

Families in Asia: A Cross-National Comparison of Intergenerational Co-residence¹

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ABSTRACT

We examine patterns and trends in household size and living arrangements in Asia to highlight the prevalent characteristics of Asian families showing diversity across countries and changes over time. We combine data from censuses and surveys from 12 countries spanning from 1980 to 2010, adopting two perspectives: a household and an individual level of analysis. Results show that households and families are changing in Asia while elements of the old remain. Driven by fertility decline, household size in most Asian countries has experienced a shrinkage, yet the prevalence of one-person household remains low, and confined mostly to the elderly, especially female, population. The dominant feature of intergenerational co-residence continues to characterize Asian households. The decline in household size does not entail a simplification of household structures. The percentage of the elderly living with children remains stable while, contrary to modernizations theories, the percentage of adult children co-residing with at least one parent in fact increased. Gender differences in intergenerational co-residence for adults clearly mark distinctions between family systems of different countries (i.e. patrilocal, matrilocal and bilateral systems).

INTRODUCTION

In this paper, we examine patterns and trends in household size and living arrangements in Asia with the goal to highlight prevalent characteristics of Asian families while showing diversity across countries and changes over time. Serving this purpose, we combined data from censuses and surveys from 12 countries spanning from 1980 to 2010. We used two different perspectives. First, we adopt the household perspective, in which the household is the main unit of analysis. We utilize classic indicators such as household size, distribution of households by members, and composition of households by age groups. Next, we move on to the individual's perspective to identify living

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arrangements over age. For the sake of comparability, we focus on universal relationship indicators such as parental, spousal, and filial affiliations. Such basic affiliations are often available when person records are organized into households in censuses and surveys (De Vos and Holden, 1988). The individual's perspective facilitates the disentanglement of the internal structure of the domestic groups by showing vertical and lateral forms of co-residence.

Asia is a region comprised of more than 50 nations and 60 % of the world's population⁴. It encompasses countries that exemplify the extremities in economic development, fertility, and life expectancy, such as the cases of Japan and Afghanistan. Japan, the beacon of modernity in Asia and one of the wealthiest nations in the world, sharply contrasts with Afghanistan, one of the poorest⁵. These two distinct nations also foster great demographic heterogeneity in fertility patterns and life expectancy. The total fertility rate (TFR) ranges from 1.34 in Japan to 6.33 in Afghanistan⁶, and similar contrast has been found in life expectancy at birth from 82.67 in Japan to 58.37 in Afghanistan⁷. Geo-culturally, Asia is divided into sub-regions identified as East Asia, South Asia, Southeast Asia, West Asia, and Central Asia. This division is commonly used in demographic and sociological studies on families in Asia (e.g. Quah, 2008; Therborn, 2004). The countries falling in each sub-region show some degree of similarity regarding household, family and marriage systems. Because of the scope and introductory nature of the paper, we will not investigate regional and social differences within countries that inevitably influence household and living arrangements. India, for example, is geographically larger and more populated than the entirety of Europe while characterized by a striking level of internal diversity regarding the force of patrilocality, arranged marriages and gender roles (Chaudhuri and Roy, 2009; Therborn, 2004). Ethnic diversity is evident in countries like Malaysia which harbors three main ethnic groups: Malays, Chinese, and Indians, each displaying unique preferences for intergenerational co-residence (DaVanzo and Chan, 1994). Therefore, we seek to provide a panoramic view of the region of Asia with the sacrifice of details in historical,

⁴ United Nations Demographic Yearbook 2011

⁵ International Monetary Fund: Regional Economic Outlook: Asia and the Pacific. General Government Revenue and GDP per Capita, 2011, <http://www.imf.org/external/pubs/ft/reo/2013/apd/eng/areo0413.htm>

⁶ UN Data, World Population Prospects: The 2012 Revision, 2005-2010, medium variant.

⁷ UN Data, World Population Prospects: The 2012 Revision, 2005-2010, medium variant.

cultural, and social influences that drive internal heterogeneity. Due to the availability of large harmonized, recently released microdata exemplified by the Integrated Public Use Microdata Series (IPUMS) International, we are able to provide a comparative analysis of cross-national living arrangements from countries ranging from the extensively-explored China to the lesser-known Mongolia.

BACKGROUND

Families and households are fundamental institutions in the lives of people. These institutions determine the context of one's place in his or her social vortex and provide a capacity for collective emotional and financial resource sharing. The understanding of family and household composition is essential in unraveling the social norms and practices of a given society. Living arrangement is determined by the interaction of factors that can be classified into three categories: demographic, economic, and cultural factors. First, demography shapes the context of opportunities of co-residence. Societies with high fertility will inevitably have larger households than societies with low fertility. Increase of life expectancy encourages the chances of intergenerational co-residence as the overlap of lifespan between two generations lengthens. Second, economic and cultural factors are the driving forces behind the materialization of such demographic opportunities for co-residence. In pre-industrial agrarian societies, children relied on parental financial resources while parents counted on filial support. These two factors consequently lead to multigenerational co-residence. Although highly contested, the transition of industrial societies was posited to simplify household structure and increase nuclear households because it reduces the intergenerational dependence (Goode, 1963). In modern Asian societies, economic factors such as housing availability and affordability force resource sharing through intergenerational co-residence despite the fact that employment has now been extended beyond family business, whereas in the past, individuals lived and worked with family members (DaVanzo and Chan, 1994; Martin, 1989; Chaudhuri and Roy, 2009). Finally, cultural norms still assert substantial influence in intergenerational co-residence through the expectation to fulfill filial duties. Confucianism remains to serve as a foundation of social norms in countries such as China, Japan, and Taiwan (Sereny, 2011; Zimmer and Korinek, 2010; Lin et al., 2003; Goody, 1996; Thornton and Fricke, 1987).

Demographic, economic and cultural factors interact in many complex ways that often

produce outcomes that are inconsistent with evolutionary presumptions such as the modernization theory.

If we are to pinpoint one remarkable attribute of Asian family life that sets Asia apart from the rest of the world, it would be the importance of intergenerational co-residence. Even in the later stages in life, it is uncommon for one to live alone in Asia.

Multigenerational households, either in the form of stem or joint family, are more widespread in Asia than in any other part of the world (Ruggles and Heggeness, 2008; Bongaarts and Zimmer, 2001). The basis of multigenerational households is the exchange of the elderly securing emotional and financial support from their children, while the children benefitting from household or economic support from their parents. As a region deeply influenced by Confucianism, many countries, especially in East Asia, hold filial piety as a crucial element of one's moral integrity (Goode, 1963; Zimmer and Kwong, 2003; Chu, 2011). The ideals of filial piety extend beyond the region of East Asia into South Asia with even greater intensity despite their distinct religious and moral codes, such as those of the Hindus in India and those of the Muslims in Pakistan. South and East Asia remain to be strongholds of patriarchy which is manifested through the parental control over children's marriage and determination of post-marital patrilocal co-residence. Patrilocality persists in countries as diverse as China, India, Pakistan, Japan, Taiwan or South Korea but with variance in intensity and pace of change over time (Wang et al, 2010; Thornton and Fricke, 1987; Martin and Tsuya, 1991; Goode, 1963; Lin et al., 2003; Logan et al., 1998; Frankenberg et al., 2002). From the adult children's perspective, patrilocality does not imply that all married sons must live with their parents, but at least one, usually the eldest, should assume the task. In the case of India, for example, many families consist of all married sons living together with their parents hence forming a household with multiple couples of the same generation (Goode, 1963). The distinction between joint and stem family is thus marked by the existence of a single couple per generation in a stem family versus multiple couples of the same generation in a joint family system. In the traditional patrilocal stem household system, both men and women marry early and live with the husband's parents (Goody, 1996). In the joint household systems, the percentage of married sons that live with their parents tend to be higher than that of the stem household systems as multiple married sons are obliged to live with their elderly

parents, with the elderly male as the figurehead (Cain, 1986). From the older generation's point of view, a high percentage of parents co-reside with their children in both systems.

Old age support is not confined to the patriarchal system. In a bilateral system, exemplified by Cambodia and Thailand, both sons and daughters are likely to provide personal care to parents through co-residence (Bongaarts and Zimmer, 2001). In Thailand, for example, the parents often prefer to co-reside with the youngest daughter (Knodel et al., 1992; Knodel et al., 1995). Under this system, we should expect similar proportions of married men and women living with parents, whereas in a patriarchal system, we expect to observe higher parental co-residence for sons, as married sons shoulder on the majority of the parental care responsibilities.

A sizeable literature has examined the evolution of the family systems in Asia. Modernization theory predicted that as countries advance economically, the pervasiveness of multigenerational living arrangements will decline as a result of urbanization, economic power, and value in privacy (Goode, 1963; Quah, 2003). Supporting this theory, we observe that economically advanced countries such as Japan, Taiwan, and Korea overall have been experiencing a decline of intergenerational households (Frankenberg et al., 2002; Martin and Tsuya, 1991). Nevertheless, very little decline has been detected for China, India, and Vietnam, despite their substantial economic development in the past few decades. The constraint imposed by housing prices and the shift from parental needs to mutual needs encouraged continual intergenerational co-residence in contrast to the predictions of the modernization theory, as high levels of intergenerational co-residence can be found in urban settings due to housing constraints and the high costs of living (Chaudhuri and Roy, 2009; Logan et al., 1998; DaVanzo and Chan, 1994; Martin, 1989). The traditional paradigm built on filial piety, or the attendance to the parents' needs, has also moved to include the attendance of the children's needs in his or her life course, thus shifted to create a more symbiotic living arrangements for both generations (Logan et al., 1998). The older generation often assumes the role of caretakers for grandchildren and provides housework and financial relief in some cases (Frankenberg et al., 2002).

The decline of fertility in Asia has raised concerns over old age support in rapidly graying societies. The birth of fewer children implies that fewer sons will be available in the future to take on parental care, challenging the traditional patriarchal system of fully relying on sons as old age insurance. The One Child Policy, implemented in 1979 in China, following the ‘later-longer-fewer’ campaign, was the most extreme antecedent of fertility decline (McNicoll, 1997). Despite fertility decline, there is no evidence showing major shifts in intergenerational co-residence (Knodel et al., 1995; Zimmer and Kwong, 2003). Since only one child needs to co-reside with his or her parents, as long as the rate of childlessness remains low, the decline of fertility should not limit the possibilities of the continuation of the traditional system of old age care (Knodel et al., 1992; Knodel et al., 1995).

Within this context, in this paper, we examine household size and living arrangements in Asia. We scrutinize whether changes in household size have had an impact on the internal structure of household as for the level of intergenerational co-residence is concerned. We will explore the prevalence of post-marital intergenerational co-residence and differences between patriarchal and bilateral household systems. We will then examine intergenerational co-residence from both the older generation and the younger generation’s points of view.

DATA

The countries included in this study are conditioned by the availability of data and varied between the first part and the second part of the analysis (household and individual perspectives). For the household perspective, we present basic indicators such as average household size, which do not require microdata. The individual perspective, however, is more demanding and requires individual records organized into households. Therefore, the total number of countries in the household perspective section is larger than the individual perspective section as microdata is not readily available for all of the countries within our scope of study.

To construct a household perspective, we used average size of households, distribution of households by number of members, and composition of households by age groups. Data for this section comes from the United Nations Development Program (for Myanmar and Burma), United Nations Population Fund (for Iran), Demographic Health

Survey (for Bangladesh), Luxembourg Income Survey (Japan, South Korea, China, Taiwan), Integrated Public Use of Microdata Series - IPUMSi (Cambodia, China, India, Indonesia, Iran, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Vietnam, and Thailand), and statistical offices of each country. Aggregating the above datasets, we created household level analysis for 25 countries.

The individual perspective, on the other hand, required more detailed data; hence we relied heavily on the Integrated Public Use Microdata Series International microdata for our analysis. The IPUMS is an international collaboration between national statistical offices lead by the Minnesota Population Center. IPUMS provides access to harmonized census microdata for research purposes. For our analysis, we used data of different years from the following 12 Asian countries, totaling 32 samples: Cambodia (1998, 2008), China (1982, 1990), India (1983, 1987, 1993, 1999, 2004), Indonesia (1980, 1985, 1990, 1995, 2000, 2005, 2010), Iran (2006), Malaysia (1980, 1991, 2000), Mongolia (1989, 2000), Nepal (2001), Pakistan (1998), Philippines (1990, 1995, 2000), Vietnam (1989, 2009), and Thailand (1980, 1990, 2000). Unfortunately, data on Japan, Taiwan, South Korea, and recent China are not available via IPUMS, hence we explored the household survey microdata available through the Luxembourg Income Study database. We chose not to utilize the samples as the intra household relationship indicators were limited to each household member's affiliation with the household head but not amongst one another. On the other hand, the IPUMS samples provided a wide range of harmonized pointer variables that identify the presence of mother, father, spouse, and child for all members within a household. Based on the above pointer variables, we were able to create three dummy variables: living with at least one parent, living with spouse, and living with at least one child.

It is important to note that enumeration techniques vary from census to census. Most censuses were conducted de jure, such as India and Indonesia; some were conducted de facto, exemplified by Malaysia; while others, namely Cambodia 2008, Mongolia, and Pakistan were conducted by the combination of both. Bearing the fact that the de jure method counts individuals at his or her official or usual residence, whereas the de facto at his or her physical location, the concept of household varies from country to country as different rules are employed for determining one's residence.

HOUSEHOLD PERSPECTIVE

Smaller Households Today

Figure 1 shows data on the average size of households for 25 countries in Asia from year 1980 to 2011. Within this period, the household size ranged from 2.4 in Japan in year 2010 to 7.3 in Afghanistan in year 2008. In between the two levels, we observe a cluster of countries that fall between 3 to 5 members per households within the timeframe. Above the average of 5 persons per household, one notices Laos, Pakistan, Maldives, and Afghanistan. On the contrary, Japan, South Korea, Hong Kong, Taiwan, and China, all of which are Eastern Asian countries, are characterized by smaller households compared to the rest. Overall, changes overtime shows decline in household size. Japan has declined from 3.2 in 1980 to 2.4 in 2010, China from 4.41 in 1982 to 3.1 in 2010, and India from 5.1 in 1983 to 4.7 in 2004. Despite the overall decline, we do not observe a visible convergence, but rather noted that differences between countries remain stable over time.

[FIGURE 1 ABOUT HERE]

Diminishing Number of Children

One of the main determinants of household size is the level of fertility of a society. It is reasonable to assume that higher fertility often entails larger households. One way of examining the effect of children on household size is by decomposing the share children occupy within an average household. Figure 2 shows the absolute household size for a selection of Asian countries that has more than one data point, all of which display a decline in household size. Moreover, it shows the share of children per household. In all countries, the contribution of the group 0-17, defined as children in this paper, is the main driver of the reduction of household size. For example, in China, the average number of adults and seniors remain constant between 1982 and 1990, but the average number of children decreased, hence a decrease of average household size can be detected. Decline in Thailand, can be analyzed in a similar fashion. Overall, fertility

decline has been taking place in Asia in the past few decades, dropping from 5.8 in 1950-1955 to 2.2 in 2005-2010.⁸

[FIGURE 2 ABOUT HERE]

Diversity in Size

We cannot make conclusive remarks on the proportion of large households within a country by solely looking at the average size of all households. That is to say, it is entirely possible that some countries have numerous one person households in combination with a sizeable proportion of extremely large households, which could lead to an unremarkable average in terms of overall household size. Therefore, we compiled a set of recent statistics on the distribution of households by number of members for 23 Asian countries, arranged by the country with the smallest proportion of one person household to the largest, to create visualization of the proportion of small versus large household within each country.

[FIGURE 3 ABOUT HERE]

At a first glance at Figure 3, one notices that the more economically developed Asian countries such as Japan, South Korea, Hong Kong, Macao, Singapore, and Taiwan cluster around the right hand side of the chart, whereas developing countries such as Pakistan, North Korea, Bangladesh, and Brunei are on the left hand side of the chart, indicating that the more affluent countries have a higher proportion of one person households compared to the less economically developed countries. This is consistent with the idea that economic power is highly associated with independent living and communal living is often the result of practical financial provision (Chaudhuri and Roy, 2009; De Vos and Holden, 1988). The countries with a lower proportion of one person households tend to have a high proportion of very large households of six members or more, such as Pakistan and Brunei, where more than 50 percent of all households are of six or more members. Extremely large households of six or more are very few at 2.8, 1.8 and 3.9 percent respectively for Japan, South Korea and Hong Kong which are countries characterized by high proportions of one person households. There is no straight forward correlation between the share of one person households and the share

⁸ UN Data, World Population Prospects: The 2012 Revision.

of extremely large 6+ persons households. The countries with more one person households, such as Japan, South Korea, and Taiwan tend to have very small proportions of large households. Amongst all of the other countries, the shares of large households vary across board. These disparities can be attributed to differences in fertility and to the prevalence of inter-generational co-residence. The internal composition of households will provide further insight on which of the above serves to be the dominant factor behind household size.

INDIVIDUAL PERSPECTIVE

Looking into the Lives of Individuals

In the past, studies of living arrangements have been dominated by analyses of broad household perspectives. The complexity of studying family living arrangement is largely due to the fact that households are multi-dimensional entities often comprised of more than one member, each with his or her own unique demographic characteristics. Moreover, members are related to one another in ways that are often difficult to identify (Bongaarts, 2001). The availability of IPUMS International data offers the advantage of having clear relationship indicators within households. One of the strengths of using person records is that the microdata allows a higher level of flexibility for building a standardized framework of analysis for multiple countries of different years. Since longitudinal data is difficult to obtain on such scale, we analyze living arrangements over age using cross-sectional data, keeping in mind that demographic changes may take place as the children and the young of today age continuously into the future. Their living arrangements in old age may very well deviate immeasurably from what we imagine today. As an example, Figure 4 below shows parental, spousal, filial co-residence and individual living for India in 2004, by age and sex.

[FIGURE 4 ABOUT HERE]

In the case of India 2004, we can observe a few similarities and differences between the male and female population. More than 50 percent of the males remain in their parental household as late as the age of 30, whereas a mere 6.7 percent of 30 year old females remain in their parental home. For the females, parental co-residence drops drastically between 15 to 20 years old, which coincides with a sharp rise in the proportion of those who enter into union. It is expected that men remain in their parental home even post-

marriage, as the new bride becomes absorbed into the patrilocal family. Marriage is near universal for both male and female.

William Goode's *World Revolution and Family Patterns* (1963) pointed out a few characteristics of the Indian marriage system, namely that marriage is near universal, and women marry at a young age to usually older, sometimes substantially older, men. Figure 4 confirms the universality of marriage, as by the age of 35, roughly 85 percent of women and 90 percent of men live with a spouse. We can also observe a drop of spousal co-residence for women starting around the age of 40, most likely due to widowhood, whereas men experience a more gradual decline at a later age. Men tend to marry younger wives who are more likely to survive themselves. Living alone is uncommon for both men and women in India, but there is a higher proportion of older women living alone than men, most likely due to women's survival of their husbands who tend to be older. Women in rural areas are more likely to live alone as the young migrate to the urban areas (Chaudhuri and Roy, 2009). Living with children reasonably slightly lags behind the timing of union formation, and co-residence with children in the later stages of life is prevalent for both men and women in India, as at age 70. Three out of four Indian men and women live with at least one child.

To better observe the variance amongst our most recent set of IPUMS International Asian countries, we created box plots to visualize the phenomenon of living alone, living with a spouse, living with parents and living with children. The following graphs allow us to visualize differences across countries and between genders over age represented by 5 year age groups. Detailed data for the box plots are attached in Appendix 2. Time is not used as a variable, as we selected the most recent data available for the 12 IPUMS Asian countries.

Living Alone

Living alone is rather uncommon in Asia, as shown in Figure 5. Young children certainly do not live alone, neither do adolescents nor adults. Compared to the western world, independent living before marriage is somewhat unlikely in Asian countries. Leaving parental home is conditioned and closely tied to the timing of union entrance. The slight increase in the proportion of those who live alone is observable in the older ages for women in particular, most likely due to mortality differentials between union

partners, and the marriage age gap between men and women resulting in female widowhood. Children's migration from rural to urban areas may increase the likelihood of living alone for seniors that are left behind in their hometown. In the extreme old ages, defined as 80 years or older in this paper, almost 34 percent of Iranian women live alone, while only 11 percent of Iranian men live solitarily. In Vietnam, only 1 percent of the men live alone at 80 plus years old, and less than 0.1 percent of women live alone past 80. All of the other countries fall in between Iran and Vietnam with relatively low proportion of the extremely old living alone. It is one of the most defining features of Asia that very few people live alone, even upon widowhood in older ages.

[FIGURE 5 ABOUT HERE]

Living with Parents

The likelihood of living with parents decreases with age, as a result of the mortality of the parents in combination with the timing of union entrance for the individuals. Up to the age of 15, homogeneity in co-residence pattern among countries is observed as nearly all children live with their parents (Lloyd and Desai, 1992). Timing of marriage and post-marriage co-residence with parents vary across countries and between genders, which lead to observed heterogeneity between the ages of 15 to 49. In particular, women leave parental home earlier than men. Historically, early marriage, especially for women, is commonplace in Asia (Jones, 2005; Jones, 2007). Although marriage age has risen, women remain to marry earlier than men. Moreover, women are less likely to continue to live with their own parents after marriage in patrilineal societies, as shown in Figure 6.

[FIGURE 6 ABOUT HERE]

Overall, the proportion of women living with parents experiences a sharp decline between the ages of 15 to 25. Women in India, Pakistan, and Nepal tend to leave parental home at an earlier age compared to women in Thailand and China. The proportion of men living with parents dwindles at a more moderate rate between the later ages of 20 to 30. Mongolian and Cambodian men are less likely to co-reside with

parents compared to their Pakistani, Indian, and Chinese counterpart. For more country-specific details, see Appendix 2.

[TABLE 1 ABOUT HERE]

To explore the differences among countries and the pervasiveness of post-marital intergenerational with parents, we turn to Table 1 which shows the percentage of all 25 to 29 year olds and married 25 to 29 year olds who live with at least one parent in 12 IPUMS countries by available data rounded to the nearest decade⁹, and the percentage of parental co-residence for those of whom are married. The four parameters are precisely gender, marital status, country, and time period. We intend to identify gender differences, the effect of marital status, cross national dissimilarities, and change over time.

We first examine the percentage of all individuals between the ages of 25 and 29 living with parents. An astounding higher percentage of Asian men, with the exception of those in Cambodia, Mongolia, and Thailand, are more likely to live with their parents compared to their female counterpart. The lower percentage of co-residence with parents for women is due to early entrance into marriage and also the deeply seated tradition of patrilocality which leads to a change of residence for women who then leave their parental home upon marriage to reside with their new patrilocal family. We subsequently examine only the percentage of married individuals between the ages of 25 and 29 living with parents. It is evident that less married children reside with parents compared to single children, yet a significant percentage of married children still remain in co-residence with their parents. The proportion of those living with parents differs among countries with India being the highest for men and Thailand for women. Gender disparity is striking within some countries as nearly 60 percent of all married Indian men in the 25 to 29 age group live with parents compared to only 1 percent of Indian women remain in their parental household post-marriage. Similarly, about 43 percent of

⁹ The actual data sets used are: Cambodia 1998, Cambodia 2008, China 1982, China 1990, India 1983, India 1993, India 1999, India 2004, Indonesia 1980, Indonesia 1990, Indonesia 2000, Indonesia 2010, Malaysia 1980, Malaysia 1991, Malaysia 2000, Mongolia 1989, Mongolia 2000, Nepal 2001, Pakistan 1998, Philippines 1990, Philippines 2000, Vietnam 1989, Vietnam 1999, Vietnam 2009, Thailand 1980, Thailand 1990, and Thailand 2000.

Pakistani married men live with their parents compared to less than 1 percent of Pakistani married women.

The differences between the genders are comparatively less pronounced in Cambodia, Mongolia, and Thailand. Differences between family systems in Asia can be seen in Table 1. In the South Asian countries (e.g. India and Pakistan), characterized by the joint family system, the percentage of married sons living with parents is high, compared to the extremely low percentage of married daughters. In Southeast Asia, e.g. Thailand and Cambodia, the level of intergenerational co-residence is balanced between men and women, as the two countries are characterized by a bilateral family system (Goody, 1996; Knodel et al., 1995; Knodel et al., 1992). In terms of change over time, we find that intergenerational co-residence shows very little signs of decline in the countries listed below, consistent with the results of previous study on intergenerational co-residence in developing countries (Ruggles and Heggeness, 2008). The co-residence pattern in India not only shows no sign of declining, but also displays an upward trend from 51 percent in 1980 to 59 percent in 2010. Investigation on this topic is beyond the scope of this paper, but we argue that it can be due to the increase in life expectancy, housing availability constraints in growing urban areas, and the entrance of women into workforce which prompted the demand for parental help on child care and household tasks.

Living with a Spouse

Union formation and marriage are clear determinants of spousal co-residence. thus these three terms will be used interchangeably to identify the characteristics of domestic partnership in this paper. The timing of marriage differs for men and women in Asian countries. Females tend to enter unions at a much younger age than men, as we can observe the sharp increase of the proportion of females living with spouse from the age group of 15 to 19, 20 to 24, and 25 to 29. The proportions of spousal co-residence peaks for females at the age group 35-39 and later for males at 45-49 (see Figure 7). The subsequent decline in the proportion of spousal co-residence, which also takes place at a younger age for women than men, is likely due to widowhood since divorce or separation were uncommon in Asia compared to the western world.

[FIGURE 7 ABOUT HERE]

Higher variance is observed for the younger age groups between the countries as the timing of marriage is often highly cultural. In China, India, and Nepal, women enter union earlier than women in Thailand, Cambodia, and Mongolia. For the men, Nepalese, Chinese, and Cambodians tend to marry younger than Malaysians and Thais. Marriage is near universal for both genders in almost all countries, with the exception of Thai and Cambodian women, for whom the proportion of spousal co-residence does not exceed 76 percent and 80 percent respectively, at any age. We can observe that spousal co-residence is delayed for both men and women (Jones, 2005; Jones, 2007). See Appendix 2 for country-specific figures.

Living with children

As one may expect from a region where individuals are unlikely to live alone, the practice of intergenerational co-residence is widespread in Asia. From the parent's perspective, as illustrated in Figure 8, we can observe the peak of parent-child co-residence by the time the parent turns 40 in most countries, before experiencing a moderate decline later as the children grow up and leave parental home. One of the notable features of the Asian households is that such decline stabilizes even as the parent grows older, signaling a strong trend of continual co-residence with children in old ages. Therefore, when we look at co-residence with children, we are interested in two aspects: the timing of childbearing and the proportion of adult children who continue to live with their parents. As marriage is near universal in Asia, the result of conjugal union, namely childbearing, reasonably follows the same trend. Women tend to have children earlier than men, and spend most of their lives residing with their children. This is generally true for men as well, to a lesser degree. Cohabitation with young children in the earlier stages shows little surprises. We find much more implications from the practice of intergenerational co-residence with adult-children.

[FIGURE 8 ABOUT HERE]

From the perspective of the elderly, we created a table of intergenerational co-residence for individuals age 65 and above. Table 2 shows that elderly men and women are

equally likely to live with their children in all countries. Other than Iranian females, more than half of all seniors, defined as individuals 65 years of age and above, live with their children. This phenomenon seems to have remained rather stable throughout the decades with modest changes between the years. India has shown the highest level of intergenerational co-residence as more than three quarters of seniors live with at least one child. Similar percentage of co-residence is found in Thailand. That is to say, despite differences between family systems, the prevalence of intergenerational co-residence is observed as the dominant trend in most countries in Asia.

[TABLE 2 ABOUT HERE]

Comparing Table 1 and Table 2, we noticed that parental co-residence for adult children between the age of 25 and 29 increased slightly throughout the years for many countries, while the co-residence with children did not increase for the elderly and instead remained more or less stable. This is due to the fact that “ongoing demographic changes increase the opportunities to reside with parents” as “mortality decline increases the chances that an adult will have a surviving parent” yet fertility decline entails that “a smaller group of adult children for each elderly parent increases the chances that any particular child will co-reside with a parent” (Ruggles and Heggeness, 2008). Although the decline of fertility is often lauded as a positive attribute of a developing country, it provokes the concern that a larger share of elderly care responsibilities will fall upon the shrinking younger generations (Knodel et al., 1992).

CONCLUSION

Family as a social system serves multiple functions that are inclusive of but not exclusive to providing a nurturing environment for the young and a supportive system for the ill or the elderly, by binding individual life courses through “unifying production, distribution, consumption, reproduction, socialization, and transmission of property within and across kinship groups” (Thornton and Fricke, 1987, p. 748). The norms behind family system are often supported by cultures, demographic realities and economic opportunities. Bearing in mind that these three dimensions of underlying forces drive family changes, we must consider the fact that ideals do not dictate practice, and opportunities do not entirely command change. William Goode expressed

that “even though all systems are more or less under the impact of industrializing and urbanizing forces” we cannot assume “that the theoretical relations between a developing industrial system and the conjugal family system is entirely clear” as the impact of traditional values and cultural norms should be acknowledged (Goode, 1963, p. 369).

As we have illustrated in this paper, households are changing in Asia while elements of the old remain. Large quantitative surveys and census microdata have allowed us to portray general aggregate measures at the household level while enabling us to contextualize individuals’ living arrangements in finer details. Although we did not have all of the data to draw comparisons between all countries within Asia, we have access to a harmonized set of microdata through IPUMS International which facilitated a broad study of 12 countries in Asia. The Luxembourg Income Study Database, the United Nations Statistics, and national statistical offices, also provided aggregate data that supplemented information for some countries, and filled in the gap for those of which we have no microdata on. This paper focused on the change of household size; proportion of children in household in relation to adults; proportions of individuals living alone, with a spouse, with parents, and with children, throughout different ages.

Results show that household size in most Asian countries has experienced a decline due to a number of demographic changes, particularly due to the decline of fertility.

Patrilocality is near universal in Asia, which in combination of earlier union formation, result in women moving out of their parental home at a younger age than men in all countries in this study. Intergenerational co-residence, therefore, usually is comprised of the married couple and the parents of the husband. Women are more likely to live alone in older ages compared to men due to widowhood. However, most of the female widows live with their children, presumably sons, rather than living alone, an uncommon arrangement in Asia for both genders in practically all age groups.

Asia is characterized by a number of distinctive features that set it apart from Europe and the Americas, namely the importance of intergenerational co-residence, or the practice of the elderly living with the young. We did not include Japan, South Korea, and Taiwan in this study due to data constraints, but previous studies have shown a slight decline in intergenerational co-residence in the economically advanced Asian

countries (Frankenberg et al., 2002; Martin and Tsuya, 1991; Martin, 1989). The decline in household size in a society is more attributable to fewer children on the playground rather than the simplification of household structures. Furthermore, the proportion of married sons living with parents has been increasing and the proportion of elderly living with children remains quite stable. Differences in household systems are clear through the examination of the propensity of married women and men living with their parents. Bilateral household systems show similar proportions of married daughters living with their parents as married sons while patrilocal household system shows an apparent dominance of married sons co-residing with parents over married daughters. Fertility decline may force living arrangements against one's ideal due to the lack of choices in the absence of a son or a daughter, but adaptability to such constraint has been observed as Asian parents would rather live with the less preferred child of co-residence rather than living alone (Knodel et al., 1992; Lin et al., 2003). Migration from rural to urban areas may also change the dynamics. However, urban life does not promise simplification of households through nuclearization as modernization theory may suggest. Instead, housing affordability and unavailability encourages co-residence. The new dynamic that emerged as social changes swept across Asia is that living arrangement can be shaped by the desires and needs of both the older and the younger generation as opposed to be the result of solely filial obligations deeply rooted in many societies in Asia. For those parents who did not migrate with children into urban areas, living alone is more likely as housing is more affordable in the rural areas (Chaudhuri and Roy, 2009; Martin, 1989).

We hope that our research invites, facilitates, and inspires new ideas and projects on the topic of family life in Asia, as the world's largest and most populous continent awaits further investigation. Our aim is to provoke a discussion on family life and household structure in the East, as demographers have extensively explored the West. There are many tasks ahead of us as we dive into the region of Asia. Due to the unavailability of microdata for many countries and the lack of usable aggregate data from a few countries such as Afghanistan, North Korea, and Laos, a comprehensive detailed analysis of the entire region is nearly impossible today. Moreover, some of the less affluent countries in the study by any standard have not experienced demographic transition from high to low mortality nor high to low fertility, such as Afghanistan, Bhutan, Laos, and Maldives

(Caldwell et al., 2006). We expect to eventually observe the unraveling of a revolution of family patterns and living arrangements upon the onset of demographic transition in these countries following the footsteps of their more affluent neighbors: Japan, South Korea, Hong Kong, Macao, Singapore, and Taiwan. As each of the pre-transition countries are characterized by their unique cultural environment, pace and magnitude of change will vary as it had for the countries that are now considered post-transition. Looking into the future, we are optimistic that the challenges we face today will diminish as coherent, comparative and usable data become accessible to demographic researchers. Moreover, time is needed to observe whether the resilience of intergenerational co-residence will endure despite further economic advancements and the spread of a media induced world culture throughout Asian societies (Lesthaeghe, 2010). New analysis by social class and status will elucidate whether intergenerational co-residence is a practice of necessity or mainly an expression of ideology by examining whether more affluent individuals opt out of intergenerational co-residence as studies suggest (Takagi et al., 2007) but rather adopt a form of parental care outside of co-residence by choosing “intimacy at a distance” (Martin and Tsuya, 1991). Exploration into internal differences across regions, religious practices, urban and rural settings will also be essential in the quest to decompose current patterns. Our analysis has not commit sufficient attention to such detail as we hope for greater availability of census microdata in the future to further dive the subject of family life in Asia with the consideration of a wider range of parameters.

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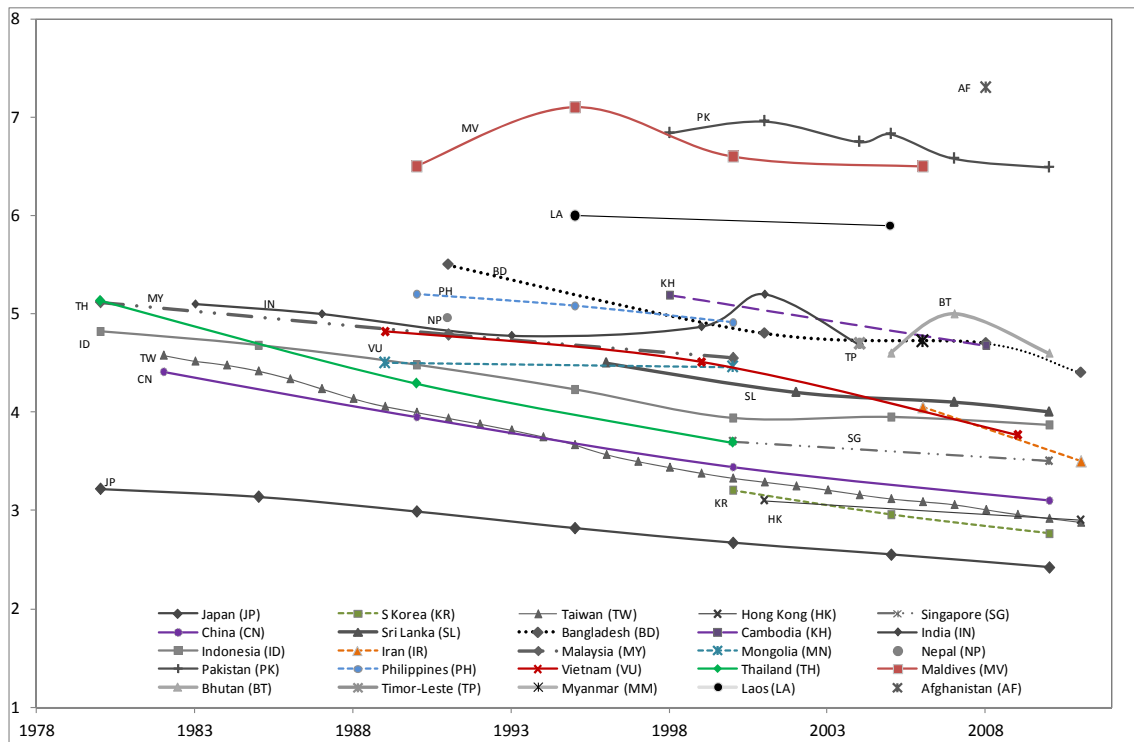
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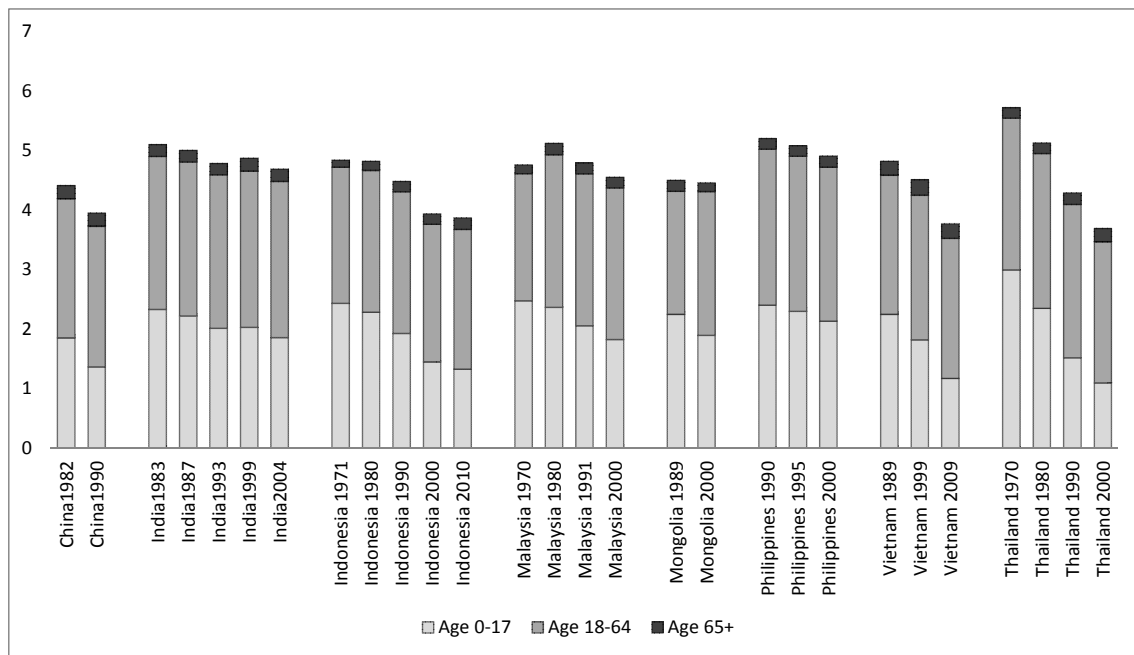
FIGURES AND TABLES

FIGURE 1. Average Household Size by Country, Asia 1980-2010



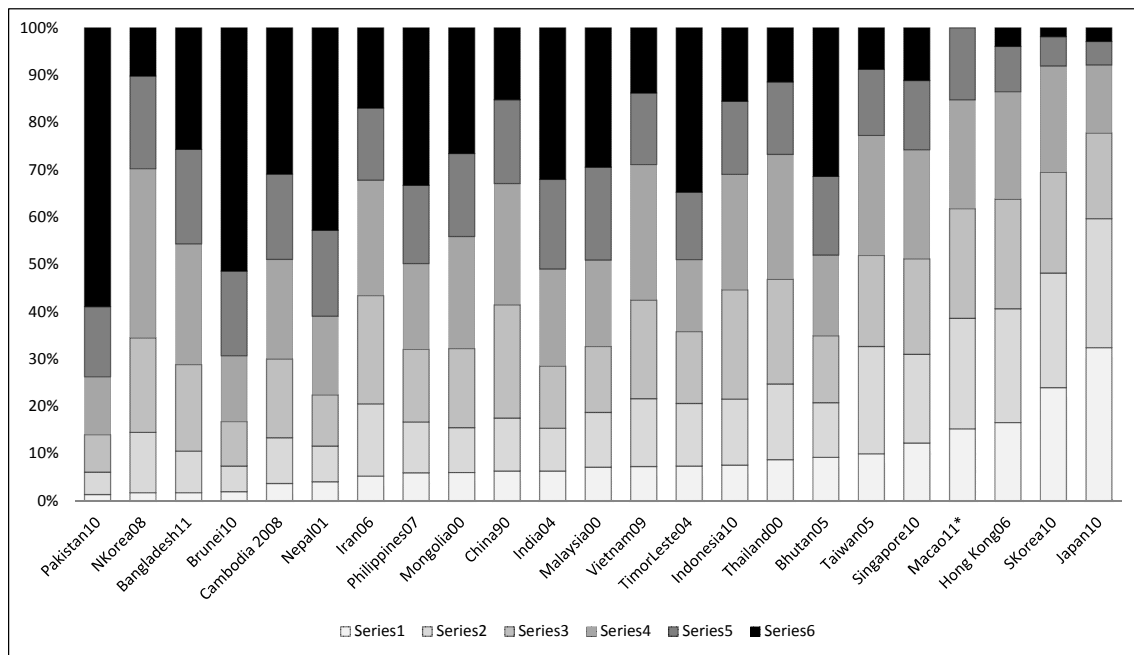
Source: Various Statistical Offices, IPUMS-international, Demographic Health Surveys and United Nations data.

FIGURE 2. Household Composition by Age Groups, Selected Asian Countries



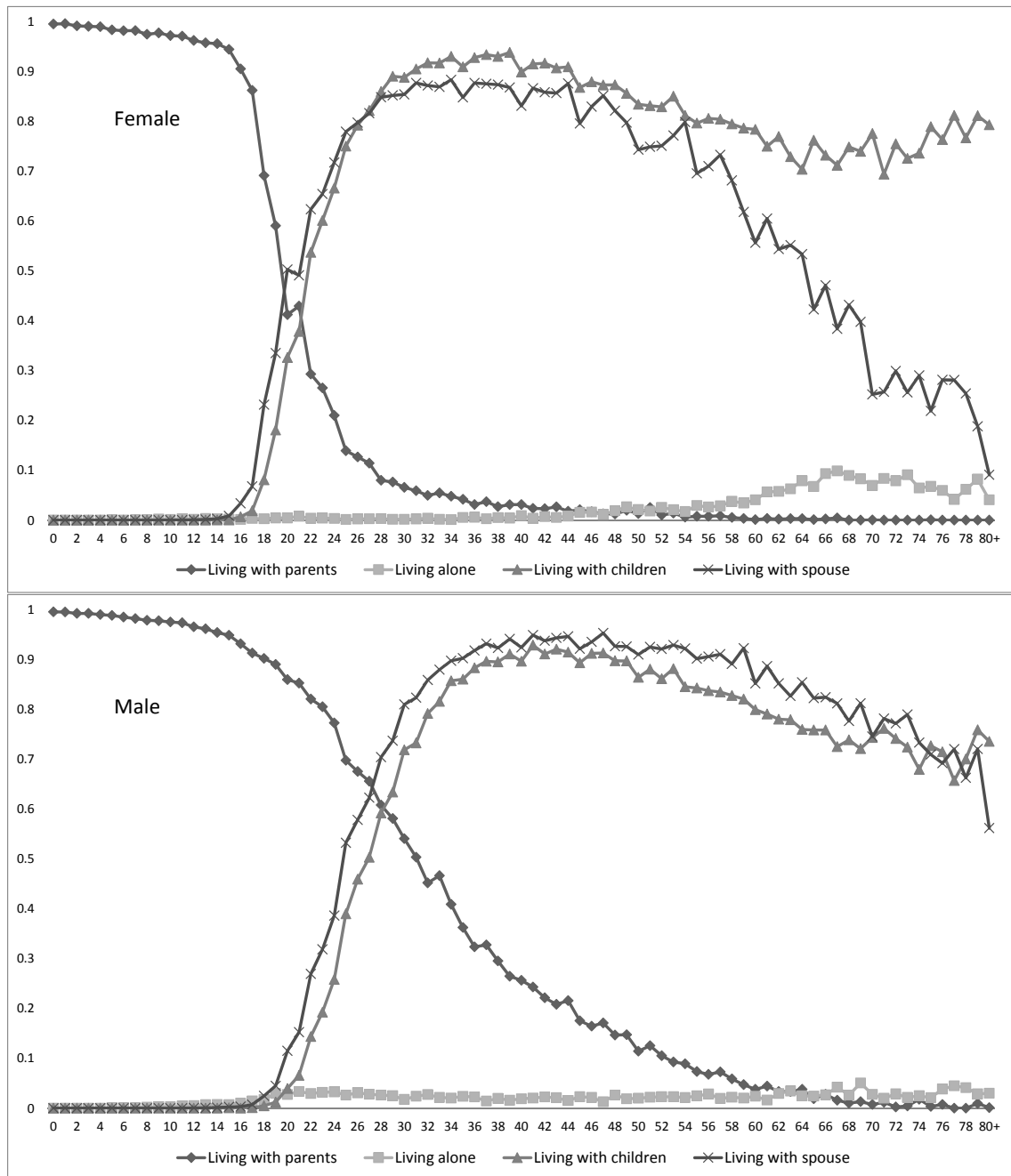
Source: IPUMS-international.

FIGURE 3. Distribution of Households by Number of Members, Selected Asian Countries



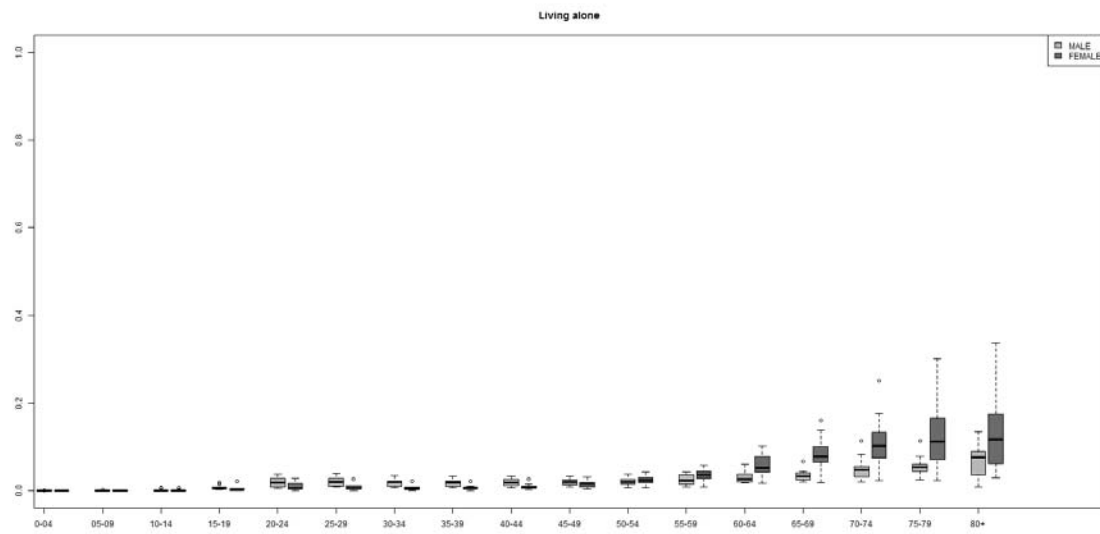
Source: United Nations Statistics and various statistical agencies.

FIGURE 4. Parental, Spousal and Filial Co-Residence by Age and Sex, India 2004



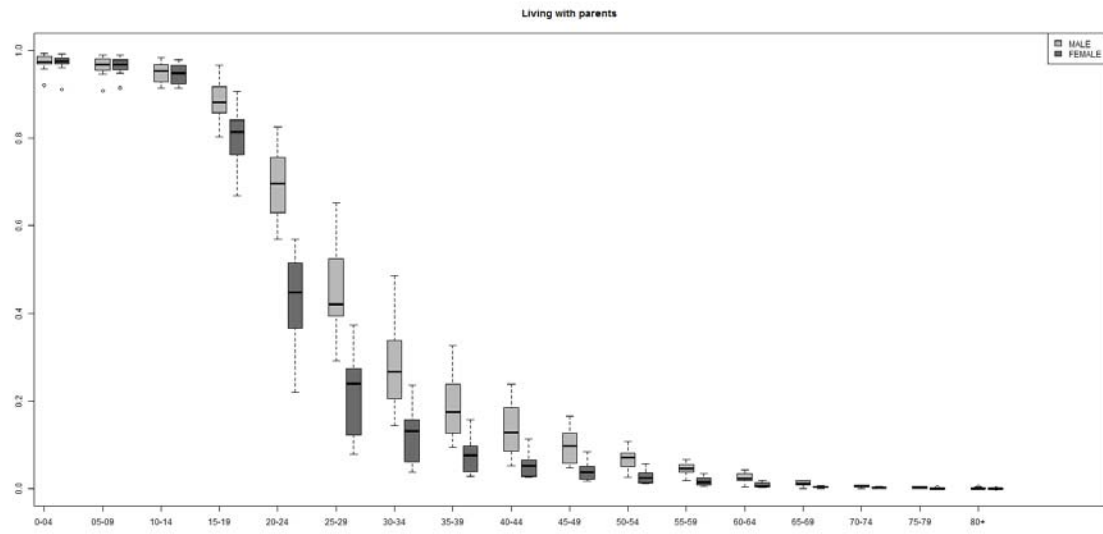
Source: IPUMS international.

FIGURE 5. Age-specific between country variability in living alone by sex, selected Asian Countries



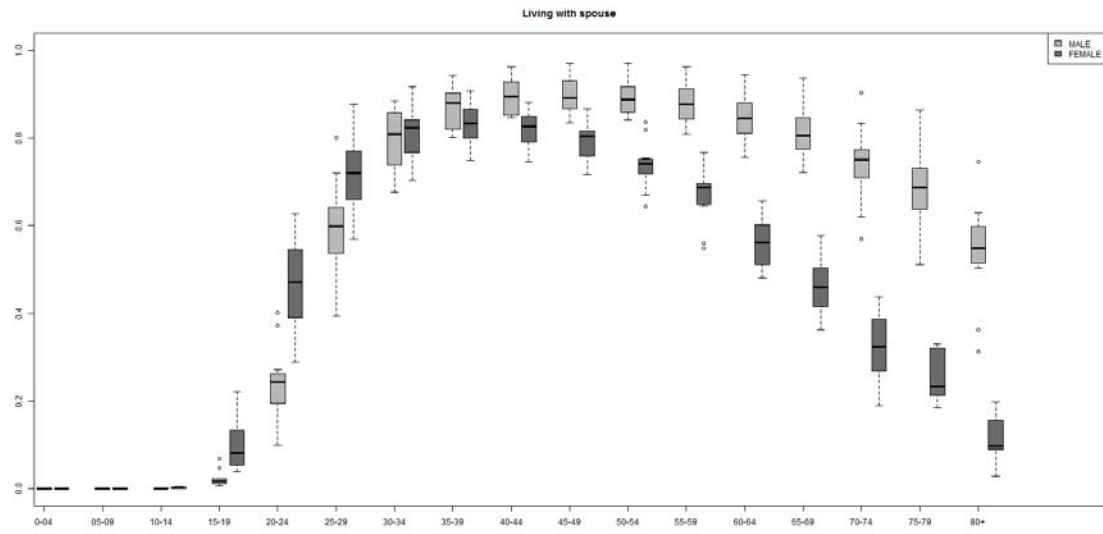
Source: IPUMS-international (see Appendix 2 for country specific details).

FIGURE 6. Age-specific between country variability in living with at least one parent by sex, selected Asian countries



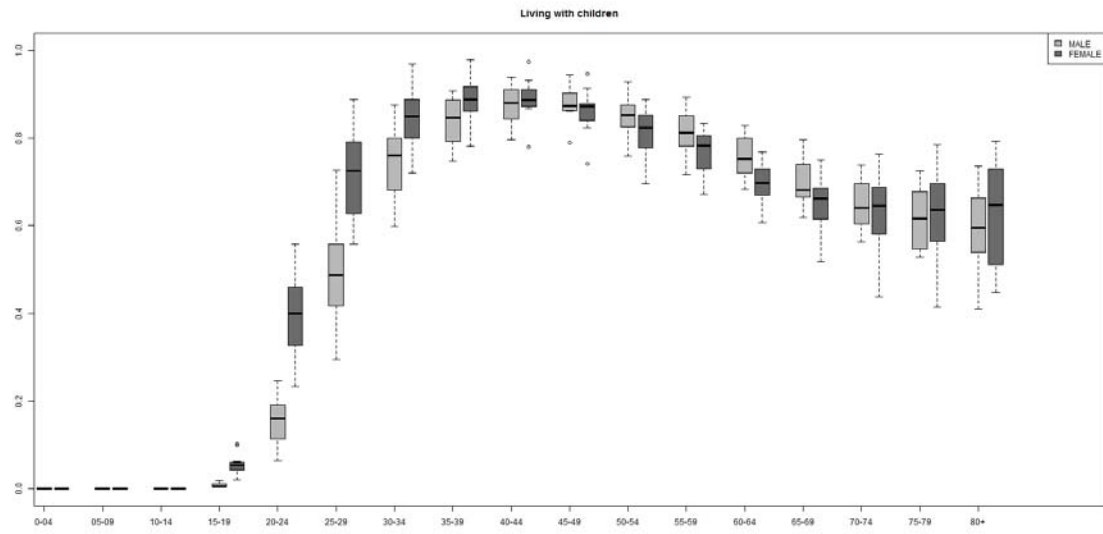
Source: IPUMS-international (see Appendix 2 for country specific details).

FIGURE 7. Age-specific between country variability in living with spouse by sex, selected Asian countries



Source: IPUMS-international (see Appendix 2 for country specific details).

FIGURE 8. Age-specific between country variability in living with children by sex, selected Asian countries



SOURCE: IPUMS-international (see Appendix 2 for country specific details).

TABLE 1. Percentage of 25-29 Year Old Living with at Least One Parent by Sex and Marital Status. selected countries

	All Individuals				Married			
	1980	1990	2000	2010	1980	1990	2000	2010
MALE								
Cambodia			20.37%	31.57%			8.77%	12.10%
China	48.64%	39.68%			36.86%	30.58%		
India	53.57%	57.44%	61.12%	65.33%	51.83%	53.77%	56.36%	59.49%
Indonesia	26.67%	29.76%	32.9%	41.25%	15.91%	14.31%		17.21%
Iran				42.87%				12.39%
Malaysia	36.76%	37.7%	38.94%		24.00%	19.83%	17.83%	
Mongolia		18.76%	29.07%			4.66%	7.83%	
Nepal			53.22%				19.90%	
Pakistan			53.03%				42.57%	
Philippines		36.65%	41.07%			9.37%	10.27%	
Vietnam		41.05%	48.21%	52.02%		26.33%	31.60%	34.95%
Thailand	29.97%	36.36%	45.53%		14.70%	15.94%	17.55%	
FEMALE								
Cambodia			23.32%	30.28%			9.36%	11.10%
China	11.45%	8.88%			1.31%	1.44%		
India	7.67%	7.92%	9.86%	11.16%	1.28%	0.90%	1.15%	1.03%
Indonesia	14.56%	16.11%	17.53%	24.01%	4.86%	4.81%		10.47%
Iran				26.3%				0.72%
Malaysia	21.25%	23.35%	24.11%		4.62%	6.24%	5.96%	
Mongolia		15.78%	24.72%			2.79%	5.85%	
Nepal			7.8%				0.90%	
Pakistan			13.06%				0.71%	
Philippines		25.89%	28.64%			5.13%	5.91%	
Vietnam		23.65%	21.07%	19.67%		3.61%	3.43%	3.32%
Thailand	27.99%	32.78%	37.38%		12.73%	14.93%	16.63%	

Source: IPUMS-international.

TABLE 2. Percentage of 65+ Year Old Living with Children by Sex, selected countries

	Male				Female			
	1980	1990	2000	2010	1980	1990	2000	2010
Cambodia			68.77%	67.72%			55.07%	62.31%
China	66.02%	63.79%			68.03%	68.63%		
India	74.45%	75.72%	76.22%	74.12%	76.13%	77.84%	78.61%	76.58%
Indonesia	62.09%	60.88%	53.65%	57.69%	59.22%	58.15%	47.76%	58.56%
Iran				59.79%				46.13%
Malaysia	65.18%	66.39%	65.56%		63.87%	66.57%	68.08%	
Mongolia		52.84%	60.66%			51.77%	57.96%	
Nepal			71.61%				69.96%	
Pakistan			73.16%				64.36%	
Philippines		62.18%	60.94%			52.65%	55.01%	
Vietnam		76.98%	74.87%	62.01%		72.81%	72.43%	64.86%
Thailand	76.29%	75.27%	66.67%		72.53%	74.15%	70.42%	

Source: IPUMS-international.

APPENDIX 1. Average Household Size by Country. Asia 1980-2010

Country	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-13
Japan	3.2	3.1	3.0	2.8	2.7	2.6	2.4
South Korea					3.2	3.0	2.8
Taiwan	4.6	4.4	4.0	3.7	3.3	3.1	2.9
Hong Kong					3.1		2.9
Singapore					3.7		3.5
China	4.4		4.0		3.4		3.1
Sri Lanka				4.5	4.2	4.1	4.0
Bangladesh			5.5		4.8	4.7	4.4
Cambodia					5.2		4.7
India	5.1	5.0	4.8	4.9	4.7		
Indonesia	4.8	4.7	4.5	4.2	3.9	4.0	3.87
Iran						4.1	3.5
Malaysia	5.1		4.8		4.6		
Mongolia		4.5			4.5		
Nepal			5.0				
Pakistan				6.8	6.8	6.6	6.49
Philippines			5.2	5.1	4.9		
Vietnam		4.8		4.5		3.8	
Thailand	5.1		4.3		3.7		
Maldives			6.5	7.1	6.6	6.5	
Bhutan						5.0	4.6
Timor-:Leste					4.7		
Burma						4.7	
Laos				6.0		5.9	
Afghanistan						7.3	

Source: Various Statistical Offices, IPUMS-international, Demographic Health Surveys and United Nations data.

APPENDIX 2. Percentage of Population Residing Alone. with at least one Parent. with Spouse. and with at least one Child. by sex and 5 year age group

IPUMS Sample	Age Group	Male				Female			
		Alone	Parent	Spouse	Child	Alone	Parent	Spouse	Child
Cambodia 2008	0-4	0.0%	95.9%	0.0%	0.0%	0.0%	96.1%	0.0%	0.0%
	5-9	0.0%	94.7%	0.0%	0.0%	0.0%	94.9%	0.0%	0.0%
	10-14	0.1%	92.4%	0.1%	0.0%	0.1%	92.5%	0.0%	0.0%
	15-19	0.4%	88.3%	1.1%	0.5%	0.4%	84.2%	6.6%	4.0%
	20-24	0.6%	61.3%	27.2%	18.8%	0.4%	54.0%	43.2%	37.3%
	25-29	0.9%	31.6%	66.6%	56.9%	0.6%	30.3%	67.2%	68.1%
	30-34	0.9%	17.9%	85.3%	80.2%	0.5%	17.8%	75.2%	81.4%
	35-39	0.7%	11.7%	90.9%	88.7%	0.8%	12.3%	77.4%	86.7%
	40-44	0.9%	8.5%	93.7%	92.3%	1.0%	8.4%	76.1%	88.5%
	45-49	0.8%	5.5%	94.5%	92.4%	1.9%	5.9%	72.9%	87.4%
	50-54	0.8%	5.4%	91.3%	90.9%	2.4%	4.2%	67.0%	82.6%
	55-59	0.8%	4.7%	91.5%	88.7%	3.4%	3.1%	56.1%	79.1%
	60-64	1.9%	1.9%	87.9%	80.0%	4.2%	1.8%	48.1%	70.4%
	65-69	2.0%	1.8%	84.3%	72.9%	6.2%	0.4%	36.3%	64.1%
	70-74	2.0%	0.9%	76.7%	68.8%	5.7%	0.3%	27.4%	61.5%
75-79	3.9%	0.2%	72.5%	63.2%	5.9%	0.1%	22.2%	60.5%	
80+	0.9%	0.6%	53.7%	57.6%	5.2%	0.0%	9.5%	61.9%	
China 1990	0-4	0.0%	99.1%	0.0%	0.0%	0.1%	98.5%	0.0%	0.0%
	5-9	0.1%	98.6%	0.0%	0.0%	0.1%	98.2%	0.0%	0.0%
	10-14	0.1%	97.8%	0.0%	0.0%	0.1%	97.8%	0.0%	0.0%
	15-19	0.5%	95.0%	1.7%	0.6%	0.2%	90.7%	4.3%	2.0%
	20-24	1.8%	75.7%	37.3%	24.6%	0.6%	40.5%	55.4%	42.3%
	25-29	1.9%	39.7%	80.2%	72.7%	0.4%	8.9%	87.8%	88.8%
	30-34	2.2%	26.9%	88.5%	87.6%	0.3%	3.8%	91.8%	96.9%
	35-39	2.3%	22.1%	89.9%	90.8%	0.3%	2.8%	90.9%	97.9%
	40-44	2.7%	19.2%	89.2%	91.5%	0.4%	2.6%	88.1%	97.4%
	45-49	3.3%	15.5%	88.0%	90.7%	0.8%	2.2%	86.7%	94.7%
	50-54	3.8%	10.8%	86.3%	87.2%	1.3%	1.4%	83.7%	88.8%
	55-59	4.3%	6.2%	84.0%	80.9%	2.5%	0.9%	76.7%	82.2%
	60-64	4.9%	2.9%	79.4%	74.3%	4.3%	0.3%	65.7%	74.9%
	65-69	6.7%	1.1%	72.2%	66.4%	8.1%	0.1%	50.1%	68.4%
	70-74	8.3%	0.2%	62.1%	62.6%	11.6%	0.0%	32.7%	68.0%
75-79	11.3%	0.0%	51.2%	60.2%	13.0%	0.0%	20.2%	69.6%	
80+	13.4%	0.0%	36.3%	61.5%	15.5%	0.0%	8.2%	69.1%	
India 2004	0-4	0.0%	99.4%	0.0%	0.0%	0.0%	99.3%	0.0%	0.0%
	5-9	0.1%	98.3%	0.0%	0.0%	0.1%	98.1%	0.0%	0.0%
	10-14	0.5%	96.7%	0.0%	0.0%	0.2%	96.4%	0.1%	0.0%
	15-19	1.5%	91.9%	1.5%	0.3%	0.3%	80.7%	12.8%	5.2%
	20-24	3.0%	82.6%	23.6%	13.0%	0.5%	32.7%	59.3%	48.8%
	25-29	2.7%	65.3%	61.9%	49.6%	0.2%	11.2%	81.4%	81.2%
	30-34	2.2%	48.6%	84.5%	77.1%	0.2%	5.7%	86.8%	90.7%
	35-39	2.1%	32.8%	91.7%	88.1%	0.5%	3.5%	86.6%	92.4%
	40-44	2.0%	23.8%	93.4%	90.7%	0.8%	2.7%	84.9%	90.7%
	45-49	2.2%	16.5%	92.9%	90.0%	1.7%	1.7%	81.3%	87.1%
	50-54	2.1%	10.8%	91.8%	86.5%	2.2%	1.3%	75.4%	83.2%

	55-59	2.4%	6.7%	90.3%	83.7%	3.1%	0.7%	69.4%	79.8%
	60-64	2.6%	3.7%	85.4%	78.9%	5.0%	0.2%	55.5%	76.9%
	65-69	2.8%	1.8%	81.4%	75.1%	7.8%	0.1%	42.7%	75.2%
	70-74	2.7%	0.8%	75.5%	73.9%	7.3%	0.0%	26.2%	76.5%
	75-79	2.8%	0.4%	70.2%	72.0%	6.5%	0.1%	23.5%	78.5%
	80+	3.0%	0.1%	56.2%	73.6%	4.1%	0.0%	9.1%	79.4%
Indonesia 2010	0-4	0.0%	97.5%	0.0%	0.0%	0.0%	97.6%	0.0%	0.0%
	5-9	0.1%	96.0%	0.0%	0.0%	0.0%	96.0%	0.0%	0.0%
	10-14	0.7%	92.9%	0.0%	0.0%	0.7%	92.4%	0.1%	0.0%
	15-19	1.9%	84.9%	1.2%	0.5%	2.2%	75.9%	10.4%	5.8%
	20-24	3.8%	64.8%	18.8%	11.8%	2.7%	44.0%	49.8%	40.5%
	25-29	2.8%	41.2%	54.1%	43.6%	1.2%	24.0%	75.8%	71.9%
	30-34	2.2%	23.8%	77.9%	71.6%	0.8%	12.8%	85.0%	84.8%
	35-39	1.8%	16.6%	86.4%	83.2%	0.8%	7.8%	86.6%	88.7%
	40-44	1.7%	12.4%	89.8%	87.5%	1.2%	4.9%	85.0%	86.7%
	45-49	1.7%	9.4%	91.5%	87.3%	1.9%	3.1%	81.9%	82.4%
	50-54	1.8%	7.2%	91.8%	82.8%	3.6%	2.3%	74.3%	74.4%
	55-59	1.9%	5.2%	91.1%	76.8%	6.0%	1.1%	65.3%	67.2%
	60-64	2.8%	3.3%	88.4%	68.4%	10.2%	0.6%	51.8%	60.7%
	65-69	3.6%	1.9%	85.1%	61.9%	13.8%	0.3%	40.6%	58.0%
70-74	5.5%	0.8%	78.1%	56.3%	17.7%	0.1%	26.3%	57.3%	
75-79	5.3%	0.4%	73.8%	54.1%	18.0%	0.0%	18.9%	59.5%	
80+	7.6%	0.1%	63.0%	52.1%	18.1%	0.0%	9.8%	61.1%	
Iran 2006	0-4	0.0%	99.4%	0.0%	0.0%	0.0%	99.3%	0.0%	0.0%
	5-9	0.0%	99.0%	0.0%	0.0%	0.0%	99.0%	0.0%	0.0%
	10-14	0.0%	98.4%	0.1%	0.0%	0.0%	97.9%	0.6%	0.1%
	15-19	0.3%	96.6%	1.2%	0.4%	0.1%	84.2%	13.9%	5.3%
	20-24	0.9%	80.6%	20.1%	8.4%	0.3%	50.4%	47.4%	31.4%
	25-29	1.0%	42.9%	61.8%	41.0%	0.3%	26.3%	71.1%	61.9%
	30-34	0.9%	18.5%	86.5%	75.2%	0.3%	14.0%	82.7%	80.9%
	35-39	0.7%	10.1%	94.4%	90.1%	0.5%	7.5%	87.2%	89.1%
	40-44	0.7%	7.4%	96.4%	93.9%	0.6%	4.5%	88.2%	91.5%
	45-49	0.9%	5.6%	97.1%	94.6%	0.9%	2.6%	86.6%	91.4%
	50-54	0.9%	4.5%	97.2%	92.9%	2.0%	1.7%	81.9%	87.7%
	55-59	1.3%	3.1%	96.3%	89.4%	4.1%	1.2%	75.6%	81.3%
	60-64	1.8%	1.8%	94.6%	82.9%	9.8%	0.5%	65.0%	67.0%
	65-69	2.3%	0.7%	93.8%	74.5%	16.0%	0.3%	57.8%	51.8%
70-74	4.0%	0.2%	90.4%	61.5%	25.1%	0.1%	43.7%	43.8%	
75-79	5.5%	0.0%	86.5%	52.8%	30.1%	0.1%	32.6%	41.4%	
80+	11.1%	0.1%	74.7%	41.0%	33.7%	0.0%	17.1%	44.9%	
Malaysia 2000	0-4	0.0%	98.3%	0.0%	0.0%	0.0%	98.0%	0.0%	0.0%
	5-9	0.0%	97.9%	0.0%	0.0%	0.0%	97.8%	0.0%	0.0%
	10-14	0.0%	96.9%	0.1%	0.1%	0.0%	96.9%	0.2%	0.1%
	15-19	0.8%	87.3%	0.7%	0.4%	0.3%	86.3%	3.9%	2.9%
	20-24	3.1%	60.5%	10.0%	6.4%	1.4%	50.7%	28.8%	23.4%
	25-29	4.0%	38.9%	39.4%	29.5%	1.2%	24.1%	63.6%	56.0%
	30-34	3.1%	26.7%	67.7%	59.9%	0.9%	13.4%	79.1%	77.9%
	35-39	2.8%	17.1%	81.3%	76.9%	1.0%	9.0%	83.1%	84.3%
	40-44	2.5%	13.4%	85.4%	83.1%	0.9%	6.2%	83.3%	87.4%
	45-49	2.5%	10.1%	88.8%	86.2%	1.5%	5.0%	80.9%	85.0%
	50-54	2.6%	7.9%	89.0%	85.5%	2.4%	3.7%	74.1%	79.1%

	55-59	3.4%	5.2%	88.4%	79.6%	3.7%	1.7%	69.9%	73.9%
	60-64	3.1%	3.5%	85.6%	72.4%	5.5%	0.9%	57.6%	69.1%
	65-69	4.0%	1.2%	82.4%	68.1%	9.5%	0.3%	45.2%	66.9%
	70-74	5.0%	0.8%	75.8%	65.5%	10.8%	0.3%	29.8%	68.5%
	75-79	5.0%	0.3%	72.6%	65.4%	12.0%	0.0%	23.0%	67.4%
	80+	9.3%	0.4%	60.7%	58.6%	13.9%	0.0%	8.9%	70.3%
Mongolia 2000	0-4	0.0%	97.6%	0.0%	0.0%	0.0%	97.6%	0.0%	0.0%
	5-9	0.0%	95.0%	0.0%	0.0%	0.0%	95.2%	0.0%	0.0%
	10-14	0.0%	92.8%	0.0%	0.0%	0.0%	91.6%	0.0%	0.0%
	15-19	0.9%	80.3%	1.0%	0.4%	0.3%	76.7%	4.3%	6.2%
	20-24	2.6%	57.0%	25.3%	19.4%	0.4%	45.6%	40.4%	46.7%
	25-29	2.4%	29.1%	58.4%	55.0%	0.6%	24.7%	66.7%	77.1%
	30-34	2.3%	14.4%	78.2%	77.8%	0.8%	15.3%	74.2%	87.8%
	35-39	1.9%	9.5%	82.8%	83.1%	0.6%	9.6%	76.9%	92.8%
	40-44	2.9%	5.3%	84.8%	86.4%	0.7%	6.0%	74.7%	93.3%
	45-49	2.3%	4.7%	83.6%	86.2%	1.4%	5.0%	71.7%	87.8%
	50-54	2.8%	2.6%	84.2%	82.4%	2.4%	2.6%	64.5%	86.8%
	55-59	4.2%	1.9%	80.9%	81.5%	3.2%	2.2%	54.9%	83.3%
	60-64	6.1%	0.3%	75.6%	73.9%	4.9%	0.3%	49.4%	72.9%
	65-69	4.3%	0.0%	74.0%	66.2%	7.8%	0.6%	36.3%	62.3%
	70-74	11.4%	0.0%	57.0%	56.4%	13.9%	0.5%	19.0%	59.0%
75-79	7.8%	0.0%	53.4%	55.3%	18.5%	0.0%	18.5%	53.4%	
80+	7.8%	0.0%	31.2%	55.8%	21.0%	0.0%	2.8%	50.3%	
Nepal 2001	0-4	0.0%	97.1%	0.0%	0.0%	0.0%	97.3%	0.0%	0.0%
	5-9	0.0%	96.8%	0.0%	0.0%	0.0%	97.0%	0.0%	0.0%
	10-14	0.0%	95.0%	0.1%	0.0%	0.0%	93.7%	0.3%	0.0%
	15-19	0.8%	88.1%	6.9%	1.8%	0.3%	66.8%	22.3%	10.2%
	20-24	1.9%	72.7%	40.1%	23.7%	0.5%	22.1%	62.9%	55.8%
	25-29	1.9%	53.2%	72.1%	58.5%	0.4%	7.8%	78.2%	83.5%
	30-34	1.7%	37.2%	86.3%	79.6%	0.3%	4.8%	83.4%	89.7%
	35-39	2.1%	25.7%	89.6%	86.3%	0.5%	3.4%	83.0%	91.2%
	40-44	2.0%	17.9%	90.8%	88.7%	0.9%	2.6%	82.5%	90.2%
	45-49	2.4%	13.0%	89.5%	88.7%	1.7%	2.2%	78.8%	88.0%
	50-54	1.7%	8.3%	88.8%	88.1%	2.5%	1.4%	73.5%	83.7%
	55-59	1.9%	4.6%	86.6%	85.0%	3.7%	0.7%	67.2%	77.7%
	60-64	2.5%	2.6%	82.9%	79.8%	7.0%	0.2%	50.6%	73.0%
	65-69	3.1%	0.7%	78.1%	73.6%	7.7%	0.2%	43.1%	68.9%
	70-74	4.3%	0.7%	72.0%	70.3%	9.6%	0.0%	32.0%	69.1%
75-79	4.9%	0.0%	63.0%	70.4%	10.6%	0.0%	23.1%	69.6%	
80+	4.3%	0.0%	50.4%	69.6%	8.4%	0.0%	9.8%	75.6%	
Pakistan 1998	0-4	0.0%	97.2%	0.0%	0.0%	0.0%	97.1%	0.0%	0.0%
	5-9	0.0%	97.2%	0.0%	0.0%	0.0%	97.1%	0.0%	0.0%
	10-14	0.0%	95.8%	0.2%	0.1%	0.0%	96.0%	0.5%	0.1%
	15-19	0.6%	81.9%	4.7%	1.6%	0.1%	68.7%	18.4%	10.0%
	20-24	1.0%	67.8%	25.0%	15.4%	0.1%	32.6%	53.9%	45.3%
	25-29	1.0%	53.0%	53.4%	42.7%	0.1%	13.1%	75.0%	74.6%
	30-34	0.8%	39.5%	73.6%	66.7%	0.1%	6.8%	82.2%	85.2%
	35-39	0.8%	28.8%	82.1%	78.2%	0.1%	4.4%	84.0%	88.7%
	40-44	1.0%	19.7%	85.1%	83.4%	0.2%	2.9%	83.0%	88.8%
	45-49	1.1%	12.5%	86.6%	86.3%	0.4%	1.7%	81.2%	87.6%
	50-54	1.3%	7.1%	84.5%	85.3%	0.7%	1.2%	73.5%	81.2%

	55-59	1.3%	4.4%	84.0%	85.2%	0.8%	0.6%	69.5%	79.2%
	60-64	1.9%	2.0%	79.6%	80.8%	1.7%	0.5%	53.5%	70.4%
	65-69	2.0%	1.1%	77.1%	79.6%	1.8%	0.2%	48.9%	70.8%
	70-74	2.4%	0.7%	70.1%	73.3%	2.4%	0.3%	33.3%	65.8%
	75-79	2.6%	0.3%	65.5%	72.5%	2.3%	0.3%	33.0%	64.9%
	80+	3.0%	0.1%	53.3%	63.2%	2.9%	0.1%	16.0%	52.0%
Philippines 2000	0-4	0.0%	97.5%	0.0%	0.0%	0.0%	97.6%	0.0%	0.0%
	5-9	0.0%	96.3%	0.0%	0.0%	0.0%	96.2%	0.0%	0.0%
	10-14	0.0%	94.3%	0.2%	0.1%	0.0%	93.1%	0.4%	0.2%
	15-19	0.2%	88.8%	2.3%	1.3%	0.1%	80.1%	7.8%	5.6%
	20-24	0.7%	69.3%	22.0%	16.7%	0.3%	52.3%	37.6%	34.2%
	25-29	1.1%	41.1%	54.2%	47.8%	0.4%	28.6%	65.5%	63.8%
	30-34	1.2%	22.7%	74.1%	69.6%	0.5%	16.1%	78.2%	79.0%
	35-39	1.5%	13.7%	82.0%	80.5%	0.6%	9.9%	82.7%	85.7%
	40-44	1.6%	8.9%	85.9%	85.2%	0.6%	6.9%	82.4%	87.2%
	45-49	1.8%	6.3%	86.4%	86.4%	0.8%	4.9%	79.9%	85.8%
	50-54	2.1%	4.9%	85.7%	84.6%	1.6%	3.5%	75.2%	82.3%
	55-59	2.8%	3.3%	84.6%	81.2%	2.6%	2.5%	69.0%	76.4%
	60-64	3.4%	1.9%	82.5%	76.2%	4.1%	1.2%	61.6%	68.9%
	65-69	3.8%	1.2%	79.5%	68.1%	5.6%	0.7%	52.8%	60.7%
70-74	5.6%	0.5%	74.9%	60.2%	8.7%	0.3%	42.4%	54.0%	
75-79	5.8%	0.3%	67.4%	53.2%	8.9%	0.3%	31.9%	51.4%	
80+	7.6%	0.3%	56.1%	51.8%	9.6%	0.1%	19.8%	48.1%	
Vietnam 2009	0-4	0.1%	96.7%	0.0%	0.0%	0.1%	96.8%	0.0%	0.0%
	5-9	0.0%	96.9%	0.0%	0.0%	0.0%	96.7%	0.0%	0.0%
	10-14	0.1%	96.7%	0.0%	0.0%	0.1%	96.5%	0.0%	0.0%
	15-19	0.5%	91.8%	2.4%	1.2%	0.6%	83.1%	8.4%	4.6%
	20-24	1.6%	75.6%	25.2%	17.8%	1.8%	41.1%	46.9%	39.5%
	25-29	1.7%	52.0%	61.4%	52.9%	1.2%	19.7%	72.9%	73.2%
	30-34	1.3%	30.7%	83.6%	80.2%	0.8%	10.4%	82.6%	88.0%
	35-39	1.2%	20.9%	89.9%	88.7%	0.9%	7.2%	83.7%	90.9%
	40-44	1.4%	14.7%	92.3%	90.7%	1.5%	5.5%	82.5%	88.7%
	45-49	1.5%	10.9%	93.4%	87.6%	3.0%	4.4%	79.0%	83.0%
	50-54	1.9%	8.1%	92.9%	81.3%	4.2%	3.6%	75.0%	76.5%
	55-59	2.1%	5.8%	92.4%	76.8%	5.5%	2.6%	68.6%	72.2%
	60-64	2.3%	4.2%	90.5%	71.7%	8.5%	1.4%	58.9%	67.0%
	65-69	3.0%	1.9%	87.8%	67.1%	10.8%	0.6%	50.7%	65.5%
70-74	3.5%	0.8%	83.4%	60.6%	12.8%	0.2%	41.8%	63.5%	
75-79	5.6%	0.3%	76.4%	58.1%	15.1%	0.1%	32.3%	62.3%	
80+	8.5%	0.0%	59.2%	60.6%	16.9%	0.0%	15.2%	67.5%	
Thailand 2000	0-4	0.0%	92.1%	0.0%	0.0%	0.0%	91.2%	0.0%	0.0%
	5-9	0.0%	90.8%	0.0%	0.0%	0.0%	91.4%	0.0%	0.0%
	10-14	0.1%	91.5%	0.2%	0.1%	0.1%	91.4%	0.2%	0.0%
	15-19	0.7%	86.6%	2.3%	0.9%	0.6%	82.2%	7.5%	5.6%
	20-24	2.3%	69.9%	17.5%	10.8%	2.2%	57.0%	32.4%	29.5%
	25-29	3.9%	45.5%	45.6%	36.9%	2.6%	37.4%	57.0%	55.8%
	30-34	3.5%	27.1%	69.6%	61.3%	2.2%	23.6%	70.4%	72.0%
	35-39	3.2%	17.8%	80.2%	74.8%	2.2%	15.8%	75.0%	78.2%
	40-44	3.3%	11.9%	84.7%	79.7%	2.6%	11.4%	75.5%	78.0%
	45-49	3.0%	8.2%	87.1%	79.0%	3.2%	8.4%	73.1%	74.2%
	50-54	3.4%	5.7%	87.6%	75.9%	3.8%	5.7%	70.4%	69.7%

	55-59	3.9%	4.3%	87.1%	71.7%	4.6%	3.4%	64.6%	68.1%
	60-64	4.2%	2.2%	83.6%	68.4%	6.2%	1.6%	57.0%	67.2%
	65-69	4.4%	1.4%	79.9%	66.7%	7.0%	0.6%	46.7%	67.1%
	70-74	5.4%	0.4%	71.8%	65.7%	7.6%	0.3%	35.5%	69.7%
	75-79	6.1%	0.3%	64.7%	65.4%	7.8%	0.1%	25.8%	73.4%
	80+	6.8%	0.1%	52.6%	70.3%	7.1%	0.0%	13.4%	77.0%

Source: IPUMS-international.