

## **B Appendix B: The Effect of WWII Contract Spending by Charter Type**

The purpose of this appendix is to explore differences in the effect of WWII contract spending on bank balance sheets by bank charter. The intention here is first to establish that there is no subcategory of bank type that is driving results. Second, the results for bank earnings in the main text only hold for nationally chartered banks and so establishing the different effect of state and national banks is useful for interpreting the finding of no earnings effect for national banks. Finally, while the behavior of the different types of banks is secondary to the findings in the main paper, other researchers may find these results of interest.

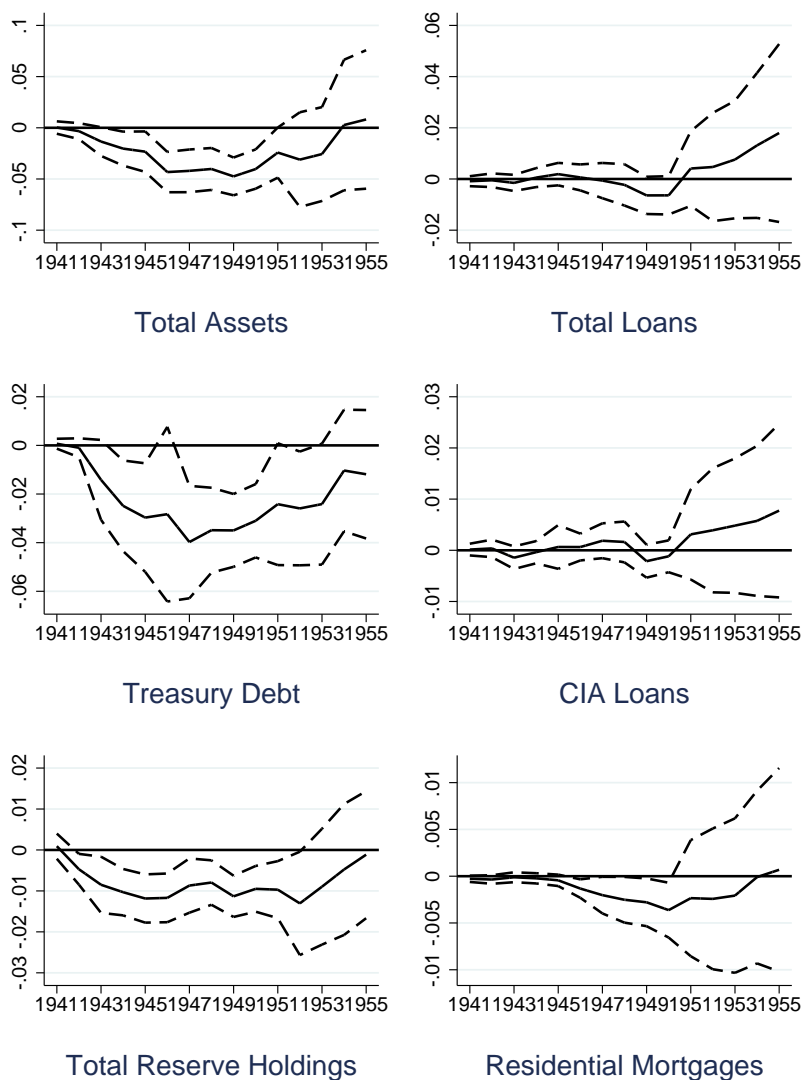
To summarize the results below: The response of all banks is more or less evenly split between national and state banks. Also, for each individual type of charter, the results of total assets and deposits is not significant after 1950, though assets and deposits do show a significant effect for all banks. This is likely due to the size of the effect. As well, while I do not show this, it should be noted that outliers are a problem for state and national banks individually in a way that they are not for the aggregate banking population. Outliers are not a consistent problem, but when they are an issue it is generally, the 12th Federal Reserve district (San Francisco) and the 9th district (Minneapolis) that cause the most problems. Consistent with the findings shown in Appendix D for all banks, these outliers are also usually only an issue for post-1950 estimates.

The final section of this appendix looks at the role mutual and unincorporated banks play. Because both types of banks are not universal at the state level the easiest way to look at the effect of war spending on these banks is to subtract them from total bank assets and compare the results. For many balance sheet components subtracting unincorporated and mutual savings banks does not affect results at all. As the final section of this appendix establishes, even when there is a difference in effect when omitting these banks, the results are changed in a way that suggests that mutual and unincorporated banks are not driving results in any unique way. Generally, the response by bank charter can simply be thought of as a disaggregation of the total effect of WWII contract spending on all banks.

### **B.1 National Banks**

Figure 1 shows the response of national bank assets to total war contract spending. This figure is the same as the figure for all banks in the main text. The response of national banks is much smaller than the response of all banks. By 1949 National banks show a slowdown in

the growth of total assets of 4.7 cents per dollar of war spending. By 1955 assets have grown more slowly by a statistically insignificant .8 cents. The lower magnitude of response carries through to the components of assets, though the pattern of response is similar for national bank assets as it is for all banks.

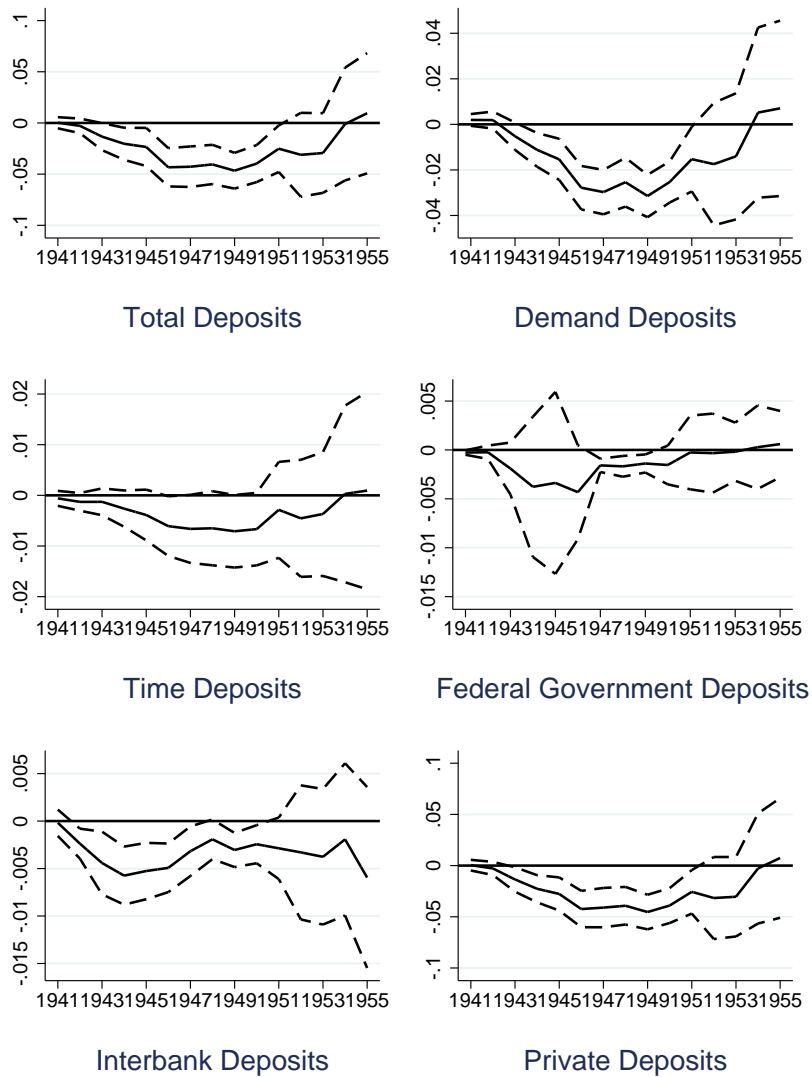


Graphs show the estimated dollar response to \$1 of war spending per capita. Dashed lines are 95% confidence intervals.

Figure 1: Response of Nationally Chartered Bank's Assets to Total WWII Spending

Figure 2 shows the response of deposits to total war contract spending. As with the components of assets, deposits show a similar but less strong pattern to all bank deposits. Total deposits grow 4.0 cents more slowly in response to a dollar of total contract spending,

in line with the slower growth of total assets. As with total assets the response of deposits in national banks to war spending is not significant after 1950.



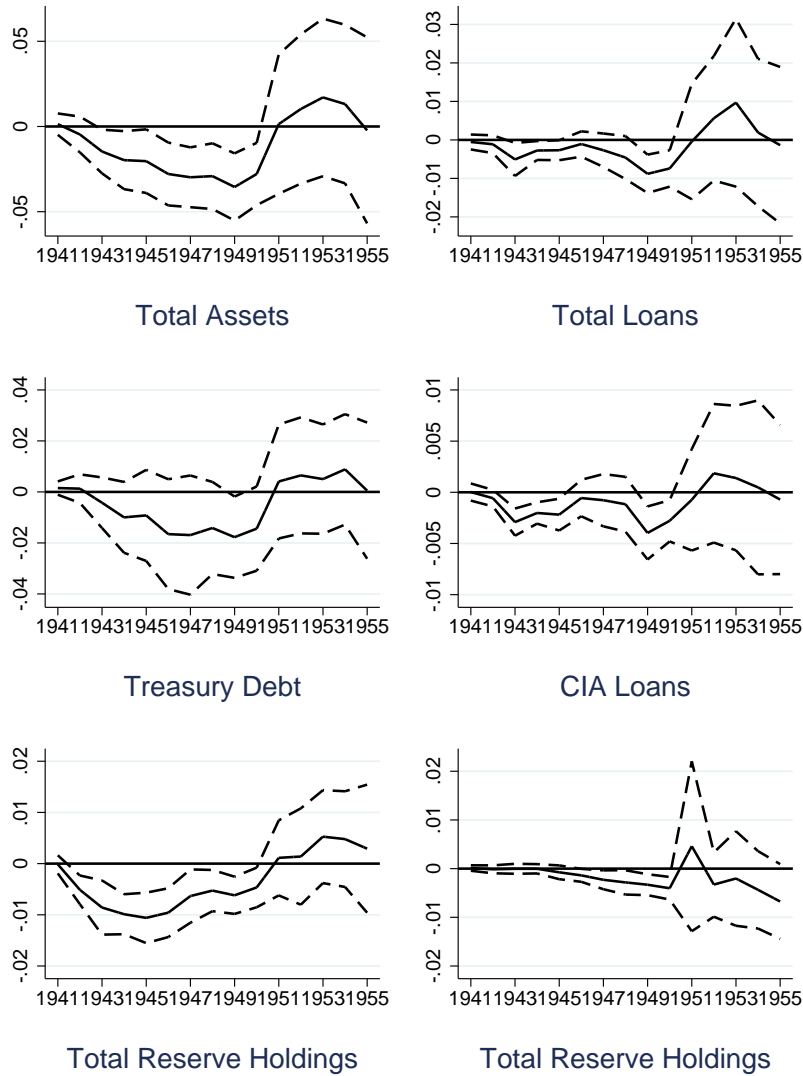
Graphs show the estimated dollar response to \$1 of war spending per capita. Dashed lines are 95% confidence intervals.

Figure 2: Response of Nationally Chartered Bank's Deposits to Total WWII Spending

## B.2 State Banks

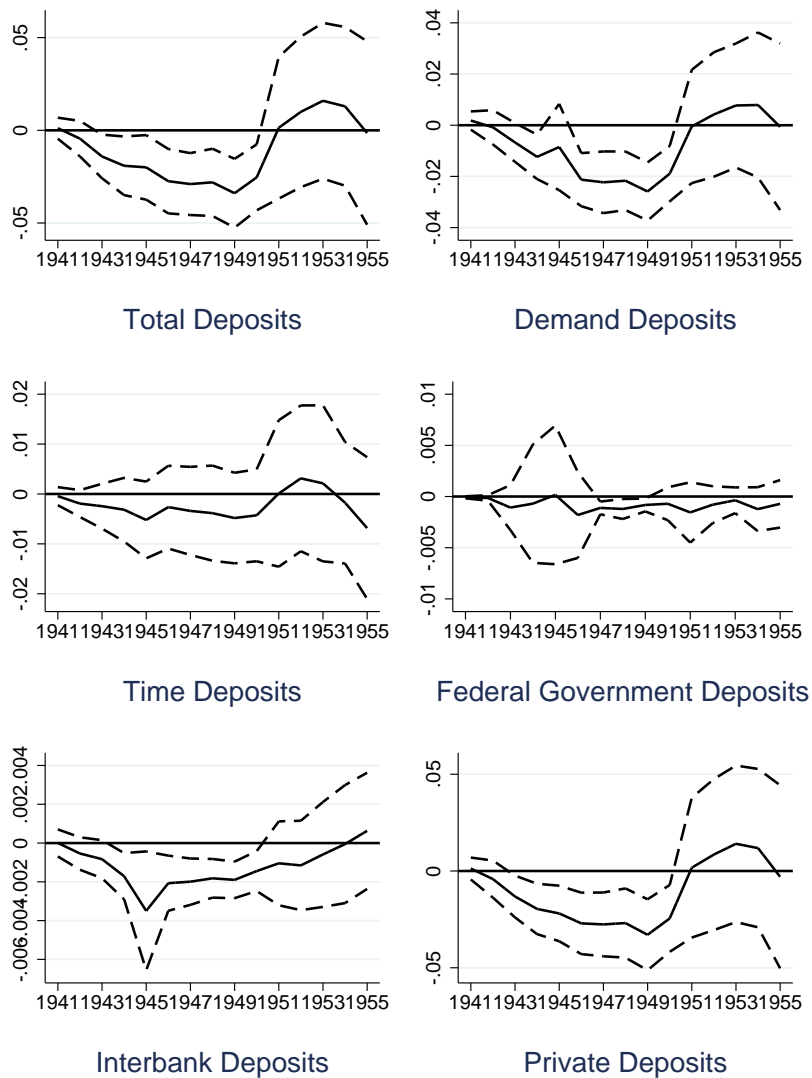
The response of state bank balance sheets is very similar to the response of national bank balance sheets. As Figure 3 shows, state bank assets grow 2.9 cents more slowly per dollar

of total contract spending and this response is not statistically significant by 1955. Figure 4 shows the response of deposits to total WWII contract spending. The estimated response of deposits to total contract spending is to grow 4.6 cents more slowly per dollar of war spending. As with assets, the pattern of response of deposits in state banks is similar to that of deposits in all banks, though again, the magnitude the effect on the components of state bank balance sheets is smaller than for all banks.



Graphs show the estimated dollar response to \$1 of war spending per capita. Dashed lines are 95% confidence intervals.

Figure 3: Response of State Chartered Bank's Assets to Total WWII Spending



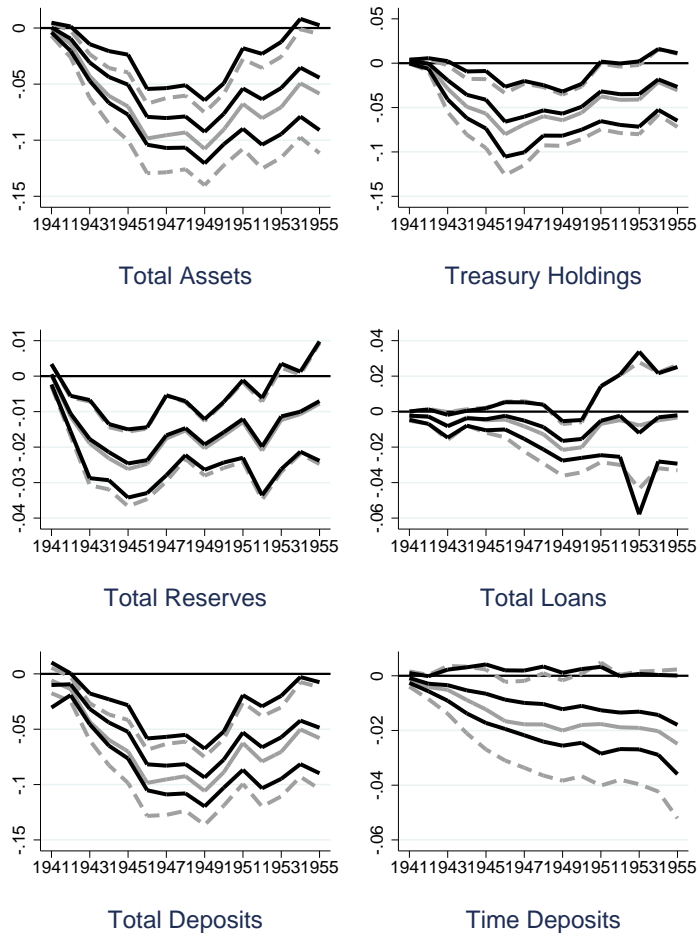
Graphs show the estimated dollar response to \$1 of war spending per capita. Dashed lines are 95% confidence intervals.

Figure 4: Response of State Chartered Bank's Deposits to Total WWII Spending

### B.3 Unincorporated Banks

Figure 5 compares the response of selected all bank balance sheet components to total war spending with the response of the components of bank balance sheets excluding mutual savings banks and unincorporated banks. Each type of bank were only permitted to exist in 17 of the 48 states and so testing the effect of these banks directly is difficult. However, the basic point to be made from this exercise should be obvious from Figure 5. The largest

difference in the effects of war spending excluding mutual savings banks and unincorporated banks is for assets and deposits . The effect is smaller when mutual and unincorporated banks are excluded, but not smaller in such a way that suggests that these types of banks are driving the results. Even in the case of assets and deposits below where a difference is established, the difference in the responses is not so large as to suggest mutual savings and unincorporated banks are driving the results for the full population of banks under consideration.



Graphs show the estimated dollar response to \$1 of war spending per capita.

Dashed lines are 95% confidence intervals.

Grey lines are All Bank's Response

Black Lines are the Response of All Banks exclusive of Mutual and Unincorporated Banks

Figure 5: Response of Selected Componets of Bank Balance Sheets to Total WWII Spending With and Without Mutual and Unincorporated Banks