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A Flight from Marriage? Gender and Educational Differentials in Patterns of Declining First Marriage Rates and Their Explanations in Taiwan

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An article in the August 20th issue of *The Economist* addressed the phenomenon of delayed and foregone marriages among Asian women, particularly the well-educated. The report showed that in 2005 the proportions of women ages 35 to 39 who have never married range from 20% in Hong Kong, 18% in Japan, 16% in Taiwan, to 15% in Singapore—four countries that have the highest rates in the East Asian region. When the issue is placed in the context of Confusion societies where the tradition has emphasized greatly on family values and collective interests, it stands out as one startling demographic trend. On the other hand, the media spotlight also focuses on this issue because marriage has been closely linked to childbearing in East Asia and that non-marital childbearing is still relatively rare and highly stigmatized (ranging from 2% of all births in Japan to 4% in Taiwan in recent years). The dramatic drop in first marriage rates has contributed to a critical proportion of the decline in total fertility rates in recent decades. This study aims to conduct an in-depth investigation of the retreat from first marriages in Taiwan. The analyses will focus on the years after the millennium, as dramatic shifts in tempo and quantum of marriage and fertility are observed in this decade. In particular, the gender and educational differentials will be examined using vital statistics and household registration data. The potential factors leading to dramatic decrease in female first marriages and the incentives needed to raise marriage intentions will be explored by drawing information from aggregate economic indicators and analyzing data from large, nationwide surveys.

I. Delayed and Declining Rates of First Marriages

Vital Statistics

Marriage pattern in Taiwan used to be characterized by “early and universal” in the beginning of the twentieth century. The institution of marriage occupies a central part in the life course of Taiwanese men and women. Yet, toward the latter half of the twentieth century, marriage timing has been largely postponed and increasingly more individuals have decided not to tie the knot at all. As can be seen in Figure 1, median age at first marriage for grooms have increased from 25.6 to 31.3 years old from 1975 to 2010. The median ages at first marriage for brides have risen from 22.2 to 28.8 years old in the same period. When the statistics are further broken down by educational categories (see Table 1), a universal uprising trend is observed across all groups. In particular, the most dramatic changes occur among the least educated men and women in between the thirty-year period from 1980 to 2010.

First marriages in Taiwan are not just postponed, a growing proportion of men and women are becoming lifelong bachelors and bachelorettes. In 1905, universal marriage is observed at relatively young ages for both men and women—for men in their late thirties (97.9%) and for women as early as their late twenties (98.2%) (see Table 2). Till the mid-century, proportions of ever married men have declined across all age groups and for teen girls, while remaining quite stable for women who are in their late twenties and older. Dramatic decline in marital behaviors among women did not take place until the 1970s. In 2000, about 12% of men and 11% of women in the ages of 35 to 39 have never been married. A decade later, the percentages further expand to 29% for men and 21% for women in the same age group in 2010.

As more detailed data that allow researchers to examine educational gradients in ever married rates are only available from year 2000¹ onward, the relevant analyses that examine

¹ Household registration data for population ages 15 and above by age, sex, education, and marital status (four dimensions) are only available from year 2000 onward. Data in pre-2000 years are three-dimension statistics, such as population by age, sex, and education, or by age, sex, and marital status.

educational differentials in ever married rates in the following sections will only focus on the past decade. In Table 3, proportions of ever married individuals by education show diverging patterns between men and women. For women, a strong negative gradient of education is observed, with the gap between educational groups getting wider across the ten-year period. For women in the age group of 45 to 49, the difference in ever married rates is 9.6% between the college-educated and the least educated group. This gap widens to 12.2% in 2005 and further to 15.2% in 2010. Increasingly more women with at least tertiary education have decided to remain single during the first decade in the 21st century in Taiwan. For men, in contrast, the educational gradient is a positive one, though not as clear as women. College-educated men are more likely to be married than their peers with less than high school education. This gap is also expanding across the ten-year period. The difference in proportions of ever married men in the ages of 45 to 49 between the best and least educated men is about 3.7% in 2000. It increases to 5.5% in 2005 and finally to 6.8% in 2010.

Marital Life Table Estimates

Using these 5-year age-specific first marriage rates, single decrement marital life tables were made to estimate the proportions of never married men and women, assuming a hypothetical cohort experienced the rates observed in 2000, 2005, and 2010. With the 2000 rates, nearly a quarter of college-educated women are expected to stay single by age 49, while the comparable rate for college-educated men is about 14% (see Table 3). In sharp contrast, marriage is expected to be universal for women with less than high school education given the 2000 rates. When the 2005 period rates were applied, the proportion of never married women show a 38% increase (from 23.46% to 32.43%) from the 2000 life table estimate, with nearly one-third of the best educated women expecting to stay single by age 49. The increases in never married rates are even more dramatic for women in other educational categories, with doubling rates for the high-school- and junior-college-educated and an

astonishing eight-fold increase among the least educated women between 2000 and 2005. Using the 2010 first marriage rates, the estimate for never married rate is the highest for women with high school education (32.3%), while college educated women have a similar rate of 30.7%. Universal marriage for the least educated women might also change if current rates persist, with 13% of them expecting to stay single by age 49.

As for men, the increase in the percentages of never married by age 49 also double for high-school- and junior-college-educated men between the 2000 and 2005 estimates, while showing a stark five-fold increase among the least educated. Marriage has changed rapidly from a universal life event to one that is experienced by only about two-thirds of the least educated men. With the 2010 age-specific first marriage rates, the most disadvantaged group in the marriage market is clearly men with less than high school education—about 44% of men in this group are expected to not entering the marriage market. Across the ten-year period, the percentage changes in the proportions of never married men in the junior-college and college groups are comparably smaller than in the other two lower educational categories. Never married bachelors will be concentrated in the socioeconomically disadvantaged groups, while lifelong bachelorettes have become more likely to be those with higher education.

To further explore these 24 marital life tables, the probability of someone getting married in different age groups (given that they are single in certain younger age intervals) were calculated and presented in Figure 2 by sex and education across year. The upper graph shows that in year 2000, there is barely any educational differential in the probabilities of getting married across educational levels at different ages. As one look across the graph, educational gradients become clearer in 2005 and 2010 for men, with college-educated men much more likely to be married than their less educated peers. Take 2010 for example, single college-educated men in the ages of 25 to 29 are about 2.5 times more likely than those with less than high school education to be married by ages 30 to 34. For college-educated single men in the ages of 35 to 39, their chances of forming a family is almost three times higher

than their peers with less than high school education. The changes in the likelihood of entering a marriage decline the most among those in the two lower educational groups, while remaining quite stable for men with college education from years 2000 to 2010.

The lower graph in Figure 2 plots the life table probabilities of marrying for women in different age groups. The educational gradient in probabilities of getting married is negative for all age groups in 2000. When compared to the 2005 and 2010 figures, the negative gradient becomes less clear. The key change is the declining likelihood of forming a family in ages 30 to 34 for single women between the ages of 25 and 29. While the chances of entering a marriage in their early thirties is about 60% for these young women in 2000, the probability show a one-third decline to about 40% in 2010. The ‘unexpressed marriage decline’ is illustrated by the relatively wider distance between the blue and red lines for women. For single college-educated women who experience the 2010 rates, the probability of getting married in their late thirties is cut in half when compared with the probability observed in the early thirties. The probability of leaving singlehood is even more minimal when these women enter their early forties—a change of about 6%.

When the graph for men is compared to the one for women, it is clear that age is less of an issue for better educated men than it is to their female counterparts. Take the 2010 plot for example, college-educated single men are about 2 times more likely to get married in the late thirties and 3.5 times more likely to get married in their early forties than their female counterparts. On the other hand, men with the least education will experience a much steeper decline in marriage likelihood at all ages than women with similar education during this ten-year period.

II. Why women stay unmarried and who remain single?

The explanations for why women stay unmarried are further explored with several survey data. However, recent surveys tend to only explore the reasons for unmarried women and

male singles have not been asked about their marital status much. In turn, the following analyses will only be restricted to unmarried women. First of all, the Survey of Women's Marriage, Fertility, and Employment (WMFE) is used to investigate the reasons of staying single.² The most recent two waves of the 2006 and 2010 survey ask respondents why they are still unmarried and ask them to select *three* most important reasons from a list of eight factors. The three most commonly selected factors by single women in the ages between 25 and 49 (excluding those who are already engaged at the time of the survey) are shown in Table 5. Nearly 80% and about three quarters of all respondents picked "haven't met a suitable partner" as the main reason why they haven't got married in 2006 and 2010. Economic factor is listed as the second most-selected reason. And intriguing enough, about a quarter of respondent in 2006 (and almost 30% in 2010) picked "fear of unhappy marriage" as the third most important reason. The data are further broken down by educational categories in Table 6. The table reveals obvious educational differences in reasons of remaining single. When comparing the surveys of 2006 and 2010, "haven't met a suitable partner" is more of an issue for the better-educated. The fear of having an unhappy marriage is more observed among the less educated, while economic factor is somewhat a common reason across educational groups.

Having known why women stay unmarried, the next step is to investigate their marital intentions. Do these unmarried women wish to tie the knot someday in the future? Or are they considering staying single for the rest of their lives? Table 7 shows the distribution of women with different educational levels who answer "yes" to the question asking: Will you consider getting married in the future? The statistics show that in 2006 about 92% of college-educated women reported an intention to get married, whereas nearly half of all women with less than

² WMFE is a multi-wave cross-sectional study that samples more than 25,000 women nationwide in each wave (ranging from ~23,000 women to ~29,000 women in different years). The survey asks about women's marriage and childbearing experiences as well as work histories in a short questionnaire. It is conducted annually from 1979 to 1988. From 1990 onward, this survey is conducted roughly every three years.

high school education indicated that they do not plan to marry. The percentages are slightly lower for all groups in the 2010 survey, but the pattern by education remains very similar. While the media has focused on the ‘flight from marriage’ among the best educated Asian daughters and implicitly suggest that they are avoiding marriages, empirical evidence here shows an opposite phenomenon—a trend of intended singlehood emerging among the least educated group of women. Unlike their better educated peers, they not only express a lower confidence in the institution of marriage (i.e., higher percentages reporting a fear of unhappy marriages) but also have weaker intentions to enter a marital union in the future.

III. What single women need in order to raise their marriage intentions?

In order to understand potential measures that can be done to boost marriage intentions among the unmarried women, the 2010 WMFE survey further ask respondents: What can be done to raise your marriage intentions? Respondents were asked to pick three most important factors in a list of eight factors. The upper panel in Table 8 presents the cross-tabulation of the most important factor (first choice of all respondents) and a respondent’s education. After excluding those who indicated that they do not want to be married, economic issue arises as one critical concern among respondents across all levels of education. About one half of respondents in every educational category stated that having a stable job and a steady income can raise their intentions to get married. A further analysis of the second choice is shown in the lower panel of Table 8. Of all the respondents who picked “have a stable job and a steady income” as the most important factor, over a quarter of them with more than high school education selected gender-equity-related factors (factors 4 & 5) as the second most important factor that can raise their intentions to form a marital union.

When compared with the reasons for singlehood listed in Table 6, the analyses here indeed resonate with the universal concern of economic security for women in all educational levels. The upper table in Table 8 indicates that about 70% of respondents in every education

category selected economic-related factors (factors 1-3) as the most important thing that can raise their marriage intentions. On the other hand, the worry of having an unhappy marriage is likely to be associated with both economic prospect and unequal gender division of domestic labor in a future marriage. In the next two sections, potential causes for these two concerns will be explored with more in-depth analyses regarding the economic situation in Taiwan and gender dissonance in sex-role and marital attitudes.

IV. What happened to the economic well-being of Taiwanese people?

The two major global economic/financial crises in 2001 and 2008 have tremendous impact on the employment markets in Taiwan, unemployment rates have increased to unprecedented levels during the past decade. On the other hand, despite continued economic growth in Taiwan, employers in all major occupation categories have experienced a stagnated income level throughout the past ten years (after adjusting for inflation factor). Prices of consumer goods continued to rise, yet most employers' income could not keep pace with the extra expenditures needed for their daily living.

Unemployment Rates

The unemployment rates in Taiwan have been below 3% for decades until the millennium. In 2002, the percentages of unemployed workers first went up to 5.2%. The rates dropped a bit to a level of about 4% for several years and further increased to 5.9% in 2009. When unemployment rates are broken down by sex and education, distinct gender differences are observed in the lower vs. higher educated people. As shown in Figure 3, men's unemployment rates in the past one decade have been much higher than women's rates among those with less than high school and high school education. This undoubtedly have significant impact on the attractiveness of lower educated men as marital partners. Although it is beyond the scope of this study to verify the hypothesis of how men's marriage

opportunities can potentially be harmed by their weakened economic well-being, it can be somewhat inferred from women's concern of the importance of economic stability before forming a family. With the persistent trend of hypergamy among Taiwanese women, it is no wonder that the life table estimates discussed earlier forecast a very gloomy picture of the marital prospect for the least educated men.

The trend in unemployment rates among the junior-college-educated show relatively little gender differences, while the pattern for college-educated individuals is the only group with higher female unemployment rates than male unemployment rates during the decade after the millennium. This can serve as a possible explanation for why college-educated women also stated economic factor as the main reason for staying unmarried (and as incentives for getting married), despite their higher human capital. Given the heightened rates of unemployment for female college graduates, the economic prospects of men have become even more important in the calculus of mate selection for these women.

Declining Disposable Income

In addition to rising unemployment rates in the past decade, disposable income among employers of all educational levels has also gone down. The yearly data collected by the Survey of Family Income and Expenditure have rich information on average annual incomes and expenditures for a nationally representative sample. After having incomes in all years adjusted to 2000 price (using Consumer Price Indices), Figure 4 demonstrates that a somewhat parallel decline in disposable income is observed for every educational group in the years from 1995 to 2010. The best-educated group experiences the steepest decline in income of about 20% less over the 15-year period, whereas the two least-educated groups face a drop about 12% in income during the same period. Employers with junior college education have the least decline in disposable income (-5.7%) in the 15-year period.

With non-relenting rise in Consumer Price Indices since the mid-1990s, employers' relative purchasing power has weakened tremendously. Over ninety percent of single women in all educational groups surveyed in the 2008 Knowledge, Attitudes, and Practices Survey (KAP) indicated that they agree or strongly agree with the statement that "a young couple has to be economically independent before getting married." This strong attitudinal preference combined with the weakened economic well-being further explains why economic factor is identified as the main reason for staying unmarried for women in all educational levels, and that fully 70% of these respondents think that improving economic conditions, be it a stable job, a mortgage subsidy, or a marriage allowance, will increase their intentions to tie the knot.

V. Is there a gender dissonance in sex-role and marriage attitudes?

In addition to worsened economic conditions for young people, rapidly changing attitudes toward more gender equity and family values have also alter how marriages are perceived. Using the most recent wave of the Taiwan Social Change Survey on the family³ that was conducted in 2006, this study analyzed 485 single men and women as well as 767 ever married men and women⁴ regarding their sex-role and marriage attitudes. All of the eight outcome variables presented in Table 9 are rated on a Likert scale of 7, with higher values indicating stronger agreement. The upper panel in Table 9 shows that when compared with their female counterpart with similar ages and education, both single and ever married men reported a significantly stronger agreement to the statement of "a husband's main responsibility is to be the bread-winner and wife the housekeeper." Furthermore, men in both martial statuses are more likely than women to disagree with the statements of "men should help with more domestic chores than what they are doing now." In contrast, both single and

³ The Taiwan Social Change Survey (TSCS) is conducted annually since 1984. Every year the questionnaire focuses on one specific theme. Five major themes are explored in a cycle of 5 years. Take the family component for example, data on family values and family processes were collected in the 1986, 1991, 1996, 2001, and 2006 TSCS surveys. The 2011 TSCS survey data on the family will be released in 2012.

⁴ Some of these ever married men and women are divorced, separated from their spouses, or widowed.

ever married men indicated a stronger disagreement to the statements of “It is more important for a wife to help with her husband’s career than to develop her own career” and “When looking for a marital partner, a man should be older than a woman.” Men’s responses to these latter two statements show their liberal attitudes toward women’s career development and non-traditional age pairing in the marriage market. Yet, this is at odds with the former two statements that reveal men’s adherence to the traditional value of strict gender division of labor in the home. These inconsistent response patterns can well be a dilemma faced by married career women, as they are burning themselves at both ends to meet the expectations from their families and workplaces. There are certainly narratives about how it may deter the younger generations of women from entering into a marriage.

The lower panel of Table 9 shows some interesting findings. Single men, in general, disagree more to the statement of “married men are happier than unmarried men” than women, holding age and education constant. In contrast, both single and ever married men hold a stronger belief than their female counterparts that married women are happier than unmarried women. The next two sets of regressions probe the issue of the centrality of marriage in one’s life. Both single and ever married men agree more to the statements of “having a bad marriage is still better than staying single” (marginally significant at .10 level) and “having a bad marriage is still better than getting a divorce” than women with similar age and education. In short, it is likely that single men see the entry into a marriage as a loss of freedom for them and thus tend to think that married men are not happier than unmarried men. On the contrary, men are much more likely to perceive that married women are happier than singles. There is a contradictory understanding between single men and women about how the opposite sex is fairing in marriages. The final two analyses further show that Taiwanese men hold a more traditional family view than women—a belief that the marriage is one major life transition that one has to experience and that divorce should be avoided in most cases.

VI. Conclusions and Discussions

The preliminary findings show that the flight from marriage is not restricted to well-educated women, but also across all educational groups for both sexes. The critical difference is the impact of education on the risk of marriage differs for the two sexes—a positive educational gradient is found for men and a negative one for women. While nearly all groups experience a decline in marriage, estimates from marital life tables show that the most educated women and the least educated men face the highest risk of lifelong singlehood (an astonishing chance of 31% and 44% respectively, based on the 2010 rates).

As for the reasons of staying single, roughly 80% of college-educated women stated the problem of not finding a suitable partner as the main cause for their single status. This would be more meaningful when considered with the gender discrepancy in sex-role attitudes presented earlier. The difficulty in finding a suitable partner is likely due to the differential understandings men and women have for the division of labor at home and women's desire to balance work and family. Indeed, single women in most educational groups (except those with less than high school education) indicated that more gender-egalitarian practices are the second most important thing (only after economic improvement) to raise their motivations to get married. Furthermore, the fact that more men agree with the statement of having a bad marriage is better than staying single or getting a divorce shows women's higher expectations for a marriage. Women are less likely than men to tolerate a bad marital relationship and prefer to stay single or to get a divorce when a marriage goes sour. Such a low tolerance is likely to lengthen the process of mate selection and thus depress marriage rates.

About one-thirds of the two groups of less educated women indicate a fear of having an unhappy marriage as the main reason for being single, which is much higher than the better educated women. This is likely due to the negative educational gradient in divorce that emerged since the 1990s. Divorce rates among women with less than high school and high school education can be as high as 1.5 to 2.5 times higher than the college educated. As less

educated women are increasingly more likely to witness divorces around them, it may have attenuated their confidence in the institution of marriage, creating a fear of entering into an unhappy marital relationship. Meanwhile, worsened economic conditions over the past decade can also cause worries for those with less means to establish a new family.

Across all educational levels in 2010, about 30% to 40% unmarried women pointed out the importance of economic factor in explaining their current marital status. When this is understood with the statistics on unemployment rates and the long-term declining disposable income levels, the so-called 'economic factor' can be interpreted as not being economically prepared and secured enough to build a new family. This is further shown in the fact that an improvement in economic conditions is commonly stated by all as a key factor to raise marriage intentions. This finding highlights the structural causes of recent decline in first marriage rates.

After knowing why women stayed single, their marital intentions in the future were also explored. The results reveal a surprising fact: compared to college-educated unmarried women, the least educated single women reported a much lower motivation to get married in the future. In 2010, about 60% of all unmarried women with less than high school education stated that they *do not* consider getting married in the future, which is in stark contrast with only about 12% of college-educated single women who made such a statement. Such a low motivation to enter marriage among the least educated women may provide some explanations to the dramatic increase in the proportion of never married women by age 49 shown in the marital life tables: a jump from only about 0.77% to 13% between the 2000 and 2010 life tables. It seems that a trend of voluntary non-marriage is emerging among women with the lowest human capital.

Common explanations given to the retreat from marriage in East Asia have focused on factors such as the improvement of female educational attainment and rising labor market participation rates, as well as the preference for hypergamy among single women (and

hypogamy among single men). This study adds to the recent discussions of the flight from marriage in East Asia in several ways. First, the analyses reveal that the dramatic decline in marriage rates among the least educated men warrants equal attention as the phenomenon observed among college educated women. While surveys have largely focused on exploring why women are not marrying, there are no empirical data on men's attitudes toward marriage. Second, analyses of recent survey data show that the retreat from marriage among college-educated women is very likely to be involuntary, as their marriage intentions are much higher than the least educated women. This contradicts the narratives of voluntary singlehood among the well-educated women that tend to imply they are 'escaping' marriages. Third, this study demonstrates the recent dramatic decline in first marriage rates has a structural cause of deteriorating economic well-being among young employers, as unemployment rates have reached record-high levels and disposable incomes have declined over the past decade. Finally, before a reconciliation between men and women can be reached regarding acceptable arrangement in division of labor and a common expectation for marriage, the trend toward further decline in first marriage rates seem to be inevitable in the years to come.

Table 1. Median age at first marriage by education

	Grooms' Median Age						Brides' Median Age							
	1980	1985	1990	1995	2000	2005	2010	1980	1985	1990	1995	2000	2005	2010
College+	28.3	29.1	30.2	30.8	30.1	30.7	31.6	27.1	27.5	28.2	28.4	28.0	28.6	29.4
Junior College					28.9	29.8	32.2					26.5	27.8	29.8
High School	27.2	27.8	28.4	29.30	28.6	28.7	30.4	24.7	25.4	26.7	27.20	24.7	26.0	27.7
Junior High School	25.3	26.5	27.6	28.10	29.4	29.4	29.7	22.6	23.4	24.5	24.90	24.3	23.9	25.6
Primary and under	27.2	27.9	28	29.70	30.2	34.2	35.1	22.9	23.4	23.6	24.60	25.2	25.7	29.7

Sources: Statistical Yearbook of Taiwan, 1980-2010.

Table 2. Percentage ever married by sex from the start of the 20th century to 2010 in Taiwan

	1905	1915	1920	1925	1930	1935	1956	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010
Men																	
15-19	10.2	5.6	6	5.3	7.3	5.7	2.1	1	0.8	0.7	0.9	0.6	0.7	0.6	0.7	0.1	0.1
20-24	45.7	39.9	41.9	44.7	51.6	49.8	35.7	16.1	12.2	12.7	12.6	10.0	8.7	7.0	5.8	3.1	1.9
25-29	77.4	72.7	75.3	78.2	82.9	83.1	77.9	66	65	61.7	60.5	52.7	43.7	36.4	31.3	21.8	14.9
30-34	89.4	88	87.6	89.7	91.3	91.9	85.2	86.6	89.1	90.7	87.5	83.8	77.3	69.2	65.2	56.7	45.9
35-39	97.9	93.2	92.3	93.4	94.2	94.4	90.3	78.5	91.3	95.4	93.6	92.1	89.4	84.9	81.8	77.8	71.0
40-44	98.2	95.1	94.8	95.5	95.6	95.7	91.9	77.3	83.3	94.8	94.9	94.3	93.2	91.5	89.5	86.5	82.2
45-49	98.4	96	95.9	96.2	96.7	96.3	94.4	82.7	83.6	89.1	93.5	95.1	94.7	94.3	93.4	91.1	88.0
50+	96.8	97	97	97.4	97.6	97	96.9	91.3	91.8	90.7	85.9	88.5	90.9	92.2	94.7	95.0	94.6
Women																	
15-19	47.3	34.6	31.6	29.4	32.6	28.1	11.4	8.6	7.1	5.5	5.3	3.1	2.5	2.2	2.3	0.7	0.4
20-24	91.6	87.6	85.6	84.4	86.3	83	70.6	59.5	49.6	43.3	41.5	33.5	25.7	21.3	17.8	9.5	5.6
25-29	98.2	96.8	96.2	96.2	96.1	95.9	95.2	92.9	91.2	85.9	82.7	76.5	68.1	60.2	53.3	38.8	29.9
30-34	99.2	98.6	98	98.3	98	97.7	97.8	98.1	97.7	97.4	94.3	90.6	87.7	84.0	79.4	71.3	62.8
35-39	98.8	99.2	98.6	99	98.8	98.4	98.5	98.9	98.8	98.7	97.9	94.3	92.5	91.0	88.9	84.1	79.1
40-44	99.3	99.4	99	99.2	99.2	98.9	98.7	99.1	98.8	99.1	98.8	96.8	94.5	93.3	93.2	89.7	85.6
45-49	99.6	99.6	99.3	99	99.4	99.3	99	99.1	98.8	99.2	99.1	97.4	96.2	94.9	95.1	92.9	90.1
50+	99.8	99.8	99.7	99.6	99.6	99.2	99.4	99.3	98.8	98.9	99	97.1	96.9	96.5	98.3	96.3	95.4

Sources: Data series between 1905 to 1980 come from Mei-ling Lee (1994). Changes in the Marital Status of the Taiwanese Population Since the Twentieth Century. *Journal of Population Studies* (in Chinese). 16:1-15. Statistics between 1985 and 2010 are calculated by the author using data released by the Department of Household Registration, Ministry of the Interior, Taiwan.

Table 3. Percentage ever married by education, percentages are calculated based on the data from the Statistical Yearbook of Taiwan 2000, 2005, 2010.

		2000						
Men		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	1.32	16.34	61.48	85.30	92.88	95.51	97.24
	Junior College	2.94	29.72	68.92	86.35	93.41	96.30	97.27
	High School	4.90	35.86	67.66	83.08	90.92	94.50	96.04
	<High School	11.94	36.63	61.45	77.39	86.25	91.78	93.94
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Women		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	2.79	26.81	65.62	78.85	84.86	87.62	91.37
	Junior College	8.95	44.47	73.29	83.45	87.79	89.64	94.18
	High School	15.53	61.49	81.80	88.49	91.70	92.83	95.40
	<High School	44.12	70.63	86.97	93.52	96.19	97.24	98.82
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		2005						
Men		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	0.31	10.18	50.02	79.00	89.59	93.65	96.37
	Junior College	1.28	20.71	59.18	81.54	90.14	94.47	97.17
	High School	2.73	26.81	60.52	78.95	87.40	92.32	95.64
	<High School	7.92	32.33	55.41	72.17	82.59	88.19	94.28
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Women		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	1.20	17.44	55.13	72.65	79.22	83.90	88.18
	Junior College	5.34	35.96	68.82	80.39	85.15	87.88	91.34
	High School	9.11	51.50	79.27	87.21	90.24	91.84	93.36
	<High School	29.73	66.08	81.14	89.84	94.33	96.11	97.38
<hr/>								
		2010						
Men		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	0.47	7.96	42.57	72.99	85.19	91.01	95.52
	Junior College	1.69	17.73	48.74	74.10	85.90	91.41	96.55
	High School	1.44	19.93	47.75	71.16	82.76	88.72	95.01
	<High School	7.03	23.98	46.58	64.19	75.93	84.19	93.94
<hr/>								
Women		20-24	25-29	30-34	35-39	40-44	45-49	50+
	College+	1.56	14.90	49.74	67.93	75.05	79.48	86.07
	Junior College	5.74	34.04	63.68	78.36	82.91	86.00	90.17
	High School	4.59	42.44	70.15	84.44	88.61	90.79	92.92
	<High School	24.62	62.18	80.73	86.42	91.16	94.71	97.29

Table 4. Life table estimates of percentages never married by age 49, based on 5-year age-specific first marriage rates calculated from data released by the Department of Household Registration, Ministry of the Interior, Taiwan.

	<HS	HS	Junior College	College
2000				
Men	6.45	13.64	11.90	13.78
Women	0.77	13.41	12.77	23.46
2005				
Men	32.73	27.99	20.45	15.97
Women	6.39	27.15	26.09	32.43
2010				
Men	43.60	37.34	24.13	18.60
Women	13.05	32.31	23.70	30.70

Table 5. Top 4 factors unmarried women selected as reasons for singlehood (statistics based on Women's Marriage, Fertility, and Employment Survey 2006 and 2010)

	2006	2010
1. Haven't met a suitable partner	79.37%	74.57%
2. Economic factor	23.95%	33.97%
3. Fear of unhappy marriage	23.46%	28.08%
N of unmarried respondents	3282	3618

Table 6. Reasons for singlehood by women's educational level, calculated from Women's Marriage, Fertility, and Employment Survey 2006 and 2010

	2006				2010			
	<HS	HS	Junior College	College+	<HS	HS	Junior College	College+
1. Haven't met a suitable partner	57.50%	78.91%	84.10%	80.97%	53.02%	71.39%	77.65%	77.56%
2. Economic factor	24.58%	28.01%	26.95%	19.40%	31.90%	38.86%	37.72%	30.85%
3. Fear of unhappy marriage	36.25%	28.65%	24.80%	16.90%	35.78%	33.85%	33.12%	22.96%
N of unmarried respondents	240	939	742	1361	232	839	631	1916

Table 7. Percentage of unmarried women ages 25-49 who answered 'yes' to the question of "will you consider getting married in the future?" (statistics based on Women's Marriage, Fertility, and Employment Survey 2006 and 2010)

	Intention to get married in the future			
	<HS	HS	Junior College	College+
2006	49.58%	77.64%	85.44%	92.14%
sample size (n)	232	839	631	1,915
2010	41.38%	71.99%	80.82%	87.68%
sample size (n)	240	939	742	1,361

Table 8. Percentage distribution of the most important factor selected by single women that will boost their marriage intentions (n=3,002)

	<HS	HS	Junior College	College+
1. Have a stable job and a steady income	45.3	49.38	52.38	46.28
2. Offer mortgage subsidies to newly weds	15.38	13.28	11.24	11.86
3. Distribute marriage allowances or offer tax-cut to married people	10.26	11.25	9.52	10.23
4. Implement gender-egalitarian employment policies so that married women can balance work and family	7.69	10	8.95	13.08
5. Spouse and family members are willing to share chores and have consensus on chidbearing plans	5.13	5.78	6.86	8.02
6. Offer marriage education and pre-marriage consulting	0	1.09	0.76	1.28
7. Hold more (matchmaking) activities for single people	9.4	7.66	8.38	8.6
8. Other	6.84	1.56	1.9	0.58
sample size (n)	117	640	525	1,720

Note: Percentage distribution excludes 616 single respondents (115 <HS; 199 HS; 106 Junior College; 196 College+) who do not intend to get married and did not answer the question.

Second choice	First choice: stable job and steady income			
	<HS	HS	Junior College	College+
Offer mortgage subsidies to newly weds	30.0	18.5	17.4	22.3
Distribute marriage allowances or offer tax-cut to married people	17.5	19.4	16.3	21.2
Implement gender-egalitarian employment policies so that married women can balance work and family	20.0	20.7	28.6	26.1
Spouse and family members are willing to share chores and have consensus on chidbearing plans	17.5	25.4	19.4	17.2
Offer marriage education and pre-marriage consulting	2.5	2.2	2.0	1.4
Hold more (matchmaking) activities for single people	12.5	13.8	16.3	11.4
Other	0	0	0	0.35

Source: The Survey of Women's Marriage, Fertility, and Employment, 2010.

Table 9. OLS regression models analyzing gender differences in sex-role and marriage attitudes among men and women in the ages of 20 and 49, Taiwan Social Change Survey 2006

Gender differences in sex-role attitudes by respondents' marital status		A husband's main responsibility is to be the bread-winner and wife the housekeeper.		Men should help with more domestic chores than what they are doing now.		It is more important for a wife to help with her husband's career than to develop her own career.		When looking for a marital partner, a man should be older than a woman.		
	single	ever married	single	ever married	single	ever married	single	ever married	single	ever married
Male (female as ref.)	.64***	.60***	-.32**	-.35***	-.31*	-.19†	-.78***			-.22*
sample size (n)	485	767	485	767	485	767	485	485	767	767
Gender differences in marriage attitudes by respondents' marital status		In general, married men are happier than unmarried men.		In general, married women are happier than unmarried women.		Having a bad marriage is still better than staying single.		Having a bad marriage is still better than getting a divorce.		
	single	ever married	single	ever married	single	ever married	single	ever married	single	ever married
Male (female as ref.)	-.23*	.003	.42***	.26*	.29†	.24†	.35*		.35**	
sample size (n)	485	767	485	767	485	767	485	485	767	767

Note: All OLS regression models, controlling for a respondent's education and 5-year age group.

Figure 1. Median age at first marriage by sex in Taiwan, 1975-2010 (based on statistics released by the Department of Household Registration, Ministry of the Interior, Taiwan)

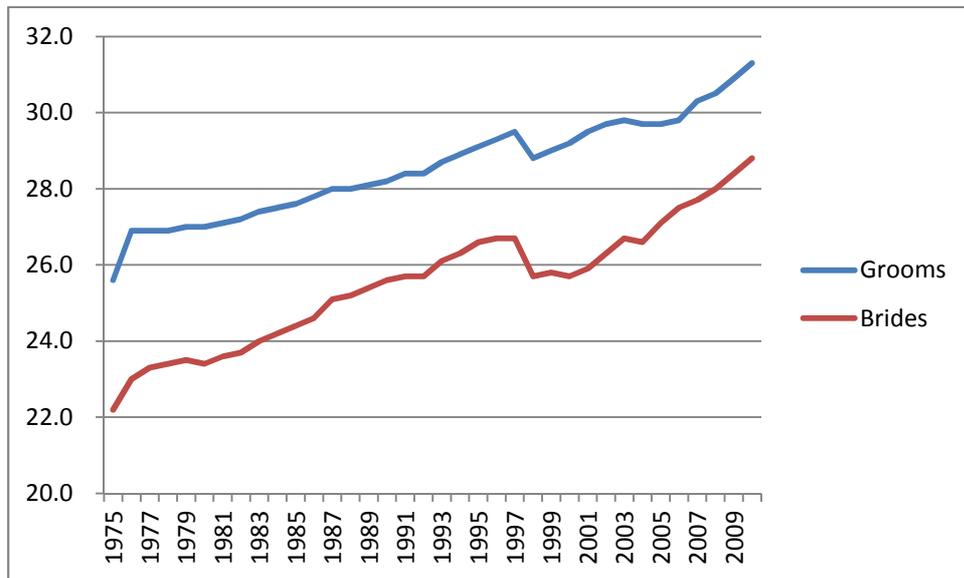


Figure 2. Life Table Probabilities of marrying at different ages by sex and education in the past one decade in Taiwan, based on period age-specific first marriage rates observed in 2000, 2005, and 2010.

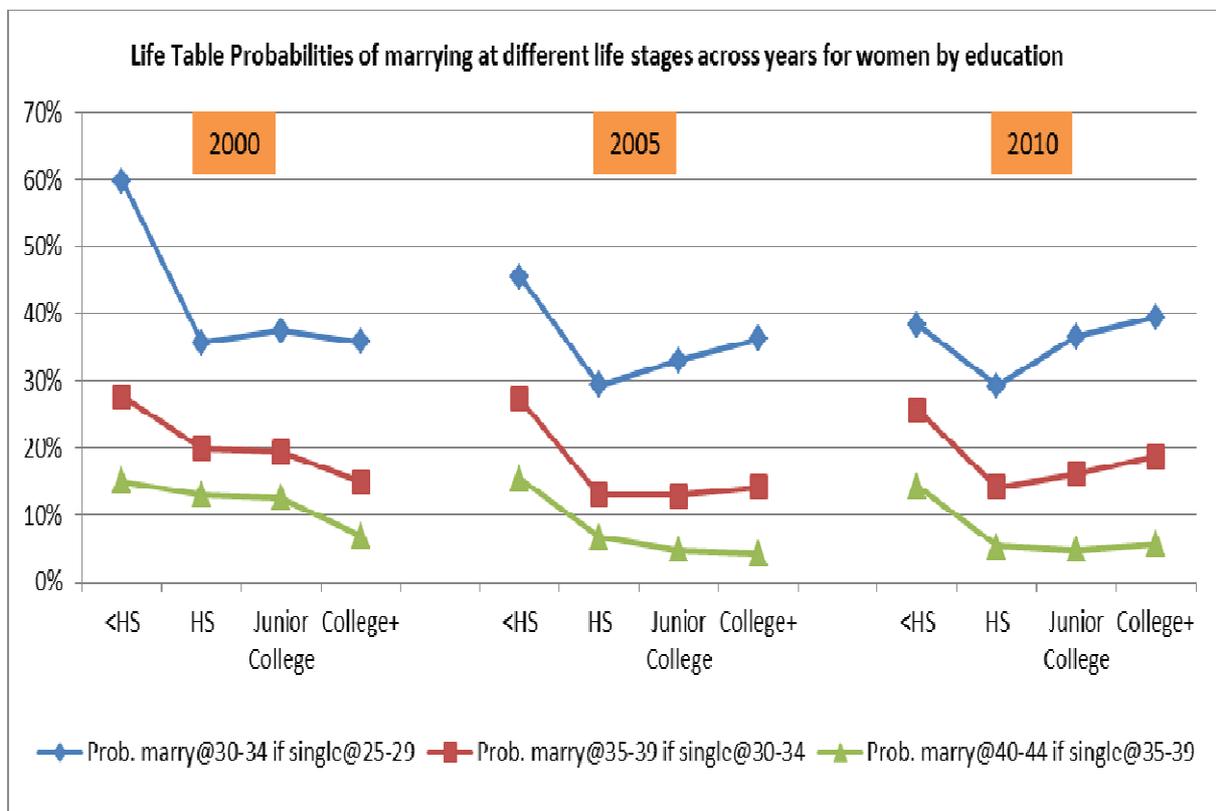
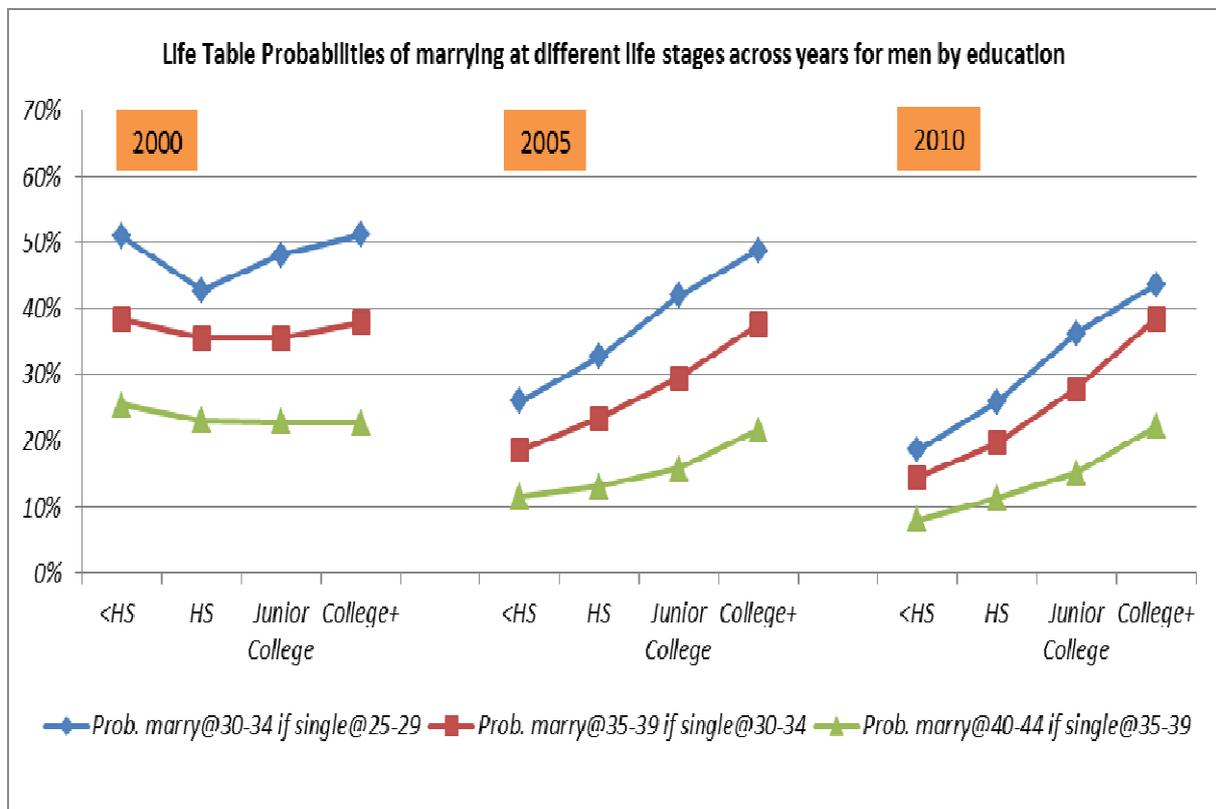


Figure 3. Unemployment Rates by sex in Taiwan, 1975-2010 (based on statistics released by the Department of Statistics, Ministry of Economic Affairs, Taiwan)

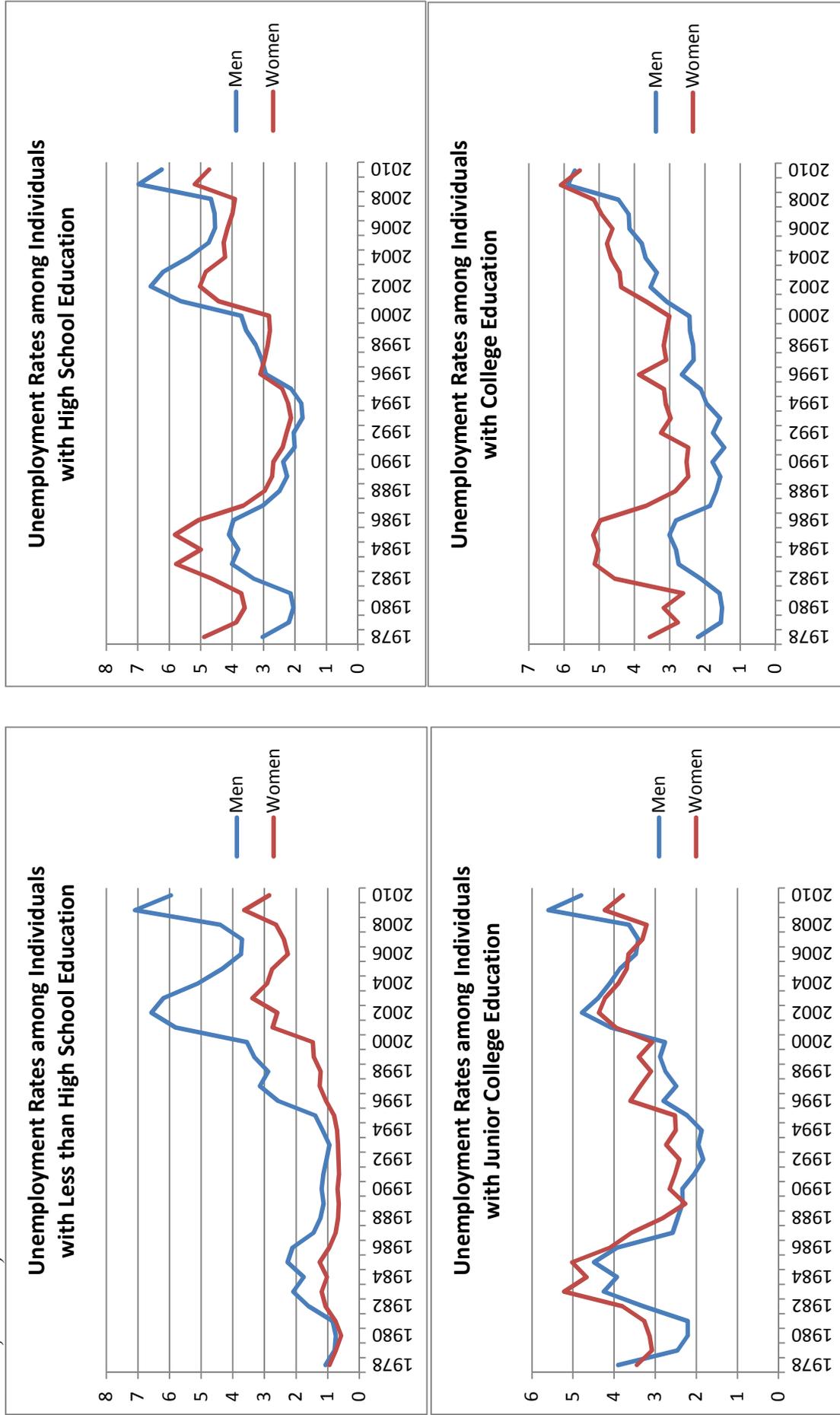
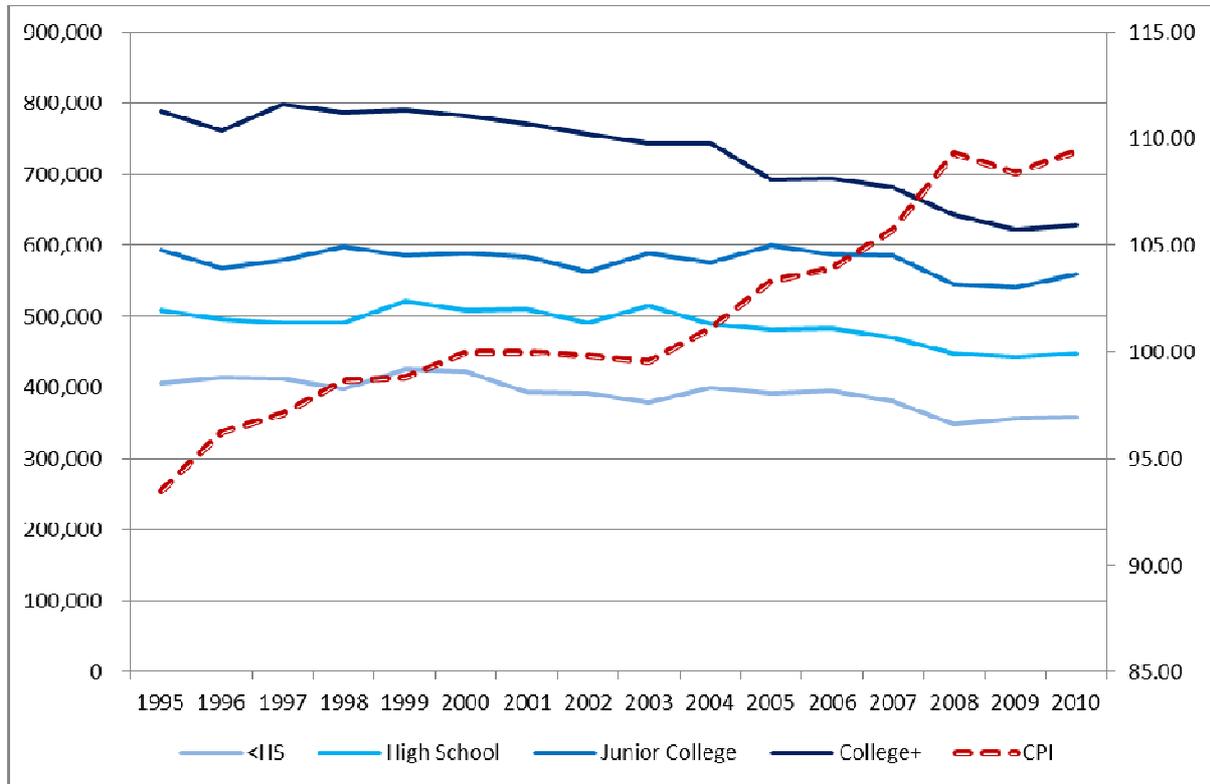


Figure 4. Changes in annual disposable income by education and Consumer Price Indices (all values converted to 2000 price)



Source: Disposable income data are based on Survey of Family Income and Expenditure, 1995-2010. Adjusted Consumer Price Indices are based on statistics released by the Department of Statistics, Ministry of Economic Affairs, Taiwan.

% decrease in disposable income between 1995 and 2010 by education

<HS	HS	Junior College	College+
-11.71%	-12.20%	-5.68%	-20.29%