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Women's Empowerment in South Asia and South East Asia: A Comparative Analysis

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Abstract

This paper uses multivariate regression analysis to explore the time and birth cohort trends of women's empowerment in eight countries of South Asia and South East Asia. The measures of women's empowerment are: economic participation, educational attainment, wage work, fertility, female to male sex ratio of living children, and the ideal female to male sex ratio. The data (1990s and 2000s) are from the Demographic and Health Surveys (DHS.) Comparison of estimated cohort lines demonstrate that Philippines and Vietnam, both in South East Asia, have the highest education level, highest rates of economic participation, and the lowest fertility rates. Cambodia has the highest female to male ratio. Pakistan and Nepal have lowest education; Pakistan and Bangladesh have the lowest economic participation rates and highest fertility rates; India has the lowest sex ratio. In surveying country specific literature to confirm these estimates, I conclude (1) social and religious norms hinder women's empowerment in both regions. (2) Progress in women's empowerment has been achieved through feminist movements (the Philippines), government programs (the *Doi Moi* program of Vietnam) and Non Government Organization efforts (Grameen Bank of Bangladesh) (3) Much of the progress has been achieved with meager access to resources. (4) More empowerment could be the consequence of political turmoil, (Cambodia) and not necessarily economic development or cultural shifts.

JEL Classification: J16, N35, O10

Keywords: female empowerment, education, labor force participation, fertility, South Asia, Southeast Asia

1. INTRODUCTION

Women's empowerment is a complex, multidimensional concept, and needs to be defined and measured as a combination of related factors. In examining the intricate concept of women's empowerment, some measures that have been studied are the relationship between development and female labor force participation rate (FLFPR), also known as the U curve hypothesis¹, (Boserup 1970; Durand 1975; Goldin 1994; Galor & Weil 1996; Rau and Wazienski 1999; Mammen & Paxson 2000; Juhn & Ureta 2003 Fuwa et al, 2006; Lincove, 2008; Bloom et. al. 2009;), fertility (Galor & Weil 1996; White et al. 2001 Angeles et al. 2005), educational attainment (Lincove 2008; Nuss & Majka 1985; Goldin 1995) , decision making ability (Amin & Lloyd 2002; Fletschner 2008), and the population sex ratio. (Sen 1992, 1998.)

This paper contributes to the literature on women's empowerment by exploring the time and birth cohort trends of women's empowerment in eight countries of South Asia and South East Asia. The countries included are Bangladesh, India, Nepal, and Pakistan of South Asia; Cambodia, Indonesia, Philippines, and Vietnam of South East Asia. Initially, I estimated the relationship between economic development and FLFPR (the U curve) using data on 172 countries from 1990 – 2007. Results show (1) the relative positions of South Asia and South East Asia (both regions on the downward sloping portion of the U curve) are unchanged since

¹ During early stages of economic development, rapid industrialization and urbanization lead to major growth in manufacturing sector, and the rise of the factory system of production sees a surge in blue collar employment. Concurrently, the separation of the household sphere and work sphere implies that the economic importance of the household reduces significantly, reducing its status to that of a consumption unit only. Male labor force participation increases due to blue collar employment opportunities; their wage rate and hence, income increases rapidly. Female wages on the other hand, are more or less stagnant, and their labor force participation reduces, partly due to a demarcation between the female household sphere, and the male public sphere, and partly due to an income effect arising from increasing income of male family members. As the economy progresses further, a combination of lower fertility, availability of household appliances and other innovations of industrialization reduce the opportunity cost of time in the household. On the other hand, higher education, and higher demand for women in white collar employment increases women's wage rate. These two together imply that during advanced industrialization, the substitution effect of the wage rate increase dominates the income effect, resulting in increase of women's labor force participation rate.

Goldin's (1995) estimation using data for 1985, and (2) the U curve shifts upward over time; the influence of time is found to be positive and significant.

Critiques of the U curve hypothesis contend (1) A cross country study reveals the U curve in most cases; however, patterns within a country can be different (Lincove 2008) (2) The U curve does not directly control for the influence of cultural background on women's empowerment.

Hence, to further explore specific cultural contexts and also to further examine the influence of time on women's empowerment, I performed a series of multiple regressions on six measures of women's empowerment variables separately for the eight countries, using individual level survey data for each country. The indicators of women's empowerment are: economic participation, educational attainment, wage work, fertility, female to male sex ratio of living children, and the ratio of ideal number of daughters to sons.

To control for country specific cultural background, I included dummy variables for religion, province of residence, and urban/rural residence. Two measures of time were included as explanatory variables: (1) survey year (1990s and 2000s)² and (2) birth cohort interval of five years, spanning from 1943 – 1990. The birth cohort variables allow me to control for the impact of long term changes in attitudes and perceptions on women's empowerment. The cohort variables also possibly incorporate the impact of previously implemented government policies that have long term impact on women's empowerment.

The estimated cohort lines show that progress has been made in at least some dimensions of empowerment. Comparison of estimated cohort lines demonstrate that Philippines and Vietnam, both in South East Asia, have the highest education level, highest rates of economic participation, and the lowest fertility rates. Cambodia has the highest female to male ratio.

² Individual country survey years vary.

Pakistan and Nepal have lowest education; Pakistan and Bangladesh have the lowest economic participation rates and highest fertility rates; India has the lowest sex ratio.

In surveying country specific literature to confirm the estimates of this paper³, some conclusions I draw are as follows: (1) from the *Chbab Srey* of Cambodia to the *purdah* of Bangladesh, social and religious norms hinder women's empowerment in both regions. (2) Progress in women's empowerment has been achieved through feminist movements (the Philippines), government programs such as the *Doi Moi* program of Vietnam and the Non Government Organization efforts in family planning in Bangladesh. (3) Much of the progress has been achieved with meager access to resources. An example is Vietnam, where women have achieved higher levels of education and labor force participation relative to comparable countries, and yet Vietnam is one of the poorer nations. (4) More empowerment could be the consequence of political turmoil, (Cambodia) and not necessarily economic development or cultural shifts. For example, high female economic participation rate and high ratio of living women to men in Cambodia are due to major civil wars and political killings that reduced the male population. This is not the result of economic development, and is certainly not the result of any changes in women's position in society.

2. LITERATURE REVIEW

2.1 Defining Empowerment

Kabeer (1999) & Sen (2001) conceptualize empowerment (or the lack of it) as a manifestation of gender inequality. Sen (2001) notes: "...inequality between women and men can take very many different forms. Indeed, gender inequality is not one homogeneous phenomenon, but a collection of disparate and interlinked problems." Sen enumerates seven types of gender inequality

³ Countries surveyed are Cambodia, Indonesia, the Philippines, Vietnam, Bangladesh and Pakistan.

including mortality, natality, basic facility, special opportunity, professional, ownership, and household inequality.

The factors that determine empowerment vary by geographic location (individual nations or world regions) and are determined as much by economic variables (economic development, labor market productivity, returns to labor, education; Rammohan & Johar 2009) as by non economic, or “soft” variables (religion, kinship structure, and domestic decision making power.)

One of the most detailed attempts at defining empowerment is found in Kabeer (1999.) Defining empowerment as the “ability to make choices,” Kabeer contends that the definition entails change, in that only previously disempowered members of society can be empowered. Kabeer suggests that empowerment consists of three dimensions: (1) resources that improve the freedom to make choice (such as land ownership and property rights, education, employment opportunities, household resource allocation), (2) agency or the “ability to define one’s goals and act on them” (Kabeer 1999: 438) (such as mobility, domestic violence, access to and voice in household decisions), and (3) achievements (such as immunization, health, survival, and education of children.)

2.2 Measurement of Women's Empowerment: Labor Force Participation Rate

In studying the relationship between economic development and women's empowerment, researchers often study trends in women's economic participation as a function of economic development. Durand (1975) explains that economic development can have either a positive or a negative impact on women's labor force participation depending on whether or not a greater share of female work force is employed in the expanding sector. Greater concentration in the non agricultural sector increases FLFPR, but greater concentration in family enterprise, agriculture or

domestic services are detrimental to FLFPR. Using data for 100 countries from the 1950's and 1960's, Durand found evidence of the U curve hypothesis. Pampel & Tanaka (1986) use data on 70 nations for 1965 and 1970 to conclude that the use of energy per capita, a measure of development, has a curvilinear impact on female labor force participation. Similarly, Psacharopoulos & Tzannatos (1989), Schultz (1990) and Goldin (1995) find evidence of the U curve hypothesis. With real GDP per capita as a measure of development, Goldin used data for 180 countries for the year 1985 to trace the U curve. The poorest regions of the world were found to be on the downward sloping portion of the relationship. The middle income countries were at the bottom, while the richer nations were on the upward sloping portion. Goldin (1995) also demonstrates that a U shaped relationship exists between male education and female labor force participation rate. The contention is that whereas men's education starts increasing at a much earlier stage of development, women's educational attainment increases only at a later stage of development. Women's productivity and hence their income have to catch up with that of men. Mammen & Paxson (2000) find evidence of the U curve. Nuss and Majka (1985), in a cross country study of occupational segregation, conclude that there is no straightforward relationship between economic development and women's economic integration. They find mixed evidence of the impact of economic development on women's education. Their findings suggest that women do not completely integrate into all areas of education, especially agriculture and engineering, thus hindering their economic empowerment. Rau and Wazienski (1999) find support for the U curve hypothesis. In a study of the effect of development on female labor force participation using data on sixty two countries, their finding suggest that while early industrialization drives women out of the labor force, the eventual impact of industrialization of female labor force participation depends on the particular path of industrialization. Bloom et al

(2009) use data for 97 countries from 1960-2000 to demonstrate that a slight U shaped relationship exists between per capita real income and female labor force participation rate. Their findings suggest that the highest participation rate of around 90 percent is found in poorest nations, while in the richest nations, such as United States, the rate reaches around 60 percent. In a study of 141 countries for the year 2000, Lincove (2008) uses real GDP per capita, gross enrolment rate, religion, and industry as explanatory variables to study the U curve hypothesis. Findings suggest that while cross country data for a particular year demonstrates the U shaped relationship, country specific characteristics and experiences do not necessarily conform to this relationship, especially if policy implementations invest in women's education and economic participation in a planned manner. Hence, policy interventions can contradict the U curve hypothesis. Tansel (2001) finds support for the U curve hypothesis in a study involving 67 provinces of Turkey. Juhn & Ureta (2003) analyze 1995 and 1996 data for 12 Latin American countries and find evidence supporting the U curve hypothesis. Fatima & Sultana (2009) affirm the hypothesis in Pakistan, while Fuwa et al. (2006) finds evidence of the hypothesis in India.

2.3 Women's Empowerment: The Role of Non Economic Variables

Current literature discusses the role of culture and religion as determinants of women's empowerment. Hammel (1990) contends that economically similar populations can display very different behavior if they are culturally different; and the same population can behave in the same way despite economic changes. Fish (2002) notes: "Religious traditions are usually constants within societies; they are variables only across societies. Societies usually are 'stuck' with their religious traditions and the social and psychological orientations they encode and reproduce." (Fish 2002: 37.) Mammen & Paxson (2000) discuss the effects of culture in under

developed parts of the world: lack of competitive markets (due to, for example, prohibition of women's employment), absence of wage work, high fixed cost of labor supply, and low marginal productivity to farm work can ensure low rates of female economic participation. Using Freedom House (FH) Freedom rating, Fish (2002) finds evidence to support the hypothesis that Islamic nations are politically authoritative and more oppressive towards women than non Islamic nations. In a similar note, Donno & Russett (2004) also find evidence to show that Islamic nations tend to be more autocratic and are more likely to suppress women's rights. Clark et al. (1991) explore the impact of culture on female labor force participation in 135 countries for 1980. They use a combination of religion, political ideology, and world region variables to find evidence supporting the importance of culture in explaining women's labor force participation. Women in Islamic countries and in the largely Catholic Latin American countries were found to have the lowest labor force participation rates. Their conclusion is that strong Islamic separation of male and female work sphere and traditional exclusion of women from paid participation in Latin America explain the lower participation rates in these countries. Papps (1992) discusses the mixed evidence of the direct impact of religiosity on women's economic participation in the context of Islam dominated Middle East. Salway et al. (2005) mention "unaccompanied mobility" as a key element of women's empowerment in South Asia. Dyson & Moore (1983) contend that traditional norms such as exogamous marriage, and male kinship patterns lead to low status and less autonomy of women in Northern India. Rahman & Rao (2004) contend that restrictions on women's physical mobility leads to lower labor force participation rates in Northern India, while Goyal (2007) argues that development alone will not solve gender inequity; in the northern Indian state of Punjab, male qualities are preferred, and families prefer having sons. Goyal contends that sex selective abortion techniques are used to ensure that sons

are born, leading to an alarming drop of the population sex ratio, as is evident in the 2001 Census of India. Salway et al (2005) argue that the restrictive *pardah* system of rural Bangladesh symbolizes the traditional separation of the male public sphere and female domestic sphere. Mumtaz (2007) notes that in Pakistan, even in urban Karachi, women felt physically restricted by the responsibility of guarding their honor, as dictated by Islamic traditions.

2.4 Women's Empowerment: The Role of Taste and Preference

The role of taste and preference in determining the choices made by women is discussed by authors such as Sanad & Tessler (1988.) Kabeer (1999), in discussing non uniform achievements of men and women, stresses the need to distinguish between the ability to make choice (preference), and the "inequalities in people's capacity to make choices..." (Kabeer 1999: 439). At one place, Kabeer notes: "While these forms of behaviour could be said to reflect "choice", they are also choices which stem from, and serve to reinforce, women's subordinate status."

Goyal (2007), in discussing conscious choices made by women concludes that in India, women make a conscious decision in settling for less. However, this does not mean that women have a taste for settling for less or that they lack "self-awareness" of the injustice and unfair treatment that they receive. Goyal concludes that "...women, on the whole, make choice in full awareness of what they are doing." (Goyal 2007: 431) Postelwaite & Neumark (1995) contend that besides income and substitution effects, women's choice on labor force participation is also influenced by other women's decision to enter the labor force. They conclude that women with employed sisters are 10 to 15 percent more likely to work than women whose sisters are not in the labor force.

Sanad & Tessler (1988) discuss choice of older Kuwaiti women as a “normative orientation”. Women who are least educated, and are highly religious are also more likely to disapprove of women's economic participation. The authors take an inter generational approach to justify the reason for persistence and perpetuation of gender perceptions in Kuwait as follows: “...the attitude and behavior patterns of these women who reached adulthood a decade or more ago have helped to shape the character of the Kuwaiti labor force and, among other things, they have intensified the country's reliance on foreign workers.” (Sanad & Tessler: 463.)

2.5. Alternative Measures of Women's Empowerment

Sen (1998) notes: “Gender bias is, ..., very hard to identify, since many of the discriminations are subtle and covert, and lie within the core of intimate family behaviour.” (Sen 1998: 10)

Researchers focus on several alternative measures of women's empowerment. For example, Lincove (2008) discusses female educational attainment, while Nuss & Majka (1985) study female educational attainment, enrollment ratio, and “index of femaleness” in education.

Gangadharan & Maitra (2000) examine educational attainment, age at first marriage and age at first birth. Goldin (1995) explores trends in graduation rate, percentage of workers in white collar jobs, and male to female secondary gross enrollment rates. Bloom et al. (2009), Galor & Weil (1996), Angeles et al. (2005) and White et al. (2001) analyze fertility as a determinant of women's empowerment as a nation develops. Goldin (2006) explores women's expectation to be employed at age 35, age at first marriage, fraction of females in professional education programs, wage gap, fraction of years spent married, and child status. Sanad & Tessler (1988) study several attitude variables such as opinion on women's economic participation, women's professional opportunity, religiosity, and husband's control over wife. Anderson & Eswaran (2009) study female autonomy in Bangladesh by focusing on the ratio of women's earned income to their

unearned income. Pitt et al. (2006) examine variables that measure women's economic freedom, decision making freedom, political awareness, family planning and fertility control, along with household attitude towards dowry, and women's status in the household. Amin & Lloyd (2002) analyze the proportion of female headed households, proportion of women who perform cash work, freedom of mobility without permission, and decision making power about family budget. Kishor & Johnson (2006) examine women's reproductive health, such as unwanted pregnancies, pregnancies ending in stillbirth, and prevalence of STDs to study the relationship between domestic violence against women and their reproductive health. Azarnet (2009) uses abortion laws as a measure of empowerment and its impact on women's education in Africa. Villarreal (2007) uses variables depicting coercive control by male partner, frequency and type of violence as measures of women's empowerment. Fletschner (2008) uses women's access to credit, while Goyal (2007) looks at female membership in micro credit institutions. Liu (2004) and Hung & Pham (2006) study sectoral wage gap in Vietnam. Donno and Russett (2004) examine the Freedom House Rating; Dijkstra (2002) examines the Gender Development Index (GDI) and Gender Empowerment Measure (GEM.) Sen (1992, 1998) asserts that the population sex ratio is a measure of empowerment and is indicative of discrimination against women in mortality, health care, nutrition, and other forms of gender inequity.

3. WOMEN'S EMPOWERMENT IN SOUTH ASIA AND SOUTH EAST ASIA:

PRELIMINARY ANALYSIS

For the rest of the paper, I focus on women's empowerment in South Asia and South East Asia. In this section, I share some preliminary information on the two regions, and also justify their selection. Table 1 shows the Real GDP Per Capita (RGDPPC) as per Penn World Tables 6.3 and

the rank of these eight countries out of 164 countries for three years – 1985, 1990, and 2007. Table 2 shows the FLFPR, as given by ILO's KILM. From table 1, it is evident that these countries are less developed compared to rest of the world; all of them have consistently low ranks of economic development, as measured by RGDPPC. In terms of population, four out of eight countries – India, Indonesia, Pakistan, and Bangladesh are among the ten most populous countries of the world.⁴ Table 2 shows that there is a wide variation in FLFPR between the two regions. While the lowest participation rates are from South Asia, (Pakistan and India,) the highest are from South East Asia (Cambodia and Vietnam.) RGDPPC is highest in Indonesia and Philippines, yet FLFPR is not the highest in these countries. In fact, FLFPR is highest in Cambodia, which has been the least developed in the two regions combined in two out of the three years.

Table 3 shows the UNDP administered indices of gender equity for 2007: the Gender Equity Measure (GEM) and the Gender Related Development Index (GDI).⁵ None of the eight countries are ranked very high. However, within this group of countries, the lowest ranked countries (Bangladesh and Pakistan) are of South Asia, while the highest ranked (Philippines and Vietnam) are both in South East Asia.

As established by the discussion in section 2, religious and cultural experiences play significant roles in shaping women's empowerment. In this context, the selection of these countries is interesting because of the sheer diverse religious and cultural experiences in these regions. The predominant religions are as follows: Nepal and India: Hinduism; Pakistan, Bangladesh and Indonesia: Islam; Philippines: Roman Catholic; Cambodia and Vietnam:

⁴ 2009 data, not shown, are from the Population Reference Bureau.

⁵ The GDI is a gender inequality adjusted measure of the Human Development Index (HDI), and has three components: income, education, and health. The GEM is a measure of agency, and refers to women's political and economic power, such as representation in parliament, share of administrative and technical positions, and income. For a comprehensive study of these two measures, see Dijkstra (2002.)

Buddhism. Also, family and gender perceptions differ between the two regions. (Rammohan & Johar 2009.). While gender inequality is present in both regions, South Asia tends to be relatively more traditional and restrictive, including restriction on women's mobility. (See discussion in section 2.)

3.1. Revisiting the U Curve Hypothesis: The 1990s & 2000s

Goldin (1995) estimated the U curve with data on 190 countries for the year 1985, and plotted major world regions along the curve. The poorest regions of the world were along the downward sloping portion, the medium income countries around the bottom, and the higher income countries were on the upward rising part. Accordingly, in the year 1985, South Asia and South East Asia were on the downward sloping part of the curve. South Asian countries, such as India and Nepal were somewhat below the estimated relationship, while countries of South East Asia, such as Indonesia were above the estimated relationship. South East Asia was to the right (signifying more development than South Asia) and above South Asia, (signifying higher female labor force participation rate than South Asia.)

In this section, I discuss the results of the estimated relationship between economic development and female labor force participation rate with data on 172 countries from 1990 through 2007, for a total of 3060 observations⁶. The data for female labor force participation rate (for population more than 15 years old) is from ILO's Key Indicators of Labor Market (KILM). The KILM program was initiated by the ILO in 1999 to collate existing information on labor markets from international organizations. KILM provides comparable data on labor market indicators, such as employment, unemployment, inactive population, education, and wage indicators for 230 countries. KILM defines labor force participation rate as "...a measure of the

⁶ A few recently formed countries have missing data for some years.

proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work...."⁷ In measuring economic development, I followed Goldin (1995) in using the RGDPCC. (2005 Constant Prices: Chain series,) of the Penn World Tables. The estimation method is similar to Goldin (1995) and Mammen & Paxson (2000). Female labor force participation rate was the dependent variable, and the log RGDPCC, its square, along with a time trend variable were used as explanatory variables. The regression model is as follows:

$$FLFPR = \alpha + \beta_1 \ln RGDPCC + \beta_2 (\ln RGDPCC)^2 + \beta_3 TIME$$

Table 4 shows the results of the estimation procedure, confirming the existence of the U curve. Figure 1 illustrates the shifting position of the U curve over time. Thus, even if RGDPCC remains constant, women's economic participation increases over time. Figure 2 illustrates U curve for 2007. The relative position of South Asian and South East Asian regions have not changed since 1985 (Goldin 1985.) Both regions are on the downward sloping part of the U curve. South Asian countries are roughly below the U curve, while the South East Asian countries are roughly above the curve. Pakistan have lowest participation rates, while Cambodia and Vietnam have the highest participation rates.

4. WOMEN'S EMPOWERMENT IN SOUTH ASIA & SOUTH EAST ASIA: INDIVIDUAL COUNTRY DATA ANALYSIS

The U curve estimation of section 3 does not include direct controls for country specific cultural variables. One might argue that the country level data includes the influence of background variables. But cultural variables not only differ between nations, but they can and do vary within

⁷ For a more detailed outline of the KILM, refer "Guide to Understanding the KILM"

a nation too. Women living in a single nation experience different empowerment, depending on the specific environment that they are subject to.⁸

On the other hand, the U curve estimates suggest that there is a time element involved in women's empowerment. I interpret this as hinting towards vital changes occurring in a nation that operate quite separately from a numeric yardstick of development. For example, attitude towards women's professional education may change over time; views on whether they should be allowed to work outside home can change over time. Political events and government policies can have significant impact on empowerment over time. For example, a devastating war can have demographic impact by reducing the male population, and consequently, increase the female to male ratio of a population.

Therefore, to further explore the differential influence of such variables on women's empowerment over time within a nation, I performed a series of multiple regressions on six measures of women's empowerment variables separately for the eight countries, using individual level survey data for each country. To control for cultural background variables, I included dummy variables for religion, province of residence, and urban/rural residence.

Two time variables were included as explanatory variables: (1) survey year (1990s and 2000s) and (2) birth cohort interval of five years, spanning 1943 – 1990⁹. The birth cohort variables allowed me to include a longer time span (almost 50 years,) even though the actual surveys cover less than 20 years. As an example of why birth cohorts are useful, consider changes in women's opinion about their own labor force participation. If older women are

⁸ For example, see Dyson & Moore (1983) for a discussion on difference in FLFPR between North and South India. The main contention is that differences in kinship and marriage norms result in higher FLFPR and in general, greater female empowerment in South India compared to North India.

⁹ Some variations in the selection of birth cohorts occurred depending on data availability and variable specific appropriateness. The birth cohorts were 1943-1947, 1948-1952, 1953-1957, 1958-1962, 1963-1967, 1968-72, 1973-1977, 1978-1982, 1983-1987, and 1988-1990.

opposed to it but younger women are in favor of it, then the birth cohort variable would capture the impact of attitudinal change on FLFPR across the cohorts. (Sanad & Tessler 1988.) Also, previously initiated government policies towards female education and population control might have a lagged impact on later cohorts.

Data for all eight countries are from the Demographic and Health Surveys (DHS) of the 1990s and 2000s. Initiated in 1984 by the United States Agency for International Development, (USAID), the DHS provides assistance to 85 developing countries in administering surveys to households in order to collect and distribute individual level data on women and children. The DHS individual recode contains information on respondents who were ever married women aged 15 – 49 years. The advantage of the DHS surveys is that for each country, individual level data is available on several measures of women's empowerment. The DHS also contain information such as year of birth, age, and other socio-demographic information on each individual respondent, such as religion, place of residence, rural/urban residence. Table 5 shows the country wise survey years and total sample sizes.

I followed existing literature in selecting the empowerment variables, and followed Kabeer (1999) in categorizing them:

Resources variables: Education in years, economic participation rate¹⁰, wage work¹¹.

Agency variables: Total number of children ever born¹², desired sex ratio.¹³

¹⁰ The DHS surveys ask respondents the question “Are you currently working?” and defines currently employed persons as those “...who were employed in the seven days preceding the survey and include those who did not work in the past seven days but who were absent from their regular work due to illness, leave, or any other such reason.”

I consider this variable as economic participation. (IIPS and Macro International (2007.)

¹¹ The DHS survey question on this variable differs between countries. In some countries, such as Vietnam, the survey question leads to only two answers: earns cash or not. For other countries, such as Bangladesh and India, for at least some years, the type of earnings for work was used to measure this variable. For such cases, I recoded responses “only cash” and “cash and kind” as wage work. Hence, this definition of wage work includes payment in kind also. Type of earnings was recorded only for women who were employed in the twelve months preceding survey.

Outcome variables: The sex ratio of living children.¹⁴

The estimation method is similar to (Goldin 2006). For each country, the six empowerment variables were regressed separately on the explanatory variables, as follows¹⁵:

$$\text{Empowerment}_i = \alpha + \sum \beta_j \text{cohort}_j + \sum \phi_k \text{religion}_k + \sum \lambda_l \text{province}_l + \sum \theta_m \text{urban}_m + \sum \omega_n \text{year}_n$$

5. RESULTS¹⁶

Figures 3 through 8 show the estimated cohort lines for each empowerment variable by country/region. The estimates are cohort wise averages for survey years. Figure 3 shows the cohort lines for years of education. For all countries, the cohort lines show that there is a general upward trend in education. A comparison between the two regions shows that with the exception of Cambodia, the South East Asian countries have higher education levels. Philippines and Vietnam have the highest levels of education, while Nepal, Pakistan, and Cambodia have the lowest levels of education. Education is more than 9 years for later cohorts of Philippines, and less than 4 years for later cohorts of Nepal and Pakistan.

In figure 4, the cohort lines for economic participation rates display a downward trend for most countries. The earlier cohorts have higher participation rates than the later cohorts.

Economic participation rates are higher in South East Asia. Vietnam has the highest participation rates, reaching 93 percent at the 1963-1967 cohort. The lowest participation rates are in Pakistan

¹² The total number of children ever born is the number of children born to a woman up until the time of survey. The reproductive cycle of woman is usually assumed to last from 15-49 years.

¹³ The ideal sex ratio was estimated from the regression of the ideal number of sons (daughters) that a woman would like to have. These variables were responses to the DHS survey questions on how many sons and daughters a respondent ideally like to have.

¹⁴ To calculate the ratio of living daughters to living sons, I first ran separate regressions on the number of sons and daughters who were ever born to the respondent and are still alive. The estimates were then used to calculate the sex ratios as the ratio of number of living daughters to the number of living sons. The data however, does not provide information on the age of living children, and hence age specific sex ratios cannot be provided.

¹⁵ Religion, province of residence, urban/rural, and year of survey were country specific variables. All explanatory variables are dummy variables.

¹⁶ Regression Coefficients and tests of significance are not displayed due to space constraint. Results are available from author upon request.

and Bangladesh at each cohort. In Pakistan it reaches a maximum of only 25 percent for the earliest cohort.

The assumptions of wage work and competitive labor market often do not fit the description of economic participation in developing countries, especially for women. In such labor markets, women are often paid in kind, sometimes not even that. Hence, paid labor force participation i.e. "wage work," is also a relevant indicator of empowerment. Figure 5 shows the cohort lines for wage work. As per estimates, wage work is more prevalent in South East Asia, reaching a maximum of almost hundred percent for all cohorts in Vietnam. An exception once again is Cambodia, which has one of the lowest wage work rates, and is only above Nepal. In Nepal, women's wage work rates are only around twenty percent.

Amongst the agency variables, figure 6 shows that the cohort lines for total number of children ever born show a downward trend. The trend lines are sharper in South Asia. In Pakistan for example, the 1948-1952 cohort averaged around eight births, while the 1968-1972 cohort averaged around 3.5 births. In Bangladesh, the number of births was almost seven at the 1948-1952 cohort, and reduced to three births at the 1968-1972 cohort. The lowest fertility are in the Philippines and Vietnam. In Philippines, women of 1948-1952 cohort averaged five births, reducing to around three at the 1968-1972 cohort. In Vietnam, women of 1948-1952 cohort averaged only 1.29 births. This increased to more than three births for the next two cohorts and dropped again to around two births at the 1968-1972 cohort.

The ratio of number of daughters to sons that a woman would ideally like to have is indicative of the presence of gender bias in a nation. The lower the ratio, the more is the prevalence of gender bias. In figure 7, the cohort lines for the ratio of ideal number of daughters to sons are flat for all countries, except Cambodia. For Cambodia, there is a sharp decline in this

ratio from an estimated 1300 at the 1948-52 cohort to only 500 at the 1973-1977 cohort. This result is discussed further in section 6. The cohort lines are lower for South Asia, indicating greater gender bias relative to Southeast Asia. Nepal has the lowest cohort line, while the Philippines has the highest cohort line. The Philippines is also the only country where the desired ratio is consistently greater than 1000 across all cohorts. For most other countries, the desired ratio is below 1000.

The ratio of the number of women to men has been described as an important indicator of gender bias in health and mortality. Figure 8 shows that the ratio of living daughters to living sons are flat and below 1000 for most countries. The exception is Cambodia, the only country where the ratio is greater than 1000 across all cohorts, but with a decline from earlier to later cohorts.

To summarize this section, the estimates here are consistent with the conclusions drawn in section 3, and from tables 3 & 4. The countries that are ranked higher by the GEM and GDI indicators (Philippines and Vietnam) were found to have higher empowerment. Table 6 provides a country wise estimate of value of each empowerment variable for the 1990s and the 2000s. The estimates demonstrate that as far as the three indicators of the resources dimension of women's empowerment are concerned, Vietnam and Philippines have had the highest resources for both decades, while Nepal, Bangladesh, and Pakistan have had lowest resources in one or more indicators. (Pakistan and Bangladesh in economic participation, Pakistan and Nepal in education, Nepal in wage work.)¹⁷ For the agency dimension, Philippines and Vietnam have the lowest fertility rates while Pakistan and Bangladesh have the highest fertility rates. For the outcomes dimension, India and Vietnam have the lowest ratio of living daughters to sons in both decades.

¹⁷ Although Nepal has one the highest estimated proportion of currently working women, this is offset by the fact that it has the lowest estimated rate of wage work.

The comparative analysis of the three dimensions of empowerment between the two regions indicates that South East Asia is generally higher than South Asia. A notable exception however is Cambodia, a country that is poorest in terms of real GDP per capita, has one of the lowest education levels and rate of wage work, one of the smallest ratios of ideal number of daughters to sons, and yet has one of the highest FLFPR (estimated at seventy percent) and also the highest sex ratio of living children, and is in fact the only country where the sex ratio of living children is in excess of 1000.

5.1. Country Analysis

In this section, I summarize a survey of country specific literature that I did in order to find determinants of women's empowerment that underlie the estimates. The objective was to confirm the regression estimates of section 5. The countries surveyed were Cambodia, Vietnam, the Philippines, Indonesia, Pakistan, and Bangladesh. "Explaining" women's status is a complicated task. This survey is only partial, and by no means claims to have covered all cultural, economic, and political explanations for women's status and empowerment in these countries.

5.1.1. Cambodia: One of the poorest countries of South East Asia, the estimated female education in Cambodia has been steady at around 3.5 years. There has been an increase in education across cohorts. Economic participation is higher than other countries, with the earliest cohorts at almost 80 percent participation rate, and more than seventy percent for younger cohorts. Total number of children has declined in Cambodia; fertility was more than five children for the earliest cohorts but declined to less than two for the 1973-1977 cohort.

Cambodia is also the only country with an actual sex ratio of greater than 1000 for all cohorts. However, there is a continuously decreasing trend in the actual sex ratio; from 1221 for the 1948-1952 birth cohort, to 1050 for 1973-1977 cohort. The ideal sex ratio has reduced sharply, showing a sharp increase in preference for sons.

Battered by violent civil wars for three decades, mass killings and mobilization meant that the share of female population rose in Cambodia. (Hein,) Ironically, the increase in the female population also increased women's opportunity for economic participation. Unfortunately, the rise in the proportion of women in the population also meant that women are considered less valuable than men. (Gorman et al. 1999.)

Additionally, Gorman et al. point out that Cambodia is a traditional country, where hierarchies are respected, and social behavior is guided by a code of behavior, called *chbab srey*. Accordingly, women are expected to serve their husbands and are considered to have a lower social status than men. Taken together, the decline in value of women due to high population sex ratio, along with traditional lower status of women clarify the sharply declining cohort line for ideal sex ratios.

Additionally, the high labor force participation often does not result in wage payment. This explains why in this study, Cambodia was found to have one of the lowest wage work rates. The chief reason for this is that the majority of the labor force, especially women, are employed in agriculture, and women are mostly categorized as unpaid family workers. The low levels of education amongst women also mean that they face difficulty in securing well paid employment.

5.1.2. Vietnam: Findings of this paper show that Vietnam ranks lower than some of the other countries in terms of Real GDP per capita, and yet Vietnamese women enjoy relatively higher

empowerment. This finding is similar to White et al. (2001). Female education is higher in Vietnam than most other countries of the region; around seven to eight years for all cohorts. Vietnam also has the highest economic participation rate amongst all eight countries. However, participation rate has reduced from ninety two percent in 1997 to eighty six percent in 2005.

Existing literature provides several possible reasons for these findings. The impact of government policies is one of them. One such Vietnamese government policy is the *Doi Moi* program, which essentially refers to the free market reforms of 1986 that saw a movement away from central planning to a market oriented economy. (Liu 2004.) Summerfield (1997) notes that the *Doi Moi* reforms have increased women's income and labor force participation, although concentrated mainly in agriculture and family enterprises, and export processing. Secondly, Hung & Pham (2006) note that the Vietnam Labour Code provides female workers with rights of paid maternity leave and protection from unilateral termination during pregnancy or child nursing.

However, Summerfield also notes that FLFPR has dropped in Vietnam primarily due to (1) preferences of some women leaning towards staying at home, (2) due to labor market discrimination leading to lay offs of middle aged women who became discouraged workers, (3) younger women staying in school longer and (4) older women going for early retirement. Taken together these are possible explanation for the high levels of participation rates, the drop in participation at the earlier and younger birth cohorts, and the decline in participation rates in the 2000s.

On a different note, for both Vietnam and Cambodia, Gray et al. (2006) note that political systems may influence FLFPR. Specifically, they note that Vietnam and Cambodia are former communist countries and along with several other former or current communist/Marxist states

have higher than average FLFPR. Liu (2004) notes that the communist ideology of equality of men and women led to small gender wage gap in communist Vietnam till the 1980s.

As already discussed, Vietnam has one of the lowest fertility rates. The estimated cohort trends are as follows:

Birth Cohort	Total children born
1948 – 1952	1.29
1953 – 1957	3.62
1958 – 1962	3.13
1963 – 1967	2.54
1968 – 1972	2.00
1973 – 1977	1.44

This inverted V shaped cohort trend for fertility in Vietnam is different from the other countries. (See figure 6 also.) The result that the earliest cohort had the fewest number of births maybe explained by the timing of the Vietnam war (1959 – 1975.) the 1948-1952 birth cohort was between seven and eleven years old at the start of the war, and between twenty three and twenty seven years old at the end of the war. Given that the estimated age at first birth in Vietnam is around twenty two years¹⁸, this was the only cohort that would have had children during the Vietnam war. The next cohort, 1953-1957 cohort was between eighteen and twenty two years at the end of the war and hence entered fertility after the war ended. This may explain why this and the next cohort had more number of births.

The subsequent decline in fertility from 1963-1967 cohort can be explained by the “two child” policy. The Vietnamese government implemented the “Two child” policy in 1988 as a population control measure. White et al. (2001) note that since the implementation of the reforms program and two child program in 1980's, women have had fewer children. Their result can be used to reconcile the findings here. Specifically, women of the 1963-1967 cohort were between

¹⁸ In order to get this average, the age at first birth was regressed on all explanatory variables and then estimated for each birth cohort.

twenty one and twenty five years old in 1988, and were probably affected by the two child policy. This explains why the fertility declined for this and subsequent cohorts.

As for the high levels of female education, White et al. (2001) & Summerfield (1997) note that Vietnam has maintained a high level of commitment towards educational attainment, and adult literacy rates of Vietnam exceed those of neighboring countries. White et al. (2001) find that higher educated women have lower fertility in Vietnam. Hence, the general high level of education could also explain the lower fertility.

However, Vietnam still suffers from gender bias, as evidenced by the low sex ratio of living children. Interestingly, the actual sex ratio was highest for the 1953-1957 and 1958-1962 birth cohorts (at 1015) but dipped sharply for the 1963-1967 cohort to around 970 and remained below 1000 for succeeding cohorts. The ideal sex ratio is around 890 for all birth cohorts till 1963-1967, and then this ratio increased to around 915 for succeeding cohorts. These findings are similar to Summerfield (1997), who also finds that the sex ratio is less than 1000. Two possible reasons for this result are a traditional family system of Vietnam with bias towards sons and the two child program that has led to strong bias towards sons, neglect of female children and hence higher female mortality.

Also, Liu (2004) contends that the *Doi Moi* program and the resulting shrinking public sector employment opportunities (where women dominated) meant that women had to find jobs in the private sector or informal sectors. This has ironically increased the sectoral gender pay gap in the private sector of Vietnam. Liu contends that much of the pay gap is due to gender discrimination, and a general reluctance to give up traditional discriminatory attitudes towards women. Hung & Pham (2006) contend that the very Vietnam Labour Code that protects

women's rights may lead to worsening of their economic status due to private sector reluctance in hiring women.

5.1.3. Indonesia: Indonesia has one of the highest Real GDP per capita amongst the eight countries. Siegmann (2006) notes that Indonesia has experienced rapid growth since 1960s, along with export oriented growth after 1986 which led to inflow of FDI and increased FLFPR. Yet, the findings of section 6 suggest that Indonesia does not have high estimates of women's empowerment. Education in Indonesia is around 6.5 years, with an upward cohort trend. Economic participation is higher for earlier cohorts, reaching forty seven percent for the earliest cohort. Both these estimates are lower than Vietnam, a country that has lower real GDP per capita than Indonesia. These findings are similar to Widarti (1998) who notes that although women in Indonesia enjoy higher levels of economic participation relative to other Muslim countries, the levels are still lower than other countries of South East Asia.

The total number of children born to women of Indonesia was more than six children for the earliest cohort, but has reduced for all successive cohorts to less than 1.5 for 1973-1977 birth cohort. The ideal sex ratio is below 1000. The actual sex ratio is around 950. This finding is similar to Kevane & Levine (2003.)

To understand why Indonesian women enjoy lower empowerment despite higher levels of development, Rammohan & Johar (2009) contend that Indonesian society traditionally favors sons over daughters, although this gender bias is not as striking as in South Asia. Kinship norms in Indonesia differ: it can be either patrilineal (i.e. less empowerment for women) or matrilineal (more empowerment for women.) The authors note that due to ethnic diversity of Indonesia, women's ethnic background has an impact on empowerment. Duncan et al. (2006) note that

Indonesia follows a traditional family system wherein men are heads of households and women's economic participation is considered only supplemental. Substantial gender education and wage gap also exists. Kevane & Levine (2003) note that Indonesian families traditionally have strong male bias and prefer having sons over daughters as their first child. This was evidenced by the traditional norms and rules of Indonesia that dictates gender behavior and roles (called *adat*.)

5.1.4. The Philippines: Women of the Philippines enjoy higher autonomy than rest of the developing world, especially in household decision making. Estudillo et al. (2001) note that women of Philippines enjoyed equal rights in the pre Spanish colonization period (pre 1521.) Although the Spanish clergy preached male dominance, nonetheless, even during this period, the treatment of Filipino women was much more egalitarian than in other countries. Filipino women have owned land and inherited property for centuries. Husbands often hand over their income to their wives and financial and other decisions are jointly made by husband and wife.

The role of women has also expanded into the so called male public sphere. They have made foray into small scale industries. Traditionally male dominated occupations have also seen a gender shift. Amongst countries of South East Asia, the Philippines has the highest proportion of legislative and managerial positions held by women. Also, women tend to be more into technology and professional occupations, and often make equal economic contribution to their family as their husbands.

The Philippines has one of the highest real GDP per capita, and has some of the highest estimates of women's empowerment for all six measures. Education in Philippines is the highest amongst all eight countries; more than seven years for earlier cohorts and it reached almost ten years for younger cohorts (1973-1977.) The commitment of the Philippines towards education is

clear from government policies such as Aquino's compulsory free secondary schooling Act of 1986, and from Arroyo's policy of complete exemption of parents from paying all school fees. (Estudillo 2001.)

The Philippines has one of the lowest fertility rates. This was around five births for the earliest cohort, but reduced to less than one for 1973-1977 cohort. Overall, the fertility is around two children. The actual sex ratio is below 1000. In terms of the ideal sex ratio, for all cohorts, the Philippines is the only country where this ratio is consistently above 1000, indicating a preference for girls.

A special mention needs to be made about the feminist movement of the Philippines that has advocated equal rights for women for several decades. (Sobritchea 2004)The movement, aided by the United Nations, donor agencies, and the Filipino political system has mobilized support and resources for women's rights, increased social awareness of women's issues, and protested sexist portrayal by media. The movement has made inroads in furthering women's empowerment in the Philippines.

5.1.5. Pakistan & Bangladesh: As discussed in section 5, with estimated education of only around 2.4 years, economic participation of only twenty three percent in 2007, Pakistan has some of the lowest estimates of most empowerment variables. These findings are similar to Toor (2007) and Fatima & Ambreen (2009.)

Mumtaz (2007) discussed the pronounced gender bias in Pakistan, including exclusion of women from property rights, restrictions on physical mobility, domestic violence, low political rights, low educational attainment, and low rates of economic participation. The author cites "religion" as the main medium through which gender bias operates in Pakistan.

Bangladesh presents a similar picture on women's empowerment. Amin and Lloyd (2002) contend that Bangladesh is traditionally gender biased. They discuss divorce laws and inheritance rights that give unequal treatment to women. While men can verbally divorce their wife and can practice polygamy, women are not allowed to practice polygamy by law, and can divorce their husband only if they are allowed to have a marriage contract specifying the wife's right to divorce her husband. In terms of inheritance rights, women get only half the share of parental property compared to brothers, and they receive only one-eighth of husband's property. The husband on the other hand, has 100 percent right over his wife's property upon her death.

Bangladesh has achieved sharply declining fertility across birth cohorts. Similar findings are found in Amin & Lloyd (2002.) In a study of declining fertility since late 1970s in the face of economic constraints in Bangladesh and Egypt, they find that in Bangladesh, reliance on non governmental institutions for outreach to women in rural areas had a significant impact on declining fertility. They find evidence of increasing educational attainment amongst later birth cohorts and also declining fertility. The authors attribute this partly to a sharp increase in the use of contraceptives. They contend that Bangladesh experienced major policy initiative for population control in the mid 1970s. This included door to door service to encourage the use of contraceptives, and feminine health services. Such organizations, including the Grameen Bank, are known as Non Government Organizations (NGOs). They have extended services for improving health, credit, and education, especially in rural Bangladesh.

6. CONCLUSION

This paper has explored trends and determinants of women empowerment in eight countries of South Asia and South East Asia. In terms of the three dimensions of women's empowerment:

resources, agency, and outcomes, progress has been made. However much of the progress has been achieved with meager access to resources. In Vietnam, women have achieved high levels of education and labor force participation relative to comparable countries, and yet Vietnam is one of the poorer nations. Similarly, high ratio of living women to men and high female labor force participation in Cambodia is hardly the result of any resources provided to women and is certainly not the result of any changes in their position in society. The sharp decline in fertility in Bangladesh was achieved through efforts of non governmental organizations, but was not accompanied by major increases in education or economic participation.

Future efforts in improving women's empowerment should focus on improving the agency and resources dimensions. In particular, this study finds that deep seated traditions, social and religious norms hinder women's agency. Improvement of resources such as better access to quality education, economic participation, favorable labor laws, inheritance and property rights are essential for continued progress in women's empowerment.

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Table 1: Real GDP Per Capita In Constant Dollars (Chain Index), Base Year 2005 and Rank Out Of 164 Countries

	Bangladesh	Cambodia	India	Indonesia	Nepal	Pakistan	Philippines	Vietnam
RGDPPC in 1985	\$ 1452	985	1665	2500	1335	2105	3075	1316
Rank in 1985	134	153	127	114	139	119	103	140
RGDPPC in 1990	\$ 1616	1274	2002	3217	1454	2426	3386	1484
Rank in 1990	130	142	121	104	136	116	102	135
RGDPPC in 2007	\$ 2340	2824	3826	5186	1932	3588	4791	3743
Rank in 2007	126	120	111	99	137	115	106	113
Change in Rank (1985 to 2007)	+8	+33	+16	+15	+2	+4	-3	+27

Source: Penn World Tables

Table 2: Female Labor Force Participation Rate in 1985, 1990, and 2007 in South Asia & South East Asia

Female Labor Force Participation Rate	Bangladesh	Cambodia	India	Indonesia	Nepal	Pakistan	Philippines	Vietnam
1985	60.30	77.70	34.70	43.40	46.60	9.10	48.10	74.00
1990	61.84	77.22	35.02	50.12	48.07	11.08	47.30	72.88
2007	57.15	74.60	34.11	49.32	58.71	20.85	49.63	67.08
Pct. Point Change in FLFPR (1985 – 2007)	-3.15	-3.1	-0.59	+5.92	+12.11	+11.75	+1.53	-6.92

Source: ILO KILM

Table 3: Gender Equity Measure (GEM) & Gender Development Index (GDI) Rank in 2007

Country	GEM Rank in 2007 (Out Of 109 countries)	GDI Rank in 2007 (Out Of 155 countries)
Bangladesh	108	123
India	na	114
Nepal	83	119
Pakistan	99	124
Cambodia	91	116
Indonesia	96	93
Philippines	59	86
Vietnam	62	94

Source: UNDP

Table 4: Regression Results: Relationship Between Real GDP Per Capita in Log Form and Female Labor Force Participation Rate

Dependent Variable: female Labor Force Participation Rate (15 years and above)

Explanatory Variable	Unstandardized Coefficient
LnRGDPPC	-28.686*** (2.990)
LnRGDPPC Sq.	1.441*** (0.174)
Year	0.295*** (0.053)
N = 3058	
R ² = 0.115	

***: Significant at 1% significance level. Figures in brackets are standard errors.

Table 5: Country, DHS Survey Years & No. of Respondents

Country	DHS Survey Years	No. of respondents (Ever Married Women aged 15-49 Years)
Bangladesh	1993-1994, 1996, 1999-2000, 2004, 2007	51747
India	1992-1993, 1998-1999, 2005-2006	304465
Nepal	1996, 2001, 2006	27948
Pakistan	1990-1991, 2006-2007	16634
Cambodia	2000, 2005	32174
Indonesia	1987, 1991, 1994, 1997, 2004, 2007	154149
Philippines	1993, 1998, 2003	42635
Vietnam	1997, 2002, 2005	25325

Table 6: Country Wise Estimates of Empowerment in 1990s and 2000s

Empowerment Dimensions/Country Name	Bangladesh	India	Nepal	Pakistan	Cambodia	Indonesia	Philippines	Vietnam
Resources								
FLFPR (1990's)	16	29	78	14	NA	24	34	92
FLFPR (2000s)	19	33	81	20	70	33	42	88
Wage Work (%) (1990's)	90	72	12	82	NA	NA	94	100
Wage Work (%) (2000s)	91	72	18	87	54	NA	91	100
Education (Years) (1990's)	3.03	4.28	1.4	2.35	NA	6.14	8.8	7.6
Education (Years) (2000s)	3.21	4.55	2.1	2.43	3.6	6.36	9	8
Agency								
Total Children Ever Born (1990's)	2.75	2.10	3.30	2.43	NA	2.60	1.93	2.29
Total Children Ever Born (2000s)	3.00	2.41	3.00	4.05	2.50	3.00	2.28	2
Ideal Sex Ratio (1990's)	806	716	655	492	NA	980	1060	900
Ideal Sex Ratio (2000s)	815	751	682	726	737	987	1057	908
Outcome								
Sex Ratio Of Living Children (1990's)	940	927	944	977	NA	950	958	928
Sex Ratio Of Living Children (2000's)	948	936	967	942	1134	950	946	942

Figure 1: Estimated U Curve in 1990, 2000, and 2007: Real GDP per Capita (Log Scale) & Female Labor Force Participation Rate

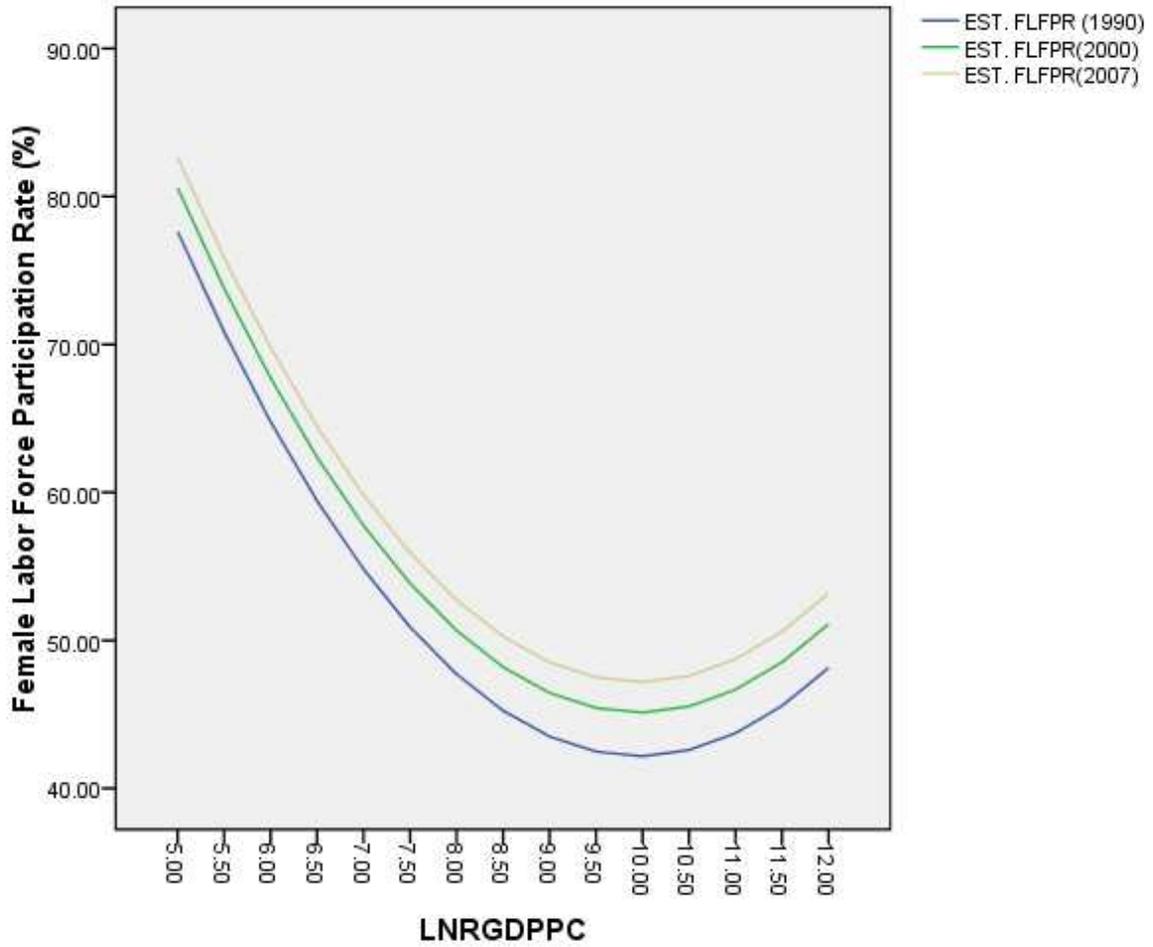
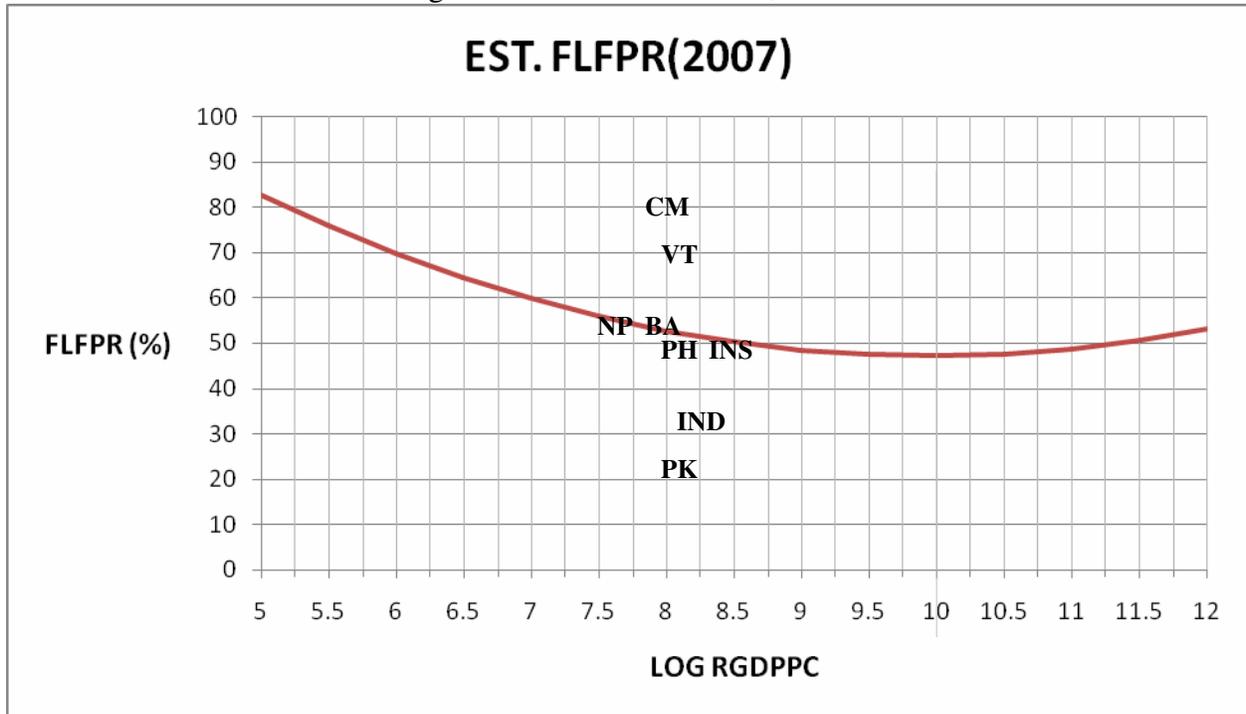


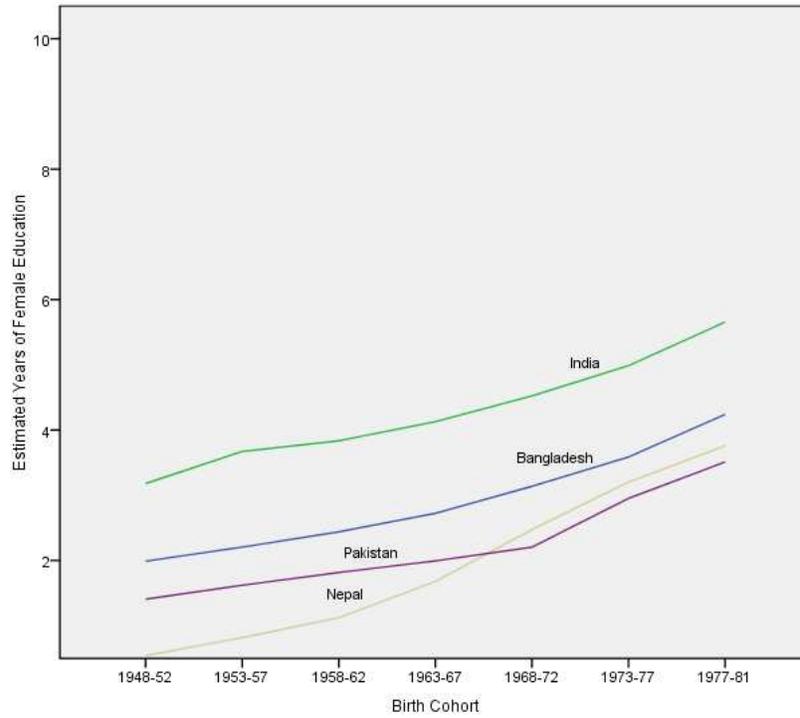
Figure 2: Estimated U Curve, 2007



CM, Cambodia; INS, Indonesia; PH, The Philippines; VT, Vietnam; BA, Bangladesh; IND, India; NP, Nepal; PK, Pakistan

Figure 3: Estimated Female Education in Single Years in the 1990s & 2000s by Birth Cohorts

Panel A: South Asia



Panel B: South East Asia

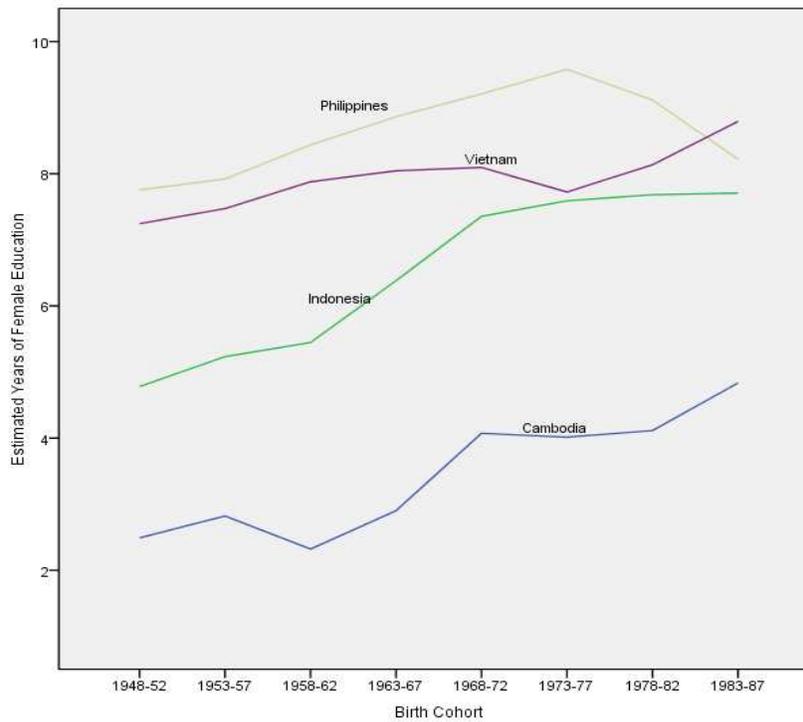
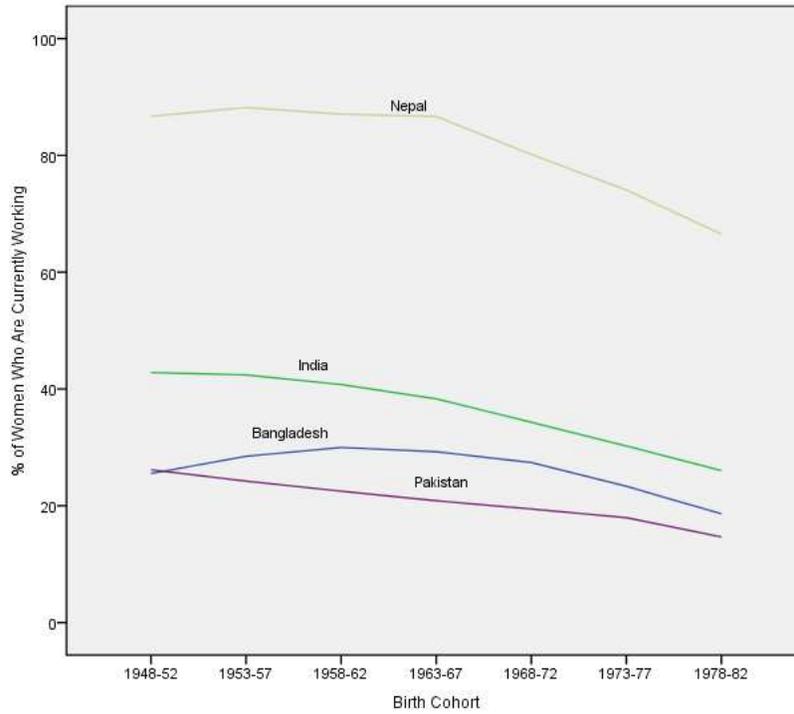


Figure 4: Proportion Of Women Who Are Currently Working in the 1990s & 2000s by Birth Cohorts

Panel A: South Asia



Panel B: South East Asia

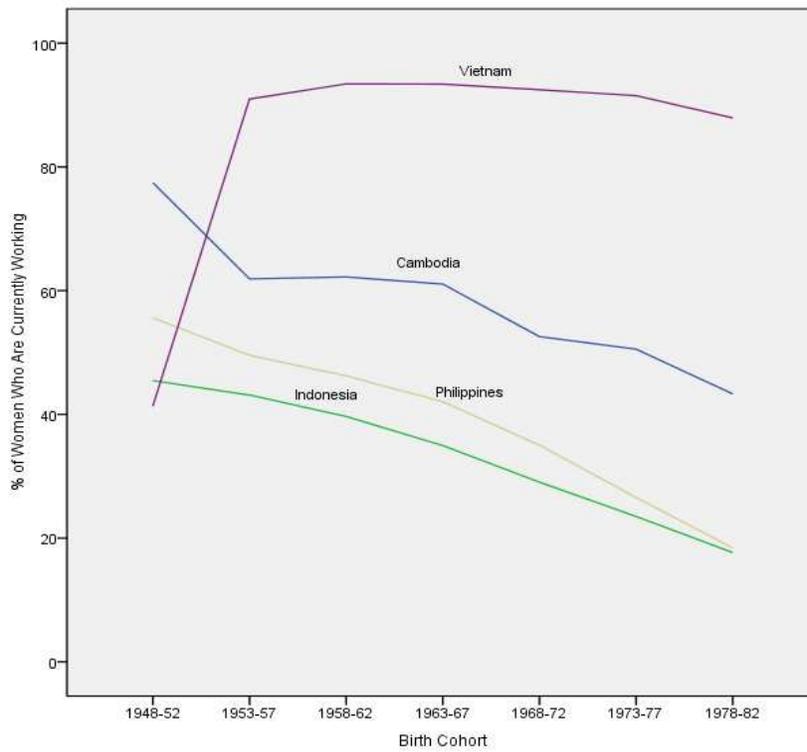
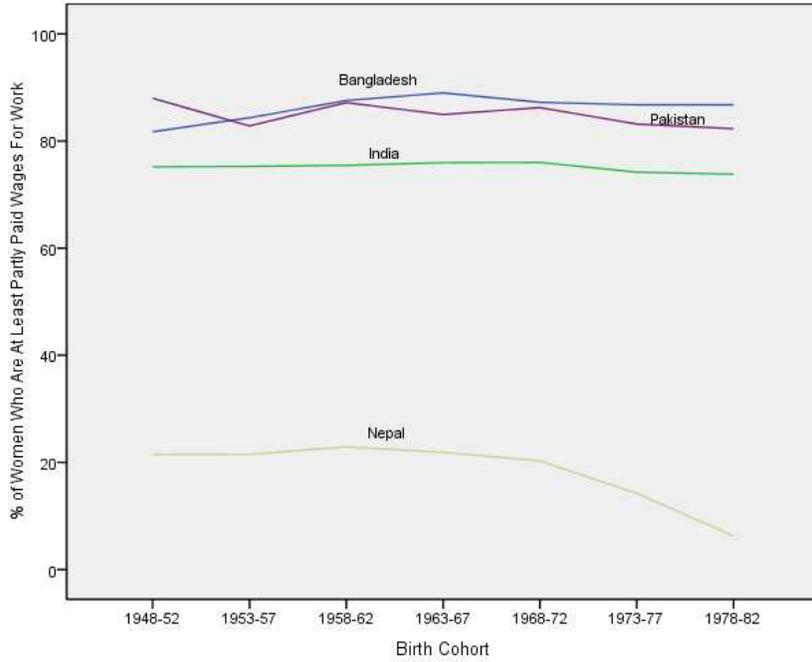


Figure 5: Percentage Of Women Who Are At Least Partly Paid Wages For Work in the 1990s & 2000s by Birth Cohorts (Amongst Women Who Are Currently Working)

Panel A: South Asia



Panel B: South East Asia (Data on This Variable Was Not Available For Indonesia)

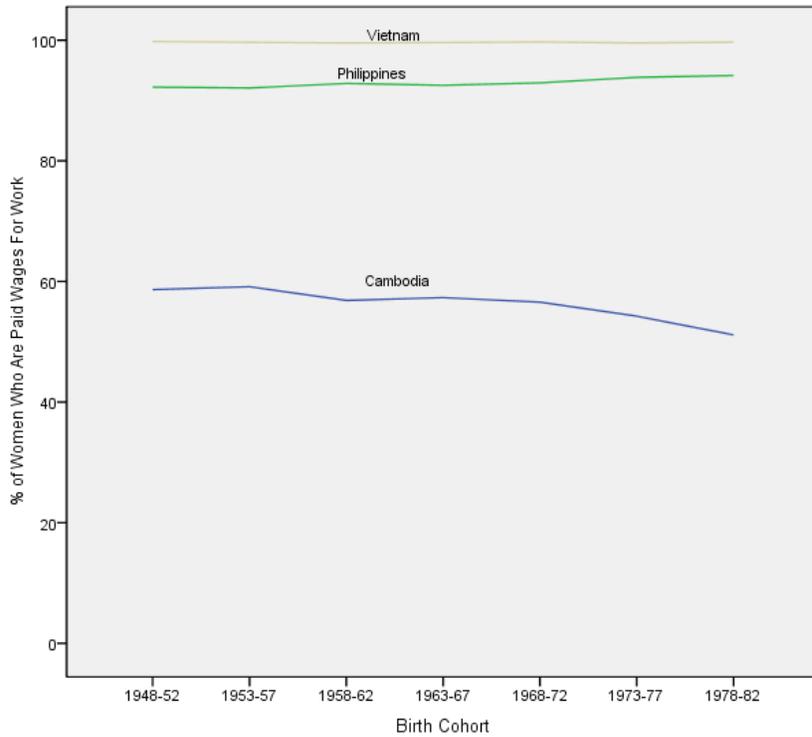


Figure 6: Estimated Total Children Ever Born to Women in the 1990s & 2000s by Birth Cohorts

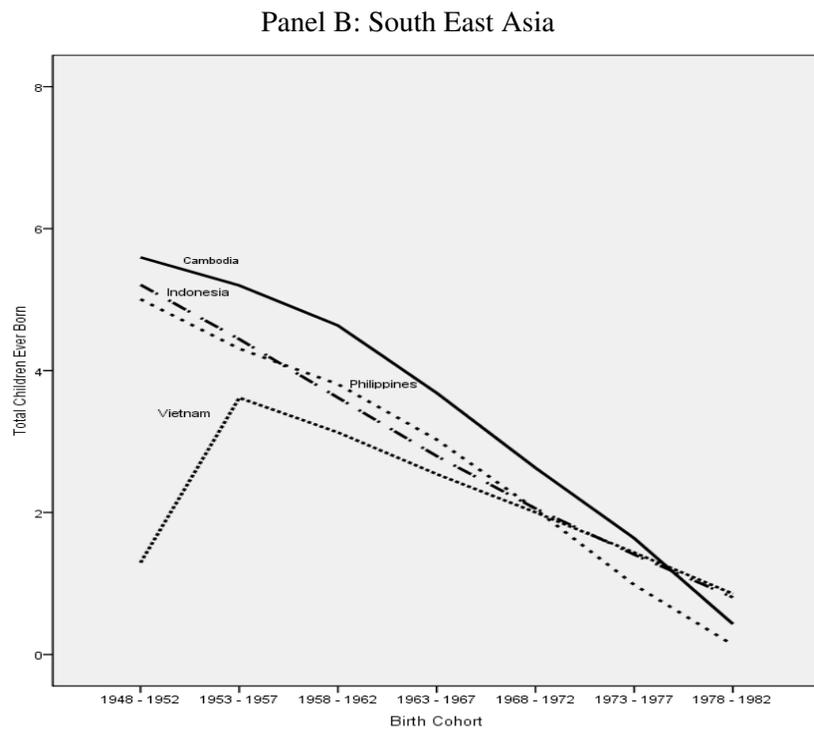
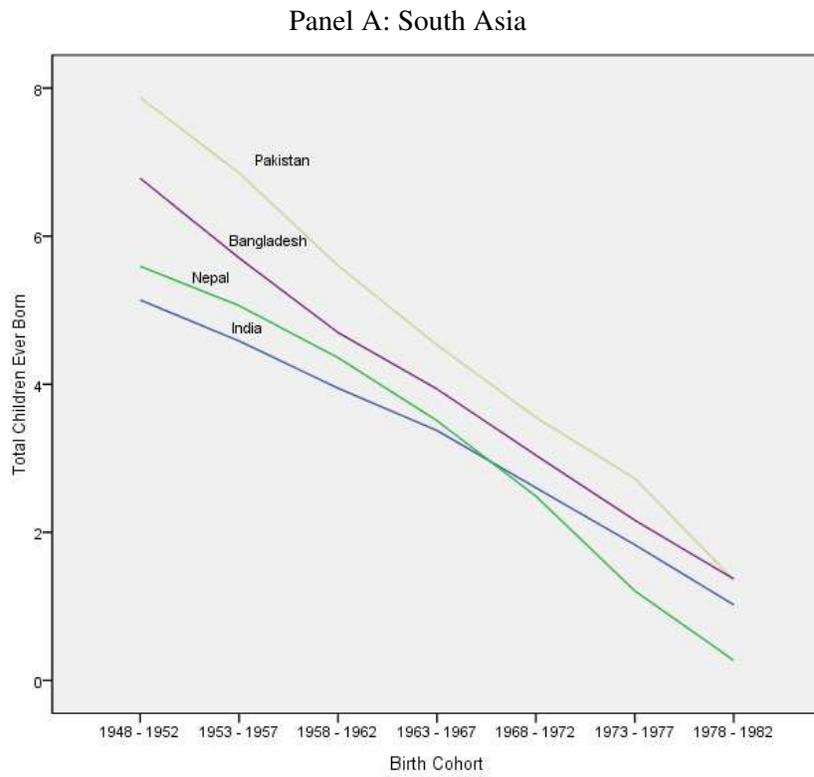
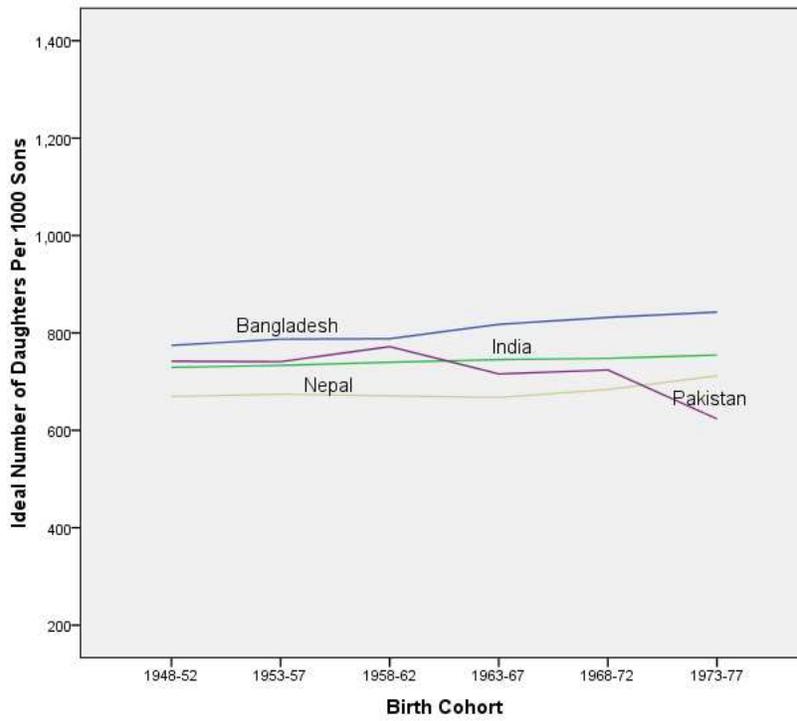


Figure 7: Estimated Ideal Sex Ratio in the 1990s & 2000s by Birth Cohorts

Panel A: South Asia



Panel B: South East Asia

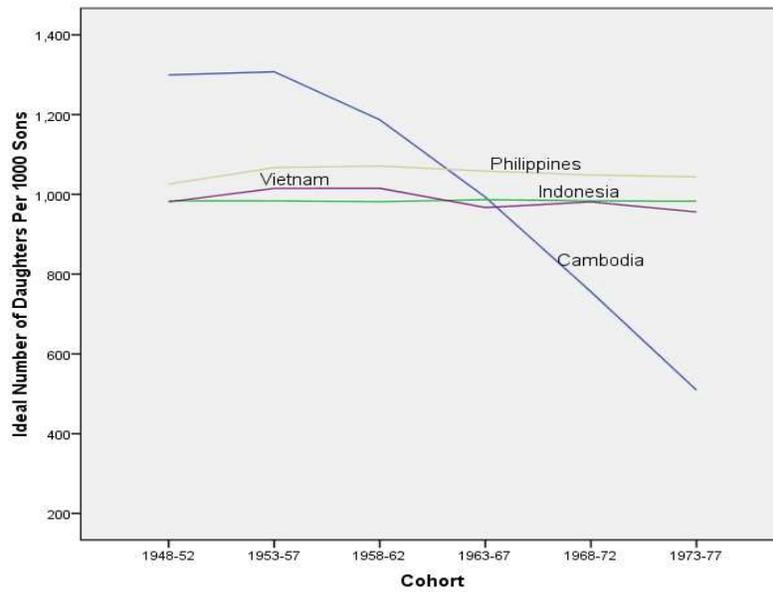


Figure 8: Estimated Sex Ratio Of Living Children in the 1990s & 2000s by Birth Cohorts

