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MOBILIZING THE MANPOWER OF MOTHERS:
CHILDCARE UNDER THE LANHAM ACT DURING WWII

Joseph P. Ferrie
Claudia Goldin
Claudia Olivetti

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Mobilizing the Manpower of Mothers: Childcare under the Lanham Act during WWII
Joseph P. Ferrie, Claudia Goldin, and Claudia Olivetti
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ABSTRACT

The Lanham Act was a federal infrastructure bill passed by Congress in 1940 and eventually used to fund programs for the preschool and school-aged children of working women during WWII. It remains, to this day, the only example in US history of an (almost) universal, largely federally-supported childcare program. We explore its role in enabling and increasing the labor supply of mothers during WWII. Our information is at the city or town level and includes war contracts, the size of and expenditures on the childcare program, and the “reserve labor force” of mothers as of 1939. We find that the programs became well-funded but were late to start, limited in scope, and incapable of greatly increasing women’s employment in the aggregate. They were more numerous in places that already had high participation rates of women suggesting that they were effective in caring for the children of women who had already entered the labor force. Their impact on the children as adults is still to be determined.

Joseph P. Ferrie
Department of Economics
Northwestern University
2001 Sheridan Road
Evanston, IL 60208-2600
and NBER
ferrie@northwestern.edu

Claudia Olivetti
Department of Economics
Dartmouth College
6106 Rockefeller Hall
Hanover, NH 03755
and NBER
claudia.olivetti@dartmouth.edu

Claudia Goldin
Department of Economics
229 Littauer
Harvard University
Cambridge MA 02138
and NBER
cgoldin@harvard.edu

America was still reeling from the Great Depression when German tanks rolled into Poland on September 1, 1939 and, in hindsight, made a second world war a *fait accompli*. Two days later, Britain and France declared war on Germany. The aerial bombing campaign over London—the “blitz”—began a year later. Orders for American goods by our allies were stepped up and the US military prepared for the inevitable. On December 17, 1940, President Roosevelt told a press conference that despite the US policy of neutrality, we must aid our allies by selling them needed arms and supplies and letting them pay their bills when they could. “Lend-Lease” would pass Congress three months later.

When President Roosevelt delivered his famous radio broadcast to the nation on December 29, 1940 imploring Americans to increase production so the US could become an “arsenal of democracy,” unemployment in the US was still around 13%. American workers were delighted to be called back to the factories, mills, and mines of the nation. The first military draft (actually the first peacetime draft in US history) was on October 16, 1940 and the second was on July 1, 1941. There was no apparent labor “shortage” yet in the US, as these were registrations, not mobilizations, let alone deployments. But unemployment rates soon plummeted as labor demand rose and as labor supply was reduced through mobilization. By August 1941 unemployment was just below 10%. By the third draft registration on February 16, 1942 it was 7.4% and by May 1942, it was under 5%.¹

Contracts to produce war-related goods of all types were issued by a range of US agencies to firms across the nation. A compilation of the almost 191,000 contracts completed from 1940 to 1945 shows that they peaked in number in June 1943, when there were almost 6,000, and that contracts exceeded 1,000 per month even as early as October 1940.² The US had asked firms to rev up production of every conceivable item to fight the war on land, sea, and air, and had done so in the briefest period with an ever-shrinking male labor force.

It was soon clear that the contracts firms had accepted with alacrity were going to be difficult to fulfill due to a lack of labor. Many of the firms were in the small textile towns that dotted the US South. Others were in the US heartland, which now housed manufacturing facilities strategically placed away from the vulnerable coastlines of North America. Still others were in the larger, well-known industrial centers of America like Detroit, Gary, Pittsburgh, and Toledo. And several large contracts were in the shipyards of California and Washington state. Labor had suddenly become the bottleneck.

¹ Official unemployment rates for the early 1940s include those on work relief and are from the BLS website, <https://www.bls.gov/opub/mlr/2018/images/data/haugen-figure1.stm>.

² Data are from US Civilian Production Administration (1946), as described in Brunet (2024, forthcoming). We term the dataset the “Brunet-Kousta WWII Contracts Data.”

We explore the role of the Lanham Act, which was used to fund nurseries and extended-hours programs for school children, in enabling and increasing the labor supply of mothers during the war. Our data are at the city or town level and include war contracts, expenditures on the childcare program, and the size of the “reserve labor force” of mothers relative to the deficit caused by the mobilization of men. We define the female reserve labor force as those women who were not in the labor force in 1939.

We find that the number of women who had no children younger than 12 years old and who were not in the labor force in 1939 was nearly identical to the number of men eventually mobilized for war in the cities and towns served by the Lanham childcare facilities. Employing the entire reserve labor force of women who did not have young children at home would, therefore, have provided almost the number of workers needed to replace those who were eventually mobilized (of course, not necessarily in terms of effective workers for production and not necessarily if the war lasted longer than it did).

The reserve labor force of the mothers of children who could eventually be served by the Lanham facilities (those 2 to 11 years old) was less than half the number of women (20 to 64 years) *without* young children and not in the labor force in 1939. In other words, the reserve labor force of all women *without* young children was 2.3 times the size of the reserve labor force of women *with* children in the ages eligible to receive subsidized services.³

Consistent with those facts, we find that towns with higher pre-war participation rates of the mothers of young children were *more* likely to receive Lanham-subsidized childcare services. That is, facilities were subsidized in towns and cities that already had a higher participation rate of mothers. The reasons are twofold.

The first is that facilities were not necessarily meant to entice women to enter the labor force.⁴ Rather, the facilities were needed to reduce the toll of the war on children and families and decrease the turnover rates of mothers. The second reason is that the rationale

³ Data are for the 547 cities and towns with Lanham sites and 1940 population data. The approximate mean number of men who would be mobilized per city was 9,684. This is computed as the product of the number of men aged 18-44 in the labor force in 1940 (at the city or town level) multiplied by the state mobilization rate for the same age group, where the latter is defined as men ever inducted or volunteered divided by the number of men ever registered. (These figures are computed from the August 1, 1945 Selective Service; see Goldin and Olivetti, 2013.) The mean number of women (20 to 64 years old) without children less than 12 years and not in the 1939 labor force was 9,321 per city. The mean number of mothers of children 2 to 11 years old not in the 1939 labor force was 3,974 per city.

⁴ The long hours of some wartime factories would probably have made the participation of previously-employed mothers more difficult.

for having subsidized childcare facilities was that working mothers would put their children in the centers. Had the facilities existed and were poorly utilized, wartime resources would have been ill-spent.

Note as well, that although some federally-subsidized childcare facilities were created during 1942, most opened in 1943 and 1944. By then, many mothers of young children had already entered the wartime labor force. War contracts, we will soon demonstrate, peaked in June 1943, before funding increased for the childcare facilities. Funds arrived late largely due to bickering in Congress concerning who would be in charge of the facilities and even whether the nation should encourage mothers of young children to be employed.

In sum, childcare facilities were an important means to protect the 2 to 11 year old children of employed mothers and to ensure that the “home-front” was less disrupted by the war. Although women with young children were not a critical part of the female reserve labor force in 1945, that may have been the case because the war ended that year. We know that fact with hindsight. But it was not known when these programs were first devised. Detailed planning and projections done in February 1942 by the Office of Community War Services demonstrate the possibility that women with young children could have been a necessary reserve labor force.⁵ That they were not is our good fortune, as well as theirs.

The Lanham Act and the Evolution of Wartime Childcare Programs

As production for the war increased and as the multitudes moved to small towns and already overcrowded cities, the need for infrastructure of all types—water, sewerage, schools, housing—grew in many parts of the nation. Added to these imbalances was the fact that public building had been slowed during the Depression, leaving many dilapidated public structures, including schools.

The National Defense Housing Act, popularly known as the Lanham Act after Representative Frederick “Fritz” Lanham (D-TX), its lead sponsor, was signed into law in 1940.⁶ In June 1941, Congress passed Title II (“Defense Public Works”), which amended the Lanham Act. The amendment allowing federal funds to be used for the operation and maintenance of facilities in areas impacted by production for the war as the original act had

⁵ NARA, RG 215, Records of the Office of Community War Services Day Care Division, Entry 46, Box 2, Folder “Day Care Under Community Facilities Act.”

⁶ The Lanham Act (Public Law 849, 76th Congress, passed October 14, 1940) set up a War Housing Program under the jurisdiction of the Federal Works Administrator. Executive Order 9070 on February 24, 1942 shifted that responsibility to the National Housing Agency. According to Stoltzfus (2000) the Federal Works Agency (FWA), which was the parent agency of the Works Progress Administration, controlled the funds from the act starting in 1941.

only allowed for their construction. Title II would soon open the door for the FWA to use Lanham funds for childcare.

Our interest in the act concerns the education portion that became important in fall 1943 when the Federal Works Agency (FWA) was able, in a complicated and poorly understood manner to tap into its funds. Fascination with the Lanham Act has increased with time because it remains, to this day, the only example in US history of an (almost) universal, largely federally-supported childcare program.⁷

Funding Wartime Childcare Programs

The nursery schools (care for preschool children) and extended-hours school programs (also termed programs for school-age children) to be funded by the Lanham Act were announced on August 31, 1942. In October, a nursery school operated by New Haven (CT) Teachers College became the first program of its kind to receive those funds.⁸ Starting around January 1943, many more cities and communities across the US began applying to the FWA for grants.⁹

National conferences had been held earlier on the various ways states and localities could facilitate the care of the children of working mothers.¹⁰ Communities across America had already been funding programs to aid working mothers so that young children would not be left alone after (or before) school and so that 2-to-5 year old preschool children would be cared for during the day. There was discussion of care for infants, but it was agreed by most that they would not be part of the federal childcare program.

Also of importance is that these schools followed on the heels of the WPA nurseries of the Great Depression.¹¹ Those nurseries were set up for the young children of unemployed and poor parents who were on work relief. The goals of that program were to ensure that the nation's pre-school children were nourished, healthy, and mentally sound as we went through a devastating period of economic depression.

⁷ On the details of the act, see Farrar (1945) and for a summary of federal support of childcare in general, see Cohen (1996).

⁸ No author (1942).

⁹ Records in the form of index cards (see US NARA, Record Group 171) give approval dates for childcare funding from the Lanham Act and show that most began in early 1943, although a few were dated 1942.

¹⁰ Regional Day Care Committee (1943) is a compilation of various ways the program was formulated and announced to the states, as well as the advice given to states. The funds were approved to be used for educational purposes around October 1942. Best practices for the nurseries were suggested in US Department of Labor, Children's Bureau (1942).

¹¹ See US National Advisory Committee on WPA Nursery Schools (1940).

The WPA nurseries decreased in number as the economy returned to normal. Their funding ended in December 1942. But many WPA nurseries that operated in cities and towns with war contracts were repurposed as nurseries for working mothers before WPA funding ran out.¹² In fact on July 2, 1942, Congress passed the Emergency Relief Appropriation Act for FY 1943 that allocated “not less than \$6 million ... for the operation of day nurseries ... for the children of employed mothers.” The President added \$400K from his emergency fund to encourage states to help cities and towns apply for funds. Around the same time, the FWA used an interpretation of an amendment to the Lanham Act to tap into its funds to expand childcare beyond repurposing the WPA facilities.¹³

The goals of the Lanham Act childcare program were different from those of the WPA. Lanham Act childcare was to help America’s mothers take jobs in an economy of labor shortage. The schools would replace a mother’s time rather than providing what she could not. She would be working, not unemployed.

Funds were allocated by the FWA for childcare through the use of the 1941 amendment to the Lanham Act, known as Title II “Defense Public Works” (Title I was “Defense Housing”) mentioned above. The provision gave authority to the President to allocate funds to the FWA in cases of national defense emergencies.¹⁴

In August 1942, the FWA, in consultation with the House Committee on Public Buildings and Grounds, interpreted the language of Title II to allow funds authorized under the Lanham Act to be used for the operation of WPA childcare facilities.¹⁵ To guard against continued use of such funds, the committee stipulated that the interpretation was valid only until the end of the war.

Despite the use of Title II, Congress and the administration wrestled for some time regarding how to redeploy the Lanham Act funds for childcare and which agencies would be in charge.¹⁶ For example, a proposed amendment to the Lanham Act (known as the

¹² Testimony by Charles Phelps Taft of the Federal Security Agency in May 1943 noted that many WPA nurseries could be redeployed as Lanham nurseries and that, he believed, around 400 were in war-impacted cities (US Senate 1943a, p. 12). We have found evidence of about 240 WPA nurseries that later became Lanham nurseries.

¹³ See Damplo (1987, p. 11, 26) for a careful analysis of the early use of Lanham Act funds for childcare and also for federal funds use, through the US Maritime Commission, for the childcare program run by Kaiser, and for migratory farm workers, through the Farm Security Administration.

¹⁴ Title II states: “Whenever the President finds ... an acute shortage of public works ... the Federal Works Administrator is authorized ... to relieve such shortage” (Damplo 1987, p. 27).

¹⁵ US Department of Labor, Women’s Bureau (1953), p. 18.

¹⁶ The Lanham Act was somewhat of a political football since localities and states wanted more freedom from the DC bureaucracy, child advocates wanted oversight of the children’s facilities, and the FWA wanted to retain control of the funds.

Thomas Bill, S. 1130, “War-Area Child Care Act of 1943”), would have funded childcare through grants to states and local communities and transferred control of childcare funds to the US Office of Education and the Children’s Bureau. It was passed unanimously by the Senate in June 1943 (US Senate 1943a), but the House of Representatives never considered the bill (Strickland 1944) and it died in committee.

Public Law 150 passed by Congress July 15, 1943 and signed by President Roosevelt, increased the allocation from the Lanham Act to the FWA but prohibited the use of funds for childcare “if and when” S. 1130 passed Congress. S. 1130 never did. P.L. 150 appears from its wording to have put a ceiling on total future childcare expenditures at \$40 million. But subsequent Congressional testimony reported future expenditures well in excess of that number (see, for example, US House of Representatives 1945).

The various agencies that had vied for control of the Lanham Act childcare funds, including the FWA and the Federal Security Agency (FSA), met during the summer of 1943 to iron out their differences.¹⁷ An agreement was forged that divided responsibilities and enabled the childcare program to move forward. It was approved by President Roosevelt on August 13, 1943.¹⁸

The *Final Report of the War Public Services Programs*, issued July 1946, provides the post-war tally for Lanham Act childcare (and other program) expenditures. The FWA, according to that accounting, kept close to the \$40 million mark from FY 1944 onward (US Bureau of Community Facilities 1946). Federal outlays were just shy of \$20 million in FY 1944, decreased to \$14.0 million in FY 1945, and were a mere \$7.1 million in FY 1946. The anticipated numbers in Congressional testimony had been far greater.¹⁹

Local governments, parents, and other interested parties added to the funds available for childcare. Federal outlays were eventually around 65% of the total, although the original intent was that they would be 50%. None of the Lanham childcare funds, however, was for the construction of school buildings, which came out of the original Lanham Act intended for infrastructure.²⁰

¹⁷ The FSA was the precursor to the Department of Health, Education, and Welfare and thus would have had significant control of the childcare funds had S. 1130 passed.

¹⁸ US Department of Labor, Women’s Bureau (1953), p. 18, although US Bureau of Community Facilities (1946) gives August 12 as the date.

¹⁹ Many researchers (e.g., Herbst 2017) have accepted the provisional funding numbers by state in US House of Representatives (1945) for FY 1945 and FY 1946. Yet the final report of the FWA gives far lower amounts.

²⁰ It is possible that some of the nursery buildings were also funded that way, but there were several statements that the building of public schools took priority.

Requests by cities and municipalities to receive federal funding through the FWA had to be justified by demonstrating labor supply shortages in fulfilling government contracts and a potential supply of women who would work if their children were adequately cared for. The War Manpower Commission classified areas as having an “existing or impending critical labor shortage” and claimed that all places determined as such were participating in the program (US FWA 1944, p. 10).²¹ Some cities, such as New York City, could not prove there was a labor shortage. But other large cities could, including Chicago, Los Angeles, Philadelphia, San Francisco, and St. Louis.

Production of the machinery of war and goods for the armed forces was widely dispersed across the US, and labor deficits cropped up almost everywhere. But a disproportionate share of the funds, relative to population, went to small towns, often in the South and West.²² Of the 664 cities and towns that were initially approved for federal funds before the middle of 1943, or that ever received funds, 18% were in the Northeast, 21% were in the Pacific region, and 28% were in the South Atlantic or East South Central regions (see Table 1). In addition, conditional on receiving approval for a childcare center, those in the South (South Atlantic and East South Central), Mountain, and Pacific states received more money, given city population and the value of war contracts, than did cities in other regions (see Table 3).

Similar findings are observed in state-level data (see Appendix Table 1A), which cover all contracts and all Lanham sites. We find that the ratio of Lanham childcare expenditures (1943-46) to the total value of all wartime contracts (1940-45) was highest in the Southern, Mountain, and Pacific states. It was lowest in the states of the Northeast and Midwest. For example, South Carolina received 14 times as much Lanham childcare money as did Connecticut and Georgia received 18 times as much as did New Jersey, all relative to the dollar value firms in each state had in war contracts.

When cities and towns were approved for Lanham childcare funding by the FWA in the months before July 1943, an index card for each was typed containing the expected number of units to be funded (for nurseries and for extended-hours programs, separately) and the expected number of children in each of the two programs. The city or town and state were listed on the card, but not the precise site or address. Also included was the funding amount agreed upon by the federal government and the date the program had been

²¹ The report also noted that additional allotments were made in connection with military establishments. Some childcare units, we have found, were not in towns with war contracts but may have been in places with bases or training camps.

²² The November 1943 data show that somewhat more was allocated to the bottom 500 cities in population than to the top 50, which included almost all of the nation’s major industrial cities and shipping ports.

approved. The index cards are part of Record Group 171, Office of Civilian Defense, of the National Archives and Records Administration (NARA) and were accessed for this project.

Additional data on childcare sites were gathered from FWA data entered into the Congressional Record from US Senate hearings in 1943, providing the amounts the federal government allocated for cities and towns and the funds to be provided by the “sponsors,” which generally meant parents, local (rarely state) governments, and other institutions. A tentative accounting was done for May 1943. Another gave the amounts approved by the President in November 1943 (see US Senate 1943a, 1943b). Subsequent lists of outlays were aggregated by state.²³ We have not yet found a full list of programs by cities and towns after 1943, other than that provided by the California Legislature and in the FWA final report of Lanham childcare units existing after federal funding had ended.²⁴

Expenditure per Child on the Programs

In evaluating the role of the childcare centers and extended-hours programs, it is useful to understand the financial resources allocated per child in average daily attendance in each of the programs. We will show that the preschool-age or nursery program was exceptionally well funded even by recent standards relative to per capita income. We can do this because we have multiple types of information that allow us to separate the amount provided to preschool children from the amount that went into the extended-hours program.

The initial FWA cards listed the approved federal outlays as of July 1943 and the approximate numbers of children in each program. Because the financial allocation for the two programs was combined, we have used the information from the FWA cards to estimate the per child federal outlays by program. We also have direct evidence from cost studies that were done of several sites in 1944 and 1945.

The cards do not contain everything we need, but other data sources supplement them. The cards contain the approved federal outlays but not the total amount, since localities and parents (the “sponsors”) also contributed. Information for 1943 shows that federal outlays were around 55% of total expenditures, although that increased to around 65% in later years. Another issue is that the approved outlays by July 1943 were not always the eventual allocations.

²³ US House of Representatives (1945), for example, contains outlays by state but not by city. Note, however, that appropriations do not appear to have been made at the levels given. FWA Annual Reports and its final report (US Bureau of Community Facilities 1946) show much lower final levels.

²⁴ See California Legislature (1947) and US Bureau of Community Facilities (1946).

The main assumption of the estimation is that the funds were for items usually considered to be variable costs (e.g., teachers, cooks, materials, utilities), but not for those we usually consider part of fixed costs (e.g., buildings). That was almost always the case since Lanham Act funds were separated into those for services and those for infrastructure. In consequence, each regression in Table 2 contains no constant term. The estimation gives an amount per child for the nurseries (preschool-age children) and a different amount per child for the extended-hours program (school-age children).

Of the original 438 cities and towns listed on the National Archives FWA cards, only 34 were not funded or did not receive funding by November 1943. However, 151 additional sites were later funded (US Senate 1943a, 1943b). For example, only eight cards were found for places in New Jersey, but 26 were funded by November 1943. In addition, another 75 sites were recorded in a document written after the program was defunded. They were probably added in 1944 or 1945 (California Legislature 1947).²⁵

We do not have the numbers of children for the 226 sites that were added after the cards were created but we have the total number of children actually enrolled and in average daily attendance for each of the two programs, by month, from August 1943 to February 1946 from the final report of the FWA.²⁶ We use data from the cards and from the cost studies to obtain the per child cost for the nursery relative to the school-age program. We then use total appropriations and expenditures for the full period, as well as the number of children in average daily attendance across the full period, to obtain average annual allocations per child. We can compare that to the cost study estimates that were done for select cities.

The per child federal allocation as of July 1943, as seen in Table 2, row (1), was about \$113.5 for each nursery school child and \$23.8 for each extended-hours child (all in 1943 dollars). Allocations varied by region (as seen in rows 2 to 7) with higher amounts allocated per nursery child in the Northeast and far lower amounts in the more rural parts of the nation. Differences by region for the extended-hours programs may have to do with differential subsidies from public school districts.

The estimated ratio of the preschool to school-age program federal allocation is 4.77. But the ratio would be lower if other funds went equally to each rather than

²⁵ The 75 cities were drawn from the lists in California Legislature (1947) of facilities that had received federal appropriations and were still in operation after allocations ended. Some of the cities (e.g., Philadelphia) are in our companion sample of facility addresses found in newspapers. Those lists, we have discovered, were based on data in US Bureau of Community Facilities (1946).

²⁶ The exact table of data is also in California Legislature (1947, table 44a, p. 286) from US Bureau of Community Facilities (1946, table 6, p. 80). The latter source is the final report of the War Public Services Program, FWA.

proportionally, and it is likely that local funds went disproportionately to the school-age programs. Furthermore, the parental charge was often the same for each program. We will use an estimate for the ratio of 2.5 to compute expenditures per child for the nursery and school-age programs and explore sensitivity to that estimate.²⁷ The higher the ratio, the greater the estimated amount spent on the preschool-age program.

As we noted, federal appropriations for the Lanham childcare projects increased in mid-1943 and the number of children served was never as large as was expected, as indicated by the cards. We use information on the actual numbers served (in average daily attendance) from August 1943 to February 1946 and total appropriations and expenditures during the full period to produce ball-park estimates of the amounts that were spent per pupil on each program.

Total federal outlays from August 1943 to May 1946 on the two programs were \$51.923 million and total expenditures (including that from localities, parents, and others) were \$77.931 million. There were 37,773 preschool children in average daily attendance per month and 26,058 school-age children, from August 1943 to February 1946.²⁸

Using total outlays and child numbers for the full period from August 1943 to February 1946 and assuming that each preschool child cost 2.5 what each school-age child did, we estimate that \$627 was spent on each preschool child and \$251 on each school-age child.²⁹ These back-of-the-envelope calculations are similar to those from cost studies in the final report of the FWA. For example, the operating cost of childcare in a nursery for 22 days per month and 11 hours per day across five Montgomery County, MD cities was \$45.70 or \$548.40 per year.³⁰ The operating cost across California during 1944-45 was \$610 for preschool centers and \$325 for extended day care, all using average attendance.

If these numbers accurately reflect the per child expenditures on the nursery program—and they likely do—the total amount spent would have been around 24% of

²⁷ Cost estimates for Dallas, TX give a ratio of 1.87; those for California give 1.88 (US Bureau of Community Facilities 1946, tables 8 and 10).

²⁸ Outlays are from US Bureau of Community Facilities (1946), pp. 78-9, table 5 and children in average daily attendance are from p. 80, table 6 (identical to California Legislature 1947, p. 286).

²⁹ We get \$585 and \$311 if we use the ratio of 1.88 from the California cost study.

³⁰ The period of the cost study in MD is not given but appears to have been for two months in 1944 and was prepared to determine the fee to parents. See US Bureau of Community Facilities (1946), table 5. Costs in MD may have been somewhat lower than in the non-South.

median family earnings in 1945.³¹ These were meant to be high-quality programs, and given the amount spent on each child, they probably were.

Part of the cost was paid for by the parents. When the programs were first proposed, it was assumed that parents would pay half the cost, but it was also maintained that their contribution would not exceed \$0.50 per day and in some cases of need would be far less. Appropriations for the programs increased but the maximum amount per child-day that parents were expected to pay did change until the very end of the war. Therefore, parents probably covered 20% of the full cost, the federal government about 65%, and local governments, firms, charities, and a few states covered the rest. School district funds by law in most states could not be used for the preschool-age programs, but could be used for the extended-hours school programs.

Impact of the Childcare Programs

The federal government, beginning in 1940, mounted a colorful and wide-ranging propaganda campaign to get women into factories, offices, and the armed services. Posters were aimed at a range of women from single daughters with watchful fathers, to recently-married women longing for their military husbands to return, to older women with proud husbands. But none of the thousands of posters we have viewed featured a woman with a young child. There are no posters with a proud school child whose mother was employed in a munitions factory.

Mothers with pre-school children were the most resistant to being employed and the nation, as well, resisted employing them.³² It would be an uphill battle on several fronts to move mothers of young children into the workforce. Nursery school programs would have to be high quality, for in the minds of Americans in 1941, federal nurseries were associated with the poorest of Americans in the worst of times.

And it wasn't just the mothers of pre-school children who were difficult to employ. Since school often started after the workday began and generally ended before mothers could be home, even women with school-aged children found employment challenging. Extended-hours programs for children six to eleven years old (ages depended on local circumstances) were also begun. These programs often cared for school children from 7am

³¹ Median income for families and individuals in 1945 was \$2,595 (US Bureau of the Census 1948). Childcare costs for 2-to-5 year olds vary widely, but 25% of median income is a common ball-park estimate for such care today.

³² Even in 1977, when the General Social Survey (GSS) asked whether respondents believed that a "pre-school child would suffer if the mother worked," the vast majority of Americans thought that the child would suffer. Even half of young women (20 to 34 years old) reported that belief.

to 7pm, and some had even longer hours depending on the demands of local war industries.

Yet, even before federal childcare supports were established, mothers of young children, especially those with husbands overseas or in military training camps, had ventured into factories and shipyards. Many were enticed by the ability to earn money and others to be part of the nation's war effort. Their children were taken care of by a host of caregivers, although some, it was reported, were ill-provided for (US Senate 1943a). Something had to be done.

In addition, there could be no missteps with the wartime nurseries, or else mothers and the greater public would be indifferent at best and hostile at worst. Personnel would have to be professionally trained. The programs would have to be engaging for the children, healthful, possibly educational, and the hours would have to be extensive. Most nurseries were open from 7am to 6pm and provided all meals.³³

The programs for both preschool children and school-age children were available year-round, on weekends, and during the summer months. In fact, average daily attendance was highest in the summer months when public schools were not in session (California Legislature 1947, table 44a).

Geographic Placement of Childcare Programs and Expenditures

According to the FWA administrator, the number of communities served increased to 685 by FY 1945 and was expected to rise to 723 by FY 1946 (US House of Representatives 1945, table 5B). As we previously noted, we have compiled a list of 664 towns and cities with federally-funded childcare programs (that includes 589 to November 1943 and the additional 75 that we know received Lanham funds after that date but have no appropriations data). We have appropriations data for 581 of the 589.³⁴

Because we have information on war contracts by city and town, we can explore demand factors that determined the location of the Lanham facilities. Lanham sites were areas of labor shortage, as identified by the War Manpower Commission. But communities

³³ Instructions came from the US Office of Education in the form of leaflets, such as "School Children and the War Series," Exhibit 10, Attachment 2 of Regional Day Care Committee (1943). See also the "Standards for Day Care of Children of Working Mothers" in US Department of Labor, Children's Bureau (1942), which was distilled from a 1941 Children's Bureau Conference of the same title. Note that the meals would have to be paid out of parental contributions or other sources since Lanham funds could not cover food.

³⁴ FWA city and town listings often included duplicates for cities with more than one contract. We believe that our list of 664 separate cities is close to the FY 1946 total.

had to request funds and some found the bureaucracy overly cumbersome.³⁵

Among the factors that could make a community more intent on getting Lanham funds and encourage the FWA to provide them were the ability of firms to easily employ women, the increased demand for their products, and the relative importance of the products in the local economy. Another would be the existence of large employers, such as Kaiser, that wanted to train and employ women in factories and shipyards. Although much has been written on those cases, they were more the exception than the rule.

To examine the factors that determined the sites and their funding, we add two other sources of information. One is the (probably) full list of the almost 191,000 war contracts by city and town containing product name, firm, value of the contract, and contract dates.³⁶ We have created 26 product categories mapped to the 1940 industry codes (see Appendix Table 2A), to obtain the fraction of the 1940 industry labor force that was female by product group. We also added demographic information from the 1940 census giving total population and the labor force participation of women with children of different ages by city.

The cities can be categorized as those that had a Lanham facility at some point (*Lanham*), those that had any war contracts (*contracts*), and those we can match to the 1940 full count micro-data census (*population*). Our Lanham-contracts-population regression sample has 2,922 cities, of which 489, according to our data, had Lanham facilities. We also have 581 Lanham cities with appropriations data, of which 452 also have contract and population data. These are our two regression samples in Table 3.

The first question we address is what determined the placement of the Lanham programs. We noted earlier that a back-of-the-envelope calculation shows that the employment of women who did not have children younger than 12 years could have substituted for the decrease in the male labor force during the war. That calculation does not take into account productivity differences or geographic dispersion. It does not consider the uncertainty regarding when the war would end. It does raise questions about why childcare facilities became an important component of wartime mobilization.

It is our sense that the importance was largely because mothers of young children were taking lucrative jobs, even if for brief periods, and that their children had to be cared for.³⁷ The publicity at the start of war production regarding children being left in cars or

³⁵ See Chafe (1972) on the difficulty accessing funds and why some cities did not apply.

³⁶ We thank Gillian Brunet for the Brunet-Kouostas WWII Contracts Data.

³⁷ Another possibility is that areas with high pre-war participation rates of all women, including mothers, needed an additional boost to attract yet more from the reserve labor force.

roaming the streets was counterproductive to the war effort. The fact that the government was not encouraging the employment of mothers in other ways, including the vast propaganda poster campaign, supports the notion that they were not targeted as a substantial reserve labor force. Yet, they may have been an important addition in certain places and in certain industries. And they may have become a more critical source of labor had the war not concluded in 1945.

We find, in Table 3, that the placement of facilities was a positive function of the total value of the contracts and of the 1940 city population (both in logs). That isn't surprising. Places that had larger contracts or were producing more valuable products for the defense industry had good reason to apply for funds and the FWA had good reason to favor those areas. What is somewhat surprising is that the participation rate of women, especially those with school-aged children (6 to 11 years), was *positively* related to the likelihood of getting approved for a facility.³⁸ A one standard deviation increase in the participation rate of these mothers increased the likelihood of getting a facility by 3 percentage points when the likelihood of getting a program was 0.167.

The results are robust to the inclusion of region dummies as well as a full set of dummies for a contract of any value in each of the 26 industry groups. Results are also robust to including the fraction female in each of the industry groups (although that is not shown in Table 3).

Given city population, the value of its war contracts, and the participation rate of its mothers, the Pacific and Mountain states as well as those of the East South Central region had a much higher probability of receiving a Lanham childcare program than did states in other regions.

In addition, the likelihood of a Lanham facility was higher when the town had a contract in one of the more male-intensive products, such as aircraft, motor vehicles, petroleum, and chemicals, which had critically-important defense contractors. But the largest coefficients, for the industry dummy variables, were those with service contracts, a highly diverse group in which many of the firms were universities and colleges, possibly in towns that were more skilled at getting government funding.³⁹

The main point of this analysis is that Lanham facilities were placed in towns and cities that already had higher rates of participation and employment of mothers, rather

³⁸ The participation rate of women by age of children is highly colinear and we cannot differentiate the role of the employment of women in general from those with young children. The R-squared is highest using the school-aged (6 to 11 year old) group.

³⁹ Many of these contracts were for training of some type.

than in places where the reserve labor force was larger. It was important to the FWA that the reserve labor force of mothers be movable. It was also imperative to have care for the children of mothers who were already employed and for those who would soon be working for defense contractors.

We also have information on the amount spent on the facilities through November 1943 by city. Whereas the location was dependent on the apparent desire of mothers to be employed, as given by the 1939 employment of mothers in a town or city, the amount spent on the facilities per town or city was more dependent on the population of the city, the total value of the contracts, and the region. Given the size of the place, the value of the contracts, and the type of product, funds were greatest in the states of the South Atlantic and Pacific. Funds were also greater in areas with contracts for textiles, possibly because there were more children per member of the population to serve in those towns.

Summary: The Lanham Act's Role in Mobilizing Mothers

Childcare facilities were important during the war in many towns and cities to keep children safe and to avoid having front-page stories of child neglect that might endanger the defense program. But the programs never achieved the enrollment levels they were intended to reach during the planning phase in mid-1942 to spring 1943. That fact is easy to demonstrate.

When the FWA first began to review community programs in 1943, 446 cities and towns were approved to have childcare facilities and federal funds were provisionally allocated to support them. Another group of 143 cities had applications "pending" with no funding listed. For those with funding, the number of planned nursery units and children to be served was also listed for each city. Similar data exist for the extended-hours school-age child program. Those are the data we previously used to calculate spending per child.

The number of preschool children, 2-to-5 years old, intended to be cared for in the 436 cities that included such information on the index cards created prior to July 1943, was 73,363.⁴⁰ The number of school-age children planned for by the 269 cities that requested funds for the extended-hours programs was 107,529.

For most months from 1943 to 1945, the number of children served by the program was far below anticipated enrollment. The average monthly enrollment in 1944 for the preschool group was 52,330, or 71% of the planned number for just 436 cities of the eventual number of about 630. In fact, total enrollment of preschool children hit 73,660 in

⁴⁰ Although we have data for 446 cities, ten were approved for the extended hours program but not the nursery school.

May 1945—its maximum—when the number of cities served by these programs exceeded 600. The number of school-age children hit 76,917, its maximum, in August 1944.⁴¹

It should be no surprise, therefore, that the number of mothers whose mobilization was facilitated by the childcare facilities was never substantial in the nation as a whole or even in the towns and cities that participated. The findings from surveys by the Women's Bureau, mainly from spring to fall 1944, of employed women in ten major war production cities reinforce our conclusions.⁴²

The ten cities were among the most important centers of US war production as proxied by the sum of the value of all war contracts. Of the ten cities in the study, three are in the top ten by value and five in the top thirty among the more than 2,500 cities whose firms had war contracts that summed to at least \$500,000.

The Women's Bureau surveys found that among employed women with children younger than 14 years old, on average 5% stated that any of their children was cared for in a nursery school. About half reported that another relative, including an older child, looked after their children. Another group noted that they shared the care with their husband, who did a different production shift or that no care was needed.

The child age range covered by the survey—younger than 14 years—is much broader than for the preschool group. Under the assumption that the 2-to-5-year old group was 0.364 of those younger than 14 years, only about 14% of preschool children of working mothers across the ten cities would have been in a nursery school, most likely one supported by Lanham funds.⁴³ Data on the number of Lanham daycare facilities funded in the ten cities show that most of the cities, excluding Mobile and Seattle, did not have sufficient daycare facilities to serve even a minute fraction of the young children of working women.

We cannot say that the program was unimportant for defense production nor can we say that it would not have been important had the war dragged on. We can say that the

⁴¹ Enrollment numbers by month and the maximum number of projects are from California Legislature (1947, table 44a, p. 286).

⁴² US Department of Labor, Women's Bureau (1946), p. 56. The cities surveyed were Mobile AL, San Francisco CA, Wichita KS, Baltimore MD, Springfield, MA, Detroit MI, Buffalo NY, Dayton OH, Seattle WA, and Kenosha WI. All but Kenosha had Lanham supported childcare programs.

⁴³ We assume a uniform distribution from ages 2 to 13 and that no mother with children younger than two was employed, which biases our calculation upward. Note that Kenosha was the only non-Lanham city among the ten and that no mother surveyed in that city claimed to have used a nursery school. About 60% of working women with children younger than 14 years had only one child across the ten cities. It is not clear how the Women's Bureau aggregated the care variable for those with more than one child or more than one type of care.

program wasn't very significant in terms of actual numbers.⁴⁴

In pursuit of its importance, we computed the number of mothers of 2-to-5 year olds who would have been employed had they been able to place a child in one of the nurseries. We use the 1939 complete count census for which we know the number of women not in the labor force (a reserve labor force) who had at least one child in this age group. We also know the total number of preschool children these mothers had and we can compare that with the number of potential slots in these nurseries.

We make several assumptions that upwardly bias the calculation of the number of mothers enabled to be employed. One is that all women employed in 1939 remain employed and do not use any childcare slots. Another is that any mother of a 2-to-5 year old with one or more 6-to-11 year old children also received extended hours slots for the older child. Not surprisingly, only a handful of the Lanham cities had more than enough slots given on the 1943 NARA cards to accommodate all mothers of 2-to-5 year olds not in the 1939 labor force. Yet another is that we do not consider the increase in births that followed the military deferments for marriage and then for fatherhood.⁴⁵

The calculation can be simplified, with little loss in precision, to dividing the number of nursery slots by the number of 2-to-5 year olds each mother (among those not in the labor force in 1939) had on average. That number was 1.24 for the Lanham cities enumerated on the cards for which there were 73,363 proposed nursery slots.⁴⁶ Therefore, the increased employment of mothers in those cities would have been 59,164. The average increase in their labor force participation per city would have been 16 percentage points. The increase was far greater in the smaller towns than in the large cities. The average across all the cities is just 0.0464 percentage points. Prior to the war, the labor force participation rate of the mothers of preschoolers for all sample cities was around 15%. Even an upper bound increase was small.

Although the programs could not have greatly increased the labor force participation of mothers across the entire US, considerable heterogeneity existed by state and by war contract. As we previously noted, mothers of preschoolers in the South and the

⁴⁴ A qualification is that we use aggregates and not whether a particular woman was ever affected. There was considerable flux in the child population. Therefore, the total number of mothers and of children who ever entered one of the facilities will be higher than the peak numbers.

⁴⁵ The number of births per 1000 population increased from 19.4 in 1940 to 22.2 in 1942 and 22.7 in 1943. It then decreased and resumed its climb in 1946 (US Bureau of the Census 1969).

⁴⁶ The calculation is actually for the 408 cities we can match to the US census to get the number of mothers with children 2-to-5 years old although the number of slots is for the 436 cities. The mean is 1.24, as is the median, and the standard deviation is just 0.049. Although we could get more precision by using the number for each of the cities and towns, there would be little difference.

Pacific states would have had the largest increases. But there are places, mainly the textile towns of the South, for which our calculations of mothers' labor force participation rates would have exceeded one. Most of these towns received large numbers of workers and families who migrated for employment, often from the surrounding rural areas and thus our denominator from 1939 will be too low. Of the 30 towns with an estimated increase in the participation of mothers of preschoolers that exceeded 50 percentage points, only four, including New York Mills NY, were not in a Southern or Pacific state.

We have discussed the fact that the childcare programs funded by the Lanham Act came into being by fits and starts, were not universally supported in Congress, and became a political football more generally. Our estimates show that, on a per child (average daily attendance) basis, they were eventually well funded. We also show that they were limited in number and could have had only a small impact on the aggregate employment of mothers. But the nursery schools could still have had large and positive effects on the children later in their lives. That is a topic we will soon be able to explore in depth.

We would be remiss if we didn't mention what happened to the Lanham facilities after World War II. Federal funding of the childcare facilities was predicated on wartime necessity. But because even after the Potsdam Agreement and VJ Day some of our military remained away from home, the funding of Lanham projects continued for a brief time. It eventually ended on February 29, 1946.

The units had important demonstration effects, and families and firms in various parts of the nation lobbied to keep the preschools and nurseries open. Despite the urging, California was the only state to continue to fund preschools after World War II through its public school system. In Cleveland (OH), for which the funding was not through the public school system, a lower court ruled that because the childcare centers did not "render any service of charity ... [they] are unlawful and constitute an attempt to *supply public funds for a private purpose* in competition with private enterprise."⁴⁷ The Lanham Act remains the only federally funded and (almost) universal preschool program in US history.⁴⁸

⁴⁷ *Ferrie v. Sweeney et al.* (1946).

⁴⁸ It lacks universality because the women had to be employed. In addition, Black children in many states were in separate units.

Table 1: Regional Distribution of Lanham Cities and Towns, c. 1943

Region	Cities/ Towns in Region	Percent by Region
New England	49	7.4
Middle Atlantic	73	11.0
South Atlantic	120	18.1
East South Central	64	9.6
West South Central	41	6.2
East North Central	98	14.8
West North Central	38	5.7
Mountain	41	6.2
Pacific	140	21.1
Total	664	100.1

Sources: California Legislature (1947); NARA Record Group 171 FWA cards; US Senate (1943a, 1943b).

Notes: The FWA cards from the National Archives include data on 448 sites (cities or towns) that requested funds from the federal government by mid-1943. Data from US Senate (1943a, 1943b) give information on further sites that received federal funding by 1943 (321 were approved by the President as of May 31, 1943 and 551 were approved by the President for allocations in November 1943). The 1947 report by the California state legislature contains information on Lanham sites in operation just before and after federal funding ended. There were 75 additional sites but without appropriations data. The data in this table are the union of all four lists. Some of the sites on the FWA cards were not in the US Senate data giving actual funding as of November 1943 but may have received funding later. Note, as well, that the US Senate (1943b) listed projects by city and was a count of projects, for which there may have been two or more for a particular city, whereas this is a count of cities. Therefore, the numbers of projects and cities will differ.

Table 2: Federal Expenditures on Lanham Preschool and School-Age Child Programs, 1943

		Children 2 to 5 years (s.e.)	Children 6 to 11 years (s.e.)	Number of Observations (Cities)	R ² (adj)
(1)	All regions to July 1943 (federal only) ^a	113.5 (2.52)	23.8 (1.05)	438	0.904
	By region (federal only):				
(2)	New England & Mid-Atlantic	185.1 (11.4)	29.0 (1.47)	75	0.961
(3)	South Atlantic	118.3 (5.23)	11.8 (2.21)	74	0.931
(4)	East & West South Central	91.0 (5.65)	31.9 (4.24)	90	0.876
(5)	East & West North Central	116.0 (4.23)	21.3 (1.84)	95	0.938
(6)	Mountain	71.1 (7.93)	78.6 (4.78)	23	0.977
(7)	Pacific	121.6 (4.82)	15.1 (2.64)	81	0.913

^a Only two cards had approval dates after July 3, 1943.

Sources: US National Archives and Records Administration (1942, 1943).

Notes: Each row is a separate regression. The dependent variable for each row is the federal cost of both programs. The dependent variables are, the number of preschool children (“Children 2 to 5 years”) and the number of school-age children (“Children 6 to 11 years”). See text for interpretation. All regressions are estimated by OLS with no constant term.

Table 3: Correlates of Lanham Preschool and School-Age Childcare Programs

	(1) Lanham Program in a City/ Town = 1	(2) Log(Program Cost per City/ Town)
Log (city population, 20-64 years old)	0.0838*** (13.07)	0.292*** (5.22)
Log (Value, in thousands \$, of war contracts)	0.00947* (2.37)	0.118*** (4.23)
FLFPR of mothers with 6 to 11 year olds	0.244*** (4.00)	-0.572 (-1.06)
Regions:		
Mid-Atlantic	-0.0776* (-2.48)	0.261 (1.35)
South Atlantic	0.0418 (1.22)	1.003*** (4.86)
East South Central	0.0870* (2.32)	0.883*** (4.13)
West South Central	-0.0597 (-1.57)	0.664** (2.80)
East North Central	-0.0350 (-1.11)	0.469* (2.56)
West North Central	-0.00466 (-0.13)	0.136 (0.61)
Mountain	0.0993* (2.16)	0.750** (2.88)
Pacific	0.192*** (5.20)	1.089*** (5.54)
Industries (selected):		
Motor vehicles	0.0449* (2.28)	0.0631 (0.53)
Services	0.0764*** (4.92)	-0.144 (-1.47)
Textiles	-0.00747 (-0.44)	0.314** (2.98)
Constant	-0.694*** (-11.99)	5.867*** (11.12)
Mean of dependent variable	0.167	10.434
Number of observations	2,922	452
R ² (adjusted)	0.323	0.446

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

Sources: See text.

Notes: An observation is a city or town that had a war contract. Col. (1) is a linear probability estimation of whether the town or city ever had a Lanham program, either a preschool or school age facility, from 1943 to 1946. Col (2) is an OLS regression on the $\log(\text{total expenditure on the Lanham programs})$ in the 452 cities for which we have expenditure data (federal plus “sponsor”) mainly for FY 1944. Value is in thousands (000). FLFPR = female labor force participation rate of mothers of 6 to 11 year old children, as given in the 1940 full-count census microdata. A full set of 26 industry dummies was included and the information for three are given. The omitted region is New England.

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Appendix Table 1A: Lanham Expenditures on Nurseries and Extended-Hours Programs, 1942 to 1946, and Federal Expenditures on War Contracts (000), 1940 to 1946: by State

State	(1) Sum of Contract Value (000) 1940-1945	(2) Total Lanham Expenditures 1942-1946	(3) Lanham Exp/ Sum Contracts (000) = (2)/(1)
ME	1,218,708	79,367	0.065
NJ	12,520,158	1,366,790	0.109
PA	12,837,193	1,473,097	0.115
CT	7,721,761	994,618	0.129
IN	8,943,311	1,210,681	0.135
WI	4,597,222	651,846	0.142
KS	2,554,539	371,746	0.146
WV	712,922	132,661	0.186
NY	21,599,437	4,305,717	0.199
MA	6,870,944	1,586,989	0.231
IL	11,980,292	2,927,968	0.244
MI	17,341,370	4,654,583	0.268
OH	15,634,953	4,396,470	0.281
RI	1,191,396	347,814	0.292
TX	5,994,994	2,042,244	0.341
NH	403,281	138,942	0.345
MD	4,670,581	1,692,212	0.362
IA	1,086,965	497,915	0.458
OK	1,454,666	695,884	0.478
MN	1,661,032	797,797	0.480
MO	3,462,810	1,740,850	0.503
VT	210,334	111,121	0.528
LA	1,368,291	870,516	0.636
DE	431,922	286,293	0.663
NE	836,438	676,170	0.808
VA	1,401,499	1,164,185	0.831
KY	601,426	500,098	0.832
OR	1,835,659	1,553,454	0.846
DC	831,542	709,869	0.854
AL	1,488,766	1,288,319	0.865
MS	469,665	444,070	0.946
AR	198,427	192,011	0.968
NC	1,395,507	1,526,108	1.094
WY	82,677	98,009	1.185

TN	1,213,995	1,452,291	1.196
WA	3,837,465	4,684,712	1.221
CA	16,730,059	20,975,794	1.254
CO	375,505	513,709	1.368
NV	34,302	51,247	1.494
SC	617,415	1,137,067	1.842
GA	1,413,106	2,783,028	1.969
ID	19,580	47,292	2.415
FL	822,188	2,320,112	2.822
MT	28,165	140,508	4.989
ND	7,615	44,544	5.850
AZ	133,091	821,180	6.170
UT	114,561	965,150	8.425
SD	4,835	44,772	9.260
All States	\$180,992,570	\$77,507,820	0.428

Sources: Col. (1) Contract Value from Brunet-Koustas WWII Contracts Data; see Brunet (2024, forthcoming); col. (2) Lanham total (federal and sponsor) expenditures by state, US Bureau of Community Facilities (1946).

Notes: New Mexico is omitted because no cities or towns in the state received Lanham nursery or extended-hours funds. Totals do not include separate funds for school buildings. Expenditures for childcare under the Lanham Act are those given in the Final Report of the FWA, summed in current dollars, and likely exclude an initial \$6.4 million given to continue the WPA nurseries by the FWA and the President.

Appendix Table 2A: Industry Aggregates for War Defense Contracts in the Regression Sample of Towns and Cities

Product Aggregates	Mean contract value per city (\$000)	Fraction of cities having any contract for the product
Agricultural products	578	0.042
Aircraft	15425	0.126
Ammunition	2638	0.179
Apparel	814	0.267
Bombs	2223	0.229
Chemicals	1056	0.186
Electrical	4048	0.181
Food	15	0.025
Glass	190	0.057
Leather	273	0.069
Machinery	4854	0.300
Manufactured products	3031	0.317
Marine (e.g., boats, ships)	6434	0.171
Materials	240	0.146
Medical supplies	181	0.067
Metals	1424	0.278
Motor vehicles	4784	0.162
Paper, printing, packaging, etc.	334	0.189
Petroleum and coal	1369	0.120
Railroads	281	0.037
Rubber	464	0.086
Services, various	852	0.244
Steel	1281	0.256
Textiles	1222	0.195
Textile products	892	0.279
Wood products including lumber	314	0.259
Number of cities and towns	2,922	2,922

Notes: Aggregates were created by Brianna Alderman from the approximately 14,000 separate, but often related (e.g., Cotton Duck; Duck Cloth) product codes in the Brunet-Koustas WWII Contracts Data; see Brunet (2024, forthcoming). The means and fractions are from the regression sample of 2,922 cities and towns having information on contracts and population from the 1940 full-count micro-data census.