The Political Economy of Saving Mothers and Babies:
The Politics of State Participation in the Sheppard-Towner Program

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Abstract

We explore the reasons underlying the striking variation in state participation in the Sheppard-Towner Act. By examining the political economy of Sheppard-Towner at the state level, we find that prior state expenditures on child-life and the number of Catholics in a state were strong predictors of participation in the Sheppard-Towner program. In addition, the length of time since a state had granted women suffrage was also negatively related to state participation. States with the most experience with women voters had the lowest participation rates while states that extended suffrage only when compelled by the 19th Amendment had the highest participation rates.

I. Introduction

In 1921, Congress passed the Promotion of the Welfare and Hygiene of Maternity and Infancy Act, more commonly known as the Sheppard-Towner Act. Sheppard-Towner was one of the first federal matching grant programs; each participating state received $5,000 outright and then the federal government matched state expenditures on infant and maternal health programs on a one-for-one basis up to an explicit cap determined by a state's population. Despite its uncontroversial goal of reducing maternal and infant mortality, the Act generated a tremendous amount of controversy. The State of Massachusetts challenged the law in the Courts, claiming that the use of matching grants violated states' rights, while the American Medical Association (AMA) charged that it was the first step down the path towards socialized medicine. The political battles culminated in a bitter fight for funding re-authorization in Congress in 1926. The outcome of this fight favored the program's opponents. Sheppard-Towner funding was extended for two years in exchange for the automatic repeal of the law on June 30, 1929.

Historians have argued that Sheppard-Towner originally passed despite significant opposition because politicians feared reprisal from newly enfranchised women who were awarded suffrage in 1920 (Lemons 1990). When politicians learned that women did not necessarily vote as a bloc, Sheppard-Towner was repealed in the face of ardent opposition from the AMA. (See Lemons 1990; Skocpol 1992; Ladd-Taylor 1994).

However, this simple packaging of Sheppard-Towner ignores a great deal of variation in how states participated in the program, as shown in Figure 1. States were where much of the real action took place; they had to enact enabling legislation, set up special state boards of child hygiene, and put up their own funds to get the federal grants. Three states (CT, IL and MA) refused to participate at all. Other states participated in some years and not in others. Some

states participated fully, and some took only partial advantage of the federal matching dollars. What makes this surprising is that a number of these "partial participants" had expenditures on child health programs that were high enough to meet the maximum federal matching grant, but they chose to accept only part of that grant. This begs the question, why did these states "leave money on the table?"

This paper examines the politics of state participation in Sheppard-Towner. Although much has been written about the politics of Sheppard-Towner at the national level, little attention has been paid to the factors influencing state acceptance of Sheppard-Towner grants. The focus on the national politics has shaped the way we think about the Sheppard-Towner program: its passage was victory for woman's suffrage and its repeal, the victory of the AMA. We find that the politics of Sheppard-Towner in the states did reflect these national themes, but other factors were important as well. Specifically, we find that states with the highest level of participation in the Sheppard-Towner program were those states that had relatively high prior expenditures on child life. Suffrage played an important role; states that enacted suffrage after 1917 participated at a much higher level than states that enacted suffrage earlier. Finally, our findings downplay the role of doctors in determining the level of state participation in Sheppard-Towner.

II. The National Politics of Sheppard-Towner

The passage of the Sheppard-Towner Act in 1921 marked the culmination of maternalists' efforts during the Progressive Era to involve the federal government in a broad campaign to improve the health of mothers and their children. The Children's Bureau's first attempt to enact legislation came in 1918, when Representative Jeannette Pickering Rankin (R-Montana) sponsored a bill calling for a yearly appropriation of $10,000 per state, with $1

million in additional funds to be divided among states based on their share of the U.S. rural population, and contingent on the state legislature approving matching funds. The purpose of the bill was educational in nature; funds were to be used to encourage instruction in hygiene and maternity, and not to provide medical care. Despite the fact that no one appeared before the House Committee on Labor to oppose the bill, it did not reach the floor of Congress (Lindenmeyer 1997, p. 79). During the next session of Congress, Representative Horace Mann Towner (R-Iowa) and Senator Morris Sheppard (D-Texas) introduced proposals similar to Rankin's bill. The Senate passed the bill in December 1920, following three days of debate that centered on questions of funding for the program, and whether the Children's Bureau or the medically-run Public Health Service (PHS) should run the program. In the House, hearings were held at the end of December, but the bill failed to come to a vote before the end of the Congressional session. Supporters of the bill were buoyed by President Harding's endorsement in April 1921 and re-introduced the measures.

While no group voiced opposition to the Rankin bill in 1918, new resistance to the proposed Sheppard and Towner bills came from two primary sources: the American Medical Association and the Woman Patriots (Lindenmeyer 1997, p. 83). While the AMA was slow to organize against compulsory health insurance in the late 1910s, the organization took a definitive stance against compulsory health insurance in 1920 (Burrow 1963, p. 150). The AMA viewed Sheppard-Towner in the same vein as compulsory health insurance: an attempt by government to intervene in medical care. The AMA strongly opposed government control over medical service, and viewed the provision of care for individuals as best achieved "…through voluntary self-taxation of voters in a political unit to pay for the necessary local facilities for the prevention of

disease and the promotion of health" (JAMA, February 5, 1921).[1] Physicians feared that government intervention would eventually lead to non-medical provision of medical services.

Anti-suffragists joined physicians in opposing the proposed Sheppard-Towner legislation. The Woman Patriots, formerly known as the National Association Opposed to Woman Suffrage, denounced the Act as a communist and feminist plot. Samuel Winslow, an anti-suffragist and chair of the House Committee on Interstate and Foreign Commerce refused to even hold hearings on the bill for several months. Alice Robertson, an anti-suffragist and the only woman in Congress, voted against the bill (Lemons 1990, p. 157). Anti-suffragist Elizabeth Lowell Putnam argued that the bill was objectionable because it not only interfered with states' rights, it also placed matters of medicine into the hands of laypeople. In a letter to the editor published in the *Journal of the American Medical Association*, Putnam wrote, "the hearings have been carried on as if the fact that a woman had borne a child, or indeed, just happened to be a woman, entitled her per se to medical knowledge on the subject of the proper care of childbirth…the bill will do no good" (Putnam, 1921). One of the most vociferous opponents of the bill in the Senate was anti-suffragist Senator James A. Reed (D-Missouri) who railed against the proposal, stating that Sheppard-Towner would "… turn the control of the mothers of the land over to a few single ladies holding Government jobs… We would better reverse the proposition and provide for a committee of mothers to take charge of the old maids and teach them how to acquire a husband and have babies of their own" (from Ladd-Taylor p. 172; original source Congressional Record, 67th Congress, 1st Session, vol. 61, Nov. 1, 1921, 7145).

[1] While the AMA as a whole was opposed, certain groups of physicians within the AMA supported Sheppard-Towner. Pediatricians supported Sheppard-Towner; in fact, the American Academy of Pediatrics was founded as an independent group in 1922 because pediatricians disagreed with the AMA's stance. Other medical groups also supported the bill's passage, including the Medical Women's National Association (Lindenmeyer 1997, p. 87).

Despite the opposition, the bill easily passed in both the House, (279 to 39) and the Senate (63 to 7). According to Lemons, Congress feared the women's vote. Women's magazines published numerous articles in favor of Sheppard-Towner. The League of Women Voters supported the bill, and the Women's Joint Congressional Committee (WJCC), which claimed to speak for 20 million members, lobbied strongly for its passage and generated significant grass-roots support (Lemons 1969, p. 778). Legislators feared that women would vote as a bloc. The effectiveness of the women's lobby and the fear of the House and Senate was noted by Senator Kenyon (R-Iowa), who stated, "If the members could have voted on that measure secretly in their cloak rooms it would have been killed as emphatically as it was finally passed in the open under the pressure of the Joint Congressional Committee of Women" (Lemons p. 167, original source *Ladies Home Journal* XXXIX (April 1922, p. 95)).[2]

Within a few years, however, the tide had turned. Sheppard-Towner's appropriation was scheduled to end on June 30, 1927. When supporters attempted to extend its authorization, the same groups that opposed the bill in 1921 mobilized with renewed and intensified vigor. The AMA lobbied against the bill even more loudly than before, and the Catholic Church joined the fight against Sheppard-Towner's renewal.[3] Further, the results of the 1924 and 1926 elections suggested that women did not vote in blocs on issues (as Congressmen had feared), but rather split along party lines (Meckel 1990, pp. 214-15). While the reauthorization easily passed in the House, a filibuster led by conservative anti-suffragist Senator Lawrence Phipps of Colorado blocked action in the Senate. Eventually, supporters accepted a compromise that extended the

[2] The idea that Congress had at least some fear of the women's vote is supported by Lott and Kenny (1999) and Miller (2008). Lott and Kenny (1999) find that suffrage coincided with immediate increases in state government expenditures for functions women generally supported, such as education, sanitation and hospitals. Suffrage also generated more liberal voting patterns among federal representatives. Miller (2008) similarly finds that suffrage laws generated large increases in public health spending.

[3] Church leaders feared that the educational programs espoused by the Children's Bureau would include instruction on birth control and sexual hygiene (Lindenmeyer 1997, p. 102).

appropriations through June 30, 1929, with an automatic repeal of the law at that time. Although proponents believed the political winds would become more favorable as time passed, they did not. In 1929, Sheppard-Towner was repealed.

III. The State Politics of Sheppard-Towner

In order for a state to receive Sheppard-Towner funds, it had to enact enabling legislation and this legislation had to include appropriations, since all but the first $5,000 of the federal grant had to be matched with state funds. While some states were quick to pass legislation and put up the funds to get their maximum federal appropriation, political battles in other states delayed and limited their participation in the federal program. Most states took far less than the maximum federal appropriation. Figure 1 shows that in no year of the program did more than one-third of the states take the full federal appropriation.

The large number of states not taking the maximum grant contrasts sharply with the experiences of most other "closed ended" federal matching programs both at the time and in more recent experience. Before Sheppard-Towner, the states could get matching federal funds for agricultural extension work under the Smith-Lever Cooperative Extension Act of 1914. The maximum federal match under this program was determined by a state's rural population and states generally accepted the maximum appropriation that they were entitled. As Alfred C. True wrote in his history of agricultural extension work, "Since the State and county funds available for this purpose from year to year were uniformly in excess of the required offset there was no difficulty in carrying out this provision of the act" (True 1969, p. 128).

True's comment evokes a common criticism of closed-ended matching grant programs. Although the matching aspect of the grant is intended to stimulate expenditures on the desired

program by lowering the “price” of those expenditures to the state, a low maximum grant level could produce little or no stimulus at all. Figure 2 displays the budget constraint under a closed-ended matching grant program. Once a state reaches the maximum grant level, B, the price effect of the matching grant disappears. Since the federal money is fungible, states that were spending more than B before the program will increase their expenditures on the desired program by far less than the amount of the grant. The states will take advantage of their relaxed budget constraints to spend more on other public goods and services or to lower tax rates. In other words, the federal grant will crowd out state spending on the targeted program.

True’s observation about the Smith-Lever program seems to fit many federal closed-ended matching grant programs. When the maximum grant level is low relative to existing state expenditures, states take the full grant amount and decrease rather than increase their spending as the proponents of the grant programs intended (Bezdek and Jones 1988; Knight 2002; and Miller 1974).

Such behavior was not absent in the Sheppard-Towner program. The prime example is the state of New Jersey. New Jersey accepted the maximum federal grant every year the program was in effect and cut state appropriations for child health programs by the equivalent amount. In 1922, the New Jersey legislature appropriated almost $100,000 less for the Department of Health than it had in 1921. The Department's report for that year, however, explains this reduction in plain terms: it came from the reductions in appropriations for the Bureau of Child Hygiene and the Bureau of Venereal Disease Control, both of which would be receiving federal monies for their work and therefore it would "probably not be necessary to cut down the work of these bureaus to any great extent" (New Jersey Department of Health 1922, 19). The budget cut for the Bureau of Child Hygiene was repeated every year through 1929. But

in 1930, after the repeal of Sheppard-Towner, the New Jersey legislature increased the appropriations to the health department to make up for the lost federal funds. The appropriations for the 1930 fiscal year were $416,978 compared to $375,249 for the 1929 fiscal year, a difference of $41,729. The maximum grant available to New Jersey under Sheppard-Towner – and the amount accepted by New Jersey for every year Sheppard-Towner was in force – was $31,284.55 (New Jersey Department of Health 1929, 23).

Figure 3 plots New Jersey's cost payments for child health programs for 1915-1919 and 1923-1931 taken from the Census Bureau series of the Financial Statistics of the States. These data include all expenditures on child health programs using state and federal funds. Unfortunately, this series contains no data on child health expenditures for the years 1920 to 1922.[4] Figure 3 also plots the funds the state received in Sheppard-Towner grants for the years 1922 to 1929. Expenditures do not seem to respond to the federal grants. Expenditures were trending upward before Sheppard-Towner was enacted and continued to do so during the program even though the grant amount stayed constant. Moreover, expenditures on child health programs were not scaled back after the repeal of Sheppard-Towner; they remained stable between 1929 and 1930 and then increased between 1930 and 1931.

New Jersey's behavior was not exceptional, but it was certainly not the norm as it was (and is) under many other closed-ended matching grant programs. Table 1 presents the fraction accepted by states of their total Sheppard-Towner appropriation. Panel A lists states that had positive expenditures on child health programs in 1919, the last year before Sheppard-Towner for which we have data. Like New Jersey, North Carolina, Pennsylvania, Alabama, Michigan,

[4] No data was collected in 1920, and only some states provided the Census Bureau with data for 1921. In 1922, the Census Bureau published data on cost payments for conservation of health and sanitation, but did provide data on cost payments for the conservation of child life. This gap means that we can not examine how state expenditures changed with the onset of the Sheppard-Towner program.

Minnesota and Iowa took full advantage of the federal matching funds. However, other states which were engaged in child health work before 1920 took only fractions of the monies appropriated for them. Most notable on this list is Massachusetts which had established a division of child hygiene as part of its health department in 1915 yet did not take any of the federal Sheppard-Towner money.

Panel B of Table 1 adds another layer to this puzzle. Panel B presents data on the states that had zero expenditures on child health in 1919. When Sheppard-Towner was enacted in 1921, these states had little or no engagement in child health work and one might suspect that the shortfall in participation came from these types of states. These are after all the states hypothesized to be right of the point B on Figure 2. Yet the range and variation in the participation rates of these states are comparable to those found for the states in Panel A. Eight of these states put up enough of their own funds to get the full federal match for all the years the program was in place, and seven more accepted 85 percent or more of their total appropriation. Some of the gap for these states is due to the cost of setting up the necessary bureaucratic infrastructure to run Sheppard-Towner programs. Figure 4 plots Nevada's cost payments for child health programs and Sheppard-Towner grants for 1915-1919 and 1923-1931. Nevada established a division of child hygiene in 1922 only in response to the Sheppard-Towner Act. In the first two years of the program, Nevada only accepted the non-matched part of the federal grant. But by 1924, Nevada had ramped up its own appropriation in order to receive the full federal grant. Only in the last year of the program did Nevada accept less than the full amount as it scaled back its child health program anticipating Sheppard-Towner's repeal.

Therefore, the variation across states in their participation in Sheppard-Towner cannot simply be explained by the variation in state engagement in child health programs before 1920.

The data in Table 1 reveal little correlation between the fraction of Sheppard-Towner appropriations accepted by a state and the state's expenditures on child health programs in 1919 or the year the state established a division of child hygiene. The politics of Sheppard-Towner were clearly about more than just the provision of child health services.

The complaint voiced most often by Sheppard-Towner's opponents was that the program violated states' rights. Such arguments were particularly prevalent in the debates in the three non-participating states. The Chicago Tribune took the position that Sheppard-Towner promoted the evils of "the centralization of government, the development of bureaucracy, (and the) weakening influence of paternalism." Moreover, the Tribune argued that it set a "dangerous and evil precedent" (Tribune, April 25, 1923). An editorial a few days earlier had claimed that the Act, stating that it was a "trick" to "deceive" taxpayers who thought they were receiving a gift from the federal government but who would in reality just pay for it through their taxes (Tribune, April 22, 1923). The Commonwealth of Massachusetts filed suit against Treasury Secretary Andrew Mellon, arguing that the law infringed on state sovereignty. A similar lawsuit was filed by Harriet A. Frothingham, president of the Woman Patriots, who argued that as a taxpayer she was unfairly burdened by the Act. The U.S. Supreme Court ruled on both together, dismissing Massachusetts' lawsuit, and affirming the dismissal of the Frothingham suit in a lower court, arguing that her injury was not serious enough to warrant a lawsuit (Massachusetts v. Mellon and Frothingham v. Mellon, 262 U.S. 447 (1923)). Ironically, some of the states that argued that the federal government had no right to intervene in matters of state policy were happy to take state aid in other forms. At the same time Massachusetts was suing to preserve its rights under Sheppard-Towner, it was accepting federal money under 22 other programs. In Connecticut, the state appropriations committee in Connecticut refused to take federal aid under Sheppard-

Towner as a matter of principle, but then voted to accept federal aid for an airplane squadron (Lemons 1969, p. 783).

The inconsistencies of these states' behavior regarding other federal grant programs and their stated opposition to Sheppard-Towner suggests that "states' rights" may have been just a convenient excuse to vote against a program that was unpopular with politically influential groups. Mrs. Frothingham's role in the court case for Massachusetts is informative. Although she articulated her opposition to Sheppard-Towner in terms of states' rights, her opposition reflected the general anti-suffragist opposition to government expansion into issues they felt should remain within the home and family.

Given the prominence assigned to the role of women's suffrage in the discussion of the national politics of Sheppard-Towner, we might expect that women's suffrage also played a role in the state politics. Many states extended suffrage to women before 1920 and the passage of the 19th Amendment. A state's experience with women's voters may have influenced how it responded to Sheppard-Towner. However, it is not clear in what direction that relationship would go. Lott and Kenny (1999), and more recently Miller (2008) have found that the extension of the vote to women led to a positive and permanent shift in a state's expenditures, particularly its expenditures on welfare and health. These findings could be interpreted as implying that states that enacted women's suffrage earlier would participate more fully in the Sheppard-Towner program, holding all other factors equal. These states would be expected to have larger and more organized constituencies promoting public health programs. But the correlation could instead have the opposite sign. The influence of women voters may have been greatest right after the extension of suffrage and politicians were uncertain about how women would vote. But over time, as politicians gained experience with women voters and realized that

they split along party lines in much the same way as male voters, women's influence would wane and so too would politicians' support for "women's programs." This argument is consistent with the traditional historiography about why the re-authorization of Sheppard-Towner failed in 1926. By 1926, politicians on the national scene had learned that women were not one-issue voters and did not vote as a block.

Table 1 does provide support for the hypothesis that the influence of women voters may have been greatest right after they got the vote. In both panel A and B, the states with the highest acceptance rates are states that only extended suffrage to women with the 19th Amendment or in the two or three years prior to that.

The other factor prominent in discussions of the national politics of Sheppard-Towner is the AMA. The AMA may have played an even more influential role in some of the state battles than in the federal one. The AMA was slow to mobilize its opposition to the federal legislation but gained momentum in the early years of the program just when state legislatures were considering their enabling legislation. Opposition to Sheppard-Towner was particularly strong among the state medical societies of Ohio, New York, Indiana, Massachusetts and Illinois, with the latter two states joining Connecticut in refusing to even participate in the Act (Lemons 1990, p. 163). One Illinois physician wrote a letter to the editor assailing the bill, arguing that the bill would ultimately lead to a "… tax eating corps of prairie midwives and old maids who are to raise the offspring at taxpayer expense" (Butterfield 1923). Physicians from Massachusetts testified against the bill in hearings (original source Lemons 1990 p. 164).

The Catholic Church may have also played a role in the political economy of Sheppard-Towner in the states. While the Church did not have an official stance on Sheppard-Towner until the Act came up for reauthorization in 1926, some Church officials opposed the proposed

legislation. For example, the Jesuit periodical *America* opposed Sheppard-Towner, while the National Council of Catholic Women and the National Catholic Welfare Council supported the bill (Lindenmeyer 1997 p. 90). Even if Catholic opposition did not prevent the bill from becoming law, Lindenmeyer suggests that opposition grew in the time between the law's passage and when states appropriated money.

So far, the two major political parties of the period have been absent from the discussion. They tend to be absent from discussions of the national politics as well. Politicians from both parties weighed in on the debate but they did not divide themselves by party lines. For instance, while President Harding, a Republican, endorsed the bill and later signed it into law, other Republicans opposed it. Prominent in this list was Nathan Miller, governor of New York. Miller went so far as to propose a state infant and maternal hygiene program with an appropriation of $100,000 as an alternative to Sheppard-Towner. Sheppard-Towner proponents pointed out that if the state put up only $75,000 under Sheppard-Towner, the federal matching grant would have allowed the state to spend $150,000 on infant and maternal health programs. But the legislature voted for the governor's plan in early 1922 and even upped the appropriation to $130,000.

Party politics may have mattered though for year-to-year variations in a state's participation. Shifts in the balance of power may have caused a state to increase or decrease its appropriations for the program. This is exactly what happened in New York. In 1923, Miller was out of office, replaced by Alfred Smith, a Democrat. Smith made Sheppard-Towner a key component of his platform, asking the state legislature in his first state address to pass Sheppard-Towner legislation. In the summer of that same year, the legislature did as Smith asked.

IV. An Empirical Examination of the Politics of Participation

Although the politics of Sheppard-Towner played out in a unique way in each state, there seem to be some prominent common threads. An empirical analysis of state participation in the program will allow us to assess the role of doctors and the Catholic Church in determining a state's response to Sheppard-Towner. It will also allow us to explore the factor cited by historians as the key to the success of the federal legislation: women's suffrage. Politicians wanting to woo, or at least seeking not to offend women may have voted overwhelmingly in favor of the legislation given that infant and maternal mortality were seen as "women's" issues.

Participation in a government program is often measured as a binary variable; a state either participated or did not participate. In this case, such a simple classification would miss much of the interesting variation in the participation in the Sheppard-Towner program. Some states took only a fraction of the maximum grant and that fraction varied from year to year. Therefore, we measure a state's participation in a given year as the ratio of the amount of Sheppard-Towner funds accepted by a state in that year to the maximum grant available to the state.

We explore the role of women's suffrage by examining whether participation in Sheppard-Towner varied by the length of time women in the state had had the vote. Accordingly, we divide states into three categories based on when the state enacted women's suffrage: before 1917, 1917-1919, and in 1920 under the 19th Amendment.

Given that the most vocal opposition to Sheppard-Towner came from doctors and the AMA, we include two measures of the strength of the AMA in a state: the number of doctors per 1000 in the population and the percent of doctors in a state who were AMA fellows. AMA fellows were AMA members in good standing who paid dues to the AMA and who subscribed to

the Journal of the American Medical Association. The data on doctors and AMA fellows comes from data collected by the AMA and published annually in the *Journal of the American Medical Association.*

Another potential opponent of Sheppard-Towner was the Catholic Church. The U.S. Census has never collected data on the religious affiliations of individuals. However, it does collect data on the membership of churches of different denominations and other religious organizations in its Census of Religious Bodies. We use data from the 1916, 1926, and 1936 Censuses of Religious Bodies to construct state-level data on the strength of the Catholic Church. We construct a "percent Catholic" measure for each of the census years by dividing the total membership in Catholic churches in a state by the state's population. We then linearly interpolate between the three census dates to construct annual data.

A state's response to Sheppard-Towner was likely also influenced by its engagement in child health programs prior to the program's enactment. While Sheppard-Towner was seen as an innovation in terms of federal engagement in public health issues, the types of activities it promoted had been implemented by several states long before 1921. The federal program was indeed based on the experiences of these state programs. Thus, we also include the amount of money spent by a state on child life expenditures in 1919, the last year before Sheppard-Towner for which such data are available. In one specification, we alternatively include an indicator variable for whether a state implemented a division of child hygiene before 1920. This variable captures whether a state already had child health programs in place and perhaps the underlying preference of a state to be engaged in such programs. But it may also capture some element of the "costs" of participation for a state. A state that did not have a division of child hygiene by 1920 would have to incur the cost of establishing one to receive Sheppard-Towner grants.

However, it could be that the costs of participation were even greater for states that already had established child hygiene divisions in that participating in Sheppard-Towner meant relinquishing some degree of autonomy.

We also include variables intended to capture the more general economic, social and political characteristics of a state: per capita personal income, the percent of the population that was black, the percent of the population that lived in urban areas, South and West region indicators, and indicators for democratic governors and a democratic majority in the House and Senate.[5] In some specifications we instead include the "political shift" variables that Fishback and Kantor (1998) found influenced changes in the generosity of a state's workers' compensation program, another Progressive Era social welfare initiative.[6] Finally, we allow for year fixed effects to capture any factors that may have affected all states in given year.

Table 2 presents the descriptive statistics for the variables used in the analysis. On average, state accepted 73 percent of their maximum grant amounts, but the standard deviation was large revealing the tremendous heterogeneity in the degree of participation.

Table 3 presents the results from OLS estimation of the model, both with and without the inclusion of state fixed effects. The standard errors for both specifications have been adjusted to allow for the clustering of the error term by state. Columns 1-3 present the model without state fixed effects. These are our preferred models because the primary variables of interest are either truly fixed -- the experience with women's suffrage – or relatively constant over the period – the number of doctors per capita, the percent of AMA fellows, and the percent Catholic – and hence get swept away when state fixed effects are included. The models with state fixed effects in

[5] Per capita personal income data are linearly interpolated between benchmark data for 1920 and 1929. The 1920 data come from Kuznets and Thomas (1957, 753) and the 1929 data are those produced by the Bureau of Economic Analysis (U.S. Department of Commerce 1995, 11).

[6] The political variables come from Fishback and Kantor who have generously made publically available all the data collected in their workers' compensation studies.

columns 4 and 5, however, do allow us to consider what factors influenced the year-to-year changes in a state's participation in the program.

A state's participation in Sheppard-Towner was strongly related to its experience with women's suffrage. States that extended the vote to women 1917 or later accepted much larger shares of their maximum federal grant than did states that had given the vote to women before 1917. The results indicate that holding all other factors equal, the share accepted by a state that gave women the vote in 1920 was more than 60 percentage points greater than the share accepted by a state which had given women the vote before 1917. The models include regional dummy variables, so this result cannot be simply attributed to the behavior of the Western state. [7] These findings may bolster the traditional historiography about Sheppard-Towner: while politicians voted in favor of Sheppard-Towner in 1921 due to their fear of new women voters, by 1926, experience had eliminated that fear and politicians were willing to vote against legislation that had formerly been labeled a "women's issue." Our findings reinforce this. In states with little experience with women voters, legislators were quick to vote for what was viewed as a "women's issue." But in states with a longer history with women voters, legislators did not feel so threatened, perhaps because they knew that women's political preferences were not necessarily centered on one issue and were as heterogeneous as those of men.

The model also reveals that, that contrary to the conclusions drawn from Table 1, a state's prior expenditures on child life is a predictor of its later level of participation in Sheppard-Towner; an one-standard deviation increase in per capita expenditures on child life (an increase of 0.6 cents) increased the share of the maximum grant accepted by 11 percentage points.

[7] Our suffrage results are robust to difference specifications. We find similar results, for example, with an alternative specification with suffrage before 1910, between 1911 and 1915, 1915-1919, and 1920. The suffrage variables are also robust to the inclusion of a dummy variable for the Western region of the U.S., which is positive and statistically significant in all of our specifications.

Controlling for other factors, a state's participation did indeed reflect its underlying preferences for child health programs as represented by its pre-Sheppard-Towner expenditures. However, the alternative measure of a state's preferences for child health – whether a state had a division of child hygiene before 1920 – did not have an impact on a state's participation in Sheppard-Towner. This may be due to the crudeness of this measure relative to the expenditure measure.

In addition, the Catholic Church played a key role in limiting a state's participation in the Sheppard-Towner program. States with large Catholic populations also were less likely to accept the maximum federal grant. An increase in the percent Catholic by 12 percentage points, approximately a one-standard-deviation change, reduced the fraction of the maximum grant accepted by 17 percentage points.

On the other hand, in most specifications we find little support for the notion that doctors affected a state's participation. The number of doctors per capita is only negatively related to state acceptance of Sheppard-Towner in the specification of the model where we omit state prior child life expenditures. The percentage of doctors who were AMA fellows (a measure of the state-level strength of the AMA) is never statistically significant. [8]

Other than the Western region indicator variable (which is positive and statistically significant in all of our specifications), none of the other variables have statistically significant effects in the specification without state fixed effects. Not surprising given the narrative accounts of the battles over Sheppard-Towner, the political party in control of the governor's office or either of the legislative houses had no effect on a state's take-up of the federal grants. However,the state fixed effects models indicate that a change in the majority party in one of the houses of the state legislature led to a drop in the Sheppard-Towner grant accepted by the state in

[8] We also tried other measures of the influence of the AMA: the percent of doctors in a state who were members of the AMA and the percent of doctors who received the *Journal of the American Medical Association*. These variables also had no effect on a state's receipt of Sheppard-Towner grants.

that year. Some of the year-to-year variation in participation in the program was due to shifts in the political environment in the states.

VI. Conclusions

In this paper we seek to explore the state-level political economy of the Sheppard-Towner Act. What we find generally supports the traditional historiography: the level at which states participated in Sheppard-Towner was strongly influenced by the length of time since women's suffrage. Notably, states with the most experience with how women voted were the ones that participated at the lowest level. These results support the traditional explanation that the bill was enacted because members of Congress feared the power of the women's vote, and the law was not extended several years later after members of Congress realized that women were not issue voters.

The burning question is, why did politicians not learn from the experiences of other states? The answer may be that state politicians are myopic, viewing their own state's experiences as unique. An alternative explanation of our findings, though, could be that the organization and mobilization of women's groups was greatest right before and immediately after the extension of women's suffrage. Before women got the vote, there was a unifying issue that brought politically motivated women together. After the women's suffrage was enacted, this unifying issue was lost and with it the motiviation to organize. This hypothesis could be explored directly with quantitative data on the relative strength of women's groups in different states.

We find little evidence that states with more physicians or more physicians affiliated with the AMA participated at a lower level than other states, unless we omit a state's prior expenditures on child life from the regression. We know that the AMA was slow to organize and

oppose Sheppard-Towner initially. Once states decided to participate, it appears to be the case that physician opposition had little effect on determining the level of a state's participation.

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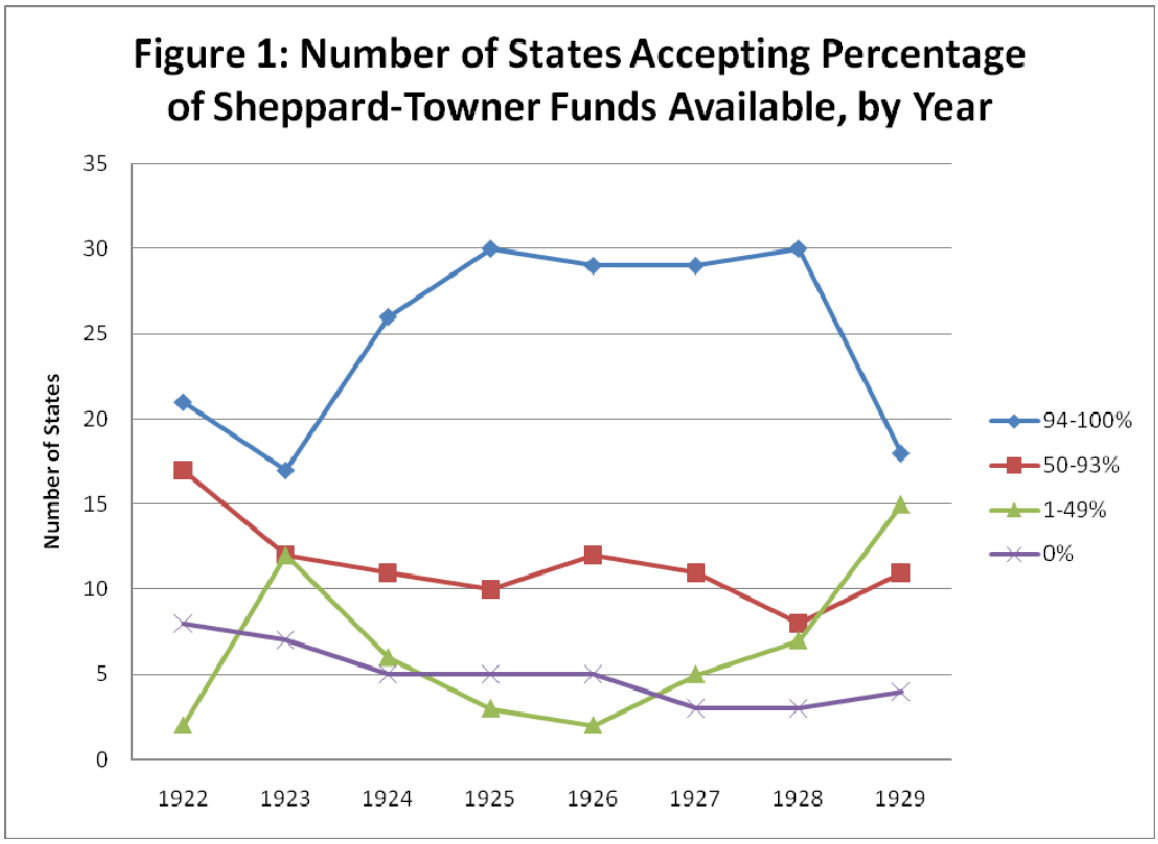
Figure 1: Number of States Accepting Percentage of Sheppard-Towner Funds Available, by Year
Number of States
35
30
25
20
15
10
5
0
1922
1923
1924
1925
1926
1927
1928
1929
94-100%
50-93%
1-49%
0%

Figure 2: Governmental Budget Constraint with a Closed-ended Matching Grant

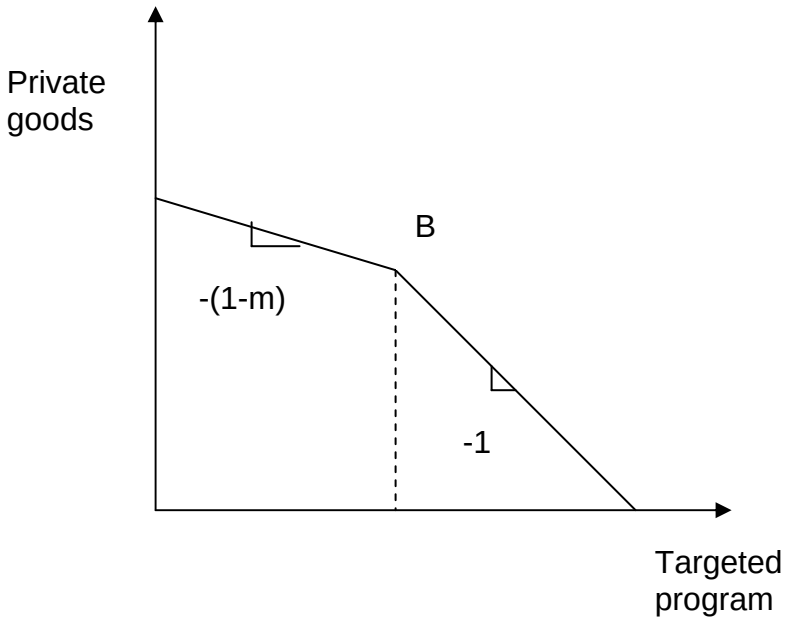

Figure 3: Cost Payments on Conservation of Child Life and Sheppard-Towner Grants, New Jersey 1915-1931

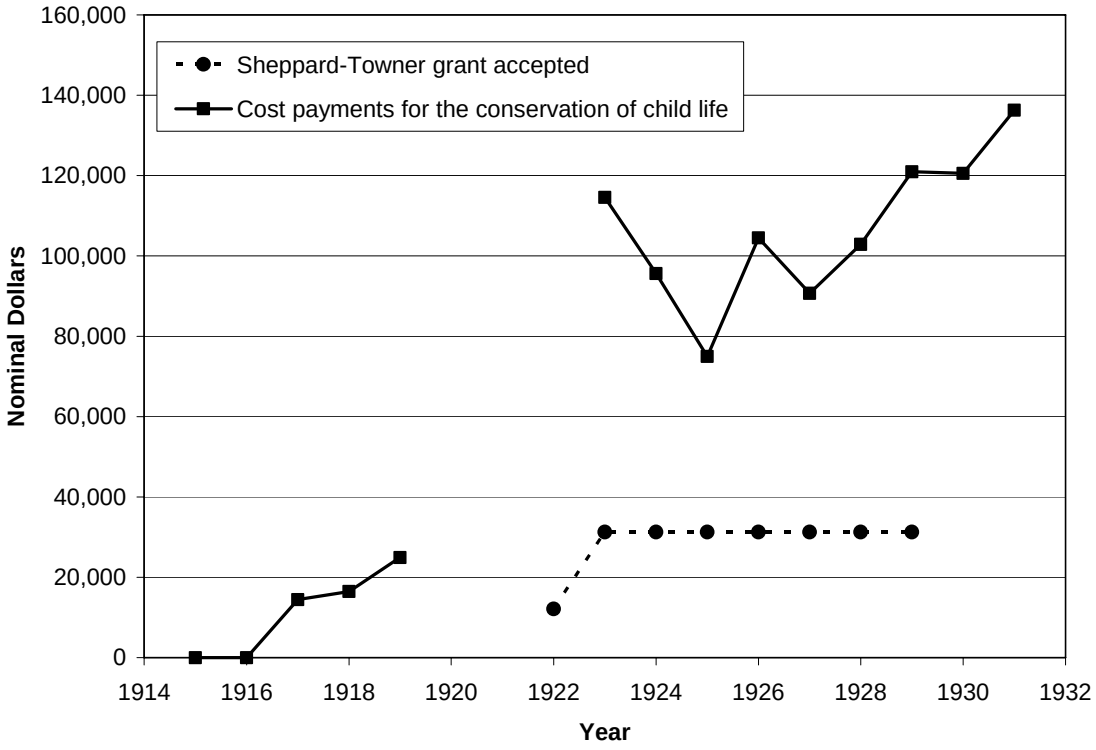

Figure 4: Cost Payments on Conservation of Child Life and Sheppard-Towner Grants, Nevada 1915-1931

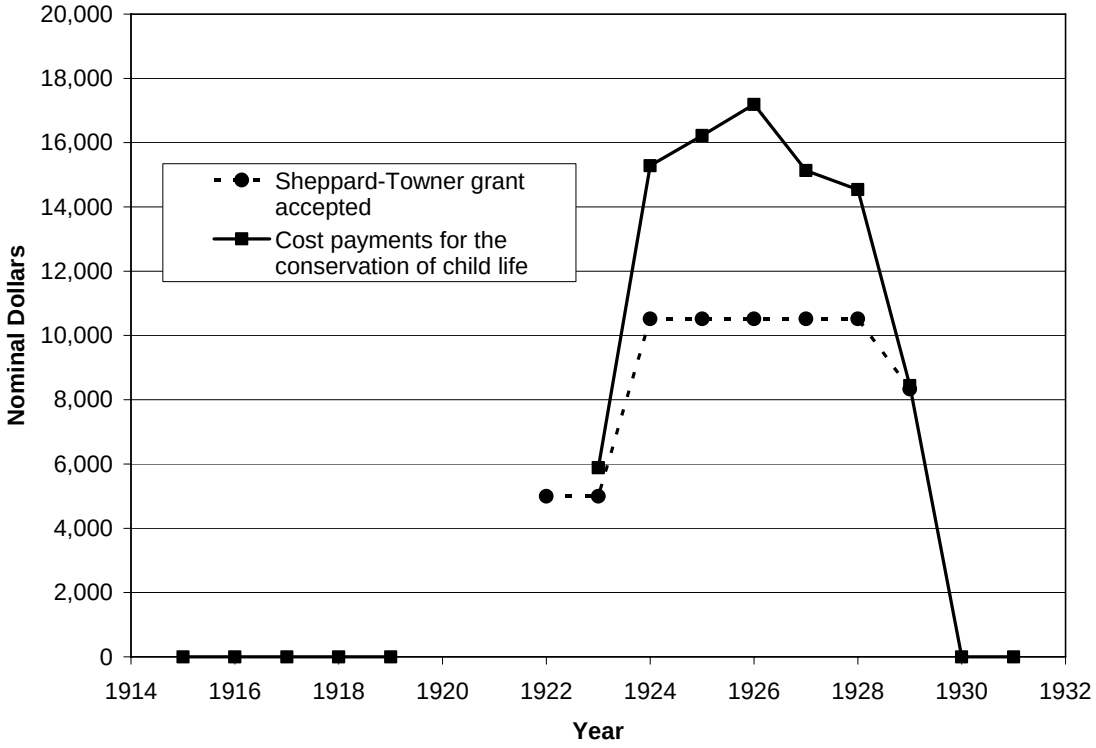

Table 1: Sheppard-Towner Participation, Women's Suffrage, and Prior Engagement in Child Health Programs

Panel A

	Child life exp. per capita, 1919 (cents)	Year suffrage granted to women	Year division of child hygiene established	Fraction of total Sheppard-Towner appropriation accepted 1922-1929
North Carolina	0.31	1920	1918	1.00
New Jersey	0.81	1920	1915	1.00
Pennsylvania	1.39	1920	1918	1.00
Alabama	0.02	1920	1920	1.00
Michigan	3.38	1918	1919	1.00
Minnesota	0.04	1919	1918	0.99
Iowa	0.75	1919	1922	0.99
New Hampshire	0.28	1920	1922	0.91
New York	0.18	1917	1914	0.79
California	0.14	1911	1919	0.67
Rhode Island	2.17	1917	1919	0.63
Louisiana	0.01	1920	1912	0.57
Ohio	0.08	1919	1915	0.42
Kansas	0.43	1912	1915	0.37
Massachusetts	0.03	1920	1915	0.00

Table 1: *continued.*

Panel B

	Child life exp. per capita, 1919 (cents)	Year suffrage granted to women	Year division of child hygiene established	Fraction of total Sheppard-Towner appropriation accepted 1922-1929
Delaware	0	1920	1921	1.00
Kentucky	0	1920	1919	1.00
Mississippi	0	1920	1920	1.00
Virginia	0	1920	1919	1.00
South Carolina	0	1920	1919	1.00
New Mexico	0	1920	1919	1.00
Montana	0	1914	1917	0.99
Maryland	0	1920	1922	0.97
Florida	0	1920	1918	0.92
Tennessee	0	1919	1922	0.91
Nevada	0	1914	1922	0.90
Wisconsin	0	1919	1919	0.88
Texas	0	1918	1919	0.88
Oklahoma	0	1918	1922	0.85
Indiana	0	1919	1919	0.84
Utah	0	1870	1919	0.82
Oregon	0	1912	1922	0.80
Georgia	0	1920	1919	0.79
West Virginia	0	1920	1919	0.74
South Dakota	0	1918	1921	0.72
Arizona	0	1912	1919	0.71
Wyoming	0	1869	1922	0.65
Missouri	0	1919	1919	0.64
Arkansas	0	1917	1919	0.64
Nebraska	0	1917	1921	0.61
Colorado	0	1893	1919	0.58
Idaho	0	1896	1919	0.57
North Dakota	0	1917	1922	0.48
Washington	0	1910	1920	0.42
Maine	0	1919	1920	0.31
Vermont	0	1920	.	0.28
Connecticut	0	1920	1919	0.12
Illinois	0	1913	1917	0.00

Source: Constructed from Rude (1920) and White House Conference on Child Health and Protection, (1932, pp.280-281).

Table 2: Descriptive Statistics for Variables Used in Participation Models, 1922-1929

Variable	Mean (Std. Dev)	Minimum	Maximum
Federal money accepted	16751.230	0.000	80041.780
	(14444.130)		
Maximum federal grant	22936.200	5174.630	80041.780
	(14210.340)		
Percentage of maximum grant accepted	0.734	0.000	1.000
	(0.343)		
Suffrage 1917-1919	0.354	0.000	1.000
	(0.479)		
Suffrage in 1920	0.396	0.000	1.000
	(0.490)		
Child Life Exp per cap, 1919 (cents)	0.209	0.000	3.384
	(0.607)		
Child Hygiene Div. before 1920	0.646	0.000	1.000
	(0.479)		
Percent AMA fellows	35.031	8.286	61.972
	(10.388)		
Physicians per 1000 population	1.213	0.723	1.943
	(0.254)		
Percent Catholic	14.805	0.000	49.732
	(12.053)		
State per capita income	611.772	267.000	1151.000
	(205.384)		
Percent Black	9.698	0.100	51.800
	(14.063)		
Percent Urban	44.323	14.100	96.480
	(20.368)		
Democratic Governor	0.458	0.000	1.000
	(0.499)		
Democratic Majority in State House	0.380	0.000	1.000
	(0.486)		
Democratic Majority in State Senate	0.385	0.000	1.000
	(0.487)		
Power Shift in one house of legislature	0.060	0.000	1.000
	(0.238)		
Power Shift in both houses of legislature	0.016	0.000	1.000
	(0.124)		

Notes: 384 observations.

Table 3: OLS Estimates for Percent of Maximum Grant Accepted by States

	(1)	(2)	(3)	(4)	(5)
Suffrage in 1920	0.632[a]	0.627[a]	0.618[a]		
	(0.1040)	(0.1070)	(0.1370)		
Suffrage 1917-1919	0.514[a]	0.544[a]	0.559[a]		
	(0.1120)	(0.1130)	(0.1410)		
Child Life Exp per cap, 1919	0.177[a]	0.161[a]			
	(0.0605)	(0.0561)			
Bureau of Child Hygiene			0.016		
before 1920			(0.0738)		
Percent AMA Fellows	0.00158	0.00332	-0.00022	-0.00362	-0.00378
	(0.0048)	(0.0051)	(0.0054)	(0.0036)	(0.0035)
Physicians per capita	-0.155	-0.176	-0.293[b]	-0.245	-0.256
	(0.1390)	(0.1360)	(0.1350)	(0.3890)	(0.3830)
Percent Catholic	-0.0140[a]	-0.0137[a]	-0.0134[a]	0.0294	0.0211
	(0.0029)	(0.0029)	(0.0037)	(0.0692)	(0.0683)
State per capita Income	0.000263	0.000235	0.000254	0.000665	0.000696
	(0.0003)	(0.0003)	(0.0004)	(0.0010)	(0.0011)
Democratic Governor	0.0927	0.0959	0.0707	-0.057	-0.0459
	(0.0638)	(0.0683)	(0.0692)	(0.0721)	(0.0719)
Democratic House	0.0504		0.0476		
	(0.0997)		(0.0944)		
Democratic Senate	0.116		0.0617		
	(0.0856)		(0.0894)		
Power Shift in one House		0.0331		-0.104[c]	
		(0.0785)		(0.0553)	
Power Shift in both Houses		-0.0538		-0.156	
		(0.1570)		(0.1540)	
Percent Black	-0.0027	-0.00061	-0.00178	-0.0513	-0.0494
	(0.0026)	(0.0029)	(0.0030)	(0.0422)	(0.0410)
Percent Urban	-0.00123	-0.0013	0.00125	0.00176	-0.00256
	(0.0031)	(0.0031)	(0.0038)	(0.0174)	(0.0171)
South	-0.106	-0.00956	-0.1		
	(0.1060)	(0.1130)	(0.1180)		
West	0.484[a]	0.492[a]	0.473[a]		
	(0.1060)	(0.1050)	(0.1330)		
Constant	0.378	0.387	0.514[c]		
	(0.2500)	(0.2540)	(0.2920)		
Observations	384	384	384		
R-squared	0.393	0.377	0.328		

Notes: Robust standard errors clustered on states. 384 observations. a: denotes statistical significance at 1% level. b: denotes statistical significance at 5% level. c: denotes statistical significance at 10% level.