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## 1889 Oklahoma Land Run: The Settlement of Payne County<sup>1</sup>

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## 1889 Oklahoma Land Run: The Settlement of Payne County<sup>i</sup>

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Abstract

In this paper, we examine the demographic characteristics of the non-Native American settlers in Payne County, Oklahoma using the 1890 Territorial Census, which includes information on gender, household size and composition, and birth region. For comparison, we use census data from the 1880 Midwest census region to examine if the settlers of Payne County were unique or a representative sample of Midwestern families from which they emigrated. We find that U.S. born individuals were more likely to participate in the land run, but that the number and age of children was not significantly different from the Midwestern region.

Keywords: Land Run, Oklahoma, Western U.S. Settlement, Family Demographics, Payne County

"The history of no other state derived from more fundamentally distinctive natural forces, conditions, trends, and developments – bewildering questions of public policy, difficult problems of reconciling the operation of the laws of nature with Indian rights, private greed, and national honor..." (Foreman 1945, p.viii)

#### I. Introduction

The land runs in 1889 in Oklahoma are the beginning of a unique regional development story in the United States. The history of Oklahoma begins much earlier, however, with the passing of the Indian Removal Bill on June 30, 1830, requiring that all Native Americans be relocated, often forcibly; to land that was west of the Mississippi River (Foreman 1945, p. 12-16). The legislation did not indicate that Native Americans be located in the land that would become Oklahoma, but given existing settlement, it was the "logical location for the five Southern tribes," (Foreman, 1945, p. 12) which included the Cherokee, Chickasaw, Creek, and Seminole tribes.<sup>ii</sup> These tribes were located in various regions throughout the Southeastern United States prior to removal and white settlers viewed these Native American lands as an untapped resource and were lobbying for and moving into areas designated as Native American territory even before the Native Americans emigrated west (Foreman 1945, p. 13).<sup>iii</sup> The emigration west was an arduous journey filled with illness and death and the lands they were moved to in Oklahoma Territory presented their own challenges, as other Native American tribes already occupied them. Between 1834 and 1837, treaties were enacted providing agreements for the existing residents and the new Native American immigrants to share the land (Foreman 1945, pp. 18-21) Conflicts over Native American land allocations were far from resolved, however.

The 1830s treaties were destroyed along with much of the Native American settlements by the Civil War (1861-1865), in which some tribes supported the Union Army and some supported the Confederate Army (Foreman 1945, pp. 131-132). After the Civil War, the Treaty of 1866 was signed in order to provide a framework for reestablishing relationships between the U.S. Government and the various tribes. This agreement led to further reduction of Native American lands, allocated specific lands for each tribe, and set aside land in which to relocate other tribes (Forman 1945, pp. 134-139, Chickasaw 2017). The land that was set aside for relocation of other tribes was known as the Unassigned Lands and was approximately 2 million acres situated in the center of the lands allocated by treaty to other tribes (Foreman 1945, pp. 213-214, 239). Figure 1 shows the lands allocated to each tribe and the Unassigned Lands in Oklahoma Territory, what would become the state of Oklahoma.

Subsequently, the Unassigned Lands were opened to white settlers through various land runs. This was intended to resolve a contentious period in the history of what would become the state of Oklahoma as settlers demanded access to Native American lands in Oklahoma Territory (Foreman 1945, p.230-231) After the Treaty of 1866, white settlers were not allowed to claim land in Indian Territory.<sup>iv</sup> Enforcing the laws to keep settlers out proved to be a challenge, becoming increasingly difficult as more and more people set their eyes on the *new* Territory (Foreman 1945, pp.215-218). In 1880, there were a reported 6000 white settlers living in Indian Territory, by 1886 the number had reach 36,500 (Foreman 1945, pp. 227-228). These settlers were allowed to live on territorial lands through various arrangements including, marriage, rental of farmland, cattle ranching, through either a Native American leasing system or illegal uncompensated grazing, providing services to the Native Americans such as mechanics, or in conjunction with the expansion of the railroads (Foreman 1945, pp.225-231, 234-235 Goins and Globe 2006, pp. 116-117). These various solutions proved untenable, as the Federal Government later deemed many illegal, such as the leasing of farmland and grazing rights (Foreman 1945, pp.225-231, Goins and Globe 2006, pp. 116-117).

In 1889, through negotiations with the various tribes that occupied other lands in Oklahoma Territory and subsequent land sales from tribes to the federal government, the treaty of 1866, was rolled back to allow non-Native American settlement on the Unassigned Lands (Foreman, p. 244-245). On March 23, 1889, a portion of Unassigned Lands were officially designated as open for white settlement and the first land run in Oklahoma was held on April 22, 1889 (Foreman, 1945, p. 239). The first land run included portions of Canadian, Cleveland, Kingfisher, Logan, Oklahoma, and Payne County. Figure 2 provides a county map of Oklahoma; from the map, it is clear that the Unassigned Lands cover large parts of these modern day Oklahoma counties. Remaining areas of Oklahoma that were made available to non-Native American settlement, were allocated in four subsequent land runs, a lottery, and a sealed bid auction prior to Oklahoma's statehood in 1907 (OK Statehood 2017, NPS 2001).<sup>v</sup> Figure 1 provides more information on the number and timing of the land runs.

In this paper, we examine the settler characteristics of the first citizens in Payne County, Oklahoma using the 1890 Territorial Census of Oklahoma.<sup>vi,vii</sup> There is a substantial amount of economic and business history research examining the settlement of the Western United States. This literature focuses on a variety of distinct areas including discussions of the evolution of family size in the 19<sup>th</sup> century U.S., and the influence of newly settled areas on family size and fertility (Guinnane 2011; Hacker 2003; Parkerson and Parkerson 1988; Schapiro 1982; Easterlin 1978), the role of private property rights in economic development (Libecap and Lueck 2011, Libecap 2007, Anderson and Hill 2002, Alston 1992, Allen 1991, Anderson and Hill 1990), an examination of the success or failure of federal government policies in efficiently reallocating federal lands (Clay 1999, Allen 1991, Anderson and Hill 1990, Gates 1941), and examinations of economic outcomes, including income, land values and the subsequent welfare of various settler

groups (Gregg and Wishart 2012, Bleakley and Ferrie 2010 Working Paper, Libecap and Hansen 2002, Bohanon and Coelho 1998, Weiman 1991, Galenson and Clayne 1989, Bogue and Bogue 1957, Gates 1941). Previous research on the land runs in Oklahoma is more limited. Specific papers have focused on positing an entrepreneurial theory which is used to explain the opening of the Indian Territory for settlement (Campbell 1999), on estimating land values across the various land allocations (Coelho 1998) and on an examination of the evolution of property rights in the Cherokee strip (Alston 1992).<sup>viii</sup>

This is the first paper that we are aware of that examines the characteristics of the settlers in the first Land Run in Oklahoma in Payne County. Using the 1890 Territorial census, we examine the demographic characteristics of the first households in Payne County. Using this information, we describe the individuals and households that decided to take part in this unique economic opportunity to become territorial landowners.<sup>ix</sup> In particular, our analysis of family characteristics follows in a long line of literature examining fertility for families in the eighteenth and nineteenth century in the United States. In Easterlin's work (1976, 1978) he noted there was a decline in fertility across the nation in the early 1800s despite widespread availability of farmland. He also noted that previous work had found much higher fertility rates in newly formed western states in the early-1800s than in more established eastern states, despite availability of farmland in eastern states (Easterlin 1978, p.50). This well documented demographic transition, the slowdown in fertility and population growth that occurred in the 1800s in the United States (Guinnane 2011; Hacker 2003; Parkerson and Parkerson 1988; Schapiro 1982; Easterlin 1978) was contrary to the Malthusian view of population growth. The Malthusian view was that as long as there was available land and resources, fertility would remain high and populations would continue to grow (Easterlin 1978, p.46). Easterlin finds that

there is a pattern of increased number of children in areas with a large amount of available land and a low population density in the 18<sup>th</sup> century in the U.S., although the specific factor leading to pattern is not clear (Easterlin 1978, pp. 70-71). Easterlin (1978, p.60) provides one argument for an increased number of children in newly settled areas. He argues that in newly settled areas there will be a larger number of children because child labor is relatively more valuable in new settlements, as would be the case in Payne County. He demonstrates that there was a consistent pattern of population growth in newly settled areas with initially increased number of children followed by a decline to a replacement level (Easterlin 1978, p.70). However, he also notes that in the case of the United States in the 18<sup>th</sup> and 19<sup>th</sup> centuries, there is evidence that child labor is just as valuable to farmers in established areas, so this pattern of increased children in newly settled areas cannot be strictly due to the opportunity costs of children (Easterlin 1978, pp.60, 70).

In this paper, we examine the family composition of the Payne County settlers, including number of children and number of sons and daughters relative to the 1880 Midwest Region Census sample of rural households. Based on Easterlin's findings, although settler land by definition had a low population density of settlers and was a less established area than the Midwest region generally, Payne county settlers may not be expected to have increased children relative to similar more established regions in the Midwest. This is due to two factors, first we cannot track the settlers over time, we analyze whether these rural settlers in the new settlement in Payne County had more children at the time of settlement than the more established Midwest region. Second, according to Easterlin's argument, child labor may have been just as valuable in the established Midwest region as it was in the newly established Oklahoma Territory.

The paper proceeds as follows; first in Section II, we provide historical background on

the settlement of the Unassigned Lands and Payne County specifically. Next, in Section III, we discuss the primary data source that we are examining and the methods that we have used to construct the dataset. Then in Section IV, we present our results and discuss our findings. Finally, in Section V, we conclude.

#### **II. Background**

Prior to the land runs, settlers began encroaching on the Unassigned Lands. These settlers were often called *boomers*, the name given to settlers who were demanding the opening of the Indian Territory for non-Native American settlement (Newsome 2007, pp. 16-17). Boomers came from a variety of occupations, doctors, lawyers, barbers, farmers, ranchers, etc. One of the most infamous was David L. Payne. (Foreman 1945, p. 240, Newsome 2007, p. 14). Payne would routinely take groups of illegal settlers into the Oklahoma Territory, usually to be kicked out by the military (Foreman 1945, p. 216-217).<sup>x</sup> While there had been small boomer incursions into the unsettled and legally unavailable land before, Payne played a large role in forcing the issue of territorial land settlement in the U.S. Congress (Newsome 2007, p. 26). On January 23, 1885, after petitioning Congress and following several major victories in the courts, the U.S. President recommended the opening up of Indian Territory (Newsome 2007, p. 219).

What made this particular style of settlement so revolutionary were the land runs. Potential settlers had to register to enter the run and if an applicant qualified for land settlement under the Homestead Act of 1862, they had the chance to join in the land run. Interestingly enough, citizenship was not required, and even though women could not legally vote at the time, they were able to participate in the land runs as well (Klein 2014).<sup>xi,xii</sup> The registrants lined up at

the edge of the new area that was to be opened up for settlement, near what would become Stillwater, OK. The scene prior to the start of the run was unique.

They were all there, many thousands strong, the boomer, the settler, the gambler, the speculator, the land shark, the honest home seeker, the adventurer (Foreman 1945, p. 247).

Once the registrants lined up, they waited for an appointed official to fire a gun, and the race to claim land was on. Each successful registrant took a flag designating a plot of 160 acres, claiming the land.<sup>xiii</sup> Unfortunately, some armed miscreants were noted on several occasions taking land by force from those who had already stopped in an area to claim it (Newsome 2007, p. 29). While estimates vary, a generally accepted number of settlers in the first land run is approximately 50,000 (McReynolds 1954, p. 291)

Once the land run officially ended, the settlement of the area and construction of the new area officially began. Under the Homestead Act of 1862, the settlers paid small fees, and then were required to live on the land continuously for five years and improve it before they would officially receive ownership of the land (LOC 2016).<sup>xiv,xv</sup> By the time Stillwater was settled, it had a population of approximately 300 people in the town with additional rural settlers in the surrounding area (Newsome 2007, p. 30).<sup>xvi</sup> While these Payne county settlers varied greatly in origin, age, gender, and family composition, there is census information from 1890 that paints a picture of these families.

#### III.Data

To provide information on the demographic characteristics of the Payne County settlers and their families, we used the 1890 Oklahoma Territorial census, available from the Oklahoma Historical Society (OHS).<sup>xvii</sup> The 1890 Oklahoma Census for Payne County (PCC) includes 1782 households and 6872 individuals. The census includes demographic information including the age, gender, race, place of birth, marital status, length of time in the United States, number, age, and gender of children by household. We identified each household using the PCC data from the OHS combined with manual re-numbering and household verification as needed. In the PCC, each head of household is identified using the relationship category, *Head*.<sup>xviii</sup> Wives, children, and other members of the household are included alongside the Head of Household (HoH) in the census with relationship information included, such as *Wife*, *Son*, *Daughter*, etc. In order to provide context for the demographic characteristics of the Oklahoma settler households we have used the 1880 census data for the Midwest region provided by IPUMS-USA (Ruggles et al, 2015).<sup>xix,xx</sup> The dataset was restricted to rural, non-metropolitan, single or two family households in order to better match the Oklahoma territory region in 1890. By examining the census region that the settlers were emigrating from, it is possible to analyze whether the settlers were a distinctive group or simply a representative sample of the region.<sup>xxi</sup>

#### **IV. Results**

In our analysis, we describe the demographic characteristics of the first settler households in Payne County.<sup>xxii</sup> In the first set of analyses, Table 1, we examine the household structure of the Payne County settlers as compared to the rural households in the 1880 Midwest Census sample (MWC). Next, Section IV.1, we examine the family composition of the settler households in terms of children as compared to the 1880 Midwest sample. Then, we focus on describing the regional composition of Payne county settlers as compared to the 1880 sample, Section IV.2.

 Table 1 categorizes Payne County settler HoHs based on gender and whether they

 traveled alone (Table 1). Table 1, Column II indicates, as expected, men headed approximately

96 percent of households and only 22 percent of them were traveling alone. For women, the numbers are much lower, women head approximately 4 percent of the households and as Column I shows, surprisingly, given the restrictions on women's participation, 24 women did participate in the land run as single person households. The group of women allowed to participate included widows, single women, and those that were legally separated from their husbands.<sup>xxiii</sup>

Table 1, Column III shows that the Head of Households (HoHs) in Payne County were largely from the Midwest, between 62 and 71 percent of each group were from the Midwest. For comparison with the PCC data in Column II, Column IV includes the distribution of HoHs from the 1880 MWC. This comparison indicates that the settler HoHs in Payne County had a significantly larger share of single men than the Midwest Region generally, 21.6 percent and 2.5 percent respectively. There were also fewer multi-person households headed by women who settled in Payne County as compared to the Midwest Region generally, 2.86 percent and 6.95 percent respectively. Given the data, it is not possible to determine why there is a difference in the gender composition of the settler HoHs, but one may posit that the individuals that selected into the land run were more risk taking, i.e. willing to take a chance on a lottery and, for men, to travel alone. Clearly, the restrictions placed on women in terms of both social and economic opportunities generally, in addition to the specific restriction preventing married women from participating in the land run, also played a role.

#### **IV.1** Distribution of Settler Children

Many of the settlers traveled with children. Table 2, Column II indicates that only 16.8 percent of the multi-person households had no children. This is a low percentage, however when compared with the MWC, it is representative of the Midwest generally, 16.95 percent and 16.78

percent respectively. Contrary to the Malthusian theory, settler households were not more likely to have children. According to Easterlin (1978), households in established regions also had a high demand for child labor and this finding supports that theory. There is no evidence that Payne county settlers had significantly larger numbers of children in order to provide labor and assistance with the settlement of the land when they emigrated than the rural areas of the Midwest included in the1880 MWC.

In Table 3, we describe the number of children per household for households that had children. Our analysis indicates that in the 1890 PCC data, there is a statistically significant difference between the number of sons, 1.66 on average, and daughters1.39 on average; households with children have on average significantly more sons. This is true in the MWC as well, 1.70 sons and 1.53 daughters on average, respectively. Interestingly, the total number of children and number of daughters in the PCC is significantly less than average for families in the Midwest.<sup>xxiv</sup> It does not appear that settler households selected into the land runs based on an abundance of offspring. An alternative hypothesis might be that children were a burden, and so there were fewer children in settler households. This is not supported by the age data presented in Table 4, however. Table 4 shows the data for the two censuses categorized by age, the percentages in the PCC are similar to those found in the MWC.

Typically, minor children are defined as individuals under 18 years of age, but due to the large number of older children, we have included statistics beyond minors. Given the difficult work of settlement, one may expect many settlers to have older children and possibly more sons, but that is not the case (Easterlin 1976, 1978). In fact, as Columns I - A, B, C indicate the three largest categories are children between 5 and 10, 27 percent, children between 1 and 5, 24 percent, and children between 10 and 15, 22 percent. Many of these children would require

significantly more care than they would provide assistance in maintaining a settled piece of land, so the cost of these children at the time of settlement would it seem outweigh the benefits in terms of output. In addition, while there are differences in the age distribution between the two censuses, there is no clear evidence that settlers selected into settlement based on a particular age distribution that is distinct from a typical Midwestern family. (See Columns II – A, B, C) The lack of evidence that child number or distribution across age or gender was a significant factor in determining which families selected into the first land run in Payne County could be due to several factors. One plausible theory is that the policy for opening the land run was implemented in a short enough period of time that settler households were not able to alter their decisions regarding children, particularly in terms of increasing the number of older children. It is also plausible that Easterlin's previous finding in other U.S. states hold for Oklahoma as well, that rural households required labor regardless of whether they were in a newly or established settled region (Easterlin 1978).

#### **IV.2 Regional Characteristics: Where Settlers Came From**

In addition to household family structure characteristics, another area of analysis readily available using census data is the geographic history of the settlers and their families. As discussed previously, the censuses include information on the place of birth for each settler. In order to analyze the data, we have grouped the settlers by census region with the following additions, a region has been added for those born in a region in Indian Territory and three regions have been added for those born outside the United States (Table 5). See Table A1 for more details.

The data in Table 5 above show that the PCC settlers and those in the MWC are predominantly from the Midwest Region, 67.25 and 42.70 percent, respectively. One could argue

that settlers emigrated from the Midwest region simply due to proximity to the Oklahoma Territory, but as Column II indicates, families in the South region, which includes neighboring states such as Texas and Arkansas, comprise a significantly smaller share of settlers, 18.08 percent. (See Table A1 for a list of states in each region.) Second, as opposed to those in the MWC, settler HoHs were comprised of significantly fewer European immigrants, 23.59 percent of the Midwest HoHs were born in Europe as opposed to only 4.43 percent of the settler HoHs. One may be tempted to conclude that settlers were comprised of a younger cohort making them largely second generation Americans, but on average settler HoHs were 39.25 years old, while the Midwest HoHs were 43.09, significantly older, but not indicative of being from an older generation. Clearly, Table 5 indicates that those born in the U.S. were significantly more likely to emigrate, but it does not provide a reason. It may be because U.S. citizens were more willing to undertake a significant relocation, as compared to European immigrants who had already invested in one significant relocation in their lifetime.

As an alternate method of examining region of birth, we used birth region for the youngest child as an indicator of the region from which settler households were relocating just prior to the land run.<sup>xxv</sup> Table 6, Columns I and II, indicate that settler households were locating closer to the Unassigned Lands prior to the land run; the number of youngest children born in the Midwest increased significantly from 67.25 to 86.28 percent and the number born in the Native American Territories around the Unassigned Lands increased from essentially zero to nearly 5 percent. This is of particular note given that non-Native American settlement in these lands was illegal. If we examine the share of youngest children born in the Midwest between the two censuses Table 6, Columns II and IV, it becomes clear that settlers were not establishing their households in the Midwest at greater rates than Midwesterners generally. In fact, Midwesterners

are significantly more likely to have their youngest child in the Midwest than the settlers, 90.82 and 86.28, respectively. In addition, Table 6 Columns II and IV indicates that youngest children from settler households were significantly more likely to have been born in the South region, 4.85percent, or West region, 2.56 percent, than those from the Midwest region; 1.64 and 1.58 percent respectively. From this information, one can infer that the boomers who immigrated to Payne County were clearly attempting to settle the lands near and in the Indian Territory prior to the land run just as historians have previously documented for Oklahoma generally. (Newsome 2007, pp. 16-17; Foreman 1945, p. 216-217).

#### V. Conclusion

In this paper, we have examined the demographic information for the Payne County, Oklahoma settlers. We have analyzed the composition of the Payne county settlers relative to the Midwest region from which most of them emigrated. We find that the settlers were more likely to be single men and less likely to have a female HoH, which is not unexpected, than those in the Midwest region. However, we did not find a great disparity in the number or age distribution of children. This suggests that those families that selected in to the land run did not do so based on their family size or composition in terms of their children. Future work examining the family composition changes over time in Payne County relative to the more established Midwest region would shed light on whether the Malthusian theory would hold and the settlers would have increased fertility as compared to the Midwest region or not.

In addition to family composition, we also analyzed the relative birth regions for both the Payne county settlers and the Midwest region sample. In terms of birth region, it is clear that the settler HoHs were less likely to be immigrants from Europe than those in the Midwest generally, indicating that U.S.-born individuals were more likely to participate in the land run. It is also

interesting to note that based on the birth region for their youngest child, settlers had indeed begun to relocate prior to the opening of Indian Territory as the historical work on the boomers indicates.

Future work on this topic will examine the remaining counties that were part of the first land run and are included in the 1890 Census in order to determine if the settlers of Oklahoma generally mirrored the demographic and composition of Payne County.

## **Primary Source Data**

1890 Oklahoma Territorial Census for Payne County. Oklahoma Historical Society. Oklahoma City, OK.

### References

Allen, Douglas W. "Homesteading and Property Rights; or," How the West Was Really Won"." *The Journal of Law and Economics* 34, no. 1 (1991): 1-23.

Alston, Lee, and Pablo Spiller. "A congressional theory of Indian property rights: The Cherokee Outlet." Property rights and Indian economies (1992): 85-107.

Anderson, Terry L., and Peter J. Hill. "Cowboys and contracts." *The Journal of Legal Studies* 31, no. S2 (2002): S489-S514.

Anderson, Terry L., and Peter J. Hill. "The race for property rights." *The Journal of Law and Economics* 33, no. 1 (1990): 177-197.

Bleakley, Hoyt, and Joseph Ferrie. "Shocking Behavior: Land Lotteries in 1832 Georgia and 1901 Oklahoma and Later Life Outcomes." (2010). Working Paper

Bogue, Allan G., and Margaret Beattie Bogue. ""Profits" and the Frontier Land Speculator." The Journal of Economic History 17, no. 1 (1957): 1-24. http://www.jstor.org/stable/2114704.

Bohanon, Cecil E., and Philip RP Coelho. "The costs of free land: The Oklahoma land rushes." The Journal of Real Estate Finance and Economics 16, no. 2 (1998): 205-221.

Foreman, Grant. 1945. *A History of Oklahoma*. Norman, OK: The University of Oklahoma Press.

Campbell, Noel D. "Political entrepreneurs and the transfer demanding process: homesteading the unassigned district." *The Review of Austrian Economics* 12, no. 2 (1999): 201-225.

Census. 2017. Availability of 1890 Census. U.S. Census Bureau.

https://www.census.gov/history/www/genealogy/decennial\_census\_records/availability\_of\_1890 \_\_census.html (accessed 06/06/17)

Chickasaw 2017. Treaty of 1866: April 28, 1866. The Chickasaw Nation. <u>https://www.chickasaw.tv/events/treaty-of-1866</u> (accessed 12/1/2017)

Clay, Karen B. "Property Rights and Institutions: Congress and the California Land Act of 1851." *The Journal of Economic History* 59, no. 1 (1999): 122-42.

http://www.jstor.org/stable/2566499.

County Map.

http://www.worldatlas.com/webimage/countrys/namerica/usstates/counties/okcountymap.htm (Accessed May 31, 2017)

Gates, Paul Wallace. "Land Policy and Tenancy in the Prairie States." The Journal of Economic History 1, no. 1 (1941): 60-82. http://www.jstor.org/stable/2113396.

Galenson, David W., and Clayne L. Pope. "Economic and Geographic Mobility on the Farming Frontier: Evidence from Appanoose Country, Iowa, 1850-1870." *The Journal of* 

Economic History 49, no. 3 (1989): 635-55. http://www.jstor.org/stable/2122508.

Gregg, Matthew T., and David M. Wishart. "The price of Cherokee removal." *Explorations in Economic History* 49, no. 4 (2012): 423-442.

Guinnane, Timothy W. "The historical fertility transition: A guide for economists." *Journal of Economic Literature* 49, no. 3 (2011): 589-614.

Hacker, J. David. "Rethinking the 'early' decline of marital fertility in the United States." *Demography* 40, no. 4 (2003): 605-620.

Klein, Christopher. 2014. Remembering the Oklahoma Land Rush.

http://www.history.com/news/the-oklahoma-land-rush-125-years-ago (accessed 06/30/16) Libecap, Gary D., and Dean Lueck. "The demarcation of land and the role of

coordinating property institutions." *Journal of Political Economy* 119, no. 3 (2011): 426-467.

Libecap, Gary D. "The assignment of property rights on the western frontier: lessons for contemporary environmental and resource policy." *The Journal of Economic History* 67, no. 02 (2007): 257-291.

Libecap, Gary D., and Zeynep Kocabiyik Hansen. ""Rain Follows the Plow" and Dryfarming Doctrine: The Climate Information Problem and Homestead Failure in the Upper Great Plains, 1890-1925." *The Journal of Economic History* 62, no. 1 (2002): 86-120. http://www.jstor.org/stable/2697973.

LOC. 2016. Homestead Act

https://www.loc.gov/rr/program/bib/ourdocs/Homestead.html (accessed 06/30/16) LOF. 2017. Five Civilized Tribes. Legends of America.

https://www.legendsofamerica.com/na-fivecivilizedtribes/ (accessed 12/20/17)

Newsome, D. Earl. 2007. *Stillwater: A Cradle of Oklahoma History*. Stillwater, OK: New Forums Press Inc.

NPS. 2001. Built in a Day: The Oklahoma Land Rush. *The Museum Gazette*. <u>http://www.nps.gov/jeff/learn/historyculture/upload/oklahoma.pdf (06/30/16)</u>

OK Statehood. 2017. Rushes to Statehood: The Oklahoma Land Runs. <u>https://nationalcowboymuseum.org/explore/rushes-statehood-oklahoma-land-runs/</u> (Accessed 05/31/17)

Parkerson, Donald H., and Jo Ann Parkerson. ""Fewer children of greater spiritual quality": Religion and the decline of fertility in nineteenth-century America." *Social science history* 12, no. 1 (1988): 49-70.

Ruggles, Steven, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 6.0 [dataset]. 1880 Census 10%. Minneapolis: University of Minnesota, 2015. <u>http://doi.org/10.18128/D010.V6.0</u>.

Schapiro, Morton Owen. "Land availability and fertility in the United States, 1760–1870." *The Journal of Economic History* 42, no. 3 (1982): 577-600.

Territory Map. 2014. Territorialism in the U.S., 1789-Present (Maps).

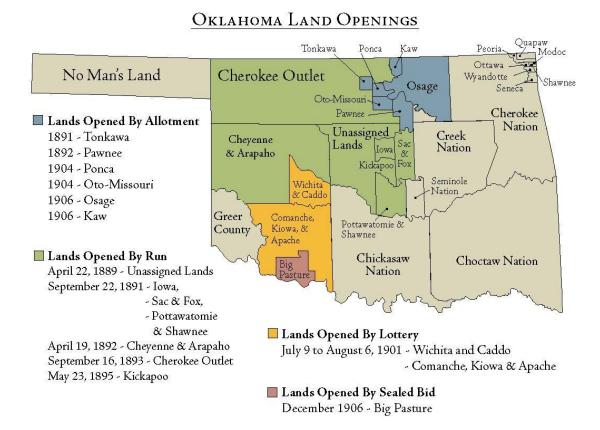
https://annexx51.wordpress.com/pr-101/territorialism-in-the-u-s-maps/ (accessed 01/29/14)

Unassigned Lands. 2012. Land Records, Research Guide. *Oklahoma Historical Society Research Center*. <u>www.okhistory.org/research</u>

Weiman, David F. "Peopling the Land by Lottery? The Market in Public Lands and the Regional Differentiation of Territory on the Georgia Frontier." *The Journal of Economic History* 51, no. 4 (1991): 835-60. http://www.jstor.org/stable/2123395.

## Tables and Figures

#### Figure 1



Source: Unassigned Lands, 2012.

Cimarron	Texas	Beaver	Harper	Woods	Alfalfa	Grant	Kaj			Nowat Vashington	Craig	Ottawa
			Ellis	dward	Major	Garfield	d Noble	Pawnee	Osage	Rogers	Mayes	Delawar
			$\sim$	Dewey	Blaine	Kingfisher	Logan	Payne	Creek	Tulsa Wago		rokee
			Roger Mills	Custer		Canadian	Oklahoma	Lincoln	Okfuskee		skogee	Sequo)
			Beckham Greer	Washita Kiowa	Caddo	Grady	Cleveland Potr McClain	Semin tawatomie	Hughe	1 1	Hask	
			Harmon Jackso		omanche		Garvin	Pontoto	Coal	Pittsburg	Latimer	Le Fl
			$\sum$	Tillman	Cotton	Stephens	Carter	Johns		l Push toka	imataha	
				~	$\sim$			Marshall	Bryan	Choct		McCurt

## Figure 2

Source: County Map, 2017.

1890 PCC 1880 MV						
Head of Households	I Number	I II Number Share		IV Share		
	1 200	74.10	Midwest	20.72		
Men Women	1,322 51	74.19 2.86	66.90 70.60	89.62 6.95		
Solo Men	385	21.60	68.30	2.50		
Solo Women	24	1.35	62.50	0.92		
Total	1,782					

Table 1: Head of Household (HoH)

Note: Solo indicates that there is only one household member.

A: There are 23 households in the 1890 PCC that do not have a Place of Birth indicated and are therefore excluded from all region results.

B: There were 247,791 Head of Households in the 1880 Midwest Region Sample and 1,209,584 individuals.

	189	0 PCC	1880 MWC
	Ι	II	III
Head of	Number		Share without
Households	without	without	children
nousenoius	Children	children	
Men	230	16.80	16.02
Women	2	0.15	0.75
Total	232	16.95	16.78

Table 2: Households without Children

Note: By definition, solo men and women did not have children in their household at the time of the census. There were 385 solo men and 24 solo women, see Table 1.

A: There were 247,791 households and 239,309 multi-person households in the 1880 Midwest Census Sample and 1,782 households and 1,373 multi-person households in the 1890 PCC.

<b>1890 PCC</b>					<b>1880</b> ]	MWC		
Children	Mean	Min	Max	Std.	Maan	Min	Max	Std.
per HH	Mean	IVIIII	IVIAX	dev.	Mean	IVIIII	IVIAX	dev.
Sons	1.66	0	9	1.36	1.70	0	11	1.38
Daughters	1.39	0	6	1.22	1.53	0	10	1.29
Total	3.07	1	11	1.91	3.22	1	15	2.00

## Table 3: Children per Household (HH)

Notes: 1890 PCC: Total Households: 1,782. Total Households with children: 1,141. 1880 Midwest Census Sample: Total Households: 247,791. Total Households with children: 199,164

A: These statistics exclude no child households.

B: In the 1890 PCC sons includes stepsons and daughters includes stepdaughters.

	1		1880 MWC			
Age	Α	В	С	Α	В	С
Category <sup>xxvi</sup>	Children	Daughters	Sons	Children	Daughters	Sons
< 1	4.76	5.22	4.37	5.38	5.56	5.22
1 - 5	23.74	23.92	23.59	20.40	21.22	19.67
5-10	27.30	28.07	26.66	24.45	25.45	23.54
10-15	21.70	22.49	21.03	21.80	22.32	21.32
15-20	14.01	15.19	13.00	15.55	15.11	15.96
20-30	7.83	4.69	10.49	10.70	8.58	12.61
30-40	0.49	0.30	0.65	1.37	1.34	1.4
Over 40	0.16	0.12	0.20	0.35	0.42	0.28
Total #	3677	1685	1992	642,350	304,736	337,614

Table 4: Children by Age Category

Note: There are 19 children without age information in the 1890 PCC. Note: The 1890 PCC data indicate that there were 3653 children under the age of 30 traveling with their families, 1975 sons and 1678 daughters.

	1890	) PCC	1880	MWC
Region of Birth	Ι	II	III	IV
	Share	HoH	Share	HoH
		Share		Share
N.A. Territory*	2.72	0.06	0.01	0.01
Midwest	77.59	67.25	71.00	42.70
South	11.33	18.08	5.82	11.73
West	1.46	0.63	0.79	0.04
Northeast	4.12	8.47	9.49	19.31
Europe	2.16	4.43	11.15	23.59
Canada	0.32	0.57	1.51	2.36
Other	0.31	0.51	0.21	0.26

Table 5: Region of Birth

\* N.A. = Native American (Those already in and around the Native American lands surrounding the unassigned lands. See Figure 2)

Note: In the 1890 PCC, there are 1,759 HoHs and 6,798 individuals with a reported birth region. A: There are 247,791 HoHs in the 1880 Midwest Region Sample and 1,209,584 individuals.

Table 6: Reg	1890		) MWC	
Region	Ι	II	III	IV
of Birth	HoH	Youngest	HoH	Youngest
	Share	Child in	Share	Child in
		HH		HH
		Share		Share
N.A. Territory	0.06	4.85	0.01	0.01
Midwest	67.25	86.28	42.7	90.82
South	18.08	4.85	11.73	1.64
West	0.63	2.56	0.04	1.58
Northeast	8.47	0.82	19.31	2.99
Europe	4.43	0.27	23.59	2.33
Canada	0.57	0.00	2.36	0.61
Other	0.51	0.37	0.26	0.01

Table 6: Region of Birth Youngest Child in HH

Note: In the 1890 PCC, there are 1,759 HoHs, 6,798 individuals, and 1,093 households with a reported youngest childbirth region.

A: There are 1,209,584 individuals in the 1880 Midwest Region Sample 247,791 HoHs and 164,792 households with a reported youngest childbirth region.<sup>xxvii</sup>

# Appendix 1

Table A1: PCC - Region of Birth

Category	Region of Birth		
N.A. Territory	Oklahoma Terr	Indian Terr	Kaw Nat
	Osage Terr	Cherokee Terr	Creek Terr
	No Mans land	Chickasa Nat	C Na
	Choctaw Nat	Kaw Nation	Pottawotamie Nat
Midwest	Minnesota	Iowa	Dakota Terr
	Missouri	Kansas	Nebraska
	Wisconsin	Ohio	Michigan
	Illinois	Indiana	
South	Texas	Arkansas	Louisiana
	Mississippi	Alabama	Dist of Col
	Tennessee	Kentucky	West Virginia
	Virginia	Delaware	Maryland
	North Carolina	South Carolina	Georgia
	Florida		
West	Colorado	Washington	Arizona Terr
	Wyoming	California	Montana
	Nebraska	Nevada	Oregon
	New Mexico		
Northeast	Pennsylvania	New York	Maine
	New Jersey	Connecticut	Rhode Island
	Massachusetts	Vermont	New Hampshire
Europe	Denmark	England	Wales
1	Europe	France	Germany
	Ireland	Norway	Scotland
	Sweden	Switzerland	
Canada	Canada	Nova Scotia	
Other	Russia	Prus	Africa
	Turkey		

Table A2 – HoH Summary Statistics

1890 PCC						
variable	Ν	mean	min		max	sd
Children (Number)	1141	3.07362		1	11	1.9116
Sons	1141	1.65557		0	9	1.36486
Daughters	1141	1.39439		0	6	1.22422
Age	1778	39.2548		15	87	12.5458
1880 MWC						
Children (Number)	199164	3.22498		1	15	2.00095
Sons	199164	1.69501		0	11	1.38109
Daughters	199164	1.52997		0	10	1.29639
Age	247791	43.0936		3	105	13.7611
Birth Place						
Midwest	247791	0.427		0	1	0.49464

1890 PCC

Race	Ν	Black	Native American	White	Chinese
1890 PCC	1782	1.57	0	98.43	0
1880 MWC	247,791	2.96	0.22	96.82	0.01

vi The Census was taken in April and May of 1890.

<sup>vii</sup> Payne County was chosen as the county for analysis because a portion of the first and second land runs occurred there. In addition, the starting line for the first land run is in Payne County, near the city of Stillwater.

<sup>viii</sup> The Cherokee Outlet was assigned by land run in September 1893. (See Figure 1)

<sup>ix</sup> The 1890 Territorial Census was completed in May of 1890 and is the first official census record taken after the 1889 Land Run.

<sup>x</sup> The Oklahoma Territory and Indian Territory are often used interchangeably.

<sup>xi</sup> The women that participated had to be either unmarried, widows, or legally separated from their husbands (McReynolds, p. 288).

<sup>xii</sup> The allotted land parcels were 160 acres and no one that already owned more than 160 acres of land was able to stake a claim in the land runs (McReynolds, p. 288).

<sup>xiii</sup> The 160 acre plots were available outside of the town-sites that had been designated by the U.S. Congress (Smith's 1890 - The Town-Site Bill, pp. 83-84)

<sup>xiv</sup> This cost to the settler roughly covered the purchase price of that tract of land that the U.S. Government paid the Indian Tribes for it (McReynolds 289).

<sup>xv</sup> Another option under the Act gave residents the ability to purchase the land from the government after only six months if they could pay \$1.25 per acre. (LOC 2016)

<sup>xvi</sup> Each county seat, Guthrie in Logan County, Oklahoma City in Oklahoma County, Kingfisher in Kingfisher County, El Reno in Canadian County, Norman in Cleveland, and Stillwater in Payne County was allotted 320 acres for their town site. (McReynolds 1954, p. 290)

<sup>xvii</sup> Volunteers of the Oklahoma Historical Society (OHS) converted the PCC to text from scanned images of the 1890 census. I verified the data using the original scanned images from the 1890 Census CD that is available for purchase from the OHS and made changes and additions as needed to match the original scanned census data.

<sup>xviii</sup> There were some households with only one person that were listed as *Single*, and some women were listed as *Widow*. There were multiple census takes in 1890 so some variation is expected. Household groupings in the Census made it possible to identify family groups. Volunteers at the OHS completed much of the work to digitize the data.

xix The IPUMS provides data for a 10% 1880 Population Census Sample.

<sup>xx</sup> The Midwest census region includes the West North Central Census Region (North Dakota, South Dakota, Minnesota, Iowa, Nebraska, Kansas, and Missouri) and the East North Central Census region (Illinois, Indiana, Michigan, Ohio, and Wisconsin).

<sup>xxi</sup> The 1880 Population Census is used rather than the 1890 Census, because the 1890 census is unavailable. (Census, 2017)

<sup>xxii</sup> The 1890 PCC data contained 98.43 percent white households and only 1.57 percent black households, so no separate analysis of race is included. See the Table A2: Summary Statistics for more information.

<sup>xxiii</sup> The 1890 PCC data did not always indicate whether a woman was a widow or not so it not possible to definitively identify the marital status of the women.

<sup>xxiv</sup> We used an unpaired t-test assuming unequal variances to analyze the 1890 PCC and 1880 Midwest sample. The number of daughters were statistically significantly different at the 1% level, the number of children at the 5% level. There is not a statistically significant difference in the number of sons between the two censuses.

<sup>&</sup>lt;sup>i</sup> We would like to the Economic History Association for the financial support that they provided through the Cole Grant 2012.

<sup>&</sup>lt;sup>ii</sup> These tribes were also known as the five civilized tribes (LOF, 2017)

<sup>&</sup>lt;sup>iii</sup> For detailed information on where each tribes territorial land was in the Southeastern United States prior to removal see LOF 2017.

<sup>&</sup>lt;sup>iv</sup> There were exceptions, for instance, the Treaty of 1866 required that the Native Americans provide rights of way for railroads across their territorial lands (Chickasaw, 2107).

<sup>&</sup>lt;sup>v</sup> Subsequent land runs occurred on September 22, 1891, April 19, 1892, September 16, 1893, and May 18, 1895. In addition, instead of a land run, a lottery occurred to allocate the last area of lands on August 1, 1901. (Due to the length of time since the last land run and the overwhelming demand for the land, the lottery system was instituted to maintain order (Foreman, 244-249). (See Figure 2)

<sup>&</sup>lt;sup>xxv</sup> We have dropped children under the age of one in order to exclude those settler children born after the land run, but before the census. Children under one were excluded from the youngest child region data for both the 1890 PCC and 1880 Midwest Census sample in Table 6 for comparability.

<sup>&</sup>lt;sup>xxvi</sup> The lower bound age is included in the category, while the upper bound age is included in the following category, i.e. category 5-10 includes individuals who are 5 up to but not including 10.

<sup>&</sup>lt;sup>xxvii</sup> In the 1880 Midwest Census Sample, there were 54 households with 2 children of the same age that were the youngest and were born in different states, those households were excluded.