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Subjective Economic Insecurity in the United States: Perceived Precarity in the New Economy

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Subjective Economic Insecurity in the United States:
Perceived Precarity in the New Economy

Travis Scott Lowe, Ph.D.

University of Connecticut, 2014

As the United States continues its transition into a postindustrial society, we are slowly moving away from the standard work arrangements that characterized the early post-World War II era towards less secure arrangements. Examining changes in workers' *perceptions* of insecurity is important because these perceptions often condition their actions within the labor market. Recent events like the Great Recession also reflect a changing economic landscape and highlight the need for a closer look at workers' perceived insecurity. In addition to using a social structure of accumulation (SSA) framework, this dissertation distinguishes three dimensions of subjective economic insecurity: perceived job precarity, perceived skill precarity, and perceived financial precarity. Two research questions are considered by this research. First, how have U.S. workers' perceptions of economic insecurity changed during the late postwar era, especially in the initial stage of spatialization and the aftermath of the Great Recession? Second, what factors have contributed to these changes in U.S. workers' subjective economic insecurity? These questions are addressed by analyzing GSS data from the cumulative file, which covers the entirety of the late postwar period, and the Quality of Working Life Module, which covers the emergence of the spatialization SSA (2002, 2006, and 2010). The findings indicate that the dimensions of subjective economic insecurity are empirically distinct. After controlling for unemployment, both perceived

job and financial precarity sharply increase over the course of the late postwar period whereas perceived skill precarity trends slightly downward. The flexible turn in employment relations is positively associated with perceived job precarity but not perceived skill or financial precarity. These results indicate that workers are responding to the shifting employment relationship in a very significant way. During the spatialization SSA, characteristics of security and control tend to be negatively associated with perceived job and financial precarity, whereas characteristics of uncertainty and conflict are positively associated. This is in contrast to the results for perceived skill precarity, which are more varied. These findings suggest that the notion of job security may be becoming less important than a worker's ability to manage their own career across multiple jobs, firms, and geographical locations.

Subjective Economic Insecurity in the United States:
Perceived Precarity in the New Economy

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A Dissertation

Submitted in Partial Fulfillment of the

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at the

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2014

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APPROVAL PAGE

Doctor of Philosophy Dissertation

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Perceived Precarity in the New Economy

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DEDICATION

For Isaac. You are my inspiration and my joy.

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There are many people who have made this achievement possible. At the top of the list is Victoria, who has supported me in this endeavor since the very beginning. Victoria, we did not know what we were getting ourselves into, but you have been an unwavering source of support, strength, and resolve. You have always been so incredibly tolerant of the quirks and inconveniences (and debt!) that are associated with me and my chosen profession. I can think of no one else with whom I would rather have gone on this journey, and I could not have finished it without your love and encouragement. Isaac, your arrival gave me the motivation to keep trying, even when my prospects looked bleak. I do this work so that you can grow up in a world that is better than the one you came into. There are no words to express how grateful I am for the sacrifices that my family has made to get me to the finish line. I love you both.

Mom, thank you for instilling in me a lifelong love of reading and believing in my ability to succeed, regardless of the circumstances. Your confidence in me has emboldened me to face every challenge that I have encountered, and it has made me a better man. Dad, your quiet and determined example taught me the value of hard work and discipline. It is amazing how applicable these things are to so many aspects of life, and I want you to know that your lessons have been invaluable to me. Benjamin, I am grateful for the intellectual challenge and stimulation you have provided over the years that have kept me on my toes. It may be difficult to see between the banter, but I respect you and I am proud of all you have accomplished.

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CHAPTER 1: INTRODUCTION

1.1 Research Problem

In the capitalist mode of production, employment security is an important facet of economic well-being. While the employment relationship between workers and employers has changed dramatically since the advent of the Industrial Revolution, employment security has been a perennial feature of that relationship and has received a great deal of scholarly attention in a variety of disciplines. Examining workers' *perceptions* of employment security is a particularly important endeavor because they can be indicative of macro-structural economic transformations and often condition workers' actions within the labor market. Higher levels of perceived insecurity lead workers to experience a greater sense of vulnerability. This means that workers are less likely to fight for higher wages and fringe benefits. Also, unlike traditional measures of employment stability, which concentrate on the economic well-being of workers who have lost their jobs, "we can learn about how changes in job stability and job loss are affecting *all* workers only by looking at data on job security perceptions" (Schmidt 2000:300).

However, while much of the literature on this topic has used the term "security" to describe the nature of the employment relationship, this is not necessarily an accurate reflection of the times in which we live. Recently, many scholars have approached this subject using the terms "precarity" and "insecurity," arguing that the terminology of security stems from an anachronistic perspective that developed from an anomalous era of employment relations (Heery and Salmon 2000; Kalleberg 2009; Kalleberg 2011).

That is, in terms of employment relationships, the early postwar period is more of an outlier than the basis for historical comparison and the recent trend towards flexibility and decreased attachment between employers and workers, not the security and stability of the early postwar era, is representative of a broader historical trend. As Kalleberg (2000:342) states: “The efficiencies associated with organizing work in standard, hierarchical employment relations and internal labor markets in the post-World War II period may have been more of an historical irregularity than is the use of nonstandard employment relations.” Kalleberg (2011) frames this as a pendulum-like “double movement,” tracing the swings between flexible markets and greater social protections to major institutional changes, such as globalization, increased price competition, deindustrialization, and the decline of unions. Additionally, not all groups of workers benefited from the stability associated with this period. In particular, women and minorities did not typically enjoy the same level of employment security as white males during this so-called gilded age of employment (Kalleberg 2011). This dissertation builds upon recent scholarship by framing all subsequent discussion and analysis of perceived job security in terms of precarity.

Unsurprisingly in light of the aura of insecurity that permeates the modern workplace, several studies have found that workers’ expectations about job loss tend to align with the empirical reality (Dominitz and Manski 1997; Klandermans, Hesselink, and van Vuuren 2010). In fact, subjective job loss expectations have been found to predict subsequent job displacement (Stephens Jr. 2004), meaning that subjective economic insecurity is an important precursor to more concrete events in the labor market. Examining the ebb and flow of these perceptions over time will allow scholars to

harness a certain amount of predictive power by connecting these trends and patterns with larger social and economic forces. Further, greater feelings of employment insecurity have been associated with the growing contingent workforce that has characterized the late postwar period (Barker and Christensen 1998). As efforts continue to document the size and scope of the contingent workforce, researchers have increasingly relied on workers' perceptions to determine their contingent status. Disentangling the relationship between workers' perceptions and the nature of the employment relationship is the key to understanding the changes brought about by the new economy.

As noted above, examining workers' perceptions of economic insecurity is an important endeavor because they often condition their actions within the labor market. For example, Elman and O'Rand (2002) found that perceived job insecurity contributes to greater levels of adult work-related educational participation. In an economy where risk is continually being shifted to workers (Hacker 2008; Smith 2001), such as workers paying for the development of occupational skills, understanding changes in these perceptions is critical. These perceptions also have implications for other aspects of human life. High levels of subjective economic insecurity have been shown to have detrimental consequences for workers' psychological and overall health (Burgard, Brand, and House 2009; Rocha, Crowell, and McCarter 2006). While bouts of unemployment have been found to decrease feelings of job security, they do not explain the negative relationship between perceived job precarity and general health. Notably, persistent insecurity is more important than episodic insecurity (Burgard et al. 2009), which makes the recent Great Recession worthy of further investigation.

However, despite its enduring prominence in the minds of workers, there have been relatively few studies examining perceived employment precarity and even fewer focusing on the United States (for notable exceptions, see Erlinghagen, 2008; Fullerton and Wallace, 2007; Kalleberg, 2011; and Schmidt, 2000). The extant research on employment precarity has placed an unduly narrow focus on *job* security. However, in an era characterized by a rise in nonstandard work arrangements (Gordon 1996; Kalleberg 2003; Kalleberg, Reskin, and Hudson 2000; Osterman 1999; Wallace and Junisbai 2004), a broader conceptualization and operationalization of perceived employment precarity is required to gain a more nuanced understanding of workers' attitudes in the new economy. Namely, the distinction between perceived job precarity and skill (also known as labor market) precarity (Kalleberg 2011) needs to be highlighted since the theoretical relevance of the former seems to be declining in an economy characterized by workers holding more jobs over the course of their careers (Bernhardt, Morris, Handcock, and Scott 2001).

The advent of these so-called “boundaryless” careers (Arthur and Rousseau 2001; Tremblay 2008) also opens the door to greater concerns about workers' overall economic security. The employment relationship has shifted from the relative security of the early postwar era to a system of employment, wage, and functional flexibility precipitated by the erosion of the social contract that existed between employers and workers (Rosenberg 1991). Further, despite a great deal of attention by the mainstream media, the recent Great Recession has aroused a dormant fear throughout the American workforce that has yet to be examined in a systematic way.

This dissertation tackles these issues and investigates the important topic of subjective economic insecurity by analyzing General Social Survey (GSS) data, which contain variables that capture its different dimensions and cover different parts of the late postwar period, a time of great social and economic change in the United States. Specifically, the analyses will focus on the era of spatialization, which Wallace and Brady (2001) argue started at the end of the 1990s as the pace of globalization accelerated, spurred by technological advances in shipping, transportation, and communication, which led to the widespread adoption of flexible accumulation practices such as outsourcing. By utilizing such a complete data set, this dissertation seeks to paint a comprehensive portrait of workers' perceptions of insecurity and their determinants during a critical period in American history.

1.2 Outline of Dissertation

Chapter 2 provides a critical review of how subjective economic insecurity has been conceptualized in previous literature and advances an alternative conceptualization comprised of three major dimensions, perceived job, skill, and financial precarity. I also discuss the theoretical background of social structures of accumulation (SSAs) and provide an overview of how the employment relationship has changed in recent decades. Additionally, I consider the implications that the Great Recession has for subjective economic insecurity within the context of the new economy.

Chapter 3 presents the data and methods that are used in each chapter to address the research questions of this dissertation. Specifically, I address what the GSS has to offer to the study of subjective economic insecurity, how the measures used in this study capture the concepts discussed in Chapter 2, as well as an overview of the analytical

strategy such as the use of ordinal generalized logit models and the handling of missing data.

There are two major goals addressed by this dissertation. The first goal is to improve upon previous conceptualizations of subjective economic insecurity and establish a coherent framework for understanding its dimensions. The second goal is to understand how subjective economic insecurity changed during the late postwar period, particularly during the era of spatialization, and identify what caused this change.

Chapters 4, 5, and 6 are the empirical chapters and they address these goals by answering the following core research questions:

1. How have U.S. workers' perceptions of economic insecurity changed during the late postwar era, especially in the initial stage of spatialization and the aftermath of the Great Recession?
2. What factors have contributed to these changes in U.S. workers' subjective economic insecurity?

These empirical chapters use data from the 1977-2012 cumulative GSS and one of its supplements, the Quality of Working Life (QWL) module, which was asked of respondents in 2002, 2006, and 2010.

Chapter 4 examines changes in perceived job precarity during the late postwar era and in the initial stage of spatialization. The purpose of this chapter is to use the cumulative GSS to assess the effect of annual measures such as unemployment on perceived job precarity and the QWL module to test the effects of security, control, uncertainty, and conflict in the workplace during the contemporary era.

The analytical structure of Chapter 5 is very similar to that of Chapter 4, only perceived skill precarity is the dependent variable. This chapter empirically establishes

perceived skill precarity as a dimension of subjective economic insecurity separate from perceived job precarity.

Chapter 6 follows the same format as Chapters 4 and 5, only examining perceived financial precarity, a neglected dimension of subjective economic insecurity. Perceived financial precarity is measured using a scale that captures how satisfied respondents are with their finances, how they feel about finances relative to those of others, and recent changes in their financial situation.

Finally, Chapter 7 synthesizes the results of the empirical chapters, summarizes the limitations of this research, and details the implications this study may have for public policy and future scholarship on subjective economic insecurity and its dimensions.

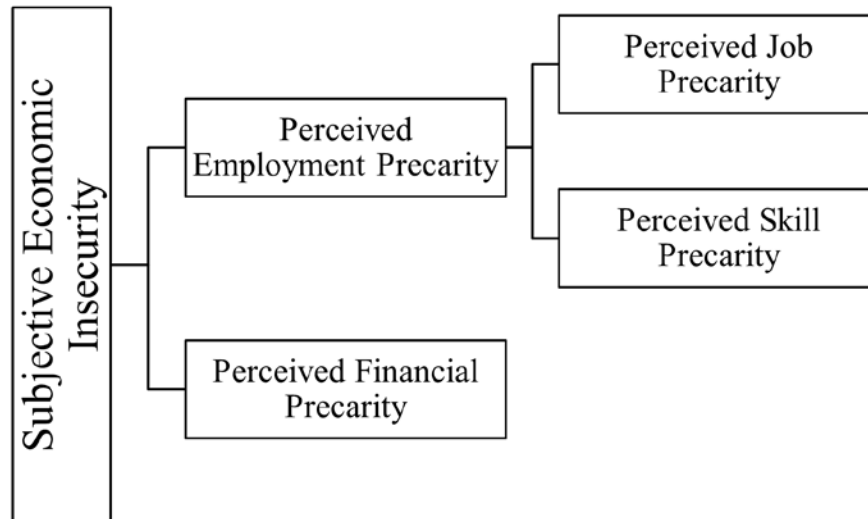
2.1 Conceptualizing Subjective Economic Insecurity

Employment precarity is situated under the broader conceptual umbrella of economic insecurity, which also includes housing-based insecurity and healthcare-related insecurity. However, due to the nature of the American housing market and healthcare system, employment precarity often serves as the bridge to these other dimensions of economic insecurity and is arguably the most important of all. For instance, Dominitz and Manski (1997) found that, on average, expectations concerning health care coverage and job loss were quite similar. Previous research has examined economic insecurity in two distinct ways: objectively and subjectively (De Witte and Näswall 2003; Heery and Salmon 2000; Klandermans et al. 2010). While objective employment security tends to be measured in a more concrete sense, focusing primarily on measures of job tenure or job retention (Diebold, Neumark, and Polsky 1997; Swinnerton and Wial 1995; Valletta 1999), measures of the subjective experience of employment security are based upon workers' *perceptions* of their employment situation and that of others. As noted in the introduction, this distinction is an important one. Since much of the extant research has focused on objective employment security, the role of workers' perceptions as predictors of employment stability has been largely ignored. In addition, perceptions can also be better predictors than objective measures. For example, in his book on neighborhood effects in Chicago, Sampson (2012) finds that shared perceptions of disorder predict future poverty better than measures of observed disorder.

2.1.1 Perceived Job Precarity

Perceptions of precarity can take many different forms and can therefore be measured in different ways. Figure 2.1 presents the conceptual map for subjective economic insecurity posited in this dissertation. As shown in the figure, subjective economic insecurity can be broken down into two major components: perceived employment precarity and perceived financial precarity. Perceived employment precarity is further divided into perceived job precarity and perceived skill precarity. This dissertation identifies three dimensions of subjective economic insecurity (perceived job precarity, perceived skill precarity, and perceived financial precarity) and explores the distinctions between them. Out of these three dimensions, perceived job precarity has received perhaps the most attention from the extant research and has been conventionally referred to as “job security.” As noted in Chapter 1, this terminology does not reflect the reality in which workers’ are living, hence the use of the term “precarity” in this dissertation.

Figure 2.1: Conceptual Map of Subjective Economic Insecurity



Traditionally, job security has been operationalized to reflect the security of one's current position in the occupational structure. It has been conceptualized in many different ways, including being divided into cognitive and affective job security (Anderson and Pontusson 2007; Borg and Elizur 1992), the former referring to a worker's estimated probability of losing his/her current job and the latter referring to how much a worker worries about losing his/her job (Anderson and Pontusson 2007). Greenhalgh and Rosenblatt (1984) identify two dimensions of job insecurity: severity of threat and powerlessness against the threat. While the case for developing a more nuanced conceptualization is sound, the ability to do so is often limited by the availability of data, particularly for longitudinal and nationally representative datasets. Because of this, I conceptualize perceived job precarity as the worker's perceived likelihood of losing his/her job in the imminent future for the purposes of this dissertation.

2.1.2 Perceived Skill Precarity

Skill security, which refers to one's ability to utilize his/her skills to gain a position in the labor market (Kalleberg 2011), is a closely related concept to job security that is often situated under the same conceptual umbrella. In their comparative investigation of perceived employment insecurity in European countries, Dixon, Fullerton, and Robertson (2013) make the distinction between these two dimensions and conceptualize them in tandem as employment insecurity, but they refer to the perceived skill precarity measure as perceived labor market insecurity.¹ However, this conceptualization is not necessarily appropriate for individual-level measures. Since the measure described above taps the *individual's* perceived employability, perceived skill

¹ Anderson and Pontusson (2007) and Kalleberg and Marsden (2012) also use this terminology, along with the phrase "employability security."

precarity is a more accurate label for what is being captured. This is particularly true in a society that places such a large emphasis on individualized skill development and job training (Hacker 2008).

Because long-term attachments between employers and workers are on the decline (Farber 2008; Gordon 1996; Harrison 1994; Sennett 1998; Smith 2001), being able to transfer one's skills to other firms is essential in the current labor market. In addition, risk is increasingly assumed by workers as they are becoming more responsible for developing their own skills and managing their careers (Arthur and Rousseau 2001; Osterman 1996; Smith 2001). Smith (2001) finds that many workers are willing to accept an employment situation fraught with precarity and risk because they view the skills they have gained as an advantage in the new economy. Therefore, in the age of the "boundaryless" or "nomadic" career (Arthur and Rousseau 2001; Tremblay 2008), perceived skill precarity is distinctive and worthy of examination separate from perceived job precarity.

2.1.3 Perceived Financial Precarity

In addition to distinguishing perceived skill precarity from perceived job precarity, this research aims to develop another dimension of subjective economic insecurity: perceived financial precarity. In her review of the literature on job stability, Hollister (2011:316) notes that scholars of job stability need to expand the scope of their investigation to include "...measures of broader anxiety about employment, beliefs about the likelihood of longer-term stability, and views on voluntary as well as involuntary job change." Kalleberg and Marsden (2012:322) argue that "those dissatisfied with their financial situation, perceiving their situation as worsening, or viewing their family

income as below average are expressing a more general economic insecurity, as distinct from job insecurity.” Similar to perceived job precarity and perceived skill precarity, these attitudes and beliefs can potentially condition workers’ behavior within labor markets and other social institutions. By conceptualizing perceived financial precarity as a dimension of subjective economic insecurity, this dissertation answers Hollister’s call for a more inclusive definition. It also overlaps with the distinction between cognitive job security and affective job security posited by Borg and Elizure (1992). While the former refers specifically to a worker’s estimated probability of losing his/her job, the latter indicates a general sense of economic anxiety and is therefore subsumed under the dimension of perceived financial precarity.

While more comprehensive and nuanced conceptualizations of employment precarity have been developed by previous research (Ashford, Lee, and Bobko 1989), their utility for documenting longitudinal trends is limited because the measures required to capture them are not widely used. By developing a unified conceptualization of subjective economic insecurity with distinct dimensions, this dissertation seeks to add clarity and coherence to a topic that has been characterized by a great deal of inconsistency.

2.2 Social Structure of Accumulation Theory

In regards to theory, this research is best situated within a social structure of accumulation, or SSA, framework, as developed by Gordon, Edwards, and Reich (1982). Social structure of accumulation theory moves beyond the short-term perspective of many economic theories and explains the tendency for capitalist economies to experience long swings of economic prosperity followed by bouts of decline and crisis. These swings

are approximately 50-60 years in length, and each is characterized by certain types of social and institutional structures and processes that facilitate the accumulation of capital in ways that are different from the preceding and following periods (Gordon et al. 1982). In the initial formulation of SSA theory, Gordon (1980) eschewed overly deterministic explanations and argued that these swings are driven by changes in social, economic, and political institutions. Since determining the existence and boundaries of these long swings is not necessarily testable and depends upon a certain interpretation of the evidence, Gordon et al. (1982) do not claim that their existence has been definitively proven. However, they do argue that the concept is very advantageous for furthering our understanding of long term changes in social and economic structure as well as the consequences of those changes.

In *Contested Terrain*, Edwards (1979) identifies broad systems of control (simple, technical, and bureaucratic) that have evolved historically in western capitalist societies as new technology was developed and the sizes of firms continued to grow. He claims that these systems contain three elements that are coordinated by employers: direction, evaluation, and discipline. Direction refers to an employer's ability to determine specifically how tasks are performed. Evaluation refers to the supervision of those tasks, which includes identifying mistakes. Finally, discipline is the mechanism used by employers to punish and reward employees in exchange for better work performance. The transitions between the systems of control identified by Edwards (1979) are precipitated by crises of control that are a result of increased labor militancy and resistance. Each crisis of control is distinct from the one preceding it and gave rise to new

systems of control that were employed to more effectively manage workers with the ultimate goal of generating more profit.

Wallace and Brady (2001) point out that the systems of control identified by Edwards (1979) tend to align rather closely with the SSAs outlined by Gordon et al. (1982). They argue that “control systems are the key mechanism in managing the capital-labor conflict under a prevailing SSA” (Wallace and Brady 2001:106) They proceed to highlight the connections between the SSAs and the control systems, theorizing that these control systems serve as the vital link between macro-level processes and the organization of work at the micro-level (Wallace and Brady 2001). Namely, their basic premise is that the organization of work gradually changes over extended periods of time as a direct result of changes in capital accumulation practices.

There are four SSAs, and Gordon, Edwards, and Reich (1982) identify three of them: initial proletarianization, homogenization, and segmentation. The fourth SSA is more recently identified by Wallace and Brady (2001) as the spatialization SSA. Each SSA goes through three phases over the course of its tenure: exploration, consolidation, and decay (Gordon et al. 1982; Wallace and Brady 2001). The phase of decay for one SSA is the period of exploration for another, as new practices of accumulation are being tried. The phase of consolidation represents the period where the most successful accumulation practices are commonly used. SSA theory posits that in order for the consolidation phase to begin, the institutions of the new SSA must already be established (Reich 1994). Therefore, each SSA is not completely discrete from the others, but rather vestiges of the old systems continue into later systems. This means that even today we have features of all four SSAs and all four control systems in various work settings, but

the SSAs discussed in this section are the predominant ones during a given time period. The following sections provide an overview of each SSA and their associated systems of control, describing the transitions between them. Although each SSA and system of control is discussed to provide historical context, this dissertation's analysis focuses on the transition between the segmentation SSA and the spatialization SSA.

2.2.1 Initial Proletarianization and Simple Control

The initial proletarianization SSA experienced its phase of exploration in the 1820s-1840s, a result of economic forces during this time that forced people out of the agricultural and cottage industries and into factories under the direct supervision of capitalists (Wallace and Brady 2001). This period of time falls squarely within the Industrial Revolution, the century-long economic transformation from which modern capitalism emerged. Although this SSA represents a substantial change in the organization of work, it did not fundamentally alter the work process itself, which was still based on craft methods (Wallace and Brady 2001). In addition to representing the first step in the development of a paid labor force, the initial proletarianization SSA provides the first test of SSA theory's tenets of institutional rigidity and economic stagnation (Reich 1994). For example, Reich (1994:29) notes that "even though the Civil War brought about fundamental institutional changes, the SSA analysis of institutional rigidity and economic stagnation still holds." The consolidation phase of this SSA occurred during the period leading up to and including the Civil War, or the 1840s-1870s, and its decay phase in the Reconstruction Era, or the 1870s-1890s.

Since the companies conducting business at the time tended to be small, the initial proletarianization SSA is characterized by simple control, or the face to face oversight of

craft workers by management (Wallace and Brady 2001). However, according to Edwards (1979), simple control can be divided into two types: entrepreneurial and hierarchical. Entrepreneurial control is associated with very small firms and refers to direct supervision of workers by the entrepreneur, who often possessed knowledge and skills related to the craft. This form of control relies on the interpersonal relationships that exist between the employers and the workers, and “despite being informal, erratic, and subject to favoritism and arbitrariness, provided the basis for profitable control” (Edwards 1979:27). Hierarchical control, on the other hand, emerged in response to the increased firm sizes, which made it increasingly difficult to directly supervise employees on a daily basis (Edwards 1979). This form of control involves a layer of supervisors between the capitalists and workers as a response to this increased growth. However, this form of control had its own problems as well, creating separation between employers and workers. In addition to the deterioration of social bonds, an important consequence of this general situation was a substantial skill knowledge gap between managers and workers (Edwards 1979; Wallace and Brady 2001). This meant that workers had a great deal of leverage in the employment relationship, which began to sour as managers continued to arbitrarily wield their authority (Edwards 1979). This was the first crisis of control.

2.2.2 Homogenization and Technical Control

The homogenization SSA experienced its phase of exploration in the 1870s-1890s, a period of great economic and demographic change as the policies of Reconstruction were implemented and blacks began migrating en masse to the industrialized urban North. The consolidation phase of the homogenization SSA lasted from the 1890s to World War I, and the decay phase took place in the period between

World War I and II. The homogenization SSA emerged as a response to the first crisis of control in the workplace. Simple forms of control were not enough to maintain the balance of power between employers and workers because increased firm sizes limited supervisors' ability to efficiently organize production and they did not have any real compulsion to exercise their authority in the firm's interest (Edwards 1979). While the initial proletarianization SSA was characterized by the movement of work from the home to the factory, the homogenization SSA was typified by an earnest attempt to deskill and homogenize workers and the system in which they operate (Wallace and Brady 2001). This was achieved by increasing the capitalists' degree of control over the work performed in their factories in an effort to tamp down the resistance that resulted from the first crisis of control.

The homogenization SSA features technical control, which is the product of machine technology and the assembly line. This mechanization of production is structural in nature and was facilitated by development of new technologies that improved efficiency (Edwards 1979). Through these new technologies, technical control also contributed to the erosion of craft knowledge, leading to a homogenization of the production system (Braverman 1974). While technical control was effective at achieving the sought after homogenization and was less arbitrary than the simple systems of control, it also led to an increased level of class consciousness among workers as their subordinate status was more readily apparent (Wallace and Brady 2001). This heightened class consciousness contributed to higher levels of resistance. This increased resistance (e.g., strikes and boycotts) represents the second crisis of control, and it overlapped with

the Great Depression, signaling the beginning of the end for the homogenization SSA (Edwards 1979; Wallace and Brady 2001).

2.2.3 Segmentation and Bureaucratic Control

The segmentation SSA experienced its phase of exploration in the period between World War I and II, its consolidation phase in the early postwar period (1945-1970s), and its decay phase in the late postwar period (1970s-2000). The segmentation SSA represented a reversal of the homogenization SSA, tending towards the division of labor markets into primary and secondary segments as well as firm internal labor markets (Doeringer and Piore 1971; Piore 1970).² Key features of these segmented labor markets included highly stratified status, authority, and pay distinctions in the workplace, usually indicated by a proliferation of job titles. In fact, it has been posited that this segmentation was a deliberate attempt to address the second crisis of control by inhibiting worker solidarity (Marglin 1974; Stone 1975). Therefore, the intensification of segmentation during this era is tied to the emergence of the capital-labor accord in which unions agreed to not stage strikes in exchange for greater economic rewards, which in turn benefited union members disproportionately (Wallace and Brady 2001). As a result, this accord helped give rise to an unprecedented period of steadily declining union activity and greater employment security with longer job tenures in primary labor market positions (Kalleberg 2011), all of which are discussed in greater detail below.

The segmentation SSA is associated with bureaucratic control, which involves written rules and procedures that determine aspects of the workplace such as wage policies, working conditions, and due process (Wallace and Brady 2001). Edwards (1979)

² The primary labor market is characterized by “good” jobs with good pay, fringe benefits, and opportunities for advancement in internal labor markets. In contrast, the secondary labor market is characterized by “bad” jobs with poor pay, no fringe benefits, and no due process (Kalleberg 2011).

likens bureaucratic control to technical control in that they are both structural and not dependent upon the personal relationships between workers and their supervisors. However, technical control is limited to the nature of the work, whereas bureaucratic control is embedded in the structure of the firm itself. Although this form of control came about as an attempt to reduce labor resistance by stratifying the labor force (Marglin 1974), the unions were often complicit in developing these procedures in exchange for job security. However, there are contradictions in the bureaucratic control system that gave rise to another crisis of control (Edwards 1979). First, while the employment security achieved during this period does allow employers to maintain a great degree of control over their workers, it also facilitates workplace democracy. This democracy serves as a venue in which workers can question their employers' power. Second, this system of control increased labor costs in an increasingly aggressive global economy that required companies to be more agile as the other countries that participated in World War II became competitive again in the 1970s. This forced firms to choose between maintaining a labor force that it had so far sustained long-term attachments with and adopting flexible accumulation practices. The contradictions that compose this third crisis of control were ultimately unable to be resolved, contributing to the decay of the segmentation SSA and the emergence of a new one (Wallace and Brady 2001).

2.2.4 Spatialization and Technocratic Control

Wallace and Brady (2001) posit that the early 2000s signaled the advent of a new SSA's consolidation phase. They label this nascent period "spatialization," referring to the dispersed nature of the global economic system. While the segmentation SSA was dominant during the early postwar period, the late postwar period has witnessed the

contradictions in the bureaucratic system of control and is characterized by its decline. Wallace and Brady (2001) assert that the spatialization SSA begins around 2000 in earnest, but its nascent forms—deindustrialization, deunionization, and downsizing—were taking shape in the late postwar period (1970s, 1980s, and 1990s). Since it is required to remain competitive in a global economy, adopting flexible accumulation practices is the first objective for employers who wish to be successful in the spatialization SSA. Flexible accumulation is the antithesis of the more rigid early postwar employment structure, and it usually comes at the cost of employment security as employers attempt to navigate the global economy by shopping for the lowest labor cost and enhancing access to raw materials and markets. Consequently, employers were able to effectively use the threat of relocation as a tool for curbing resistance from labor (Wallace and Brady 2001). Wallace and Brady (2001) note that this arrangement is accomplished through the use of modern shipping, transportation, and communication technology to conduct operations all around the world.

Wallace and Brady (2001) contend that these technologies are being used to perpetuate a system of technocratic control, the dominant control system for the spatialization SSA, which makes effective use of information technologies to regulate the modern workplace (Burris 1998). Burris (1998) argues that computing technology is distinct from previous workplace technologies in that it is used in a much wider variety of ways, and just as importantly, it applies to a wide range of workplace settings. Since computing technology has become a central element of the knowledge economy, characteristics that are associated with its use represent important factors that should be considered in any analysis of subjective economic insecurity. For example, those workers

who have greater job autonomy are more likely to be engaging with these technologies on a daily basis and using those technologies to manage others. Wallace and Brady (2001) note that the nature of management has changed as a result, with modes of communication that cross the lines between workers and managers in many different ways. Moreover, they suggest that technocratic control has contributed to the development of a neo-Taylorist ideology in the workplace with the main goal of finding the “one best way” and achieving it by routinizing the work of lower-level workers. This is normally done through the use of algorithms that are embedded in many workplace computer systems which deskill work while maintaining more effective control, particularly in routine cognitive and manual job tasks (Autor, Levy, and Murnane 2003; Burris 1998). However, computing technology can also enhance the work experience and create greater productivity. For example, the evolution of computers and what they are used for has allowed academics and researchers to harness this technology and produce more research that uses complex methodologies. These contrasting narratives allude to the double-edged nature of technocratic control, which can be simultaneously empowering and alienating (Wallace 1989). As mentioned above, it is important to note that while this dissertation places a great deal of emphasis on the transition between the segmentation and spatialization SSAs as well as the latter’s consolidation phase, elements of all four systems are present in the contemporary era.

2.3 The Changing Employment Relationship

Subjective economic insecurity is ultimately situated within a larger context of employment relations, and SSA theory can be used to partially explain the changes in that context (Gordon et al. 1982). As the United States continues its transition to being a

postindustrial society, there has been a marked shift in the nature of work in the American economy (Bluestone and Harrison 1982; Harrison and Bluestone 1988). Knowledge and technology jobs form the backbone of the new economy, supplanting the manufacturing jobs that were so prevalent during the early postwar era. We are slowly moving away from the standard work arrangements that characterized the early post-World War II era towards less secure nonstandard work arrangements in the late postwar era (Barker and Christensen 1998; Belous 1989; Kalleberg 2011). Nonstandard work arrangements are typified by greater levels of contingent workers, who tend to have weak affiliations with their employers, lack implicit long-term contracts, are not significant stakeholders in the company, and are not part of the corporate family (Belous 1989). The increasing prevalence of contingent work indicates a fundamental shift in employment contracts and, consequently, the impending obsolescence of these systems. As demand-side economics, or the demands generated by businesses, government, and households, take precedence over the needs of the labor force, a context of deinstitutionalization, contingency, and insecurity is created (McCall 2001).

2.3.1 The Political Economy of Change

Not only is the type of work being performed changing, but the conditions under which this work is done are transforming as well. Broader changes in the political and economic spheres have shaped the world of work and therefore potentially influence the attitudes that workers have concerning their perceived employment security. The progressivism of the New Deal and Great Society eras has given way to a political environment that tends to emphasize the central tenets of neoliberalism, a political and economic approach that assumes “private companies, private individuals, and, most

importantly, unhindered markets are best able to generate economic growth and social welfare” (Bockman 2013:14). As Dean (2014:160) notes, neoliberalism represents an “...identifiable but heterogeneous militant movement seeking to influence and appropriate the powers of national and international organizations, including states.” Dean (2014) goes on to distinguish neoliberalism as a regime of and by the state, cautioning against entangling it in the concept of the state itself. By framing this regime as a product of a movement, or thought collective, Dean (2014) highlights the malleable nature of the polity and how it can drive structural changes. The rise of the neoliberal regime has had serious consequences for the way in which American markets work, and most importantly, for the types of experiences that workers in the United States have had in the labor market.

While macro-level factors have gone largely unexplored in relation to workers’ perceptions, there is some evidence that they may be important. For instance, De Boef and Kellstedt (2004) found that political factors matter for determining consumer confidence, arguing that scholars’ perception of subjective economic factors as driving politics is too limited and that the causal relationship between politics and the economy is a two-way street. In terms of economic shifts, many scholars have found that perceived job precarity trends positive during the late postwar period in both Europe and the United States after controlling for unemployment (Fullerton, Robertson, and Dixon 2011; Fullerton and Wallace 2007; Kalleberg 2011; Kalleberg and Marsden 2012). Additionally, other economic factors such as union density and income inequality shape workers’ perceptions of their employment precarity (Dixon et al. 2013; Fullerton and Wallace 2007). These findings suggest that key structural factors that reflect the broader

political economic context may have more to tell us in regards to subjective economic insecurity. Furthermore, it highlights the relevance of SSA theory for explaining changes in workers' attitudes regarding job, skill, and financial precarity.

Part of why these political and economic forces are germane to this discussion is because they have contributed to significant changes in the employment relationship. Employment security was a taken-for-granted aspect of the occupational structure following WWII and prior to the late 1970s. Even though there was great diversity in the early postwar employment system, "...there was a central set of norms, behaviors, and institutions that structured the core of the labor market" (Osterman 1999:67). Osterman (1999) points out that one defining feature of the early postwar occupational structure was the implicit contract under which many workers took their jobs.

At the crux of this understanding between employers and workers is the issue of employment security. Many workers who started their careers under the early postwar employment system envisioned their career path as involving only one or two employers (Smith 2001). Workers felt they could count on opportunities for advancement as they toiled within well-established firm internal labor markets.³ When layoffs happened, they were typically due to slow periods of production and carried the expectation that workers would be called back to work when the economy picked up. However, it has been widely acknowledged that the early postwar employment system upon which many U.S. workers' conceptions of the employment relationship is based has undergone substantial transformations in recent decades (Bridges 1994; Kalleberg 2011; Kalleberg et al. 2000;

³ In reality, only some workers (mainly white males) enjoyed these types of opportunities, and there were others (such as minorities and women) for whom this did not apply (Kalleberg 2011). However, the *perception* that these opportunities were available to all is particularly salient for many workers who began their careers in the postwar era.

Morris and Western 1999; Osterman 1999; Wallace and Brady 2001). As described above, these transformations have been features of the exploration phase of the spatialization SSA and its subsequent consolidation. Bridges (1994) argues that one result of this change has been the “dejobbing” of the U.S. economy, in which work is being increasingly automated and deskilled, and corporations are delegating even essential functions to temporary or contract workers. The result is that, more often than before, workers have to get ahead by changing employers (Bernhardt et al. 2001) and managing their own careers (Osterman 1996; Smith 2001). This phenomenon has been called the “boundaryless” career (Arthur and Rousseau 2001; Tremblay 2008), and it is characterized by a growing insecurity that is the result of the systematic dismantling of firm internal labor markets in the new economy (Bridges 1994; Osterman 1996).

2.3.2 The New Insecurity

The nascence of the late postwar period in the 1970s signaled the beginning of an age of flexibility. Rosenberg (1991) identifies three dimensions of this flexibility: employment flexibility, wage flexibility, and functional flexibility. This increased flexibility and the rise in nonstandard employment arrangements such as contingent work are the result of global economic changes (such as the re-entry of foreign manufacturers into the global market during the 1970s), governmental deregulation, deunionization, and technological advancements (Bernhardt et al. 2001; Kalleberg 2000, 2011). These broad shifts and changes have challenged the once firm sense of what constitutes a job, with mass production and firm internal labor markets giving way to flexible accumulation and new forms of nonstandard work characterized by a decreased attachment between employers and workers (Barker and Christensen 1998; Bernhardt et al. 2001; Bridges

1994; Osterman 1996, 1999; Wallace and Brady 2001). Muddling the issue is the fact that standard and nonstandard employment arrangements are not separate systems within the economic institution. Rather, they are inextricably linked, with many firms simultaneously using standard and nonstandard employment relations (i.e., core workers that perform essential functions and periphery workers that are deemed dispensable) to produce goods and services (Vallas 1999). As Smith (2001:7) notes, “Tenuousness and uncertainty have become ‘normal’ facts of work ... and they thrive in concert with past opportunity structures in a restructuring economy.” Therefore, many people with different terms of employment are working side by side, which can also influence workers’ attitudes concerning their employment security.

The changes in the employment relationship discussed above have serious implications for the subjective economic insecurity of American workers. Heery and Salmon (2000:1) synthesize existing literature on employment precarity into what they call “the insecurity thesis,” which they define as “...the coherent set of statements about the nature, causes and effects of recent change in employment relations.” They advance several propositions concerning employment precarity, several of which involve workers’ perceptions of their job security. Heery and Salmon (2000) assert that employees are feeling increasingly insecure and groups that used to be relatively secure (e.g., older workers, white collar professionals, and male workers) are now experiencing greater precarity in their employment situation.

A new insecurity has accompanied the new economy, and not even white collar workers are immune. For example, in their analysis of 1995 National Household Education Survey data, Elman and O’Rand (2002) found that such workers do not feel

any more secure about their jobs than other workers. The results from Kalleberg and Marsden's (2012) examination of labor force insecurity during the late postwar period confirm this, demonstrating that professional and managerial workers are feeling more precarious in the spatialization SSA than in the past. This dissertation seeks to test these elements of the insecurity thesis by documenting changes in subjective economic insecurity, paying special attention to how specific social groups have been differentially affected by these changes over time.

Wallace and Brady (2001) predict the consequences of the emerging spatialization SSA as it relates to the collapse of the capital-labor accord described above, identifying rising levels of job insecurity and perpetual skill restructuring as two major outcomes. They cite the constant threat of relocation and displacement as being indicative of a perpetually changing occupational structure in which automation and skill restructuring are key features. Wallace and Brady (2001) go on to state that as a result, workers will likely drop in and out of the workforce multiple times to further develop their skills, assuming a great deal of risk with no guarantee of return on investment. This string of predictions has substantial implications for research on subjective economic insecurity and highlights the connection between macro-level socioeconomic structures and workers' attitudes. Namely, one would expect workers' perceived job precarity to increase over time as society continues to be afflicted with more nonstandard work arrangements. Furthermore, one might expect perceived skill precarity to decrease over the course of the late postwar period, as workers adjust to the new age of flexibility.

2.3.3 Other Consequences

The erosion of this social contract during the late postwar period and the consequences of that erosion have been well-documented (Cappelli, Bassi, Katz, Knoke, Osterman, and Useem 1997; Osterman 1999; Rubin 1996a). Standard employment is the basis upon which labor law, collective bargaining, and social security systems were developed (Kalleberg 2011; Osterman 1999). In addition, social policy, health care, retirement, and unemployment were all based on the assumption of long-term employment (Kalleberg 2009; Levine, Belman, Charness, Groshen, and O'Shaughnessy 2002). Therefore, increases in nonstandard employment arrangements signal not only an increase in employment insecurity, but greater insecurity in other social institutions as well.

In this vein, Smith (2001:9) contends that the new work and employment relationships are particularly problematic because they are set up to encourage workers to be “willing to adapt to uncertainty because they felt they were gaining skills and insights that would allow them to maintain a solid footing in the new economy.” Namely, since they value their attachment to the firm, which they see as a calculated advantage, they take on burdens such as student loan debt in order to advance within the company (Smith 2001). This arrangement is more feasible in a context of greater economic security such as the early postwar era, when there was reciprocity and a greater attachment between employers and workers (Farber 2008). However, the shift towards nonstandard employment in the late postwar era means that the desire for attachment is no longer shared by many employers as they adapt to an increasingly competitive global economy (Fullerton and Wallace 2007; Smith 2001; Wallace and Brady 2001). Smith (2001)

argues that workers have not responded to this reality with resistance because their desire to maintain attachment to their employers is a result of a cost-benefit analysis based upon perceptions and individual work histories, not broader trends in the labor market.

In addition to individual workers, many of our social institutions have also failed to adapt to these changes, operating under the premise that these long-term attachments persist. Hacker (2008:6) argues that the United States is experiencing what he describes as the Great Risk Shift, “a massive transfer of economic risk from broad structures of insurance, including those sponsored by the corporate sector as well as by government, onto the fragile balance sheets of American families.” He chronicles the gradual unraveling of the social safety net that has been constructed since the New Deal era and how this has been problematic for an increasing number of people, paying special attention to the increasingly riskier nature of jobs, families, health care, and retirement in recent decades. Hacker (2008) attributes this shift to what he calls the Personal Responsibility Crusade, a growing political movement that promotes an anti-collectivist agenda and espouses values of individual accountability. Barring some kind of bold political action, Hacker envisions a future in which programs such as Medicare and Social Security are transformed into personal accounts that workers do not have the expertise to manage effectively. The Great Risk Shift has implications for many aspects of workers’ lives, particularly perceived financial precarity, which taps into workers’ general economic anxieties.

2.4 The Great Recession: Academic Definition versus Workers’ Experiences

Although the employment relationship has gradually changed since the mid-1970s, this transformation has been punctuated by specific events that have spurred its

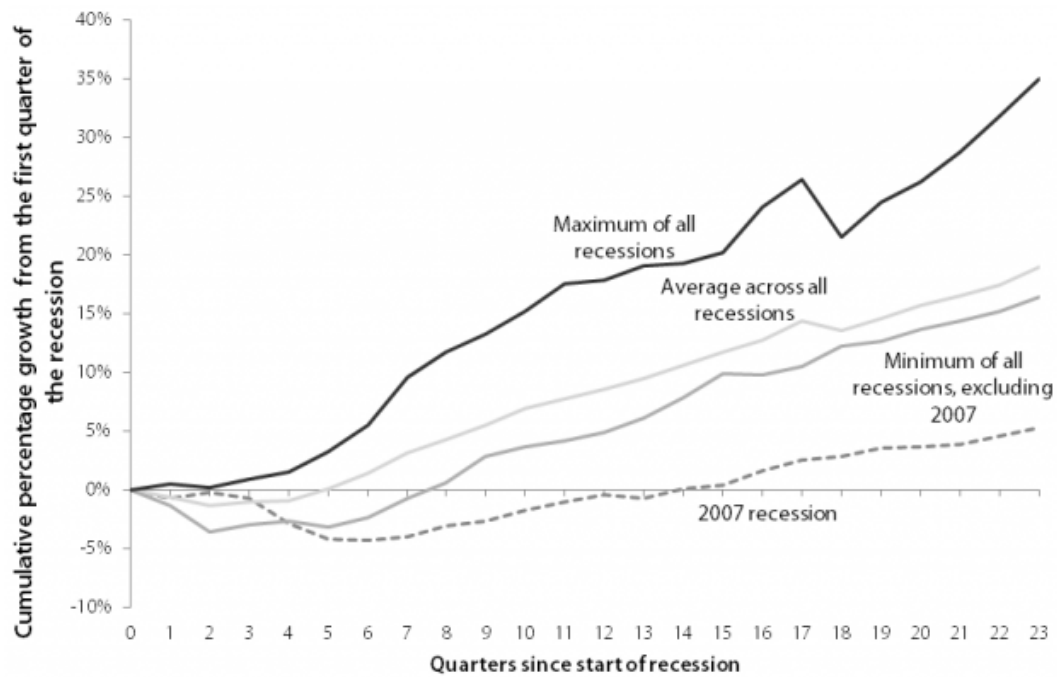
progress such as the oil shock of the 1970s, heightened international competition for many U.S. industries, and Reagan's breaking up of the PATCO strike in 1981. In 2007, the United States experienced a substantial wave of foreclosures on subprime, adjustable rate home mortgages. This wave of foreclosures was the result of a confluence of events, including a growing housing bubble, greater financial deregulation, and increases in predatory lending practices. These foreclosures triggered a massive financial crisis, the likes of which has not been seen since the Great Depression of the 1930s. The Great Recession, as this crisis came to be known, is a stark example of how various types of precarity, such as housing and employment, are inextricably linked with each other. Home values plummeted, financial institutions failed, and unemployment sharply increased.

Traditionally, a recession has been defined by economists as two or more consecutive quarters of negative GDP growth, with positive GDP growth signaling the end of the recession. Using this definition as evidence for their determination, the National Bureau of Economic Research (NBER) reported in September 2010 that the Great Recession had ended for the U.S. in June 2009, and that the country had entered a recovery period (NBER 2010). Currently, the U.S. government has designated the NBER as the experts responsible for determining when recessions begin and end. Economists at the NBER typically use a variety of measures (e.g., real GDP, real income, employment, industrial production, and wholesale-retail sales) to determine when recessions begin and end. While the strictly academic approach is overly simplistic and ignores other factors that may still be indicative of a deleterious economic environment, the standards used by the NBER are also problematic. Although the Great Recession may have formally ended

in an academic sense, this does not necessarily mean that economic conditions have returned to pre-recession levels. Nor does this mean that workers' fears concerning their economic insecurity have been allayed. Indeed, the recovery period following the Great Recession has been characterized by a notably high unemployment rate. In a measure not including discouraged workers and the underemployed, the Bureau of Labor Statistics reports that the unemployment rate increased from 4.6% in 2007 to 8.9% in 2011. Krugman (2012) argues that these extremely high levels of unemployment are indicative of a depression, and that it is premature to pronounce that the crisis has been averted. Additionally, unemployment has been found to detrimentally impact the perceived job security of workers in the past (Fullerton and Wallace 2007; Schmidt 2000).

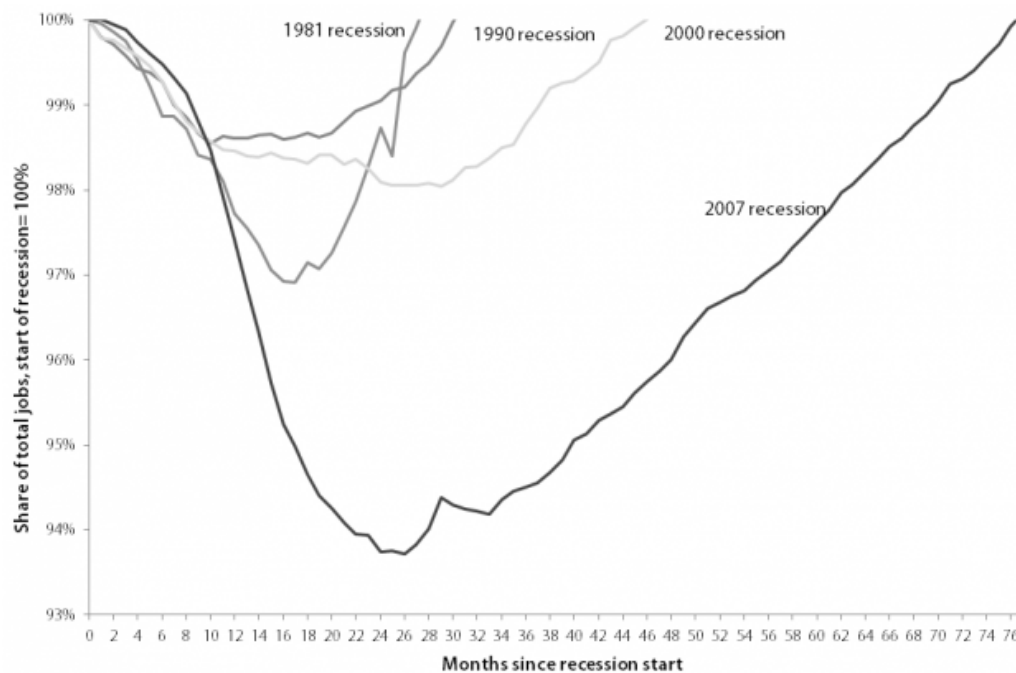
Figures 2.2 and 2.3 highlight the distinctiveness of this downturn. Figure 2.2 demonstrates the depth of the Great Recession in terms of GDP compared to all postwar recessions. As indicated in the figure, the Great Recession was the longest and deepest recession since World War II (National Bureau of Economic Research 2010). In fact, it was longer and deeper than both the minimum and average of all recessions since 1947. While the case is made above that GDP is not the only economic indicator of significance, it is still an important one, and the salience of this downturn is significant when compared to previous recessions. Figure 2.3 demonstrates the impact of the Great Recession on indexed job loss, in comparison to the previous three recessions of the late postwar era. This figure highlights the disproportionate effect of the Great Recession, painting a very bleak picture for workers who were out of work and seeking new positions during the six year period following the onset of the downturn. Despite this, there is a glimmer of positive news. The jobs report released by the Bureau of Labor

Figure 2.2: Real GDP Growth, Comparison of Recessions, 1947-2011



Source: Economic Policy Institute

Figure 2.3: Indexed Job Loss for the Four Most Recent Recessions



Source: Economic Policy Institute

Statistics in May of 2014 indicated that the United States climbed back to the number of jobs that existed prior to the recession for the first time since it started. However, the workforce has grown by 15 million workers, or seven percent, over the course of this recovery, so while the upward trend in job growth is encouraging, many more jobs are needed to achieve levels that are actually comparable to those before the downturn (Schwartz 2014).

Although previous findings link unemployment and greater subjective economic insecurity, this dissertation argues that the Great Recession represents a significant event in the economic history of the United States and warrants closer systematic attention separate from the preceding decades. Although the recession may technically be over according to an academic definition, its aftermath can still be a source of anxiety for American workers, particularly those who have experienced job loss during this period. There is also evidence that changes in GDP growth and other market factors are more important than institutional factors for European workers' perceptions of employment insecurity (Chung and van Oorschot 2011). Since the heightened media attention surrounding the recession and its consequences may exacerbate workers' fears (Hetsroni, Sheaffer, Ben Zion, and Rosenboim 2014), it is important to examine workers' perceptions of their employment precarity before and after this critical point in history. Specifically, a thorough analysis of this downturn's impact on workers' perceptions should focus on the onset of the spatialization SSA's consolidation phase through the period after the downturn.

2.5 Contributions

This dissertation contributes to the literature on subjective economic insecurity in several ways. First, it updates and extends the existing scholarship by examining data on U.S. workers during the entirety of the late postwar period, an era that encompasses the most severe economic downturn since the Great Depression. Second, it brings conceptual clarity to an ambiguous topic by identifying three dimensions of subjective economic insecurity: perceived job precarity, perceived skill precarity, and perceived financial precarity. Third, it uses SSA theory to explain structural and temporal changes in these dimensions. The macro-level SSA theory described in this chapter has a clear linkage with micro-level phenomena such as subjective economic insecurity because it establishes a structural context that workers experience and interact with on a regular basis.

As an acknowledgement of how the shift in employment relations has changed the everyday realities confronted by workers, this dissertation incorporates explanatory factors that have not been adequately considered by the extant literature on workers' attitudes. Namely, the effects of the social and technological changes reflected in the transition from bureaucratic to technocratic control during the exploration phase of the spatialization SSA have not been addressed in a systematic way. By accounting for the role of workers' job autonomy, this dissertation's analysis captures a critical element that is related to the technocratic control posited by Wallace and Brady (2001).

In this dissertation, I use the cumulative file of the General Social Survey (GSS) to examine changes in each of the three dimensions of subjective economic insecurity during the transition from the segmentation SSA to the spatialization SSA. There are

three empirical chapters, and each one addresses a dimension of subjective economic insecurity. In addition to the analysis of the cumulative file, which accounts for the effects of time and structural factors during the late postwar period, I also utilize the GSS's Quality of Working Life module that focuses on the consolidation phase of the spatialization SSA and the aftermath of the Great Recession. The Quality of Working Life module provides the opportunity to incorporate factors of security, control, uncertainty, and conflict into the analysis that are not typically found in previous research on this topic. Finally, I utilize multiple imputation techniques to handle missing data, which has not been employed by previous research on subjective economic insecurity in the United States. This research develops a more comprehensive and overarching understanding of subjective economic insecurity over time and across different types of workers. The following chapter lays out the rationale, data used, and methodological plans for the three empirical chapters of this dissertation in greater detail.

CHAPTER 3: DATA AND METHODS

3.1 Introduction

In this chapter, I describe the data, measures, and methods that I use in each of the empirical chapters to address the research questions stated in the introduction. This dissertation will analyze data from the cumulative file and the Quality of Working Life (QWL) module of the General Social Survey (GSS). There are four major sections in this chapter. The first section deals with the GSS, describing the dataset, outcomes, and key independent variables. The second section discusses the annual data taken from the Bureau of Labor Statistics (BLS) and the Current Population Survey (CPS), explaining the rationale for using these data and identifying key independent variables. The third section provides a brief overview of the procedure used for handling missing data. The fourth section explains the methodological approach used in this dissertation.

3.2 General Social Survey, 1972-2012

3.2.1 Description of Data

The General Social Survey (GSS) is a multistage, stratified sample of the adult population living in the United States that is funded by the National Science Foundation (NSF) and conducted by the National Opinion Research Center (NORC). It was developed in 1972 as a repeating cross-sectional survey that serves as a comprehensive source of information on the attitudes and behaviors of contemporary American society. Since then, it was administered on an annual basis until 1994 (with the exception of 1979, 1981, and 1992), when it started being conducted in even numbered years. The GSS has used full probability sampling of households since 1975, and has been sub-sampling non-

respondents since 2004. The GSS uses a combination of in-person, telephone, and computer-assisted interview techniques, and has conducted a total of 55,087 interviews to date.

The GSS is particularly suited for examining subjective economic insecurity because it is one of the few nationally representative surveys that have been able to consistently measure it during the late postwar period, an era that has witnessed significant change in the employment relationship. Namely, this timeframe represents a critical period of transition between the segmentation and spatialization SSAs. In addition to the outcome measures, the GSS also includes a rich array of theoretically and substantively relevant variables that can be used as predictors. Notably, it has recently developed a panel component that will be of significant interest to future scholars.

However, despite its many advantages, the GSS also has its limitations. Since it is for the most part a periodic cross-sectional survey and not a panel study, it offers no way to gauge how changes in subjective economic insecurity occur over the course of the working career and what factors have contributed to this change. This means that researchers using the GSS are unable to link information from one year to information in another year. This limits their ability to predict changes in subjective economic insecurity over time. Finally, while there are many questions that have been asked for the entire duration of the GSS, there are many that have not. Its central purpose of being a wide-ranging source of data has precluded it from providing any real depth on a given topic for a sustained period of time.

Since not all dependent variables were measured in the early years of the GSS, the sample from the cumulative file includes all years that the GSS was asked from 1977 and

on. This dissertation extends the most recent study of subjective economic insecurity using the cumulative GSS by ten years (cf., Fullerton and Wallace 2007). Since most of the dependent variables hinge upon the respondent's employment status, all samples in the analysis are limited to full-year workers, both part-time and full-time. Self-employed workers are excluded because their employment security is conceptualized differently than the typical worker's. Additionally, this analysis excludes the oversample of blacks performed in 1982 and 1987.

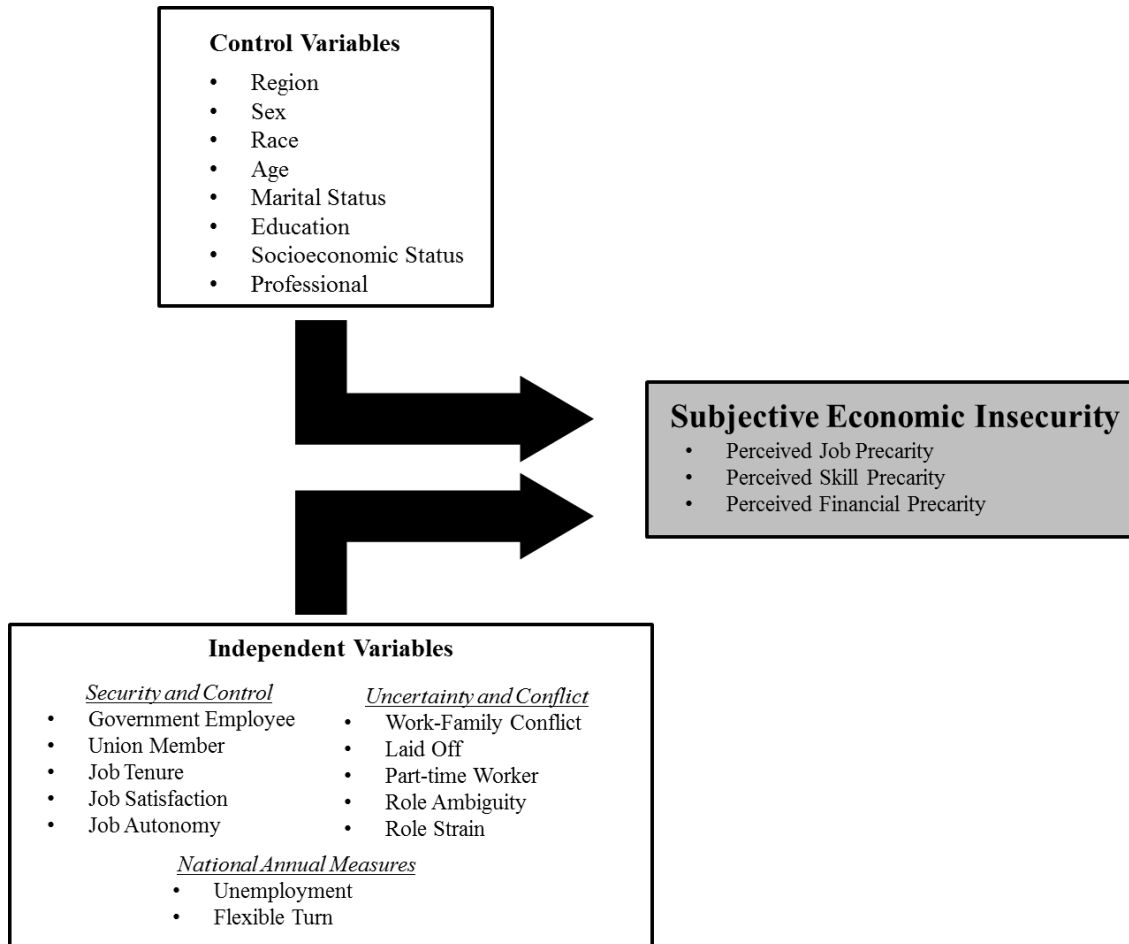
Quality of Working Life Module. As noted in the introduction to this chapter, The Quality of Working Life module is extracted from the cumulative file of the GSS. The QWL module provides comprehensive, cross-sectional data from 2002, 2006, and 2010, and asks respondents about the conditions under which they worked and their experiences in the workplace. In fact, many of the questions are taken from or inspired by the 1977 Quality of Employment Survey. Using this module is particularly advantageous because it provides the opportunity for a closer and more nuanced look at subjective economic insecurity in the spatialization SSA. It is also useful for examining the impact of the Great Recession on subjective economic insecurity because it contains data for time points before and after the recession. Since these data provide a representative cross-section of each year, it also provides the opportunity to see how the labor market as a whole is changing.

3.2.2 Dependent Variables

As described above, this dissertation distinguishes between three dimensions of subjective economic insecurity: perceived job precarity, perceived skill precarity, and

perceived financial precarity. Each empirical chapter addresses one of these dimensions as its outcome measure. Figure 3.1 presents an overview of this dissertation’s analysis.

Figure 3.1: Overview of Analysis



Perceived Job Precarity. Chapter 4 deals with perceived job precarity. There are two variables used to measure this concept, one from the cumulative file of the GSS and one from the QWL module. The longitudinal measure of *perceived job precarity* from the cumulative file is captured by the following question: “Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off?—1=Not at all likely, 2=Not too likely, 3=Fairly likely, or 4=Very likely” (Smith, Marsden, Hout,

and Kim 2013). Following the precedent established by previous research (Fullerton and Freeman 2013; Fullerton and Wallace 2007), the third and fourth categories were combined due to small percentages. This question was not asked in 1972-1976, 1980, 1984, and 1987. The measure of *perceived job precarity* from the QWL module is captured using a simple but effective measurement that asks workers to provide a succinct assessment of their job security: “The job security is good—1=Very true, 2=Somewhat true, 3=Not too true, and 4=Not at all true” (Smith et al. 2013). As with the previous measure, the third and fourth categories were combined due to small percentages.

Perceived Skill Precarity. Chapter 5 examines perceived skill precarity. The *perceived skill precarity* variable is measured by the following question: “About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have?—1=Very easy, 2=Somewhat easy, or 3=Not easy at all” (Smith et al. 2013). Similar to the perceived job precarity measure from the cumulative file, this question was not asked in 1972-1976, 1980, 1984, and 1987. The QWL measure for *perceived skill precarity*, on the other hand, is nearly identical to the one in the cumulative file. It is measured with the following question: “How easy would it be for you to find a job with another employer with approximately the same income and fringe benefits as you have now?—1=Very easy to find similar job, 2=Somewhat easy to find similar job, or 3=Not easy at all to find similar job” (Smith et al. 2013).

Perceived Financial Precarity. The measure for *perceived financial precarity* was asked in all years of the GSS and does not have a QWL counterpart, although it was asked of the respondents in the QWL module. Following the precedent set by Kalleberg

and Marsden (2012), it is captured using an index ($\alpha=0.60$) developed from the standardized scores of three measures, and is presumed to be interval in nature. The first measure asks, “During the last few years, has your financial situation been getting better, worse, or has it stayed the same?” (Smith et al. 2013). The second measure asks, “Compared with American families in general, would you say your family income is far below average, below average, average, above average, or far above average?” (Smith et al. 2013). And finally, the third measure asks, “We are interested in how people are getting along financially these days. So far as you and your family are concerned, would you say that you are pretty well satisfied with your present financial situation, more or less satisfied, or not satisfied at all?” (Smith et al. 2013).

These measures are all coded in the same direction so that higher values reflect precarity rather than security. For the first measure, better=1, stayed the same=2, and worse=3. For the second measure, far above average=1, above average=2, average=3, below average=4, and far below average=5. Finally, for the third measure, pretty well satisfied=1, more or less satisfied=2, and not satisfied at all=3. Unlike the perceived job and skill precarity measures, the questions used to capture perceived financial precarity were asked in 1972-1976. However, those years are excluded from the analysis so that the time frame is consistent across empirical chapters and the results are comparable to the other measures’. Also unlike the other two dependent variables, these questions were asked in 1980, 1984, and 1987.

Measuring Perceived Employment Precarity. As discussed in Chapter 2, the conceptual distinction between perceived job and skill precarity is significant. There has also been some debate as to how these concepts should be measured. Kalleberg (2011)

notes that while often conflated with each other, the perceived job and skill precarity measures discussed above are capturing two separate dimensions of what he calls perceived employment precarity. Schmidt (2000) uses the options from the perceived skill precarity measure to split the perceived job precarity measure into two dichotomous variables, likely to lose job and costly job loss. Schmidt's (2000) approach is problematic because it conflates the concepts that are actually being captured by these measures. While Kalleberg (2011) downplays this distinction and follows Schmidt's (2000) precedent, this dissertation argues that ignoring this difference is not an appropriate approach. Alternatively, Fullerton and Wallace (2007) use a reverse-coded version of the

Table 3.1(a) Correlation Coefficients for Dependent Variables, GSS: 1977-2012

	Perceived job precarity	Perceived skill precarity	Perceived financial precarity
Perceived job precarity	-	-	-
Perceived skill precarity	0.1508	-	-
Perceived financial precarity	0.1888	0.0659	-

Table 3.1(b) Correlation Coefficients for Dependent Variables, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Perceived job precarity	Perceived skill precarity	Perceived financial precarity
Perceived job precarity	-	-	-
Perceived skill precarity	0.0824	-	-
Perceived financial precarity	0.1972	0.065	-

perceived job precarity measure as an ordinal dependent variable and refer to it as perceived job security. Nevertheless, they ignore perceived skill precarity in their otherwise thorough analysis. Although perceived job precarity and perceived skill precarity are conceptually similar, they are distinct dimensions of the overarching concept of subjective economic insecurity and they warrant independent treatment. There is also an empirical basis for this distinction. Tables 3.1(a) and 3.1(b) present the correlation coefficients for the dependent variables in both the cumulative GSS and the QWL module. The correlations between the dependent variables in both samples are very weak, with the highest correlations existing between perceived job precarity and perceived financial precarity, at 0.1888 for the cumulative sample and 0.1972 for the QWL module sample.

3.2.3 Independent Variables from the General Social Survey

This section identifies the variables in the GSS that are used as predictors of subjective economic insecurity. In addition to the control variables, which are common to both the GSS cumulative file and the QWL module, there are many variables that are unique to the QWL module that help further our understanding of subjective economic insecurity in the contemporary period.

Control Variables. Each model in this dissertation's analysis includes a set of dummy variables indicating the region in which the respondent lives (*New England, Mid-Atlantic, South Atlantic, East North Central, West North Central, East South Central, West South Central, Mountain, and Pacific*). *Female* is a dummy variable, coded 1 if the respondent is female and 0 if they are male. Dimensions of subjective economic insecurity have also been found to vary by race (Wilson, Eitle, and Bishin 2006). Race is

captured using several dummy variables (*white*, *black*, and *other race*), with white being the reference category. *Age* is measured as the respondent's age in years. Since Fullerton and Wallace (2007) found that middle-aged workers tend to feel less secure about their jobs, age is included in quadratic form to account for its curvilinear relationship to the dependent variables. *Married* is a dichotomous variable for marital status, coded as 1 if the respondent is married and 0 if they are not. *Years of education* is measured as the number of years the respondent has attended school. *Income (ln)* is measured as the natural log of the respondent's yearly gross income. *Professional* is a dichotomous variable, coded as 1 if the respondent works in a professional occupation and coded as 0 if they do not. This measure is derived from the OCC, OCC80, and OCC10 variables in the GSS.

Security and Control. There are several factors that represent the characteristics of security and control as features of one's job. *Government employee* is a dummy variable, coded as 1 if the respondent is employed by the federal, state, or local government and 0 if they are not. *Union member* is a dummy variable, coded as 1 if the respondent belongs to a union and 0 if the respondent does not. *Job tenure* is measured as the number of years that the respondent has worked in their present job. *Job satisfaction* is measured using the question, "All in all, how satisfied would you say you are with your job—Very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied?" This measure is reverse coded so that higher numbers indicate greater satisfaction. *Job autonomy* is a scale comprised of four variables from the Quality of Working Life module ($\alpha=0.72$). The measures that compose the autonomy scale capture whether the respondent has a lot of freedom to decide how to do their job, if they have a lot of say in their work, how often

the respondent takes part in decisions in their work environment, and how often they are able to set the way things are done.

Uncertainty and Conflict. *Work-family conflict* is measured using an index ($\alpha=0.61$) comprised of two measures of work-family conflict: how often the respondent's family life interferes with their job and how often the respondent's job interferes with their family life. *Laid off* is coded as 1 if the respondent was laid off from their main job at any time within the last year and 0 if not. *Part-time* is a dichotomous variable, coded 1 if the respondent works less than 35 hours per week and 0 if the respondent works 35 hours or more per week.

Role ambiguity is measured using an index comprised of the standardized scores of four measures that capture the extent to which the worker experiences a lack of resources and direction that are necessary for getting the job done ($\alpha=0.66$). The first three measures use a scale of trueness, where: 1=Very true, 2=Somewhat true, 3=Not too true, and 4=Not at all true. The first measure asks, "I have enough information to get the job done" (Smith et al. 2013). The second measure asks, "I receive enough help and equipment to get the job done" (Smith et al. 2013). The third measure asks, "I have the training opportunities I need to perform my job safely and competently" (Smith et al. 2013). The fourth measure asks, "On my job, I know exactly what is expected of me—1=Strongly agree, 2=Agree, 3=Disagree, and 4=Strongly disagree" (Smith et al. 2013). Finally, *role strain* is captured using a measure that asks respondents to assess the degree to which they have conflicting demands imposed on them in the workplace: "I am free from the conflicting demands that other people make of me—1=Very true, 2=Somewhat true, 3=Not too true, and 4=Not at all true" (Smith et al. 2013).

Survey Weights and Sampling Design. While many of the questions on subjective economic insecurity have remained unchanged for the duration of the GSS, changes to the sampling procedures may affect the trends that emerge from the data. Additionally, not accounting for these design elements can lead to inaccurate point estimates. In order to account for changes in the sampling design over time and ensure the validity of the results, this dissertation utilizes the SURVEY prefix command in Stata, which allows the user to specify the sampling weights and clustering variables that reflect the survey design of the dataset. VPSU and VSTRAT are variables that have been included with the GSS; the VPSU variable indicates the primary sampling unit for each case, and the VSTRAT variable identifies the sampling strata. In instances where the strata have only a single sampling unit, the strata are centered at the grand mean instead of the strata mean. Finally, I use WTSSALL as the sampling weight for the analyses in all empirical chapters. This weight accounts for the subsampling of initial non-respondents and the selection of one adult per household. All of these variables were created by NORC.

3.3 National and Regional Annual Measures

In addition to using GSS data, this dissertation also employs several annual measures taken at the national and regional levels. One of the unfortunate limitations of the public-use cumulative file of the GSS is that geocodes for the state level are not available, precluding any sort of comprehensive multilevel analysis. This study deals with this limitation by following the precedent set by Fullerton and Wallace (2007), who use national annual measures in conjunction with regional control variables in their analysis of perceived job security.

3.3.1 Independent Variables

There are two annual measures used to great effect in the longitudinal stages of each empirical chapter's analysis, unemployment and the flexible turn index.

Unemployment is measured as the average national unemployment rate, averaged over the course of the year. The *flexible turn* index ($\alpha=0.82$) is developed from Fullerton and Wallace's (2007) study, incorporating national annual measures of union density, deindustrialization (percent change in manufacturing over a ten year period), percent temporary workers, average weekly earnings in constant dollars, and the Gini coefficient. This data is taken from the Current Population Survey and the Bureau of Labor Statistics.

3.4 Missing Data

Like many other surveys of its kind, the GSS contains a substantial amount of missing data. Although the cumulative file of the GSS contains 55,087 cases, there are only 668 complete cases in the sample used for this dissertation. This necessitates the use of imputation techniques so that the sample sizes for each analysis can be maximized. All missing data for this dissertation were handled using the multiple imputation (*mi*) protocol in Stata 12. Specifically, the missing values were imputed using the chained equations feature of the MI IMPUTE command. Multiple imputation using chained equations operates by first creating multiple copies of the original dataset and then running a series of regressions to fill in the missing values contained in each dataset. The type of regressions that are run depends upon the nature of each of the predictors being included in the imputation model. Analysis of multiply imputed data involves estimating models on each of the datasets and then combining the results to obtain single point estimates of the coefficients. The MI protocol provides a unified framework that

researchers can use to impute data and then seamlessly transition into model estimation, reducing the likelihood of coding errors.

Using multiple imputation offers distinct advantages over alternative methods of handling missing data such as list-wise deletion or mean replacement. By using a series of chained equations to create multiple datasets, MI IMPUTE uses all of the available information to incorporate random variation into the process. Since the newly imputed values vary across each dataset, the subsequent analysis does not rely upon any single set of imputations. Most importantly, the point estimates that are produced by multiple imputation have been shown to be approximately unbiased when compared to other methods (Allison 2000; Rubin 1987; Rubin 1996b). However, although this approach is useful for producing unbiased estimates, it does have one significant drawback. Since the reported coefficients are derived not from a singular point estimate but from several estimates, log-likelihood information is not generated. This precludes any attempt to calculate model fit statistics such as R-squared and pseudo R-squareds.

In order to provide an unadulterated snapshot of the analytical samples, descriptive statistics were calculated using unimputed data. For the multivariate analyses, 20 imputations were used for each dataset (Royston, Carlin, and White 2009). Additionally, factors that were used to create scales were imputed at the item-level rather than imputing the scales themselves. Although the extant research has found no bias in scale-level imputations, these types of imputations are found to be less efficient than those performed at the item-level, resulting in a loss of statistical power (Gottschall, West, and Enders 2012).

3.5 Overview of Methods

Since the outcome measures used in Chapters 4 and 5 of this study are ordinal, the multivariate analyses of these chapters rely primarily upon generalized ordinal logistic regression. Generalized ordinal logistic regression models offer significant advantages over other methods such as ordinary least squares (OLS) regression, the proportional odds model, and multinomial logit models. In regards to OLS regression, many of its assumptions (such as equal spacing between categories) do not hold for ordinal outcomes, making it an inappropriate tool for examining the variables described above (Long 1997; Winship and Mare 1984). The proportional odds model, on the other hand, assumes an underlying latent variable and estimates logistic regressions at specific cut points in its distribution. The problem with this approach is that the “parallel regression assumption,” or the assumption that the coefficients are the same at each cut point, is often violated (Long 1997). Although multinomial logit models provide a valid and thorough framework for analyzing ordinal outcomes, these models lack parsimony and are not readily interpretable. The generalized ordinal logit model offers an appropriate and easily understood framework for understanding ordinal outcomes that does not rely on often violated assumptions (Liu and Koirala 2012; Williams 2006). It does this by relaxing the parallel lines constraint “...by allowing the effect of each explanatory variable to vary across different cut points of the ordinal outcome variable without data restructuring” (Liu and Koirala 2012:243). Chapter 6 uses general linear regression to examine perceived financial precarity since it is measured using an index that is presumed to be interval in nature.

CHAPTER 4: PERCEIVED JOB PRECARITY DURING THE LATE POSTWAR ERA AND THE SPATIALIZATION SSA

4.1 Introduction

As discussed in Chapter 2, perceived job precarity is a major dimension of subjective economic insecurity. Discovering how perceived job precarity has changed over time is important because these changes are often related to fluctuations in the economy (Fullerton and Wallace 2007; Schmidt 2000), inform workers' attitudes and work values (Johnson, Sage, and Mortimer 2012; Kalleberg and Marsden 2013), and condition how they will behave in the labor market (Ashford et al. 1989; Elman and O'Rand 2002). However, the economy has experienced a great deal of turbulence in recent decades, particularly in the wake of the Great Recession, and our understanding of these relationships is far from complete. Relatively little longitudinal research has been done on this topic for two major reasons. First, there is little agreement concerning the conceptualization and subsequent operationalization of dimensions of subjective economic insecurity such as perceived job precarity. Second, and relatedly, there is a limited amount of data available on workers' perceptions of employment precarity over time. Although the cross-sectional research that has been done on this topic contributes a great deal to our understanding of insecure work, it lacks a coherence that can only be obtained by examining comprehensive data sets.

4.2 Research Questions and Hypotheses

The majority of previous research on perceived job precarity has concentrated on longitudinal trends (Fullerton and Wallace 2007; Schmidt 1999; Schmidt 2000), the

consequences it has for other outcomes such as health (Burgard et al. 2009; Fullerton and Freeman 2013) and participation in job training (Elman and O'Rand 2002), or the European context (Dixon et al. 2013; Erlinghagen 2008; Laszlo, Pikhart, Kopp, Bobak, Pajak, Malyutina, Salavecz, and Marmot 2010). However, few studies have taken a closer look at perceived job precarity as an outcome exclusively in the spatialization SSA, and even fewer have used a wide range of predictors that encompass the various aspects of security, control, uncertainty, and conflict that characterize the modern workplace in the new economy.

This chapter seeks to understand how perceived job precarity has changed during the late postwar era while at the same time identifying the factors that have contributed to that change, extending the most recent scholarship on this topic by several years and addressing the considerable effects the Great Recession has had on workers' understanding of the employment relationship. However, at the core of this chapter is an analysis of a data-rich module of the GSS that covers the spatialization SSA, has been largely neglected by extant research, and contains the measures of security, control, uncertainty, and conflict that are required to understand perceived job precarity in a contemporary context.

4.2.1 Structural and Time Factors

This section lays out the hypotheses concerning the relationship between structural/time factors and perceived job precarity. One of the most salient structural variables used in the extant literature is the unemployment rate, which is intended to control for the effect of the business cycle on perceived employment security (Erlinghagen 2008; Fullerton and Wallace 2007; Schmidt 1999; Schmidt 2000). These

studies have consistently shown higher unemployment rates to have a positive effect on perceived job precarity, net of other factors at the individual level. Additionally, Fullerton and Wallace (2007) found that this effect still holds with the addition of other structural factors. These collective findings inform the first hypothesis of this chapter:

H_{4.1}: Higher levels of unemployment will be positively associated with perceived job precarity.

In addition to unemployment, other important structural factors have also been taken into account. In their longitudinal examination of perceived job security, Fullerton and Wallace (2007) highlight what they call the “flexible turn” in employment relations by incorporating several annual measures that are indicative of the shift towards greater economic insecurity. They use these variables to create an index using percent temporary workers, average real weekly earnings, union density, deindustrialization, and income inequality. These variables reflect the three dimensions of flexibility denoted by Rosenberg (1991): employment flexibility, wage flexibility, and functional flexibility. Many of these variables are indicative of structural economic processes that have contributed to the transformation of the employment relationship, most notably the transfer of risk from employers to workers (Kalleberg 2009; Kalleberg 2011; Smith 2001) that has characterized the emerging spatialization SSA (Wallace and Brady 2001). Fullerton and Wallace (2007) found that the flexible turn in employment relations has contributed to a decreasing sense of security among U.S. workers. A study of 27 European Union countries by Fullerton, Robertson, and Dixon (2011) also indicates that these economic and labor market structure variables are significant predictors of perceived job insecurity, as many of the effects are consistent with the findings from Fullerton and Wallace (2007). Additionally, in a study linking GSS respondents with

establishment-level data from the National Organizations Survey (NOS), Pedulla (2013) found that when an establishment uses more contingent workers, perceived job security declines. The agreement between these comparative, national, and establishment-level studies informs the second hypothesis:

H_{4.2}: Increases in the flexible turn index will be positively associated with perceived job precarity.

Although it has been deemed officially over since June 2009, at the time of this writing the consequences of the Great Recession are still rippling through U.S. society in the form of buoyed unemployment and uncertainty in the financial markets. In his study of media coverage and perceived job insecurity in Germany, Garz (2012) found that a greater quantity of news reporting leads to increases in perceived job security. Given the amount of attention that the Great Recession has received in the mainstream media, it stands to reason that respondents asked about the precarity of their employment situation after the recession are likely to have been exposed to this attention and feel much more insecure than they would under better macroeconomic conditions. Therefore:

H_{4.3}: Respondents interviewed in the year 2010 will be more likely to experience greater levels of perceived job precarity.⁴

4.2.2 Security and Control

There are several employment situations that are generally viewed as having a greater degree of security and control than others. This section outlines the hypotheses for the factors that reflect these situations. Being employed in federal, state, or local government is generally perceived as trading in more lucrative pay for a decreased likelihood of losing one's job. In their examination of GSS data from 1996 and 1998,

⁴ The respondents from 2010 are being compared to other respondents that were interviewed in the spatialization SSA.

Wilson and colleagues (Wilson et al. 2006; Wilson and Mossakowski 2009) found a negative effect of public sector employment on perceived job insecurity.

H_{4.4}: Being a government employee will be negatively associated with perceived job precarity.

However, they also found that being a member of a union had no significant impact. Despite this insignificant effect, this dissertation asserts that workers who are members of unions are more likely to feel protected by the contract between their employer and the union, thus having a greater sense of security than those who do not belong to such an organization. Therefore, I hypothesize that:

H_{4.5}: Being a union member will be negatively associated with perceived job precarity.

Job tenure is a staple in the work and occupations literature and is a key concept that can provide insight as to how workers' feelings of insecurity can change over the duration of their position. The extant literature has consistently shown that longer job tenures translate into workers feeling more secure about their jobs (Pedulla 2013; Wilson et al. 2006; Wilson and Mossakowski 2009). This is likely a result of the job-specific skills that workers have learned over the course of their tenure which allow them to complete their work efficiently.

H_{4.6}: Longer job tenure will be negatively associated with perceived job precarity.

In addition to job tenure, job satisfaction has also been shown to be important for perceived job precarity. Ashford et al. (1989), in their study of the antecedents and outcomes of perceived job insecurity utilizing data from two northeastern industrial organizations, found that increased feelings of job security were associated with greater levels of job satisfaction. Although the causal order of these findings is reversed, the

expectation of this dissertation is that this relationship will hold when job satisfaction is the independent variable.

H_{4.7}: Higher levels of job satisfaction will be negatively associated with perceived job precarity.

The relationship between job autonomy and perceived job precarity has been examined by previous research with mixed results. For example, Ashford et al. (1989) found that workers with an internal locus of control are likely to have decreased feelings of job insecurity. Additionally, Prawitz, Kalkowski, and Cohart (2013) found that having an internal locus of control was negatively associated with financial distress. While this term has a long history in the social psychology literature (Lefcourt 1976; Rotter 1966; Shim, Xiao, Barber, and Lyons 2009; Sumarwan and Hira 1993), having an internal locus of control can serve as a proxy for having autonomy over one's work. Conversely, Wilson and his co-authors (Wilson et al. 2006; Wilson and Mossakowski 2009) have found that job autonomy has no significant effect. However, these studies utilize data from before or at the very start of the spatialization SSA. As Wallace and Brady (2001) note, the spatialization SSA is characterized by technocratic control, which utilizes information technology to manage workers (Burris 1993; Burris 1998). This means that those workers who have any degree of job autonomy will likely have a great deal of technical expertise and/or a good working relationship with technical experts (Burris 1993). Therefore, compared to other workers, they tend to be relatively advantaged in many respects.

H_{4.8}: Higher levels of job autonomy will be negatively associated with perceived job precarity.

4.2.3 Uncertainty and Conflict

This section identifies the hypotheses concerning the relationship between perceived job precarity and a variety of predictors that reflect uncertainty and conflict in the work place, the labor market, and in workers' personal lives. Being recently laid off is very likely to predispose someone to a continuing anxiety of being thrust unexpectedly into the same predicament, especially if they believe (rightly or wrongly) that they were laid off for reasons specific to them. Over the course of the Great Recession, many workers who felt their positions secure were laid off. One of the main arguments made in Chapter 2 is that this pivotal economic crisis has aroused a dormant fear in the U.S. workforce that has been developing within a context of deindustrialization and spatialization. Given this backdrop of insecurity, it is expected that:

H_{4.9}: Having been laid off in the past year will be positively associated with perceived job precarity.

Part-time employment is another aspect of the modern employment relationship that can be tinged with uncertainty. While Fullerton and Freeman (2013) found that being a part-time worker had no significant effect on perceived job insecurity, part-time employment has been associated with poorer working conditions such as irregular hours and a lack of benefits (Kalleberg et al. 2000), leading to the expectation that those who are working under such conditions will likely be more pessimistic about the security of their position.

H_{4.10}: Being a part-time worker will be positively associated with perceived job precarity.

Turning to classical sociological factors, role conflict, role ambiguity, and role strain are likely to instill a certain degree of psychological distress in workers that can influence their attitudes concerning their job security. One of the seminal examples of

role conflict is the struggle of workers to balance their responsibilities on the job with their obligations in the home. The work of Lewis, Smithson, and Brannen (1999) suggests that it has become increasingly difficult for younger workers to envision their future work-life priorities and plan accordingly. Using European Social Survey (ESS) data, Scherer (2009) found that workers in insecure jobs have higher levels of work-family conflict. Despite the insignificant effect of a several item index of role conflict in Ashford et al.'s (1989) study, it is expected that a positive effect will be found using data from the United States.

H_{4.11}: Higher levels of work-family conflict will be positively associated with perceived job precarity.

Role ambiguity, or the extent to which workers are not provided with clear expectations or the resources required to perform their tasks, is related to but conceptually distinct from role conflict. Given that Ashford et al. (1989) found a positive relationship between role ambiguity and perceived job insecurity:

H_{4.12}: Higher levels of role ambiguity will be positively associated with perceived job precarity.

The measure for role strain, conceptualized in this dissertation as the degree to which conflicting demands are placed on the worker, is theoretically similar and is oriented in the same direction as role ambiguity, resulting in the same hypothesized effect.

H_{4.13}: Higher levels of role strain will be positively associated with perceived job precarity.

Insofar as they indicate a greater sense of economic unease and anxiety in the workforce that has been precipitated by the shift of risk to employees (Cappelli et al. 1997; Kalleberg 2009; Smith 2001) and a growing dualism between highly skilled workers and even those with some college education (Vallas and Prenner 2012), perceived

skill and financial precarity should be considered as factors that potentially impact workers' feelings about their job security.

H_{4.14}: Higher levels of perceived skill precarity will be positively associated with perceived job precarity.

While studies of perceived skill precarity (usually referred to as “labor market insecurity”) are still emerging, there has been some work on the effect of attitudes concerning personal finances on job insecurity. For example, in his study of perceived job insecurity in Europe, Erlinghagen (2008) found that workers who felt that their families were in a bad financial situation experienced greater levels of job insecurity. Additionally, Anderson and Pontusson (2007) have found that cognitive and affective job insecurity are associated with each other.⁵ Since affective job insecurity reflects a more general level of concern about employment and economic insecurity:

H_{4.15}: Higher levels of perceived financial precarity will be positively associated with perceived job precarity.

4.3 Sample Characteristics

The samples used in this analysis are drawn from the General Social Survey (GSS) cumulative file and the Quality of Working Life (QWL) module (Smith et al. 2013) and are restricted to respondents who indicated that they were currently employed at the time of the interview. They are also limited to cases with valid answers to the perceived job precarity questions. All figures and descriptive statistics are drawn from the original data file using listwise deletion for missing data, whereas the multivariate

⁵ The distinction between cognitive and affective job insecurity is described in Chapter 2.

component of the analysis uses multiply imputed data (the protocol for multiple imputation is described in greater detail in Chapter 3).⁶

The first sample in this chapter's analysis is taken from the cumulative file of the GSS, which covers 1972-2012. The total sample size for analyses using the imputed cumulative file is 15,754. Table 4.1(a) presents the frequency distribution for the perceived job precarity measure asked of respondents from 1977 on, and is adjusted by survey sampling design. As expected, a great majority of the surveyed workers feel secure in their jobs (61.3%), with a much smaller percentage (11.4%) feeling very or fairly likely to lose their jobs in the next year.

Table 4.1(a) Frequency Distribution for Perceived Job Precarity, GSS: 1977-2012

<i>"Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off?"</i>	Percent	Total
1=Not at all likely	61.3	9,663
2=Not too likely	27.3	4,299
3=Fairly or very likely	11.4	1,792
Total	100	15,754

Additionally, Table 4.1(b) shows the means and standard deviations of the dependent and independent variables from the cumulative sample, adjusted by survey sampling design. The sample is almost 50% female, and approximately 80% white, 13% black, and 6% identifying as other race. The mean age is about 39, the average years of education is 13.44, and 17.6% of them work in professional occupations. Finally, the average unemployment rate for this period is 6.4.

⁶ Due to the nature of multiply imputed data and its focus on producing reliable point estimates, any descriptive statistics drawn from it would not be truly representative of the *sample*.

Table 4.1(b) Descriptive Statistics for Dependent and Independent Variables, GSS: 1977-2012 and Bureau of Labor Statistics

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived job precarity	1.492	0.006
<i>Region</i>		
New England	0.053	0.004
Mid-Atlantic	0.149	0.005
South Atlantic	0.190	0.007
East North Central	0.177	0.006
West North Central	0.074	0.005
East South Central	0.063	0.005
West South Central	0.094	0.006
Mountain	0.060	0.004
Pacific	0.139	0.005
<i>Control Variables</i>		
Time	17.129	0.099
Female	0.494	0.004
White	0.804	0.004
Black	0.133	0.005
Other race	0.062	0.003
Age	39.050	0.123
Age squared	1684.804	10.164
Married	0.594	0.005
Years of education	13.439	0.030
Income (\ln)	8.562	0.028
Professional	0.176	0.004
<i>Annual Measures</i>		
Unemployment	6.401	0.018
Flexible turn index ($\alpha=0.82$)	0.081	0.007
<i>Subjective Economic Insecurity</i>		
Perceived skill precarity	2.161	0.007
Perceived financial precarity ($\alpha=0.60$)	-0.076	0.006

Note : Adjusted by survey sampling design.

The second sample in this chapter's analysis uses the Quality of Working Life module from the GSS, which was asked of respondents in 2002, 2006, and 2010. The total sample size for analyses using this sample is 3,893. Table 4.2(a) presents the frequency distribution for the perceived precarity measure from the QWL module, and is

**Table 4.2(a) Frequency Distribution for Perceived Job Precarity
GSS: Quality of Working Life Module, 2002, 2006, 2010**

<i>"The job security is good."</i>	Percent	Total
1=Very true	51.68	2,012
2=Somewhat true	33.26	1,295
3=Not too true or not at all true	15.05	586
Total	100	3,893

Table 4.2(b) Descriptive Statistics for Dependent and Independent Variables, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived job precarity	1.638	0.019
<i>Control Variables</i>		
2002	0.233	0.011
2006	0.461	0.015
2010	0.306	0.013
<i>Security and Control</i>		
Government employee	0.205	0.010
Union member	0.146	0.009
Job tenure	6.928	0.195
Job satisfaction	3.346	0.021
Job autonomy ($\alpha=0.72$)	-0.006	0.020
<i>Uncertainty and Conflict</i>		
Work-family conflict ($\alpha=0.61$)	0.005	0.024
Laid off	0.062	0.006
Part-time worker	0.192	0.010
Role ambiguity ($\alpha=0.66$)	0.027	0.018
Role strain	2.161	0.022
Perceived skill precarity	2.168	0.021
Perceived financial precarity ($\alpha=0.60$)	-0.034	0.018

Note : Adjusted by survey sampling design. The statistics for the regional and control variables are consistent with those from the cumulative file and are excluded for the sake of parsimony.

adjusted by survey sampling design. The patterns in this distribution are consistent with those found in the cumulative file, with 15.05% of workers saying that it was not too true or not at all true that their job security was good. Finally, Table 4.2(b) shows the means and standard errors of the module-specific dependent and independent variables from the QWL module sample, adjusted by survey sampling design. Regarding occupational indicators that represent a degree of security, about 20.5% of the sample's respondents are government employees and 14.6% are union members. For measures that are indicative of uncertainty, almost 19% of the respondents are part-time workers and just over 6% of them had been laid off within the last year.

4.4 Analytic Approach

The analytic strategy for this chapter is three-pronged. First, I conduct a descriptive analysis using the sample from the cumulative data file, presenting a tabulation of this chapter's outcome by race as well as figures that highlight the trend of increasing insecurity over the course of the late postwar era. The multivariate components of this chapter's analysis compose the second and third phases. In the second phase, models are constructed using the cumulative file of the GSS, examining longitudinal changes in this critical dimension of subjective economic insecurity. The third phase of the analysis is the primary focus of this chapter, taking advantage of the wide variety of independent variables that are available in the GSS's QWL module and focusing on the spatialization SSA, the significance of which is discussed in Chapter 2. The multivariate analysis of perceived job precarity is comprised of a series of generalized ordinal logistic regressions.⁷

⁷ Specific information on the variables used in this chapter and the merits of the generalized ordinal logit method are discussed in greater detail in Chapter 3.

Since the perceived job precarity measure was not collected in the first four years of the GSS, the second phase only includes data from 1977 to 2012. While this part of the analysis mirrors the one by Fullerton and Wallace (2007) in many respects, it contains an additional 10 years of data and introduces the two other dimensions of subjective economic insecurity, perceived skill and financial precarity, into the explanatory framework. It also seeks to understand how structural factors such as declining union membership, deindustrialization, and the increasing use of contingent workers have set the stage as precursors to the spatialization SSA. Model 1 tests the effects of the control variables: region, sex, race, age, marital status, education, and professional occupation. Model 2 tests the effect of the annual unemployment rate on perceived job precarity, net of the control variables. Model 3 incorporates the flexible turn index ($\alpha=0.82$), accounting for the control variables and unemployment. As noted in Chapter 3, the flexible turn index is based on the measure developed by Fullerton and Wallace (2007) and is comprised of national annual measures such as union density, deindustrialization, percent temporary workers, the Gini coefficient, and average weekly earnings. Model 4 drops the flexible turn index and examines perceived skill and financial precarity net of the control variables and unemployment. Unemployment is retained through all except the baseline control model because it has been shown to be a vital predictor of perceived job precarity (Fullerton and Wallace 2007; Schmidt 2000). All models include regional dummy variables, but they are not shown for the sake of parsimony (South Atlantic is the reference category). The standard errors of Models 2-4, which contain annual measures, are clustered by year.

Turning to the third phase, the baseline model is constructed using the control variables mentioned above, with the exception of the time variable, which is substituted by dummy variables for year=2006 and year=2010. Model 2 incorporates several QWL module variables that indicate security and control: government employee, union member, job tenure, job satisfaction, and job autonomy ($\alpha=0.72$). Model 3 tests the effect of the work-family conflict index ($\alpha=0.61$), a measure of uncertainty and conflict, on perceived job precarity, net of the control variables and measures of security and control. Model 4 incorporates the remaining uncertainty and conflict factors: laid off, part-time worker, role ambiguity ($\alpha=0.66$), role strain, perceived skill precarity, and perceived financial precarity ($\alpha=0.60$). Since there are only three survey years included in the third phase of the analysis, annual measures such as unemployment and the flexible turn index are excluded. Similar to the longitudinal phase of the analysis, all models include regional dummy variables, but the coefficients are not presented.

All of the models in this chapter are weighted using the WTSSALL sampling weight, which adjusts for selection of one adult per household and the subsampling of initial nonrespondents after 2004. Additionally, this analysis uses survey design variables provided by NORC with the SURVEY prefix command in Stata to account for changes in the sampling design over time. As described in Chapter 3, missing cases were handled using the standard multiple imputation procedure for all of the models ($m=20$).

4.5 Findings

4.5.1 Descriptive Results

Table 4.3 presents the frequency distribution of perceived job precarity by race from the GSS cumulative file, with statistically significant differences being found among respondents identifying as white, black, and other race ($\chi^2=182.06$, $p<0.001$). Whereas 9.45% of white respondents felt that they were very or fairly likely to lose their jobs in the next year, nearly twice as many black respondents had high levels of perceived job precarity, with 16.61% of those identifying as other race feeling extremely insecure. These findings indicate that there are racial disparities in perceived job precarity that need to be accounted for in a multivariate analysis.

Table 4.3 Perceived Job Precarity by Race, by Row Percentage GSS: 1977-2012

Race	Perceived Job Precarity		
	Not at all likely	Not too likely	Very or fairly likely
White	63.38	27.17	9.45
Black	54.98	26.69	18.33
Other race	56.97	26.42	16.61

Note: Adjusted by survey sampling design. $\chi^2 = 182.06$, $p < 0.001$

Figure 4.1 presents trends in the predicted probabilities of high perceived job precarity (i.e., “Very likely” to lose one’s job) and the national unemployment rate over time. Since a recession is indicated by negative GDP growth over two or more consecutive quarters, it can be difficult to measure on an annual basis. Unemployment, on the other hand, is easily captured by annual measures, and higher unemployment rates have been a direct consequence of previous recessions (e.g., the four recessions during the period of this analysis are 1981, 1990, 2000, and 2007). This figure highlights how the probability of feeling very likely to lose one’s job fluctuates with the national

unemployment rate during the late postwar period. This correspondence indicates how closely related perceptions of economic insecurity can be tied to objective measures of stability, and provides a compelling argument for including these factors in the multivariate analysis of perceived job precarity.

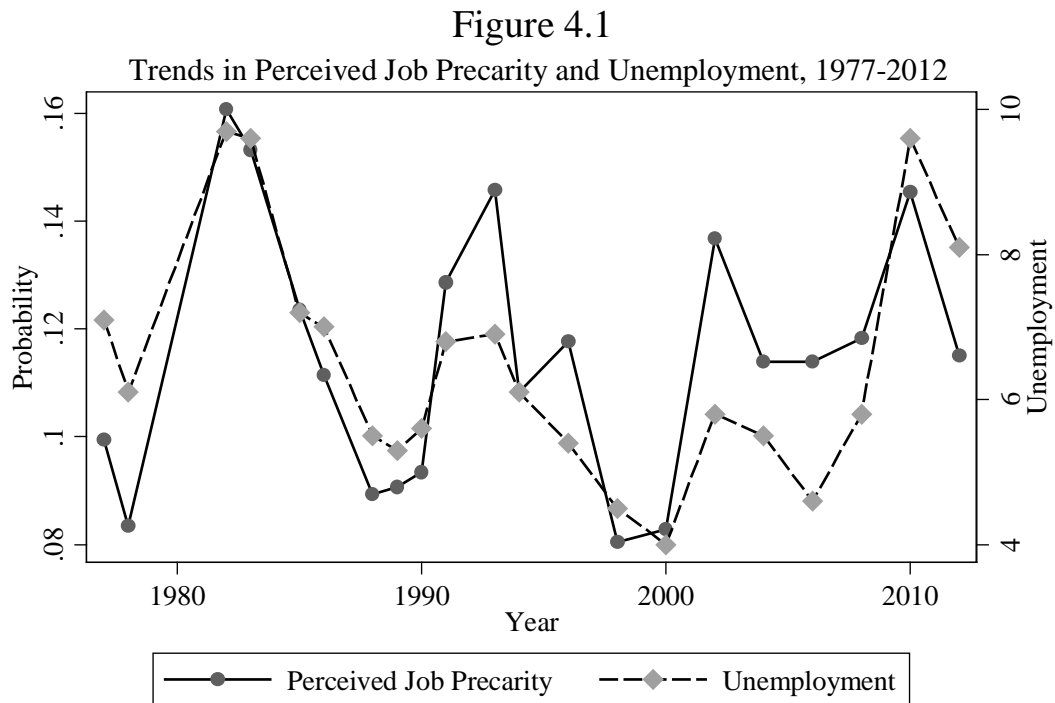
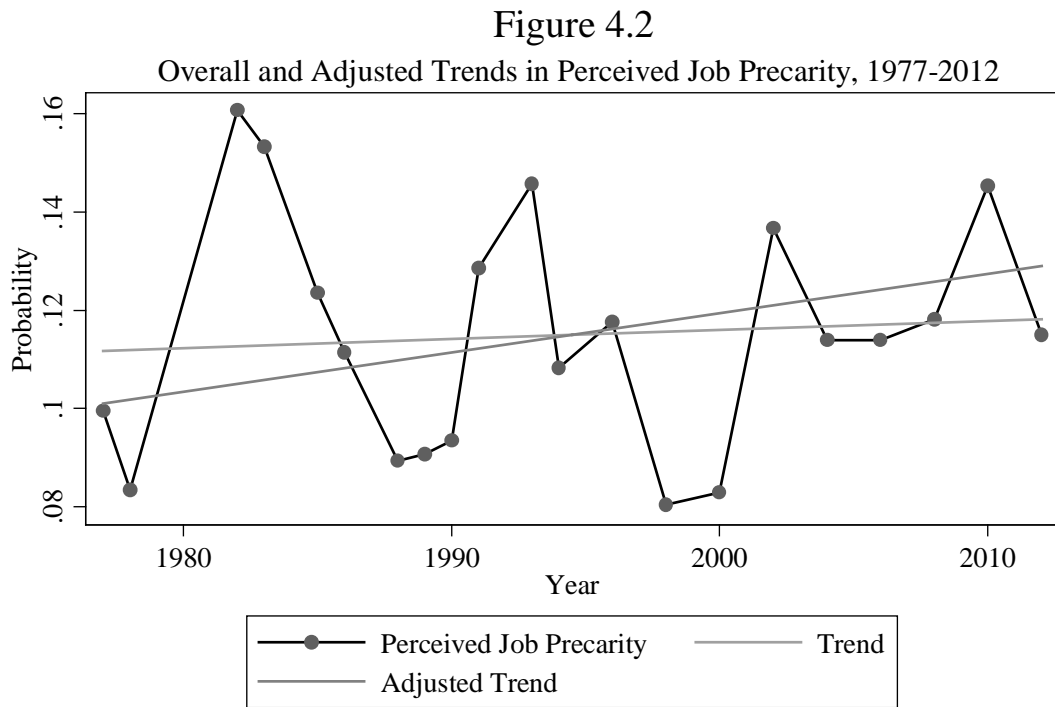


Figure 4.2 presents the overall and adjusted trends in high levels of perceived job precarity during the late postwar era. As evidenced by this figure, the predicted probabilities of high perceived job precarity trend slightly positive when a linear line is fitted to the data. However, when the outcome is adjusted by accounting for the national unemployment rate, the upward trend in perceived job precarity becomes distinctly more pronounced. Thus, this figure provides an accurate portrait of perceived job precarity patterns during this period that is belied by the raw data.



4.5.2 Multivariate Results for Cumulative File

Table 4.4 presents the generalized ordinal logit analyses of perceived job precarity from 1977 to 2012. Model 1 shows the coefficients for the baseline control model. Time has a positive effect, meaning that over the course of the late postwar era, perceived job precarity has increased. This and later evidence supports the data shown in the descriptive analysis. While being female is not a significant predictor, being married, having higher levels of education and income, and being in a professional occupation decrease the odds of perceiving greater levels of job precarity. However, being black versus white increases the odds of feeling very insecure about one's job by a factor of 1.405 ($=e^{0.340}$; $p<0.001$), and identifying as other race versus white increases the odds by a factor of 1.247 ($=e^{0.221}$; $p<0.001$). Age, on the other hand, is shown to have a curvilinear relationship to perceived job precarity, as workers feel increasingly insecure until they reach mid-career, after

Table 4.4 Generalized Ordinal Logit Coefficients for Perceived Job Precarity, GSS: 1977-2012

	Model 1		Model 2		Model 3		Model 4	
	β	exp(β) S.E.	β	exp(β) S.E.	β	exp(β) S.E.	β	exp(β) S.E.
<i>Control Variables</i>								
Time	0.005	1.005 (0.002) *	0.009	1.009 (0.003) **	-0.008	0.992 (0.004) *	-0.008	0.992 (0.004)
Female	0.000	1.000 (0.035)	0.000	1.000 (0.040)	-0.004	0.996 (0.040)	-0.010	0.990 (0.040)
Black	0.340	1.405 (0.054) ***	0.327	1.386 (0.054) ***	0.324	1.383 (0.053) ***	0.271	1.312 (0.055) ***
Other race	0.221	1.247 (0.083) **	0.242	1.273 (0.074) **	0.242	1.274 (0.074) **	0.223	1.250 (0.080) **
Age	0.030	1.030 (0.009) **	0.034	1.034 (0.010) ***	0.033	1.033 (0.010) ***	0.016	1.016 (0.009)
Age squared	-0.410	0.664 (0.107) ***	-0.461	0.631 (0.107) ***	-0.448	0.639 (0.107) ***	-0.307	0.736 (0.099) **
Married	-0.092	0.912 (0.038) *	-0.099	0.906 (0.042) *	-0.098	0.907 (0.043) *	-0.026	0.974 (0.046)
Years of education	-0.058	0.943 (0.008) ***	-0.057	0.945 (0.009) ***	-0.059	0.943 (0.008) ***	-0.038	0.962 (0.009) ***
Income (ln)	-0.030	0.970 (0.006) ***	-0.030	0.970 (0.005) ***	-0.030	0.970 (0.005) ***	-0.026	0.974 (0.005) ***
Professional	-0.144	0.866 (0.052) **	-0.155	0.856 (0.053) **	-0.144	0.866 (0.055) **	-0.100	0.905 (0.058)
<i>Annual Measures</i>								
Unemployment			0.091	1.096 (0.016) ***	0.106	1.112 (0.009) ***	0.069	1.071 (0.008) ***
Flexible turn index					0.296	1.344 (0.059) ***	0.256	1.292 (0.059) ***
<i>Subjective Economic Insecurity</i>								
Perceived skill precarity							0.386	1.471 (0.026) ***
Perceived financial precarity							0.403	1.497 (0.027) ***
τ_1	-0.051		0.683		0.461		0.967	
τ_2	1.574		2.314		2.095		2.650	
N	15,754		15,754		15,754		15,754	
F-value	15.27		152.86		919.70		8,499.18	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. All coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

which they begin to worry less about their job security. Previous research has produced mixed findings regarding the effects of age on perceived job precarity. For example, Fullerton and Wallace (2007) found the opposite effect with GSS data from 1977-2002. However, the nascent period of spatialization and the Great Recession have changed the employment relationship in a fundamental way. For instance, in recent years, younger workers have experienced the highest unemployment rates of any age cohort (U.S. Census Bureau 2013).

Model 2 introduces unemployment into the model, with no substantive changes being made in the sign or significance of the control variables' coefficients. Given the results of the descriptive analysis above, the positive effect of the unemployment rate on perceived job precarity is expected, with unemployment increasing the odds of feeling insecure by a factor of 1.096 ($=e^{0.091}$; $p<0.001$). This effect persists throughout the remaining models, supporting H_{4.1}. Model 3 tests the effect of the flexible turn index, which is also positive and significant, supporting H_{4.2}. Although the other variables' coefficients are consistent with those in Model 2, the time coefficient becomes negative with the addition of the index, which is likely due to the high correlation between time and the flexible turn index.

Finally, Model 4 tests the effect of perceived skill and financial precarity on perceived job precarity, net of the control variables, unemployment, and the flexible turn index. Both perceived skill and financial precarity increase the odds of feeling insecure by a factor of 1.471 ($=e^{0.386}$; $p<0.001$) and 1.497 ($=e^{0.403}$; $p<0.001$), respectively. The flexible turn index was dropped from this model in a supplemental analysis, and time re-emerges as a significant predictor, reflecting U.S. society's transition to a postindustrial

economy over the course of the late postwar era. However, age, being married, and working in a professional occupation become insignificant with the introduction of these measures of subjective economic insecurity.

4.5.3 Multivariate Results for Quality of Working Life Module

Table 4.5 represents the crux of this chapter's analysis and shows the generalized ordinal logit coefficients predicting perceived job precarity during the spatialization SSA. Model 1 shows the coefficients for the baseline control model. Unexpectedly, the effect of year=2010 is insignificant and does not emerge in future models, providing no support for H_{4.3}. While somewhat surprising, the fact that female is not significant in any of the models in this table or in Table 4.4 is consistent with previous research (Elman and O'Rand 2002; Fullerton and Wallace 2007). Being black has a significant positive effect on perceived job precarity versus being white ($=e^{0.286}$; $p<0.01$) in this model and all subsequent models, while identifying as other race had no significant effect versus being white. Similar to the models constructed from the cumulative sample, age has a curvilinear effect, indicating greater levels of insecurity for individuals in the middle of their careers. However, the effect is more pronounced in this table since both the original and squared terms remain significant throughout all models. Additionally, being married versus not married and having a higher income decreased the odds of feeling very insecure by 15.97% ($[1-e^{-0.174}]$; $p<0.05$) and 3.44% ($[1-e^{-0.035}]$; $p<0.01$), respectively. Unlike the longitudinal models in the previous section, years of education and professional occupation were not significant, indicating that the period covered by the QWL module is one of great change.

Table 4.5 Generalized Ordinal Logit Coefficients for Perceived Job Precarity, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Model 1			Model 2			Model 3			Model 4		
	β	$\exp(\beta)$	S.E.	β	$\exp(\beta)$	S.E.	β	$\exp(\beta)$	S.E.	β	$\exp(\beta)$	S.E.
<i>Control Variables</i>												
2006	0.058	1.059	(0.084)	-0.009	0.991	(0.089)	-0.009	0.991	(0.089)	0.019	1.020	(0.094)
2010	0.171	1.187	(0.093)	0.122	1.130	(0.096)	0.110	1.116	(0.095)	0.014	1.014	(0.101)
Female	-0.117	0.890	(0.075)	-0.145	0.865	(0.078)	-0.140	0.870	(0.077)	-0.113	0.893	(0.078)
Black	0.286	1.331	(0.102) **	0.242	1.274	(0.104) *	0.277	1.319	(0.104) **	0.380	1.462	(0.104) ***
Other race	0.236	1.266	(0.138)	0.148	1.159	(0.148)	0.152	1.164	(0.147)	0.114	1.120	(0.148)
Age	0.065	1.067	(0.017) ***	0.087	1.091	(0.018) ***	0.079	1.082	(0.018) ***	0.066	1.068	(0.019) ***
Age squared	-0.797	0.451	(0.202) ***	-0.932	0.394	(0.211) ***	-0.828	0.437	(0.209) ***	-0.691	0.501	(0.227) **
Married	-0.174	0.840	(0.076) *	-0.073	0.930	(0.081)	-0.096	0.908	(0.081)	-0.067	0.936	(0.084)
Years of education	-0.005	0.995	(0.013)	0.029	1.029	(0.014) *	0.024	1.024	(0.014)	0.014	1.015	(0.014)
Income (ln)	-0.035	0.966	(0.011) **	-0.018	0.982	(0.012)	-0.021	0.979	(0.012)	-0.016	0.984	(0.012)
Professional	0.030	1.030	(0.103)	0.199	1.220	(0.107)	0.188	1.207	(0.107)	0.187	1.205	(0.107)
<i>Security and Control</i>												
Government employee				-0.452	0.636	(0.098) ***	-0.455	0.634	(0.099) ***	-0.489	0.613	(0.102) ***
Union member				-0.143	0.867	(0.135)	-0.154	0.857	(0.136)	-0.202	0.817	(0.136)
Job tenure				-0.022	0.978	(0.006) ***	-0.023	0.978	(0.006) ***	-0.023	0.977	(0.006) ***
Job satisfaction				-0.527	0.590	(0.053) ***	-0.501	0.606	(0.053) ***	-0.311	0.733	(0.056) ***
Job autonomy				-0.495	0.609	(0.054) ***	-0.515	0.598	(0.054) ***	-0.257	0.733	(0.059) ***
<i>Uncertainty and Conflict</i>												
Work-family conflict							0.172	1.188	(0.046) ***	0.046	1.047	(0.047)
Laid off in past year										0.824	2.279	(0.140) ***
Part-time worker										0.156	1.169	(0.097)
Role ambiguity										0.680	1.974	(0.062) ***
Role strain										0.273	1.314	(0.047) ***
Perceived skill precarity										0.204	1.226	(0.051) ***
Perceived financial precarity										0.194	1.215	(0.059) ***
τ_1	0.947			0.263			0.095			1.481		
τ_2	2.665			2.144			1.985			3.519		
N	3,893			3,893			3,893			3,893		
F-value	3.24			18.67			18.34			21.28		

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. Coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

Model 2 tests the effects of various indicators of security and control on perceived job precarity. In terms of control variables, year=2010, being married, and income are not significant while years of education has a positive effect on perceived job precarity. However, this effect does not come through in future models. On the whole, factors associated with security and control decrease workers' sense of job precarity. Being a government employee decreases the odds of feeling very insecure by 36.36% ($[1 - e^{-0.452}]$; $p < 0.001$), which is consistent with the expectations of H_{4.4}. However, being a union

member is not significant, providing no evidence to support H_{4.5}. For every year increase in job tenure, the odds of feeling very insecure decrease by 3% ($[1-e^{-0.022}]$; $p<0.001$), supporting H_{4.6}. Higher levels of job satisfaction and job autonomy each reduce the odds of feeling very or fairly likely to lose one's job by about 40%.⁸ These negative and significant effects persist throughout the remaining models, lending support to H_{4.7} and H_{4.8}.

Model 3 tests the effect of work-family conflict on perceived job precarity net of the control variables and the security and control factors. While not the most important factor in terms of magnitude, this is a theoretically important concept. Higher levels of work-family conflict increase the odds of feeling very insecure by a factor of 1.188 ($e^{0.172}$; $p<0.001$), providing evidence to support H_{4.11}. This index is included separately from the other uncertainty and conflict measures to highlight its significance, which disappears when the remaining variables are entered into Model 4.

In addition to the factors included in Model 3, Model 4 incorporates the rest of the uncertainty and conflict measures. Although the work-family conflict index fades from significance and being a part-time worker still does not come through, this cluster of variables contains the largest effects out of all four models. Unsurprisingly, there is support for H_{4.9}, as being laid off from one's job in the past year has a positive impact on the odds of feeling very or fairly likely to lose one's job by a factor of 2.279 ($e^{0.824}$; $p<0.001$), and is by far the largest effect. Notably, the role ambiguity index and role strain have significant positive effects, with role ambiguity increasing the odds of feeling very insecure by a factor of 1.974 and role strain by a factor of 1.314, lending support to

⁸ ($[1-e^{-0.527}]$; $p<0.001$) and ($[1-e^{-0.495}]$; $p<0.001$), respectively

H_{4.12} and H_{4.13}, respectively. Finally, perceived skill and perceived financial precarity, despite being only weakly correlated with the outcome measure, are both positively associated with higher levels of perceived job precarity in the multivariate models. Taken in conjunction with the findings from the cumulative sample, these results support H_{4.14} and H_{4.15}.

4.6 Discussion

This chapter examines trends in perceived job precarity throughout the late postwar era and in the nascent period of spatialization, identifying several factors that are important for understanding these changes. Namely, this research addresses the various aspects of security, control, uncertainty, and conflict that characterize the modern workplace in the new economy. By utilizing both the cumulative file and the QWL module of the GSS, this chapter has situated its investigation of perceived job precarity in the spatialization SSA within a broader context of postindustrial transformation, working towards developing a more comprehensive understanding of perceived job precarity and its determinants.

The descriptive analysis generated two major findings. First, perceived job precarity has steadily increased over the course of the late postwar period, with the positive trend being more clearly pronounced when adjusting for the unemployment rate. While this is not really a novel or undiscovered trend (see Fullerton and Wallace 2007), this chapter does confirm that the pattern still holds for the period after 2002 and, most importantly, through the Great Recession. Second, the pervasive influence of race and racism has extended into the realm of perceived insecurity, as workers who identify as black or other race feel significantly less secure in their jobs than white workers. While

disheartening, this finding is consistent with the multivariate models presented in this chapter and much of the previous research on perceived job precarity (Fullerton and Freeman 2013; Fullerton and Wallace 2007; Manski and Straub 2000).

The multivariate analysis further illuminates the nature of perceived job precarity in the postindustrial United States. The sample using the cumulative file of the GSS points to the significant role of macro-structural factors (e.g., unemployment and the flexible turn in employment relations) in increasing workers' perceptions of job precarity, providing valuable insight into future avenues of research. Additionally, the positive effects of the other two dimensions of subjective economic insecurity, perceived skill and financial precarity, indicate that while these factors are conceptually distinct, they are all empirically interrelated.

Turning to the sample using the QWL module of the GSS, several important findings emerge. Often it is not only the significant findings that tell a story, but the non-significant findings as well. Notably, the year=2010 variable is not significant, indicating that the effect of the Great Recession on workers' perceived job precarity is either non-existent or waned into unimportance by 2010.⁹ In contrast to the longitudinal analysis, years of education and being a professional are not significant in the spatialization analysis, which means that these are no longer the buffer against feelings of insecurity that they used to be.

Generally speaking, the statistically significant factors associated with security and control have negative effects on perceived job precarity, whereas those associated with uncertainty and conflict have positive effects. One of the more interesting

⁹ It should be noted however, that year=2010 is a significant predictor of perceived *skill* precarity in the analysis of Chapter 5, which is indicative of the shift in employment relations.

contradictions presented by these findings is that while the Great Recession has prompted an increasing preoccupation with reducing public spending, being a government employee has one of the largest effects in reducing perceived job precarity. Interestingly, being a union member does not have a significant effect, although this may be due to the declining presence of unions in the U.S. in general. The negative effect of job autonomy, on the other hand, persists through all models. Job autonomy is likely to become increasingly important as the spatialization SSA continues to unfold, a mark of status and power in an occupational structure dominated by a technocratic system of control.

Furthermore, the significance of work-family conflict, role ambiguity, and role strain indicate that there are many things that employers can do to help ease feelings of insecurity among their workers. In addition to clarifying expectations and streamlining employees' workflow, employers should consider embracing a type of flexibility that serves the needs of workers as well as the organization. For example, as noted in the introduction, perceived job precarity has important implications for health outcomes (Burgard et al. 2009; Fullerton and Freeman 2013). If employers work towards improving health outcomes by reducing the amount of anxiety workers have over their work situations, it would likely contribute to reducing the cost of providing health care benefits.

Finally, while this chapter highlights the importance of perceived job precarity, there are other dimensions of subjective economic insecurity that are playing an increasingly prominent role in the new economy. The goal of Chapter 5 is to provide a similar analytical treatment to the concept of perceived skill precarity, which reflects workers' subjective assessment of his/her ability to transfer their skills into a different but

comparable position in the labor market. It is imperative that sociologists develop a more nuanced understanding of perceived skill precarity as the notion that workers are responsible for managing so-called “boundaryless” careers becomes an increasingly common feature of the employment relationship (Arthur and Rousseau 2001; Briscoe, Henagan, Burton, and Murphy 2012; Tremblay 2008).

CHAPTER 5: PERCEIVED SKILL PRECARITY DURING THE LATE POSTWAR ERA AND THE SPATIALIZATION SSA

5.1 Introduction

As discussed in Chapter 2, perceived skill precarity is a major dimension of subjective economic insecurity, reflecting a worker's assessment of his/her ability to obtain another job with comparable wages and fringe benefits. This is an often overlooked outcome that is frequently conflated with perceived job precarity (Kalleberg 2011), which was addressed in Chapter 4. One of the central purposes of this chapter is to use data from the General Social Survey (GSS) cumulative file and Quality of Working Life module to empirically demonstrate that perceived job and skill precarity are two distinct concepts. Examining how perceived skill precarity has changed over time is important because the old employment contract is eroding and being replaced by one that is based upon market forces (Levine et al. 2002). Additionally, western capitalist societies have moved from an emphasis on structure to one of individual agency, transferring risk to workers (Beck 1992; Hacker 2008). Ultimately, the notion of job security is arguably becoming less important than a worker's ability to manage his/her own career across multiple jobs, firms, and geographical locations (Arthur and Rousseau 2001). It only makes sense that as accumulation practices become increasingly spatialized (Wallace and Brady 2001), so will workers' careers. Workers' perceptions of their employability can be a critical indicator of this process.

5.2 Research Questions and Hypotheses

Since it is often assumed to be the same as perceived job precarity, the literature on perceived skill precarity is relatively scarce. Few studies have examined perceived skill precarity in the United States as an outcome (Kalleberg and Marsden 2012), and even fewer have focused exclusively on the spatialization SSA or used a wide range of predictors that encompass the various aspects of security, control, uncertainty, and conflict used in Chapter 4. As discussed in Chapters 2 and 3, many of the studies on this topic that do exist refer to it as perceived labor market insecurity (Anderson and Pontusson 2007; Dixon et al. 2013), employability (Fugate, Kinicki, and Ashforth 2004), or treat it as a facet of perceived job precarity (Schmidt 2000).

5.2.1 *Structural and Time Factors*

This section discusses the hypotheses concerning the relationship between structural/time factors and perceived skill precarity. The previous chapter addressed the importance of the unemployment rate for perceived job precarity, describing the many studies that have found a positive relationship between them (Erlinghagen 2008; Fullerton and Wallace 2007; Schmidt 2000). Since high rates of unemployment reflect a tight labor market in which it would be more difficult to secure another position, this chapter replicates that hypothesis for perceived skill precarity:

H_{5.1}: Higher levels of unemployment will be positively associated with perceived skill precarity.

The flexible turn in employment relations was also discussed in Chapter 4. Fullerton and Wallace (2007) found that the flexible turn in employment relations has contributed to a decreasing sense of job security among U.S. workers. Since the variables used to capture the flexible turn are indicative of structural economic processes that are transforming the

employment relationship, one would expect them to contribute to greater levels of unease among workers concerning their ability to secure other positions that are comparable to their current jobs.

H_{5.2}: Increases in the flexible turn index will be positively associated with perceived skill precarity.

Because of the substantial impact of the Great Recession on the U.S. and world economy, its impact on workers is a major factor that must be considered when examining subjective economic insecurity in the spatialization SSA. In their multi-level analysis of European Social Survey data, Chung and van Oorschot (2011) find that market forces are more important than institutional factors in explaining perceived insecurity. Also, the blitzkrieg of negative media coverage surrounding the Great Recession chronicled many stories of workers who were having a difficult time looking for work. Consequently, it is expected that:

H_{5.3}: Respondents interviewed in the year 2010 will be more likely to experience greater levels of perceived skill precarity.¹⁰

5.2.2 Security and Control

This section outlines the hypotheses for situations in which workers have greater levels of security and control. There are several characteristics of workers' jobs that are typically viewed as making them secure. Being a government employee or a union member are two such factors. Despite the evidence showing that such characteristics contribute to reduced feelings of job insecurity among workers (Wilson et al. 2006; Wilson and Mossakowski 2009), perceived skill precarity operates differently.

¹⁰ The respondents from 2010 are being compared to other respondents that were interviewed in the spatialization SSA.

The conditions of government employees' and union members' employment provide them with a degree of objective job security. However, that security has a downside when it comes to looking for new employment. Namely, the skills and knowledge required to occupy these positions tends to have limited applicability to other jobs at other firms. Given that Anderson and Pontusson (2007) found that union membership and public sector employment had positive effects on labor market insecurity in their analysis of 15 OECD countries, it is expected that:

H_{5.4}: Being a government employee will be positively associated with perceived skill precarity.

H_{5.5}: Being a union member will be positively associated with perceived skill precarity.

The same reasoning also applies to workers with longer job tenures, and previous research substantiates this, with findings specific to measures of perceived skill precarity (Dixon et al. 2013). Specifically, workers that have occupied their current positions for an extended period of time have accrued a very specific skill set that may not transfer over to other positions.

H_{5.6}: Longer job tenure will be positively associated with perceived skill precarity.

While job satisfaction has been shown to be negatively related to perceived job precarity (Ashford et al. 1989; Rundmo and Iversen 2007), there is no evidence that it will have the same effect on perceived skill precarity. In fact, there is good reason to expect the opposite effect. The more satisfied workers are with their jobs, the more precious their jobs become to them, and they may feel that they would be unable to find other similar jobs.

H_{5.7}: Higher levels of job satisfaction will be positively associated with perceived skill precarity.

As noted in Chapter 4, the relationship between job autonomy and perceived job precarity has been examined by previous research with mixed results (Ashford et al. 1989; Wilson et al. 2006). Autonomy is an important factor for many reasons, not the least of which involves buffering the detrimental effect of job insecurity on health (Schreurs, van Emmerik, Notelaers, and De Witte 2010). Workers with higher levels of job autonomy will likely have a great deal of technical expertise and/or a good working relationship with technical experts (Burris 1993). This expertise makes them highly employable and attractive to employers, particularly in the information economy.

H_{5.8}: Higher levels of job autonomy will be negatively associated with perceived skill precarity.

5.2.3 Uncertainty and Conflict

This section identifies the hypotheses concerning the relationship between perceived skill precarity and a variety of predictors that reflect uncertainty and conflict in the work place, the labor market, and in workers' personal lives. Being recently laid off is one such factor that may impact perceived skill precarity, and in the previous chapter I posited a positive effect that was supported by the analysis. As perceived skill precarity is distinct from perceived job precarity, the expected effect of being recently laid off is different. Since the workers who are included in this dissertation's analysis are employed, any who have been recently laid off have been successful in being re-employed after the separation. Therefore:

H_{5.9}: Having been laid off in the past year will be negatively associated with perceived skill precarity.

Part-time employment is another aspect of the modern employment relationship that can be tinged with uncertainty. It is important because of the increasing role that nonstandard work arrangements are playing in the transforming employment relationship, both generally and at specific points in the occupational structure. For example, Fullerton and Wallace (2007) found that part-time employment status decreased perceived job security and Schmidt (2000) found that it increased the respondents' assessed likelihood of losing their jobs. These findings support McCall's (2001) assertion that casualized forms of work, such as part-time work, have led to an increasingly deinstitutionalized labor market that is characterized by high levels of insecurity. Also demonstrating the importance of part-time employment, Farber (1999) found that workers have used alternative and part-time employment arrangements as responses to actual job loss. This means that respondents who are temporary or part-time workers are more likely to have experienced a job loss, making them more susceptible to increased feelings of job insecurity. However, it would be an oversimplification to hypothesize that being a part-time worker would have a uniform positive effect on all dimensions of subjective economic insecurity. Since part-time workers tend to be concentrated in the secondary labor market which is characterized by more job turnover, they have likely adjusted their expectations to conform to this reality. Therefore:

H_{5.10}: Being a part-time worker will be negatively associated with perceived skill precarity.

Similar to the argument made in Chapter 4, higher levels of role conflict, role ambiguity, and role strain are likely to produce a greater degree of psychological distress in workers which in turn can affect their feelings of insecurity. A classic indicator of role conflict is the struggle of workers to balance their responsibilities on the job with their

obligations at home. In the case of work-family balance, Scherer (2009) found that those who are in more insecure employment positions tend to have less time for their families than those with permanent positions. Since perceptions tend to align with the empirical reality, these findings have important implications for perceived skill precarity, indicating the need to account for both the type of work arrangements in which respondents are situated and how these arrangements potentially conflict with family life. Although previous research does not indicate what may be expected from modeling the effects of these determinants on perceived skill precarity, it can be argued that greater levels of work-family conflict can lead to greater feelings of insecurity. This is especially the case if workers choose to prioritize family obligations over those that are work-related.

H_{5.11}: Higher levels of work-family conflict will be positively associated with perceived skill precarity.

As noted in the previous chapter, role ambiguity is related to, but conceptually distinct from, role conflict. Given that Ashford et al. (1989) found a positive relationship between role ambiguity and perceived job insecurity, this uncertainty would likely have a similar effect for perceived skill precarity:

H_{5.12}: Higher levels of role ambiguity will be positively associated with perceived skill precarity.

In the previous chapter, I argued that role strain is conceptually similar and is oriented in the same direction as role ambiguity. The findings from Chapter 4 bear this out, with both effects being positively associated with perceived job precarity. This similarity suggests that a comparable result can be expected for perceived skill precarity. Namely, workers who are experiencing conflicting demands on the job will feel less confident in their ability to obtain another position.

H_{5.13}: Higher levels of role strain will be positively associated with perceived skill precarity.

Finally, the relationship of perceived skill precarity to the other dimensions of subjective economic insecurity must be considered. Chapter 4's analysis of perceived job precarity revealed that both perceived skill and financial precarity had positive effects, holding all other variables constant. Kalleberg and Marsden (2012) also observed a positive relationship between perceived financial precarity and a measure of subjective job insecurity that incorporated perceived skill precarity. Given these results and the work of Anderson and Pontusson (2007), which found positive associations between analogues of job and skill precarity, it is expected that:

H_{5.14}: Higher levels of perceived job precarity will be positively associated with perceived skill precarity.

H_{5.15}: Higher levels of perceived financial precarity will be positively associated with perceived skill precarity.

5.3 Sample Characteristics

As in Chapter 4, the samples used in this analysis are drawn from the General Social cumulative file and the Quality of Working Life (QWL) module (Smith et al. 2013) and are restricted to respondents who indicated that they were currently employed at the time of the interview. They are also limited to cases with valid answers to the perceived skill precarity questions. All figures and descriptive statistics are drawn from the original data file using listwise deletion for missing data, and all multivariate analyses use multiply imputed data. As noted in Chapter 4, this is done so that the descriptive statistics reflect the composition of the raw sample, which is their purpose.

Table 5.1(a) Frequency Distribution for Perceived Skill Precarity, GSS: 1977-2012

"About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have?"

	Percent	Total
1=Very easy	24.6	3,880
2=Somewhat easy	33.9	5,336
3=Not easy at all	41.5	6,528
Total	100	15,744

Table 5.1(b) Descriptive Statistics for Dependent and Independent Variables, GSS: 1977-2012 and Bureau of Labor Statistics

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived skill precarity	2.161	0.007
<i>Region</i>		
New England	0.053	0.004
Mid-Atlantic	0.149	0.005
South Atlantic	0.190	0.007
East North Central	0.177	0.006
West North Central	0.074	0.005
East South Central	0.063	0.005
West South Central	0.094	0.006
Mountain	0.060	0.004
Pacific	0.139	0.005
<i>Control Variables</i>		
Time	17.129	0.099
Female	0.494	0.004
White	0.804	0.005
Black	0.133	0.004
Other race	0.062	0.003
Age	39.050	0.123
Age squared	1684.804	10.164
Married	0.594	0.005
Years of education	13.439	0.030
Income (\ln)	8.562	0.028
Professional	0.176	0.004
<i>Annual Measures</i>		
Unemployment	6.401	0.018
Flexible turn index ($\alpha=0.82$)	0.081	0.007
<i>Subjective Economic Insecurity</i>		
Perceived job precarity	1.492	0.006
Perceived financial precarity ($\alpha=0.60$)	-0.076	0.006

Note : Adjusted by survey sampling design.

Following the approach in Chapter 4, this chapter uses two samples to examine perceived skill precarity. The first sample is from the cumulative file of the GSS (1972-2012), and the total imputed sample size is 15,744. Since the sample sizes are determined largely by valid answers to the dependent variable, this is a different sample than that used in Chapter 4's cumulative analysis, which had a sample size of 15,754. Table 5.1(a) presents the frequency distribution for the perceived skill precarity measure asked of respondents from 1977 on, and is adjusted by survey sampling design. The modal response of the surveyed workers is that it would not be easy at all to find another job with approximately the same income and fringe benefits (41.5%), with a much smaller but still sizeable percentage (24.6%) feeling that it would be very easy to find another job. Table 5.1(b) shows the means and standard deviations of the dependent and independent variables from the cumulative sample, adjusted by survey sampling design. Although Tables 4.1(b) and 5.1(b) represent different cumulative samples (15,754 and 15,744, respectively), the statistics presented in each are virtually identical. This phenomenon can be attributed to the very large sample sizes.

The second sample in this chapter's analysis uses the Quality of Working Life module from the GSS, which was asked of respondents in 2002, 2006, and 2010 and provides a window in the spatialization SSA. As is the case for the cumulative sample, the sample sizes are determined largely by valid answers to the dependent variable. The total sample size for this chapter's QWL sample is 3,869, compared to 3,893 for Chapter 4's QWL sample. Table 5.2(a) presents the frequency distribution for the perceived skill precarity measure from the QWL module, and is adjusted by survey sampling design. This table shows that 39.47% of workers feel very skill insecure, which is consistent with

**Table 5.2(a) Frequency Distribution for Perceived Skill Precarity
GSS: Quality of Working Life Module, 2002, 2006, 2010**

<i>"How easy would it be for you to find a job with another employer with approximately the same income and fringe benefits as you have now?"</i>	Percent	Total
1=Very easy	23.26	900
2=Somewhat easy	37.27	1,442
3=Not easy at all	39.47	1,527
Total	100	3,869

Table 5.2(b) Descriptive Statistics for Dependent and Independent Variables, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived skill precarity	2.168	0.021
<i>Control Variables</i>		
2002	0.233	0.011
2006	0.461	0.015
2010	0.306	0.013
<i>Security and Control</i>		
Government employee	0.205	0.010
Union member	0.146	0.009
Job tenure	6.928	0.195
Job satisfaction	3.346	0.021
Job autonomy ($\alpha=0.72$)	-0.006	0.020
<i>Uncertainty and Conflict</i>		
Work-family conflict ($\alpha=0.61$)	0.005	0.020
Laid off	0.062	0.006
Part-time worker	0.192	0.010
Role ambiguity ($\alpha=0.66$)	0.027	0.018
Role strain	2.161	0.022
Perceived job precarity	1.638	0.019
Perceived financial precarity ($\alpha=0.60$)	-0.034	0.018

Note : Adjusted by survey sampling design. The statistics for the regional and control variables are consistent with those from the cumulative file and are excluded for the sake of parsimony.

the measure from the cumulative sample. Finally, Table 5.2(b) shows the means and standard errors of the module-specific dependent and independent variables from the QWL module sample, adjusted by survey sampling design. Just like in the cumulative analysis, the descriptive statistics from the QWL match those from Chapter 4.

5.4 Analytic Approach

The analytic strategy for this chapter is nearly identical to that of Chapter 4. First, I conduct a descriptive analysis using the cumulative sample. The multivariate analysis is broken into two parts, one that uses the cumulative file and another that uses the GSS's QWL module. As noted in the previous chapter, the latter part takes advantage of the wide variety of independent variables that are available in the QWL module and focusing on the spatialization SSA, the significance of which is discussed in Chapter 2. The key difference between this chapter's analysis of the QWL module and Chapter 4's is that there are three models instead of four. Due to the ordinal nature of the perceived skill precarity measure in the GSS, the multivariate analysis is comprised of a series of generalized ordinal logistic regressions.

Since the perceived skill precarity measure was not collected in the first four years of the GSS, the first part of the multivariate analysis is limited to data from 1977 to 2012. Similar to Chapter 4, this part of the analysis replicates Fullerton and Wallace's (2007) study of perceived job precarity in many respects. However, in addition to the differences listed in the previous chapter's discussion of the analytic approach, it uses a different but related outcome, perceived skill precarity. Model 1 tests the effects of the control variables: region, sex, race, age, marital status, education, and professional occupation. Model 2 tests the effect of the annual unemployment rate on perceived skill

precarity, net of the control variables. Model 3 incorporates the flexible turn index ($\alpha=0.82$), accounting for the control variables and unemployment. As noted in Chapters 3 and 4, the flexible turn index is based on the measure developed by Fullerton and Wallace (2007). Model 4 examines perceived job and financial precarity net of the control variables, unemployment, and the flexible turn index. As in Chapter 4, all models include regional dummy variables (South Atlantic is the reference category), but they are not shown. The standard errors of Models 2-4, which contain annual measures, are clustered by year.

It has been noted above that the third and final phase of this chapter's analysis, which uses the QWL sample, is somewhat different from Chapter 4's treatment of said sample. Namely, there are three models instead of four, as work-family conflicted is not highlighted in a separate model. Model 1 is constructed in similar fashion to its counterpart in Chapter 4, using the baseline controls described above and dummy variables for year=2006 and year=2010 in place of the time variable. Model 2 adds several QWL module variables that capture security and control: government employee, union member, job tenure, job satisfaction, and job autonomy ($\alpha=0.72$). Model 3 incorporates the uncertainty and conflict factors: work-family conflict ($\alpha=0.61$), laid off, part-time worker, role ambiguity ($\alpha=0.66$), role strain, perceived skill precarity, and perceived financial precarity ($\alpha=0.60$). Following Chapter 4's precedent, annual measures such as unemployment and the flexible turn index are excluded. Similar to the longitudinal phase of the analysis, all models include regional dummy variables, but the coefficients are not presented.

Following the strategy used in the previous chapter, all of the models in this chapter are weighted using the WTSSALL sampling weight, which adjusts for selection of one adult per household and the subsampling of initial non-respondents after 2004. This analysis also uses survey design variables provided by NORC with the SURVEY prefix command in Stata to account for changes in the sampling design over time. Missing cases were handled using the standard multiple imputation procedure for all of the models ($m=20$).

5.5 Findings

5.5.1 Descriptive Results

Table 5.3 presents the frequency distribution of perceived skill precarity by race from the GSS cumulative file. Similar to the outcome in Chapter 4, statistically significant differences are found among respondents identifying as white, black, and other race ($\chi^2=30.41, p<0.001$). 40.34% of white respondents felt that it would not be easy to find another job similar to their own, and 46.16% of black respondents felt the same way. The significant Chi-square statistic indicates that there are racial disparities in perceived skill precarity that need to be accounted for in a multivariate analysis.

Table 5.3 Perceived Skill Precarity by Race, by Row Percentage GSS: 1977-2012

<i>Race</i>	Perceived Skill Precarity		
	Very easy	Somewhat easy	Not easy
White	25.33	34.33	40.34
Black	21.93	31.91	46.16
Other race	22.90	36.84	40.26

Note: Adjusted by survey sampling design. $\chi^2 = 30.41, p < 0.001$

Figure 5.1 presents trends in the predicted probabilities of high perceived skill precarity (i.e., “Not easy at all” to find another job) and the national unemployment rate over time. Using unemployment instead of negative GDP growth is preferable because it is easier to measure annually. Also, as mentioned in previous chapters, higher unemployment rates are positively associated with previous recessions. Similar to the relationship between unemployment and perceived job precarity found in Figure 4.1, Figure 5.1 shows how the probability of feeling very skill insecure corresponds with the national unemployment rate over the course of the late postwar period.

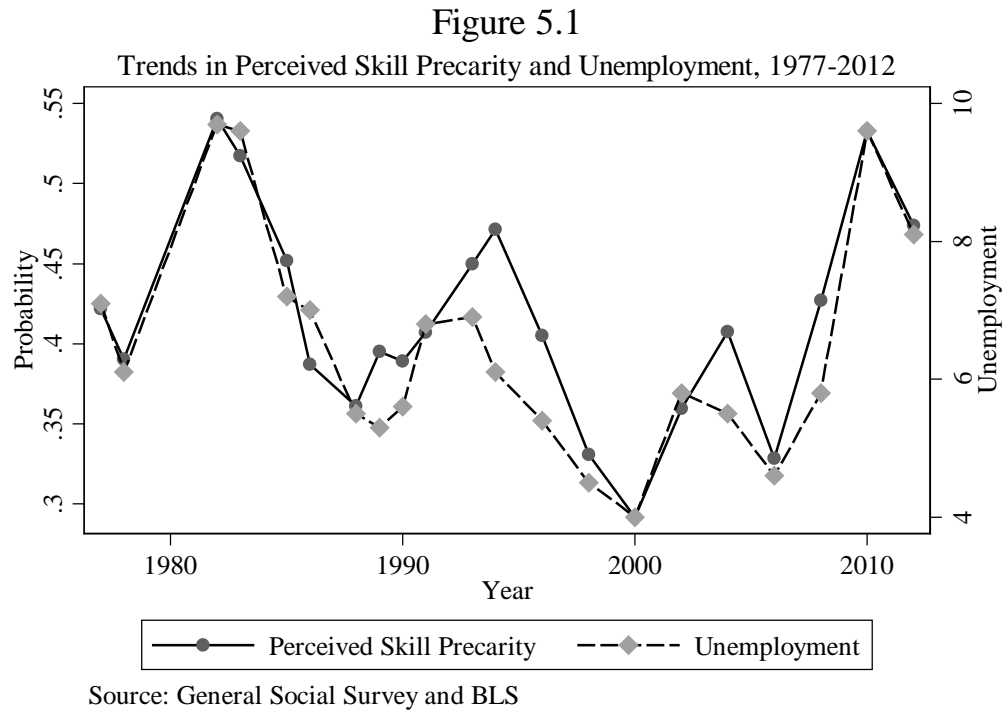
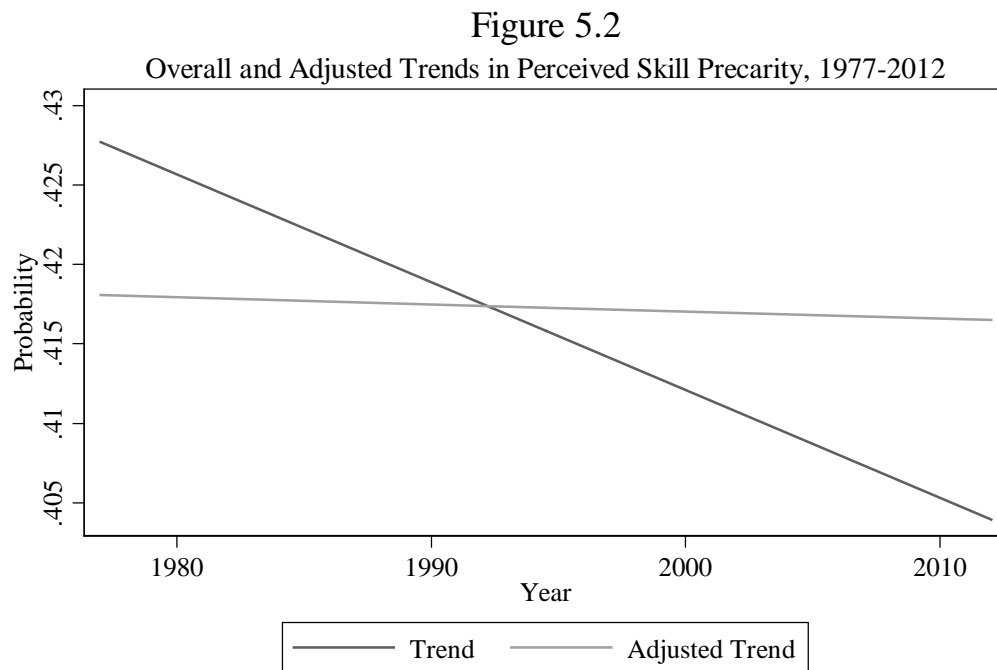


Figure 5.2 presents the overall and adjusted trends in high levels of perceived skill precarity during the late postwar era. This figure shows that the predicted probabilities of high perceived skill precarity trend extremely negative when a linear line is fitted to the data. However, when the outcome is adjusted by accounting for the national

unemployment rate, the downward trend in perceived skill precarity becomes distinctly less pronounced, although it is still present. This figure provides a view of perceived skill precarity patterns during this period that is consistent with the results of the multivariate analysis discussed below but in contrast with the upward trend in perceived job precarity found in Chapter 4.



5.5.2 Multivariate Results for Cumulative File

Table 5.4 presents the generalized ordinal logit analyses of perceived skill precarity from 1977 to 2012. Model 1 shows the coefficients for the baseline control model. Time has a negative effect, indicating that perceived skill precarity has decreased over the course of the late postwar era. However, the effect does not hold for subsequent models. Being female decreases the odds of feeling very insecure about one's skills versus being male by 9.79% ($[1 - e^{-0.103}]$; $p < 0.01$). Being black versus white increases the

Table 5.4 Generalized Ordinal Logit Coefficients for Perceived Skill Precarity, GSS: 1977-2012

	Model 1		Model 2		Model 3		Model 4	
	β	exp(β) S.E.	β	exp(β) S.E.	β	exp(β) S.E.	β	exp(β) S.E.
<i>Control Variables</i>								
Time	-0.004	0.996 (0.002) *	0.004	1.004 -.002	-0.009	0.991 (0.008)	-0.007	0.993 (0.008)
Female	-0.103	0.902 (0.033) **	-0.102	0.903 (0.039) **	-0.105	0.900 (0.039) **	-0.107	0.899 (0.037) **
Black	0.234	1.264 (0.053) ***	0.209	1.233 (0.055) ***	0.208	1.231 (0.054) ***	0.152	1.165 (0.052) **
Other race	0.166	1.180 (0.073) *	0.203	1.225 (0.056) ***	0.204	1.226 (0.056) ***	0.163	1.177 (0.058) **
Age	0.040	1.041 (0.009) ***	0.048	1.050 (0.011) ***	0.047	1.049 (0.011) ***	0.042	1.043 (0.011) ***
Age squared	-0.144	0.866 (0.108)	-0.238	0.788 (0.122)	-0.226	0.798 (0.122)	-0.157	0.855 (0.122)
Married	0.005	1.005 (0.036)	-0.009	0.991 (0.041)	-0.007	0.993 (0.041)	0.021	1.021 (0.040)
Years of education	-0.074	0.929 (0.007) ***	-0.072	0.930 (0.005) ***	-0.074	0.929 (0.005) ***	-0.063	0.939 (0.005) ***
Income (ln)	0.019	1.019 (0.006) ***	0.020	1.020 (0.004) ***	0.019	1.020 (0.004) ***	0.025	1.026 (0.005) ***
Professional	-0.084	0.920 (0.045)	-0.105	0.900 (0.032) **	-0.096	0.908 (0.033) **	-0.077	0.925 (0.033) *
<i>Annual Measures</i>								
Unemployment			0.172	1.188 (0.017) ***	0.182	1.200 (0.019) ***	0.169	1.185 (0.019) ***
Flexible turn index					0.207	1.230 (0.120)	0.167	1.182 (0.123)
<i>Subjective Economic Insecurity</i>								
Perceived job precarity							0.377	1.458 (0.027) ***
Perceived financial precarity							0.078	1.082 (0.038) *
τ_1	-0.676		0.702		0.536		1.130	
τ_2	0.862		2.265		2.101		2.718	
N	15,744		15,744		15,744		15,744	
F-value	15.27		152.86		919.70		8499.18	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. All coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

odds of feeling very insecure about one's job by a factor of 1.264 ($=e^{0.234}$; $p<0.001$), and identifying as other race versus white increases the odds by a factor of 1.181 ($=e^{0.166}$; $p<0.05$). Age also has a positive effect on perceived skill precarity. While higher levels of education decrease the odds of perceiving greater levels of skill precarity by 7.13% ($[1-e^{-0.074}]$; $p<0.001$), higher levels of income unexpectedly increase those odds by a factor of 1.019 ($=e^{0.019}$; $p<0.001$).

Model 2 introduces unemployment into the model. Unemployment increases the odds of feeling insecure by a factor of 1.188 ($=e^{0.172}$; $p<0.001$). This effect persists throughout the remaining models, providing evidence in support of H_{5.1}. There are two major differences in the effects of the control variables between this model and Model 1. Time becomes insignificant in this model, and being a professional has a significant negative effect, decreasing the odds of feeling very insecure about one's skills by 9.97% ($[1-e^{-0.105}]$; $p<0.01$). Model 3 tests the effect of the flexible turn index, which is insignificant and provides no support for H_{5.2}. The other variables' coefficients are consistent with those in Model 2.

Finally, Model 4 tests the effect of perceived job and financial precarity on perceived skill precarity, net of the control variables, unemployment, and the flexible turn index. Perceived job precarity significantly increases the odds of feeling insecure by a factor of 1.458 ($=e^{0.377}$; $p<0.001$) and perceived financial precarity also does so by a factor of 1.081 ($=e^{0.078}$; $p<0.05$), respectively. In fact, perceived job precarity represents the largest effect out of all the cumulative models. None of the other variables' effects changed with the introduction of these measures of subjective economic insecurity.

5.5.3 Multivariate Results for Quality of Working Life Module

Table 5.5 shows the generalized ordinal logit coefficients predicting perceived skill precarity during the spatialization SSA. Model 1 shows the coefficients for the baseline control model. As noted in Chapter 3, the effect of time is captured using dummy variables for the years 2002, 2006, and 2010, with 2002 as the reference category. In this model, year=2006 is negative and year=2010 is positive, meaning that perceived skill precarity was lower in 2006 than in 2002, but higher in 2010. These effects persist throughout the remaining models and year=2010 consistently has one of the largest effects. This finding is consistent with H_{5.3} and will be discussed further in the discussion section. The insignificance of being female is unexpected given its positive effect in the cumulative analysis shown in Table 5.4. Being black or identifying as other race is not significant versus being white in this model and all subsequent models. Similar to the models constructed from the cumulative sample of this chapter, age has a positive effect, indicating greater levels of insecurity for older individuals. Additionally, years of education and being a professional have significant negative effects, reducing perceived skill precarity in the spatialization SSA. Unlike the longitudinal models in the previous section, income is not significant in this and all subsequent models.

Model 2 tests the effects of various indicators of security and control on perceived skill precarity. Regarding the control variables, all of the effects are consistent with those from Model 1. Generally speaking, factors associated with security and control tend to increase workers' sense of skill precarity. Being a government employee represents one of the largest effects out of all the models, and increases the odds of feeling very insecure by a factor of 1.428 ($e^{0.356}$; $p<0.01$), supporting H_{5.4}. Being a union member increases the odds by a factor of 1.422 ($e^{0.352}$; $p<0.05$), supporting H_{5.5}. Additionally, for every year

Table 5.5 Generalized Ordinal Logit Coefficients for Perceived Skill Precarity, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Model 1				Model 2				Model 3			
	β	$\exp(\beta)$	S.E.		β	$\exp(\beta)$	S.E.		β	$\exp(\beta)$	S.E.	
<i>Control Variables</i>												
2006	-0.322	0.724	(0.078)	***	-0.359	0.699	(0.078)	***	-0.368	0.692	(0.078)	***
2010	0.430	1.538	(0.086)	***	0.449	1.567	(0.086)	***	0.411	1.508	(0.087)	***
Female	0.004	1.004	(0.061)		-0.017	0.983	(0.061)		0.044	1.045	(0.064)	
Black	0.041	1.042	(0.101)		-0.001	0.999	(0.102)		-0.019	0.981	(0.104)	
Other race	-0.012	0.988	(0.117)		0.008	1.008	(0.119)		-0.060	0.941	(0.120)	
Age	0.044	1.045	(0.016)	**	0.035	1.036	(0.016)	*	0.010	1.010	(0.016)	
Age squared	-0.244	0.783	(0.181)		-0.257	0.773	(0.188)		0.021	1.021	(0.190)	
Married	-0.047	0.954	(0.070)		-0.044	0.957	(0.070)		0.001	1.001	(0.072)	
Years of education	-0.036	0.964	(0.014)	*	-0.032	0.969	(0.015)	*	-0.033	0.968	(0.016)	*
Income (ln)	0.010	1.010	(0.010)		0.003	1.003	(0.011)		0.004	1.004	(0.011)	
Professional	-0.300	0.741	(0.101)	**	-0.403	0.668	(0.105)	***	-0.415	0.660	(0.108)	***
<i>Security and Control</i>												
Government employee					0.356	1.427	(0.110)	**	0.402	1.495	(0.111)	***
Union member					0.352	1.421	(0.142)	*	0.380	1.462	(0.144)	**
Job tenure					0.035	1.036	(0.006)	***	0.038	1.039	(0.006)	***
Job satisfaction					0.087	1.091	(0.055)		0.174	1.190	(0.061)	**
Job autonomy					-0.277	0.758	(0.054)	***	-0.191	0.826	(0.058)	**
<i>Uncertainty and Conflict</i>												
Work-family conflict									0.011	1.011	(0.045)	
Laid off									0.259	1.295	(0.143)	
Part-time worker									-0.275	0.760	(0.100)	**
Role ambiguity									0.135	1.144	(0.057)	*
Role strain									-0.035	0.966	(0.043)	
Perceived job precarity									0.242	1.273	(0.056)	***
Perceived financial precarity									0.165	1.179	(0.061)	**
τ_1	-0.326				-0.184				-0.072			
τ_2	1.363				1.555				1.694			
N	3,869				3,869				3,869			
F-value	10.78				11.67				10.35			

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. Coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

increase in job tenure, the odds of feeling very insecure increase by a factor of 1.036 ($e^{0.035}$; $p < 0.001$), providing evidence in favor of H_{5.6}. However, higher levels of job autonomy reduce the odds of feeling unable to obtain a job with similar income and benefits by about 24% ($[1 - e^{-0.277}]$; $p < 0.001$), which upholds H_{5.8}. These significant effects persist throughout the remaining models.

Model 3 incorporates the uncertainty and conflict measures. From the security and control variables, job satisfaction enters the model with a significant and positive effect, providing mixed results regarding H_{5.7}. Although the work-family conflict index is insignificant and being laid off does not come through, offering no evidence in support of H_{5.9} and H_{5.11}, being a part-time worker has a negative effect, reducing the odds of feeling very insecure by 24.04% ($[1 - e^{-0.275}]$; $p < 0.01$). This finding is consistent with H_{5.10} and is likely a result of the high turnover and low skill levels required of many such positions. Notably, the role ambiguity index has a significant positive effect, increasing the odds of feeling very insecure by a factor of 1.145 ($e^{0.135}$; $p < 0.05$). This effect offers evidence in favor of H_{5.12}, but the lack of a significant effect for role strain means that H_{5.13} is not supported. Finally, both perceived job and perceived financial precarity are positively associated with higher levels of perceived skill precarity. Taken in conjunction with the findings from the cumulative sample, these results support H_{5.14} and H_{5.15}.

5.6 Discussion

This chapter examines trends in perceived skill precarity for workers in the United States throughout the late postwar era and in the emerging period of spatialization, identifying various factors that are important for understanding these changes. Namely, this research addresses the various aspects of security, control, uncertainty, and conflict

that characterize the modern workplace in the new economy. By utilizing both the cumulative file and the QWL module of the GSS, this chapter has situated its investigation of perceived skill precarity in the spatialization SSA within a broader context of postindustrial transformation, working towards developing a more comprehensive understanding of perceived skill precarity and its determinants.

The descriptive analysis of this chapter reveals a slight decline in perceived skill precarity over the course of the late postwar period when adjusting for the unemployment rate. This is in contrast to the results from Chapter 4, which found that perceived job precarity sharply increased with the same adjustment. These divergent findings achieve two things. First, they provide further empirical evidence for the distinction between perceived job and skill precarity. Second, they serve to highlight the changing nature of the employment relationship discussed in Chapter 2 and at the beginning of this chapter. Namely, the slight decline in perceived skill precarity reflects workers' subliminal understanding of the gradual shift towards a "boundaryless" career model.

The multivariate analysis provides greater detail concerning this slight decline in perceived skill precarity. The sample using the cumulative file of the GSS shows how unemployment significantly contributes to greater levels of perceived skill precarity, but unlike the models for perceived job precarity, the flexible turn index was not significant. Given the high correlation between time and the flexible turn index, the insignificance is not surprising. In fact, the effect of time in Chapter 4's cumulative analysis goes from positive to negative when the flexible turn index is introduced. Supplemental analyses for this chapter show that when time is removed from the model, the flexible turn index is positive and significant. However, despite the positive effect when time is removed, it is

not a very large one. Barring a major policy intervention, I suspect that the downward trend in perceived skill precarity will continue and future research may find that the effect of the flexible turn would be insignificant.

Another key distinction between the cumulative analysis in Chapter 4 and this one is the significant effect of being female on perceived skill precarity, which is negative. This probably hinges on the role of women as the primary caregivers in society, which places certain demands upon them that make them more likely to occupy flexible, low status jobs. Unsurprisingly, the effects of perceived job and financial precarity are positive and significant, just like perceived skill and financial precarity were in the corresponding models for the last chapter. Taken together, the findings of this and the previous chapter's analysis of the cumulative sample highlight the interrelatedness of these dimensions.

Turning to the sample using the QWL module of the GSS, the first thing that stands out is that the effects of the time variables persist throughout all three models. Year=2006 is negative and significant and year=2010 is positive and significant, which means that the Great Recession had a major impact on workers' perceived skill precarity, which was declining prior to its onset. This downward trend before the Great Recession was likely due to a falling unemployment rate in the wake of the 2000 recession. This is in contrast to the models of perceived job precarity from Chapter 4, in which neither of these variables were significant. While the insignificance of the time variables in Chapter 4 was somewhat surprising, it becomes clearer when compared to their effects in this chapter's analysis. Namely, the Chapter 4 findings indicate that workers who already had jobs felt relatively certain about keeping them. However, this chapter's findings suggest

that when facing the prospect of obtaining another position in an economy shedding jobs at an incredible rate, they felt much more insecure.

Additionally, the significant effects of being female and non-white from the cumulative analysis evaporate when focusing exclusively on data from the spatialization SSA, which means that women and minorities do not feel any more or less insecure about their skills than men and whites in the contemporary era. Unlike the QWL analysis in Chapter 4, the effects of education and being a professional remain negative and significant throughout all models. This discrepancy suggests that while these may no longer provide a sense of *job* security like they used to, they are still important determinants of workers' perceived ability to go out and get a similar job to the one they now have.

Given the divergence between these two outcomes revealed in this and the previous chapter's descriptive analysis, it is no surprise that entering the characteristics of security, control, uncertainty, and conflict produce much more heterogeneous effects than in Chapter 4's analysis. With the exception of job autonomy, all of the security and control measures contribute to greater levels of perceived skill precarity. This differs from the perceived job precarity models in that all of these measures except union member had negative effects. For government employees, the explanation lies in the notion that government employment comes with a great deal of job security. However, when government employees consider their prospects of finding an equivalent job elsewhere, the picture is much bleaker. The same explanation applies for being a union member, which was insignificant in the models for perceived job precarity. While unions are still able to afford many protections to workers who fall under their purview,

unionization is in decline and workers recognize the difficulty in finding other jobs with comparable skill levels. Since government employees and union members tend to have longer job tenures, it is not surprising that longer job tenures result in lower levels of perceived job precarity and higher levels of perceived skill precarity. Longer tenures reflect a long-term accretion of firm- and job-specific skills and knowledge which have a limited applicability to other organizations and positions.

Similar to the models for perceived job precarity, greater levels of job autonomy result in lower levels of perceived skill precarity. It is likely that those who have greater autonomy in their work are also very proficient at managing their careers and therefore are less likely to feel insecure about finding another job. Additionally, those who are more educated and employed in a professional occupation are likely to have more job autonomy, which possibly bolsters this effect to some degree.

Aside from perceived job and financial precarity, there are only two other significant variables from the uncertainty and conflict cluster of measures. Unlike the model for perceived job precarity in Chapter 4, in which the effect of being a part-time worker is insignificant, part-time workers experience less perceived skill precarity than full-time workers. There are likely two things going on here. First, part-time workers are more likely to be working in casual, unskilled jobs and feel more confident that they can get another one similar to their current position. Second, part-time workers are also more likely to change jobs frequently and therefore have some experience in looking for comparable work. The discrepant effects of being a part-time worker between this chapter and the previous one provide further evidence of the distinction between perceived job and skill precarity.

Finally, while this chapter explores the distinction between perceived job precarity and perceived skill precarity, there is one other dimension of subjective economic insecurity that is featured in the new economy. The goal of Chapter 6 is to provide a similar analytical treatment to the concept of perceived financial precarity, which captures the degree of economic anxiety surrounding workers' personal finances.

CHAPTER 6: PERCEIVED FINANCIAL PRECARITY DURING THE LATE POSTWAR ERA AND THE SPATIALIZATION SSA

6.1 Introduction

In contrast to the previous empirical chapters, which examine perceived job precarity and perceived skill precarity, this chapter uses General Social Survey (GSS) data to focus specifically on the third dimension of subjective economic insecurity, perceived financial precarity. Examining how this dimension has changed over time is important because it taps into fears that are not necessarily tied to respondents' employment. Chapter 2 discusses the shift in employment relations that occurred in recent decades and highlights the Great Risk Shift that has accompanied this transition. In addition to the tendency towards employment flexibility, earnings have also become more volatile (Hacker 2008), increasing the likelihood that workers will feel more uncertain about their general financial situation.

In fact, previous work has shown that workers have felt increasingly anxious about their personal finances over the course of the late postwar period (Kalleberg and Marsden 2012). However, this phenomenon has not been adequately examined post-Great Recession. Exploring what specifically drives these changes in perceived financial precarity and comparing the results to the predictors of perceived job and skill precarity will provide a more nuanced understanding of the insecurity that is quickly becoming an enduring feature of the new economy.

6.2 Research Questions and Hypotheses

Research on perceived financial precarity is relatively infrequent and tends to be somewhat atheoretical. Additionally, the majority of the research that examines the measures used in this chapter situates this topic in the literature on life satisfaction and happiness. Very few studies have viewed this concept as related to perceived employment precarity (Kalleberg and Marsden 2012), and none have accounted for as many factors of security, control, uncertainty, and conflict as this dissertation.

6.2.1 Structural and Time Factors

This section identifies the hypotheses concerning the relationship between structural/time factors and perceived financial precarity. In their examination of GSS data from 1977-2006, Kalleberg and Marsden (2012) found that the unemployment rate was positively related to the scale used in this chapter to measure perceived financial precarity. After expanding the analysis to 2012 and accounting for the impact of the Great Recession, one would expect the effect to remain significant and positive.

H_{6.1}: Higher levels of unemployment will be positively associated with perceived financial precarity.

The flexible turn index has been discussed extensively in both Chapter 4 and 5. As previously noted, both Fullerton and Wallace (2007) and my analysis in Chapter 4 found that the flexible turn had a positive effect on perceived job precarity. The results from the supplementary analyses from Chapter 4 substantiate this finding. Although perceived financial precarity may be tapping into a general economic anxiety not necessarily connected to employment, it is expected that the flexible turn in employment relations will have an effect similar to the one hypothesized for perceived job precarity.

H_{6.2}: Increases in the flexible turn index will be positively associated with perceived financial precarity.

Due to the historical distinctiveness of the Great Recession and the lack of studies that address perceived financial precarity as a dimension of subjective economic insecurity, there is an absence of theory that addresses this specific research topic. However, given the amount of media attention both the downturn and the subsequent recovery received, the expectation is that workers' anxiety concerning their finances will be magnified in the wake of the Great Recession (Garz 2013).

H_{6.3}: Respondents interviewed in the year 2010 will be more likely to experience greater levels of perceived financial precarity.¹¹

6.2.2 Security and Control

This section identifies characteristics of security and control and explores their potential relationship to perceived financial precarity. Since research on perceived financial precarity tends to be restricted to the impact of sociodemographic variables, the theoretical basis for this chapter's remaining hypotheses will be more abstract and informed by fewer empirical findings than those in Chapters 4 and 5. In an era where workers bear an increasing share of the economic risk (Hacker 2008; Smith 2001), it is reasonable to hypothesize that all characteristics that reflect security and control may be responsible for reducing perceived financial precarity. Although research has not been conducted on the effect that all of these factors may have on perceived financial precarity, it is expected that they will have negative effects.

There are several employment situations that are generally viewed as having a greater degree of security and control than others. For example, being employed in

¹¹ As in Chapters 4 and 5, the respondents from 2010 are being compared to other respondents that were interviewed in the spatialization SSA.

federal, state, or local government is generally seen as trading in more lucrative pay for a decreased likelihood of losing one's job. In their examination of GSS data from 1996 and 1998, Wilson and colleagues (Wilson et al. 2006; Wilson and Mossakowski 2009) found a negative effect of public sector employment on perceived job insecurity. In this case, the effect on perceived financial precarity is anticipated to be negative as well.

H_{6.4}: Being a government employee will be negatively associated with perceived financial precarity.

Also, aggregate levels of unionization have been found to decrease workers' sense of job precarity, and it is expected that an individual-level factor would have the same effect. In his paper on the effect of the new economy on the American Dream, Starks (2003) uses data from a survey of Indiana workers to evaluate how layoffs, eroding job quality, and an increasing reliance on nonstandard work arrangements have affected attitudes concerning economic opportunity.¹² Starks (2003) finds that belonging to a union decreases workers' pessimism about the American Dream, and being a union member is expected to have an analogous effect on perceived financial precarity.

H_{6.5}: Being a union member will be negatively associated with perceived financial precarity.

Additionally, the extant literature has consistently shown that longer job tenures translate into workers feeling more secure about their jobs (Pedulla 2013; Wilson et al. 2006; Wilson and Mossakowski 2009). Although these findings are tied to perceived job precarity, there is a strong likelihood that these effects will be the same for perceived financial precarity as workers with longer job tenures tend to be older and have higher

¹² Although Starks makes the case that Indiana can serve as an indicator for what may be happening across the nation, the use of a dataset comprised of only one state's workers is less than ideal as it is limited in terms of generalizability. This chapter tests the generalizability of these findings for the perceived financial precarity dimension of subjective economic insecurity by incorporating a similar measure for a nationally representative sample.

wages. An additional argument can be made for higher levels of job satisfaction, which was negatively associated with perceived job precarity in Chapter 4 and can be viewed as mitigating workers' feelings of financial precarity.

H_{6.6}: Longer job tenure will be negatively associated with perceived financial precarity.

H_{6.7}: Higher levels of job satisfaction will be negatively associated with perceived financial precarity.

The characteristic of security that stands out the most in the extant literature is locus of control, which I have argued is a parallel concept to job autonomy. In addition to the work on perceived job precarity, previous research on perceived financial precarity has found that workers with an internal locus of control are less likely to feel insecure about their personal finances (Prawitz et al. 2013; Sumarwan and Hira 1993).

Extrapolating these results to job autonomy, it is hypothesized that workers with higher levels of job autonomy will experience lower levels of perceived financial precarity.

H_{6.8}: Higher levels of job autonomy will be negatively associated with perceived financial precarity.

6.2.3 Uncertainty and Conflict

This section identifies characteristics of uncertainty and conflict and explores their potential relationship to perceived financial precarity. Starks (2003) finds that some of the most important predictors of these attitudes are having experience with layoffs and whether the respondent knows someone who has been laid off. If so, then the respondent is likely to feel that there is less economic opportunity than respondents who do not know someone who has been laid off. More specifically, Mau, Mewes, and Schöneck (2012) found in their examination of the European Social Survey that being previously unemployed increases subjective socioeconomic insecurity. These results lead to the

expectation that if a worker has experienced being laid off, it will increase his/her perceived financial precarity.

H_{6.9}: Having been laid off in the past year will be positively associated with perceived financial precarity.

Additionally, more workers being engaged in part-time work is one of the defining elements of the shift in employment relations. A clear example of this is McCall's (2001) conceptualization of casualized work, which includes part-time workers in addition to temporary and informal self-employment. McCall (2001) argues that the rise in casualized labor is connected to the deinstitutionalization of the labor market as a whole. Workers do not only witness this deinstitutionalization, they experience it. It can be argued that if they experience it in a direct way, such as holding part-time positions, they will feel more insecure about their finances. Also, given the extant research that has found a positive effect between part-time work and perceived job precarity, it is likely that it will have a similar effect on perceived financial precarity.

H_{6.10}: Being a part-time worker will be positively associated with perceived financial precarity.

In their examination of German workers, Körner, Silbereisen, and Cantner (2014) found that a higher load of work-related demands results in decreased levels of subjective well-being. Extrapolating these findings to factors characterized by work-related stress such as work-family conflict, role ambiguity, and role strain, one can anticipate that greater levels of these three factors would result in workers feeling that their financial situation is more precarious. These factors tap into the contradictions, uncertainty, and tension of workers' lives, both in and outside the workplace, making them important features to consider. Therefore:

H_{6.11}: Higher levels of work-family conflict will be positively associated with perceived financial precarity.

H_{6.12}: Higher levels of role ambiguity will be positively associated with perceived financial precarity.

H_{6.13}: Higher levels of role strain will be positively associated with perceived financial precarity.

In regards to the other dimensions of subjective economic insecurity, Anderson and Pontusson (2007) found positive associations between measures that capture perceived job and skill precarity. Kalleberg and Marsden (2012) also used Schmidt's (2000) measure of costly job loss derived from the perceived job and skill precarity variables and found that it had a positive effect on perceived financial precarity. More importantly, both Chapters 4 and 5 consistently found that the three dimensions are all positively related to each other. Given the findings of this and previous research, it is expected that:

H_{6.14}: Higher levels of perceived job precarity will be positively associated with perceived financial precarity.

H_{6.15}: Higher levels of perceived skill precarity will be positively associated with perceived financial precarity.

6.3 Sample Characteristics

The samples used in this chapter's analysis are drawn from the GSS cumulative file and the Quality of Working Life (QWL) module (Smith et al. 2013) and are restricted to respondents who indicated that they were currently employed at the time of the interview. They are also limited to cases with valid answers to the perceived financial precarity questions. All figures and descriptive statistics are drawn from the original data

Table 6.1 Descriptive Statistics for Dependent and Independent Variables, GSS: 1977-2012 and Bureau of Labor Statistics

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived financial precarity ($\alpha=0.60$)	-0.076	0.006
<i>Region</i>		
New England	0.053	0.004
Mid-Atlantic	0.149	0.005
South Atlantic	0.190	0.007
East North Central	0.177	0.006
West North Central	0.074	0.005
East South Central	0.063	0.005
West South Central	0.094	0.006
Mountain	0.060	0.004
Pacific	0.139	0.005
<i>Control Variables</i>		
Time	17.129	0.099
Female	0.494	0.004
White	0.804	0.005
Black	0.133	0.004
Other race	0.062	0.003
Age	39.050	0.123
Age squared	1684.804	10.164
Married	0.594	0.005
Years of education	13.439	0.030
Income (\ln)	8.562	0.028
Professional	0.176	0.004
<i>Annual Measures</i>		
Unemployment	6.401	0.018
Flexible turn index ($\alpha=0.82$)	0.081	0.007
<i>Subjective Economic Insecurity</i>		
Perceived job precarity	1.492	0.006
Perceived skill precarity	2.161	0.007

Note : Adjusted by survey sampling design.

file using listwise deletion for missing data, whereas the multivariate component of the analysis uses multiply imputed data. As discussed in earlier chapters, this is the most appropriate method for presenting this information so that it is reflective of the actual sample.

Table 6.2 Descriptive Statistics for Dependent and Independent Variables, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Mean	Std. Error
<i>Dependent Variable</i>		
Perceived financial precarity ($\alpha=0.60$)	-0.034	0.018
<i>Control Variables</i>		
2002	0.233	0.011
2006	0.461	0.015
2010	0.306	0.013
<i>Security and Control</i>		
Government employee	0.205	0.010
Union member	0.146	0.009
Job tenure	6.928	0.195
Job satisfaction	3.346	0.021
Job autonomy ($\alpha=0.72$)	-0.006	0.020
<i>Uncertainty and Conflict</i>		
Work-family conflict ($\alpha=0.61$)	0.005	0.020
Laid off	0.062	0.006
Part-time worker	0.192	0.010
Role ambiguity ($\alpha=0.66$)	0.027	0.018
Role strain	2.161	0.022
Perceived job precarity	1.638	0.019
Perceived skill precarity	2.168	0.021

Note : Adjusted by survey sampling design. The statistics for the regional and control variables are consistent with those from the cumulative file and are excluded for the sake of parsimony.

Just like in Chapters 4 and 5, there are two samples used in this chapter's analysis. The first sample is drawn from the cumulative file of the GSS. The total sample size for analyses using the imputed cumulative file is 25,795. As evidenced by the dramatic increase in sample sizes, this is a different sample than the ones found in previous chapters. As discussed in Chapter 3, this is largely because the measures for perceived financial precarity were asked in all years of the GSS, whereas the measures for perceived job and skill precarity were not asked in 1980, 1984, and 1987. Table 6.1 shows the means and standard deviations of the dependent and independent variables

from the cumulative sample, adjusted by survey sampling design. Even though the *N*s are in this case radically different from those found in Chapters 4 and 5 (15,754 and 15,744, respectively), the demographic statistics have remained essentially unchanged across chapters, which is likely a result of the large sample sizes in each cumulative analysis.

Also similar to Chapters 4 and 5, the second sample in this chapter's analysis uses the Quality of Working Life (QWL) module from the GSS, which was asked of respondents in 2002, 2006, and 2010. The total sample size for analyses using this sample is 3,760, compared to 3,893 for Chapter 4 and 3,869 for Chapter 5. Table 6.2 shows the means and standard errors of the module-specific dependent and independent variables from the QWL module sample, adjusted by survey sampling design. As is the case with the cumulative analysis, the descriptive statistics from the QWL are virtually identical to those from the previous two chapters.

6.4 Analytic Approach

The analytic strategy for this chapter corresponds to the three-pronged approach used in Chapters 4 and 5. First, I conduct a descriptive analysis using the sample from the cumulative data file. This descriptive analysis involves the presentation and discussion of figures that document trends in perceived financial precarity. Unlike the previous two chapters, a cross-tabulation of the outcome and race is not shown because the relationship is not statistically significant. The second and third phases of the analysis are multivariate in nature. In the second phase, models are constructed using the cumulative file of the GSS, examining longitudinal changes in perceived financial precarity. The third phase uses the GSS's QWL module to focus on perceived financial precarity in the spatialization SSA, taking advantage of a rich set of independent variables not accounted

for in previous research. Because the outcome is an index, the method used in the multivariate analysis of perceived financial precarity is generalized linear regression.

Similar to the other outcomes examined in this dissertation, the perceived financial precarity measure was not collected in the first four years of the GSS. Therefore, the second phase only includes data from 1977 to 2012. Model 1 tests the effects of the control variables: region, sex, race, age, marital status, education, and professional occupation. Model 2 tests the effect of the annual unemployment rate on perceived financial precarity, net of the control variables. Model 3 incorporates the flexible turn index ($\alpha=0.82$), accounting for the control variables and unemployment. Model 4 examines perceived job and skill precarity net of the control variables, unemployment, and the flexible turn index. As in Chapters 4 and 5, all models include regional dummy variables (South Atlantic is the reference category), but they are not shown for the sake of parsimony. The standard errors of Models 2-4, which contain annual measures, are clustered by year.

The third phase, which employs the QWL module, replicates the models from its counterpart in Chapter 5. Model 1 is built using the control variables listed in the above discussion of the cumulative analysis. The one exception is the time variable, which is substituted by dummy variables for year=2006 and year=2010. Model 2 incorporates characteristics of security and control from the QWL module: government employee, union member, job tenure, job satisfaction, and job autonomy ($\alpha=0.72$). Model 3 includes the uncertainty and conflict factors: work-family conflict ($\alpha=0.61$), laid off, part-time worker, role ambiguity ($\alpha=0.66$), role strain, perceived skill precarity, and perceived financial precarity ($\alpha=0.60$). Following the approach used in Chapters 4 and 5, annual

measures such as unemployment and the flexible turn index are excluded. Similar to the longitudinal phase of the analysis, all models include regional dummy variables, but the coefficients are not presented.

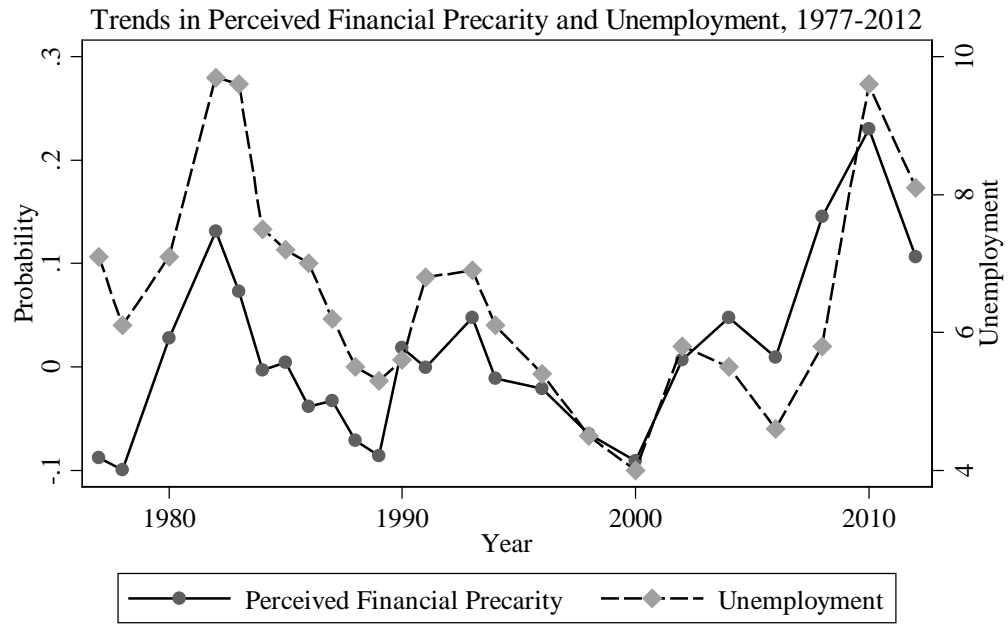
Similar to the strategy used in Chapters 4 and 5, all of the models in this chapter are weighted using the WTSSALL sampling weight. This weight accounts for the selection of one adult per household and the subsampling of initial non-respondents after 2004. Additionally, this analysis uses survey design variables provided by NORC with the SURVEY prefix command in Stata to account for changes in the sampling design over time. Missing cases were handled using the standard multiple imputation procedure for all of the models ($m=20$).

6.5 Findings

6.5.1 Descriptive Results

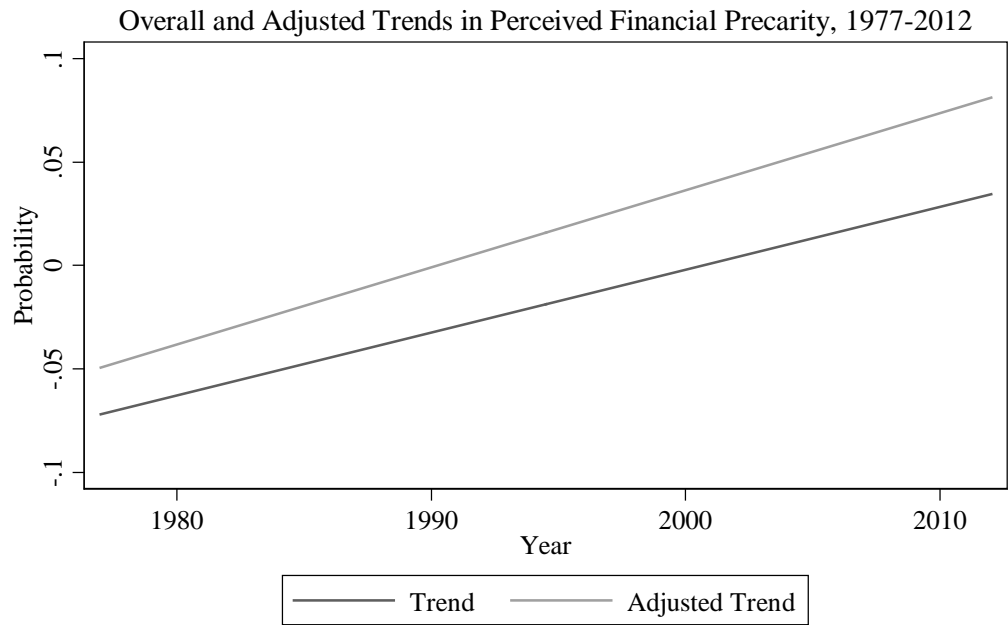
Figure 6.1 presents trends in the predicted values of perceived financial precarity and the national unemployment rate over time and is similar to Figures 4.1 and 5.1, which look at the relationship between unemployment and perceived job and skill precarity. This figure highlights how changes in workers' feelings of financial precarity tend to vary with the ups and downs of the national employment rate during the late postwar period. Taken in conjunction with the findings from Chapters 4 and 5, this evidence indicates that changes in all of the dimensions of subjective economic insecurity tend to be tied to fluctuations in more objective indicators of job stability. Specifically, in Figures 4.1, 5.1, and 6.1, the feelings of precarity match the trend of the unemployment rate. This draws attention to the parallels that exist between these dimensions, while the multivariate analyses of each chapter show that the similarities are not so clear cut.

Figure 6.1



Source: General Social Survey and BLS

Figure 6.2



Source: General Social Survey

Figure 6.2 presents the overall and adjusted trends in perceived financial precarity during the late postwar era, showing how the predicted values of perceived financial precarity trend positively when a linear line is fitted to the data. However, when controlling for the national unemployment rate, the upward trend in perceived financial precarity becomes distinctly more pronounced. Thus, this figure contributes to a growing body of evidence that certain forms of subjective economic insecurity have been steadily increasing over the course of this period.

6.5.2 Multivariate Results for Cumulative File

Table 6.3 presents the generalized linear model analyses of perceived financial precarity from 1977 to 2012. Model 1 shows the coefficients for the baseline control model. Time has a positive effect, meaning that perceived financial precarity has increased during the late postwar era. This bolsters the findings presented in the descriptive analysis, although the effect does not hold for all of the remaining models. Being female and being black also increase feelings of financial precarity, and these effects persist through all of the models. Age and its quadratic term are negative and significant, meaning that workers tend to feel increasingly more financially secure as they age. Unsurprisingly, workers who are married experience lower levels of perceived financial precarity, with this effect being the largest in the model. As expected, years of education, income, and being a professional are also associated with reduced feelings of financial precarity, findings which are consistent with previous research (Alston, Lowe, and Wrigley 1974).

Model 2 introduces unemployment into the model. Unemployment has a significant positive effect on perceived financial precarity, supporting $H_{6.1}$. This effect

Table 6.3 General Linear Model for Perceived Financial Precarity, GSS: 1977-2012

	Model 1		Model 2		Model 3		Model 4	
	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.
<i>Control Variables</i>								
Time	0.002	(0.001) **	0.003	(0.001) ***	0.001	(0.002)	0.001	(0.002)
Female	0.022	(0.010) *	0.024	(0.009) **	0.023	(0.008) **	0.025	(0.008) **
Black	0.119	(0.016) ***	0.115	(0.018) ***	0.114	(0.018) ***	0.090	(0.017) ***
Other race	0.007	(0.024)	0.015	(0.027)	0.016	(0.027)	-0.001	(0.028)
Age	0.031	(0.002) ***	0.032	(0.002) ***	0.032	(0.002) ***	0.029	(0.002) ***
Age squared	-0.336	(0.026) ***	-0.351	(0.027) ***	-0.349	(0.027) ***	-0.323	(0.027) ***
Married	-0.200	(0.010) ***	-0.203	(0.008) ***	-0.203	(0.008) ***	-0.197	(0.008) ***
Years of education	-0.035	(0.002) ***	-0.035	(0.003) ***	-0.035	(0.003) ***	-0.030	(0.002) ***
Income (ln)	-0.029	(0.002) ***	-0.028	(0.002) ***	-0.028	(0.002) ***	-0.027	(0.002) ***
Professional	-0.060	(0.013) ***	-0.064	(0.011) ***	-0.063	(0.011) ***	-0.056	(0.012) ***
<i>Annual Measures</i>								
Unemployment			0.042	(0.004) ***	0.044	(0.004) ***	0.038	(0.004) ***
Flexible turn index					0.046	(0.025)	0.031	(0.024)
<i>Subjective Economic Insecurity</i>								
Perceived job precarity							0.159	(0.009) ***
Perceived skill precarity							0.026	(0.010) **
Intercept	0.106		-0.218		-0.187		-0.480	
N	25,795		25,795		25,795		25,795	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. All coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

persists throughout the remaining models. All of the control variables from Model 1 retain their significance in Model 2, with no new effects coming into play. Model 3 tests the effect of the flexible turn index, which is insignificant. With the exception of time, the effect of which becomes insignificant, the other variables' coefficients are consistent with those in Model 2. Supplemental analyses reveal that when the time variable is dropped from the model, the flexible turn index became positive and significant. This issue has also presented itself in Chapters 4 and 5, changing the direction of the time effect in the former and rendering the time effect insignificant in the latter. Given the findings of the supplemental analysis, the support for $H_{6.2}$ is mixed.

Finally, Model 4 tests the effect of perceived job and skill precarity on perceived financial precarity, net of the control variables, unemployment, and the flexible turn index. Both perceived job and skill precarity increase perceived financial precarity, pointing once again to the interrelatedness of the dimensions of subjective economic insecurity. Perceived job precarity represents the second largest effect in Model 4. None of the other variables' effects changed with the introduction of these measures of subjective economic insecurity.

6.5.3 Multivariate Results for Quality of Working Life Module

Table 6.4 presents the generalized linear model for predicting perceived financial precarity during the spatialization SSA. Model 1 shows the coefficients for the control variables. Similar to the previous empirical chapters, the effect of time is captured using dummy variables for the years 2002, 2006, and 2010, with 2002 as the reference category. In this model, year=2006 is not significant and year=2010 is positive, meaning that workers' perceived financial precarity was higher in 2010 than in 2002. These effects persist throughout the remaining models and offer support for H_{6.3}. The insignificance of being female is unexpected given the effects in Table 6.3. Being black or identifying as other race is not significant versus being white in this model and all subsequent models. Age and its quadratic term are both significant, indicating that workers feel increasingly insecure until they reach mid-career, after which they begin to worry less about their financial security. Additionally, being married, years of education, and income have significant negative effects, reducing perceived financial precarity in the spatialization SSA. Unlike the longitudinal models in the previous section, being a professional is not significant in this and all subsequent models.

Table 6.4 General Linear Model for Perceived Financial Precarity, GSS: Quality of Working Life Module, 2002, 2006, 2010

	Model 1		Model 2		Model 4	
	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.
<i>Control Variables</i>						
2006	-0.025	(0.032)	-0.052	(0.031)	-0.047	(0.031)
2010	0.226	(0.037) ***	0.199	(0.035) ***	0.174	(0.035) ***
Female	0.027	(0.026)	0.020	(0.026)	0.029	(0.027)
Black	0.035	(0.043)	0.020	(0.040)	0.033	(0.039)
Other race	-0.007	(0.049)	-0.022	(0.046)	-0.036	(0.045)
Age	0.029	(0.006) ***	0.036	(0.006) ***	0.032	(0.006) ***
Age squared	-0.285	(0.067) ***	-0.315	(0.066) ***	-0.000	(0.000) ***
Married	-0.232	(0.026) ***	-0.198	(0.025) ***	-0.275	(0.067) ***
Years of education	-0.034	(0.005) ***	-0.027	(0.005) ***	-0.028	(0.005) ***
Income (ln)	-0.035	(0.003) ***	-0.028	(0.003) ***	-0.027	(0.003) ***
Professional	-0.080	(0.036)	-0.043	(0.035)	-0.053	(0.035)
<i>Security and Control</i>						
Government employee			-0.004	(0.034)	0.013	(0.033)
Union member			-0.090	(0.046) *	-0.103	(0.046) *
Job tenure			-0.011	(0.002) ***	-0.010	(0.002) ***
Job satisfaction			-0.154	(0.019) ***	-0.111	(0.020) ***
Job autonomy			-0.123	(0.022) ***	-0.092	(0.023) ***
<i>Uncertainty and Conflict</i>						
Work-family conflict					0.053	(0.017) **
Laid off					0.266	(0.053) ***
Part-time worker					0.108	(0.040) **
Role ambiguity					0.039	(0.021)
Role strain					0.036	(0.018) *
Perceived job precarity					0.071	(0.023) **
Perceived skill precarity					0.044	(0.019) *
Intercept	0.202		0.408		0.009	
N	3,760		3,760		3,760	

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (2-tailed). Standard errors are in parentheses. Coefficients are adjusted for sampling design. Multiple imputations for missing cases in the control variables are used ($m=20$). Controls for region are included in all models, but the coefficients are not shown. Coefficients and standard errors for Age squared are multiplied by 1,000.

Model 2 tests the effects of various indicators of security and control on perceived financial precarity. In terms of control variables, all of the effects are consistent with those from Model 1. Mostly, factors associated with security and control tend to reduce workers' sense of financial precarity. Surprisingly, being a government employee is not a significant predictor of perceived financial precarity, which does not meet the expectations of H_{6.4}. Workers who are union members tend to feel less insecure in their personal finances, as are those with longer job tenures, higher levels of job satisfaction, and greater job autonomy. These significant effects persist throughout the remaining models, offering support for H_{6.5}, H_{6.6}, H_{6.7}, and H_{6.8}.

Model 3 brings in the uncertainty and conflict measures. Generally, the factors of uncertainty and conflict are associated with greater levels of perceived financial precarity. While the work-family conflict index, laid off, part-time worker, and the role strain index are all positive and significant, laid off and part-time worker represent the largest effects out of this block of variables. These findings provide evidence in support of H_{6.9}, H_{6.10}, H_{6.11}, and H_{6.13}, but the lack of significance for role ambiguity offers no support for H_{6.12}. Finally, both perceived job and perceived skill precarity are both positively associated with higher levels of perceived financial precarity. Taken in conjunction with the findings from the cumulative sample, these results support H_{6.14} and H_{6.15}.

6.6 Discussion

This chapter examines trends in perceived financial precarity for workers in the United States throughout the late postwar era and in the emerging period of spatialization, identifying several factors that are important for understanding these changes. Specifically, this chapter accounts for factors that capture security, control, uncertainty,

and conflict. By using both the cumulative file and the QWL module of the GSS, this chapter has situated its investigation of perceived financial precarity in the spatialization SSA within a broader context of postindustrial transformation, working towards developing a more comprehensive understanding of perceived financial precarity and its determinants.

The descriptive analysis of this chapter shows that perceived financial precarity has increased dramatically over the course of the late postwar period. When adjusting for the unemployment rate, this positive trend becomes more pronounced. Although this is consistent with the trend in perceived job precarity revealed in Chapter 4, it is in contrast to the trend in perceived skill precarity discussed in Chapter 5. While the analyses of perceived job and financial precarity reflect a growing insecurity among workers, the decline in perceived skill precarity suggests that the nature of this insecurity is complex.

The multivariate analysis provides further insight concerning the increase in perceived financial precarity and how it is distinct from perceived job precarity. Similar to the analysis of perceived skill precarity in Chapter 5, the sample using the cumulative file of the GSS found that unemployment contributed to greater perceived financial precarity in the main models but not the flexible turn index. So while unemployment is consistently positive for each dimension of subjective economic insecurity during the late postwar period, the flexible turn index only affects perceived job precarity. However, as noted above, this lack of significance is likely due to the presence of the time variable which is highly correlated with the index. Supplemental analyses reveal that when time is removed from the model, the flexible turn index is positive and significant for all three outcomes, which presents an interesting juxtaposition with the findings of the descriptive

analyses. The best explanation for this inconsistency is that the social contract between employers and workers is still changing, and perceived skill precarity is more in flux than the other dimensions of subjective economic insecurity.

Turning to the sample using the QWL module of the GSS, the effect of year=2010 on perceived financial precarity compared to year=2002 is notable. This means that workers felt more insecure about their personal finances after the Great Recession than during the rest of the spatialization SSA. Taken in light of the findings from Chapter 4 and 5, this period heightened workers' concern about their personal finances and the transferability of their skills. However, workers were not more concerned about their job precarity than before the Great Recession. Interestingly, being female or non-white has no significant effect on workers' perceived financial precarity. This is in contrast to the cumulative model, in which being female and black were positive and significant. These findings indicate that all workers, regardless of sex or race, were feeling more financially insecure during the spatialization SSA. The difference between the cumulative and QWL models is similar to the models for perceived skill precarity. It is also telling that being married has some of the largest effects in reducing perceived financial precarity across all of the models. Although marriage brings someone else's debts into one's life, clearly the potential for additional income and emotional support that results from the partnership represent a psychological asset that serves to allay workers' feelings of financial insecurity. Additionally, the negative effect of being a professional from the cumulative model is nowhere to be found in the QWL models. This indicates that being a professional no longer provides a buffer against feeling financially insecure like it once did.

Unlike the analysis for Chapter 5, the results of the models that incorporate the characteristics of security, control, uncertainty, and conflict provide more consistent results. Generally, the significant factors of security and control have a negative effect on perceived financial precarity while the significant factors of uncertainty and conflict have a positive effect. While this pattern is consistent with that found in the perceived job precarity models, the effects do differ. The major difference for the security and control variables is that being a government employee is not significant in the perceived financial precarity models whereas being a union member has a significant negative effect. The most likely explanation for this discrepancy is the nature of government employment versus that of private sector union employment. While both situations are generally associated with a vague notion of security, government jobs are generally seen as sacrificing pay for job security, which may explain why the effect is not significant for perceived financial precarity. Union jobs, on the other hand, are typically viewed as having due process as well as good pay. However, since unionization has been in a state of persistent decline for several decades, workers may feel that the power of unions to guarantee their jobs is waning, hence the insignificant effect for perceived job precarity.

This chapter explores the upward trend in perceived financial precarity and its determinants, further highlighting the distinction between the three dimensions of subjective economic insecurity. Chapter 7, the final chapter of this dissertation, synthesizes the results of this and the previous empirical chapters, summarizes the limitations of this research, details the implications of this study, and suggests avenues for future scholarship on this topic.

CHAPTER 7: CONCLUSIONS

7.1 Introduction

At the beginning of this dissertation, I identified two major goals. The first goal was to improve upon previous conceptualizations of subjective economic insecurity and establish a coherent framework for understanding its dimensions. The second goal was to understand how subjective economic insecurity changed during the late postwar period, particularly during the era of spatialization, and identify what caused this change. This chapter summarizes the main findings of this dissertation, discusses the implications and limitations of this investigation, and suggests potential avenues for future research.

7.2 Main Findings

As noted above, the first major goal of this dissertation was to develop a sound conceptualization of subjective economic insecurity upon which future research may build. In Chapter 2, I identified three dimensions of subjective economic insecurity: perceived job precarity, perceived skill precarity, and perceived financial precarity. In addition to developing these dimensions in a theoretical sense, the findings of the descriptive and multivariate analyses in this dissertation affirm this conceptualization, particularly the distinction between perceived job and skill precarity. The second goal, understanding how subjective economic insecurity changed during the late postwar period and identifying what caused this change, was achieved by analyzing the cumulative GSS data file in three empirical chapters which addressed each dimension of subjective economic insecurity. Table 7.1 presents the hypothesized effects laid out in the front end of each empirical chapter, as well as the corresponding results.

Table 7.1 Hypotheses and Results for Empirical Chapters

<i>Hypothesis</i>	<i>Variable</i>	<i>Perceived job precarity</i>		<i>Perceived skill precarity</i>		<i>Perceived financial precarity</i>	
		Expected	Result	Expected	Result	Expected	Result
1	Unemployment	+	+	+	+	+	+
2	Flexible turn	+	+	+	+	+	+
3	Year=2010	+	ns	+	+	+	+
4	Government employee	-	-	+	+	-	ns
5	Union member	-	ns	+	+	-	-
6	Job tenure	-	-	+	+	-	-
7	Job satisfaction	-	-	+	+	-	-
8	Job autonomy	-	-	-	-	-	-
9	Laid off	+	+	-	ns	+	+
10	Part-time worker	+	ns	-	-	+	+
11	Work-family conflict	+	+	+	ns	+	+
12	Role ambiguity	+	+	+	+	+	ns
13	Role strain	+	+	+	ns	+	+
14	Perceived skill/job precarity	+	+	+	+	+	+
15	Perceived financial/skill precarity	+	+	+	+	+	+

Note: + = positive effect, - = negative effect, ns = not significant

Chapter 4 examines perceived job precarity and found that perceived job precarity increased sharply during this time, with no significant difference being found for workers surveyed during the spatialization SSA or post-Great Recession. The sample using the cumulative file of the GSS points to the significant role of macro-structural factors (e.g., unemployment and the flexible turn in employment relations) in increasing workers' perceptions of job precarity, which is consistent with previous research and hypotheses H_{4.1} and H_{4.2} (Fullerton and Wallace 2007; Kalleberg and Marsden 2012; Schmidt 2000). Perceived skill and financial precarity are also positively associated with perceived job precarity in the cumulative file. Turning to the sample using the QWL module of the GSS, several important findings emerge. Often it is not only the significant findings that tell a story, but the non-significant findings as well. Notably, the year=2010 variable is not significant, indicating that the effect of the Great Recession on workers' perceived job precarity is either non-existent or waned into unimportance by 2010 (H_{4.3}). In contrast

to the longitudinal analysis, years of education and being a professional are not significant in the spatialization analysis, which means that these are no longer the buffer against feelings of insecurity that they used to be. Generally speaking, the statistically significant factors associated with security and control (e.g., government employee, job tenure, job satisfaction, and job autonomy) have negative effects on perceived job precarity (supporting H_{4.4}, H_{4.6}, H_{4.7}, and H_{4.8}). On the other hand, those associated with uncertainty and conflict (e.g., laid off in past year, role ambiguity, role strain, perceived skill precarity, and perceived financial precarity) have positive effects (supporting H_{4.9}, H_{4.12}, H_{4.13}, H_{4.14}, and H_{4.15}).

Chapter 5, on the other hand, examines perceived skill precarity during the late postwar era and the spatialization SSA, finding that it declined slightly during this period when adjusting for the unemployment rate. The sample using the cumulative file of the GSS shows how unemployment significantly contributes to greater levels of perceived skill precarity (supporting H_{5.1}), but the flexible turn index was not significant.¹³ Unsurprisingly, the effects of perceived job and financial precarity are positive and significant, just like perceived skill and financial precarity were in the corresponding models for Chapter 4. Turning to the sample using the QWL module of the GSS, the first thing that stands out is that the effects of the time variables persist throughout all three models. Year=2006 is negative and significant and year=2010 is positive and significant (supporting H_{5.3}), which means that the Great Recession had a major impact on workers' perceived skill precarity, which was declining prior to its onset. Additionally, the significant effects of being female and non-white from the cumulative analysis evaporate

¹³ Given the high correlation between time and the flexible turn index, the insignificance is not surprising. Supplemental analyses show that when time is removed from the model, the flexible turn index is positive and significant. These results provide some support for H_{5.2}.

when focusing exclusively on data from the spatialization SSA, which means that women and minorities do not feel any more or less insecure about their skills than men and whites in the contemporary era. When the characteristics of security, control, uncertainty, and conflict are entered into the model, the effects are mixed. With the exception of job satisfaction's insignificance and job autonomy's negative effect, all of the security and control measures contribute to greater levels of perceived skill precarity (supporting H_{5.4}, H_{5.5}, and H_{5.6}). For the uncertainty and conflict measures, being a part-time worker reduces perceived skill precarity (supporting H_{5.10}) while role ambiguity, perceived job precarity, and perceived financial precarity increase it (supporting H_{5.12}, H_{5.14}, and H_{5.15}).

Chapter 6 examines perceived financial precarity during the late postwar era and the spatialization SSA, finding that it increased sharply during this period when adjusting for the unemployment rate. The sample using the cumulative file of the GSS found that unemployment contributed to greater perceived financial precarity (supporting H_{6.1}) but not the flexible turn index.¹⁴ Additionally, both perceived job and skill precarity had positive effects. Turning to the sample using the QWL module of the GSS, the first thing that stands out is that the effect of year=2010 is positive and significant (supporting H_{6.3}), indicating that workers felt more insecure about their personal finances after the Great Recession than during the rest of the spatialization SSA. The significant effects of being female and non-white from the cumulative analysis are not found in the QWL analysis, which means that all workers, regardless of sex or race, were feeling more financially insecure during the spatialization SSA. Moreover, the negative effect of being a

¹⁴ However, this lack of significance may be due to the presence of the time variable which, as noted in the discussion of Chapter 5, is highly correlated with the index. A supplemental analysis reveals that when time is removed from the model, the flexible turn index is positive and significant. These results provide some support for H_{6.2}.

professional from the cumulative model is nowhere to be found in the QWL models. This indicates that being a professional no longer protects workers against feeling financially insecure like it once did. Generally, the statistically significant factors associated with security and control have negative effects on perceived financial precarity (supporting H_{6.5}, H_{6.6}, H_{6.7}, and H_{6.8}), whereas those associated with uncertainty and conflict have positive effects (supporting H_{6.9}, H_{6.10}, H_{6.11}, H_{6.13}, H_{6.14}, and H_{6.15}). The only insignificant variables in these two clusters are government employee and role ambiguity.

When comparing the results across all three empirical chapters, several substantive findings emerge. The positive effects of perceived job, skill, and financial precarity in all of the cumulative and QWL models indicate that while these factors are conceptually distinct, they are all empirically interrelated. However, as the correlations in Chapter 3 reveal, this relationship is not exactly clear cut. Future research should continue striving to disentangle this relationship using other sources of data and a wider variety of measures. For instance, asking workers to assess the applicability of their skills to other positions is one way to capture perceived skill precarity in a more specific way.

The consistent positive effects of unemployment in every empirical chapter's cumulative analysis align with previous research (Anderson and Pontusson 2007). So while unemployment is consistently positive for each dimension of subjective economic insecurity during the late postwar period, the flexible turn index only affects perceived job precarity. However, the strong positive correlation between the flexible turn index and time complicates the insignificance of the index for both perceived skill and financial precarity. Supplementary analyses show that when time variables are dropped from the cumulative analysis, the flexible turn in employment relations contributes to greater

levels of precarity for all three outcomes. This suggests that not only has this flexible turn been steadily unfolding over time, but that it contributes to increased precarity for workers in every aspect. As described in Chapter 1, greater feelings of insecurity can have very detrimental effects, especially consequences for health.

Related to the effects of time and the flexible turn in employment relations, the findings of this dissertation show that market fluctuations and economic downturns have important consequences for subjective economic insecurity. The impact of the Great Recession is represented by the year=2010 variable in the QWL models for each outcome. This period heightened workers' concern about their personal finances and the transferability of their skills. However, even though unemployment levels were still high as a result of the downturn in 2010, workers were not more concerned about their job precarity than before the Great Recession. These findings speak to the distinctiveness of the Great Recession and suggest that workers will feel more vulnerable during times of economic crisis both generally and when faced with the possibility of seeking a new position.

When results between the cumulative and QWL models are compared, some important themes stand out. First, being female in the cumulative models has no effect on perceived job precarity, a negative effect on perceived skill precarity, and a positive effect on perceived financial precarity. So while female workers are not any more or less concerned about keeping their jobs than men, they are actually less concerned about being able to secure another position. In Chapter 5, I theorized that this was likely due to the role of women as the primary caregivers in society, which places certain demands upon them that make them more likely to occupy flexible, low status jobs (Hochschild

1997; Hochschild and Machung 2003). It may also be due to the lack of skill differentiation between many traditionally female jobs (e.g., sales and clerical workers). These jobs are also likely to be easier to obtain in an economy that is characterized by flexibility. Notably, the QWL models for all outcomes show that being female has no effect. A similar phenomenon occurs for workers that identify as black or other race. This means that in the spatialization SSA, women and minorities generally do not feel any more or less insecure than men and whites in the contemporary era.

Another important difference between the cumulative and QWL models for each outcome is the change in effects of education and being a professional. For nearly every model in the cumulative analysis of each chapter, being educated or a professional reduces workers' insecurity. However, these effects are much more mixed in the QWL analyses. As noted above, these factors are no longer the buffer against feelings of job precarity that they used to be. Additionally, the negative effect for being a professional on perceived financial precarity goes away in the spatialization SSA, but the effect of education persists. Perceived skill precarity is the only outcome in which both effects remain across the two analyses. These findings suggest that education still plays a role in allaying workers' fears in regards to finding another position and being financially stable. However, this instills little confidence for educated workers looking for jobs during an economic downturn. Furthermore, being a professional is no longer a safeguard against perceived job and financial precarity. This means that while professionals may generally fare better when looking for a new position, they are no more secure than other workers in the course of their daily work experiences or in evaluating their personal finances.

Focusing on the QWL analysis, there are some interesting variations across the three dimensions of subjective economic insecurity. The most conspicuous divergence is found between the effects of government employee, union member, and job tenure. For instance, being a government employee has a negative effect on perceived job precarity but a positive one for perceived skill precarity. Being a union member also has a positive effect on perceived skill precarity, but a negative effect on perceived financial precarity. Job tenure has similar effects, being negatively associated with perceived job and financial precarity, but positively associated with perceived skill precarity. While these three factors reflect security and control, that does not translate into a universal reduction in perceived precarity. This is largely a result of the changing employment relationship that has characterized the exploration and consolidation phases of the spatialization SSA. For government employees, the explanation lies in the notion that government employment comes with a great deal of job security. However, when government employees consider their prospects of finding an equivalent job elsewhere, the picture is much bleaker. The same explanation applies for being a union member. While unions are still able to afford many protections to workers who fall under their purview, reducing feelings of financial precarity, unionization is in decline and workers recognize the difficulty in finding another job that offers those types of protections. Job tenure represents a common thread that ties together these results. Government workers and union members tend to experience longer tenures. Longer tenures reflect a long-term accretion of firm- and job-specific skills and knowledge which have a limited applicability to other organizations and positions.

The connection between this dissertation's macro-level theoretical approach and its micro-level analyses is represented in the dramatically changing structure of society which influences workers' attitudes and behaviors. The differences in the results between the three dimensions of subjective economic security not only highlight how the dimensions are distinct from each other, but they also reflect the impact of this changing structure. Therefore, any examination of subjective economic insecurity needs to be situated in the broader context of changing employment relations and consider the processes and effects that respectively shape and result from that context.

7.3 Implications

The findings of this dissertation have meaningful implications for researchers, policymakers, and workers. This dissertation contributes to the extant literature in several key ways. First, it updates and extends the existing scholarship by examining data on U.S. workers during the entirety of the late postwar period, an era that encompasses the most severe economic downturn since the Great Depression. Second, it brings conceptual clarity to an ambiguous topic by identifying three dimensions of subjective economic insecurity: perceived job precarity, perceived skill precarity, and perceived financial precarity. Third, it is the only study that uses SSA theory to explain changes in these dimensions with structural and temporal factors. The macro-level SSA theory described in Chapter 2 has a clear linkage with micro-level phenomena such as subjective economic insecurity because it establishes a structural context that workers experience and interact with on a regular basis. By connecting temporal and structural factors to perceptions, this dissertation offers a unique and more complete look at each of the three dimensions. Fourth, I account for factors of security, control, uncertainty, and conflict in the

spatialization SSA that are not addressed by existing research. Finally, unlike previous studies of perceived job insecurity that use list-wise deletion, I employ multiple imputation techniques to handle missing data, producing better point estimates.

The extant research in this area has placed an undue focus on objective measures of economic stability, which also happens to be what policymakers tend to concentrate on. As noted in Chapter 1, examining workers' subjective economic insecurity is important because it affects their health and social relationships. In the United States, risk in all spheres has been shifted away from institutions and individualized (Beck 1992; Hacker 2008; Smith 2001). Namely, workers are individually responsible for financing higher education and many different types of job training, supplementing paltry social security benefits, and shopping for as well as purchasing health insurance if their employer does not offer coverage. This has serious ramifications for a society in which people's economic and therefore physical wellbeing is tied to their employment situation. Feelings of economic insecurity lead to vulnerability among workers, and this makes them less likely to fight for higher wages and crucial benefits such as health insurance and pensions.

The findings of this dissertation show that workers are feeling increasingly insecure about their jobs and their personal finances. Since the flexible turn in employment relations has been found to drive the increase in perceived job precarity, there are many things that policymakers can do to ease these feelings of insecurity and the negative consequences of those feelings. Broadly speaking, we need to halt the Great Risk Shift that is afflicting workers in the United States (Hacker 2008). Instituting policies that alleviate income inequality, bolster entitlements, and provide support to

prepare workers for the information economy are general areas that should be given priority. More specific policies could also be used to directly target workers' perceptions of insecurity. For instance, it has been found that job security guarantees and other policies protecting due process reduce perceived job precarity (Anderson and Pontusson 2007; Bryson, Cappellari, and Lucifora 2009). Additionally, in their examination of 15 OECD countries, Anderson and Pontusson (2007) found that government spending on programs geared towards developing workers' employability reduces perceived skill precarity.

Beyond these basic recommendations, a choice will have to be made between trying to preserve a quickly eroding arrangement based on job security and embracing a boundaryless career model that requires individuals to manage their careers over the course of many different occupations. While the findings of this dissertation and the extant research on this topic indicate that this transition is already underway, the rest of society has failed to catch up. Even with the sweeping reforms enacted by the Affordable Care and Patient Protection Act, healthcare in the United States continues to be tied to employment and many people find their access to healthcare as well as their ability to pay for it to be tenuous. Additionally, student loan debt has reached unprecedented levels as workers continue to assume risk by using loans from which the federal government profits substantially. Until the risk is shifted away from individuals and back to institutions, the boundaryless career model is untenable.

7.4 Limitations

Despite its many contributions to the literature, this dissertation also has some limitations. This section identifies these limitations and the next section discusses how

future research may address some of them. One of the most significant limitations of this research is its inability to track how the three dimensions of subjective economic insecurity have changed over the course of *individuals'* careers. Having access to this type of longitudinal panel data would be very advantageous. For instance, Hsiao (2005:146) argues that panel data offers several benefits over cross-sectional designs, including more accurate point estimates and a “greater capacity for capturing the complexity of human behavior.” Additionally, Chapters 4 and 5 rely on singular measures for perceived job and skill precarity. While both of these limitations are features of the cumulative GSS and the Quality of Working Life module, other research on this topic has utilized multiple measures to operationalize these dimensions to great effect. It is unclear if the trends in these dimensions would change if panel data, different measures, or a combination of measures were used.

Additionally, this dissertation presents several questions concerning direction of causality that are not answered in a completely satisfactory way. Namely, the persistent significance of the other outcomes in each empirical chapter’s analysis does little to disentangle the relationships between these measures, making cause and effect difficult to identify. The inclusion of job satisfaction as a predictor of subjective economic insecurity represents another gray area. While a case can be made for using job satisfaction as a predictor of subjective economic insecurity, a just as plausible argument can be made for the opposite scenario, as most of the extant research treats it as an outcome. These are issues that should be further explored by future research.

Furthermore, although this dissertation makes an argument for connecting the explanations offered by SSA theory to changes in the dimensions of subjective economic

insecurity, it accounts for very few structural factors and those that are included are very limited in depth. The correlation between the national unemployment rate and all three dimensions of subjective economic insecurity demonstrate the need to develop a more nuanced view of the relationship between these perceptions and macrostructural factors.

Finally, this dissertation focuses on the subjective economic insecurity of *workers*. While the nature of the perceived job and skill precarity measures necessitates the exclusion of other respondents, the perceived financial precarity scale does not. While I excluded non-workers from the analysis in Chapter 6 so that the samples would be comparable between all three analyses, more can be done to plumb the depths of this general measure of economic anxiety. Specifically, there may be non-work factors that shape peoples' expectations regarding their personal finances that are unaccounted for in an analysis rooted in the work and occupations literature.

7.5 Future Research

Building upon this dissertation's conceptualization of subjective economic insecurity, future investigations should continue to explore the dimensions of perceived job precarity, perceived skill precarity, and perceived financial precarity. The latter two dimensions are particularly important in the ever-changing context of the new economy and the aftermath of the Great Recession. More effort should be directed towards refining this conceptualization and operationalizing these dimensions in a more satisfying way. Moreover, future work should account for political and structural factors, going beyond this dissertation's analysis and using multi-level modeling to incorporate state-level measures, which would provide a more comprehensive view as to what drives these changes in subjective economic insecurity. For instance, a more precise specification of

the flexible turn index based on state-level data might yield better results for this measure.

While this dissertation examines subjective economic insecurity primarily as a period-based phenomenon, future research should also consider these questions in terms of cohort effects. For instance, there are many respondents from the 1970s that had their formative work experiences in the 1940s. These experiences likely shape workers' attitudes in profound ways, but they are not captured by this research because the variables used in my analyses are tied to a specific time frame. By accounting for cohort effects, future work has the potential to round out the explanatory framework for the patterns uncovered by this dissertation by allowing for a more direct comparison between the segmentation and spatialization SSAs.

Finally, scholars should also take a closer look at the relationship between objective measures of job stability and subjective economic insecurity. While more individualistic measures such as pay increases and promotions are undoubtedly related to workers' perceptions of precarity in the occupational system, turnover rates and other firm-level measures will likely shape perceptions of precarity as well. Considering structural and contextual-level factors is going to be increasingly important as the employment relationship continues its swing towards flexibility and reduced worker attachment. It will be interesting to see if, as expected, the "boundaryless career" will become more common and subjective perceptions will adjust to the new circumstances, or whether feelings of insecurity will continue to rise in response to such substantial changes.

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