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Abstract

Those with disabilities have persistently lower wages than the non-disabled. To improve labor market outcomes of the disabled, Congress passed the Americans with Disabilities Act (ADA). Immediately following the enactment of the ADA, the wages of people with disabilities decreased. However, the longer term wage consequences of the ADA have not been studied. Interest in longer term post-ADA wage trends of people with disabilities derives from the weakening of the ADA's employment provisions by the Supreme Court. This paper uses variation in state disability laws and data from twenty years of the March Current Population Survey to determine the short and longer term impact of the ADA on the log weekly wages of people with disabilities. Using data from the March Current Population Survey, this paper shows that the ADA led to a longer term increase in the weekly wages of those with disabilities. This finding is sensitive to the composition of the sample. Furthermore, this paper presents evidence that the wage effect of the ADA varies according to level of education.

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I. INTRODUCTION

Those with disabilities have persistently lower wages and higher dependency on government transfers than the non-disabled (Acemoglu and Angrist 2001; Bound and Burkhauser 1999). For example, in 1990, disabled adults earned real wages that were 19 percent less than those of the non-disabled.[1] In an effort to reverse these trends and ballooning expenditures on federal entitlement programs for the disabled, in 1990, Congress enacted the Americans with Disabilities Act (ADA).[2] Congress assumed that the lower economic status of those with disabilities was due to reduced access to employment opportunities. Title I of the ADA was intended to improve the labor market outcomes of people with disabilities by creating equal employment opportunities. However, immediately following the ADA's enactment, opponents of the ADA suggested that the legislation would increase the costs of employing the disabled; thereby, worsening their labor market outcomes (Oi 1991; Olson 1997). While a few studies present evidence of the ADA's short-term wage effects on those with disabilities, to my knowledge, there has not been a study that evaluates the "longer term" wage consequences of the ADA.

Previous research nearly unanimously agrees that Title I of the Americans with Disabilities Act(ADA) resulted in lower labor force participation and employment rates of people with disabilities (Deleire 2000; Acemoglu and Angrist 2001; Kruse and Schur 2002; Baldwin and Johnson 2000). There is, however, a lack of consensus regarding the wage effects of the ADA. One study finds that the ADA did not alter the earnings of disabled men (DeLeire 2000). And another study finds that the ADA decreased the earnings of disabled men(Acemoglu and Angrist 2001). Additionally, the majority of the literature regarding the wage effects of the ADA does not evaluate the ADA's impact past the late 1990s. Since the ADA has been significantly and

[1] DeLeire (2000).
[2] Leonard (1991).

incrementally weakened by Supreme Court rulings between 1999 and 2008, the interpretation of the employment provisions of the ADA has evolved since the 1990s which may have caused the wage effects of the Act to change over time. This paper presents new evidence on the medium and longer term impact of the ADA on the weekly wages of the disabled by exploiting two sources of variation: pre-ADA state disability legal regimes and the changing interpretation of the ADA caused by Supreme Court decisions.

The empirical analysis in this paper evaluates the wage outcomes of people with disabilities using data from the March Current Population Survey(CPS) for 1988-2010. These data are useful for the purposes of this paper because the CPS has an income supplement that identifies people with disabilities on a yearly basis. To investigate the longer term impact of the ADA on the log weekly wages of those with disabilities, this paper employs two empirical strategies. First, a difference-in-differences estimator is used to compare the log weekly wages of people with disabilities before and after the signing of the ADA across three state groups. Second, a difference-in-differences-in-differences estimator is used to compare the log weekly wages of people with disabilities to the log weekly wages of the non-disabled before and after the signing of the ADA across three state groups. The paper separates the years following the passage of the ADA into five intervals based on Supreme Court rulings and amendments that altered Title I of the ADA.[3]

I exploit variation in pre-ADA state disability legislation to identify the mechanism by which each of the changes to the ADA impacted the wages of the disabled. I follow Jolls and Prescott's empirical strategy of separating states into three categories based on their pre-ADA state disability legislation. States that had legislation providing disability anti-discrimination coverage and reasonable accommodation provisions are termed "Quasi-ADA" states because laws in these states closely resemble the ADA. States that provided disability anti-discrimination coverage but no provisions for reasonable accommodations are termed "Anti-discrimination"

[3] The rulings and amendments are discussed in detail in Section II.

states. States without legislation prohibiting discrimination against those with disabilities in private labor markets are termed "No Law" states. The combination of pre-ADA state disability legislation and changes in the interpretation of Title I of the ADA are assumed to be exogenous. Results from the difference-in-differences estimation show that there was no short-term change in the log weekly wages of disabled workers in "Anti-discrimination" and "No Law" states relative to the disabled residing in "Quasi-ADA" states. However, in the medium run, the log weekly wages of disabled workers increased in "Anti-discrimination" states and remained unchanged in "No Law" states. Disabled workers without a high school diploma experienced a significant increase in log weekly wages while disabled workers with, at least one year of college education, did not experience an ADA-induced change in wages. Results from the difference-in-differences-in-differences alters the ADA's estimated impact on wages and show that the ADA did not alter the weekly wages of the disabled relative to the non-disabled.

The first paper that explicitly disaggregates the ADA's labor market effects on those with disabilities based on pre-ADA state laws is Jolls and Prescott(2004). Jolls and Prescott also use the CPS to compare labor market outcomes of the disabled before and after the ADA across three state groups. They find significant negative effects on weeks worked and labor force participation. However, the present paper differs from Jolls and Prescott's. First, the wage effect of the ADA is estimated in lieu of the ADA's impact on the weeks worked and labor force participation of the disabled. Second, the post-ADA time frame is extended to the year 2010. Third, the post-ADA year intervals are constructed according to key changes to the interpretation of the ADA. Fourth, people without disabilities are included in part of this analysis.

The paper proceeds as follows. Section II provides background on Title I of the ADA, six Supreme Court decisions that altered the interpretation of Title I and the ADAAA. Section III presents the theoretical and empirical framework used to examine and interpret the wage effect of the ADA. I discuss the data used in Section IV. Section V includes the main empirical results of

the effects of the ADA on the log weekly wages of those with disabilities. The paper concludes in Section VI.

II. LEGISLATIVE BACKGROUND

Most states had a disability anti-discrimination statute before the ADA. Table I lists these along with the year of enactment. In Table I, the following information is presented for each state: the year the legislation was enacted, the statutory number of the legislation, the presence of a reasonable accommodation mandate in the statute, and its pre-ADA disability legislation code used in the regression analysis below.[4] This paper follows Jolls and Prescott's coding of Arkansas as a state without pre-ADA disability legislation. Although Beegle and Stock(2003) codes Arkansas as having pre-ADA disability legislation, the legislation did not cover disability discrimination by private sector employers.[5]

As shown in Table I, there is considerable variation across states with respect to the requirements of each state's disability anti-discrimination statute. This variation is one aspect of my identification strategy as it allows for both the identification of the mandate by which changes in the ADA impacted labor market outcomes among the disabled and the quantification of these effects.

Anti-discrimination provisions for people with disabilities were developed from earlier civil rights legislation that covered traits such as race or gender. In many states, the predecessors to state disability statutes were "White Cane" provisions and laws passed in the 1960s and 1970s that granted those with visual disabilities and other physical disabilities protection in public sector employment. Following the adoption of the White Cane laws, most states amended existing anti-discrimination laws to include coverage for those with disabilities and expanded employment

[4] For example, in 1985, Arizona passed an anti-discrimination statute requiring reasonable accommodations for the disabled and is coded as a "Quasi-ADA" state.
[5] See Jolls and Prescott(2004) for a detailed discussion of state coding differences between their paper and Beegle and Stock(2003).

protection for those with disabilities to include the private sector.[6] Some state laws grant plaintiffs the right to seek damages for mental anguish, embarrassment and foregone interest. Almost all states with disability statutes by the mid 1980s "offered comparable or better remedies than those provided at the federal level [by the Rehabilitation Act, 1973] for disabled persons with claims of discrimination by employers."[7]

Although the ADA went into effect after state disability legislation, the ADA did not render state laws obsolete because the ADA provides a floor for disability discrimination coverage. That is, in states that offer state disability laws with greater protection than the ADA, entities must comply with the most stringent law in their respective state.[8] For example, the ADA required businesses with 15 or more employees to comply with the law in 1994. However, 34 states required such businesses to comply with state disability laws well before 1994. In this instance, state law is not preempted by federal law.

In light of the "patchwork" approach to disability discrimination protection prior to 1990, the intent of the Americans with Disabilities Act(ADA) was "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."[9] The ADA was signed into law in July, 1990 and went into effect in July, 1992. Title I of the ADA contains the employment provisions of the law and initially covered all employers with at least 25 employees. In 1994, coverage was extended to employers with 15 employees or more. Title I of the ADA consists of two parts. First, the ADA prohibits discrimination in hiring, firing, wages and promotion against "qualified individuals with a disability."[10] Second, it requires employers to provide reasonable accommodations to otherwise qualified disabled individuals unless doing so would cause an undue burden. A reasonable accommodation is a change in the work environment that does not substantively alter the job but results in an equal employment

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[6] See Beegle and Stock(2003) for a detailed discussion of state disability statutes.
[7] Beegle and Stock (2003).
[8] Burgdorf (1995).
[9] ADA (1990).
[10] ADA (1990).

opportunity for a person with a disability. Examples include purchasing special equipment for disabled employees or permitting flexible work hours.

The ADA enforces its mandates through the Equal Employment Opportunity Commission(EEOC) and the courts. Those with disabilities who feel they have been discriminated against can file a charge with the EEOC. The charge will be investigated and the EEOC will either resolve the charge or give permission for the charging party to sue at his or her own expense. The ADA defines disability as "a physical or mental impairment that substantially limits one or more of the major life activities of… an individual; a record of such an impairment; or being regarded as having such an impairment."[11]

When Congress drafted the bill, it purposefully used vague language for the definition of disability and the definition of reasonable accommodation. This was done to cover individuals with a wide variety of physical and mental conditions under purview of the law.[12] However, the broad language regarding the definition of disability and reasonable accommodation has led employers and disabled individuals to seek clarification on these points from the Supreme Court.

Table II documents Supreme Court decisions used in this paper to group the years following the ADA into intervals. An individual seeking a favorable Supreme Court decision under the employment provisions of the ADA must meet four criteria to demonstrate a prima facie case of disability discrimination. First, the plaintiff must either show that the condition in question meets the ADA's definition of disability, or she has a record of such a condition, or the employer mistakenly regarded the plaintiff as having such a condition. Second, the plaintiff must show she is qualified for the position by proving that she can perform essential functions of the position. Third, the accommodation requested by the plaintiff must be reasonable. Fourth, the plaintiff must show that the negative action taken by the employer was done on the basis of the plaintiff's disability. However, the majority of Supreme Court rulings on Title I of the ADA have

[11] ADA (1990).
[12] Lee (2003).

focused on the first criteria(establishing a person has, or is regarded as having, a disability) because this is the threshold issue that must be found in favor of the plaintiff before other issues can be ruled on. In most ADA cases brought before the Supreme Court involving employment provisions, the Court, due to its narrow interpretation of the definition of disability, has held that the plaintiff's condition was not a disability under the ADA.[13] Since each plaintiff has not been considered disabled, he or she was not entitled to the protection of the ADA; thus the Court did not render a decision on the other three criteria.

The first three Supreme Court decisions regarding the ADA used in this paper are known as the *Sutton* trilogy. The decisions were handed down on June 22, 1999 and had similar effects on the interpretation of the ADA. The first case, *Sutton v. United Airlines, Inc*., involved two sisters who were severely near-sighted and applied to be pilots with United Airlines; however, due to their myopia, they did not meet the uncorrected vision standard of United Airlines pilots. As a result, they were not hired by United Airlines. Since the sisters' vision was fully corrected with mitigating measures, the Supreme Court decided that they did not meet the ADA's definition of disability. The Court held that "[a] 'disability' exists only where an impairment 'substantially limits' a major life activity, not where it 'might,' 'could,' or 'would' be substantially limiting if mitigating measures were not taken."[14] The second case, *Murphy v. United Parcel Service, Inc.,* involved a plaintiff who was hired to be a commercial driver for UPS but was subsequently fired for having hypertension.[15] The Court held that when the plaintiff was compliant with his medication, he was not substantially limited in any major lift activity; thus, the plaintiff's condition did not meet the ADA's definition of disability. In the third case, *Albertson's, Inc. v. Kirkingberg*, the plaintiff did not meet the standards of the Department of Transportation for a commercial driver's license due to monocular vision. Since the plaintiff was able to correct his

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[13] Klein (2010).
[14] *Sutton v. United Airlines, Inc.,* 527 U.S. 471 (1991).
[15] The Department of Transportation requires that "the driver of a commercial motor vehicle in interstate commerce have no current clinical diagnosis of high blood pressure."

monocular vision using subconscious adjustments to the manner in which he perceived peripheral objects, the Court held Kirkingberg did not meet the ADA's definition of disability. By holding that any condition that can be effectively mitigated by device, medication or another method, is not a disability under the ADA, the Court substantially narrowed the population that could seek relief under the ADA; thereby, altering the interpretation of the ADA after June 1999.

The next major Supreme Court decision regarding the ADA was *Toyota, Inc. v. Williams* (2002). In *Williams*, the plaintiff had carpal tunnel syndrome and sued her employer for failing to accommodate her condition. The Court held that the plaintiff was not disabled, because for an impairment to be considered a disability, it must prevent or severely restrict an "individual from doing activities that are of central importance to most people's daily lives."[16] Additionally, the Court said the impairment must be permanent or long-term. Similar to the *Sutton* trilogy, *Williams* altered the interpretation of the ADA by restricting the number of people covered by the ADA.

In 2002, the Supreme Court decided its first case regarding the reasonable accommodation mandate of the ADA, *U.S. Airways, Inc. v. Barnett*. In deciding whether a job transfer was a reasonable accommodation when the company's seniority policy would award the position to another employee, the Court said that an accommodation that conflicts with a company's seniority system is not reasonable but an employee can still present evidence of special circumstances that make reasonable exceptions to a company's seniority rule. This case, by determining that accommodations which interfere with a neutral company policy are not reasonable, restricted the definition of reasonable accommodation.

The final case decided by the Supreme Court regarding the ADA was *Chevron, U.S.A, Inc. v. Echazabal* (2002). In *Echazabal*, the Supreme Court held that an employer can refuse to employ a person with a disability if the task of the job poses too great a risk to the individual's health due to disability. This case altered the interpretation of the ADA by reducing the cost to

[16] *Toyota, Inc. v. Williams* (2002).

employers of not hiring a disabled individual and eliminating the possibility of being required to provide reasonable accommodation the disabled individual would have needed.

In response to the impact of the above cases on the interpretation of the ADA, in 2008, Congress passed the Americans with Disabilities Act Amendments Act (ADAAA), which became effective January 2009. Since the Supreme Court, contrary to the intent of Congress, significantly narrowed the definition of disability in the ADA, the ADAAA expanded the protection of the ADA by altering the way courts interpret the definition of disability. Specifically, the ADAAA does the following: requires the term "substantially limited" to be inclusive of less limiting impairments than the Supreme Court case *Toyota* allows, provides a non-exhaustive list of "major life activities" covered by the ADA, expands "major life activities" to include major bodily functions, expands the "regarded as" category to include everyone with a known impairment, does not require entities to provide accommodations to those who fall under the "regarded as" prong, and prohibits consideration of mitigating measures when determining whether an impairment is a disability. While the ADAAA increases the population covered by the ADA, which may increase the cost associated with hiring a person with a disability, it also decreases the population that are entitled to reasonable accommodations which may lower the cost of employing those with disabilities.

III. THEORETICAL AND EMPIRICAL FRAMEWORK

The theoretical consequences of the ADA on the labor market have been extensively modeled and will be briefly summarized here.[17] There are three aspects of the ADA that pertain to the labor market: non-discrimination in hiring and firing, non-discrimination in wages, and mandates requiring employer-provided accommodations. Regulations outlawing disability-based discrimination in hiring and firing impose costs on firms due to an increased risk of lawsuits. However, non-discrimination in hiring a disabled worker provides a subsidy to hiring the disabled

[17] See Acemoglu and Angrist (2001) for a detailed model of the employment effects of the ADA.

because not hiring the disabled person increases the risk of a costly lawsuit. These two factors indicate that the ADA should be associated with increased demand for, and increased employment of, disabled workers.

On the other hand, non-discrimination in firing increases the cost of hiring a disabled worker because the risk of a lawsuit associated with firing the disabled worker is higher. This would likely depress the demand for, and employment of, those with disabilities. Therefore, firms weigh the perceived costs of hiring a person with a disability with the perceived cost of not hiring a person with a disability. If, as a result of the ADA, the perceived penalties for not hiring disabled workers are relatively larger than the discounted cost of firing disabled workers, then the net effect of the ADA would be increased demand for, and employment of, the disabled.

Provisions requiring non-discrimination in wages of the disabled may increase the relative cost of disabled workers if either the productivity of disabled workers is lower than that of non-disabled workers or disabled workers are costlier to employ due to the accommodation mandate. Assuming an adequate supply of non-disabled workers, if disabled workers are less productive than non-disabled workers, the mandate of non-discrimination in wages would suggest that demand for disabled workers would fall because firms choose to employ cheaper (non-disabled) labor at the prevailing wage. As long as the elasticity of substitution between the two types of labor is positive, employment of the disabled would fall as firms substitute non-disabled for disabled workers.[18]

Regulations requiring firms to provide reasonable accommodations also increase the cost of hiring disabled employees. This provision requires firms to pay the wages of the disabled and to provide accommodations that the firm may not have provided in the absence of legislation, which results in a decrease in the relative demand for disabled workers. Since the ADA prohibits firms from cutting the wages of disabled employees in response to increased worker costs, the

[18] This result would also hold in the case of labor capital decisions. Depending on the technology used by and relative input prices of firms, firms may substitute away from disabled labor towards increased use of capital in response to an increase in relative wages.

reasonable accommodation mandate further depresses demand for disabled workers.[19] However, this downward pressure on demand for disabled labor may be partially offset by an increase in the supply of disabled workers induced to become labor force participants by the reasonable accommodation requirement. This offset would occur only if the equal pay mandate is *not* binding. If the equal pay mandate is binding(i.e. if disabled workers are less productive than non-disabled workers), the increased labor supply of disabled workers does not offset the depressed demand for the disabled because the wages of the disabled cannot fall.

Thus, the theoretical predictions of the ADA's consequences imply that, in states where the ADA is an innovation, the ADA should be associated with increased wages for disabled workers. However, the impact of the ADA is likely to vary across states, based on pre-existing state disability statutes, and across time as the interpretation of the ADA evolves. Since state disability statutes have one or more of the provisions of the ADA, the preceding theoretical framework also holds for state disability laws and will not be recapitulated.

The empirical framework of this paper separates states into three groups according to the mandates of their pre-ADA state disability laws. In states with pre-ADA laws that include disability anti-discrimination and reasonable accommodation mandates("Quasi-ADA" states), the ADA was not an innovation and did not impose new costs on firms. In "Quasi-ADA" states, the ADA should not be associated with a change in the wages of the disabled. However, in states with pre-ADA state laws that include only disability anti-discrimination mandates("Anti-discrimination" states), the ADA's impact on wages depends on the anti-discrimination provisions of the state statutes. If the statutes include an equal pay mandate, then the ADA would not alter the wages of people with disabilities in these states. However, if the statutes exclude an equal pay mandate, then the ADA should increase the weekly wages of disabled workers. Lastly,

[19] The extent to which employer-provided accommodations decrease the employment of those with disabilities depends on the cost of accommodation.

in states without pre-ADA disability statutes("No Law" states), the ADA is a complete innovation and would likely increase the wages of disabled workers.

While the preceding relationship between ADA and the three categories of states most likely holds in the years immediately following the ADA's enactment, this relationship would change as the Supreme Court altered the interpretation of the ADA. Supreme Court rulings regarding the ADA fall into one of two categories: rulings regarding the definition of disability, which alters who is covered by the ADA, and rulings regarding what is considered a reasonable accommodation. Since the ADA provides a floor for disability coverage, Supreme Court rulings that restrict the definition of disability weaken the ADA and would cause states to rely on their own disability statutes when determining who qualifies for disability legislation coverage; thereby, nullifying relationship between the ADA and wages of the disabled in states with pre-ADA disability statues. However, the restricted definition of disability would likely decrease the wages the disabled in "No Law" states relative to "Quasi-ADA" states because fewer people are covered by the equal pay mandate.

Supreme Court rulings that restrict the definition of reasonable accommodations should expand employers' resources since employers must provide fewer reasonable accommodations. If employers use these increased resources to invest in the firm and if that investment takes the form of higher wages for disabled workers, then the wages of disabled workers in "Anti-discrimination" states and "No Law" states will increase relative to the wages of the disabled in "Quasi-ADA" states. However, if the investment takes any other form, the wages of the disabled in "No Law" states and in "Anti-discrimination" states should be unchanged relative to the wages of the disabled in "Quasi-ADA" states.

The ADA Amendments Act(ADAAA), which increased the stringency of the ADA by expanding the population covered by the law, should cause the wages of the disabled in "No Law" states and "Anti-discrimination" states to increase relative to "Quasi-ADA" states because a

greater percentage of the disabled in "Anti-discrimination" and "No Law" states are covered by the ADA's equal pay mandate.

The empirical analysis in this paper is designed to assess the wage effects of the ADA on disabled workers. Following the theoretical framework above, I estimate the short and longer term wage effects of the ADA for disabled workers using a difference-in-differences approach. I begin by estimating the following baseline equation:

$$(1) \quad Y_{ist} = \alpha_1 (D9092_t * LLP_s) + \beta_1 (D9092_t * NLP_s) + \alpha_2(D9399_t * LLP_s) + \beta_2(D9399_t * NLP_s) + \alpha_3(D0002_t * LLP_s) + \beta_3 (D0002_t * NLP_s) + \alpha_4(D0308_t * LLP_s) + \beta_4(D0308_t * NLP_s) + \alpha_5(D0910_t * LLP_s) + \beta_5(D0910_t * NLP_s) + v_t + \pi_s + \varepsilon_{ist}$$

where Y_{ist} indicates the log weekly wages of individual i in state s in year t. v_t is a set of year dummy variables, π_s is a set of state indicator variables, LLP_s is a dummy variable equal to 1 for states in the "Anti-discrimination" state group as they offered Limited Legal Protection prior to the ADA's enactment, and NLP_s is a dummy variable equal to 1 for states in the "No Law" state group as they offered No Legal Protection prior to the ADA. LLP_s and NLP_s capture the state group main effects.

There are five post-ADA year intervals and each interval has its own dummy variable. $D9092_t$ equals 1 for observations from years 1990-1992. This interval corresponds to the transition years after the ADA passed but before the Act went into effect. $D9399_t$ equals 1 for observations from 1993-1999, which are the years prior to Supreme Court decisions altering the ADA. $D0002_t$ equals 1 for observations from 2000-2002. This interval coincides with the years following the *Sutton* trilogy of cases which narrowed the ADA's definition of disability. $D0308_t$ equals 1 for observations from the years 2003-2008, which are the years after the Supreme Court restricted the definition of reasonable accommodations. $D0910_t$ equals 1 for observations from

the years 2009-2010. This interval corresponds to the years after the ADA Amendments Act was passed. The comparison time interval is 1988-1989.

With this specification, I evaluate the wage effects of an evolving interpretation of the ADA on the disabled by using a difference-in-differences procedure that compares changes in outcomes among disabled people in pre and post-ADA eras across states with different pre-ADA disability regimes. In the baseline equation, the coefficients of interest are the α's and β's as they are the difference-in-differences estimators. The α's measure the change between the pre-ADA interval and each post-ADA interval in the log weekly wages of people with disabilities in "Anti-discrimination" states relative to the same change in "Quasi-ADA" states. Since "Anti-discrimination" states have pre-ADA laws that provide disability anti-discrimination coverage, the α's represent the wage effects of the ADA that operate through the reasonable accommodations mandate. The β's measure the change between the pre-ADA interval and each post-ADA interval in the log weekly wages of people with disabilities in "No Law" states relative to the same change in "Quasi-ADA" states and represents wage effect of the ADA that operate through both anti-discrimination coverage and reasonable accommodations mandate.

The key assumptions underlying this strategy are three-fold. First, people with disabilities in "No Law" states are equivalent to the disabled in "Quasi-ADA" and "Anti-discrimination" states; therefore, they are an adequate control group. Second, in the absence of the ADA, the evolution of log weekly wages of the disabled would have been the same across the state groups. Third, the ADA did not alter the labor force participation of the disabled. If the ADA did impact the labor market behavior of the disabled, estimates of the ADA's wage effects using the baseline model would suffer from selection bias.

Estimates from five extensions to the baseline model are reported. First, standard demographic controls (age, gender, minority status, educational attainment and marital status) and state economic variables are added to equation (1). Second, equation (1) and equation (1) plus controls are estimated for the sample excluding observations from the years 1990-1992. Third,

equation (1) and equation (1) plus controls are estimated for the sample excluding observations from years 1990-1995. Results from these subsamples are estimated because Thompkins(2011) finds that the ADA altered the labor force participation and weeks worked by those with disabilities in the years 1990-1992 and Acemoglu and Angrist(2001) find labor market effects of the ADA for 1992-1995. For equation (1) to yield unbiased estimates of the ADA's wage effects, it must be the case that the ADA did not alter the labor market behavior of the disabled; hence, the estimated wage effects of the ADA using a sample that excludes the years 1990-1995 is likely to be unbiased. Fourth, results from equation (1) and equation (1) plus controls are estimated for the two subsamples stratified on education. It is likely that the wage effects of the ADA varies based on level of education. Finally, state trends are added to equation (1) plus controls. Linear time trends allow for the possibility that changes in log weekly wages can be explained by extrapolating different trends for each state.

Next, I estimate the following equation using the disabled + non-disabled sample:

(2) $$Y_{ist} = \alpha_1(D9399_t * LLP_s) + \beta_1(D9399_t * NLP_s) + \alpha_2(D0002_t * LLP_s) + \beta_2(D0002_t * NLP_s) + \alpha_3(D0308_t * LLP_s) + \beta_3(D0308_t * NLP_s) + \alpha_4(D0910_t * LLP_s) + \beta_4(D0910_t * NLP_s) + \delta_1(D9399_t * Disabled_i * LLP_s) + \gamma_1(D9399_t * NLP_s) + \delta_2(D0002_t * Disabled_i * LLP_s) + \gamma_2(D0002_t * Disabled_i * NLP_s) + \delta_3(D0308_t * Disabled_i * LLP_s) + \gamma_3(D0308_t * Disabled_i * NLP_s) + \delta_4(D0910_t * Disabled_i * LLP_s) + \gamma_4(D0910_t * Disabled_i * NLP_s) + \tau_1 Disabled_i + \tau_2(Disabled_i * LLP_s) + \tau_3(Disabled_i * NLP_s) + \tau_4(D9399_t * Disabled_i) + \tau_5(D0002_t * Disabled_i) + \tau_6(D0308_t * Disabled_i) + \tau_7(D0910_t * Disabled_i) + \tau_1 v_t + \pi_s + \varepsilon_{ist}$$

where the variables are defined as above. $Disabled_i$ is an indicator variable which equals 1 for those with disabilities.

With this specification, I evaluate the wage effects of an evolving interpretation of the ADA on the disabled by using a difference-in-differences-in-differences(DDD) estimation that compares changes in outcomes among disabled workers compared to changes among non-

disabled workers in pre and post-ADA eras across states with different pre-ADA disability regimes. In equation (2), the coefficients of interest are the δ's and γ's as they are the DDD estimators. The δ's measure the change between the pre-ADA interval and each post-ADA interval in the log weekly wages of people with disabilities versus the wages of people without disabilities in "Anti-discrimination" states relative to the same change in "Quasi-ADA" states. The γ's measure the change between the pre-ADA interval and each post-ADA interval in the wages of people with disabilities versus the wages of people without disabilities in "No Law" states relative to the same change in "Quasi-ADA" states.

The key assumptions underlying this strategy are three-fold. First, people with disabilities in "No Law" states are equivalent to the disabled in "Quasi-ADA" and "Anti-discrimination" states; therefore, they are an adequate control group. Second, in the absence of the ADA, the evolution of the difference in the log weekly wages of the disabled and the log weekly wages of the non-disabled would have been the same across the state groups. Third, the ADA did not alter the labor force participation of the disabled or the non-disabled. Fourth, people with disabilities are equivalent to people without disabilities in each state group; therefore, the non-disabled are an adequate control group.

A possible source of concern for the empirical strategy is, while "Quasi-ADA" and "Anti-discrimination" states are approximately equal in size and are geographically balanced, "No Law" states are comprised of three states located in the southern region of the country. If, between pre- and post-ADA periods, an unobserved shock occurred in the southern region of the country that impacted people with disabilities or if states with higher proportions of people with disabilities experienced a labor market shock, the difference-in-differences and DDD estimators would capture the impact of these unobserved shocks in addition to any labor market effect

caused by the ADA.[20] However, Jolls and Prescott(2004) use a matching strategy to show that there were no trends affecting only southern states that would bias results using "No Law" states.

IV. DATA AND DESCRIPTIVE STATISTICS

This sample is drawn from the 1988-2010 March CPS and is limited to those ages 18-59 with positive earnings. Disabled workers are identified in the March CPS Income Supplement by the following question: "Does [respondent] have a health problem which prevents him/her from working or which limits the kind or amount of work he/she can do?" Although this question has been used by other researchers working on disability issues, using this measure of disability is subject to a few caveats. First, the definition of disability used in the CPS, which focuses on work disabilities, differs from the ADA's definition, which focuses on functional limitations. As a result, this paper may capture the labor market outcomes of those not covered by the ADA. However, employment trends over time for populations defined by work disabilities are similar to employment trends for populations defined by impairments.[21] Thus, the labor market outcomes of disabled respondents included in the CPS data has enough overlap with the labor market outcomes of those with disabilities covered by the ADA to make studying labor market outcomes of the disabled using the CPS informative. Second, and perhaps more damaging, the ADA's enactment could have changed the composition of the group identifying themselves as disabled on surveys.[22] However, other researchers working on disability issues have found no evidence of composition bias in the CPS (Jolls and Prescott 2004; Acemoglu and Angrist 2001; Beegle and Stock 2003).

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[20] The "No Law" state group has the greatest percentage of people with disabilities of the three state groups.
[21] Burkhauser, et. al. (2002).
[22] See Kruse and Schur (2003) for a description of the routes by which the ADA's passage could alter the composition of people answering 'yes' to disability questions on surveys.

The variables in the Income Supplement refer to the previous calendar year so the sample has data for years 1987-2009. The disability status question in the supplement refers to the respondents' status in the previous year. The tables and figures refer to estimates by survey year.

Descriptive statistics organized by survey year intervals are reported in Table III and descriptive statistics stratified on survey year intervals and state groups are reported in Table IV. Nearly 10 percent of each state's population reports a disability limiting work with the percentage increasing slightly from 1988-1989 to 2009-2010 (7 percent versus 8 percent.) This finding is comparable to the disability rate found in Acemoglu and Angrist (2001), who also use CPS data. However, this disability rate is below the figures found when using data such as the Census or SIPP.[23] Interestingly, as can be seen in Table IV, "No Law" states have the highest average state disability rates while "Quasi-ADA" states have the lowest.

Across time comparisons in Table III reveal that the weekly wages of disabled workers increased from $450 in 1988-1989 to $575 in 2009-2010. The average weeks worked increased from 43 in 1988-1989 to 45 in 2009-2010. At the same time, educational attainment of people with disabilities improved markedly. The percentage of people with disabilities with at least a high school diploma increased from 40 percent in 1988-1989 to 88 percent in 2009-2010. High school graduation rates are higher for the disabled in "Quasi-ADA" and "Anti-discrimination" states relative to the disabled in "No Law" states. Other demographic characteristics of the disabled do not appear to have changed much between 1988 and 2010.

Table IV shows that "Quasi-ADA" states and "Anti-discrimination" states alternate reporting the highest weekly wages and weeks worked of the disabled. Table IV also allows the comparison of the strength of state economies across state groups. For all three state groups, the state unemployment rate rose between 1988-1989 and 2009-2010 with "Anti-discrimination" and "No Law" states experiencing the highest unemployment rate in 2009-2010 of 10 percent.

[23] See DeLeire (2000), Beagle and Stock (2003), and Haveman and Wolfe (1990) for various measures of disability prevalence found in different samples.

V. RESULTS

Table V reports ordinary least squares estimates of the wage effects of the ADA using the Disabled Only sample. Columns 1, 3 and 5 report estimates of the baseline equation for the full sample, the sample without years 1990-1992 and the sample without 1990-1995, respectively. Columns 2, 4 and 6 report estimates of the baseline equation plus controls for the full sample, the sample without years 1990-1992 and the sample without 1990-1995, respectively. The parameters of interest are a set of state group * year interval interactions, with 1988-1989 as the base period. The interaction terms report the change in relative log weekly wages of workers with disabilities.

The results in column 1 suggests that, relative to "Quasi-ADA" states, the log weekly wages of the disabled in "Anti-discrimination" and "No Law" states increase for each time interval following the passage of the ADA, with one exception: "No Law" states in 2000-2002. However, all of the estimates, except for one, are insignificant. Column 2, which presents estimates of equation (1) plus controls, shows that three of the five estimates for "No Law" states are negative and an increased number of the interaction variables are estimated with precision. Since these estimates are found using the full sample, they are likely to suffer from selection bias and should not be used to draw conclusions regarding the wage effect of the ADA. Hence, estimates from two subsamples are presented.

Columns 3 and 4 present estimates from the sample which excludes years 1990-1992. Similar to results from the full sample, results reported in column 3 suggest a mostly positive relationship between log wages and the interaction variables. Disabled workers in "No Law" states in 2009-2010 experienced the largest increase in log weekly wages; however, only the estimate for "Anti-discrimination" states in 2003-2008 is significant and the point estimate for this variable is significant for all specifications. As shown in column 4, the inclusion of controls changes the estimates along two dimensions. First, an increased number of estimates for "No

Law" states become negative. Second, the estimates of interest are slightly more precise. Columns 5 and 6 present estimates using the sample sans 1990-1995. The estimates reported in these columns are quite similar to the estimates reported in columns 3 and 4.

The estimates is Table V suggest, in the short run, the ADA did not significantly increase the log weekly wages of disabled workers in "Anti-discrimination" states relative to "Quasi-ADA" states, while the longer run relative wage effects of the ADA for "Anti-discrimination" states vacillates between a significant 11 and 20 percent increase in weekly wages. In contrast, estimates for "No Law" states suggest the ADA did not significantly alter the relative earnings of disabled workers in the short run and may have depressed the relative wages of disabled workers in these states.

A few trends emerge from Table V regardless of the sample used. First, people with disabilities in "No Law" states in 2000-2002 experienced a decline in their wages, relative to "Quasi-ADA" states. This finding is logical since this time interval corresponds to the restriction of the ADA's definition of disability and "No Law" states did not have state statutes covering the disabled. If fewer people are considered disabled by the ADA, then fewer people are protected by the ADA's equal pay mandate which would result in falling relative wages of the disabled in "No Law" states. Second, all estimates for "Anti-discrimination" states are positive and estimated with precision in models with controls. This indicates that, in terms of log weekly wages, the ADA's equal pay mandate most benefitted disabled workers in states with a partial disability anti-discrimination regime. Third, the estimates for "Anti-discrimination" and "No Law" states in 2009-2010 are positive, which suggests that the Americans with Disabilities Act Amendments Act increased the relative wages of those with disabilities.

Table VI reports estimates of equation (1) and equation (1) plus controls with the inclusion of state time trends and is organized in the same manner as Table V. Specifications that include time trends report larger point estimates for the interaction variables, fewer negative estimates for "No Law" states in each time interval and increased precision for estimates. The

results show that regardless of the sample used, disabled workers in "Anti-discrimination" did not experience significant change in log weekly wages relative to those in "Quasi-ADA" states. However, the log weekly wages of the disabled in "No Law" states did significantly increase relative to disabled workers in "Quasi-ADA" states for every time interval after 1999 in all but two specifications. Additionally, the point estimate for "No Law" states becomes larger over time. These findings suggest that the ADA significantly improved the log weekly wages of disabled workers in states without a pre-ADA disability regime and this improvement increased over time. However, such findings are quite different from the results derived from equations without state trends. One possible explanation for this difference is found in Thompkins(2011), which finds that including state trends in equations such as equation (1) yield significant, negative effects of the ADA. Since equations such as equation (1) yield a significant labor force participation effect of the ADA, it is likely that the estimated wage effect of the ADA using this specification is going to be biased due to the estimated selection effect of the ADA.

While the above results are informative, it may be the case that the wage effect of the ADA varies by level of education. Table VII reports estimates of equation (1) and equation (1) plus controls for the two subsamples stratified on education. Panel A reports estimates of the baseline equation, while Panel B reports estimates of the baseline equation plus controls. People with disabilities are divided into the following three categories: those without a high school diploma, those with a high school diploma, and those who enrolled in at least one year of college. The odd columns report results from the sample *sans* 1990-1992 and the even columns report results using the sample which excludes 1990-1995. The parameters of interest are a set of state group * year interval interactions, with 1988-1989 as the base period. The interaction terms report the change in relative log weekly wages of workers with disabilities.

Regardless of the years included in the sample, results suggests that the disabled without a high school diploma in "Anti-discrimination" states experienced significant increases in weekly wages in 1993-1999, 2003-2009 and 2009-2010 and those without a diploma in "No Law" states

saw a significant increase in their wages in 2009-2010. Results for high school graduates show a significant increase in wages for those in "No Law" states for each interval. Additionally, estimates for high school graduates in "Anti-discrimination" states are negative for each interval, but are not significantly different from zero. Disabled workers with at least one year of college in "Anti-discrimination" and "No Law" states experience a statistically insignificant decline in relative weekly wages for all year intervals.

Although these estimates are imprecisely measured, the relationship between log weekly wages and the variables of interest is quite different across level of education and demonstrates the import of estimating separate models. The results suggest that those with disabilities who did not attend college benefitted more from the equal pay mandate of the ADA than those with some college education. This is a somewhat surprising result that deserves further attention. Although the ADA did not alter labor market participation rates of the disabled beyond 1995, perhaps the ADA induced sectoral shifts among those with disabilities who have less education. The ADA may have caused those without a high school diploma to switch jobs, in such a way that their new jobs were higher paying. Alternatively, it could be that those with disabilities who have at least one year of college are more likely to be employed in positions where they were paid on par with non-disabled workers prior to the ADA causing the equal pay mandate of the ADA to be inconsequential. Since those with less education are more likely to be employed in jobs that require physical labor, it would follow that, prior to the ADA, disabled workers in these jobs were less productive than non-disabled workers causing firms to pay disabled workers less than non-disabled workers. In this instance the equal pay mandate would have resulted in higher wages for disabled workers with less education.

Table VIII reports estimates of equation (1) with the inclusion of state time trends and is organized in the same manner as Table VI. Specifications that include time trends report far fewer significant point estimates for the interaction variables. Additionally, the significant advantage disabled workers with less education enjoyed in the form of higher wages has disappeared as has

the distinct disadvantage experienced by disabled workers with at least one year of college. These findings suggest that the wage effect of the ADA is similar across education levels, which is a significantly different finding from the results derived from equations without state trends. Once again, it is likely that the estimated wage effect of the ADA using this specification is biased due to the selection effect of the ADA estimated with this specification.

Turning to the difference-in-differences-in-differences(DDD) estimation of the wage effects of the ADA, Figure 1 plots average log weekly wages by disability status. Overall, the log weekly wages of those without disabilities increases steadily between 1988 and 2010, while the log weekly wages of those with disabilities is far more variable over the same time period. Between 1988 and 1990, the log weekly wages of those with disabilities remained constant while increasing modestly for the non-disabled. After 1993, log weekly wages of the non-disabled steadily increase. The log weekly wages of the disabled remain virtually flat between 1991 and 1998. After 1998, wages of disabled workers increase slightly. However, the log weekly wages of the disabled are less than the log weekly wages of the non-disabled in every year. Figures 2-4 plot average log weekly wages by disability status for "Quasi-ADA" states, "Anti-discrimination" states and "No Law" states separately. The most striking feature of these figures is that while the figures for "Quasi-ADA" states and "Anti-discrimination" states look nearly identical to Figure 1, the figure for "No Law" states is quite different from Figure 1.

Table IX reports ordinary least squares estimates of the wage effects of the ADA using a DDD framework that compares the log weekly wages of the disabled to the log weekly wages of the non-disabled. Columns 1, 3 and 5 report estimates of equation (2) for the full sample, the sample without years 1990-1992 and the sample without 1990-1995, respectively. Columns 2, 4 and 6 report estimates of equation (2) plus controls for the full sample, the sample without years 1990-1992 and the sample without 1990-1995, respectively. The parameters of interest are a set of disabled * state group * year interval interactions, with 1988-1989 as the base period. The triple interaction terms report the change between pre- and post-ADA intervals in log weekly

wages of workers with disabilities versus log weekly wages of the non-disabled relative to the same change in "Quasi-ADA" states.

The results in column 1 suggest that, relative to "Quasi-ADA" states, the log weekly wages of the disabled in "Anti-discrimination" and "No Law" states increase for each time interval following the passage of the ADA. However, all of the estimates are insignificant. Column 2, which presents estimates of equation (2) plus controls, shows that one of the estimates for "No Law" states is negative. Again, all of the triple interaction variables are insignificant. As discussed above, estimates found using the full sample are likely to suffer from selection bias. Hence, estimates from two subsamples are presented.

Columns 3 and 4 present estimates from the sample which excludes the years 1990-1992. Similar to results from the full sample, results reported in column 3 suggest a positive relationship between log wages and the interaction variables. Disabled workers in "No Law" states in 2003-2008 experienced the largest increase in log weekly wages; however, all of the triple interaction variables are statistically insignificant. As shown in column 4, the inclusion of controls decreases the size of the point estimate for all but one of the interaction variables and causes the point estimate for the disabled in "No Law" states in 1993-1999 to become negative. Columns 5 and 6 present estimates using the sample sans 1990-1995. The estimates reported in these columns are quite similar to the estimates reported in columns 3 and 4. The estimates using a DDD framework suggest that the ADA did not significantly alter the relative earnings of disabled workers in "Anti-discrimination" states nor in the relative earnings of the disabled residing in "No Law" states.

The results from DDD estimation show a different wage effect of the ADA for the disabled than the results from the difference-in-differences estimation. This is most likely due to the addition of the non-disabled as a control group. The lack of a wage effect of the ADA when using a DDD framework suggests that the equal pay mandate of ADA did not enable the disabled to gain ground in weekly wages vis-à-vis the non-disabled. However, the significant wage effect

found using a difference-in-differences model suggest that the equal pay mandate allowed some within the disability community to experience higher weekly wages. This is a more nuanced view of the ADA and suggests that evaluation of employment policies targeting the disabled should be evaluated on two levels: the within group impact of the policy and the across group impact.

Since the ADA's wage effect varies by education status using a difference-in-differences estimator, it is instructive to determine if a similar finding holds using a DDD estimation framework. Table X reports estimates of equation (2) and equation (2) plus controls for the two subsamples stratified on education. Panel A reports estimates of equation (2), while Panel B reports estimates of equation (2) plus controls. The sample which includes those with disabilities and those without disabilities are divided into the following three categories: those without a high school diploma, those with a high school diploma, and those who enrolled in at least one year of college. The odd columns report results from the sample *sans* 1990-1992 and the even columns report results using the sample which excludes 1990-1995. The parameters of interest are a set of year interval* disabled * state group interactions, with 1988-1989 as the base period. The triple interaction terms report the change between pre- and post-ADA intervals in log weekly wages of workers with disabilities versus log weekly wages of the non-disabled relative to the same change in "Quasi-ADA" states.

Regardless of the years included in the sample, results suggests that the disabled without a high school diploma in "Anti-discrimination" states experienced significant increases in log weekly wages in 2003-2008 and those without a diploma in "No Law" states saw a significant increase in their wages in 2003-2008 and 2009-2010. Results for high school graduates in "No Law" states show a significant decrease in log weekly wages in 1993-1999 and an increase in log wages for 2000-2002, 2003-2008 and 2009-2010; however, these results are sensitive to the inclusion of demographic control variables. Additionally, estimates for high school graduates in "Anti-discrimination" states are positive for each interval except 1993-1999, but are statistically insignificant. Disabled workers with at least one year of college in "No Law" states experience a

decline in relative weekly wages for all year intervals and the estimates are significant for 2000-2002 and 2009-2010. Estimates for disabled workers with at least one year of college in "Anti-discrimination" are insignificant and show a variable relationship between log weekly wages of the disabled and the variables of interest. These results suggest that, when compared to those without disabilities, the disabled without a high school diploma, disabled high school graduates and college-educated disabled persons in "No Law" states experienced an ADA-induced decline in log weekly wage. These findings are different from the results using the Disabled Only sample and reinforce the above finding that the ADA impacted within-group wages in a different manner from across-group wages.

VI. CONCLUSION

People with disabilities have worse economic outcomes than the non-disabled across a multitude of economic and disability measures. Partly in response to the lower economic standing of the disabled, Congress passed the Americans with Disabilities Act(ADA) in 1990 to create equal employment opportunities for the disabled. However, theoretical predictions and previous research indicate that the ADA may have negatively impacted the short-term weekly wages of the disabled. Since its enactment, the ADA has undergone changes to its two central employment provisions: the definition of disability and the definition of reasonable accommodation. Questions regarding the ADA's longer term effect on the wages of the disabled persist as the Supreme Court continues to alter the interpretation of the Act.

This paper presents new evidence on the longer term effects of the ADA based on two sources of variation: pre-ADA state disability legislation and five Supreme Court decisions that significantly altered the ADA's interpretation. The findings in this paper indicate that in the short run, the ADA insignificantly increased weekly wages of disabled workers while significantly increasing their wages in the longer run. Additionally, disabled workers with less education

experienced the largest increase in their weekly wages. However, these findings hold only when analyzing the disabled. When the non-disabled are included in the analysis, the wage effects of the ADA are insignificant which suggests that the ADA did not significantly improve wages of the disabled compared to the non-disabled.

Two areas for future research remain. First, understanding why the wage effect of the ADA varies so dramatically across education levels would be instructive to understanding the employment trends of disabled workers. Second, deciphering the extent to which the economic downturn of the late 2000s contributes to these results would also be informative.

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TABLE I
State Disability Anti-discrimination Laws

State (1)	Statutory Section (2)	Date Adopted* (3)	Anti-discrimination Provisions and Reasonable Accommodation Requirement (4)	Anti-discrimination Provisions (5)	No Statute (6)	Category Assigned for Empirical Analysis (7)
Alabama					x	No Law
Alaska	18.80.220(a)(1)	1969		x		Anti-Discrimination
Arizona	41-1463(b)	1985	x			Quasi-ADA
Arkansas					x	No Law
California	Govt. 12940(a), 12994	1973		x		Anti-Discrimination
Colorado	24-34-402(1)(a)	1977	x			Quasi-ADA
Connecticut	46a-60(a)(1)	1973		x		Anti-Discrimination
Delaware	19:723(b), 724(a), 724(e)(2)	1988	x			Quasi-ADA
Florida	760.10(1)	1977		x		Anti-Discrimination
Georgia	34-6A-4(a)	1981		x		Anti-Discrimination
Hawaii	378-2(1)	1975		x		Anti-Discrimination
Idaho	67-5909(1)	1988	x			Quasi-ADA
Illinois	68:1-103(Q),2-102(A)	1971		x		Anti-Discrimination
Indiana	22-9-1-3(1)	1975		x		Anti-Discrimination
Iowa	601 A.6(1)(a)	1972	x			Quasi-ADA
Kansas	44-1009(a)(1)	1974		x		Anti-Discrimination
Kentucky	207.150(1)	1976		x		Anti-Discrimination
Louisiana	46:2254(A), (C)	1980	x			Quasi-ADA
Maine	5:4572(1)(A)	1973		x		Anti-Discrimination
Maryland	49B:16(a)	1974		x		Anti-Discrimination
Massachusetts	151B:4(16)	1972	x			Quasi-ADA
Michigan	37.1102(2), 1202(1)	1976		x		Anti-Discrimination
Minnesota	363.03:1(2), (6)	1973	x			Quasi-ADA
Mississippi					x	No Law
Missouri	213.055.1(1)	1978		x		Anti-Discrimination
Montana	49-2-303(a), 49-4-101	1974		x		Anti-Discrimination
Nebraska	48-1104	1973		x		Anti-Discrimination
Nevada	613.330(1)	1971		x		Anti-Discrimination
New Hampshire	354-A:8(I)	1975		x		Anti-Discrimination
New Jersey	10:5-4.1, -12(a), -29.1	1972		x		Anti-Discrimination
New Mexico	28-1-7(A), (J)	1973	x			Quasi-ADA
New York	Exec. 296(1)(a)	1974		x		Anti-Discrimination
North Carolina	168A-4, 5(a)	1973	x			Quasi-ADA
North Dakota	14-02.4-03	1983		x		Anti-Discrimination
Ohio	4112.02(A)	1976		x		Anti-Discrimination
Oklahoma	25:1302(A)	1981		x		Anti-Discrimination
Oregon	659.425(1)	1973	x			Quasi-ADA
Pennsylvania	43:955(a), (b)	1974	x			Quasi-ADA
Rhode Island	28-5-7(1)	1973	x			Quasi-ADA
South Carolina	43-33-530	1983		x		Anti-Discrimination
South Dakota	20-13-10, 23.7, 23.8	1986		x		Anti-Discrimination
Tennessee	8-50-103(a)	1976		x		Anti-Discrimination
Texas	Civ. Art. 5221k:5.01	1975		x		Anti-Discrimination
Utah	34-35-6(1)(a)(i)	1979		x		Anti-Discrimination
Vermont	21:495(a)(1). 494d(6)	1973	x			Quasi-ADA
Virginia	51.5-41(A), (C)	1975	x			Quasi-ADA
Washington	49.60.180	1973	x			Quasi-ADA
West Virginia	5-11-9(a)(1)	1981		x		Anti-Discrimination
Wisconsin	111.321, 322(1), 34(1)(b)	1965	x			Quasi-ADA
Wyoming	27-9-105(a), (d)	1985	x			Quasi-ADA

NOTES -- This table reports which states had pre-ADA disability anti-discrimination statutes and the major provisions of the statutes. *The following states adopted reasonable accommodations mandates after adopting traditional anti-discrimination provisions: Iowa, Massachusetts, Minnesota, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Wisconsin.

TABLE II
United States Supreme Court Decisions Regarding the ADA

Case/Statute	Year Decided/ Implemented	Expanded Definition of Disability	Restricted Definition of Disability	Expanded Definition of Reasonable Accommodation	Restricted Definition of Reasonable Accommodation
(1)	(2)	(3)	(4)	(5)	(6)
Sutton v. United Airlines	1999		X		
Murphy v. UPS	1999		X		
Albertson's v. Kirkingburg	1999		X		
Toyota Motor Mfg. v. Williams	2002	X			
Chevron v. Echazabal	2002				X
US Airways v. Barnett	2002				X
ADA Amendments Act	2009	X		X	

NOTES -- This table reports the impact of Supreme Court decisions and amendments that significantly altered the interpretation of Title I of the ADA.

TABLE III
DESCRIPTIVE STATISTICS FOR DISABLED ONLY SAMPLE

	1988-1989	1990-1992	1993-1999	2000-2002	2003-2008	2009-2010
	(1)	(2)	(3)	(4)	(5)	(6)
Female	.44	.44	.48	.51	.50	.51
Age (in years)	38.78	39.08	40.42	41.69	42.56	43.35
High School Graduate	.40	.55	.84	.87	.88	.88
Married	.51	.51	.47	.45	.41	.40
Minority	.14	.13	.14	.17	.18	.17
State Unemployment Rate	.04	.05	.05	.04	.04	.10
State Disability Rate	.07	.07	.08	.08	.08	.08
Weeks Worked	42.52	43.22	43.51	44.30	44.56	45.05
Receives SSI/DI	.12	.10	.09	.07	.08	.08
Weekly Wages	449.99	468.47	480.26	571.96	573.49	574.68
Number of Observations	2,195	3,473	7,217	3,692	6,785	1,915

NOTES -- This table reports weighted descriptive statistics for the sample of those with disabilities ages 18-59 years by time interval. Data comes from the March CPS and is weighted using CPS weights.

TABLE IV
DESCRIPTIVE STATISTICS OF DISABLED ONLY SAMPLE BY STATE GROUP

	1988-1989 (1)	1990-1992 (2)	1993-1999 (3)	2000-2002 (4)	2003-2008 (5)	2009-2010 (6)
Female						
Quasi-ADA	.41	.46	.48	.51	.50	.51
Anti-Discrimination	.45	.43	.48	.50	.50	.51
No Law	.48	.45	.48	.51	.51	.54
Age (in years)						
Quasi-ADA	39.00	38.66	40.25	41.33	42.40	44.31
Anti-Discrimination	38.82	39.22	40.43	41.85	42.59	42.93
No Law	36.11	41.05	42.30	41.63	43.63	42.96
High School Graduate						
Quasi-ADA	.39	.59	.84	.88	.89	.90
Anti-Discrimination	.42	.53	.85	.87	.87	.87
No Law	.25	.57	.78	.81	.88	.79
Married						
Quasi-ADA	.52	.50	.46	.45	.41	.41
Anti-Discrimination	.50	.50	.48	.45	.41	.39
No Law	.50	.60	.53	.49	.50	.42
Minority						
Quasi-ADA	.10	.10	.11	.13	.15	.10
Anti-Discrimination	.15	.13	.15	.18	.18	.19
No Law	.28	.19	.26	.31	.30	.20
State Unemployment Rate						
Quasi-ADA	.04	.05	.04	.04	.04	.09
Anti-Discrimination	.06	.05	.05	.04	.04	.10
No Law	.06	.05	.05	.04	.05	.10
State Disability Rate						
Quasi-ADA	.07	.07	.08	.08	.08	.08
Anti-Discrimination	.07	.07	.08	.08	.08	.08
No Law	.09	.10	.10	.10	.11	.12
Weeks Worked						
Quasi-ADA	42.92	43.71	43.79	44.68	44.55	44.93
Anti-Discrimination	42.56	42.97	43.43	44.20	44.59	44.92
No Law	38.37	42.77	42.45	42.60	43.78	48.79
Weekly Wage						
Quasi-ADA	464.76	465.11	472.51	571.76	559.11	541.70
Anti-Discrimination	444.93	469.25	484.08	574.13	579.63	582.85
No Law	424.10	490.38	478.51	525.46	582.17	717.98
Receives SSI/DI						
Quasi-ADA	.13	.08	.09	.07	.06	.07
Anti-Discrimination	.12	.11	.09	.08	.09	.08
No Law	.05	.06	.06	.07	.07	.01

NOTES -- This table reports weighted descriptive statistics for the sample of those with disabilities ages 18-59 years by time interval and state group. Data comes from the March CPS and is weighted using CPS weights.

TABLE V
ESTIMATES FOR UNSTRATIFIED DISABLED ONLY SAMPLE

	Full Sample		Sample Without Years 1990-1992		Sample Without Years 1990-1995	
	(1)	(2)	(3)	(4)	(5)	(6)
Female	--	-.248 ***	--	-.239 ***	--	-.235 ***
		(.021)		(.022)		(.022)
Age	--	.010 ***	--	.010 ***	--	.010 ***
		(.001)		(.001)		(.001)
High School Graduate	--	.388 ***	--	.419 ***	--	.362 ***
		(.032)		(.037)		(.038)
Some College	--	.832 ***	--	.864 ***	--	.831 ***
		(.045)		(.049)		(.049)
Married	--	.337 ***	--	.330 ***	--	.330 ***
		(.022)		(.023)		(.022)
Minority	--	-.021	--	-.028	--	-.030
		(.031)		(.032)		(.033)
State Unemployment %	--	-1.560 *	--	-1.480	--	-2.440 **
		(.798)		(.914)		(.983)
State Disability Rate	--	-.420	--	-.147	--	.104
		(1.158)		(1.278)		(1.273)
Transition Years						
1990-1992 * LLP	.111	.128	--	--	--	--
	(.106)	(.094)				
1990-1992 * NLP	.134	-.070	--	--	--	--
	(.169)	(.129)				
Pre-Ruling Years						
1993-1999 * LLP	.169 *	.165 *	.168 *	.164 *	.154	.160 *
	(.097)	(.089)	(.097)	(.090)	(.102)	(.091)
1993-1999 * NLP	.091	-.100	.092	-.099	.086	-.106
	(.199)	(.163)	(.199)	(.162)	(.190)	(.140)
Post-Disability Definition Decision Years						
2000-2002 * LLP	.106	.111	.104	.112	.104	.106
	(.103)	(.095)	(.102)	(.095)	(.102)	(.094)
2000-2002 * NLP	-.057	-.199 **	-.054	-.195 **	-.053	-.210 **
	(.102)	(.088)	(.101)	(.089)	(.100)	(.088)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.198 **	.199 **	.198 **	.201 **	.198 **	.197 **
	(.090)	(.082)	(.090)	(.083)	(.090)	(.083)
2003-2008 * NLP	.123	-.065	.127	-.065	.127	-.085
	(.132)	(.128)	(.131)	(.126)	(.132)	(.128)
ADA Amendments Act Years						
2009-2010 * LLP	.138	.199 **	.138	.199 *	.143	.204 *
	(.110)	(.107)	(.110)	(108)	(.111)	(.109)
2009-2010 * NLP	.197	.146	.202	.146	.215	.146
	(.160)	(.116)	(.157)	(.112)	(.159)	(.116)
Number of observations	25,277	25,277	21,804	21,804	18,479	18,479

NOTES -- This table reports OLS estimates for the CPS samples described in the text. The dependent variable is log weekly wages. All specifications include year fixed effects and state fixed effects. Standard errors are in parentheses. All specifications employ CPS survey weights and are clustered at the state level. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

TABLE VI
ESTIMATES FOR UNSTRATIFIED SAMPLE DISABLED ONLY WITH STATE TRENDS

	Full Sample		Sample Without Years 1990-1992		Sample Without Years 1990-1995	
	(1)	(2)	(3)	(4)	(5)	(6)
Female	--	.010 ***	--	-.238 ***	--	-.233 ***
		(.001)		(.022)		(.022)
Age	--	-.247 ***	--	.010 ***	--	.010 ***
		(.021)		(.001)		(.001)
High School Graduate	--	.388 ***	--	.418 ***	--	.363 ***
		(.031)		(.036)		(.038)
Some College	--	.831 ***	--	.863 ***	--	.832 ***
		(.045)		(.049)		(.050)
Married	--	.339 ***	--	.331 ***	--	.331 ***
		(.022)		(.023)		(.022)
Minority	--	-.021	--	-.029	--	-.029
		(.030)		(.031)		(.033)
State Unemployment %	--	-1.240	--	-1.043	--	-2.267 **
		(.863)		(.949)		(.999)
State Disability Rate	--	-.483	--	.366	--	.948
		(1.279)		(1.400)		(1.343)
Transition Years						
1990-1992 * LLP	.119	.136	--	--	--	--
	(.102)	(.093)				
1990-1992 * NLP	.240	.034	--	--	--	--
	(.156)	(.129)				
Pre-Ruling Years						
1993-1999 * LLP	.186	.174	.188	.175	-.018	.008
	(.135)	(.132)	(.145)	(.146)	(.155)	(.152)
1993-1999 * NLP	.400 *	.183	.415	.201	.763 ***	.522 ***
	(.229)	(.221)	(.260)	(.249)	(.193)	(.181)
Post-Disability Definition Decision Years						
2000-2002 * LLP	.127	.121	.131	.126	-.139	-.109
	(.224)	(.214)	(.234)	(.229)	(.254)	(.240)
2000-2002 * NLP	.436 **	.250	.458 **	.279	.856 ***	.637 ***
	(.211)	(.235)	(.237)	(.266)	(.217)	(.228)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.229	.211	.234	.218	-.135	-.097
	(.278)	(.268)	(.293)	(.291)	(.316)	(.296)
2003-2008 * NLP	.816 ***	.565 *	.840 **	.588	1.400 ***	1.089 ***
	(.316)	(.330)	(.359)	(.383)	(.312)	(.292)
ADA Amendments Act Years						
2009-2010 * LLP	.183	.216	.189	.226	-.270	-.162
	(.345)	(.319)	(.364)	(.348)	(.399)	(.370)
2009-2010 * NLP	1.037 ***	.908 ***	1.064 ***	.934 **	1.729 ***	1.544 ***
	(.319)	(.313)	(.371)	(.369)	(.342)	(.382)
Number of observations	25,277	25,277	21,804	21,804	18,479	18,479

NOTES -- This table reports OLS estimates for the CPS sample described in the text. The dependent variable is log weekly wages. All specifications include year fixed effects, state fixed effects and time trends for individual states. Standard errors are in parentheses. All specifications employ CPS survey weights and are clustered at the state level. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

TABLE VII
ESTIMATES FOR DISABLED ONLY SAMPLE STRATIFIED ON EDUCATION

	No High School Diploma		High School Diploma		At Least One Year of College	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Baseline Estimation						
Pre-Ruling Years						
1993-1999 * LLP	.364 **	.374 **	-.229	-.191	-.125	-.182
	(.143)	(.162)	(.223)	(.234)	(.138)	(.137)
1993-1999 * NLP	.144	.110	.829 ***	1.128 ***	-.012	-.200
	(.386)	(.479)	(.159)	(.192)	(.338)	(.312)
Post-Disability Definition Decision Years						
2000-2002 * LLP	.210	.239	-.315	-.333	-.125	-.123
	(.235)	(.239)	(.234)	(.233)	(.155)	(.155)
2000-2002 * NLP	-.271	-.269	.732 ***	.693 ***	-.062	-.061
	(.188)	(.191)	(.278)	(.268)	(.300)	(.302)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.550 ***	.573 ***	-.191	-.207	-.129	-.129
	(.206)	(.204)	(.190)	(.189)	(.140)	(.139)
2003-2008 * NLP	.506 *	.509 *	.942 ***	.907 ***	-.198	-.199
	(.285)	(.286)	(.173)	(.177)	(.209)	(.209)
ADA Amendments Act Years						
2009-2010 * LLP	.554 **	.581 ***	-.373 *	-.380 *	-.053	-.047
	(.216)	(.220)	(.214)	(.214)	(.182)	(.180)
2009-2010 * NLP	1.040 ***	1.063 ***	.651 ***	.625 ***	.164	.176
	(.359)	(.356)	(.186)	(.188)	(.174)	(.167)
Number of observations	3,994	3,433	7,168	5,922	10,642	9,124
Panel B: Estimation With Controls						
Pre-Ruling Years						
1993-1999 * LLP	.276 **	.317 **	-.145	-.087	-.137	-.184
	(.129)	(.154)	(.200)	(.214)	(.136)	(.127)
1993-1999 * NLP	.012	-.083	.447 ***	.711 ***	-.154	-.334
	(.392)	(.471)	(.139)	(.198)	(.318)	(.288)
Post-Disability Definition Decision Years						
2000-2002 * LLP	.176	.198	-.271	-.284	-.141	-.137
	(.242)	(.245)	(.206)	(.204)	(.148)	(.145)
2000-2002 * NLP	-.323	-.324	.326	.293	-.188	-.210
	(.233)	(.232)	(.209)	(.202)	(.286)	(.288)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.491 **	.516 **	-.133	-.140	-.138	-.134
	(.199)	(.201)	(.165)	(.165)	(.140)	(.137)
2003-2008 * NLP	.351 ***	.330	.463 ***	.422 **	-.302	-.327
	(.291)	(.287)	(.165)	(.183)	(.196)	(.203)
ADA Amendments Act Years						
2009-2010 * LLP	.446 **	.487 **	-.239	-.234	-.057	-.043
	(.220)	(.225)	(.185)	(.185)	(.179)	(.173)
2009-2010 * NLP	.942 **	.932 **	.275 *	.270	.099	.108
	(.407)	(.396)	(.151)	(.167)	(.221)	(.196)
Number of observations	3,994	3,423	7,168	5,922	10,642	9,124

NOTES -- This table reports OLS estimates for the CPS samples described in the text. The dependent variable is log weekly wages. All specifications include year fixed effects and state fixed effects. Standard errors are in parentheses. All specifications employ CPS survey weights and are clustered at the state level. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. The odd columns present estimates using the sample which excludes the years 1990-1992. The even columns present estimates using the sample which excludes the years 1990-1995. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

TABLE VIII
ESTIMATES FOR DISABLED ONLY SAMPLE STRATIFIED ON EDUCATION WITH STATE TRENDS

	No High School Diploma		High School Diploma		At Least One Year of College	
	(1)	(2)	(3)	(4)	(5)	(6)
			Panel A: Baseline Estimation			
Pre-Ruling Years						
1993-1999 * LLP	.337	-.139	-.138	.021	.033	-.295
	(.394)	(.597)	(.260)	(.319)	(.203)	(.215)
1993-1999 * NLP	-.018	-1.117	.635 ***	1.762 ***	.912	.899
	(.456)	(.994)	(.218)	(.377)	(.452)	(.427)
Post-Disability Definition Decision Years						
2000-2002 * LLP	.155	-.495	-.260	-.076	.119	-.293
	(.670)	(.923)	(.332)	(.346)	(.306)	(.294)
2000-2002 * NLP	-.563	-2.006	.431	1.783 **	1.423	1.405
	(1.199)	(1.721)	(.405)	(.739)	(.512)	(.552)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.443	-.449	-.167	.101	.192	-.373
	(.817)	(1.153)	(.405)	(.448)	(.366)	(.352)
2003-2008 * NLP	.153	-1.819	.526	2.609 ***	1.895	1.882
	(1.456)	(2.150)	(.368)	(.766)	(.535)	(.588)
ADA Amendments Act Years						
2009-2010 * LLP	.438	-.680	-.351	-.026	.345	-.359
	(1.142)	(1.507)	(.499)	(.552)	(.418)	(.443)
2009-2010 * NLP	.522	-1.903	.124	2.738 ***	2.733	2.700
	(1.736)	(2.693)	(.542)	(1.106)	(.448)	(.625)
Number of observations	5,540	3,433	7,168	5,922	10,624	9,124
			Panel B: Estimation With Controls			
Pre-Ruling Years						
1993-1999 * LLP	.160	-.207	-.105	.064	-.004	-.346
	(.378)	(.564)	(.252)	(.338)	(.208)	(.210)
1993-1999 * NLP	.098	-1.125	.240	1.026 ***	.588	.531
	(.382)	(.687)	(.233)	(.391)	(.439)	(.468)
Post-Disability Definition Decision Years						
2000-2002 * LLP	-.049	-.579	-.278	-.107	0.069	-.367
	(.653)	(.868)	(.312)	(.364)	(.316)	(.306)
2000-2002 * NLP	-.205	-1.801	-.041	.924	1.012	.946
	(1.038)	(1.332)	(.376)	(.673)	(.522)	(.623)
Post-Reasonable Accomodation Decision Years						
2003-2008 * LLP	.160	.553	-.178	.078	.136	-.461
	(.816)	(1.110)	(.399)	(.486)	(.376)	(.365)
2003-2008 * NLP	.609	-1.590	-.084	1.445 *	1.389	1.309
	(1.198)	(1.579)	(.490)	(.744)	(.549)	(.734)
ADA Amendments Act Years						
2009-2010 * LLP	.084	-.798	-.287	.038	.285	-.457
	(1.135)	(1.473)	(.485)	(.586)	(.431)	(.461)
2009-2010 * NLP	1.068	-1.607	-.406	1.573	2.204	2.100
	(1.501)	(2.022)	(.636)	(.1082)	(.462)	(.780)
Number of observations	5,540	3,433	7,168	5,922	10,624	9,124

NOTES -- This table reports OLS estimates for the CPS samples described in the text. The dependent variable is log weekly wages. Standard errors are in parentheses. All specifications employ CPS survey weights, are clustered at the state level and include year fixed effects, state fixed effects and time trends for individual states. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. The odd columns present estimates using the sample which excludes the years 1990-1992. The even columns present estimates using the sample which excludes the years 1990-1995. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

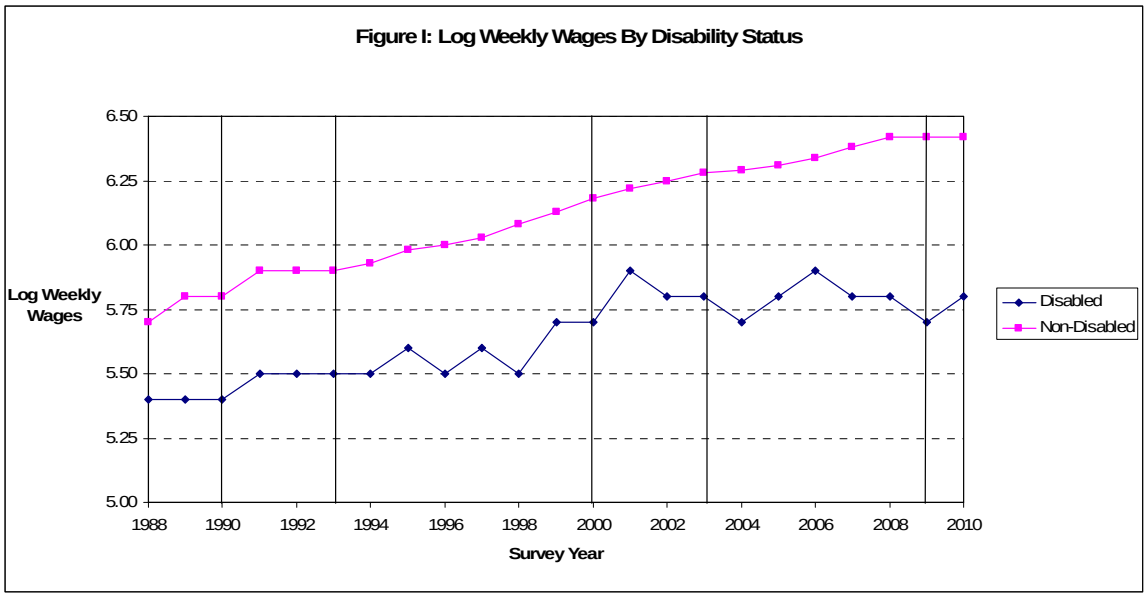
Figure I: Log Weekly Wages By Disability Status
Log Weekly Wages
6.50
6.25
6.00
5.75
5.50
5.25
5.00
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Survey Year
Disabled
Non-Disabled

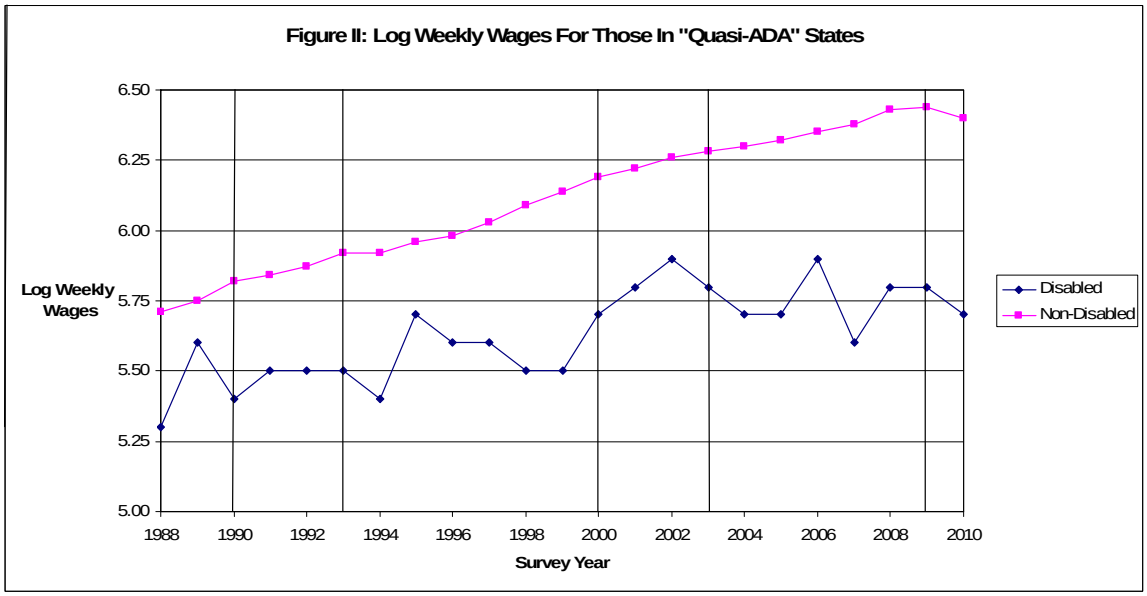
Figure II: Log Weekly Wages For Those In "Quasi-ADA" States
Log Weekly Wages
6.50
6.25
6.00
5.75
5.50
5.25
5.00
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Survey Year
Disabled
Non-Disabled

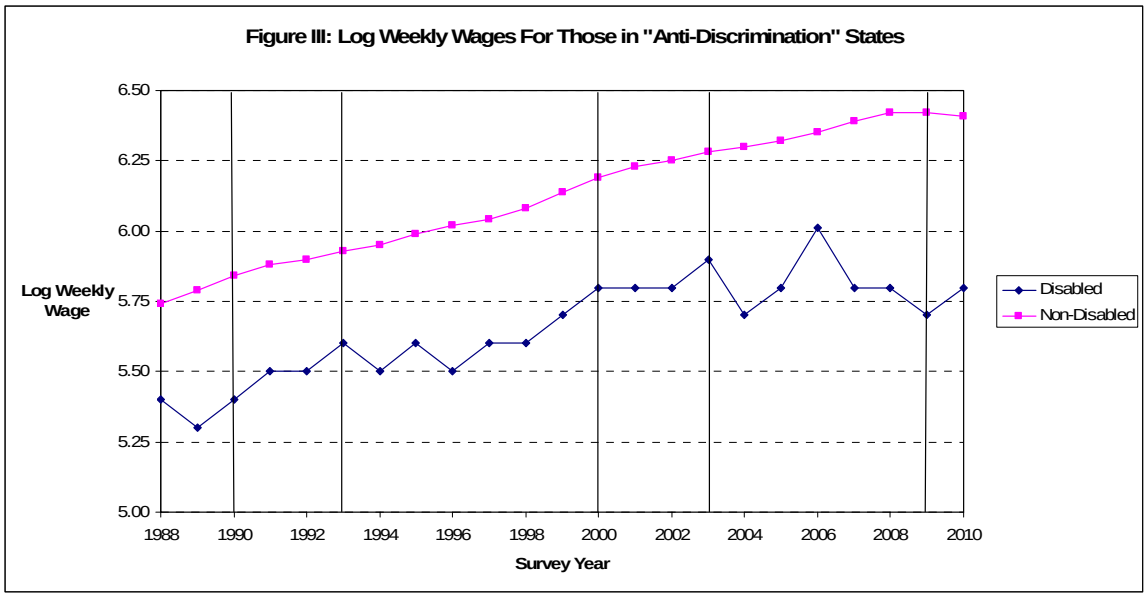
Figure III: Log Weekly Wages For Those in "Anti-Discrimination" States
6.50
6.25
6.00
5.75
5.50
5.25
5.00
Log Weekly Wage
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Survey Year
Disabled
Non-Disabled

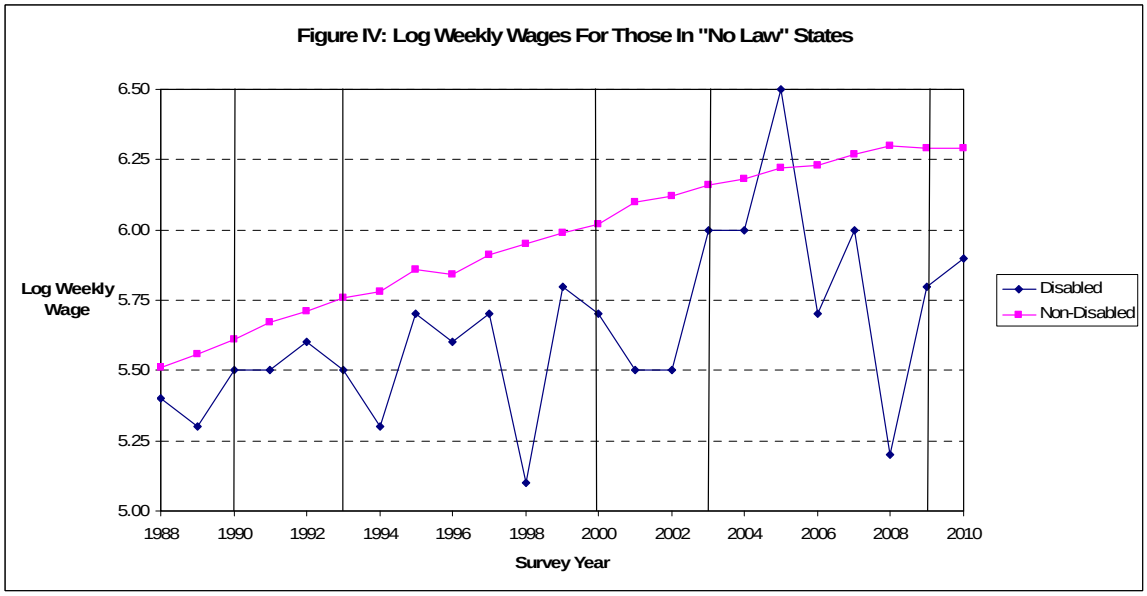
Figure IV: Log Weekly Wages For Those In "No Law" States
6.50
6.25
6.00
5.75
5.50
5.25
5.00
Log Weekly Wage
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Survey Year
Disabled
Non-Disabled

TABLE IX
ESTIMATES FOR UNSTRATIFIED DISABLED + NON-DISABLED SAMPLE

	Full Sample		Sample Without Years 1990-1992		Sample Without Years 1990-1995	
	(1)	(2)	(3)	(4)	(5)	(6)
Disabled	-.407 ***	-.394 ***	-.407 ***	-.394 ***	-.407 ***	-.393 ***
	(.045)	(.041)	(.045)	(.041)	(.045)	(.041)
Disabled *LLP	-.021	-.028	-.021	-.028	-.021	-.028
	(.065)	(.055)	(.065)	(.055)	(.065)	(.055)
Disabled *NLP	-.060	.030	-.060	.029	-.060	.029
	(.159)	(.141)	(.159)	(.142	(.159)	(.142)
Transition Years						
1990-1992 *Disabled* LLP	.021	.012	--	--	--	--
	(.071)	(.057)				
1990-1992 *Disabled* NLP	.253	.078	--	--	--	--
	(.175)	(.152)				
Pre-Ruling Years						
1993-1999 *Disabled* LLP	.084	.064	.084	.064	.066	.039
	(.665)	(.066)	(.066)	(.066)	(.076)	(.074)
1993-1999 *Disabled* NLP	.130	-.014	.129	-.013	.046	-.085
	(.204)	(.184)	(.204)	(.185)	(.224)	(.190)
Post-Disability Definition Decision Years						
2000-2002 *Disabled* LLP	.054	.047	.053	.047	.053	.047
	(.089)	(.084)	(.089)	(.083)	(.089)	(.084)
2000-2002 *Disabled* NLP	.068	.025	.068	.026	.068	.025
	(.101)	(.099)	(.100)	(.100)	(.100)	(.099)
Post-Reasonable Accomodation Decision Years						
2003-2008 *Disabled* LLP	.117	.114	.116	.113	.116	.113
	(.080)	(.073)	(.080)	(.073)	(.080)	(.073)
2003-2008 *Disabled* NLP	.182	.057	.182	.058	.182	.058
	(.189)	(.173)	(.189)	(.174)	(.189)	(.174)
ADA Amendments Act Years						
2009-2010 *Disabled* LLP	.070	.092	.069	.092	.069	.091
	(.096)	(.092)	(.096)	(.093)	(.096)	(.093)
2009-2010 *Disabled* NLP	.012	.085	.012	.086	.012	.086
	(.170)	(.129)	(.170)	(.129)	(.170)	(.130)
Number of observations	1,606,670	1,606,670	1,415,359	1,415,359	1,231,923	1,231,923

NOTES -- This table reports OLS estimates for the CPS sample described in the text. The dependent variable is log weekly wages. All specifications include year fixed effects, state fixed effects and time trends for individual states. Standard errors are in parentheses. All specifications employ CPS survey weights and are clustered at the state level. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

TABLE X
ESTIMATES FOR DISABLED + NON-DISABLED SAMPLE STRATIFIED ON EDUCATION

	No High School Diploma		High School Diploma		At Least One Year of College	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Baseline Estimation						
Disabled	-.429 ***	-.429 ***	-.325 ***	-.325 ***	-.290 ***	-.290 ***
	(.077)	(.077)	(.088)	(.088)	(.055)	(.055)
Pre-Ruling Years						
1993-1999 *Disabled* LLP	.107	.133	.106	.026	.016	-.013
	(.139)	(.165)	(.262)	(.267)	(.086)	(.110)
1993-1999 *Disabled* NLP	.285	.225	-1.220	-1.300	-.047	-.095
	(.188)	(.206)	(.767)	(.916)	(.264)	(.294)
Post-Disability Definition Decision Years						
2000-2002 *Disabled* LLP	.107	.110	.652	.651	-.012	-.013
	(.213)	(.214)	(.477)	(.477)	(.093)	(.093)
2000-2002 *Disabled* NLP	-.023	-.021	.941 *	.938 *	-.076	-.076
	(.119)	(.119)	(.512)	(.512)	(.133)	(.133)
Post-Reasonable Accomodation Decision Years						
2003-2008 *Disabled* LLP	.317 *	.319 *	.026	.025	.037	.037
	(.166)	(.166)	(.313)	(.313)	(.099)	(.099)
2003-2008 *Disabled* NLP	.336 *	.337 *	.850 ***	.845 ***	-.049	-.049
	(.175)	(.175)	(.313)	(.314)	(.274)	(.274)
ADA Amendments Act Years						
2009-2010 *Disabled* LLP	.316 *	.318	.248	.249	-.012	-.012
	(.226)	(.226)	(.705)	(.703)	(.111)	(.122)
2009-2010 *Disabled* NLP	.460	.463	1.407 *	1.408 *	-.283	-.283
	(.292)	(.291)	(.805)	(.803)	(.196)	(.196)
Number of observations	140,848	121,777	60,813	58,707	1,213,698	1,051,439
Panel B: Estimation With Controls						
Disabled	-.466 ***	-.465 ***	-.384 ***	-.386 ***	-.362 ***	-.360 ***
	.070	(.070)	(.088)	(.088)	(.055)	(.055)
Pre-Ruling Years						
1993-1999 *Disabled* LLP	.108	.128	-.009	-.181	.013	-.017
	(.143)	(.167)	(.271)	(.270)	(.082)	(.103)
1993-1999 *Disabled* NLP	.246	.151	-1.519 **	-1.678 **	-.232	-.279
	(.190)	(.199)	(.709)	(.848)	(.170)	(.191)
Post-Disability Definition Decision Years						
2000-2002 *Disabled* LLP	.124	.125	.872 *	.869 *	-.026	-.026
	(.205)	(.206)	(.503)	(.503)	(.093)	(.093)
2000-2002 *Disabled* NLP	.002	.001	.928 *	.921 *	-.199 **	-.199 **
	(.143)	(.142)	(.532)	(.531)	(.094)	(.094)
Post-Reasonable Accomodation Decision Years						
2003-2008 *Disabled* LLP	.343 **	.344 **	.003	.003	.034	.034
	(.147)	(.148)	(.303)	(.304)	(.092)	(.092)
2003-2008 *Disabled* NLP	.346 **	.347 **	.273	.260	-.213	-.212
	(.155)	(.154)	(.320)	(.319)	(.179)	(.180)
ADA Amendments Act Years						
2009-2010 *Disabled* LLP	.378 *	.379 *	.360	.364	.003	.003
	(.221)	(.221)	(.675)	(.676)	(.109)	(.109)
2009-2010 *Disabled* NLP	.551 **	.560 **	.926	.938	-.266 ***	-.266 ***
	(.255)	(.255)	(.793)	(.793)	(.092)	(.092)
Number of observations	140,848	121,777	60,813	58,707	1,213,698	1,051,439

NOTES -- This table reports OLS estimates for the CPS samples described in the text. The dependent variable is log weekly wages. Standard errors are in parentheses. All specifications employ CPS survey weights, are clustered at the state level and include year fixed effects and state fixed effects. LLP refers to "Anti-Discrimination" states. NLP refers to "No Law" states. The odd columns present estimates using the sample which excludes the years 1990-1992. The even columns present estimates using the sample which excludes the years 1990-1995. * Indicates significance at the 10% level. ** Indicates significance at the 5% level. *** Indicates significance at the 1% level.

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