Women's rights and women's labor: Married women's property law reform and labor force participation, 1870-1900

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Chapter 2

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Introduction

In the five decades after the Civil War, American wives' rights to own property, retain their own earnings, and do business on their own account separate from their husbands, were extended throughout most of the American states. The flurry of changes in property rights after the Civil War were part of a century-long sequence of legal changes increasing married women's control over assets and income. At the time, and subsequently, though passed in different states at different times, they have been seen as part of the same trend and known as "married women's property acts." There has been substantial research since the 1970s into the campaign and passage for the property acts, and their legal consequences. A limited, and more recent, literature examines the economic consequences of the acts, and finds that women were responsive to the change in incentives for different forms of economic behavior, such as making wills and patenting. However, there is no published research on the broader economic consequences of the acts—how labor force participation, education, and marriage behavior were affected by the acts.

In this chapter I use data from the IPUMS samples of the American census to estimate the effects of changes in married women's property laws on the extent of married women's involvement in gainful employment. Individual-level census data

allows me to control for individual and family factors affecting wives' decisions to work. After controlling for individual and family factors in women's work, education and marriage decisions, differences in the timing of legal change between states permits independent identification of the effects of passing married women's property laws.

The absolute effects of changes in property rights were small. Between 1860 and 1900—when the majority of laws were passed—the overall level of married women's labor force participation, among the free population, fluctuated from 4.2% to 4.6% in 1880, and back down to 4.1% in 1900. Although married women's labor force participation varied little over time, participation varied by family circumstances and across states and regions. For example, within individual states or territories, the largest absolute increase in married women's labor force participation was in the District of Columbia, where labor force participation for married women advanced from 15.5% in 1860 to 28.6% in 1900. Outside the south, the largest increase over forty years was in the Dakota Territory where just one in sixty married women in the new territory had a gainful occupation in 1870, but by 1900 one in twelve did; an increase of approximately eight percentage points in thirty years. But wives in the Dakotas were somewhat different from women in other states—they were younger, lived in rural areas or small towns, and were more likely to be immigrants from northern Europe—all factors that influenced observed levels of market work by wives.

Given that we observe different levels of labor force participation in states with different laws, it is possible these differences are due to the laws. It is also possible that the level of married women's labor force participation varied because women had different opportunities to work in different states. For example, states with more

industrial employment and greater urbanization typically had greater level of married women's labor force participation for white women, as recorded by the census. Women who were more likely to combine paid employment with marriage may have moved to these states, independent of the passage of property laws. Thus, it is important to try and eliminate the influence of state and individual factors that are independent of the laws. More formally, I ask what was the effect of the married women's property acts on women's behavior, after controlling for individual and family circumstances, and states' social and economic characteristics other than legal change.

Despite variation in married women's work behavior across states, and among women with different circumstances, passage of the married women's property acts did not have a strong influence on labor force participation. Economic theory—and intuition—suggests that giving women stronger title to their own earnings from work would lead to women working more. This is borne out by the estimates. Theory also predicts that property acts, by transferring wealth to women would lead to a decrease in married women's labor force participation as measured in the census. This is also confirmed by the analysis. However, most of the estimates are insignificantly different from zero at standard levels of statistical significance, and this finding is robust to alternative models of other factors influencing women's work decisions. My findings are also not altered by disagreement among scholars about exactly when particular states passed property laws. In short, there was little or no immediate effect on women's work behavior from the passage of married women's property acts. The wealth effects of the property acts were cancelled out by the own-wage effects of earnings acts.

The organization of the chapter is as follows; I first summarize the history of married women's property law reform in the United States, and the recent literature by historians and economists that examines the consequences of property law reform. After introducing the data that I use in the remainder of the paper, I summarize the changes in women's labor force participation conditioned only on the passage of property law reform in the preceding decade. My analysis is divided into three main sections. First, I look at the effect of property, earnings and sole-trade laws on married women's labor force participation, as measured by the census' gainful employment measure of market work. Finding little effect of the laws, the second stage of the analysis is to expand the measure of women's market work to include taking in boarders and lodgers. The third and final section of the analysis looks at the effect of the property laws on other measures of young women's behavior, including investment in education, work by single women, and age at marriage.

My analytic strategy in estimating the effects of the property acts on labor force participation, education, and marriage behavior is a "difference-in-differences" approach. This compares the change over time in women's behavior between states that did, or did not, enact new married women's property legislation in the previous decade. I distinguish between the effects of three different kinds of married women's property law reform;

1. Title to assets and estates, referred to as "property laws"

2. Title to earnings from labor and capital, referred to as "earnings laws"

3. Ability to own and operate businesses without the legal requirement of a husband's permission or oversight, referred to as "sole trader laws"

After holding individual and state-specific factors constant, the effects of change in married women's property and earnings legislation on married women's labor force participation was trivially small for white women. Apparently large effects of the introduction of earnings laws on black women's labor force participation are spurious, and due to the low number of black women in some states shortly before passage of earnings law reform. Reform of property laws was not sufficient for increasing married women's labor supply in the late nineteenth century. Finding little effect of property, earnings, and sole-trade laws on women's labor force participation, I then look at whether broader measures of women's participation in work were affected by the passage of the property laws. Specifically, the census provides information on whether a family had taken in boarders and lodgers. Qualitative evidence from the late nineteenth-century makes it clear that taking in boarders and lodgers was a strategy used by a significant minority of families to increase their income, and that wives were often responsible for the extra household work when there more people living in the household.[1] Augmenting measures of wives' work by an indicator of taking in boarders and lodgers has become standard in the examination of women's work before 1940.[2]

In the final section of the analysis I examine investments in education—measured in the census by literacy—and whether young women delayed marriage and worked longer in response to the passage of the property acts. I find that the property acts had consistent and statistically significant effects on investments in education for children,

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[1] Claudia Goldin, *Understanding the Gender Gap: An Economic History of American Women* (New York: Oxford University Press, 1990), 44-45, 224-25, John Modell and Tamara K. Hareven, "Urbanization and the Malleable Household: An Examination of Boarding and Lodging in American Families," *Journal of Marriage and the Family* 35, no. 3 (1973).

[2] Carolyn M. Moehling, "Women's Work and Men's Unemployment," *Journal of Economic History* 61, no. 4 (2001): 926-49.

and delays in marriage for women in their 20s. Women in their 20s who lived in a state that had passed a property or earnings act were more likely to be unmarried—and because they were unmarried, more likely to be working. These decisions by cohorts of young women in the late nineteenth century to increase their human capital in response to changes in married women's property rights may have influenced the early-twentieth century expansion in married women's labor force participation. I also find that school attendance for children increased after the passage of property acts. Given the importance of education to later increases in women's work, this finding is significant.

Background: Coverture and marital service

Laws determining title to property within marriage are the responsibility of state legislatures and courts in the United States. With the exception of states in the south and west—most of which inherited their civil law traditions from French or Spanish colonial control—the laws of property within marriage in the United States were largely derived from the English common law tradition of coverture.[3] The civil law states—Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas and Washington—had a community property system.[4] In practice, however, the operation and reform of the married women's property laws was not substantially different in community property and common law states, according to authors who have studied the acts across the

[3] A concise summary of the English common law tradition as it existed in the eighteenth century can be found in Joanne Bailey, "Favoured or Oppressed? Married Women, Property and 'Coverture' in England, 1660-1800," *Continuity and Change* 17, no. 3 (2002): 351-72.
[4] Donna Clare Schuele, "`a Robbery to the Wife': Culture, Gender and Marital Property in California Law and Politics, 1850-1890" (PhD, University of California Berkeley, 1999), 447.

different states.[5] The doctrine of coverture provided that in marriage a woman's property became the property of her husband. The influential legal theorist, William Blackstone in his *Commentaries on the Laws of England* explained that during coverture

> those chattels, which belonged formerly to the wife, are by act of law vested in the hufband, with the same degree of property and with the same powers, as the wife, when sole, had over them. This depends entirely on the notion of an unity of person between the husband and wife; it being held that they are one person in law … the very being and existence of the woman is suspended during the coverture, or entirely merged and incorporated in that of the husband. And hence if follows, that whatever personal property belonged to the wife, before marriage, is by marriage absolutely vested in the husband.[6]

The laws of England regarding coverture were largely inherited by many of the American colonies. The pre-eminent American legal theorist of the nineteenth century, Tapping Reeve, writing in 1846 before the wave of married women's property law reform

> The husband by marriage, acquires an absolute title to all the personal property of the wife, which she had in possession at the time of the marriage; such as money, goods or chattels personal of any kind. These, by the marriage, become his property as completely as the property which he purchases with his money; and such property can never again belong to the wife, upon the happening of any event, unless it be given to her by his will; and in the case of the death of the husband, this property does not return to the wife, but vests in his executors.[7]

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[5] Kathleen Elizabeth Lazarou, "Concealed under Petticoats: Married Women's Property and the Law of Texas, 1840-1913" (PhD, Rice University, 1980), 9. Sara L. Zeigler, "Uniformity and Conformity: Regionalism and the Adjudication of the Married Women's Property Acts," *Polity* 28, no. 4 (1996): 467-95.
[6] William Blackstone, *Commentaries on the Laws of England*, (London, 1765-1779), Book II, Chapter 29, "Of Title by Succession, Marriage, and Judgment." Available: http://www.yale.edu/lawweb/avalon/blackstone/bk2ch29.htm. [Accessed: 2 May 2006].
[7] Tapping Reeve, *The Law of Baron and Femme, of Parent and Child, Guardian and Ward, Master and Servant, and of the Powers of Courts of Chancery*, 2nd ed. (Burlington: Chauncey Goodrich, 1846), 2. On Reeve's influence on American law, see Gregory S. Alexander, *Commodity & Propriety: Competing Visions of Property in American Legal Thought, 1776-1970* (Chicago: University of Chicago Press, 1997), 163, 423.

In both England and the United States all personal property brought by a woman to the marriage was both owned *and* controlled by the husband under coverture. It should be noted that under English common law, which the United States inherited, single women had unusual freedom, compared with women elsewhere in Western Europe.[8] Moreover, while coverture was illiberal and restricted women's full participation in the market, it did not entirely prevent women from using or controlling property. Research on the operation of coverture in England shows that some wives were able to leave property in their wills.[9] While coverture imposed transaction costs on maintaining separate property in a woman's name, the financial and legal instruments to do were available across England. Indeed, Erickson has argued that the liberal rights granted to single women—before *and* after marriage—in combination with the development of instruments to bypass coverture made a positive contribution to the development of the English economy. Single women were free to invest their wealth, while coverture promoted the development of financial instruments that had application in other transactions. Moreover, at least in England, these instruments to bypass coverture became commodified. Documents establishing trusts, for example, did not have to be written from scratch for every family, reducing the costs involved. The uneven inheritance of the English common law in the American colonies meant that coverture bore more heavily on American women. Equity courts, for example, were not available in all the colonies.[10] Research by Marylynn Salmon suggests that the market for trusts and other instruments

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[8] Amy Louise Erickson, "Coverture and Capitalism," *History Workshop Journal*, no. 59 (2005): 1-16.
[9] Maxine Berg, "Women's Property and the Industrial Revolution," *Journal of Interdisciplinary History* 24, no. 2 (1993): 240-41, Amy Louise Erickson, "Common Law Versus Common Practice: The Use of Marriage Settlements in Early Modern England," *Economic History Review* New Series 43, no. 1 (1990): 21-39.
[10] Charles Chauncey Savage, "Some points of comparison between English and American legislation, as to married women's property," *American Law Register*, 31 no.12 (1883): 762.

to bypass coverture was thinner in the United States.[11] Contemporaries believed that the

earlier pressure to reform property laws in the United States, compared with Britain, was

because "the English custom of marriage settlements … never prevailed here to so great

an extent."[12]

Coverture was modified in practice by the parallel tradition of dower that

guaranteed wives a one-third share of their husband's property upon his death.[13]

Women's property could also be held in trust to shelter it from passing to the husband

under coverture upon marriage. The purpose of dower and trusts was not to provide

women with opportunities for equal control of property, but to insure them against

financial catastrophe if their husband died or could not fulfill financial obligations to

creditors.[14] Trusts were generally operated to permit married women continuing

ownership of property that had bequeathed to them before marriage. Thus, as well as

protecting a married woman's limited rights in her property, trusts were also a way of

protecting the property of a woman's patrilineal family from the mismanagement of her

husband. The crucial distinction here is between ownership and control. Trusts protected

a married woman's ownership of her property, but generally permitted her husband to

control that property. Moreover, both common and statute law gave the husband rights to

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[11] Marylynn Salmon, *Women and the Law of Property in Early America* (Chapel Hill: University of North Carolina Press, 1986).

[12] Frank Gaylord Cook, "The Law's Partiality to Married Women," *The Atlantic*, (September 1886): 312.

[13] On the history of dower, see Florence Griswold Buckstaff, "Married Women's Property in Anglo-Saxon and Anglo-Norman Law and the Origin of the Common-Law Dower," *The Annals of the American Academy of Political and Social Science* 4 (1893): 33-64. A more recent summary is Ariela R. Dubler, "In the Shadow of Marriage: Single Women and the Legal Construction of the Family and the State," *Yale Law Journal* 112 (2003): 1660-68.

[14] Kermit Hall, *The Magic Mirror: Law in American History* (New York: Oxford University Press, 1989), 157-59. On the long history of dower, see Buckstaff, "Married Women's Property in Anglo-Saxon and Anglo-Norman Law and the Origin of the Common-Law Dower," 33-64.

the earnings—rents, interest, and dividends, for example—that accrued from a wife's property.

This distinction between ownership and control persisted through the nineteenth century reforms to married women's property rights. Some acts purported to give wives ownership or title, but not management or control of assets. It is a distinction that may appear odd to economists, in particular, as an operating assumption of many economic analyses is that ownership of assets implies control over their use and sale. In the legal realm the distinction was advocated as a way of giving wives title to assets, but without interfering unduly with her husband's day-to-day authority over the household. More concretely, laws which attempted to separate ownership from control restricted husbands' ability to sell property. Wives had the final say in the continued ownership of assets. However, on a day-to-day basis a husband was presumed to be in charge of managing the asset. Land—a particularly important form of wealth in nineteenth century America—could not be sold by the husband, but he could decide what was planted on it, or whether to rent the property, and how much rent would be charged. In the service of maintaining the legal doctrine of the indivisible household husbands had substantial power to affect the value of property that titularly belonged to their wife.

The extent of women's legal disabilities under coverture has been the subject of a sixty year debate, since the 1946 publication of Mary Beard's *Women as Force in History*.[15] Beard argued that nineteenth century feminists overstated the strength of coverture, by reading Blackstone too literally. In so doing, early feminists created a politically useful myth of subjugation that did not reflect the more complicated reality of

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[15] Mary Ritter Beard, *Woman as Force in History* (New York: Macmillan, 1946).

women's property rights in antebellum America. Equity courts complicated the common law of coverture, and at least in theory, ameliorated some of the harshest aspects of the common law as it applied to married women. Because of its canonical status in the history of American women, the arguments advanced by Beard in *Women as Force* were scrutinized by some of the first large cohort of women's historians in the 1960s and 1970s.

Studies of the application of equity law in the colonial and antebellum eras concluded that Beard's claims were overstated. In practice, equity law was utilized only by wealthy women with substantial inheritance to protect. Poor women were left with the restrictions of the common law.[16] In effect the common law of coverture specified a standard contract for the ownership of property within marriage. Seeking a variation on this standard contract was costly—requiring a woman to invest her own time in the process, as well as possibly paying a lawyer to represent her. Moreover, the outcome was uncertain, and potentially complicated the social and emotional relationships involved in the marriage. One of the uncertainties was that the application of equity law varied from state to state. Marylynn Salmon finds that equity was not uniformly practiced in England, and varied among the American colonies. Pennsylvania and New England strayed the most from English traditions, and adopted legal codes that placed a high priority on family unity. Southern colonies, by contrast, adapted the common law more rapidly.[17] Under these conditions we would expect that only women who expected to gain from going to equity court to avail themselves of its proceedings. The potential gains from

[16] Elizabeth Bowles Warbasse, *The Changing Legal Rights of Married Women, 1800-1861* (New York: Garland Publishing, 1987), 29-48.
[17] Robert A. Pollak, "A Transaction Cost Approach to Families and Households," *Journal of Economic Literature* 23, no. 2 (1985): 581-608.

using equity law had to exceed the monetary costs of going to court, and the risks of upsetting the marriage.

Coverture prescribed a default set of property rights for men and women within marriage which it was costly to deviate from.[18] Economic analysis of coverture has used a transaction cost approach.[19] If bargaining about property rights within marriage was costless, and husbands and wives could be sure their spouse was not going to renege on the marriage contract, then the default law of coverture would not have affected women's incentives to work outside the home. These conditions for coverture to not affect women's work within marriage are the conditions given by the Coase theorem for an initial allocation of property rights not to affect economic efficiency.[20] However, as bargaining was costly, and there were incentives for people to seek alternative arrangements than coverture, pressure developed in the early nineteenth century for changes in married women's property rights. Geddes and Lueck argue that increases in women's property rights were directly related to general increases in wealth and wages, as well as changes that affected women's incentives to work outside the home. Specifically, they predict that as the wages earned by educated women increased, and women had the opportunity to work in highly skilled and "non-routine jobs," that

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[18] For contemporary commentary on this problem, see Joel Prentiss Bishop, *Commentaries on the Law of Married Women
under the Statutes of the Several States, and at Common Law and in Equity* (Boston: Little, Brown, 1873), microform.
[19] R. H. Coase, "The Problem of Social Cost," *Journal of Law and Economics* 3 (1960): 1-44.
[20] Rick Geddes and Dean Lueck, "The Gains from Self-Ownership and the Expansion of Women's Rights," in *John M. Olin Program in Law and Economics Working Paper* (Palo Alto: Stanford Law School, 2000), Rick Geddes and Dean Lueck, "The Gains from Self-Ownership and the Expansion of Women's Rights," *American Economic Review* 92, no. 4 (2002): 1082.

coverture would become less attractive.[21] Geddes and Lueck's empirical analysis focuses

on the late nineteenth century introduction of earnings and sole trader laws. Their

hypothesis that overall levels of wealth and market activity made coverture less attractive

finds support in a recent dissertation that examines the state-level influences on reform of

married women's property rights in the mid-nineteenth century.[22] Gignesi uses Sellars'

concept of the "market revolution," as the foundation of her analysis, and argues that the

more commercialized a state's economy was, the more likely that state was to reform

married women's property laws.[23] Historian Carole Shammas has also argued that the

opening of western lands, and growing opportunities for non-agricultural employment,

weakened the benefits of coverture in the early Republic, and led to pressure for reform.[24]

Until quite recently, historians of coverture in the United States emphasized its

restrictions on women's title to and control of assets. Recently more attention has been

paid to further, and separate disincentives for women to undertake paid labor outside the

home that prevailed under coverture. Until 1857 no states gave women explicit title to

their earnings from labor or business. Contemporary observers, such as the lawyer Joel

Bishop were aware of the disincentives this gave to women. Under the heading "Evils of

the Common Law Rule," Bishop wrote:

> Among some very rude and barbarous tribes of people, the
> chiefs are in the habit of appropriating to themselves
> whatever earnings of their subjects they take a fancy to. The
> result is, that all such people are thereby made *lazy*. The

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[21] Amy Lydia Gignesi, "Relinquishing Control: The Married Women's Property Acts in Mid-Nineteenth Century America" (PhD, American University, 2005).

[22] Reva B. Siegel, "Home as Work: The First Woman's Rights Claims Concerning Wives' Household Labor, 1850-1880," *Yale Law Journal* 103, no. 5 (1994).

[23] Charles Sellars, *The Market Revolution: Jacksonian America 1815-1846* (1991).

[24] Carole Shammas, "Anglo-American Household Government in Comparative Perspective," *William & Mary Quarterly* 3rd Ser. 52, no. 1 (1995): 104-44, Carole Shammas, *A History of Household Government in America* (Charlottesville: University of Virginia Press, 2002)..

proper stimulant for exertion is taken away. In like manner,
the common law of married women in so far as it is
practically carried out, tends to make wives lazy.[25]

If women had few opportunities to do work separately from their husbands, then the
appropriation of their earnings by him would have little effect on what wives would do. If
a husband and wife worked together, for example on a family farm, then coverture had
little effect on women's work choices, or a family's well-being.[26] But under some
conditions coverture, by reducing wives' incentives to earn money, reduced a family's
well-being. On the face of it, coverture benefited men since it gave them greater power
within marriage. Yet if coverture reduced a woman's incentives to choose paid work over
household labor or leisure, it also potentially reduced husband's standards of living.

For example, consider a married couple where the wife has time to undertake
some market work, perhaps through sewing or taking in boarders.[27] Under coverture, her
incentives to work are limited since she has no legal claim to the additional earnings she
brings into the family. Her claim on the addition to family income she has made is
dependent on her bargaining power with her husband. Assuming she has title to her own
earnings, but earns less than her husband, she will be likely to share at least some of the
earnings with her husband. Even if she didn't share any earnings with her husband, the
husband's obligation to provide his wife with independent spending money may be

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[25] Bishop, *Commentaries on the Law of Married Women
under the Statutes of the Several States, and at Common Law and in Equity.*
[26] On the strong links between the household and work in the late eighteenth and early nineteenth century,
see Jeanne Boydston, *Home and Work* (New York: Oxford, 1990), Jeanne Boydston, "The Woman Who
Wasn't There: Women's Market Labor and the Transition to Capitalism in the United States," *Journal of
the Early Republic* 16, no. 2 (1996): 183-206.
[27] I use this example to abstract from the problem that going out to work may have some social stigma. See
Claudia Goldin, "A Pollution Theory of Discrimination: Male and Female Differences in Occupations and
Earnings," *National Bureau of Economic Research Working Paper Series* No. 8985 (2002), Goldin,
Understanding the Gender Gap: An Economic History of American Women.

reduced. By increasing wives' incentives to substitute paid work for leisure, giving wives title to their own earnings was likely to, at least minimally, increase a husband's standard of living since the family's income would be greater without him having to work more. The potential benefits to husbands from giving wives title to their own earnings are worth emphasizing, because otherwise the political economy of the married women's property acts appears anomalous. While there were benefits to women from passing property acts, and early women's rights political activity included reform of married women's property laws in their purview, the property acts were passed by male legislators, elected by male voters, well before women's suffrage was achieved. It is unlikely that the property law reforms would have been passed if they did not also benefit men.[28]

While reforms to coverture promised potential benefits for both spouses, the common law doctrine of marital service was not reformed in any state until well into the twentieth century, and likely acted to retard married women's entry into market work. The doctrine of marital service—upheld by courts and not reformed by legislation— specified that in marriage a woman's first obligation was to provide domestic labor for her husband.[29] When a wife worked outside the home, courts generally found that *if* the work was being done on her "sole and separate account," *and* if the state had an earnings act in place, that she was entitled to controlling the income she received from labor or business, providing that she kept the money in some form of separate account. These conditions placed some barriers between married women and their earnings. The work had to be clearly unrelated to her husband's work, clearly not an extension of her

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[28] Warbasse, *The Changing Legal Rights of Married Women, 1800-1861*, 272.
[29] A concise introduction to the topic is Katharine Silbaugh, "Turning Labor into Love: Housework and the Law," *Northwestern University Law Review* 91, no. 1 (1996): 28-30.

domestic labor, and the wife had to ensure that the earnings received were not mingled with other family accounts. If she contributed even some of her earnings to the family budget, courts then presumed the money was in the husbands control as the legal head of the household.[30] The law became somewhat murkier when wives earned money through activities undertaken within the family home, or provided labor for their husband's business.[31] Legal historian Reva Siegel reviews the adjudication of the earnings statutes in the late nineteenth century, and finds that no states weakened wives obligations to first labor for their husband.[32] A corollary of the doctrine of marital service was that any commitments by a husband to pay his wife explicitly for her domestic labor was not legally enforceable.[33] Furthermore, if a married woman was injured by a third party, she could only claim for pain and suffering, while their husbands could claim for the lost value of household labor. Indeed, husbands whose wives were injured, and unable to recover to do housework were able to claim monetary damages sufficient to employ a servant to replace lost household labor.[34]

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[30] Helen Z.M. Rogers, "Married Women's Earnings," *Albany Law Journal* 64 (1902): 384-386.

[31] Amy Dru Stanley, "Conjugal Bonds and Wage Labor: Rights of Contract in the Age of Emancipation," *Journal of American History* 75, no. 2 (1988): 495-97.

[32] Reva B. Siegel, "The Modernization of Marital Status Law: Adjudicating Wives' Rights to Earnings, 1860-1930," *Georgetown Law Journal* 82 (1994): 2168-97. See also Sara L. Zeigler, "Family Service: Labor, the Family and Legal Reform in the United States" (PhD, University of California Los Angeles, 1996), 206-08, Zeigler, "Uniformity and Conformity: Regionalism and the Adjudication of the Married Women's Property Acts," 467-95. Zeigler also argues that the doctrine of marital service was upheld uniformly across the country.

[33] Siegel, "Home as Work: The First Woman's Rights Claims Concerning Wives' Household Labor, 1850-1880," 1082-86.

[34] For a contemporary report, see e.g. "Married Women. Damages for Impaired Capacity to Labor," *Harvard Law Review*, 9, no. 7 (1896): 473-4 ; Barbara Young Welke, *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920*, *Cambridge Historical Studies in American Law and Society* (New York: Cambridge University Press, 2001), 133. B. Zorina Khan, "Married Women's Property Laws and Female Commercial Activity: Evidence from United States Patent Records, 1790-1895," *Journal of Economic History* 56, no. 2 (1996): 362. Amy Dru Stanley, *From Bondage to Contract: Wage Labor, Marriage, and the Market in the Age of Slave Emancipation* (Cambridge; New York: Cambridge University Press, 1998), 199-217. Compare with the situation faced by women whose husbands were injured: John Fabian Witt, "From Loss of Services to Loss of Support: The Wrongful Death Statutes,

The courts recognized that there was a tension between the doctrine of marital service, and the principle of spouses independently deciding how to allocate their time implied by the earnings acts. Marital service presumed that a woman would first spend her time maintaining the household at the direction of her husband. Earnings acts implied that "[h]er right to employ her time for the earning of money on her own account is as complete as his …" Yet because comparatively few married women worked outside the home, determining a value for the potential earnings she lost if injured was difficult without an extensive earnings history that showed her value in the marketplace.[35] The tension between service and potential for earnings was not resolved quickly. By contrast the value of domestic labor could be determined with reference to the competitive market for domestic servants. Suing to test the limits of the property acts and the marital service doctrine was, almost by definition, an exceptional circumstance that may appear to be at some remove from families' everyday labor supply decisions. Yet the findings expressed in these cases illustrate the legal constraints under which wives made their choices, or not, about labor.

It is somewhat ironic that contemporaneous with courts finding husbands economically damaged when they lost their wife's labor, that the prevailing ideology of marriage and labor valorized wives' domestic work as an expression of love, its value beyond monetary compare. As an extensive historical literature has shown, housework and child-rearing were viewed as a wife's responsibility, motivated by a woman's

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the Origins of Modern Tort Law, and the Making of the Nineteenth-Century Family," *Law and Social Inquiry* 25, no. 3 (2000): 717-55.

[35] "Married Woman—Personal Injuries—Damages—Capacity for Labor: Harmon V. Old Colony R. R. Co." *Virginia Law Register* 2, no.1 (1896): 11. See also "Recovery by a Married Woman for the Impairment of Her Earning Capacity," *Harvard Law Review*, 14 no. 1 (1900): 61-62.

affection for her family.[36] Leaving aside the question of whether it was economically

rational for women to work in the home versus seeking work in the market, the

veneration of domestic labor as an expression of love, and not work, was a neat

ideological construction. It suggested that housework was a wife's choice—contrary to

legal doctrine—and elevated the actual work in comparison with paid labor in the factory

or field. Wives who chose to work out were seen to be giving up on an intrinsically more

enjoyable way to spend one's day. The moral elevation of housework, suggesting that

domestic and market labor were incomparable was a political cover for the legal

inequalities within marriage.

Married women's title to assets and income did not mean that they were legally

equal to their husbands. Marriage imposed a set of rights and responsibilities on men and

women that were unequal and hierarchical, within the household. The decision of the

Iowa Supreme Court in 1888 summarized marital service as "the duty of the wife, as a

helpmeet, to attend without compensation all ordinary household duties, and labor

faithfully to advance her husband's interests."[37] Husbands retained the right to direct

what their wives did with their time, but were correspondingly obligated to support their

wives.[38] Although much of the historiography of the doctrine of marital service focuses

on the second half of the nineteenth century, it continued to be applied through the first

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[36] Nancy Folbre, "The Unproductive Housewife: Her Evolution in Nineteenth-Century Economic Thought," *Signs* 16, no. 3 (1991): 463. Boydston, *Home and Work*. The historiographical debate goes back to Barbara Welter, "The Cult of True Womanhood," *American Quarterly* 18, no. 2 (1966).

[37] Quoted in W.W. Thornton, "Personal Services Rendered by Wife to Husband under Contract," *Central Law Journal* 50, no. 1 (1900): 184.

[38] Sara L. Zeigler, "Wifely Duties: Marriage, Labor and the Common Law in Nineteenth-Century America," *Social Science History* 20, no. 1 (1996): 63-96. Hendrik Hartog, *Man and Wife in America: A History* (Cambridge, Mass.: Harvard University Press, 2000), 156. Nancy F. Cott, *Public Vows: A History of Marriage and the Nation* (Cambridge, Mass.: Harvard University Press, 2000), 12.

half of the twentieth century.[39] A review of married women's legal status in 1929 still noted that "their labor, beyond the domestic duties required by the marital relation, belongs to themselves."[40] Indeed, as recently as 1993 a majority decision of the California Supreme Court has held that marital service obligations still apply in some respects, finding that promises to compensate a spouse for domestic labor are not enforceable.[41] The doctrine of marital service is convenient for modeling wives labor supply. It provides a foundation for using a unitary model of the household, that assumes decisions are made as if the family has just one decision maker, and largely ignores the division of power within the household and how spouses might bargain about work.[42] While a unitary model likely does not reflect modern marriage, it has a close approximation to the legal theory of marriage in Victorian era America.

In summary, over the course of the nineteenth century a succession of legal reforms enacted in most states granted American married women stronger title over assets and income, yet did not grant wives complete equality within marriage. The doctrine of marital service left husbands ultimately in charge of the household and decisions about family labor supply. If husbands allowed their wives to work property

[39] Joseph Warren, "Husband's Right to Wife's Services I," *Harvard Law Review* 38, no. 4 (1925): 421-46, Joseph Warren, "Husband's Right to Wife's Services Iii," *Harvard Law Review* 38, no. 5 (1925): 622-50. Although the second article listed here is given as the third in the series, this appears to be a misprint. The footnotes in III continue sequentially from I, and the articles appear in subsequent issues. See also M. Cecile Matheson, "Married Women and Their Work," *Journal of Comparative Legislation and International Law* 8, no. 1 (1926): 50-54.

[40] Mary Phlegar Smith, "Legal and Administrative Restrictions Affecting the Rights of Married Women to Work," *The Annals of the American Academy of Political and Social Science* 143 (1929): 255. See in the popular press: "Women disclose inequality in law," *New York Times*, 18 September 1922, p.20.

[41] Joan Williams, "Do Wives Own Half? Winning for Wives after Wendt," *Connecticut Law Review* 32 (2000): 256-58. See also Joan Williams, *Unbending Gender: Why Family and Work Conflict and What to Do About It* (Oxford; New York: Oxford University Press, 2000), 119-20.

[42] Richard Blundell and Thomas Macurdy, "Labor Supply: A Review of Alternative Approaches," in *Handbook of Labor Economics*, ed. Orley Ashenfelter and David Card (Amsterdam: Elsevier, 1999), 1657-72. Compare with the analysis in Elissa Braunstein and Nancy Folbre, "To Honor and Obey: Efficiency, Inequality, and Patriarchal Property Rights," *Feminist Economics* 7, no. 1 (2001): 25-44.

law reform gave wives increasing control of earnings and assets. The residual doctrine of marital service meant that in marriage women did not have full control of their own time. Even the title of Reeve's legal treatise suggests this. Wives stood to husbands like children to parents, wards to guardians, or servants to masters. Spouses were not equal.

Married women's property law reform in the United States

The course of married women's property law reform in the United States can be neatly traversed by examining the multiple reprintings of Tapping Reeve's 1816 treatise on "domestic relations." Reeve died in 1823, and the revisions were undertaken by others to place under Reeve's more saleable name.[43] The 1846 summary of marital property law—that the husband acquired "absolute title" to his wife's property was not terribly inaccurate, as few states had passed any form of married women's property law at this date. At each following reprinting the footnote explaining to the reader that Reeve's original summary was contradicted by statute grew longer and longer. In 1862 the footnote merely noted that the common law right of the husband to his wife's property "is annulled in New York and most of the other states by statute."[44] By 1888 the archaic title, *Baron and Femme* had been changed to *Husband and Wife*, and the clause in the title about the books consideration of the chancery courts—where equity cases were adjudicated—was removed. Yet the connection of "husband and wife" with manifestly hierarchical relationships: parent and child, guardian and ward, master and servant, is suggestive in itself. Nor was this connection unique to Tapping Reeve. Other legal

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[43] There is no monographic work on Reeve's life. The closest work is a history of his involvement with the Litchfield Law School: Marian C. McKenna, *Tapping Reeve and the Litchfield Law School* (New York: Oceana, 1986).
[44] Tapping Reeve, *The Law of Baron and Femme, of Parent and Child, Guardian and Ward, Master and Servant, and of the Powers of Courts of Chancery*, 3rd ed. (Albany: William Gould, 1862), 46.

treatises of the time, such as James Schouler's had very similar titles.[45] The original text

of the husband acquiring absolute title remained, yet the footnote contradicting Reeve's

original summary took up more space than the original text:

> The great and sweeping changes made, both in this
> country and England, in respect to the property
> rights and liabilities of married women, by what
> may be termed the married women's legislation of
> the last half century, are too well known to
> extended reference in this connection. In nearly all,
> if not all of the states of the Union … property of a
> married woman belonging to her at the time of
> marriage, or acquired subsequently thereto,
> becomes and remains her separate estate, free from
> the interference of her husband and not liable for
> his debts …. This is the statement of a general rule
> which is subject to some slight qualifications when
> applied to the statutes of particular states.[46]

In 72 years the laws had changed so much that Reeve's summary was nearly

entirely contradicted. As Reeve's 1888 interlocutor, James W. Eaton, noted the general

statement that coverture had been largely abolished manifested itself in different ways in

different states. Reform of married women's property laws took three main forms.[47] The

initial wave of reforms granted married women control over their separate estates and

property, with the first of these laws being passed in Mississippi in 1839.[48] Some of the

initial acts were stimulated by the financial panic of 1837.[49] In the remainder of this

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[45] James Schouler, *Law of the Domestic Relations* (Boston: Little Brown, 1905).

[46] Tapping Reeve, *The Law of Husband and Wife, of Parent and Child, Guardian and Ward, Master and Servant*, 4th ed. (Albany: William Gould, 1888), 44.

[47] Joan Hoff, *Law, Gender and Injustice: A Legal History of U.S. Women* (New York: New York University Press, 1991), 128.

[48] Sandra Moncrief, "The Mississippi Married Women's Property Act of 1839," *Journal of Mississippi History* 47, no. 2 (1985): 110-25. Elizabeth Gaspar Brown, "Husband and Wife: Memorandum on the Mississippi Women's Law of 1839," *Michigan Law Review* 42, no. June (1944): 1110-21.

[49] Richard Chused, "Late Nineteenth Century Married Women's Property Law: Reception of the Early Married Women's Property Acts by Courts and Legislatures," *American Journal of Legal History* 29, no. 1 (1985): 4.

paper, I refer to these acts as the "property acts," as they dealt with the control and ownership of assets. A second phase of reform—beginning in Maine in 1857—allowed married women to exercise some control over their earnings in the labor market. In a third aspect of reforms, states allowed married women to operate as sole traders, independent of their husbands.

Scholars disagree about the effective date of passage of the married women's property laws. For example, Joan Hoff's 1991 book *Law, Gender and Injustice* traces some acts as far back as an 1811 Ohio law permitting wives to be sole traders, contradicting the textbook women's history narrative that grants Mississippi's 1839 law first place.[50] Conversely, Khan's research ignores these earlier laws, and indicates that Maine's 1844 combined sole trade and property legislation was the first effective married women's property act. Geddes and Lueck's recent work on the state-level determinants of property law reform proposes yet another set of dates.[51] The disagreement stems not from a failure of basic research in historical legislation identifying when laws were passed, but division over when effective laws were passed. For example, some sole trade legislation required that a woman place an advertisement in a newspaper stating her intention to take advantage of the legislation (See Figure 2.1).[52] This was a barrier to married women's

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[50] For attribution of the first act to Mississippi, see *inter alia* Christine A. Lunardini and Catherine Clinton, *The Columbia Guide to American Women in the Nineteenth Century* (New York: Columbia University Press, 2000), 63. Laura Edwards, *Scarlett Doesn't Live Here Anymore: Southern Women in the Civil War Era* (Chapel Hill: University of North Carolina Press, 2002), 29. For evidence that Arkansas Territory passed an act in 1835, four years before Mississippi, see Richard Chused, "Married Women's Property Law: 1800-1850," *Georgetown Law Journal* 71 (1983): 1398-400. On the Arkansas act, see Michael B. Dougan, "The Arkansas Married Woman's Property Law," *Arkansas Historical Quarterly* 46, no. 1 (1987).
[51] See the Appendix to Geddes and Lueck, "The Gains from Self-Ownership and the Expansion of Women's Rights." Working paper version: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236012. [Accessed: 18 September 2005].
[52] Smith, "Legal and Administrative Restrictions Affecting the Rights of Married Women to Work," 260. This article noted that in some states wives had to receive a judge's permission to be a soletrader. In

independent trading, reinforcing the control of husbands over wives labor. Legal details mattered, as they imposed transaction costs on wives who wanted to deviate from the default presumption of a husband's control of his wife's labor.

The passage from coverture to constrained choice in married women's property rights took over a century. In the vast majority of states legislation about different types of property passed separately, and was then revised. For example, Hoff identifies only three states that passed all their acts in the same year (Colorado, Montana, and Utah). Compared to Khan, Hoff is more likely to cite the earliest version of an act, whereas Khan cites the dates of passage of laws that gave women some level of substantive control over property. Despite this, Khan only identifies 12 states which passed all their laws in the same year (California, Colorado, Kansas, Maryland, Mississippi, Nebraska, Nevada, North Dakota, South Dakota, Utah, Washington, Wyoming). Married women's property law reform was repeatedly reformed and clarified in most states in the course of the nineteenth century.

Laws about title and control of assets were revised the most frequently, with different aspects of ownership being reformed separately. According to Hoff acts dealing purely with ownership of property can be further sub-divided into four different classes:

- Debt-free estates
- Separate estates
- Wills
- Personal estate access.[53]

Wisconsin the wife had to prove to a judge that her husband was unable to support her by reason of drunkenness, disability, or otherwise before she could be a soletrader.

[53] Hoff, *Law, Gender and Injustice: A Legal History of U.S. Women*, 129, 377-82, Zeigler, "Wifely Duties: Marriage, Labor and the Common Law in Nineteenth-Century America," 64, 72-3.

The laws which—following Khan—I refer to as "property acts" are the acts Hoff

distinguishes as dealing with debt-free estates and separate estates. Respectively, these

pieces of legislation enabled women to inherit property unencumbered by any debts their

husbands might have had, and to hold separate title to property. While these property acts

gave women *title* to their estates within marriage, some legislation did not give women

control over the property.[54] Legislation reforming married women's ability to will

property generally made the change from a regime where women could not will property

without their husband's consent to a regime where married women could will their

separate property without their husband's involvement. Personal estate access acts gave

widows greater access to proceeds from their husbands estate before creditors could use

the estate to meet any debts the husband had.

Historiography

The early historiography of the property acts largely focused on the property and

estate acts.[55] Recent scholarship has begun to show that the most potentially significant

legislation were the earnings acts.[56] This is borne out by the mid-nineteenth-century

census enumeration of wealth. In 1850, just one third of one percent of white married

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[54] Lazarou, "Concealed under Petticoats: Married Women's Property and the Law of Texas, 1840-1913", 13.

[55] Norma Basch, "The Emerging Legal History of Women in the United States: Property, Divorce, and the Constitution," *Signs* 12 (1986): 97-117. Chused, "Late Nineteenth Century Married Women's Property Law: Reception of the Early Married Women's Property Acts by Courts and Legislatures," 129-51, Marylynn Salmon, "The Legal Status of Women in Early America: A Reappraisal," *Law and History Review* 1, no. 1 (1983).

[56] Beginning with Amy Dru Stanley's work, and continuing into the work be legal historians Siegel and Sillbaugh: Siegel, "Home as Work: The First Woman's Rights Claims Concerning Wives' Household Labor, 1850-1880.", Siegel, "The Modernization of Marital Status Law: Adjudicating Wives' Rights to Earnings, 1860-1930.", Reva B. Siegel, "Valuing Housework - Nineteenth-Century Anxieties About the Commodification of Domestic Labor," *American Behavioral Scientist* 41, no. 10 (1998), Silbaugh, "Turning Labor into Love: Housework and the Law."

women reported any real estate wealth. While this figure advanced to 0.77 percent in

1860, and 1.45 percent in 1870, the proportion of white married women reporting wealth

was small. In 1860 and 1870, a broader measure of wealth—personal property—was also

enumerated. White married women's wealth holding on this measure advanced from 0.92

percent in 1860 to 1.58 percent in 1870. By contrast, even in 1860 and 1870 at least 4

percent of married women were working outside the home—more than twice the

proportion of women who said they held even a little property. It is likely that this

comparison *understates* the difference between wealth holding by women and labor force

participation. On the one side, it is nearly universally agreed that the nineteenth century

American census under-counted women's work.[57] Conversely, census estimates of wealth

were quite accurate, or somewhat overstated.[58] It is unsurprising that the census would

report few women holding real or other wealth with reforms to property laws only

recently enacted, or not enacted at all by 1870. From 1850 to 1870 just over a quarter of

white married men reported owning real property, while two in every five white husbands

reported having some form of wealth in 1860 and 1870. Reform of property laws had the

potential to affect the intra-family claim on wealth for a significant minority of American

families.

    The motivation of male legislators for introducing the married women's property

acts was not to strike a blow for female equality. While reform of property law was an

[57] Folbre, "The Unproductive Housewife: Her Evolution in Nineteenth-Century Economic Thought.", Lisa Geib-Gunderson, *Uncovering the Hidden Work of Women in Family Businesses: A History of Census Undernumeration*, *Garland Studies in the History of American Labor* (New York: Garland, 1998). Susan B. Carter and Richard Sutch, "Fixing the Facts: Editing of the 1880 U.S. Census of Occupations with Implications for Long-Term Labor-Force Trends and the Sociology of Official Statistics," *Historical Methods* 29, no. 1 (1996).
[58] Joshua L. Rosenbloom and Gregory W. Stutes. "Reexamining the distribution of wealth in 1870" University of Kansas. Working papers series in theoretical and applied economics. Number 200501. January 25, 2005.

object of nineteenth-century feminists, in general their lobbying efforts were not the primary reason for the passage of laws. The initial wave of reforms—the property laws that gave married women title to their separate property and estates—were motivated in part by the periodic financial crises of the nineteenth-century American economy. By securing married women's continuing title to assets they brought with them into a marriage, married women had some possibility of financial fallback if their husband were to die, desert or divorce them. The public interest in protecting married women's property from the claims of their husband's creditor was to minimize calls by widows on public assistance. In short, married women's property reform was a form of welfare policy.[59]

Another motivation for married women's property law reform was attracting families to western territories. Legal historian Richard Chused analyzed the mid-nineteenth century Congressional debates on the Oregon donation acts, and found that Congress wanted to attract women to the Oregon territory by granting married men twice the land of single men, with half the couple's land held by the wife. The Donation Acts provided that women could use and transfer the property without their husband's consent, and the land was immune to the claims of her husband's creditors if he died encumbered with debts.[60] The Oregon Donation Act was a rare piece of federal legislation expanding married women's property rights. Most legislation and litigation regarding married women's property rights took place at the state level. The limited examples of federal action on married women's property rights were all relatively liberal. Congress passed a married woman's property act for the District of Columbia in 1869 that was described by

[59] Lazarou, "Concealed under Petticoats: Married Women's Property and the Law of Texas, 1840-1913".
[60] Richard Chused, "The Oregon Donation Act of 1850 and Nineteenth Century Federal Married Women's Property Law," *Law and History Review* 2, no. 1 (1985): 44-78. See also U.S. House of Representatives, *The Public Domain: Its History, With Statistics*, (Washington D.C., 1881): 296.

a contemporary scholar as "one of the most radical on this subject …. [granting] a married woman … all the legal rights and powers of a single woman."[61]

Whereas the British Married Women's Property acts of 1870 and 1882 occasioned a great deal of interested comment in the press, pamphlets and broadsides of the time, a striking aspect of the American reforms was a lack of interest by the press and contemporary commentators. One index of greater public awareness of the British Acts may be Oscar Wilde's reference to the Acts in *An Ideal Husband*, where Mrs Allonby argues that "All men are married women's property. That is the only true definition of what married women's property really is. But we don't belong to any one."[62] When legislation appears in the theater it is almost certainly well known.

By contrast, the American press barely covered the numerous reforms to married women's property acts in the various states. The New York Times, for example, scarcely covered the passage of the New York state earnings act in 1860, reprinting the text of the act but providing no report of the debate, commentary, or letters.[63] While historians view the New York earnings act of 1860 as a model for later acts in other states, it was not regarded as an important piece of legislation by contemporaries. Indeed, writing in 1891 the American feminists Annie Meyer and Julia Howe commented about the reform of property law that "the emancipation of married women has been gradually, *silently*, successfully accomplished."[64]

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[61] Henry Hitchcock, "Modern Legislation Touching Marital Property Rights," *Journal of Social Science*, no. 13 (1881): 29.

[62] Oscar Wilde, *An Ideal Husband: A Woman of No Importance*, (Boni & Liveright, New York, 1919): 153.

[63] "Rights of Married Women: An Act Concerning the Rights and Liabilities of Husband and Wife," *New York Times*. March 21 1860, p.5.

[64] Emphasis added. Annie Nathan Meyer and Julia Ward Howe, *Woman's Work in America* (New York: Henry Holt, 1891), 447.

Historiography of consequences

Despite the relative silence of contemporaries, historians since the 1970s have taken with enthusiasm to studying the nineteenth century married women's property acts in both the United States and Great Britain. The literature has grown sufficiently to encompass both synthesis and challenge to the synthesis.[65] The first wave of historiography in the 1970s and 1980s largely looked at the campaigns to achieve property law reform, and evaluated their impact as instruments and objects of women's political organization.[66] As the acts had been passed, despite women's lack of political rights, perforce they were some sort of success. The first historical assessments of the consequences of the acts concluded that their impact was selective and limited.[67] The only women who benefited were women with property, and change occurred only slowly even for them. For example, Norma Basch writes that "the married women's property acts failed to make … a significant alteration [in the patriarchal family] One reason for the failure of the statutes was the common law doctrine of marital unity."[68] Basch is not alone in emphasizing that while the text of the acts could have been construed liberally, they were largely interpreted in the most conservative manner possible. Sandra vanBurkleo argues that it took sixty years—until 1908—for the New York Court to acknowledge that the legislature may actually have intended to give married women

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[65] Shammas, "Re-assessing the Married Women's Property Acts." Zeigler, "Uniformity and Conformity: Regionalism and the Adjudication of the Married Women's Property Acts," 467-95.
[66] e.g; Basch *In the Eyes of the Law*.
[67] Richard Chused, "Married Women's Property and Inheritance by Widows in Massachusetts: A Study of Wills Probated between 1800 and 1850," *Berkeley Women's Law Journal* (1986): 42-88, Michael Dahlin, Carole Shammas, and Marylynn Salmon, *Inheritance in America from Colonial Times to the Present* (New Brunswick: Rutgers University Press, 1987). Norma Basch, "Invisible Women: The Legal Fiction of Marital Unity in Nineteenth-Century America," *Feminist Studies* 5 (1979): 346-47. Carole Shammas, "Re-Assessing the Married Women's Property Acts," *Journal of Women's History* 6, no. 1 (1994): 16-21.
[68] Basch, "Invisible Women: The Legal Fiction of Marital Unity in Nineteenth-Century America," 346-47.

control over property and earnings. In the interim, they ruled that married women " may elect to labor on her own account and thereby entitle herself to her earnings, but in the absence of such an election …. the husband's common law rights to her earnings remains unaffected." In other words, if a woman did not explicitly state that she would retain control of her earnings, it was presumed that her husband did. In 1895, the New York court hardened this view into the notion that by getting married a woman assented to her husband's claim on her labor, and gave up her title to earnings. [69] What was true for New York was also true in other jurisdictions. Zeigler has argued that the jurisprudence of the married women's property acts was remarkably uniform across the United States, and that the doctrine of marital service retarded the property acts from having any immediate effect on women's situation.[70] While Zeigler blames the courts for using marital service obligations to undermine the liberalizing intentions of property law statutes, Kathleen Sullivan argues that legislatures did not intend to transform the hierarchical family. Judges adherence to marital service doctrine was a way to preserve the unity of the family when the property acts gave both spouses an individual legal identity.[71]

By contrast with the early historiography, more recent quantitative assessments show that married women did benefit from the passage of the acts. After reviewing historians' pessimism about the acts' consequences, Shammas uses studies of probating—property willed at death—to show that women's share of probated wealth, and the proportion of women among people leaving wealth, rose rapidly between 1860

[69] Sandra F. Vanburkleo. *Belonging to the World*. (New York: Oxford University Press, 2001): 134-135.
[70] Zeigler, "Wifely Duties: Marriage, Labor and the Common Law in Nineteenth-Century America."
[71] Kathleen Sullivan, "Liberalism's Domesticity: The Common-Law Domestic Relations as Liberal Social Ordering" (PhD, University of Texas, 2002).

and 1900, soon after acts were passed.[72] Similarly, economic historian B. Zorina Khan

argues that the property acts had a substantial act on women's inventive activity. Khan

argues that women *did* respond to the changes in incentives provided by the acts. She

finds that states that reformed married women's property acts saw more rapid increases in

women's filing of patents, and had a higher absolute level of patenting by women even

after controlling for state characteristics such as the level of industrialization and

urbanization.[73]

While Khan's paper is the only scholarly work on the economic consequences of

the nineteenth-century American property acts, similar acts were passed in Britain and

Canada.[74] Research on women's wealth holding and business ownership after the British

and Canadian acts suggests that the acts did have some effect on women's economic

behavior and status. In Britain, Mary Beth Combs finds that "women shifted the majority

of their wealth-holding into forms of property that they could legally control during

marriage."[75] Combs uses a research design that exploits the differential treatment of

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[72] Shammas, "Re-Assessing the Married Women's Property Acts." 16-21.

[73] Khan, "Married Women's Property Laws and Female Commercial Activity: Evidence from United States Patent Records, 1790-1895."

[74] Constance B. Backhouse, "Married Women's Property Law in Nineteenth-Century Canada," *Law and History Review* 6, no. 2 (1988): 211-57. Much of the research has concentrated on Ontario. See, for example: Anne Lorene Chambers, *Married Women and Property Law in Victorian Ontario* (Toronto: Osgoode Society for Canadian Legal History and University of Toronto Press, 1997), Lee Holcombe, *Wives and Property: Reform of the Married Women's Property Law in Nineteenth Century England* (Toronto: University of Toronto Press, 1983). remains the standard work on the politics of the British acts. Acts in the Australian colonies and New Zealand were, as in Canada, more directly and admittedly influenced by British practice than in the American states. See Bettina Bradbury, "From Civil Death to Separate Property: Changes in the Legal Rights of Married Women in Nineteenth-Century New Zealand," *New Zealand Journal of History [New Zealand]* 29, no. 1 (1995), Hilary Golde and Diane Kirkby, "Mrs. Mayne and Her Boxing Kangaroo: A Married Woman Tests Her Property Rights in Colonial New South Wales," *Law and History Review* 21, no. 3 (2003).

[75] M. B. Combs, "Cui Bono? The 1870 British Married Women's Property Act, Bargaining Power, and the Distribution of Resources within Marriage," *Feminist Economics* 12, no. 1 (2006), Mary Beth Combs, "A Measure of Legal Independence": The 1870 Married Women's Property Act and the Portfolio Allocations of British Wives," *Journal of Economic History* 65, no. 4 (2005), Mary Beth Combs, "Wives and

already-married and newly-married women under the British laws, allowing her to attribute the change in behavior between groups to the effects of the property law reforms. In Canada, Inwood finds that property ownership by women in Guelph (Ontario) grew more rapidly after the passage of married women's property legislation.[76] Peter Baskerville compares women's investments in Victoria (British Columbia) and Hamilton (Ontario), and also finds that after property law reform, married women's investments grew more rapidly than before.[77] Both Inwood and Baskerville acknowledge that the design of their research is not ideal for attributing causality to the property acts, yet the rapid growth in property ownership following the acts is suggestive of some effect. In summary, on some specific measures of economic activity there is clear evidence that married women's property law reform had an impact on women's economic behavior, yet it is still not clear how widely those changes rippled through American society.

New evidence on the consequences of reform

I extend the existing literature on the effects of the property in three ways. First I estimate the effect of property and earnings law reform on married women's chances of having a gainful occupation recorded in the census. Second, for women who are already in the labor market, I examine whether the passage of sole-trader acts increased their chances of being sole-traders. Finally, I look at the consequences of the property acts for

Household Wealth: The Impact of the 1870 British Married Women's Property Act on Wealth-Holding and Share of Household Resources," *Continuity and Change* 19, no. 1 (2004).
[76] Susan Ingram and Kris Inwood, "Property Ownership by Married Women in Victorian Ontario," *Dalhousie Law Journal* 23 (2000): 405-49, Kris Inwood and Sarah VanSligtenhorst, "The Social Consequences of Legal Reform: Women and Property in a Canadian Community," *Continuity and Change* 19, no. 1 (2004): 165-97.
[77] Peter Baskerville, "Women and Investment in Late-Nineteenth-Century Urban Canada: Victoria and Hamilton, 1880-1901," *Canadian Historical Review [Canada]* 80, no. 2 (1999).

young women's education and marriage behavior, and the long-term effects of those

decisions in the early twentieth century. To investigate these issues, I use data from the

decennial censuses of the United States from 1870-1900, available in the IPUMS.[78]

Women's occupations were not enumerated by the American census until 1860, making it

impossible to estimate the effect of changes in laws during the 1850s. Only a small

number of states passed acts in the 1860s, making it statistically difficult to estimate the

impact of acts in this decade.[79] Thus, I focus on changes from 1870 to 1880, and 1880 to

1900.

For consistency with previous research in economic history, I use Khan's list of

legal changes, and the dating of the legislation by Joan Hoff that is more widely cited by

scholars in gender and legal history. Although Hoff and Khan disagree on the dates of

passage of legislation in some states, the substantive results I obtain are not sensitive to

the assignment of particular states to particular decades. This serves as some form of

check on the robustness of the underlying results. The extent of Hoff and Khan's

disagreement on when states passed *effective* legislation can be seen in Table 2.1. Note,

however, that for the estimation of the impact of the laws from census data, it only matter

that they agree on the decade of passage, or for the 1880s and 1890s on the effective act

being passed in that twenty year period. In summary, they agree on the dates of passage

of sole trader acts in just 20 states; on the passage of earnings acts in 29 states, and on the

passage of property acts in 25 states. Further disagreement on the dating of the property

acts can be seen in Geddes and Lueck's 2002 *AER* article on the state-level determinants

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[78] Steven Ruggles et al., *Integrated Public Use Microdata Series: Version 3.0* ([Machine-readable database] Minneapolis, MN: Minnesota Population Center [producer and distributor], 2004).

[79] Technically, there is collinearity between the dummy variables for passing acts in particular decades and the dummy variables identifying the second year in the sample.

of the dates of passage of married women's property law reform.[80] The disagreement among scholars about the effective dates of passage is in some ways illustrative of the convoluted process of property law reform.

Legal change and labor force participation

Reform of the married women's property laws was a national trend, yet certain regional patterns are evident. States in the Northeast, Midwest, and West were more likely to have passed legislation at a given date than were states in the south. Midwestern and Western states that came into the union during the nineteenth century sometimes incorporated protection for married women's property rights in their state constitutions.[81] While states in the South were less likely to have passed married women reforms, overall married women's labor force participation rates in the South were somewhat higher. This is entirely attributable to the greater proportion of black women in the Southern population and labor force, since white women's participation in the South was lower than in other regions of the country. To disentangle the effects of race and legal reform, I estimate the changes in labor force participation conditional on legal reform separately for black and white women.

The dates of passage of married women's property laws give a somewhat optimistic picture of the number of married women affected by the legislation. Many of the Midwestern and Western states that were in the vanguard of legal reform had small populations, and the Eastern and Southern states that lagged somewhat behind in passing

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[80] Geddes and Lueck
[81] See, for example: Report of the debates and proceedings of the Convention for the revision of the constitution of the state of Indiana. 1850. (Indianapolis, (IN). A. H. Brown, printer to the Convention, 1850-51). Available at *Making of America*. http://www.hti.umich.edu/m/moagrp/. [Accessed 23 April 2006]

legal reforms had more married women living there (Table 2.2). The critical decade for

the earnings acts, in particular, was the 1870s when the proportion of women covered by

earnings acts more than doubled. Many of these acts were passed in conjunction with, or

influenced by, the efforts of radical Republicans during Reconstruction.[82]

Examining how labor force participation varied by the laws in effect at the

decennial census dates shows the influence of the racial composition of the labor force.

Labor force participation was higher in states that did not have earnings or property laws

(Table 2.3 and 2.4). When we examine white married women alone, the differences

between legal regimes narrow significantly; reflecting the overall low level of white

women's labor force participation. No consistent conclusion on the influence of

legislation can be taken from this table. Turning to simple comparisons of changes in

labor force participation and changes in earnings legislation, there is again no clear

impact of the legislation for whites. The overall level of labor force participation is low,

and the differences between states are small. Black labor force participation was

somewhat higher in the south, where there was less likely to be married women's

property law reform, giving the impression that legislation actually had a negative effect

on black women's participation in paid work (Table 2.5 and 2.6).

Difference-in-differences estimates: earnings and property laws

To make sense of these conflicting influences on married women's labor force

participation I estimate a probit model of women's labor force participation that controls

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[82] Lebsock.

for individual and household factors affecting a woman's decision to work, state legal

reform measures, and the extent of urbanization and manufacturing within a state to

reflect both the possibilities for women's work outside the home, and the influence of the

urbanization and industry on legal reform itself.[83] The analyses include all married

women between the ages of 16 and 70 whose spouses were present in the household. The

models are estimated for all women, and then separately for white women and black

women. Because of the small population size of other racial groups I do not estimate

models separately for Asian or Native American groups.

Setting other variables equal to their mean, I then estimate the probability for

different years (1870, 1880, 1900) and different legal regimes (no earnings law, earnings

law in effect in both time periods, and earnings law introduced). Using these predicted

probabilities I then compute the difference over time in married women's labor force

participation between states that had no earnings laws, and states that introduced earnings

laws. This is the "difference in differences" estimate.

The intuition and assumptions behind the difference in differences approach are

straightforward.[84] Differences-in-differences estimation has become a common strategy

for applied research in labor economics in the United States. The existence of fifty states

making varying policy choices over time allows the effect of policy on behavior to be

empirically tested. For example, several recent articles examine the consequences of

divorce law changes on women's labor supply. The move to no-fault divorce law is

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[83] See Geddes and Lueck, "The Gains from Self-Ownership and the Expansion of Women's Rights." and Gignesi, "Relinquishing Control: The Married Women's Property Acts in Mid-Nineteenth Century America".
[84] Meyer (1995) and Blundell and Costas Dias (2001) are concise introductions to differences in differences.

generally agreed to have increased American women's labor supply.[85] In other words, changes in family law do matter for the decisions families make. In the economic history literature difference-in-differences has been used to show that child labor laws had little effect on the reduction in child labor supply in the early twentieth century.[86]

Historians may wonder why go to the trouble of using a more complex method when simpler ones are available. We are interested in finding out what the impact of passing a married women's property law is on married women's propensity to work. A naïve measure of the impact would be to compare the difference in labor force participation *within a single state* before and after legal change. Inwood's research on the effect of the Ontario acts is an example of this research strategy.[87] This method is known as a "pre-post comparison," and has the virtue of being simple to estimate. The extension to multiple states requires only that we average the before and after changes across states, weighting by the numbers of women affected in each time period. This measure requires the very strong assumptions that there are no differences among states in economic or demographic characteristics or behavior that would affect either the possibility of legal change, or labor force participation.

The difference in differences approach requires only the weaker assumption that there are no factors that affect the time trend in labor force participation differently in different states. As it happens, many married women's property acts were introduced

[85] Katie R. Genadek, Wendy A. Stock, and Christiana Stoddard, "No-Fault Divorce Laws and the Labor Supply of Women with and without Children," *Journal of Human Resources* 42, no. 1 (2007): 247-74, Jeffrey S. Grey, "Divorce Law Changes, Household Bargaining, and Married Women's Labor Supply," *American Economic Review* 88, no. 3 (1998): 628-42.

[86] Carolyn M. Moehling, "State Child Labor Laws and the Decline of Child Labor," *Explorations in Economic History* 36, no. 1 (1999).

[87] Ingram and Inwood, "Property Ownership by Married Women in Victorian Ontario.", Inwood and VanSligtenhorst, "The Social Consequences of Legal Reform: Women and Property in a Canadian Community."

during Reconstruction when even this weaker assumption may not hold.[88] It may be that

married women in southern states were more likely to go out to work during the 1870s

because of economic conditions unrelated to the passage of property laws. Yet we can

test this assumption by estimating the impact of property laws for northern and southern

states separately. It turns out there is little difference for white women in the north and

the south.

An illustration of the difference in differences approach can be seen in Figure 2.2.

The dates, states and levels of labor force participation are entirely illustrative. The

concept is perhaps clearer to understand by using neighboring states as examples, since

we can imagine that women living in Danville (IL) and Lafayette (IN), for example, are

part of relatively similar societies, except for the state line between them. Families that

migrated to this area might well have been indifferent between Indiana and Illinois *per

se,* instead choosing where to live in the area on grounds unrelated to the states. It is also

possible to imagine that the families in this area were relatively similar, and might have

acted in the same way had the laws been the same. The ideal estimate of the effect of a

policy like property law reform would be to see how the same family reacted to different

laws at the same time. Then we could we sure that the only thing changing the family's

behavior was the different law. However, this ideal is impossible as we cannot observe

the same family living parallel lives under two different laws in the same place at one

time. Therefore, in order to estimate the effect of the laws we have to compare similar-

looking families under different laws, and assume that what we do not know about the

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[88] Lebsock on the south.

families does not affect how they behave—that only the difference in the laws affects what they do.[89]

In the illustration, the level of labor force participation by married women is always higher in Indiana than in Illinois, and is 0.4 percentage points higher in 1870 (5 compared to 4.6). Assume that Illinois introduces a married women's property law in 1873. At the next census in 1880, 5.5 per cent of Indiana wives are working, and 5.4 per cent of Illinois wives. In the decade Illinois wives increased their participation by 0.8 percentage points, and Indiana wives by 0.5 percentage points.

The difference in differences estimate is that introducing a married women's property law increased labor force participation by 0.3 percentage points. This change of 0.3 percentage points can be expressed in two ways:

$$(IN_{1880} - IL_{1880}) - (IN_{1870} - IL_{1870})$$

$$(5.5 - 5.4) - (5.0 - 4.6) \qquad (1)$$

$$(IL_{1880} - IL_{1870}) - (IN_{1880} - IN_{1870})$$

$$(5.4 - 4.6) - (5.5 - 5.0) \qquad (2)$$

By taking out the initial difference in 1870 we are able to "take care" of any state-specific factors that do not change over time, and by comparing multiple states across the same time period we are able to eliminate any changes over time that affect states uniformly. This leaves us with a purer estimate of the effect of property law reform that will not be affected by other historical changes.

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[89] This summary of the logic of difference-in-differences is derived from *inter alia* A. Colin Cameron and Pravin K. Travedi, *Microeconometrics* (Cambridge: Cambridge University Press, 2005), 55-57, 878-79.

Results: Earnings and property acts

For both black and white women I find small effects on labor force participation of the introduction of earnings and property laws. The tables refer to the estimates using the dates used by Khan, which were similar to the results using Hoff's dates. Estimates for the earnings and property law effects do not change substantially with the inclusion of state fixed effects. The effect of other demographic and economic controls included in the models are similar across models. The impact of earnings laws was neither substantively large, nor statistically significant, leaving the conclusion that the impact of the laws on married women's labor force participation was trivial if there was any effect at all (Tables 2.7 and 2.8). For black women, the magnitude of the effect of legislation appears to be substantially greater between 1880 and 1900. However, this result is entirely due to the passage of legislation in four states with tiny black populations—Nebraska, Oregon, Utah, and Washington.[90] While there was an increase in black married women's labor force participation in those states consistent with the estimated effect, it is not clear that this result can be generalized to other states. It is quite unlikely that the assumption that nothing else was affecting labor force participation holds in this case. The small number of black women who lived in the west were likely to have been different than black women living elsewhere in the country.[91] If we compare states that had laws before

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[90] In 1880 these states had the following numbers of black married women (16 and over): Nebraska: 706, Oregon: 560, Utah: 303, and Washington: 1289. The total number of black married women in the West or Mountain states was 15,930. (Own calculations from the complete-count United States census). The contemporary tabulations from the 1900 census do not provide sex-marital status-color by state tables.

[91] There has been comparatively little research on blacks in the American west before World War II, compared to the other major regions of the United States. See Douglas Flamming, *Bound for Freedom: Black Los Angeles in Jim Crow America* (Berkeley: University of California Press, 2005), Quintard Taylor, *In Search of the Racial Frontier: African Americans in the American West, 1528-1990* (New York: W.W. Norton, 1998).

1880 with states that continued to have no laws, the estimated effect for black women is similar to that for white women: essentially zero.

Despite the disagreement about the dates of passage of the earnings laws, the difference in difference estimates are substantially similar when using the dates given by Hoff or the dates given by Khan. Using both sets of dates, there is an apparently large impact of introducing earnings laws for non-farm black women in the last two decades of the nineteenth century. However, in both cases the estimate is based on a tiny number of non-farm black women living in western and mountain states, for which Hoff and Khan basically agree on the dates legislation was passed. By 1900, while there are somewhat more non-farm black women in these states, and the estimates of labor force participation are not subject to huge standard errors, the comparison is still affected by the near total absence of black women from these states in the first period. Comparing the change in labor force participation between states that had laws prior to 1880, with the change in labor force participation in states that had no laws until after 1900—these states having much larger black populations—the effect of having an earnings law is insignificantly different from zero.

Results: Keeping boarders as a form of labor force participation

Boarding and lodging was common in the United States in the late nineteenth century, and there is ample qualitative evidence that the day-to-day responsibility for looking after boarders was left to wives.[92] Census enumerators were instructed not to

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[92] See, for example, Joan M. Jensen, "Cloth, Butter and Boarders: Women's Household Production for the Market," *Review of Radical Political Economics* 12, no. 2 (1980), Barbara Laslett, "Women's Work in Late-Nineteenth-Century Los Angeles: Class, Gender and the Culture of New Womanhood," *Continuity and Change* 5, no. 3 (1990), Modell and Hareven, "Urbanization and the Malleable Household: An

record wives who looked after boarders as gainfully employed. The wording of the instructions in 1920 hint at the contemporary understanding of women's role in the family economy:

> Keeping boarders or lodgers should be returned as an occupation if the person engaged in it relies upon it as his (or her) principal means of support or principal source of income. In that case the return should be *keeper—boarding house* or *keeper—lodging house*. If, however, a family keeps a few boarders or roomers merely as a means of supplementing or eking out the earnings or income obtained from other occupations or from other sources, no one in the family should be returned as a boarding or lodging house keeper.[93]

The placement of "his" before "(or her)" show quite clearly that running a large boarding house was a gainful occupation, but keeping a few was pin-money for women, and not really an occupation. Despite this convention about recording *occupations*, the census samples allow us to determine who kept boarders through information about *relationships* among household members.

From 1880 the American census asked about the relationship of every respondent to the head of household.[94] Census enumerators typically wrote down the occupants of a household with a primary family listed first: head, wife and children, followed by any extended family members, and then people unrelated to the head of household, such as visitors, employees and boarders and lodgers. While it is possible to make an informed

Examination of Boarding and Lodging in American Families.", Mark Peel, "On the Margins: Lodgers and Boarders in Boston, 1860-1900," *Journal of American History* 72, no. 4 (1986), Susan L. Richards, "Making Home Pay: Italian and Scottish Boardinghouse Keepers in Barre, 1880-1918," *Vermont History* 74, no. Winter/Spring (2006), Robert V. Robinson, "Making Ends Meet: Wives and Children in the Family Economy of Indianapolis, 1860-1920of Indianapolis, 1860-1920," *Indiana Magazine of History* 92, no. 3 (1996).

[93] 1920 Census, Instructions to Enumerators. Available: http://usa.ipums.org/usa/voliii/inst1920.shtml.

[94] Steven Ruggles and Susan Brower, "The Measurement of Household and Family Composition in the United States, 1850-2000," *Population and Development Review* 29, no. 1 (2003).

guess about relationships between household members in the earlier censuses (1850-1870) it is not possible to distinguish between visitors, boarders and employees. Whereas the presence of boarders in the household suggests that the wife of the head of household was looking after boarders, visitors and employees do not generate any extra income.[95] Therefore, I restrict my analysis to the period from 1880 to 1900. As in the analysis with the original measures of gainful employment, I estimate labor force participation models for married women between the ages of 16 and 70, whose husbands were present. I estimate models for all married women, and then separate models for blacks and whites. In this section I restrict the sample to women who were married to the head of household (or, in some rare cases were the head of household), and were not living in group quarters. Women who are not married to the head of household are less likely to be earning money from the boarders living in the house. The restriction to women married to the head of household does not reduce the sample size greatly. In 1880, this sample includes 96% of all married women from 16-70, and in 1900 it includes 95%. However, the women excluded from the sample—often children or children in law of the household head, or boarders themselves—were more likely to be in the labor force than the 95% of women who were married to the household head and lived in regular households. In 1880, 13% of the excluded sample was in gainful employment compared to 4% of the women included, and in 1900 10% of the excluded women had gainful employment compared with 4% of the women included. Although the sample women—married to the head of household, and living in regular households—had lower labor force participation

[95] IPUMS Users Guide, Chapter 5: "Family Inter-relationships." Available: http://usa.ipums.org/usa/chapter5/chapter5.shtml

rates, they are the most likely wives to have been responsible for the boarders in the household.

Keeping boarders was common. Augmenting labor force participation rates by an indicator of whether the family had boarders living with them more than doubles the labor force participation rate for white married women in both 1880 and 1900. The proportionate increase in black women's labor force participation was smaller, but the percentage increase was similar in both years (See Table 2.11). Keeping boarders was more common in urban areas. In 1880, wives in urban areas—towns with a population greater than 2,500—were twice as likely to have boarders or lodgers in the house. The gap had narrowed somewhat by 1900, but the proportion of wives keeping boarders was still about 50% higher in towns than in the country. It should also be noted that the proportion of wives who kept boarders, *and* had a gainful occupation was very small. This is suggestive of keeping boarders being a substitute for other occupations.

Unlike the gainful employment measure of labor force participation, the proportion of families taking in boarders increased between 1880 and 1900. Augmenting the measure of labor force participation with the indicator for keeping boarders does not change the conclusion about the immediate effects of the earnings acts. Married women's labor force participation did not change significantly immediately after the passage of the acts. The pattern of results is very similar to the results without including boarders. White women's labor force participation decreases slightly after the passage of the property acts, but the estimate is not statistically significant, and increases slightly after the passage of earnings acts (Table 2.12 and Table 2.13). Although the magnitude of the effects are small, the direction of the effect is in the expected direction. Property acts which

increased married women's ability to hold and inherit wealth are associated with slight decreases in participation. Earnings acts which gave women greater legal title to market labor increased participation. Similar to the estimation without including boarders, apparently large increases in black women's labor force participation after the earnings acts are due to the small numbers in the states passing earnings laws in these two decades.

Difference in differences estimates of sole-trader laws

The impact of introducing earnings and property laws on married women's labor force participation was small. Given the limitations of the data—lacking information on family earnings, for example—and the robustness of the results to different estimates of when legislation was passed in particular states, it appears that the most concise preliminary conclusion is that the earnings acts and property had very little effect on married women's labor force participation in nineteenth century America. At first glance, this appears to contradict the conclusions reached by Khan and Combs that women and families were sensitive to legal change; shifting their allocations of assets in response to legislation, and increasing their involvement in patenting in response to the passage of property laws. However, given the otherwise strong cultural and social restrictions on women's entry into the labor market, it is less surprising that the mere passage of these laws was not enough to bring large numbers of married women into the labor market. What the research by Khan, Combs, and earlier authors has shown is that women and families were responsive to quite specific legal changes. Earnings laws, while plausibly the most likely to affect overall labor force participation by women, were quite general. The response we could have observed—increased work in the marketplace—was also the

most prone to under-enumeration in the nineteenth century American census. There are

material incentives for people to keep accurate probate records, such as those used by

Shammas to show that women received and willed more wealth than before the property

acts.[96] If a wife worked somewhat more outside the home than before, but still not full-

time, there was no material incentive for her to tell the census enumerator about her extra

work. Moreover, it is entirely possible that the wealth effects from the property acts

dominated the incentives to enter market work from the earning acts.

It is also plausible that given a woman's existing participation in the labor market

that she would adjust her activities at the intensive margin in response to earnings acts,

working more hours—which we cannot detect with nineteenth century data—or adjusting

occupational or entrepreneurial choices. We cannot detect changes at the intensive

margin for working women in the late nineteenth century, because hours or weeks of

work were not recorded in any source suitable for answering this question.[97]

Nevertheless, we can make some estimates about occupational shifts towards or away

from self-employment. It is to this question, of whether married women in states that

introduced sole trader legislation were more likely to become sole traders that I now turn.

Data and methodology

Sole traders cannot be definitively identified in the nineteenth-century American

census. The first census to identify whether a worker was an employee, employed

workers, or worked on their own account was the 1910 census, which introduced this

classification of "class of worker" and has been retained in all subsequent censuses. The

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[96] Shammas, "Re-Assessing the Married Women's Property Acts."
[97] There is

correlates of a married woman in the labor force being an employer or working on their own account were very stable in 1910 and 1920. Women reporting an occupation as farmers were more than 70 percentage points more likely to be employers or sole traders than the average married women in the labor force (Table 6) . Women who had an occupation classified as managerial were more than 40 percentage points more likely to be sole traders than the average married woman. [98] Introduction of other covariates including husband's occupation and industry does not alter these results substantially.

Using the coefficients from 1910 and 1920 I then generate predicted probabilities for being an employer or working on own account for married women in 1870, 1880 and 1900 (Table 2.14). I then use these predicted probabilities as the dependent variable in a Heckman model, conditional on women being in the labor force. In the second stage regression I am particularly interested in the coefficients on the dummy variables for the passage of sole trade laws in the state between 1870 and 1880, or between 1880 and 1900. Conditional on being in the labor force, the main influence on being in self-employment was having the occupation "Farmer." The selection equation for labor force participation does not contain dummies for reform of sole trade laws. Using this model, I then simulate the predicted probability a married woman in the labor force will be a sole trader in the different legal regimes—states with a sole trade law before the first period, states passing a law in the period, and states with no sole-trade law until later. As in the previous section I use the dates of passage given by both Khan and Hoff.

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[98] Managerial occupations are part of major group 2 in the IPUMS OCC1950 classification scheme. http://www.ipums.umn.edu/usa/pwork/occ1950a.html

Results

While Hoff and Khan disagree on the dates of passage of effective sole-trader legislation for three-fifths of the states (Table 2.1), the variation in dates of passage has little substantive impact on the results. As with earnings laws, the passage of sole-trader laws had little conclusive effect on married women's predicted propensity to be sole-traders. In the Heckman models, the coefficients on the dummies for passage of sole-trade laws are of opposite signs (Table 2.15), or differ by an order of magnitude (Table 2.16) depending on whether the dates of passage used are obtained from Hoff or Khan. The coefficients translate into minor marginal effects of the laws, with the passage of sole-trader legislation altering predicted probabilities of participation (with all other variables set to their mean values) by less than four percentage points, relative to baseline expected probabilities of being a sole trader around 30 per cent.

Difference-in-differences estimates give more consistent conclusions, despite the divergent dates of passage for many states. As with the earnings laws, the estimated impacts of sole-trader legislation are clustered around zero, with estimates of opposite sign for different decades and different dates of passage. One result consistent across both sets of dates is a small *decline* in white married women's predicted propensity to be sole-traders between 1880 and 1900 after passage of sole-trade legislation (Table 2.17 and Table 2.18). Hoff and Khan actually largely agree on which states passed sole trader legislation for married women in this period—agreeing on Nebraska, Idaho, Washington, West Virginia, Louisiana, and Utah. Hoff includes the Dakotas in this group, and Khan includes Vermont. It is likely that the explanation for declines in propensity to be sole-traders in this period, if in fact real, are unrelated to the passage of legislation. The most

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common form of self-employment was farming, and the proportion of the labor force in

agriculture was declining over the same time period as legal reform was taking place.

Moreover, as more married women entered the labor market, the marginal woman was

probably less likely than the average woman already in the labor market to become a

sole-trader.

3. Effects of property laws on young women's marriage and education

Although married women's labor force participation was not immediately

influenced by the passage of property acts, economists and historians have shown that

rising educational levels among girls in the late nineteenth century was correlated with

subsequent increases in labor force participation.[99] Thus, if the passage of property acts

was immediately—within the decade—associated with declines in propensities to marry,

increasing propensity to be literate, and increasing likelihood of working outside the

home while single, we can begin to connect the married women's property acts with

changing outcomes for women.

Young women were covered by the various property acts in much the same

proportions as all women (See Figure 2.3). Because young women were slightly more

likely to be living in western and Midwestern "frontier" states that were more likely to

have passed property law reform, the coverage of the acts for young women was slightly

above the coverage rate for all women. As with overall levels of labor force participation

for women, the variation over time in young women's propensity to marry was relatively

small. The proportion of young women ever married dropped from 65 per cent to 61 per

[99] Goldin, *Understanding the Gender Gap: An Economic History of American Women*.

cent between 1880 and 1900, with estimated median ages at first marriage rising slightly at the same time.[100] Nuptiality varied less by race than labor force participation did, with parallel trends for black and white women after 1870 (cf. Figure 2.4). Comparisons of pre-Civil War marriage behavior for blacks with post-Civil War behavior is problematic. While there was a census of slaves in 1850 and 1860, it did not collect information that would allow identification of married couples.[101]

Because black and white marriage behavior followed the same trends—if not exact levels—for women in the last three decades of the nineteenth century, I examine the effect of property law reform on marriage behavior for black and white women combined. States that had passed property law reform had consistently lower levels of marriage among young women for all three of the main categories of property law reform—real and financial asset claims, earnings, and sole-trader laws (Figures 2.5-2.7). The gap in nuptial behavior between states with and without laws is persistent and substantial, on the order of at least five per cent in every decade. Passage of property law reform within a state was correlated—if a state passed one law it was likely, but not certain, to pass another. Thus, it is not clear from these figures whether we are observing an effect of legal change, or persistent demographic differences between states that is unrelated to legal change. The persistence of the gap as additional states reform property laws in the last two decades of the nineteenth century suggests that at least some of the gap in marriage behavior could be related to the passage of property law reform.

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[100] Catherine Fitch and Steven Ruggles, "Historical Trends in Marriage Formation," in *Ties That Bind: Perspectives on Marriage and Cohabitation*, ed. Linda Waite, et al. (Hawthorne: Aldine de Gruyter, 2000).
[101] Russell Menard, Trent Alexander, Jason Digman, and J. David Hacker. Minneapolis: Minnesota Population Center, *Public Use Microdata Samples of the Slave Population of 1850-1860*, University of Minnesota, 2004. http://usa.ipums.org/usa/slavepums. [Accessed: 16 February 2007].

To disentangle the effects of persistent state level differences, individual opportunities for marriage and property law reform I again use a difference-in-differences approach to assess changes in marriage behavior for young women between 1870 and 1880 and 1880 and 1900. As well as controls for state and local economic characteristics, I include measures affecting women's marriage chances such as the local sex ratio, dummies for individual years of age, nativity, and farm or urban residence.

In both the 1870s, and the 1880s and 1890s, passage of earnings law reform was associated with declines in young women's propensity to marry. The marginal effect of passing an earnings law in the 1870s was to decrease the chances an otherwise average young woman was married by about 2 percentage points overall. The effect was different for blacks and whites. Following the passage of an earnings act, young white women were less likely to be married, while young black women were slightly more likely to be married. The increase in marriage chances for black women was not statistically significant. In the 1880s and 1890s, passage of an earnings law was associated with a 6-7 percentage point drop in the chances of being married for white women. The effects were again reversed, and statistically insignificant for black women. In the 1870s, passage of earnings laws was associated with slight declines in the chances a woman would be married in her 20s, and the effect grew in the 1880s (See tables 2.19 and 2.20). Results for property laws that gave married women stronger claims to their own real or financial assets showed less effect on marriage behavior, but passage of property laws was also associated with declines in young women's propensity to be married (Tables 2.21 and 2.22). The estimate of the effect of passing earnings and property laws is quite robust to the choice of states included as a comparison group. The highlighted line in each table

compares states passing an act in the period to states with no act. To compare states that passed with a new act with states with an existing act we subtract the row above the highlighted interaction term. In all the estimates this term to be subtracted is close to zero, establishing that the passage of the new law was the significant event, not the existence of the law.

How important was a 6-7 percent fall in the chance of chance a young woman was married? For each additional year of age a woman's chance of being married increased between 2% and 9%, with the impact of the marginal year having a mean of about 5-6%. This suggests that the impact of passing earnings laws was similar to remaining unmarried for another year. About a third of white single women participated in the labor market. On average remaining unmarried an additional year gave women 3-6 months more paid work experience before marriage. If a single woman worked for ten years before marriage, an extra 3-6 months is about 5% additional work experience. For young women with a smaller gap between finishing school and getting married, 3-6 months extra work experience was even more valuable. These are back of the envelope calculations, but suggest that the impact of the property laws had an important effect on single women's work experience in the late nineteenth century.

The passage of earnings and property laws was not associated with any change in literacy for women in their twenties, but was associated with an increase in schooling for school-age children. Women had largely completed their schooling by age 20, so we would not expect to see effects of the property acts on this older group. Results for these estimation are not included, as they were estimated solely to establish that the effects on marriage and school attendance were real. By not picking up an effect on literacy for

young adult women, which would be implausible, it is more likely that we are not just

estimating the effects of proxy laws. The effect of changes in earnings laws on young

women's literacy was statistically insignificant, and small relative to the observed level of

literacy. The property and earnings acts did have an immediate and important effect on

school attendance, for both boys and girls. Because schooling for black children was of

varied quality, I restrict the estimates to white children.[102] Schooling for children became

slightly more common in the United States in the course of the late nineteenth century

(Table 2.23). Like the property laws, schooling was handled below the national level, but

whereas the property laws were a state responsibility, schooling was a local one.

Nevertheless it is possible that the same factors that affected the passage of property laws

could have motivated local decisions about schooling. As Geddes and Lueck, and Gignesi

have shown the level of wealth in a state influenced the passage of property laws. Wealth

was likely to influence schooling as well. There is a natural control group for the effect of

the property laws on school attendance: single-parent families. They will be subject to the

same educational trends as two-parent families, but might be less affected by the changes

in family dynamics caused by the property or earnings laws. This gives us another

opportunity to test the robustness of the results by seeing if children of one-parent

families were similarly affected, by comparing the change in school attendance

differences after the passage of laws between different types of families. School

attendance will also be correlated within families. To account for this, I adjust the

standard errors using the –cluster– option in Stata, and control for the number of siblings

[102] James D. Anderson, *The Education of Blacks in the South, 1860-1935* (Chapel Hill: University of North Carolina Press, 1988), Robert A. Margo, *Race and Schooling in the South, 1880-1950: An Economic History*, *Long-Term Factors in Economic Development* (Chicago: University of Chicago Press, 1990).

in the family.[103] I also include controls for other variables likely to impact parent's choices to invest in schooling for their children, such as the occupational class of the head of household, the age of the child, nativity and place of residence.[104]

The property laws had a substantial effect on white children's school attendance, though the difference between single and two parent families was not great. From 1870 to 1880 the proportion of white children aged 5-17 in two-parent families attending school rose from 60% to 63%, before dropping slightly to 62% in 1900 (see Table 2.23). The impact of the earnings and property laws were slightly different. The earnings laws had little effect on school attendance. After controlling for other factors the passage of a *new* act in the 1870s was associated with a slight *decrease* in children's school attendance, though the effect is not statistically significant. In the 1880s there is a weak evidence of a slightly larger positive effect (see Table 2.24). The passage of an earnings act was associated with a rise in school attendance of 4.5 per cent in the 1880s, relative to an overall school attendance rate of around 60%. The effect was somewhat larger and stronger for girls, with the difference being statistically significant. Children living with both their parents received little additional benefit from the passage of earnings acts than children with one parent. Other variables impacting school attendance have the expected effects. The chance of school attendance rises from age 6 to age 11 and then decreases (the omitted category are five year old children). Children living in households with literate head of households, or households headed by professional or clerical workers were 8-12 per cent more likely to attend school. Children of farmers were 1-2 per cent more likely than the average child to attend school, compared to children in households

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[103] Stata Corporation, *Base Reference Manual K-Q* (College Station: 2005).
[104] Moehling, "State Child Labor Laws and the Decline of Child Labor."

headed by unskilled workers in manufacturing, agriculture or domestic service. Native

born children were more likely to attend school, but the impact of having native born

parents was slight (2-3%). Children in the south were much less likely to attend school,

with the gap narrowing over time. The demographic and economic controls are of the

same magnitude in the estimates for the impact of property law reform, suggesting that

the equations are not mis-specified.

The impact of the property laws was greater than for earnings laws. In both the

1870-1880 and 1880-1900 periods, the passage of a new property law increased the

chances a child would attend school by 7.5 – 10 percent (see Table 2.25). The estimates

are statistically significant, and the impact is larger for girls. The larger impact for girls is

consistent with the property acts increasing the incentives to invest in girls' education.

States that passed property law reform in the 1870s through 1890s were diverse and

located across all four regions of the country. With the exception of Montana and North

and South Dakota there is agreement on the decades these states passed their laws (see

Table 2.1) . They were relatively late to pass property acts, and were not community

property states. The dates of passage of their property laws relative to earnings laws

suggests we are picking up a genuine effect of the property laws on investment in

schooling. The similar magnitude of the effect in two separate time periods, for different

groups of states, suggests that we are not merely picking up state fixed effects. In the

1880-1900 regression, the states that had introduced a property law in the 1870s are now

included in the control group of states with a property law. In all cases, the states either

did not pass an earnings act until after 1900, or passed the earnings act at approximately

the same time. Inclusion of state fixed effects slightly reduces the significance of the

estimates, but not the magnitude. Moreover, the comparison to both groups of control states—those with existing laws before the period, or states that had yet to pass laws—is similar. In Table 2.25 the time trends for states that had existing property laws are of a small magnitude and not statistically significant. This is again suggestive of a genuine effect of a new property law on investments in education.

The first cohort of white girls affected by this change in property laws—the cohort entering school in the 1870s—did not have substantially greater labor force participation later in life than earlier cohorts. The next cohort, born between 1885 and 1894 did increase their participation later in life, relative to other cohorts. In middle age, nearly ten percent of this cohort participated in the labor force, twice the rate of earlier cohorts at the same age. The same figure, reproduced for blacks—who did not benefit from increasing investment in schooling in the late nineteenth century—shows no increase in labor force participation by cohort in the same periods that white women's labor force participation increased. This suggests that the later increase in white women's participation was not a period effect for all women.

Conclusion

Historians have argued that the nineteenth century married women's property acts had little effect on married women's social status at the time. However, economic historians have found that in some specific areas of economic behavior married women, and their husbands, did alter their behavior in response to the passage of legislation. In this chapter I find some evidence consistent with the claims of historians that the immediate impact of the married women's property acts on married women's behavior was slight. Women's participation in market work did not change substantially with the

passage of the property acts. Married women who were already in the labor market did

not appear to have substantially altered their choice between sole-trade and employee

occupations in response to passage of sole-trader legislation in different states. However,

young women did delay marriage in response to the passage of earnings acts. This result

is consistent with the property acts increasing the incentives for unmarried women to

increase their human capital investments, and obtain stronger bargaining positions within

marriage. The passage of property acts was also associated with significant increases in

investments in girls education in the late nineteenth century. The cohorts of girls whose

education increased after the property acts were the same girls, who as married women in

the early twentieth century entered the labor market at an increasing rate. While the

property and earnings acts did not affect their mothers work at the time, the long run

effects were significant. The married women's property acts did not alter married

women's work choices immediately, but their long run effects were significant.

Figure 2.1 Examples of notifications of intention to take advantage of sole-trader acts

SOLE TRADER.

IN THE DISTRICT COURT OF THE SECOND Judicial District, State of Nevada, held in and for the county of Washoe. In the matter of the application of ERNESTINE STENGE to become a Sole Trader.

Notice is hereby given that I, Ernestine Stenge, a resident of Reno, county of Washoe, and State aforesaid, being desirous of availing myself of the provisions of an Act of the Legislature of the State of Nevada, entitled "An Act to authorize married women to transact business in their own name as Sole Traders," approved February 6th, 1867, intend to make application to the above entitled Court, at the Court room thereof, in the town of Reno, aforesaid, on the 12th day of July, A. D. 1879, at 10 o'clock A. M. of said day, or as soon thereafter as the same can be heard, or on such other day to which the hearing may be postponed by the Court, for an order of said Court authorizing me to carry on and transact business in my own name, and on my own account as Sole Trader. The nature of the business I propose to carry on and conduct is that of Merchant Tailoress, manufacturing men and boys' clothing and furnishing the material for the same. ERNESTINE STENGE.

S. A. MANN, Attorney for Applicant.
Dated Reno, Nev., June 12th, 1879.

Notice of Application to Become a Sole Trader.

In the Superior court, county of Fresno, State of California.

In the matter of the application of Alice B. Hilton, to become a sole trader.

NOTICE IS HEREBY GIVEN THAT I, ALICE B. Hilton, wife of Fred T. Hilton, resident of the city of Fresno, county of Fresno, state of California, intend to make application to the Superior court of the county of Fresno, in the state of California, on Monday the 27th day of January, A.D. 1896, at the opening of court on that day or on such other day to which the hearing may be postponed by the court for a judgment and order of said Superior court, authorizing me to carry on and transact business in my own name and on my own account as a sole trader. The nature of the business I propose to carry on and conduct is that of buying and selling real and personal property, loaning money, renting and leasing land and houses and keeping a lodging and boarding house, all in the city of Fresno, county of Fresno, state of California.

Dated December 23d, 1895.

ALICE B. HILTON,

Daily Nevada State Journal. Reno (NV), 13 June 1879 (no page numbering).   *Fresno Weekly Republican.* Fresno (CA), 1 January 1896, p.16.

Figure 2.2 Illustration of difference-in-differences method

Illustration of difference in differences method

1880 difference

Difference in labor
force participation
between states, 1870

<-- Law change introduced in Illinois

year

Labor force participation, Illinois   Labor force participation, Indiana

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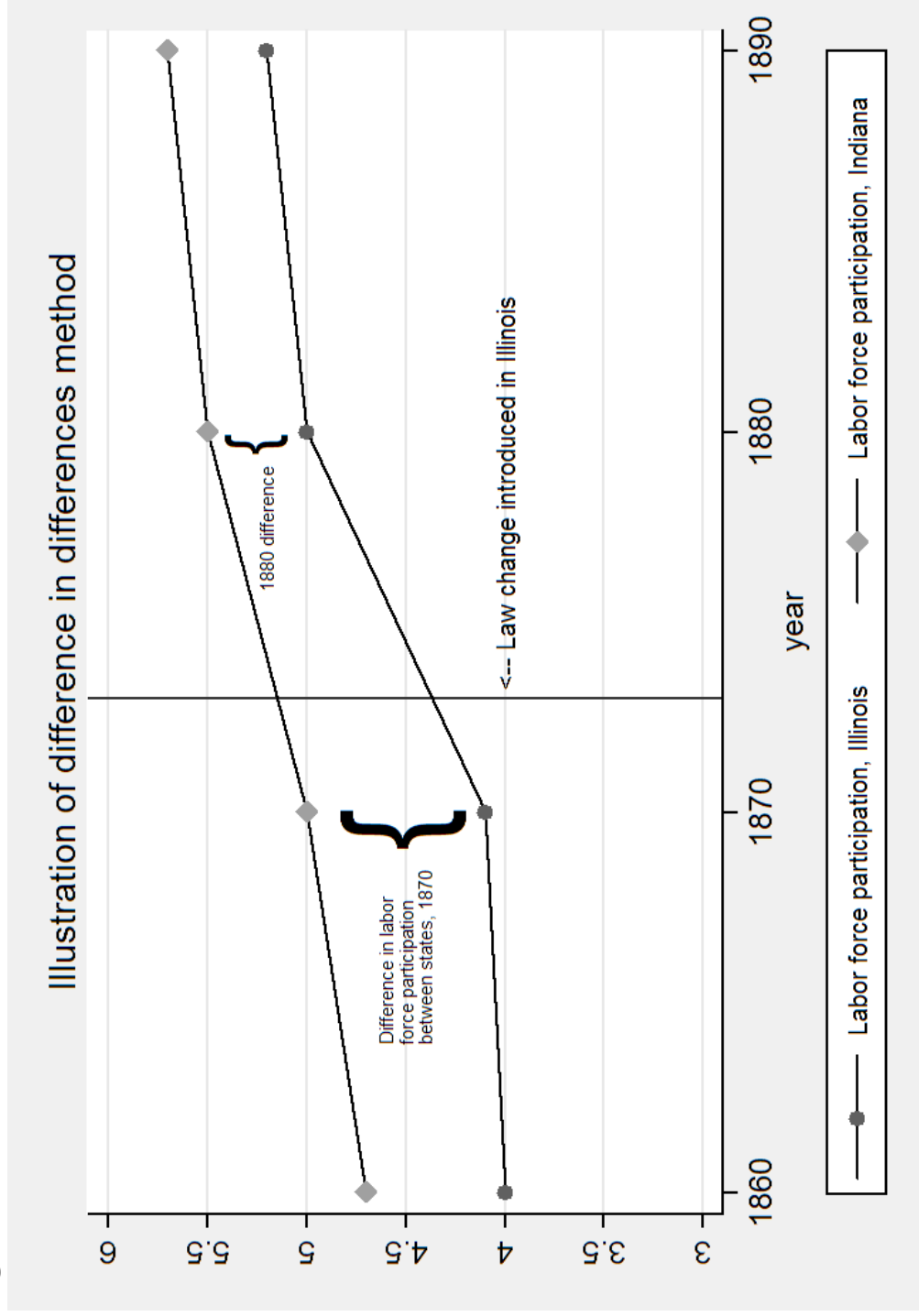
Figure 2.3 Coverage of property acts for women aged 20-30

Proportion of property acts for women aged 20-30

Dates from Khan, 1996
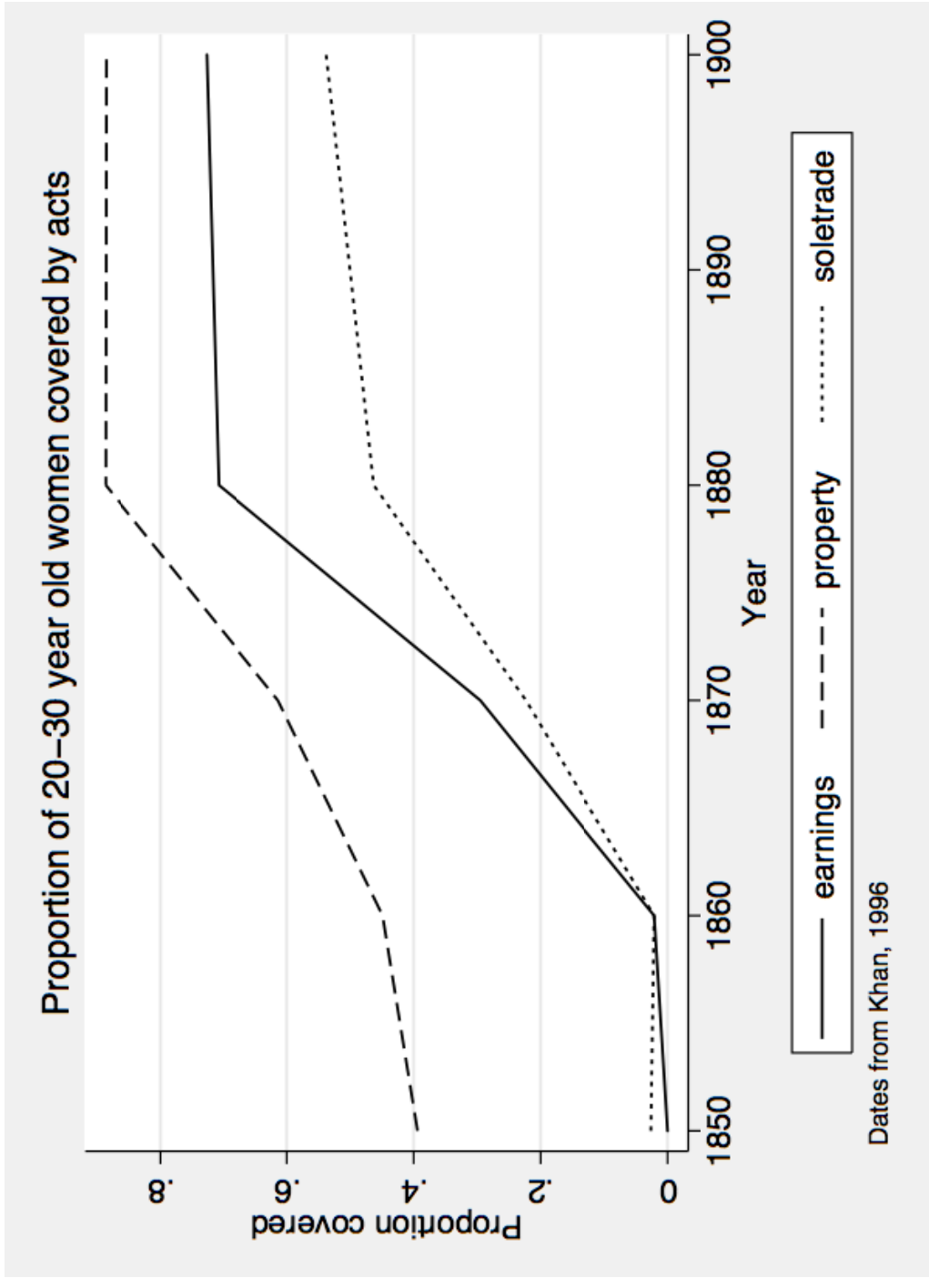
Figure 2.4 Proportion of 20-30 year old women ever married, 1850-1920

Proportion of 20–30 year old women ever married, 1850–1920

Legend: All women — White women — — — Black women ⋯⋯⋯

Free black women only in 1850–60

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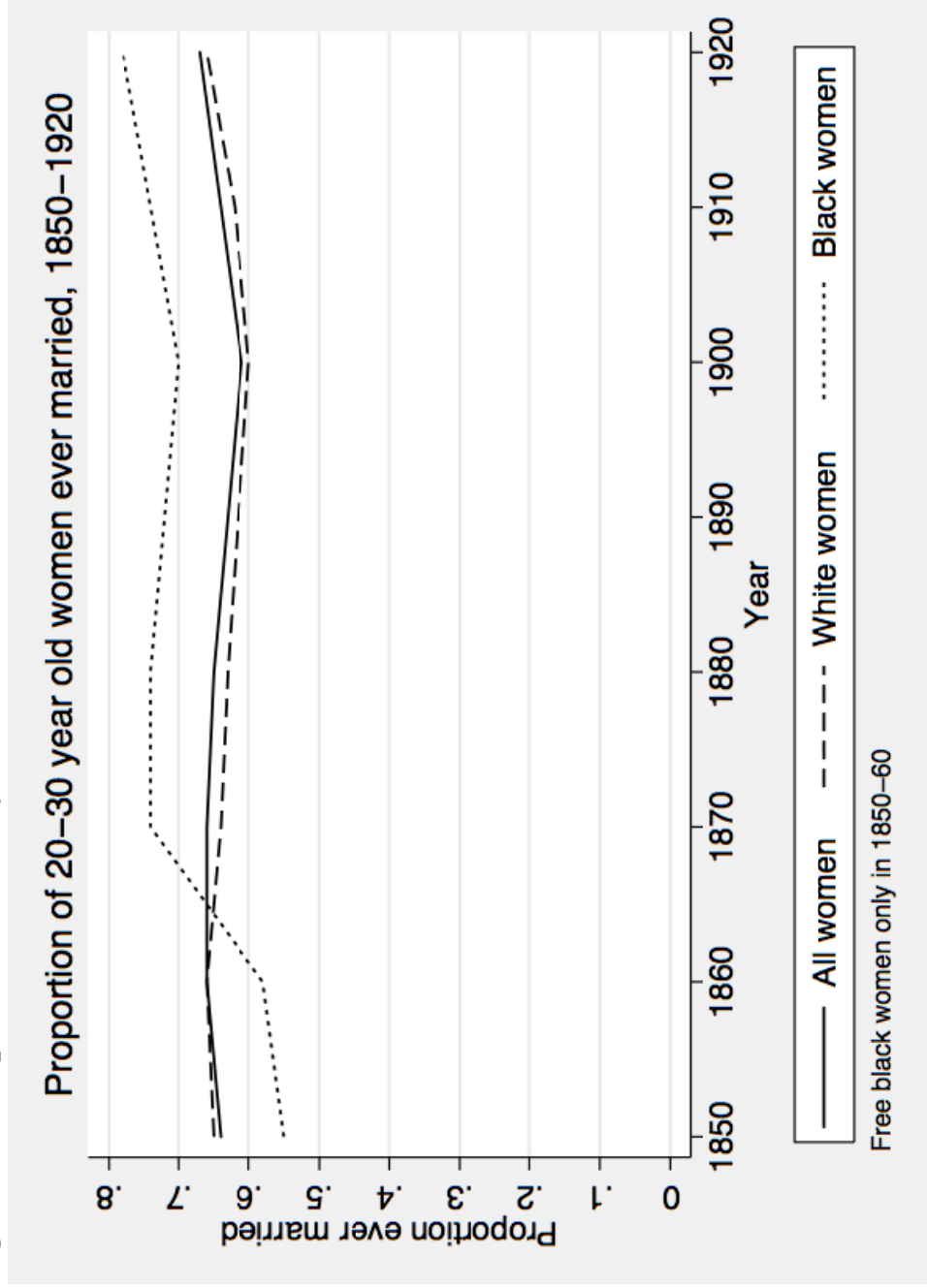
Figure 2.5 Young women's marriage behavior and earnings law reform

Young women ever married conditional on passage of earnings law

Women aged 20–30. Dates from Khan 1996.
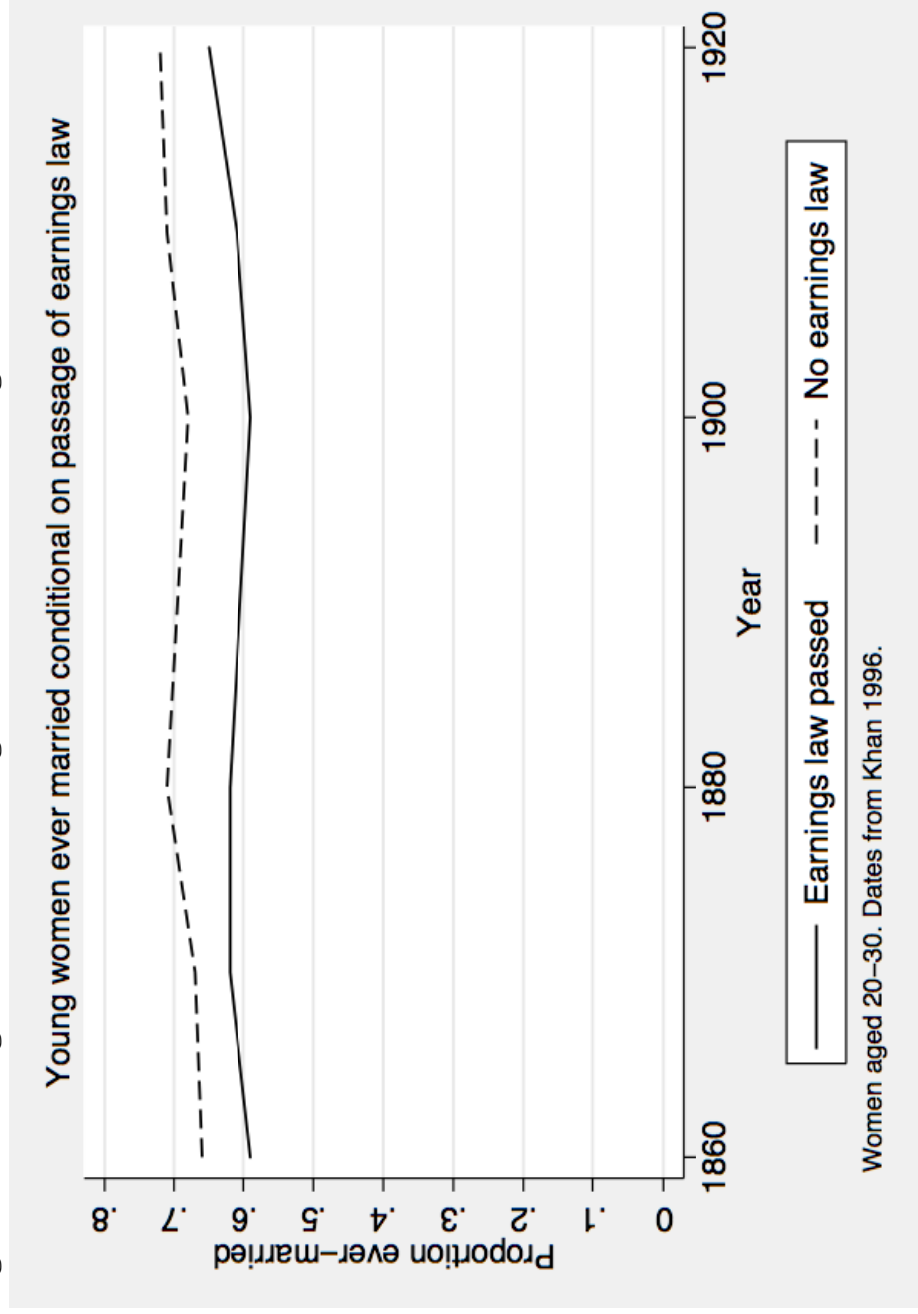
Figure 2.6 Young women's marriage behavior and property law reform

Young women ever married conditional on passage of property law

Women aged 20–30. Dates from Khan 1996.
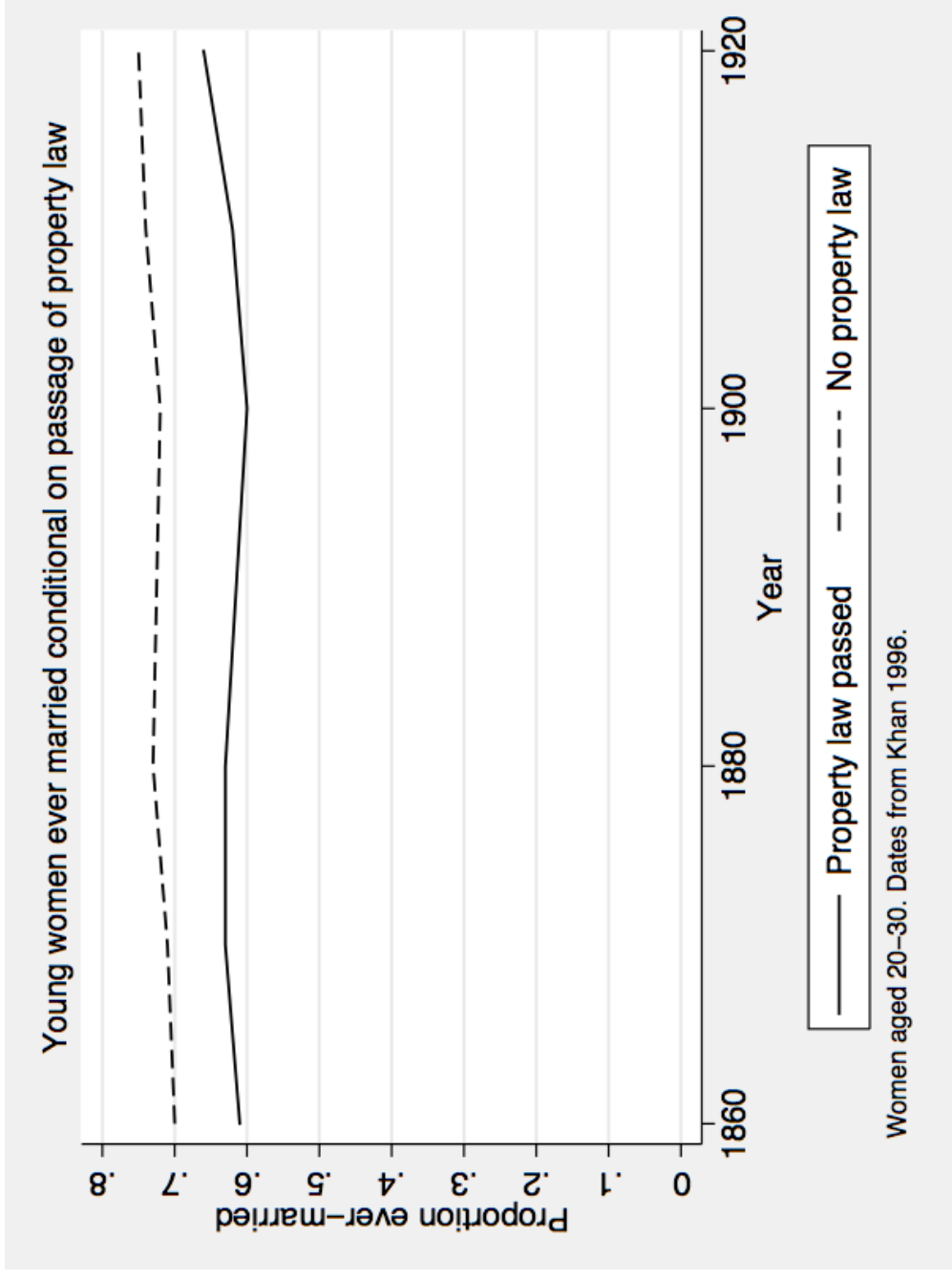
Figure 2.7 Young women's marriage behavior and sole trade law reform

Young women ever married conditional on passage of soletrade law

Women aged 20–30. Dates from Khan 1996.
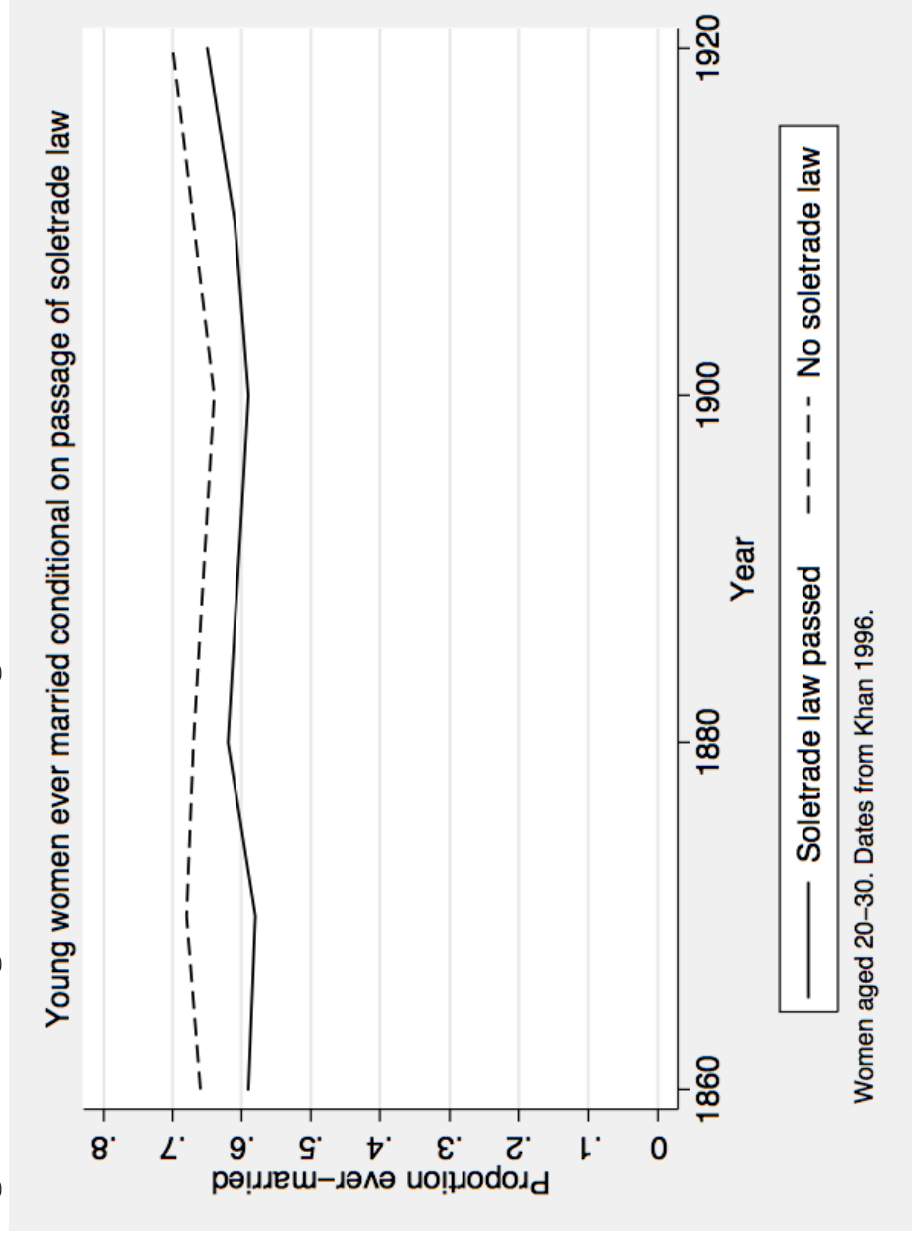
Figure 2.8 Schooling and labor force participation by cohort for whites

School attendance and labor force participation by birth cohort
White women, 1835-1924 to 1915-1924 cohorts

Proportion in school or labor force

Proportion in school at ages 6-15

Proportion in labor force when married

Data from IPUMS, 1850-1940.
1875-1884 cohort excluded because of missing 1890 census making school attendance difficult to reliably calculate
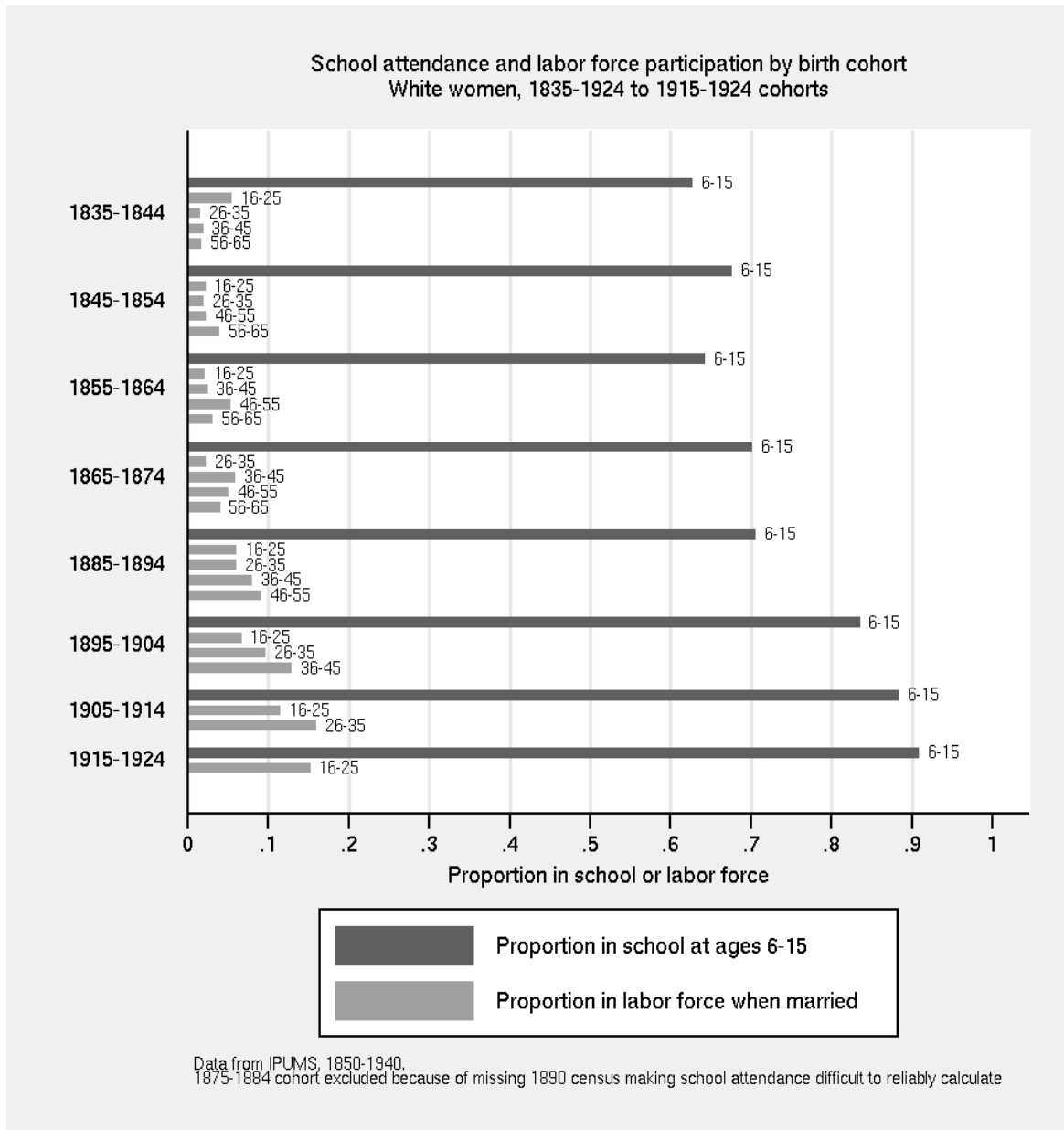
Figure 2.9. Schooling and labor force participation for blacks

School attendance and labor force participation by birth cohort
Black women, 1855-1864 to 1915-1924 cohorts

Legend:
- Proportion in school at ages 6-15
- Proportion in labor force when married

Data from IPUMS, 1870-1940.
1875-1884 cohort excluded because of missing 1890 census making school attendance difficult to reliably calculate
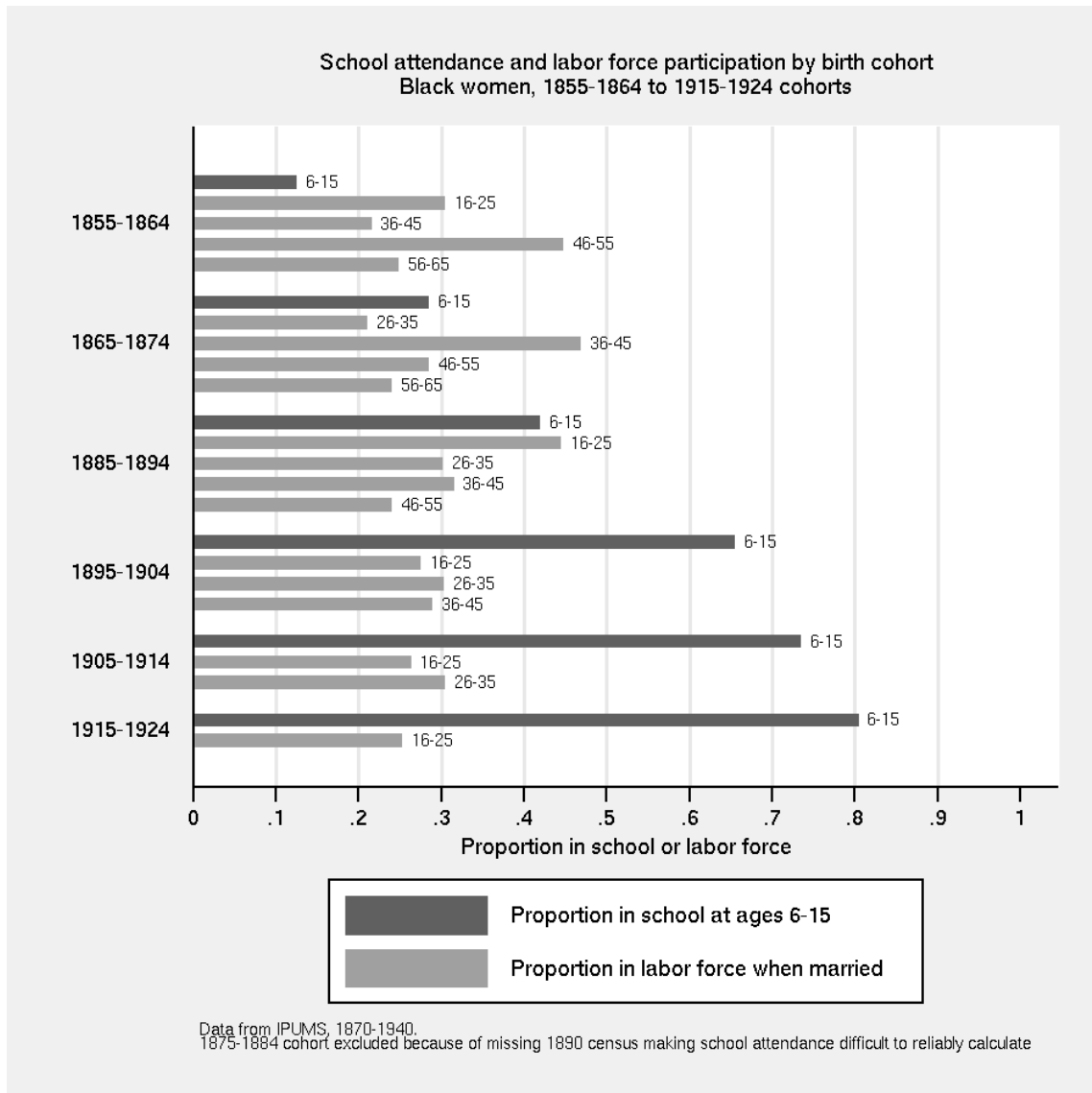
Table 2.1 Passage of married women's property laws

State	Property		Earnings		Soletrade	
	Hoff	*Khan*	*Hoff*	*Khan*	*Hoff*	*Khan*
Northeast						
Connecticut	1849	1856 -	1877	1877 -		1877
Maine	1844	1844 -	1860	1857 -	1828	1844
Massachusetts	1845	1845 -	1855	1874 -	1846	1860
New Hampshire	1850	1867 -	-		1840	1876
New Jersey	1852	1852 -	1878	1874 -		1874
New York	1848	1845 -	1860	1860 -		1860
Pennsylvania	1848	1848 -	1872	1872 -	-	
Rhode Island	1848	1848 -		1874 -	1841 -	
Vermont	1867	1881	1866 -	1874	1846	1881
Midwest						
Illinois	1861	1861	1869	1861	1874 -	1874
Indiana	1879	1879	1879	1879 -		
Iowa	-	1873	1870	1870 -	1840 -	1873
Kansas	1868	1868	1868	1868 -		1868
Michigan	1855	1855 -		-	-	
Minnesota	1869	1869 -		-		1874
Missouri	1849	1879 -		1879 -	1874 -	
Nebraska	1889	1881 -		1881	1882	1881
North Dakota	1899	1877 -		1877	1899	1877
Ohio	1861	1861	1871	1861	1811 -	
South Dakota	1889	1877 -	1887	1877	1889	1877
Wisconsin	1850	1850 -		1872 -	-	
South						
Alabama	1848	1867 -	-	-	1846 -	
Arkansas	1848	1873	1873	1873	1868	1868
Delaware	1865	1875	1873	1873 -	-	
District of Columbia	-	1869 -	-	-		1869
Florida	1855 -	-	-	-	-	
Georgia	1866	1873	1870 -	-	-	
Kentucky	-		1873	1873	1843	1873
Louisiana	-	-	-	-	1894	1894

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	Property		**Earnings**		**Soletrade**	
State	*Hoff*	*Khan*	*Hoff*	*Khan*	*Hoff*	*Khan*
South						
Maryland	1853	1860	1860	1860	-	1860
Mississippi	1873	1871	1871	1871		1871
North Carolina	1850	1868	1868	1873	1828	-
Oklahoma	-	-	-	-	-	-
South Carolina	1870	1870	1870		1868	1870
Tennessee	1870	1870			1850	-
Texas	1845	-			1845	-
Virginia	1877	1878		-		-
West Virginia	1866	1868	1891	1893	1891	1893
West						
Arizona	-	1871		-		1871
California	-	1872		1872	1874	1872
Colorado	1876	1874	1876	1874	1876	1874
Idaho	1887	1887	-		1887	1887
Montana	1889	1872	1889	1874	1889	1874
Nevada	1873	1873		1873	1867	1873
New Mexico	-	-	-		-	
Oregon	-		1880	1880	1859	1880
Utah	1895	1895	1895	1895	1895	1895
Washington	1888	1889	1889	1889	1889	1889
Wyoming	1876	1876		1876	1882	1876

Table 2.2 Proportion of women covered by property acts, 1850-1900

Year	All married women			White married women			Black married women*		
	Earnings	Property	Soletrade	Earnings	Property	Soletrade	Earnings	Property	Soletrade
Khan (1996) dates									
1850	0.000	0.371	0.030	0.000	0.300	0.010	0.000	0.347	0.007
1860	0.024	0.443	0.024	0.024	0.445	0.024	0.008	0.376	0.008
1870	0.308	0.634	0.225	0.340	0.680	0.243	0.066	0.284	0.086
1880	0.717	0.891	0.465	0.762	0.902	0.481	0.378	0.803	0.342
1900	0.737	0.892	0.530	0.779	0.906	0.541	0.382	0.790	0.435
Hoff (1991) dates									
1850	0.000	0.457	0.331	0.000	0.390	0.135	0.000	0.380	0.187
1860	0.050	0.579	0.334	0.050	0.579	0.336	0.023	0.612	0.236
1870	0.314	0.750	0.349	0.337	0.783	0.334	0.137	0.498	0.468
1880	0.662	0.879	0.445	0.677	0.881	0.439	0.556	0.870	0.483
1900	0.661	0.882	0.505	0.674	0.887	0.500	0.569	0.870	0.559

* Free black women in 1850 and 1860

Table 2.3 Married women's labor force participation and legislation in effect
Dates of passage according to Khan (1996)

Status of legislation / Year	Earnings law	No earnings law	Property law	No property law	Soletrade law	No soletrade law
All married women						
1860	0.038	0.043	0.031	0.051	0.038	0.043
1870	0.015	0.052	0.025	0.068	0.025	0.045
1880	0.030	0.089	0.045	0.064	0.046	0.047
1900	0.030	0.072	0.039	0.055	0.043	0.039
White married women						
1860	0.039	0.041	0.030	0.05	0.039	0.041
1870	0.013	0.014	0.015	0.01	0.019	0.012
1880	0.018	0.017	0.018	0.015	0.021	0.014
1900	0.021	0.021	0.021	0.017	0.024	0.017
Black married women						
1860	--	--	--	--	--	--
1870	0.074	0.263	0.203	0.269	0.177	0.257
1880	0.219	0.296	0.272	0.244	0.313	0.243
1900	0.184	0.228	0.217	0.191	0.244	0.186

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Table 2.4 Married women's labor force participation and legislation in effect

Dates of passage according to Hoff (1991)

Status of legislation Year	Earnings law	No earnings law	Property law	No property law	Soletrade law	No soletrade law
All married women						
1860	0.022	0.044	0.042	0.043	0.052	0.038
1870	0.020	0.050	0.031	0.070	0.052	0.035
1880	0.045	0.050	0.046	0.050	0.049	0.045
1900	0.039	0.044	0.040	0.047	0.043	0.039
White married women						
1860	0.021	0.042	0.040	0.043	0.051	0.036
1870	0.016	0.013	0.015	0.010	0.014	0.013
1880	0.018	0.016	0.018	0.014	0.017	0.018
1900	0.022	0.019	0.022	0.016	0.022	0.020
Black married women						
1860	0.077	0.133	0.151	0.103	0.143	0.129
1870	0.101	0.274	0.230	0.270	0.259	0.242
1880	0.291	0.236	0.263	0.292	0.268	0.265
1900	0.220	0.200	0.206	0.247	0.212	0.211

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Table 2.5 Changes in earnings laws and changes in labor force participation, 1860-1900
Dates of passage according to Khan (1996)

	All	LFP	White	LFP	Black	LFP	Non-farm white	LFP	Non-farm black	LFP
	1860	1870	1860	1870	1860	1870	1860	1870	1860	1870
No law	0.046	0.052	0.044	0.014	0.154	0.261	0.037	0.021	0.158	0.294
New law, 1860-1870	0.030	0.009	0.029	0.008	0.048	0.048	0.024	0.011	0.040	0.055
Law pre-1860	0.041	0.020	0.039	0.018	0.112	0.087	0.034	0.020	0.118	0.080
	1870	1880	1870	1880	1870	1880	1870	1880	1870	1880
No law	0.086	0.089	0.012	0.017	0.279	0.295	0.020	0.029	0.313	0.337
New law, 1870-1880	0.034	0.037	0.015	0.017	0.227	0.234	0.021	0.025	0.251	0.277
Law pre-1870	0.014	0.021	0.013	0.018	0.073	0.148	0.016	0.025	0.072	0.160
	1880	1900	1880	1900	1880	1900	1880	1900	1880	1900
No law	0.097	0.072	0.017	0.021	0.297	0.228	0.030	0.029	0.340	0.262
New law, 1880-1900	0.013	0.015	0.011	0.013	0.059	0.121	0.020	0.013	--	0.125
Law pre-1880	0.030	0.030	0.017	0.021	0.219	0.184	0.025	0.027	0.249	0.193

Table 2.6 Changes in earnings laws and changes in labor force participation, 1860-1900
Dates of passage according to Hoff (1991)

	All (LFP)		White (LFP)		Black (LFP)		Non-farm white (LFP)		Non-farm black (LFP)	
	1860	1870	1860	1870	1860	1870	1860	1870	1860	1870
No law	0.043	0.050	0.042	0.013	0.125	0.272	0.036	0.019	0.133	0.305
New law, 1860-1870	0.049	0.017	0.047	0.008	0.272	0.106	0.040	0.011	0.230	0.122
Law pre-1860	0.037	0.022	0.036	0.020	0.108	0.091	0.032	0.022	0.115	0.086

	All (LFP)		White (LFP)		Black (LFP)		Non-farm white (LFP)		Non-farm black (LFP)	
	1870	1880	1870	1880	1870	1880	1870	1880	1870	1880
No law	0.048	0.050	0.014	0.016	0.217	0.236	0.023	0.028	0.243	0.269
New law, 1870-1880	0.032	0.033	0.011	0.012	0.278	0.262	0.015	0.017	0.310	0.300
Law pre-1870	0.042	0.053	0.016	0.022	0.273	0.308	0.020	0.031	0.301	0.347

	All (LFP)		White (LFP)		Black (LFP)		Non-farm white (LFP)		Non-farm black (LFP)	
	1880	1900	1880	1900	1880	1900	1880	1900	1880	1900
No law	0.053	0.044	0.017	0.019	0.238	0.199	0.029	0.025	0.272	0.225
New law, 1880-1900	0.011	0.018	0.007	0.016	0.060	0.111	0.011	0.017	0.000	0.113
Law pre-1880	0.045	0.040	0.018	0.022	0.291	0.220	0.025	0.027	0.330	0.241

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Table 2.7: Differences in differences estimates of effects of changes in earnings laws, 1870-1880: Dates of passage according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Earnings act passed before 1870	-0.0146	-0.00271	-0.00641	-0.0905	-0.123
	(-7.93)	(-1.79)	(-2.64)	(-3.82)	(-4.73)
Earnings act passed, 1870-1880	0.00266	0.000999	0.0000600	0.0111	0.00717
	(1.41)	(0.60)	(0.02)	(0.95)	(0.51)
Earnings act passed before 1870 × year is 1880	0.00252	-0.000158	-0.000373	0.108	0.148
	(0.91)	(-0.08)	(-0.12)	(2.89)	(3.55)
Earnings act passed, 1870-1880 × year is 1880	-0.00432	-0.00279	-0.00463	-0.00648	0.0243
	(-2.12)	(-1.72)	(-1.70)	(-0.46)	(1.31)
Year is 1880	0.00938	0.00539	0.00919	0.0434	0.0308
	(5.78)	(3.15)	(3.01)	(5.14)	(2.99)
Living in urban area	0.00506	0.00488	0.00610	0.0345	0.0388
	(3.70)	(4.98)	(4.52)	(3.16)	(3.26)
Living in group quarters	0.0975	0.0677	0.0888	0.324	0.213
	(9.58)	(7.78)	(7.85)	(4.12)	(2.09)
Age	0.00302	0.00180	0.00341	0.00622	0.0108
	(9.13)	(7.63)	(8.08)	(3.39)	(4.10)
Age squared	-0.0000430	-0.0000239	-0.0000444	-0.000101	-0.000161
	(-10.39)	(-8.37)	(-8.52)	(-4.53)	(-4.83)
Spouse's age	-0.00176	-0.00134	-0.00152	-0.00419	-0.00381
	(-6.16)	(-6.14)	(-4.13)	(-2.47)	(-1.73)
Spouse's age squared	0.0000159	0.0000121	0.0000146	0.0000354	0.0000294
	(5.08)	(5.13)	(3.60)	(1.93)	(1.22)
Spouse is black	0.0425	0.124	0.134	-0.0413	-0.0340
	(3.04)	(3.71)	(2.96)	(-0.95)	(-0.58)
Spouse is U.S. born	-0.0119	-0.00532	-0.00754	-0.0930	-0.0305
	(-9.02)	(-7.61)	(-7.09)	(-1.71)	(-0.47)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Spouse in labor force	-0.00812	-0.0119	-0.00993	0.112	0.136
	(-2.90)	(-7.34)	(-3.85)	(4.45)	(4.75)
Number of own children in the household	-0.00807	-0.00553	-0.00817	-0.0248	-0.0261
	(-23.85)	(-19.03)	(-17.32)	(-12.57)	(-10.09)
Number of boys 13-19 at home	-0.00520	0.00156	0.00294	-0.0620	-0.0703
	(-3.82)	(1.63)	(1.89)	(-6.89)	(-5.80)
Number of girls 13-19 at home	-0.00824	0.00125	0.00260	-0.0812	-0.0837
	(-6.38)	(1.43)	(1.86)	(-9.76)	(-7.65)
Number of own boys working	0.00981	0.00212	0.00162	0.0609	0.0655
	(9.11)	(2.52)	(1.12)	(9.14)	(7.11)
Number of own girls working	0.0277	0.0122	0.0134	0.119	0.133
	(22.33)	(10.87)	(7.67)	(18.89)	(15.50)
Community property state	0.00468	0.00334	0.00521	-0.00969	-0.000763
	(2.20)	(1.56)	(1.43)	(-0.76)	(-0.05)
Equity laws in effect	0.0260	0.00739	0.00900	0.123	0.146
	(13.96)	(5.65)	(4.51)	(10.84)	(10.43)
% 10+ in manufacturing	-0.000620	0	0	-0.173	-0.225
	(-0.08)	(0.00)	(0.00)	(-2.02)	(-2.28)
Percentage of state population in cities over 25,000	0.0000127	0	0	0.00937	0.0125
	(0.00)	(0.00)	(0.00)	(0.21)	(0.25)
Sex ratio	-0.000205	0	0	-0.0686	-0.0191
	(-0.04)	(0.00)	(0.00)	(-0.68)	(-0.16)
Black	0.0884				
	(4.32)				
Living on farm	-0.0208	-0.00800		-0.112	
	(-23.62)	(-12.58)		(-18.17)	
Observations	147536	131793	72691	17169	11546

Average partial effects for each variable. t-statistics in parentheses.

Table 2.8: Differences in differences estimates of effects of changes in earnings laws, 1880-1900 Dates of passage according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Earnings act passed before 1880	-0.0149	-0.00117	-0.00527	0.00507	0.0153
	(-10.13)	(-0.82)	(-2.37)	(0.56)	(1.23)
Earnings act passed, 1880-1900	-0.0229	-0.00185	-0.00390	-0.0824	-0.268
	(-6.12)	(-0.54)	(-0.71)	(-1.13)	(-71.70)
Earnings act passed before 1880 × year is 1900	0.00611	-0.00135	0.00232	0.00322	0.00857
	(3.10)	(-0.86)	(0.87)	(0.28)	(0.54)
Earnings act passed, 1880-1900 × year is 1900	0.0227	-0.00247	-0.00783	0.198	0.730
	(2.47)	(-0.64)	(-1.42)	(1.41)	(195.36)
Year is 1900	-0.000972	0.00423	-0.0000704	0.000623	-0.0190
	(-0.68)	(2.77)	(-0.03)	(0.09)	(-1.93)
Living in urban area	0.00209	0.00257	0.00268	0.0754	0.0812
	(1.78)	(3.06)	(2.44)	(8.42)	(8.41)
Living in group quarters	0.0698	0.0647	0.0781	0.0835	0.0339
	(10.05)	(9.77)	(9.80)	(1.30)	(0.49)
Age	0.00413	0.00228	0.00421	0.00791	0.0130
	(14.02)	(10.13)	(11.30)	(5.02)	(5.26)
Age squared	-0.0000561	-0.0000299	-0.0000547	-0.000112	-0.000174
	(-15.61)	(-11.35)	(-12.26)	(-6.03)	(-5.68)
Spouse's age	-0.00196	-0.000980	-0.00127	-0.00460	-0.00678
	(-7.69)	(-4.66)	(-3.92)	(-3.21)	(-3.36)
Spouse's age squared	0.0000189	0.00000929	0.0000134	0.0000429	0.0000710
	(7.01)	(4.24)	(3.94)	(2.88)	(3.32)
Spouse is black	0.0650	0.0848	0.0913	0.0328	-0.000149
	(3.58)	(3.10)	(2.63)	(0.63)	(-0.00)
Spouse is U.S. born	-0.00483	-0.00353	-0.00552	-0.0404	0.00314
	(-4.27)	(-5.10)	(-5.67)	(-1.01)	(0.07)

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Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Spouse in labor force	-0.00352	-0.0159	-0.0168	0.0634	0.0768
	(-1.65)	(-11.85)	(-8.64)	(3.24)	(3.27)
Number of own children in the household	-0.00867	-0.00574	-0.00866	-0.0214	-0.0232
	(-29.02)	(-22.43)	(-21.70)	(-13.06)	(-9.51)
Number of boys 13-19 at home	-0.00235	0.00203	0.00399	-0.0289	-0.0193
	(-2.15)	(2.56)	(3.27)	(-4.08)	(-1.74)
Number of girls 13-19 at home	-0.00469	0.00243	0.00510	-0.0480	-0.0397
	(-4.49)	(3.25)	(4.46)	(-7.33)	(-3.99)
Number of own boys working	0.00968	0.00272	0.00303	0.0381	0.0374
	(11.00)	(4.05)	(2.80)	(7.14)	(4.25)
Number of own girls working	0.0292	0.0112	0.0114	0.0965	0.112
	(27.97)	(12.77)	(8.76)	(18.56)	(12.32)
Community property state	0.0187	0.000254	-0.0106	0.0223	0.0226
	(10.53)	(0.18)	(-0.50)	(2.17)	(1.64)
Equity laws in effect	0.0254	0.0112	0.0127	0.108	0.126
	(15.45)	(9.22)	(7.54)	(11.47)	(9.82)
% 10+ in manufacturing	0.00000137	0	0	-0.0884	-0.128
	(0.00)	(0.00)	(0.00)	(-1.41)	(-1.66)
Percentage of state population in cities over 25,000	-0.0000144	0	0	0.00133	0.00285
	(-0.00)	(0.00)	(0.00)	(0.04)	(0.08)
Sex ratio	0.00230	0	0	-1.104	-0.386
	(1.45)	(0.00)	(0.00)	(-12.48)	(-3.28)
Black	0.0808				
	(4.00)				
Living on farm	-0.0166	-0.0104		-0.0744	
	(-18.60)	(-17.32)		(-13.23)	
Observations	228093	194876	116748	23132	12891

Average partial effects for each variable. t-statistics in parentheses.

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Table 2.9 Differences in differences estimates of effects of changes in property laws, 1870-1880: Dates of passage according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Property act passed before 1870	-0.00622	-0.00551	-0.00616	0.0118	0.0512
	(-2.48)	(-2.99)	(-1.82)	(0.65)	(2.24)
Property act passed, 1870-1880	-0.00383	-0.00537	-0.00448	0.00466	0.0412
	(-1.37)	(-2.73)	(-1.10)	(0.24)	(1.64)
Property act passed before 1870 × year is 1880	-0.000336	0.00210	-0.00212	0.0158	0.0240
	(-0.11)	(0.86)	(-0.55)	(0.80)	(0.99)
Property act passed, 1870-1880 × year is 1880	0.000495	0.00799	0.00461	0.00295	0.0186
	(0.14)	(1.77)	(0.70)	(0.15)	(0.74)
Year is 1880	0.00881	0.00201	0.00862	0.0378	0.0285
	(2.94)	(0.88)	(1.99)	(2.15)	(1.37)
Living in urban area	0.00500	0.00479	0.00596	0.0360	0.0403
	(3.66)	(4.91)	(4.43)	(3.29)	(3.38)
Living in group quarters	0.0985	0.0679	0.0895	0.325	0.201
	(9.60)	(7.79)	(7.87)	(4.11)	(1.96)
Age	0.00303	0.00180	0.00342	0.00621	0.0109
	(9.16)	(7.65)	(8.10)	(3.38)	(4.15)
Age squared	-0.0000431	-0.0000240	-0.0000446	-0.000100	-0.000162
	(-10.43)	(-8.38)	(-8.55)	(-4.51)	(-4.85)
Spouse's age	-0.00180	-0.00135	-0.00154	-0.00407	-0.00353
	(-6.28)	(-6.19)	(-4.17)	(-2.40)	(-1.60)
Spouse's age squared	0.0000162	0.0000122	0.0000147	0.0000341	0.0000261
	(5.18)	(5.17)	(3.64)	(1.85)	(1.08)
Spouse is black	0.0430	0.125	0.134	-0.0461	-0.0373
	(3.06)	(3.73)	(2.96)	(-1.06)	(-0.64)
Spouse is U.S. born	-0.0116	-0.00535	-0.00761	-0.0941	-0.0304
	(-8.79)	(-7.65)	(-7.14)	(-1.72)	(-0.46)

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Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Spouse in labor force	-0.00780	-0.0119	-0.00994	0.112	0.136
	(-2.78)	(-7.32)	(-3.86)	(4.48)	(4.75)
Number of own children in the household	-0.00803	-0.00551	-0.00815	-0.0248	-0.0260
	(-23.75)	(-18.99)	(-17.29)	(-12.55)	(-10.05)
Number of boys 13-19 at home	-0.00517	0.00156	0.00291	-0.0618	-0.0702
	(-3.80)	(1.63)	(1.87)	(-6.85)	(-5.78)
Number of girls 13-19 at home	-0.00838	0.00122	0.00253	-0.0810	-0.0840
	(-6.48)	(1.39)	(1.81)	(-9.71)	(-7.66)
Number of own boys working	0.00978	0.00210	0.00162	0.0607	0.0652
	(9.08)	(2.50)	(1.12)	(9.09)	(7.05)
Number of own girls working	0.0281	0.0123	0.0134	0.119	0.133
	(22.55)	(10.91)	(7.70)	(18.77)	(15.46)
Community property state	0.00684	0.00388	0.00649	-0.00472	0.0213
	(3.04)	(1.79)	(1.68)	(-0.36)	(1.22)
Equity laws in effect	0.0239	0.00754	0.00953	0.117	0.122
	(13.63)	(6.57)	(5.46)	(9.94)	(8.52)
% 10+ in manufacturing	-0.000541	0	0	-0.191	-0.254
	(-0.08)	(0.00)	(0.00)	(-2.29)	(-2.61)
Percentage of state population in cities over 25,000	-0.0000132	0	0	0.0113	0.0136
	(-0.00)	(0.00)	(0.00)	(0.22)	(0.23)
Sex ratio	-0.000272	0	0	-0.0725	-0.0251
	(-0.05)	(0.00)	(0.00)	(-0.77)	(-0.22)
Black	0.0929				
	(4.41)				
Living on farm	-0.0207	-0.00801		-0.113	
	(-23.55)	(-12.61)		(-18.29)	
Observations	147536	131793	72691	17169	11546

Average partial effects for each variable. t-statistics in parentheses.

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Table 2.10 Differences in differences estimates of effects of changes in property laws, 1880-1900: Dates of passage according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Property act passed before 1880	0.0132	-0.00315	-0.00956	0.00576	0.0456
	(5.03)	(-1.36)	(-2.53)	(0.39)	(2.35)
Property act passed, 1880-1900	-0.00670	-0.00383	-0.00872	-0.234	-0.265
	(-1.17)	(-1.11)	(-1.75)	(-87.64)	(-71.08)
Property act passed before 1880 × year is 1900	-0.00155	-0.00159	0.000461	0.0253	0.0107
	(-0.57)	(-0.64)	(0.11)	(1.82)	(0.57)
Property act passed, 1880-1900 × year is 1900	0.00805	-0.00463	-0.00683	0.766	0.735
	(0.98)	(-1.19)	(-1.07)	(286.99)	(197.14)
Year is 1900	0.00561	0.00487	0.00162	-0.0195	-0.0273
	(2.11)	(1.82)	(0.38)	(-1.63)	(-1.66)
Living in urban area	0.00152	0.00258	0.00276	0.0753	0.0804
	(1.30)	(3.07)	(2.51)	(8.40)	(8.32)
Living in group quarters	0.0700	0.0653	0.0790	0.0828	0.0320
	(10.07)	(9.82)	(9.86)	(1.29)	(0.46)
Age	0.00412	0.00229	0.00422	0.00796	0.0131
	(13.97)	(10.16)	(11.34)	(5.06)	(5.32)
Age squared	-0.0000559	-0.0000299	-0.0000549	-0.000112	-0.000175
	(-15.54)	(-11.37)	(-12.30)	(-6.06)	(-5.71)
Spouse's age	-0.00200	-0.000978	-0.00127	-0.00464	-0.00680
	(-7.83)	(-4.66)	(-3.92)	(-3.25)	(-3.38)
Spouse's age squared	0.0000192	0.00000928	0.0000135	0.0000432	0.0000707
	(7.12)	(4.24)	(3.95)	(2.90)	(3.31)
Spouse is black	0.0652	0.0846	0.0914	0.0347	0.00617
	(3.57)	(3.10)	(2.63)	(0.67)	(0.10)
Spouse is U.S. born	-0.00437	-0.00366	-0.00562	-0.0416	-0.00233
	(-3.86)	(-5.28)	(-5.77)	(-1.04)	(-0.05)

Table:

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Spouse in labor force	-0.00277	-0.0159	-0.0168	0.0628	0.0751
	(-1.30)	(-11.83)	(-8.66)	(3.21)	(3.20)
Number of own children in the household	-0.00865	-0.00576	-0.00867	-0.0214	-0.0231
	(-28.93)	(-22.46)	(-21.73)	(-13.08)	(-9.51)
Number of boys 13-19 at home	-0.00235	0.00203	0.00397	-0.0289	-0.0190
	(-2.15)	(2.56)	(3.25)	(-4.08)	(-1.71)
Number of girls 13-19 at home	-0.00477	0.00241	0.00506	-0.0480	-0.0397
	(-4.56)	(3.22)	(4.42)	(-7.32)	(-3.98)
Number of own boys working	0.00969	0.00270	0.00300	0.0383	0.0375
	(11.00)	(4.02)	(2.76)	(7.18)	(4.26)
Number of own girls working	0.0292	0.0112	0.0114	0.0963	0.112
	(27.93)	(12.78)	(8.78)	(18.52)	(12.32)
Community property state	0.0328	-0.000844	-0.00307	0.0360	0.0594
	(14.48)	(-0.57)	(-1.43)	(2.41)	(3.00)
Equity laws in effect	0.0316	0.0122	0.0141	0.106	0.121
	(19.30)	(10.82)	(8.93)	(11.31)	(9.46)
% 10+ in manufacturing	-0.00000402	0	0	-0.0894	-0.129
	(-0.00)	(0.00)	(0.00)	(-1.44)	(-1.75)
Percentage of state population in cities over 25,000	-0.0000408	0	0	0.00156	0.00225
	(-0.01)	(0.00)	(0.00)	(0.05)	(0.06)
Sex ratio	0.00227	0	0	-1.106	-0.333
	(1.25)	(0.00)	(0.00)	(-12.63)	(-2.95)
Black	0.0843				
	(4.07)				
Living on farm	-0.0175	-0.0105		-0.0749	
	(-19.79)	(-17.34)		(-13.34)	
Observations	228093	194876	116748	23132	12891

Average partial effects for each variable. t-statistics in parentheses.

Table 2.11 Effect of boarders on labor force participation measures

	1880		1900	
	N	%	N	%
All married women				
Not in labor force	7,121,838	89.1	10,882,558	87.0
Keeps boarders or lodgers, but not gainfully employed	527,444	6.6	1,157,679	9.3
Gainfully employed, but no boarders or lodgers	318,552	4.0	407,365	3.3
Keeps boarders or lodgers and gainfully employed	24,216	0.3	58,293	0.5
Total	7,992,050	100.0	12,505,895	100.0
Black married women				
Not in labor force	652,646	69.6	908,743	71.9
Keeps boarders or lodgers, but not gainfully employed	43,971	4.7	99,015	7.8
Gainfully employed, but no boarders or lodgers	230,596	24.6	230,024	18.2
Keeps boarders or lodgers and gainfully employed	10,961	1.2	26,425	2.1
Total	938,174	100.0	1,264,207	100.0
White married women				
Not in labor force	6,459,617	91.7	9,926,890	88.8
Keeps boarders or lodgers, but not gainfully employed	482,475	6.9	1,053,540	9.4
Gainfully employed, but no boarders or lodgers	86,060	1.2	168,995	1.5
Keeps boarders or lodgers and gainfully employed	13,156	0.2	31,093	0.3
Total	7,041,308	100.0	11,180,518	100.0
Rural married women				
Not in labor force	5,156,266	90.4	6,742,951	88.5
Keeps boarders or lodgers, but not gainfully employed	295,230	5.2	594,065	7.8
Gainfully employed, but no boarders or lodgers	238,869	4.2	255,094	3.3
Keeps boarders or lodgers and gainfully employed	12,354	0.2	27,438	0.4
Total	5,702,719	100.0	7,619,548	100.0
Urban married women				
Not in labor force	1,965,572	85.9	4,139,607	84.7
Keeps boarders or lodgers, but not gainfully employed	232,214	10.1	563,614	11.5
Gainfully employed, but no boarders or lodgers	79,683	3.5	152,271	3.1
Keeps boarders or lodgers and gainfully employed	11,862	0.5	30,855	0.6
Total	2,289,331	100.0	4,886,347	100.0

Note: Married women with their spouse present between the ages of 16 and 70 who are spouses or heads of household and not living in group quarters are included in the tables.

Table 2.12: Difference in differences estimates of effects of changes in earnings laws, 1880-1900, with wives keeping boarders included in labor force: Dates according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Earnings act passed before 1880	-0.0286	-0.0146	-0.0330	0.00603	0.0177
	(-10.29)	(-4.67)	(-6.87)	(0.59)	(1.27)
Earnings act passed, 1880-1900	-0.0255	-0.00235	-0.0183	-0.0764	-0.200
	(-3.65)	(-0.32)	(-1.61)	(-0.99)	(-2.61)
Year is 1900	0.0140	0.0244	0.0120	0.0119	-0.00967
	(4.94)	(7.13)	(2.29)	(1.49)	(-0.86)
Earnings act passed before 1880 × Year is 1900	0.00957	0.000171	0.00807	0.0168	0.0222
	(2.82)	(0.05)	(1.41)	(1.33)	(1.27)
Earnings act passed, 1880-1900 × Year is 1900	0.00160	-0.0123	-0.000604	0.127	0.309
	(0.17)	(-1.55)	(-0.04)	(1.03)	(2.11)
Living in urban area	0.0262	0.0263	0.0245	0.103	0.106
	(12.63)	(12.84)	(10.51)	(10.50)	(10.07)
Age	0.00700	0.00499	0.00849	0.00895	0.0160
	(13.82)	(10.08)	(11.08)	(5.16)	(5.83)
Age squared	-0.0000915	-0.0000637	-0.000110	-0.000127	-0.000218
	(-15.17)	(-11.23)	(-12.06)	(-6.25)	(-6.39)
Spouse's age	0.000569	0.00196	0.00134	-0.00301	-0.00500
	(1.22)	(3.96)	(1.86)	(-1.89)	(-2.21)
Spouse's age squared	-0.00000489	-0.0000184	-0.0000103	0.0000317	0.0000537
	(-1.00)	(-3.57)	(-1.35)	(1.92)	(2.24)
Spouse is black	0.0979	0.108	0.117	0.0325	0.0399
	(3.48)	(2.77)	(2.40)	(0.57)	(0.53)
Spouse is U.S. born	-0.0113	-0.00991	-0.0221	0.00937	0.0276
	(-6.54)	(-6.24)	(-10.82)	(0.21)	(0.55)
Spouse in labor force	0.0107	-0.0104	-0.00854	0.0638	0.0785
	(2.79)	(-2.76)	(-1.78)	(2.93)	(3.02)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Number of own children in the household	-0.0136	-0.0106	-0.0141	-0.0239	-0.0290
	(-28.69)	(-22.02)	(-20.31)	(-13.41)	(-10.90)
Number of boys 13-19 at home	-0.0103	-0.00701	-0.00605	-0.0335	-0.0311
	(-6.32)	(-4.42)	(-2.59)	(-4.45)	(-2.59)
Number of girls 13-19 at home	0.000250	0.00401	0.00588	-0.0434	-0.0355
	(0.16)	(2.69)	(2.68)	(-6.30)	(-3.33)
Number of own boys working	0.0130	0.00518	0.0112	0.0426	0.0505
	(9.77)	(3.94)	(5.56)	(7.46)	(5.29)
Number of own girls working	0.0312	0.0136	0.0117	0.0913	0.114
	(17.90)	(7.10)	(4.52)	(16.12)	(11.27)
Community property state	0.0155	0.0160	0.000459	0.0188	0.0164
	(5.55)	(4.90)	(0.10)	(1.69)	(1.08)
Equity laws in effect	0.0229	0.0121	0.00770	0.101	0.111
	(9.98)	(5.52)	(2.68)	(10.16)	(8.34)
% 10+ in manufacturing	0.000000856	0	0	-0.0476	-0.0770
	(0.00)	(0.00)	(0.00)	(-0.72)	(-0.95)
Percentage of state population in cities over 25,000	0	0	0	0.00238	0.00388
	(0.00)	(0.00)	(0.00)	(0.07)	(0.09)
Sex ratio	0.000530	0	0	-0.393	-0.542
	(0.17)	(0.00)	(0.00)	(-4.25)	(-4.31)
Black	0.0825				
	(3.05)				
Living on farm	-0.0255	-0.0176		-0.0894	
	(-15.24)	(-10.22)		(-14.00)	
Observations	216997	185316	110630	22206	12289

Average partial effects for each variable. t-statistics in parentheses.

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Table 2.13: Difference in differences estimates of effects of changes in property laws, 1880-1900, with wives keeping boarders included in labor force: Dates according to Khan (1996)

Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Property act passed before 1880	-0.000333	-0.0167	-0.0212	0.0439	0.0593
	(-0.07)	(-3.42)	(-2.62)	(2.65)	(2.80)
Property act passed, 1880-1900	0.00208	0.00241	-0.0175	-0.290	-0.336
	(0.22)	(0.27)	(-1.30)	(-98.50)	(-81.22)
Year is 1900	0.0245	0.0190	0.00896	0.0145	-0.00987
	(5.01)	(3.46)	(0.99)	(1.06)	(-0.53)
Property act passed before 1880 × Year is 1900	-0.00167	0.00801	0.0135	0.00151	0.00567
	(-0.34)	(1.44)	(1.43)	(0.10)	(0.27)
Property act passed, 1880-1900 × Year is 1900	-0.0200	-0.0142	0.00167	0.709	0.664
	(-2.09)	(-1.56)	(0.10)	(240.84)	(160.49)
Living in urban area	0.0255	0.0261	0.0241	0.102	0.105
	(12.34)	(12.73)	(10.36)	(10.44)	(9.97)
Age	0.00702	0.00501	0.00850	0.00904	0.0162
	(13.85)	(10.12)	(11.08)	(5.21)	(5.90)
Age squared	-0.0000916	-0.0000639	-0.000110	-0.000127	-0.000220
	(-15.20)	(-11.26)	(-12.05)	(-6.29)	(-6.44)
Spouse's age	0.000506	0.00194	0.00133	-0.00298	-0.00499
	(1.09)	(3.92)	(1.83)	(-1.88)	(-2.21)
Spouse's age squared	-0.00000424	-0.0000182	-0.0000102	0.0000312	0.0000530
	(-0.87)	(-3.53)	(-1.33)	(1.89)	(2.21)
Spouse is black	0.0985	0.107	0.117	0.0339	0.0479
	(3.50)	(2.76)	(2.40)	(0.59)	(0.64)
Spouse is U.S. born	-0.0111	-0.0101	-0.0221	0.00643	0.0232
	(-6.42)	(-6.37)	(-10.82)	(0.14)	(0.46)
Spouse in labor force	0.0116	-0.0102	-0.00828	0.0629	0.0767
	(3.01)	(-2.73)	(-1.73)	(2.89)	(2.96)

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Dependent variable is married woman's labor force participation	All	White	White non-farm	Black	Black non-farm
Number of own children in the household	-0.0135	-0.0106	-0.0140	-0.0239	-0.0289
	(-28.54)	(-21.94)	(-20.19)	(-13.43)	(-10.89)
Number of boys 13-19 at home	-0.0105	-0.00704	-0.00615	-0.0334	-0.0310
	(-6.41)	(-4.44)	(-2.63)	(-4.44)	(-2.58)
Number of girls 13-19 at home	0.00000235	0.00391	0.00569	-0.0434	-0.0355
	(0.00)	(2.63)	(2.60)	(-6.29)	(-3.33)
Number of own boys working	0.0131	0.00518	0.0113	0.0426	0.0507
	(9.81)	(3.94)	(5.57)	(7.47)	(5.31)
Number of own girls working	0.0315	0.0136	0.0117	0.0910	0.114
	(18.04)	(7.12)	(4.50)	(16.06)	(11.26)
Community property state	0.0233	0.0158	0.00331	0.0501	0.0579
	(7.39)	(4.43)	(0.69)	(3.09)	(2.75)
Equity laws in effect	0.0319	0.0173	0.0165	0.0958	0.106
	(14.35)	(8.32)	(5.99)	(9.76)	(7.93)
% 10+ in manufacturing	0.000000214	0	0	-0.0535	-0.0839
	(0.00)	(0.00)	(0.00)	(-0.83)	(-1.09)
Percentage of state population in cities over 25,000	-0.00000150	0	0	0.00259	0.00414
	(-0.00)	(0.00)	(0.00)	(0.07)	(0.10)
Sex ratio	0.000558	0	0	-0.376	-0.149
	(0.16)	(0.00)	(0.00)	(-4.13)	(-1.26)
Black	0.0870				
	(3.18)				
Living on farm	-0.0263	-0.0179		-0.0901	
	(-15.75)	(-10.38)		(-14.13)	
Observations	216997	185316	110630	22206	12289

Average partial effects for each variable. t-statistics in parentheses.

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Table 2.14 Determinants of married women in labor force being sole traders, 1910-1920

	Change in probability	s.e	Change in probability	s.e	Change in probability	s.e	Change in probability	s.e
Farming occupation	0.718	0.017	0.727	0.017	0.724	0.018	0.724	0.018
Managerial occupation	0.454	0.022	0.453	0.024	0.438	0.024	0.438	0.024
Clerical occupation	-0.197	0.006	-0.193	0.006	-0.185	0.007	-0.185	0.007
Sales occupation	-0.093	0.013	-0.100	0.013	-0.097	0.013	-0.097	0.013
Craft occupation	-0.085	0.018	-0.055	0.022	-0.052	0.022	-0.052	0.022
Operative occupation	-0.050	0.012	-0.001	0.014	0.001	0.014	0.001	0.014
Service occupation	0.055	0.013	0.118	0.015	0.099	0.016	0.099	0.016
Agricultural labor occupation	-0.139	0.010	-0.137	0.013	-0.132	0.014	-0.132	0.014
Laborer occupation	-0.184	0.008	-0.166	0.010	-0.162	0.010	-0.162	0.010
Husband had farming occupation			-0.007	0.019	-0.027	0.019	-0.027	0.019
Husband has managerial occupation			0.051	0.021	0.048	0.021	0.048	0.021
Husband has clerical occupation			-0.042	0.020	-0.031	0.021	-0.031	0.021
Husband has sales occupation			0.007	0.023	0.013	0.023	0.013	0.023
Husband has craft occupation			-0.053	0.016	-0.044	0.016	-0.044	0.016
Husband has operative occupation			-0.106	0.013	-0.088	0.014	-0.088	0.014
Husband has service occupation			-0.096	0.014	-0.088	0.015	-0.088	0.015
Husband has agricultural labor occupation			-0.108	0.014	-0.109	0.014	-0.109	0.014
Husband has laborer occupation			-0.088	0.014	-0.077	0.015	-0.077	0.015
Spouse has no occupation			-0.028	0.021	-0.048	0.019	-0.048	0.019
Age					0.007	0.001	0.007	0.001
Age squared					0.000	0.000	0.000	0.000
Urban residence					-0.021	0.008	-0.021	0.008
Native born					0.039	0.008	0.039	0.008
Number of boys aged 13-19 in family					0.011	0.007	0.011	0.007
Number of girls aged 13-19 in family					0.024	0.006	0.024	0.006
Number of working boys					0.004	0.006	0.004	0.006
Number of working girls					-0.021	0.007	-0.021	0.007
Number of non-relatives in household					0.002	0.001	0.002	0.001
Black					0.015	0.008	0.035	0.054
Spouse is black							-0.020	0.052
LR statistic	3185.880		3468.000		3802.080		3802.230	
Significance	0.000		0.000		0.000		0.000	
Pseudo R² (N: 21, 752 for all models)	0.136		0.148		0.162		0.162	

Table 2.15 Determinants of a married woman's probability of being a sole trader, 1870-1880

| | All married women | | | |
| | Khan | | Hoff | |
	Co-efficient	s.e.	Co-efficient	s.e.
Sole trade law in effect	-0.013	0.009	0.010	0.006
Sole trade law passed, 1870-1880	0.009	0.007	-0.043	0.021
Year is 1880	-0.016	0.005	-0.002	0.005
Sole trade law in effect × Year is 1880	0.010	0.011	-0.026	0.008
Sole trade law passed, 1870-1880 × Year is 1880	0.011	0.010	0.035	0.025
constant	-0.009	0.008	-0.009	0.008
Labor force participation				
Living on farm	-0.360	0.016	-0.360	0.016
Urban residence	0.014	0.017	0.014	0.017
Lives in group quarters	0.719	0.057	0.721	0.057
Age	0.027	0.004	0.027	0.004
Age squared	0.000	0.000	0.000	0.000
Spouse's age	-0.023	0.004	-0.023	0.004
Spouse's age squared	0.000	0.000	0.000	0.000
Spouse is black	0.685	0.104	0.680	0.104
Spouse is other race	0.592	0.357	0.583	0.357
Spouse is U.S. born	-0.140	0.019	-0.141	0.019
Spouse is in labor force	-0.051	0.038	-0.053	0.038
Number of children	-0.098	0.004	-0.099	0.004
Number of teenage boys	-0.070	0.018	-0.070	0.018
Number of teenage girls	-0.118	0.017	-0.118	0.017
Number of working boys	0.135	0.014	0.136	0.014
Number of working girls	0.363	0.015	0.364	0.015
Community property state	0.141	0.025	0.146	0.025
Equity court state	0.308	0.018	0.299	0.018
Percent of state labor force in manufacturing	-0.834	0.092	-0.833	0.092
Percent of state population in cities over 25,000	-0.283	0.069	-0.246	0.068
Sex ratio	-0.459	0.079	-0.512	0.081
Black	0.641	0.105	0.648	0.105
Other race	0.640	0.350	0.664	0.350
Constant	-0.918	0.109	-0.867	0.111
/athrho	0.913		0.903	
/lnsigma	-1.605		-1.608	
Wald chi2(5)	25.800		29.960	
P > chi2	0.000		0.000	
Log likelihood	-16615.440		-16613.340	
N	149149		149149	

Table 2.16 Determinants of a white married woman's probability of being a sole trader, 1870-1880

| | White married women | | | |
| | Khan | | Hoff | |
	Co-efficient	s.e.	Co-efficient	s.e.
Sole trade law in effect	0.040	0.012	0.004	0.010
Sole trade law passed, 1870-1880	0.029	0.012	-0.023	0.019
Year is 1880	-0.016	0.009	-0.014	0.008
Sole trade law in effect × Year is 1880	0.008	0.013	-0.014	0.012
Sole trade law passed, 1870-1880 × Year is 1880	-0.065	0.015	0.014	0.023
constant	-0.619	0.024	-0.587	0.024
Labor force participation				
Living on farm	-0.225	0.017	-0.236	0.017
Urban residence	0.048	0.015	0.047	0.015
Lives in group quarters	0.158	0.053	0.168	0.054
Age	0.013	0.004	0.013	0.004
Age squared	0.000	0.000	0.000	0.000
Spouse's age	-0.013	0.004	-0.014	0.004
Spouse's age squared	0.000	0.000	0.000	0.000
Spouse is black	0.525	0.119	0.545	0.120
Spouse is other race				
Spouse is U.S. born	-0.042	0.014	-0.039	0.014
Spouse is in labor force	-0.121	0.031	-0.124	0.031
Number of children	-0.061	0.005	-0.063	0.006
Number of teenage boys	0.010	0.016	0.012	0.016
Number of teenage girls	-0.010	0.015	-0.009	0.015
Number of working boys	0.033	0.013	0.034	0.014
Number of working girls	0.183	0.020	0.191	0.020
Community property state	0.071	0.031	0.076	0.031
Equity court state	0.141	0.018	0.106	0.017
Percent of state labor force in manufacturing	-0.228	0.071	-0.181	0.073
Percent of state population in cities over 25,000	-0.055	0.060	-0.138	0.061
Sex ratio	-0.161	0.053	-0.219	0.055
Black				
Other race				
Constant	-1.515	0.085	-1.427	0.087
/athrho	2.231		2.193	
/lnsigma	-0.964		-0.974	
Wald chi2(5)	45.130		14.730	
P > chi2	0.000		0.012	
Log likelihood	-9134.030		-9149.093	
N	131793		131793	

Table 2.17 Determinants of a married woman's probability of being a sole trader, 1880-1900

	All married women			
	Khan		Hoff	
	Co-efficient	s.e.	Co-efficient	s.e.
Sole trade law in effect	0.016	0.006	-0.032	0.006
Sole trade law passed, 1880-1900	-0.017	0.011	-0.045	0.011
Year is 1900	0.030	0.006	0.000	0.006
Sole trade law in effect × Year is 1900	-0.031	0.008	0.027	0.008
Sole trade law passed, 1880-1900 × Year is 1900	0.010	0.015	0.036	0.015
constant	0.056	0.008	0.084	0.009
Labor force participation				
Living on farm	-0.292	0.014	-0.291	0.014
Urban residence	0.037	0.014	0.038	0.014
Lives in group quarters	0.660	0.043	0.661	0.043
Age	0.038	0.004	0.038	0.004
Age squared	-0.001	0.000	-0.001	0.000
Spouse's age	-0.021	0.003	-0.020	0.003
Spouse's age squared	0.000	0.000	0.000	0.000
Spouse is black	0.670	0.123	0.671	0.123
Spouse is other race	0.459	0.200	0.458	0.200
Spouse is U.S. born	-0.079	0.015	-0.079	0.015
Spouse is in labor force	-0.120	0.028	-0.122	0.028
Number of children	-0.097	0.004	-0.097	0.004
Number of teenage boys	-0.016	0.014	-0.016	0.014
Number of teenage girls	-0.047	0.013	-0.046	0.013
Number of working boys	0.096	0.011	0.096	0.011
Number of working girls	0.306	0.012	0.306	0.012
Community property state	0.056	0.020	0.053	0.020
Equity court state	0.308	0.015	0.306	0.015
Percent of state labor force in manufacturing	-0.902	0.079	-0.913	0.079
Percent of state population in cities over 25,000	-0.130	0.046	-0.118	0.046
Sex ratio	-0.223	0.060	-0.228	0.060
Black	0.615	0.123	0.615	0.123
Other race	0.732	0.199	0.734	0.199
Constant	-1.423	0.088	-1.420	0.088
/athrho	0.515	0.024	0.503	0.024
/lnsigma	-1.589	0.009	-1.594	0.009
Wald chi2(5)	36.440		48.680	
P > chi2	0.000		0.000	
Log likelihood	-27537.930		-27531.810	
N	217527		217527	

Table 2.18 Determinants of a white married woman's probability of being a sole trader, 1880-1900

	White married women			
	Khan		Hoff	
	Co-efficient	s.e.	Co-efficient	s.e.
Sole trade law in effect	0.028	0.008	-0.014	0.007
Sole trade law passed, 1880-1900	0.027	0.017	-0.005	0.018
Year is 1900	-0.029	0.007	-0.031	0.006
Sole trade law in effect × Year is 1900	0.007	0.009	0.013	0.009
Sole trade law passed, 1880-1900 × Year is 1900	-0.070	0.021	-0.024	0.022
constant	-0.782	0.020	-0.757	0.020
Labor force participation				
Living on farm	-0.134	0.012	-0.136	0.012
Urban residence	0.016	0.010	0.011	0.010
Lives in group quarters	0.132	0.036	0.124	0.036
Age	0.008	0.003	0.008	0.003
Age squared	0.000	0.000	0.000	0.000
Spouse's age	-0.004	0.003	-0.004	0.003
Spouse's age squared	0.000	0.000	0.000	0.000
Spouse is black	0.328	0.100	0.332	0.101
Spouse is other race	-0.060	0.252	-0.023	0.247
Spouse is U.S. born	-0.027	0.009	-0.025	0.009
Spouse is in labor force	-0.120	0.019	-0.122	0.018
Number of children	-0.033	0.003	-0.034	0.003
Number of teenage boys	0.010	0.010	0.012	0.010
Number of teenage girls	0.003	0.009	0.003	0.009
Number of working boys	0.042	0.008	0.042	0.008
Number of working girls	0.092	0.011	0.096	0.011
Community property state	0.046	0.018	0.047	0.018
Equity court state	0.120	0.012	0.084	0.011
Percent of state labor force in manufacturing	-0.280	0.050	-0.210	0.049
Percent of state population in cities over 25,000	-0.079	0.032	-0.112	0.033
Sex ratio	-0.203	0.042	-0.286	0.042
Black	-1.573	0.063	-1.479	0.062
Other race				
Constant				
/athrho	2.592	0.043	2.583	0.044
/lnsigma	-0.792	0.018	-0.793	0.018
Wald chi2(5)	86.530		48.390	
P > chi2	0.000		0.000	
Log likelihood	-16496.360		-16516.180	
N	193609		193609	

Table 2.19 Differences in differences estimates of changes in marriage propensities after earnings laws reform, 1870-1880: Dates according to Khan (1996)

Dependent variable is being ever married	All	White	Black
Earnings act passed before 1870	-0.286	0.0278	-0.612
	(-1.96)	(0.90)	(-2.23)
Earnings act passed, 1870-1880	-0.135	0.0323	-0.0587
	(-0.70)	(0.72)	(-0.18)
Year is 1880	0.0151	0.0180	-0.00829
	(2.60)	(2.55)	(-0.57)
Earnings act passed before 1870 × Year is 1880	-0.0232	-0.0283	0.0276
	(-2.65)	(-2.94)	(0.85)
Earnings act passed, 1870-1880 × Year is 1880	-0.0225	-0.0299	0.0163
	(-2.82)	(-3.30)	(0.88)
Age 20 (Omitted age is 30)	-0.391	-0.408	-0.303
	(-62.97)	(-62.30)	(-17.37)
Age 21	-0.323	-0.336	-0.241
	(-46.90)	(-46.18)	(-11.87)
Age 22	-0.262	-0.276	-0.178
	(-37.96)	(-37.36)	(-9.54)
Age 23	-0.182	-0.192	-0.122
	(-25.14)	(-24.70)	(-6.39)
Age 24	-0.142	-0.150	-0.105
	(-19.58)	(-19.06)	(-5.52)
Age 25	-0.106	-0.108	-0.0944
	(-15.15)	(-13.94)	(-5.83)
Age 26	-0.0471	-0.0530	-0.0214
	(-6.32)	(-6.56)	(-1.10)
Age 27	-0.00212	-0.00407	-0.0129
	(-0.28)	(-0.49)	(-0.63)
Age 28	0.00679	0.00521	0.000506

Dependent variable is being ever married	All	White	Black
	(0.93)	(0.66)	(0.03)
Age 29	0.0578	0.0574	0.0234
	(7.28)	(6.69)	(0.97)
Living on farm	-0.0453	-0.0475	-0.0174
	(-12.00)	(-11.52)	(-1.87)
Living in urban area	-0.104	-0.0996	-0.132
	(-24.35)	(-21.71)	(-10.40)
Living in group quarters	-0.341	-0.339	-0.348
	(-31.19)	(-30.20)	(-7.88)
Born in the United States	-0.0272	-0.0233	-0.0540
	(-6.03)	(-5.06)	(-0.75)
Community property state	-0.204	-0.00931	-0.559
	(-1.39)	(-0.06)	(-2.14)
Equity property state	-0.440	-0.292	-0.114
	(-3.64)	(-1.72)	(-0.29)
% 10+ in manufacturing	-0.00151	-	-0.116
		0.0000506	
	(-0.01)	(-0.00)	(-0.11)
Percent of state population in cities over 25,000	-0.00129	-0.00186	0.0104
	(-0.01)	(-0.01)	(0.02)
Sex ratio	-0.000549	-0.000182	0.342
	(-0.01)	(-0.00)	(0.56)
Black	0.0677		
	(13.97)		
Other race	-0.0721		
	(-1.79)		
Observations	89467	76679	12635

Notes: Average partial effects. t-statistics in parentheses. Sample is women 20-30 years old of any marital status. State fixed effects included in estimation. The 1870 census did not enumerate marital status. Ever-married women are defined as currently married women, plus women without a spouse with own children.

Table 2.20 Differences in differences estimates of changes in marriage propensities after earnings laws reform, 1880-1900: Dates according to Khan (1996)

Dependent variable is being ever married	All	White	Black
Earnings act passed before 1880	-0.119	-0.238	-0.351
	(-1.46)	(-2.67)	(-1.44)
Earnings act passed, 1880-1900	0.0510	0.0317	0.0964
	(1.10)	(0.59)	(0.30)
Year is 1900	-0.0183	-0.0138	-0.0276
	(-2.77)	(-1.75)	(-1.49)
Earnings act passed before 1880 × Year is 1900	0.00434	0.000503	-0.00296
	(0.68)	(0.07)	(-0.21)
Earnings act passed, 1880-1900 × Year is 1900	-0.0615	-0.0738	0.0265
	(-3.56)	(-4.02)	(0.28)
Age 20 (Omitted age is 30)	-0.413	-0.430	-0.346
	(-82.83)	(-82.72)	(-21.67)
Age 21	-0.355	-0.367	-0.301
	(-64.89)	(-63.53)	(-17.25)
Age 22	-0.286	-0.301	-0.216
	(-50.72)	(-49.52)	(-12.89)
Age 23	-0.225	-0.238	-0.166
	(-38.10)	(-37.18)	(-9.62)
Age 24	-0.175	-0.187	-0.110
	(-29.18)	(-28.56)	(-6.44)
Age 25	-0.132	-0.142	-0.100
	(-22.20)	(-21.36)	(-6.33)
Age 26	-0.0775	-0.0857	-0.0439
	(-12.41)	(-12.40)	(-2.51)
Age 27	-0.0436	-0.0489	-0.0289
	(-6.84)	(-6.90)	(-1.60)
Age 28	-0.0268	-0.0322	0.0116

Dependent variable is being ever married	All	White	Black
	(-4.30)	(-4.63)	(0.68)
Age 29	0.0228	0.0229	-0.00261
	(3.50)	(3.16)	(-0.13)
Living on farm	-0.0533	-0.0578	-0.0420
	(-16.03)	(-15.22)	(-5.05)
Living in urban area	-0.131	-0.132	-0.124
	(-37.21)	(-34.36)	(-12.06)
Living in group quarters	-0.300	-0.298	-0.297
	(-36.84)	(-34.73)	(-8.77)
Born in the United States	-0.0661	-0.0624	0.00400
	(-17.46)	(-15.66)	(0.07)
Community property state	0.0465	-0.0244	0.0894
	(0.89)	(-0.30)	(0.30)
Equity property state	0.0391	0.147	0.278
	(0.61)	(2.34)	(1.73)
% 10+ in manufacturing	0.00141	0.00109	0.000379
	(0.01)	(0.01)	(0.00)
Percent of state population in cities over 25,000	-0.00159	-0.00115	-0.00267
	(-0.04)	(-0.02)	(-0.02)
Sex ratio	0.110	0.114	0.0251
	(2.91)	(2.78)	(0.13)
Black	0.0511		
	(12.28)		
Other race	0.104		
	(13.12)		
Observations	134380	110345	16912

Average partial effects. t-statistics in parentheses.
Sample is women 20-30 years old of any marital status.
State fixed effects included in estimation.

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Table 2.21 Differences in differences estimates of changes in marriage propensities after property law reform, 1870–1880: Dates according to Khan (1996)

Dependent variable is being ever married	All	White	Black
Property act passed before 1870	-0.281	-0.211	0.267
	(-1.53)	(-1.09)	(1.76)
Property act passed, 1870–1880	-0.335	-0.252	0.418
	(-1.70)	(-1.11)	(1.92)
Year is 1880	-0.00530	-0.0101	-0.0000315
	(-0.55)	(-0.88)	(-0.00)
Property act passed before 1870 × Year is 1880	0.00701	0.0102	0.00539
	(0.62)	(0.80)	(0.22)
Property act passed, 1870–1880 × Year is 1880	0.0107	0.0123	-0.000618
	(0.96)	(0.94)	(-0.03)
Age 20 (Omitted age is 30)	-0.391	-0.408	-0.303
	(-62.97)	(-62.30)	(-17.38)
Age 21	-0.323	-0.336	-0.241
	(-46.90)	(-46.19)	(-11.87)
Age 22	-0.262	-0.276	-0.178
	(-37.94)	(-37.34)	(-9.54)
Age 23	-0.182	-0.192	-0.122
	(-25.14)	(-24.71)	(-6.39)
Age 24	-0.142	-0.150	-0.106
	(-19.57)	(-19.05)	(-5.52)
Age 25	-0.106	-0.108	-0.0943
	(-15.15)	(-13.95)	(-5.83)
Age 26	-0.0470	-0.0530	-0.0213
	(-6.32)	(-6.56)	(-1.10)
Age 27	-0.00206	-0.00402	-0.0130
	(-0.27)	(-0.48)	(-0.63)
Age 28	0.00694	0.00536	0.000449

Dependent variable is being ever married	All	White	Black
	(0.95)	(0.68)	(0.02)
Age 29	0.0579	0.0575	0.0240
	(7.29)	(6.70)	(0.99)
Living on farm	-0.0451	-0.0474	-0.0176
	(-11.97)	(-11.50)	(-1.89)
Living in urban area	-0.104	-0.0998	-0.132
	(-24.37)	(-21.74)	(-10.41)
Living in group quarters	-0.341	-0.339	-0.347
	(-31.23)	(-30.25)	(-7.87)
Born in the United States	-0.0276	-0.0237	-0.0534
	(-6.12)	(-5.15)	(-0.75)
Community property state	-0.188	0.0817	-0.263
	(-1.28)	(0.50)	(-0.55)
Equity property state	-0.0450	-0.109	-0.276
	(-0.32)	(-0.72)	(-0.74)
% 10+ in manufacturing	-0.00711	-0.00485	-0.0495
	(-0.03)	(-0.02)	(-0.05)
Percent of state population in cities over 25,000	-0.00542	-0.00535	0.0112
	(-0.04)	(-0.04)	(0.02)
Sex ratio	0.000240	0.00185	0.284
	(0.00)	(0.03)	(0.51)
Black	0.0678		
	(13.99)		
Other race	-0.0727		
	(-1.81)		
Observations	89467	76679	12635

Notes: Average partial effects. t-statistics in parentheses. Sample is women 20-30 years old of any marital status. State fixed effects included in estimation. The 1870 census did not enumerate marital status. Ever-married women are defined as currently married women, plus women without a spouse with own children.

Table 2.22 Differences in differences estimates of changes in marriage propensities after property law reform, 1880-1900: Dates according to Khan (1996)

Dependent variable is being ever married	All	White	Black
Property act passed before 1880	0.367	0.453	-0.387
	(5.43)	(5.65)	(-1.50)
Property act passed, 1880-1900	-0.0868	-0.107	-0.375
	(-2.18)	(-2.27)	(-1.10)
Year is 1900	-0.0161	-0.00934	-0.0303
	(-1.78)	(-0.86)	(-1.53)
Property act passed before 1880 × Year is 1900	-0.00161	-0.00768	0.00294
	(-0.18)	(-0.70)	(0.16)
Property act passed, 1880-1900 × Year is 1900	-0.0479	-0.0597	-0.714
	(-2.18)	(-2.54)	(-217.04)
Age 20 (Omitted age is 30)	-0.413	-0.430	-0.346
	(-82.82)	(-82.70)	(-21.66)
Age 21	-0.355	-0.367	-0.301
	(-64.89)	(-63.52)	(-17.24)
Age 22	-0.286	-0.301	-0.216
	(-50.70)	(-49.50)	(-12.88)
Age 23	-0.225	-0.238	-0.166
	(-38.09)	(-37.17)	(-9.62)
Age 24	-0.174	-0.187	-0.110
	(-29.17)	(-28.54)	(-6.44)
Age 25	-0.132	-0.142	-0.100
	(-22.19)	(-21.34)	(-6.33)
Age 26	-0.0775	-0.0856	-0.0439
	(-12.41)	(-12.39)	(-2.50)
Age 27	-0.0436	-0.0489	-0.0289
	(-6.84)	(-6.90)	(-1.60)
Age 28	-0.0268	-0.0322	0.0115

Dependent variable is being ever married

	All	White	Black
Age 29	(-4.29) 0.0229 (3.52)	(-4.63) 0.0230 (3.18)	(0.67) -0.00234 (-0.12)
Living on farm	-0.0533 (-16.02)	-0.0578 (-15.21)	-0.0421 (-5.06)
Living in urban area	-0.131 (-37.20)	-0.132 (-34.35)	-0.124 (-12.07)
Living in group quarters	-0.300 (-36.86)	-0.298 (-34.75)	-0.296 (-8.74)
Born in the United States	-0.0662 (-17.49)	-0.0625 (-15.69)	0.00374 (0.07)
Community property state	0.322 (15.78)	0.374 (22.69)	0.362 (7.34)
Equity property state	0.303 (7.76)	0.365 (9.23)	0.338 (5.81)
% 10+ in manufacturing	0.00104 (0.01)	0.000988 (0.01)	0.000165 (0.00)
Percent of state population in cities over 25,000	-0.00109 (-0.03)	-0.000988 (-0.02)	-0.00250 (-0.02)
Sex ratio	0.110 (2.90)	0.114 (2.77)	0.0250 (0.13)
Black	0.0511 (12.28)		
Other race	0.104 (13.07)		
Observations	134380	110345	16912

Average partial effects. t-statistics in parentheses.
Sample is women 20-30 years old of any marital status.
State fixed effects included in estimation.

Table 2.23 School attendance in the late nineteenth century

	1860		1870		1880		1900	
All children, 5-17								
No, not in school	3,351,864	39.4	5,911,132	49.1	6,716,344	44.6	9,289,332	43.2
Yes, in school	5,157,277	60.6	6,127,372	50.9	8,355,201	55.4	12,233,228	56.8
Total	8,509,141	100.0	12,038,504	100.0	15,071,545	100.0	21,522,560	100.0
All children, 2 parent families								
No, not in school	2,414,976	36.1	4,202,890	45.4	4,989,683	41.5	7,051,585	40.8
Yes, in school	4,274,991	63.9	5,046,096	54.6	7,031,351	58.5	10,243,937	59.2
Total	6,689,967	100.0	9,248,986	100.0	12,021,034	100.0	17,295,522	100.0
All children, 1 parent families								
No, not in school	474,680	45.5	959,047	58.2	945,606	50.9	1,316,493	48.4
Yes, in school	568,321	54.5	689,974	41.8	910,588	49.1	1,404,278	51.6
Total	1,043,001	100.0	1,649,021	100.0	1,856,194	100.0	2,720,771	100.0
White children, 2 parent families								
No, not in school	2,348,357	35.6	3,303,033	40.1	3,842,173	36.7	5,809,083	37.9
Yes, in school	4,253,207	64.4	4,931,864	59.9	6,637,188	63.3	9,502,566	62.1
Total	6,601,564	100.0	8,234,897	100.0	10,479,361	100.0	15,311,649	100.0
White children, 1 parent families								
No, not in school	442,502	44.1	661,694	49.9	628,882	43.5	918,576	43.1
Yes, in school	561,596	55.9	663,063	50.1	816,418	56.5	1,214,772	56.9
Total	1,004,098	100.0	1,324,757	100.0	1,445,300	100.0	2,133,348	100.0
White boys, 2 parent families								
No, not in school	1,164,107	34.6	1,671,827	40.0	1,959,102	36.7	3,013,358	38.8
Yes, in school	2,198,283	65.4	2,504,584	60.0 a		63.3	4,747,526	61.2
Total	3,362,390	100.0	4,176,411	100.0	5,334,980	100.0	7,760,884	100.0
White girls, 2 parent families								
No, not in school	1,184,250	36.6	1,631,206	40.2	1,883,071	36.6	2,795,725	37.0
Yes, in school	2,054,924	63.4	2,427,280	59.8	3,261,310	63.4	4,755,040	63.0
Total	3,239,174	100.0	4,058,486	100.0	5,144,381	100.0	7,550,765	100.0

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Table 2.24 Impact of earnings laws on school attendance, 1870-1900: Dates from Hoff (1991)

Dependent variable is school attendance in past year	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Earnings passed before 1870	0.0329**		0.0145		0.0514***	0.0267*
	(2.58)		(0.90)		(3.28)	(2.14)
Earnings passed in 1870-1879 period	0.0229		0.00630		0.0390**	0.0198
	(1.90)		(0.42)		(2.65)	(0.55)
Earnings passed before 1870 x Year is 1880	-0.0428*		-0.0262		-0.0598**	-0.0522**
	(-2.42)		(-1.18)		(-2.67)	(-3.21)
Earnings passed in 1870-1879 x Year is 1880	-0.0219		-0.0242		-0.0176	0.0654
	(-1.31)		(-1.16)		(-0.84)	(1.58)
Earnings passed before 1880		0.0156		0.00496		
		(1.57)		(0.39)		
Earnings passed in 1880-1899 period		0.0201		0.0193		
		(0.65)		(0.49)		
Earnings passed before 1880 x Year is 1900		-0.0376**		-0.0228		
		(-2.95)		(-1.42)		
Earnings passed in 1880-1899 x Year is 1900		0.0463		0.0305		
		(1.32)		(0.66)		
Two parents in household	0.0384***	0.0253***	0.0226	0.0278***	0.0541***	0.0237**
	(3.65)	(3.80)	(1.73)	(3.31)	(4.22)	(2.79)
Two parents x Earnings passed before 1870	0.0212		0.0356*		0.00656	
	(1.53)		(2.08)		(0.38)	
Two parents x Earnings passed in 1870-1879 period	0.00761		0.0229		-0.00736	
	(0.58)		(1.41)		(-0.45)	
Two parents x Year is 1880	-0.00875	0.0139	0.000673	-0.00198	-0.0176	0.0288*
	(-0.65)	(1.26)	(0.04)	(-0.14)	(-1.06)	(2.10)
Two parents x Earnings passed before 1870	0.0236		0.0107		0.0365	
	(1.28)		(0.46)		(1.60)	
Two parents x Earnings passed in 1870-1879 x Year is 1880	0.00849		0.0118		0.00320	
	(0.48)		(0.53)		(0.14)	
Two parents x Earnings passed before 1880		0.0262*		0.0379**		0.0140
		(2.46)		(2.84)		(1.05)
Two parents x Earnings passed in 1880-1899 period		-0.0126		-0.00815		-0.0160
		(-0.37)		(-0.19)		(-0.40)
Two parents x Earnings passed before 1880 x Year is 1900		0.00481		-0.0125		0.0219
		(0.36)		(-0.73)		(1.31)

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Dependent variable is school attendance in past year	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Two parents x Earnings passed in 1880-1899 x Year is 1900		-0.000580 (-0.01)		0.00888 (0.18)		-0.0133 (-0.27)
Year is 1880	0.0672*** (5.58)		0.0556*** (3.68)		0.0785*** (5.30)	
Year is 1900		0.0206* (1.97)		0.00121 (0.09)		0.0393** (2.96)
Age is 6	0.206*** (67.73)	0.214*** (89.45)	0.205*** (47.72)	0.219*** (63.99)	0.206*** (47.50)	0.210*** (61.75)
Age is 7	0.303*** (138.31)	0.311*** (179.04)	0.304*** (96.69)	0.316*** (126.65)	0.302*** (93.69)	0.305*** (122.00)
Age is 8	0.333*** (165.73)	0.343*** (220.01)	0.332*** (116.40)	0.348*** (156.11)	0.334*** (116.05)	0.338*** (153.52)
Age is 9	0.351*** (189.49)	0.360*** (249.83)	0.351*** (133.77)	0.364*** (177.71)	0.352*** (132.44)	0.355*** (174.70)
Age is 10	0.384*** (237.94)	0.402*** (346.95)	0.382*** (168.14)	0.407*** (252.74)	0.385*** (171.01)	0.397*** (250.51)
Age is 11	0.384*** (242.38)	0.402*** (352.13)	0.384*** (174.02)	0.406*** (257.30)	0.385*** (174.31)	0.398*** (258.62)
Age is 12	0.377*** (226.91)	0.397*** (335.52)	0.376*** (159.92)	0.401*** (242.23)	0.379*** (162.40)	0.393*** (243.42)
Age is 13	0.360*** (195.78)	0.379*** (290.50)	0.354*** (134.26)	0.380*** (202.84)	0.365*** (144.93)	0.379*** (215.16)
Age is 14	0.329*** (151.91)	0.344*** (213.13)	0.325*** (105.33)	0.342*** (145.98)	0.333*** (110.71)	0.346*** (159.63)
Age is 15	0.283*** (104.61)	0.293*** (142.71)	0.283*** (74.41)	0.290*** (97.16)	0.283*** (74.23)	0.296*** (106.77)
Age is 16	0.228*** (69.50)	0.237*** (93.53)	0.230*** (50.17)	0.232*** (62.61)	0.226*** (48.34)	0.243*** (70.48)
Age is 17	0.160*** (38.88)	0.171*** (53.10)	0.176*** (31.84)	0.172*** (38.09)	0.143*** (23.48)	0.168*** (37.43)
Head's age	0.00989*** (10.57)	0.00976*** (12.55)	0.00923*** (7.80)	0.00988*** (9.80)	0.0106*** (9.29)	0.00970*** (10.03)
Head's age squared	-0.0001*** (-10.23)	-0.00009*** (-11.84)	-0.00009*** (-7.54)	-0.00009*** (-9.35)	-0.0001*** (-9.04)	-0.00009*** (-9.42)
Head is literate	0.116*** (28.02)	0.113*** (31.33)	0.114*** (22.91)	0.111*** (25.08)	0.117*** (23.06)	0.116*** (25.58)

Dependent variable is school attendance in past year	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Head is professional worker	0.0889***	0.0800***	0.0936***	0.0973***	0.0845***	0.0623***
	(11.14)	(12.79)	(9.32)	(12.45)	(8.53)	(7.76)
Head is clerical worker	0.0420***	0.0469***	0.0356*	0.0427***	0.0481**	0.0508***
	(3.40)	(5.82)	(2.20)	(4.08)	(3.10)	(4.96)
Head is farmer	0.0115***	0.0163***	0.0149***	0.0213***	0.00788*	0.0114***
	(3.58)	(6.45)	(3.76)	(6.73)	(1.98)	(3.56)
Head is skilled trades worker	0.0174***	0.0151***	0.0154**	0.0160***	0.0194***	0.0144***
	(4.36)	(4.91)	(3.03)	(4.05)	(3.89)	(3.64)
Head had no occupation	-0.00799	-0.00586	-0.0147	-0.0185**	-0.00118	0.00680
	(-1.32)	(-1.21)	(-1.91)	(-2.95)	(-0.16)	(1.11)
Child is female	-0.000769	0.00916***				
	(-0.41)	(5.83)				
Number of own siblings in household	0.00251***	-0.000293	0.00301***	0.000687	0.00198*	-0.00128
	(3.57)	(-0.53)	(3.47)	(1.00)	(2.33)	(-1.84)
Born in the United States	0.141***	0.152***	0.143***	0.148***	0.139***	0.157***
	(24.12)	(31.62)	(19.43)	(23.85)	(18.64)	(24.80)
Parents are native born	0.0195***	0.0236***	0.0202***	0.0195***	0.0187***	0.0278***
	(6.41)	(9.80)	(5.32)	(6.37)	(4.97)	(9.10)
Resides in the south	-0.267***	-0.173***	-0.273***	-0.179***	-0.261***	-0.167***
	(-73.45)	(-59.38)	(-61.70)	(-49.80)	(-58.68)	(-46.00)
Observations	214675	295341	109052	149905	105623	145436

t statistics in parentheses   * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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Table 2.25 Impact of property laws on school attendance, 1870-1900: Dates from Hoff (1991)

Dependent variable is school attendance in past year	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Property passed before 1870	-0.0202 (-1.19)		-0.0318 (-1.51)		-0.00706 (-0.34)	
Property passed in 1870-1879 period	-0.0855*** (-3.91)		-0.0874** (-3.27)		-0.0825** (-3.03)	
Property passed before 1870 x Year is 1880	-0.0165 (-0.74)		-0.00239 (-0.09)		-0.0320 (-1.15)	
Property passed in 1870-1879 x Year is 1880	0.0931*** (3.68)		0.0885** (2.82)		0.0983** (3.13)	
Property passed before 1880		-0.0237 (-1.59)		-0.0235 (-1.26)		-0.0239 (-1.29)
Property passed in 1880-1899 period		-0.0538 (-1.29)		-0.0552 (-1.05)		-0.0540 (-1.06)
Property passed before 1880 x Year is 1900		-0.00992 (-0.54)		-0.0112 (-0.48)		-0.00892 (-0.38)
Property passed in 1880-1899 x Year is 1900		0.0778 (1.90)		0.0745 (1.42)		0.0837 (1.67)
Two parents in household	0.0253 (1.46)	0.0386*** (3.49)	0.00825 (0.38)	0.0384** (2.75)	0.0441* (2.06)	0.0390** (2.74)
Two parents x Property passed before 1870	0.0305 (1.68)		0.0467* (2.08)		0.0130 (0.58)	
Two parents x Property passed in 1870-1879 period	-0.0105 (-0.46)		-0.0128 (-0.46)		-0.00908 (-0.32)	
Two parents x Year is 1880	0.0142 (0.64)	0.0136 (0.73)	0.0335 (1.22)	0.0110 (0.47)	-0.00648 (-0.23)	0.0160 (0.69)
Two parents x Property passed before 1870	-0.0120 (-0.50)		-0.0294 (-0.98)		0.00688 (0.23)	
Two parents x Property passed in 1870-1879 x Year is 1880	-0.0174 (-0.56)		-0.0133 (-0.35)		-0.0218 (-0.56)	
Two parents x Property passed before 1880		0.00497 (0.31)		0.00220 (0.11)		0.00746 (0.38)
Two parents x Property passed in 1880-1899 period		-0.0208 (-0.48)		-0.0359 (-0.64)		-0.00312 (-0.06)
Two parents x Property passed before 1880 x Year is 1900		0.00206 (0.10)		0.00435 (0.17)		0.000653 (0.03)
Two parents x Property passed in 1880-1899 x Year is 1900		-0.0112		0.0119		-0.0390

Dependent variable is school attendance in past year	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Year is 1880	0.0432* (2.11)	(-0.23)	0.0257 (1.00)	(0.20)	0.0622* (2.48)	(-0.64)
Year is 1900		0.00454 (0.26)		0.00493 (0.23)		0.0137 (0.62)
Age is 6	0.206*** (67.88)	0.214*** (89.65)	0.205*** (47.84)	0.219*** (64.07)	0.206*** (47.62)	0.210*** (61.94)
Age is 7	0.303*** (138.47)	0.311*** (179.19)	0.304*** (96.92)	0.316*** (126.76)	0.302*** (93.72)	0.305*** (122.08)
Age is 8	0.333*** (165.78)	0.343*** (220.11)	0.332*** (116.41)	0.348*** (156.07)	0.334*** (116.07)	0.339*** (153.66)
Age is 9	0.352*** (189.92)	0.360*** (250.08)	0.351*** (134.13)	0.364*** (177.86)	0.352*** (132.70)	0.355*** (174.91)
Age is 10	0.384*** (237.98)	0.402*** (346.83)	0.382*** (168.09)	0.407*** (252.57)	0.385*** (171.10)	0.397*** (250.45)
Age is 11	0.385*** (242.80)	0.402*** (352.18)	0.384*** (174.31)	0.406*** (257.41)	0.385*** (174.72)	0.398*** (258.70)
Age is 12	0.378*** (227.23)	0.397*** (335.70)	0.376*** (160.12)	0.401*** (242.28)	0.379*** (162.71)	0.393*** (243.57)
Age is 13	0.360*** (196.35)	0.380*** (290.81)	0.355*** (134.61)	0.380*** (203.01)	0.365*** (145.51)	0.379*** (215.48)
Age is 14	0.329*** (152.26)	0.344*** (213.60)	0.325*** (105.67)	0.343*** (146.37)	0.333*** (110.93)	0.346*** (159.91)
Age is 15	0.283*** (105.11)	0.294*** (143.13)	0.283*** (74.82)	0.290*** (97.42)	0.283*** (74.57)	0.297*** (107.12)
Age is 16	0.228*** (69.91)	0.238*** (93.80)	0.230*** (50.51)	0.232*** (62.83)	0.226*** (48.58)	0.243*** (70.65)
Age is 17	0.161*** (39.25)	0.171*** (53.32)	0.177*** (32.11)	0.173*** (38.19)	0.144*** (23.75)	0.169*** (37.65)
Head's age	0.00997*** (10.66)	0.00975*** (12.50)	0.00930*** (7.83)	0.00988*** (9.76)	0.0106*** (9.36)	0.00969*** (10.00)
Head's age squared	-0.0001*** (-10.28)	-0.0001*** (-11.81)	-0.0001*** (-7.54)	-0.0001*** (-9.31)	-0.0001*** (-9.09)	-0.0001*** (-9.41)
Head is literate	0.115*** (27.88)	0.115*** (31.58)	0.113*** (22.74)	0.112*** (25.30)	0.117*** (23.01)	0.117*** (25.79)
Head is professional worker	0.0873***	0.0782***	0.0917***	0.0950***	0.0830***	0.0610***

Dependent variable is school attendance in past year

	1870-1880 All	1880-1900 All	1870-1880 Boys	1880-1900 Boys	1870-1880 Girls	1880-1900 Girls
Head is clerical worker	0.0414*** (10.89)	0.0459*** (12.45)	0.0347* (9.11)	0.0414*** (12.12)	0.0477** (8.34)	0.0500*** (7.58)
Head is farmer	0.00857** (2.67)	0.0139*** (5.67)	0.0124** (2.17)	0.0187*** (3.96)	0.00461 (1.16)	0.00912** (2.84)
Head is skilled trades worker	0.0179*** (4.49)	0.0156*** (5.47)	0.0159** (3.12)	0.0164*** (5.91)	0.0198*** (3.98)	0.0148*** (4.87)
Head had no occupation	-0.00876 (-1.45)	-0.00769 (-1.59)	-0.0154* (-2.02)	-0.0205** (-3.28)	-0.00191 (-0.26)	0.00533 (0.87)
Child is female	-0.000906 (-0.48)	0.00900*** (5.72)				
Number of own siblings in household	0.00239*** (3.41)	-0.000286 (-0.51)	0.00290*** (3.36)	0.000681 (0.99)	0.00186* (2.19)	-0.00126 (-1.81)
Born in the United States	0.145*** (24.82)	0.152*** (31.67)	0.147*** (20.03)	0.147*** (23.85)	0.143*** (19.18)	0.157*** (24.84)
Parents are native born	0.0224*** (7.44)	0.0259*** (10.79)	0.0234*** (6.21)	0.0218*** (7.16)	0.0214*** (5.72)	0.0300*** (9.86)
Resides in the south	-0.268*** (-72.53)	-0.179*** (-61.31)	-0.272*** (-60.49)	-0.184*** (-51.34)	-0.265*** (-58.39)	-0.172*** (-47.50)
Observations	214675	295341	109052	149905	105623	145436