Effects of Unemployment on Marriage in the United States (1990-2019)

By

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fulfillment of the requirements for the degree of
BSS in Economics

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Declaration

It is hereby declared that

1. The thesis submitted is my own original work while completing degree at Brac University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

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Approval

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Ethics Statement

Abstract

The existing body of research indicates a pro-cyclical relationship between marriage and business cycle fluctuations. Building upon Schaller's (2012) investigation, this paper delves into whether this relationship persists, examining the responsiveness of the female marriage rate to economic conditions with a particular emphasis on the influence of women's level of education. To ensure the robustness of the results, this research incorporates demographic factors to examine how race and ethnicity may influence the relationship between the unemployment rate and family formation. The key insight derived from the analysis reveals that while unemployment exerts a negative influence on the overall marriage rate and the marriage rate of less educated women, it has no significant influence on the marriage rate of college-educated women.

Keywords: Marriage; Unemployment; Education

Dedication

To my star, my mother, Zebunnesa Begum. Thank you for everything.

Acknowledgment

I would like to thank my supervisor, Dr. K.M. Arefin Kamal Sir, for giving me the opportunity to explore my interest in family economics and econometrics. I am truly grateful for all his patience, guidance, and support throughout this journey. Thank you, Dr. Arefin Sir.

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List of Acronyms

CPS   Current Population Survey

IPUMS   Integrated Public Use Microdata Series

SDT   Second Demographic Transition

Chapter 1

Introduction

The correlation between socioeconomic factors, family dynamics, and marital relationships has been the subject of extensive scholarly inquiry. Economic fluctuations within the business cycle have demonstrable impacts on labor markets, income stability, family formation, and marital dissolution (Salamaliki, 2017; Maclean et al., 2015; Holzner & Schulz, 2019; Engdahl et al., 2022). These influences prompt us to grapple with the critical question of the relationship between a nation's economic well-being and its marriage and divorce rates. The repercussions of the Great Recession of 2007-2009, for instance, led to a considerable decline in marriage rates (Schaller, 2012). This decline raises questions about the extent to which a country's economic health intertwines with its rates of marriage and divorce.

Theoretically, a robust economic landscape within a nation is postulated to have a positive impact on marriage rates due to the heightened desirability of the economic benefits associated with marriage, including a higher likelihood of finding an employed spouse (Becker, 1973). Contrarily, recent empirical undertakings have unveiled a pro-cyclical relationship between marriage and unemployment (Bellido & Marcén, 2020; Schaller, 2012). The shifting patterns in marriage and family formation decisions over the past few decades can be attributed to various factors, including the second demographic transition (SDT), which is characterized by declining marriage and fertility rates and an increasing prevalence of cohabitation and divorce (Zaidi & Morgan, 2017). Hence, it is crucial to conduct a contemporary analysis of the existing literature to ascertain whether the pro-cyclical relationship between marriage and employment shocks persists. For instance, marriage can be perceived as a form of insurance against job loss, where a spouse's income serves as a risk mitigator. In this context, marriage may exhibit a counter-cyclical relationship with unemployment (Clark et al., 2022; Bellido & Marcén, 2020).

The study examines the differing responses of marriage rates among college-educated women and less-educated women to changes in the unemployment rate. Kearney (2022) finds a significant decline in the inclination to marry among less-educated women compared to their college-educated counterparts from the 1960s to 2010s. This trend aligns with a decrease in the propensity to marry among men. During this period, the median real earnings of college-educated women were 60% to 70% of those of men. Kearney (2022) suggests that the decline in men's median real earnings relative to women's earnings has reduced the "marriageability" of men, especially among the less-educated cohort. According to the standard economic model of marriage proposed by Becker (1974), as female wages rise relative to male wages, marriage rates decrease due to lower returns to marriage. The study suggests that economically vulnerable less-educated women are less likely to view marriage as a form of financial security due to men's declining earning potential, making them more responsive to economic conditions such as high unemployment rates. Conversely, college-educated women, owing to their higher economic stability, exhibit lower responsiveness to business cycle fluctuations compared to their less-educated counterparts.

This study is an extension of Schaller's (2012) research, which delves into the correlation between marriage and divorce rates in the U.S. and local unemployment rates. While Schaller's (2012) study examines a 32-year panel spanning from 1978 to 2009, this study extends her investigation by utilizing a 30-year panel from 1990 to 2019, focusing exclusively on female marriage rates. The study differs from Schaller's (2012) work by investigating whether the responsiveness of marriage rates to economic conditions differs based on women's educational levels. To ensure the robustness of the findings relative to a nation's economic health, the study incorporates demographic factors such as ethnicity, race, and state-specific non-linear trends as independent variables in all regression analyses.

Chapter 2

Literature Review

The seminal work of Becker (1973) has established a foundational theory of marriage, predicated on the principle that individuals entering into matrimony do so with the expectation of a greater utility compared to remaining single. Moreover, Becker posits that the quest for an optimal marital partner results in equilibrium within the marriage market. His analysis further asserts that the benefits of marriage are contingent upon economic factors, such as income, employment prospects, and wage rates. Consequently, an elevation in these factors is anticipated to heighten the incentive for individuals to marry. Adding to this discourse, a contemporary theoretical framework presented by Ariizumi et al. (2013) proposes that first marriages display lower sensitivity to unemployment rates compared to subsequent marriages, and marriage rates are likely to decline in the event of rising unemployment rates. Intriguingly, there is contradictory evidence implying that women in the latter part of the 20th century were more inclined to marry amidst job insecurity, attributed to their risk aversion, aligning with the risk-sharing theory (Clark et al., 2022).

While research on the intersection of marriage rate and business cycle fluctuations pales in comparison to the extensive studies conducted on divorce or marital instability, recent empirical investigations have indicated a discernible correlation between the unemployment rate and family formation. These studies reveal a pro-cyclical movement of marriage rates with the business cycle, signifying that a rise in the unemployment rate causes a decline in both marriage and divorce rates (Schaller, 2012; Bellido & Marcén, 2020). Furthermore, these analyses highlight that working-age Black individuals are more susceptible to fluctuations in the business cycle as opposed to their white counterparts (Schaller, 2012). Notably, the differential impact of economic shocks across varying educational levels and genders is yet to be fully accounted for.

In a more contemporary study, Salamaliki (2017) leverages various aggregate economic indicators, including employment rates, unemployment rates, labor force participation rates, private consumption, and gross national income, to investigate the relationship between birth, marriage, and economic indicators in the Greek economy. Employing a 5-variable vector autoregressive model, the study reveals a positive correlation between marriage and birth rates with increases in employment and income, with marriage rates demonstrating relatively lower sensitivity to economic shocks than birth rates. This empirical evidence corroborates Becker's (1973) theory, asserting that individuals embark on marriage only when the advantages of such a union outweigh the option of remaining single. Additionally, the study suggests a negative long-term relationship between consumption shocks and marriage rates, as well as a detrimental impact of unemployment rates on marriage, echoing the findings of Schaller (2012).

Upon examining the correlation between family structure and economic fluctuations in Canada, Ariizumi et al. (2013) discovered similar outcomes for marriage and unemployment as Schaller (2012), with a statistically insignificant link between divorce and unemployment. The study illustrates that individuals of working age are more inclined to be single parents with children aged 18 or younger and exhibit reduced inclination to marry during economic downturns, thus contextualizing family structure, complementing the works of Schaller (2012) and Bellido and Marcén (2020). Discrepancies in responses across age groups were also evident, with the impact of unemployment on marriage in the US being more pronounced among individuals aged 16 to 35, while in Canada, there was no significant effect observed in the age group of 25 to 34-year-olds.

Ragab and Saad (2022) found a significant inverse relationship between economic disruptions and marriage rates in the West Bank, which has different cultural and social characteristics compared to North America and Europe. What sets this observation apart from the rest is that

in the instance of soaring unemployment rates, unlike the trend observed in North America and Europe where individuals tend to prioritize financial stability, thereby diminishing the inclination to marry (Ariizumi et al., 2013; Schaller, 2012; Salamaliki, 2017), in the West Bank, the bride's family maintains consistent financial expectations from the groom's family, which reduces the likelihood of marriage. Hence, while the global correlation between marriage and unemployment rates may appear diametrically opposite, it is crucial to acknowledge that these trends stem from fundamentally disparate underlying causes.

Marriage, as a legal union, is often linked to welfare systems or legal benefits provided by a country's government, which can influence family formation responses to business cycle fluctuations. According to Bellido and Marcén (2020), marriage rates in European countries without joint taxation systems are more sensitive to business cycle fluctuations, suggesting that the benefits of joint taxation act as an incentive to marry. Similarly, the Hartz I unemployment insurance policy reform in Germany decreased citizens' marriage rates, as the reform's tightening of insurance benefits led to a decrease in marital surplus and increased cautiousness in partner selection (Schulz & Siuda, 2023). Cohabitation, increasingly prevalent since the late 90s, provides most of the benefits of marriage, except legal ones, potentially distorting the genuine marriage response to business cycle fluctuations. However, evidence indicates that cohabitation has not replaced marriage and is still considered a later life event even among cohabiting couples (Jónsson, 2020).

The confluence of school leaving timing and economic hardship can significantly influence individual decisions pertaining to family formation. In many regions, economic downturns tend to impact men and women differently, with men often delaying marriage to focus on career advancement, while women may opt for earlier nuptials, potentially compromising on the quality of available partners (Engdahl et al., 2022). This phenomenon can lead to a decreased marriage rate during recessionary periods, as men, striving for financial stability, find

themselves disadvantaged by a fresh cohort of graduates entering the marriage market (Maclean et al., 2015). This refers to a specific focus on the unemployment rate upon graduation, which may differ from the overall business cycle fluctuations and its influence on the marriage rate.

The study checks how prior studies forecast contemporary relationships between the economic health of a country and its effect on the marriage rate. I extended the existing work by providing a different angle on business cycle fluctuations on the marriage decisions of women by different education groups using a 30-year panel of United States current population survey data. The paper builds upon the foundation provided by Schaller (2012) on the emphasis of the female marriage rate and aggregate unemployment rate, demographic variables, and time trends to find the current relationship among the variables and diverges from the paper by investigating whether the responsiveness of marriage rates to economic conditions differs based on women's educational levels. This work thereby contributes a nuanced and modern perspective on this subject matter.

Chapter 3

Data and Methodology

The study is based on information from the Current Population Survey (CPS), obtained from the Integrated Public Use Microdata Series (IPUMS) database, which contains US census microdata (Flood et al., 2023). The reason for using the CPS dataset is that it is an all-inclusive source of information required for this study, referring to the demographic data, unemployment rates, and marriage rates of the US population, available from the 1960s to the 2020s. The CPS dataset encompasses social and economic data on a monthly basis, as well as the March Annual Social and Economic Supplement (ASEC) which offers yearly-specific information. As an extension of the research conducted by Schaller (2012), I used a 30-year ASEC panel data

ranging from 1990 to 2019. Schaller (2012) uses data from the National Center for Health Statistics, the Current Population Survey, and the Bureau of Labor Statistics for her research whereas I use the Current Population Survey provided by the Integrated Public Use Microdata Series (IPUMS).

Within the CPS dataset, marital history records encompass variables such as year at first marriage, number of marriages, presence of children, marriage dates, and current marital status. This study scrutinizes female marriage rates by disaggregating the overall rate into three categories: all women marriage rates by state, college-educated female marriage rates by state, and non-college-educated female marriage rates by state. The economic and labor force participation data comprise metrics on employed individuals, unemployed individuals, and individuals who are not in the labor force (Flood et al., 2023). The utilization of unemployment rates in this study serves as a robust metric for gauging a country's overall economic health, reflecting the percentage of individuals within the labor force unable to secure employment or actively seeking job opportunities. These rates also bear a significant influence on the nation's economic condition and depict the labor force's susceptibility to business cycle fluctuations. By examining marriage and unemployment rates at the state level rather than relying solely on national averages, a more nuanced and specific understanding of these socioeconomic dynamics can be ascertained.

In this study, I will be analyzing three distinct categories of female marriage rates. These include all married women aged 18 to 35 residing in individual households, stratified by both state and year; married women aged 25 to 35 possessing at least a 4-year college education, also within individual households and categorized by state and year; and, lastly, married women aged 18 to 35 with less than a 4-year college education, further delineated by state and year. I created the marriage variable by limiting the sample to include all women in individual

households who are either married (including spouse present and absent) or never married/single and then generated the marriage variable by extracting only the percentage of married women from the sample. Additionally, our main independent variable of interest is the unemployment rate, which serves as a crucial economic health indicator within the study. The unemployment rate represents the proportion of the population aged 16 to 64 that is without employment, encompassing both novice and seasoned workers within the labor force and segregated by state and year within individual households.

Table 1: Average Marriage and Unemployment rates by State

State	Marriage Rate	Unemployment Rate
Alabama	49.096	6.313
Alaska	55.460	8.055
Arizona	50.327	5.879
Arkansas	55.887	5.945
California	44.627	7.611
Colorado	51.905	5.218
Connecticut	41.577	5.931
DC	22.936	7.402
Delaware	43.187	5.399
Florida	47.437	5.556
Georgia	46.292	5.749
Hawaii	41.302	4.490
Idaho	62.074	6.084
Illinois	44.796	6.671
Indiana	49.833	6.052
Iowa	51.951	4.466
Kansas	52.464	4.892
Kentucky	53.957	6.772
Louisiana	42.685	6.228
Maine	47.216	6.346
Maryland	41.681	5.283
Massachusetts	39.600	5.769
Michigan	45.460	7.119
Minnesota	48.599	5.245
Mississippi	44.464	6.881
Missouri	49.904	5.950
Montana	51.699	6.044
Nebraska	51.838	3.504
Nevada	51.119	6.526
New Hampshire	47.069	4.814
New Jersey	42.967	6.367
New Mexico	47.004	6.476
New York	39.093	6.495

North Carolina	51.168	5.726
North Dakota	51.218	4.279
Ohio	47.442	6.271
Oklahoma	57.676	5.082
Oregon	52.345	7.177
Pennsylvania	44.192	6.091
Rhode Island	39.333	7.334
South Carolina	45.495	6.160
South Dakota	51.288	4.195
Tennessee	52.915	5.938
Texas	52.365	5.827
Utah	63.174	4.743
Vermont	43.414	4.737
Virginia	47.544	4.658
Washington	48.888	6.852
West Virginia	52.065	7.674
Wisconsin	47.376	5.716
Wyoming	58.567	5.314

Marriage rates and unemployment rates are based on the Current Population Survey (CPS), accessible from the Integrated Public Use Microdata Series (IPUMS) from the years 1990 to 2019. Marriage rates are calculated as average female marriage rates in women of all ages.

The data outlined in Table 1, examines the average marriage rates among females and the average unemployment rates across different states. Marriage rates display a considerable variation, ranging from 22.936 percent to 63.174 percent in Utah. Notably, rural states such as Wyoming (58.567 percent) and Idaho (62.074 percent) exhibit relatively high marriage rates. Unemployment rates also present significant diversity, ranging from 3.504 percent in Nebraska to 8.055 percent in Alaska. It is worth noting that states with higher marriage rates such as Utah and Wyoming tend to display notably lower unemployment rates, potentially indicating an inverse relationship. Furthermore, there are regional trends, with relatively lower marriage rates and higher unemployment rates in southern states such as Alabama, Kentucky, Mississippi, and West Virginia. In contrast, no distinct trends are evident in northern regions.

The information presented in Figure 1 delineates the trends in aggregate marriage rates and unemployment rates over a 30-year sample period. It highlights a discernible downward

trajectory in the average marriage rate, juxtaposed with an overall fluctuating and downward trend in the unemployment rate, punctuated by a significant spike in the early 2010s. Over the 30-year sample period, the unemployment rate declined from 5.71 percentage point in 1990 to 3.70 percentage point in 2019, indicating a substantial 2.01 percentage point reduction.
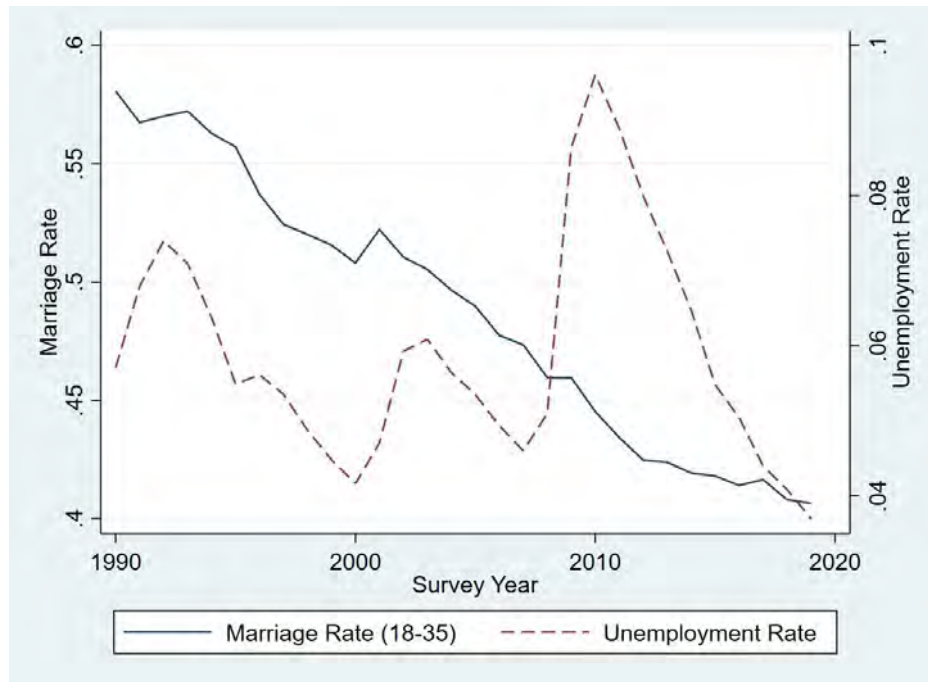

Figure 1: Average female marriage rates have been plotted on the left y-axis and the average unemployment rate has been plotted on the right y-axis with the survey year plotted on the x-axis

In Figure 2, all three marriage rates exhibit decreasing trends over time. Specifically, the marriage rate among less-educated women has exhibited a gradual decrease since the 1990s. In contrast, the marriage rate of college-educated women remained roughly constant at approximately 70 percent until 2009, after which it began to decline slightly. This college gap in marriage trends suggests that educated women have a stronger propensity for marriage, remaining at a significantly higher level from 1990 to 2019 compared to less educated women. The observed trends can be attributed to the declining pool of marriageable men since the 1960s, stemming from their declining earning potential relative to women (Kearney, 2022). This phenomenon has deterred less-educated women from pursuing marriage, as they

traditionally view it as a source of financial security in contrast to their more educated counterparts. The overall trend reflects the trend of less-educated women implying the overall trends are driven by the decline in marriage rates of less-educated women. Notably, a substantial increase in marriage rates among educated women was observed in the early 2000s, potentially associated with a decrease in unemployment rates during this period, as depicted in Figure 1.
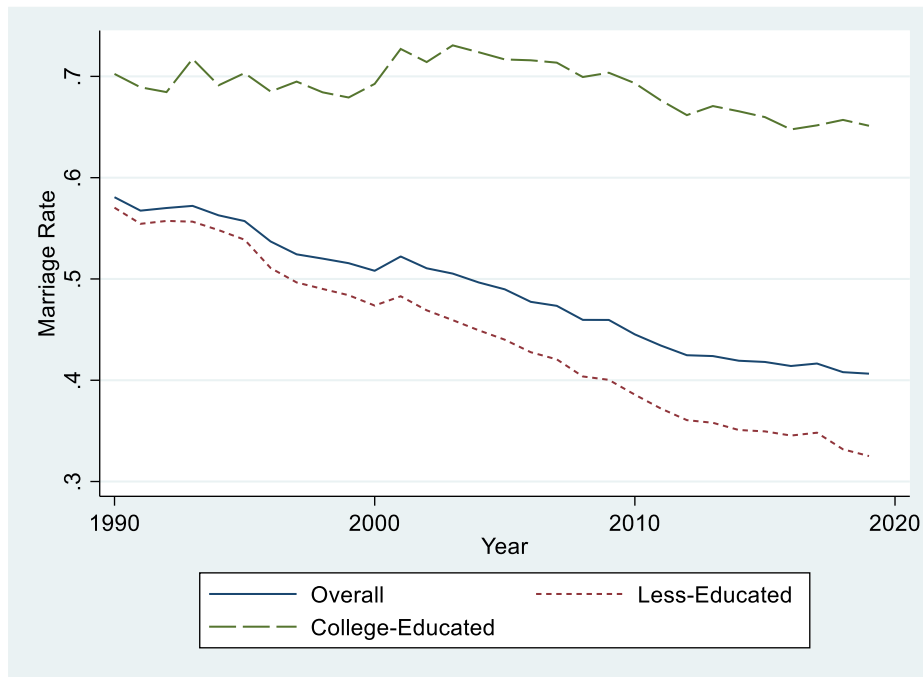

Figure 2: Overall marriage rate, college-educated marriage rate, and less-educated marriage trends over the years with marriage rates on the y-axis and survey year on the x-axis

Additionally, Figure 3 represents the pooled data of marriage rates among all married women by state and year, relative to unemployment rates by state and year. The scatterplot indicates a discernible negative association between marriage rates and unemployment rates over the sample period. The regression model adopted for this analysis is

$$M_{st} = \alpha U_{st} + \beta D_{st} + \gamma_t + \delta_s + \zeta_s t + \lambda t^2 + \varepsilon_{st},$$

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where M_{st} represents the female marriage rate for each state and year t across all observations, U_{st} signifies the unemployment rate for state 's' and year 't', and D_{st} represents a vector of demographic variables capturing the share of Blacks and Hispanics in state 's' and year 't'. The time-fixed effects γ_t control for unobserved shocks that affect all states in a given year, while state-fixed effects δ_s account for state attributes common to all states across all years such as fixed norms about marriage. t represents the state-specific linear time trends that control the effects of unobserved trends at the state level that linearly covary with unemployment and marriage. Similarly, t^2 represents state-specific quadratic time trends that control for the effects of unobserved trends that non-linearly correlate with unemployment and marriage. Controlling for state and year-fixed effects, I estimate three different regressions based on all women 18 to 35, all college-educated women 25 to 35, and less-educated women 18 to 35 to capture the influence of the unemployment rate and demographic variables on the propensity to marry among women of various education categories.
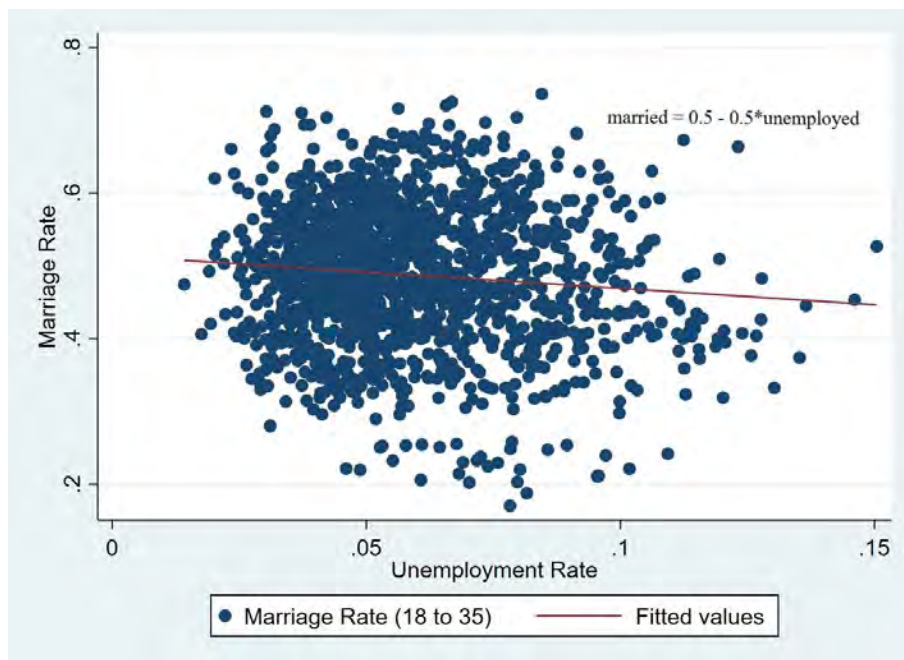

Figure 3: Pooled data of female marriage rates by state and year have been plotted on the y-axis and unemployment rates by state and year have been plotted on the x-axis where each dot represents a state-year

The research encompasses three models focusing on all women 18 to 35, college-educated women 25 to 35, and less-educated women 18 to 35. Across all regression analyses, the independent variables include the unemployment rate and the percentage of the population that identifies as Black or Hispanic. Utilizing clustered standard errors at the state level is imperative to consider the inherent correlation among the state-level clustered data. This deliberate choice ensures the robustness of the results against potential heteroskedasticity and correlation within clusters.

Chapter 4

Results

I conduct three separate regressions according to the education of women. All regressions control for state and year fixed effects. The results are presented in tables 2(a) to 2(c). In each table, column 1 controls for unemployment rate only; column 2 includes the demographic controls; column 3 includes state-level linear trends; column 4 includes state-level quadratic trends to pick up the remaining variation in unobserved trends at the state level. The results for all women 18 to 35 in Table 2(a) suggest a statistically significant negative relationship between the marriage rate and the unemployment rate, both with and without time trends. Specifically, the findings indicate that for every one percentage point increase in the unemployment rate, the overall female marriage rate decreases by 26.7 percentage points.

The findings presented in Table 2(b) demonstrate that women lacking a college education are notably susceptible to the impact of unemployment on their marriage decisions. Initially, a one percentage point rise in the unemployment rate leads to a 24.8 percentage point reduction in the likelihood of marriage among less-educated women. Notably, unlike the outcomes observed for other marriage rates, Table 2(c) shows that the unemployment rate does not

significantly affect the marriage rates of college-educated women, regardless of the inclusion of time trends.

Table 2(a): Regression Results for Marriage Rate of All Women

	(1)	(2)	(3)	(4)
Unemployed	-0.325***	-0.259**	-0.266**	-0.267**
	(-2.98)	(-2.50)	(-2.41)	(-2.34)
Black pct		-0.452***	-0.306***	-0.398***
		(-5.68)	(-2.90)	(-4.09)
Hispanic		0.032	-0.053	-0.165
		(0.37)	(-0.55)	(-1.61)
Linear Time Trends	No	No	Yes	No
Quadratic Time Trends	No	No	No	Yes
Observations	1530	1530	1530	1530

Marriage rates and unemployment rates are based on the Current Population Survey provided by Integrated Public Use Microdata Series (IPUMS) from years 1990 to 2019. Marriage rates are calculated as average female marriage rates in women of all ages. *t* statistics in parentheses $^{*}\,p < 0.1$, $^{**}\,p < 0.05$, $^{***}\,p < 0.01$.

Table 2(b): Regression Results for Marriage Rate of Less-educated Women

	(1)	(2)	(3)	(4)
Unemployed	-0.284**	-0.245**	-0.231*	-0.248*
	(-2.34)	(-2.02)	(-1.74)	(-1.80)
Black pct		-0.438***	-0.262**	-0.359***
		(-5.32)	(-2.42)	(-3.13)
Hispanic		0.118	0.071	-0.033
		(1.36)	(0.66)	(-0.27)
Linear Time Trends	No	No	Yes	No
Quadratic Time Trends	No	No	No	Yes
Observations	1530	1530	1530	1530

Marriage rates and unemployment rates are based on the Current Population Survey provided by Integrated Public Use Microdata Series (IPUMS) from years 1990 to 2019. Marriage rates are calculated as average female marriage rates in women of all ages. *t* statistics in parentheses $^{*}\,p < 0.1$, $^{**}\,p < 0.05$, $^{***}\,p < 0.01$.

Upon incorporating demographic variables, we see that a one percentage point increase in the Black population reduces the likelihood of the overall marriage propensity of a woman by 39.8 percentage points. A similar negative correlation is observed in all three regressions for the percentage of Black population. On the other hand, the Hispanic percentage of the population only shows a significant negative correlation when regressed against the marriage rate of college-educated women, decreasing a college-educated woman's propensity to marry by 41.2 percentage point when there is a one percentage point increase in the Hispanic population.

Table 2(c): Regression Results for Marriage Rate of College-Educated Women

	(1)	(2)	(3)	(4)
Unemployed	-0.234	-0.172	-0.166	-0.081
	(-1.03)	(-0.78)	(-0.87)	(-0.46)
Black pct		-0.216*	-0.223*	-0.326**
		(-1.86)	(-1.70)	(-2.28)
Hispanic		-0.087	-0.353***	-0.412***
		(-0.70)	(-2.74)	(-3.03)
Linear Time Trends	No	No	Yes	No
Quadratic Time Trends	No	No	No	Yes
Observations	1530	1530	1530	1530

Marriage rates and unemployment rates are based on the Current Population Survey provided by Integrated Public Use Microdata Series (IPUMS) from years 1990 to 2019. Marriage rates are calculated as average female marriage rates in women of all ages. t statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

In the course of this study, I have rigorously controlled for state and year-fixed effects, state-specific linear time trends, and state-specific quadratic time trends in order to ensure the robustness and validity of my models against potential sources of bias. Even after accounting for these factors, my results indicate a statistically significant negative relationship between the unemployment rate and the marriage rate for less-educated women, suggesting a plausible causal link.

Chapter 5

Discussion

The overall marriage rate seems to have primarily reflected the discernible impacts resulting from the responses of less educated women to fluctuations in the labor market. This indicates that the marriage rate among females, in general, may mainly mirror the marital behaviors of the less educated demographic. The main results of this research are consistent with Schaller's (2012) findings regarding the significant correlation between unemployment and the overall marriage rate of women. However, the unemployment rate does not seem to have any significant effect on the marriage rate of women with college education. This finding is consistent with the results of Clark et al. (2022), who similarly found no significant effect of job insecurity on the marriage decisions of women with higher education or higher wages. The lack of significance suggests that the marriages of highly educated women are not influenced by job insecurity or fluctuations in the labor market, possibly because these women are less inclined to see marriage as a means of financial stability (Isen & Stevenson, 2010). Similarly, the greater financial independence enjoyed by college-educated women in this study makes them less susceptible to the influence of rising unemployment rates on their decisions regarding family formation.

In accordance with the research conducted by Raley et al. (2015), this study finds that the Black population exhibits a significant negative correlation with the marriage rates of women across all levels of education. Raley et al. (2015) attributed this trend to the scarcity of eligible Black men in the community, limited availability of Black men within the social circles of Black women, and prevalent racial challenges that diminish the economic benefits of education resulting in lower employment opportunities for the potential grooms of the Black origin. These factors reduce the inclination of Black women to marry across all educational levels.

Conversely, the Hispanic population displays a significant negative correlation with the marriage rates of college-educated women exclusively. This finding aligns with the research of Lehrer and Son (2017), who observed a decline in the marriage propensity of Hispanic individuals as their level of education increased, a phenomenon contrary to that observed among their White counterparts. Plausible explanations for this trend include the limited options for suitable partners within their own culture and the preference for delaying marriage due to economic independence among educated Hispanic women.

Chapter 6

Conclusion

The study aimed to investigate the impact of economic conditions as captured by the unemployment rate on marriage rates, particularly for women with varying education levels. Using a 30-year ASEC panel data from 1990 to 2019 representing the US population, the research observed two contrasting responses of marriage rates to the fluctuations in the unemployment rate. The effect of unemployment on the marriage rate of overall and less educated women revealed a significant negative relationship, aligning with the pro-cyclical movement evident in existing literature (Schaller, 2012; Bellido & Marcén, 2020; Ariizumi et al., 2013). However, when examining for the marriage rate of college-educated women, the relationship became statistically insignificant, even in the presence of state-specific linear as well as quadratic time trends, indicating that highly educated women may be relatively unaffected by economic influences when making decisions about marriage timing. Additionally, the overall marriage rate seems to reflect the results observed in the marriage rates of less educated women, signifying the impact of the larger population comprising the less educated fraction.

While Schaller's (2012) work demonstrated a pro-cyclical relationship between unemployment and marriage rate during the 1978 to 2009 period, my current analysis extends her work and proves that such a relationship between the two variables holds to this day, with an elaboration on the aspect by looking into the insignificant effect of unemployment on the marital decisions of highly educated women. In conclusion, at the aggregate level, the pro-cyclical relationship observed in Schaller's work holds for the marriage rate of overall women for the 1990 to 2019 period.

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