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# Economic Interests and the American Constitution: A Quantitative Rehabilitation of Charles A. Beard

# ROBERT A. McGuire and Robert L. Ohsfeldt

An important change in the structure of U.S. institutions occurred when the government under the Articles of Confederation was replaced by a new government under the Constitution. In 1913, Charles A. Beard proposed a view of the formation of the United States Constitution—an economic interpretation—that remains a much discussed yet unresolved explanation of the behavior and motives of the men who wrote the document. This paper provides the first rigorous statistical test of this issue. We summarize the preliminary results of a statistical analysis of the relationship between the voting behavior of individual delegates involved in the making of the Constitution and their economic and personal characteristics. Contrary to current historical wisdom, significant patterns related to economic interests are found in the voting, with the division of interests generally consistent with that outlined by Charles A. Beard seventy years ago.

A important task for economic historians is to explain secular change in economic and political institutions. Because a constitution represents the fundamental "rules-of-the-game" in any society, understanding the formation of constitutions is particularly important. A significant change in the structure of the American economic and political system occurred when the government under the Articles of Confederation was replaced by a new government under the Constitution. Given the importance of this event, it is surprising that no one has employed sophisticated statistical techniques to rigorously investigate Charles A. Beard's classic thesis that the contest over the United States Constitution reflected a conflict between economic interest groups that were affected in differing ways by the adoption of the Constitution.<sup>2</sup>

Does the conflict among economic interests explain the adoption of the Constitution? Do other factors explain it? The consensus among most economic historians is that the primary reason for the movement

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<sup>&</sup>lt;sup>1</sup> This point is made forcefully in Douglass C. North, Structure and Change in Economic History (New York, 1981), Ch. 3.

<sup>&</sup>lt;sup>2</sup> Charles A. Beard, An Economic Interpretation of the Constitution of the United States (New York, 1913, 1935).

to a strong national government under the Constitution was to create more favorable economic conditions for the country as a whole by correcting the inadequacies of the weak central government existing under the Articles of Confederation. Most economic historians either reject, ignore, or are indifferent toward the claim that the proponents and opponents of the Constitution were significantly influenced by their own economic interests.<sup>3</sup>

We suggest the current understanding of the making of the Constitution is inadequate and a rigorous analysis of the forces motivating the movement to the Constitution is in order. This paper summarizes the major preliminary findings of a full-scale study of the relationship between economic interests and other factors and the making of the Constitution. The full study includes an analysis of voting at the Philadelphia convention on the general issue of forming a stronger national government, an analysis of voting patterns over a variety of individual issues at Philadelphia, and an analysis of voting at the state ratifying conventions.

The remainder of this paper contains four sections. Section I presents an overview of Beard's interpretation of the making of the Constitution and some discussion of the work of his critics and supporters. Section II contains a brief discussion of the analytical framework and estimation procedures employed in the study. A summary of the major econometric results is contained in Section III, and the final section is devoted to some preliminary conclusions.

# CHARLES A. BEARD, HIS CRITICS AND SUPPORTERS

A scrutiny of the work of Charles Beard leads us to believe that Beard's thesis is that the Constitution was the product of the interplay of conflicting economic interests rather than the revelation of ultimate truth by disinterested patriots. He suggests "merchants, money lenders, security holders, manufacturers, shippers, capitalists, and financiers" were likely supporters of the Constitution, whereas "farmers and debtors" were likely opponents. Beard argues that an economic interpretation of the Constitution is not obviated even if supporters and opponents alike "benefited by the general improvement which resulted from its adoption." Rather, he suggests, "the direct, impelling motive ... was the economic advantages which the beneficiaries expected would accrue to themselves first, from their action." Any improve-

<sup>&</sup>lt;sup>3</sup> This and the preceding statement represent a synthesis of the treatment of Beard's thesis in most current economic history textbooks. For examples, see W. Elliot Brownlee, *Dynamics of Ascent* (New York, 1979), pp. 112-13; Douglass C. North, "Government and the American Economy" in Lance Davis, et al., American Economic Growth (New York, 1972), pp. 26-27; Gary Walton and Ross Robertson, *History of the American Economy* (New York, 1983), pp. 123-25; Jonathan Hughes, American Economic History (Glenview, Illinois, 1983), p. 141.

<sup>&</sup>lt;sup>4</sup> Beard, An Economic Interpretation, pp. 16-18.

ment in the general well-being was coincidental to the pursuit of economic self-interest.<sup>5</sup>

For several decades after An Economic Interpretation was published, the Beardian view of the formation of the Constitution was accepted as a standard historical interpretation. During this period, the "Beardian school" came to dominate American historical thought. By the 1950s, Beard's interpretation fell into disrepute, primarily as a result of the work of Robert E. Brown and Forrest McDonald. Brown argues that the society was fundamentally democratic, not undemocratic as Beard portrayed, and that economic factors did not explain the movement toward the Constitution. Yet Brown presents little empirical evidence and no statistical analysis to support his conclusions. In contrast, McDonald's study attempts to quantify the economic interests and voting behavior of the delegates at Philadelphia and the state ratifying conventions. Among other things, he shows that a "large" percentage of the delegates who owned public securities was Antifederalist. From his casual statistical analysis, McDonald concludes that "anyone wishing to rewrite the history of those proceedings largely or exclusively in terms of the economic interests represented there would find the facts to be insurmountable obstacles."8

Despite their lack of rigor, Brown and McDonald generally are credited with offering a definitive debunking of the Beardian interpretation, but not without some criticism. Lee Benson suggests that neither Brown nor McDonald possesses sufficient understanding of Beard's thesis to criticize it successfully. Jackson Turner Main and Robert Schuyler contend that in some instances McDonald's data do not support his conclusions. Main also implies that McDonald's data may

<sup>&</sup>lt;sup>5</sup> Although we believe this paragraph accurately reflects Charles Beard's thesis, other scholars may not agree. Beard's An Economic Interpretation is confusing because he uses terms imprecisely, continuously interchanging "economic interest" with "class interest," "class" with "group," and "economic interpretation" with "economic determinism." As a result, Beard's thesis is sufficiently broad and ambiguous to offer support for a variety of interpretations. Many scholars consider his fundamental contribution to be a "class analysis" of the motives of the Founding Fathers. We do not accept this as an accurate portrayal of Beard's thesis. But even if others do not accept our interpretation of Beard, we suggest that an important issue to analyze is whether the self-interests of delegates affected their voting behavior. Therefore, this paragraph more appropriately may be said to reflect a "Beardian" view rather than "Beard's" view.

<sup>&</sup>lt;sup>6</sup> See Maurice Blinkoff, "The Influence of Charles A. Beard upon American Historiography," University of Buffalo Studies, 12 (1936), 1-84.

<sup>&</sup>lt;sup>7</sup> Robert E. Brown, Charles Beard and the Constitution: A Critical Analysis of An Economic Interpretation of the Constitution (Princeton, New Jersey, 1956); Forrest McDonald, We the People: The Economic Origins of the Constitution (Chicago, 1958).

<sup>&</sup>lt;sup>8</sup> McDonald, We the People, p. 110.

<sup>&</sup>lt;sup>9</sup> Lee Benson, Turner and Beard: American Historical Writing Reconsidered (Glencoe, Illinois, 1969), pp. 95-174.

<sup>&</sup>lt;sup>10</sup> Jackson Turner Main, "Charles A. Beard and the Constitution: A Critical Review of Forrest McDonald's We the People," William and Mary Quarterly, 17 (1960), 86-110; Robert Schuyler, "Forrest McDonald's Critique of the Beard Thesis," Journal of Southern History, 27 (1961), 73-80.

be systematically biased against the Beardian interpretation.<sup>11</sup> E. James Ferguson finds widespread support among public creditors for the Constitution, contrary to McDonald.<sup>12</sup> In another study, Main finds important voting patterns related to economic interests in the state ratifying conventions.<sup>13</sup> Unfortunately Benson, Ferguson, Main, and Schuyler are similar to Brown and McDonald in that they base their conclusions on rather casual statistical analyses.

Most economic history texts either reject or ignore the Beardian view in spite of the work of Benson, Ferguson, Main, and others. The only studies referenced in these textbooks are those by Brown and McDonald. Brown and McDonald often are credited with proving that economic interests had no impact on the vote on the Constitution, but neither actually made such a categorical claim. In our view, their findings usually are misrepresented or misinterpreted, as is Beard's central thesis. Beard's view often is misinterpreted as either a Marxist analysis of conflict between dichotomous and homogeneous classes—"personalty" and "realty"—or as an indictment of the Founding Fathers for "lining their own pockets."

In describing his work, Beard states he cannot accept the "assertion that the economic interpretation of history or my volume on the Constitution had its origin in 'Marxian theories.' "He also says "the purpose of such an inquiry is not, of course, to show that the Constitution was made for the personal benefit of the members of the Convention. Far from it . . . The only point considered here is: Did they represent distinct groups whose economic interests they understood and felt in concrete, definite form through their own personal experience with identical property rights, or were they working merely under the guidance of abstract principles of political science?" <sup>15</sup>

# ANALYTICAL FRAMEWORK AND ESTIMATION

Apart from historiographical concerns over the true nature of Beard's thesis, an analysis of the relationship between economic interests and voting patterns in the formation and ratification of the Constitution is important in its own right. In analyzing the relationship between economic interests and voting behavior, we do not mean to suggest

<sup>11</sup> Main, "Charles A. Beard," pp. 92-102.

<sup>&</sup>lt;sup>12</sup> E. James Ferguson, *The Power of the Purse: A History of American Public Finance, 1776–1790* (Chapel Hill, North Carolina, 1961); and Ferguson, "The Nationalists of 1781–1783," *Journal of American History*, 56 (1969), 241–64. It should be noted that Ferguson believes this correspondence to be coincidental.

<sup>&</sup>lt;sup>13</sup> Jackson Turner Main, *The Antifederalists: Critics of the Constitution*, 1781–1788 (Chapel Hill, North Carolina, 1961).

<sup>&</sup>lt;sup>14</sup> See Brownlee, *Dynamics of Ascent*; North, "Government"; Poulson, *Economic History*; Walton and Robertson, *History of the Economy*; Hughes, *American Economic History*.

<sup>&</sup>lt;sup>15</sup> Beard, An Economic Interpretation, p. xii and p. 73. The confusion over Beard's thesis in the history literature is discussed in detail in Benson, Turner and Beard.

individuals supported or opposed the Constitution solely or even largely on the basis of economic self-interest. Personal values and political beliefs undeniably affected their positions on the Constitution. We do suggest that an individual whose political preference was to favor the Constitution would have been less likely to do so if his personal economic well-being was significantly and adversely affected by the Constitution, and vice versa. 16

The data employed in our study regarding the votes and economic interests of delegates to the Philadelphia convention and the state ratifying conventions are contained in studies by McDonald, Main, Richard D. Brown, Staughton Lynd, and William C. Pool. 17 McDonald provides the voting records of the 55 delegates at the Philadelphia convention on 16 key issues, as well as detailed accounts of the economic interests of the delegates. Some changes in McDonald's data are suggested by Brown and Main. 18 In analyzing voting at the Philadelphia convention, we use two alternative data sets—one with and one without the corrections provided by Brown and Main. McDonald also provides information about the economic interests of most of the delegates to the state ratifying conventions along with their votes on the Constitution. McDonald's data on the state ratifying conventions are supplemented with data provided by Main, Pool, and Lynd. 19

To analyze voting on the general issue of forming a stronger national government at the Philadelphia convention, the strength of a delegate's pronational stance is determined by the proportion of his votes in favor of the pronational position over the 16 key issues contained in McDonald. This "pronational" variable is estimated as a function of the economic interests and personal characteristics of each delegate. (See the Appendix for details on the estimation procedure and for a list of variables.) This allows for a test of whether certain economic interests were significantly more supportive of forming a stronger central government than other interests.<sup>20</sup> Because the pronational variable (that is,

<sup>&</sup>lt;sup>16</sup> Disentangling the influence of political factors from economic factors on voting behavior becomes difficult if economic interests are strongly correlated with political philosophy. This potential problem of multicollinearity may create difficulties of interpretation. This issue is discussed in more detail later in the paper.

<sup>17</sup> McDonald, We the People; Main, "Charles A. Beard"; Jackson Turner Main, Political Parties Before the Constitution (Chapel Hill, North Carolina, 1973); Richard D. Brown, "The Founding Fathers of 1776 and 1787: A Collective View," William and Mary Quarterly, 33 (1976), 465-80; Staughton Lynd, Anti-federalism in Dutchess County, New York (Chicago, 1962); William C. Pool, "An Economic Interpretation of the Ratification of the Federal Constitution in North Carolina," North Carolina Historical Review, 27 (1950), 119-41 (Pt. 1), 289-313 (Pt. 2), 437-61 (Pt.

<sup>&</sup>lt;sup>18</sup> Richard D. Brown, "The Founding Fathers"; and Main, "Charles A. Beard".

<sup>19</sup> Main, Political Parties; Pool, "An Economic Interpretation"; and Lynd, Anti-federalism in

For more details on this aspect of the study, see Robert A. McGuire and Robert L. Ohsfeldt, "A New Economic Interpretation of the Formation of the Constitution of the United States," mimeo. For more details on our analysis of voting patterns over the individual issues at Philadelphia, see Robert A. McGuire and Robert L. Ohsfeldt, "Economic Interest Groups and Voting Patterns in the Constitutional Convention of 1787," mimeo.

the dependent variable) is naturally bounded by 0 and 1 (it is the sample proportion of the 16 votes), estimates obtained by ordinary least-squares regression would be inefficient. Of the several statistical procedures designed for limited dependent variables, we have chosen to use logit analysis.<sup>21</sup>

The existence of strategic voting behavior (compromises and logrolling) in the Philadelphia convention might obscure voting patterns related to economic and other interests because delegates may have voted contrary to their interests on individual issues to obtain a more favorable overall document. It follows that the possibility of strategic voting behavior biases our statistical test *against* the hypothesis that self-interests mattered. If the statistical analysis, despite this bias, indicates voting patterns related to economic interests existed at Philadelphia, those interests must have had a particularly strong impact on voting.

The analysis of voting patterns in the state ratifying conventions is more straightforward. Each delegate simply voted yes or no to adopt or reject the Constitution.<sup>22</sup> The vote on the Constitution is estimated as a function of each delegate's economic interests and personal characteristics using logit analysis. Seven sets of states are analyzed—all 13 states, southern states (Georgia, North Carolina, South Carolina, Virginia, and Maryland), mid-Atlantic states (Pennsylvania, New Jersey, New York, and Delaware), New England states (Connecticut, Rhode Island, Massachusetts, and New Hampshire), Virginia separately because of its historical significance, and states with and states without paper money because of the creditor versus debtor issue. In all cases, data from these states are pooled with state dummy variables included in the logit specification to account for state-specific political and other factors.<sup>23</sup>

The data on the economic interests of all delegates include number of slaves, value of public securities, value of private securities, type of occupation, and dummy variables for "land speculators," "debtors," and "mercantile interests." (A complete list of variables is contained in the Appendix.) The non-qualitative interests are measured in absolute values and as dummy variables. The different measures are employed as substitutes for each other. Proxy variables used to control for personal values and political beliefs include the delegate's age, revolutionary experience, and state population. Distance from the delegate's home

<sup>&</sup>lt;sup>21</sup> For a detailed discussion of logit analysis, see Eric Hanushek and John E. Jackson, Statistical Methods for Social Scientists (New York, 1977), Ch. 7.

<sup>&</sup>lt;sup>22</sup> It follows that strategic voting behavior was less likely at the state ratifying conventions and, therefore, does not affect our statistical analysis.

<sup>&</sup>lt;sup>23</sup> For additional details on the ratification aspect of the study, see Robert A. McGuire and Robert L. Ohsfeldt, "A New Economic Interpretation of the Ratification of the Constitution of the United States," mimeo.

<sup>&</sup>lt;sup>24</sup> Our proxy variables for political factors may not represent political philosophy very well. Some relevant variables may have been omitted. If the omitted variables are not correlated with the

to the coast, and distance from home to the nearest major city are used as proxies for a general commercial versus non-commercial interest.<sup>25</sup> Neither age nor revolutionary experience is readily available for the state conventions and both are excluded from the analysis of the ratification process.<sup>26</sup>

#### RESULTS

Although the 55 delegates to Philadelphia generally were wealthy. there were some important differences in the specific types of assets held. The preliminary logit estimates of the relationship between the strength of a delegate's pronational position and his economic interests, personal characteristics, and state population indicate significant voting patterns related to some economic interests. Specifically, slaveowners were significantly less pronational (a negative logit coefficient), and private security holders (bankers and other private creditors) significantly more pronational (a positive logit coefficient) than delegates without such interests, ceteris paribus. Delegates from more populous states were significantly more pronational than those from less populous states. There were no differences in voting patterns related to public security holdings.

These findings are very robust with respect to changing specifications and alternative measures of pronationalism. The coefficient for slaveowners, measured either as a dummy variable or the number of slaves owned, and the coefficient for private creditors, measured either as a dummy variable or as the value of private securities or debt held, are usually significant at the .05 level. The coefficient of public security holdings, measured either as a dummy variable or as the value of the holdings, is never significant at any standard level. This lack of significance may be because the amount of public securities held

included variables, no severe problems are created. If they are strongly correlated, there is a problem of interpretation because isolating the influences of the relevant variables becomes computationally impossible.

<sup>&</sup>lt;sup>25</sup> For details on these proxy variables, see McGuire and Ohsfeldt, "A New Economic Interpretation of Formation" and "A New Economic Interpretation of Ratification."

<sup>&</sup>lt;sup>26</sup> A conceptual problem inherent in the study is that the characteristics of the entire citizenry may be more relevant to an understanding of the Constitution than the characteristics of delegates alone. It has been argued the delegates represented the will of their constituents and not their personal interests. If this is true, researchers would need to analyze the characteristics of the citizenry (Bensen, Turner and Beard). There are at least two problems with this analytical approach. As a practical matter, the compilation of detailed profiles for the entire voting citizenry or even representative groups would be prohibitively costly. Also, the belief that the vote of a delegate was determined primarily by the will of his constituents and that his personal interests did not influence his voting behavior significantly is restrictive. In any case, an understanding of the relationship between the delegates' voting behavior and the delegates' characteristics is necessary for a complete understanding of the making of the Constitution.

probably represented a small proportion of the delegate's total assets. Conversely, the value of slaveholdings and private security holdings generally were much larger.

Farmers and debtors either opposed or were indifferent to forming a stronger national government, depending upon the set of data used in the estimating procedure. No differences in voting patterns for land speculators, mercantile interests, revolutionary experience, or age existed at Philadelphia, regardless of which data are used. The further a delegate was from either the coast or the nearest major city, the less likely he was to vote a pronational position. This result on the distance variable, which is assumed to be negatively related to a general commercial interest, also is very robust and highly significant statistically.

A greater variety of economic interests were represented at the state ratifying conventions than at the Philadelphia convention, and stronger voting patterns related to economic interests existed. The sample size here also is much larger, ranging from about 150 to 1200, depending on the set of state conventions considered. Preliminary results indicate that delegates with a large share of their assets in the form of slaves were significantly less likely to vote for the Constitution than were those with no slaves, ceteris paribus. Public security holders were significantly more likely to favor the Constitution, as were delegates with banking interests or private security holdings. Merchants and owners of western lands also tended to support the Constitution. The further a delegate was from the coast or nearest major city, the less likely he was to vote for the Constitution.

These findings are relatively robust with respect to changes in specifications, alternative measures of the independent variables, and changes in the sets of states. The results also are highly significant statistically. As noted earlier, neither age nor revolutionary experience of the delegates is used for this aspect of the study, because these data are not readily available.

# CONCLUSIONS

The Beardian view of the formation of the Constitution has been dismissed for the wrong reasons and with little, if any, empirical backing. A careful reading of Charles Beard's An Economic Interpretation suggests the Beardian view is that political institutions are not formed purely on the basis of political or ideological principles, but the self-interest of individuals involved in the formation of new institutions will influence the character of those institutions. With respect to the formation of the Constitution specifically, we suggest there is both a narrow and a broad Beardian interpretation. The narrow interpretation

is that the only economic interests that would matter would be those in which a significant financial interest is directly at stake. The broad interpretation is that all economic interests would matter regardless of the scale of their impact.

We have shown voting patterns related to some economic interests were present at the Philadelphia Constitutional Convention of 1787. These preliminary findings support the narrow Beardian interpretation because the only economic interests that affected voting behavior at Philadelphia were those interests that, at least potentially, were affected in a significant way by the change in government. With respect to the state ratifying conventions, our preliminary findings offer strong support for a broad Beardian interpretation. We have shown that the division of interests at the ratifying conventions generally was consistent with Beard's view—with the possible exception of slaveowners, who opposed the Constitution.<sup>27</sup>

The usual caveats apply to this study—particularly considering the preliminary nature of some of the results. Nonetheless, it seems unlikely that the view that economic factors played an important role in the making of the Constitution is without a strong foundation in fact. The major contribution of the present paper is that our statistical analysis, primarily employing McDonald's data, shows nearly the opposite of what McDonald and Brown are said to have shown. It follows that the treatment in the economic history literature of this Beardian interpretation of the Constitution is inaccurate. More generally, these findings lend support to the idea that economic factors play an important role in influencing change in political and economic institutions and suggests that further study along these lines is in order.

<sup>27</sup> Beard argues that slaveowners might have opposed the Constitution because they feared adverse legislation concerning slavery and the slave trade, as well as the potential for "navigation acts" imposed on them by a national legislature controlled by the more populous northern states. Beard, however, thought this factor would be outweighed by slaveowners' other interests (for example, financial interests) and their desires for a stronger national government to quell possible slave revolts (Beard, An Economic Interpretation, pp. 29–30). Beard may have overestimated the importance of the expectation of slave revolts given that slaveowners, holding other economic interests constant, opposed the Constitution.

#### **APPENDIX**

#### ESTIMATION PROCEDURE AND VARIABLES

Voting patterns are estimated using the general specification V = f(E, P, S), where V is the delegate's vote, E is the set of economic interest variables, P is the set of personal characteristics, and S is the set of characteristics of the delegate's state. This equation is estimated using logit analysis, which is analogous to ordinary multiple regression, with special consideration for the limited nature of the variables to be explained—votes. The specific types of variables included are described on the next page.

Votes (Philadelphia and Ratifying Conventions)

- PRONATI = sample proportion of a delegate's votes in favor of a pronational position over sixteen key issues, based on McDonald's interpretation of the pronational position for each vote. (Yes on Votes 2, 8 through 10, 13, and 15, and no on Votes 1, 3 through 7, 11, 12, 14, and 16).
- PRONAT2 = sample proportion of a delegate's votes in favor of a pronational position over sixteen key issues, based on the McGuire-Ohsfeldt interpretation of the pronational position for each vote. (Yes on Votes 2, 8, 9, 11 through 13, 15, and no on Votes 1, 3 through 7, 14 and 16).
- VOTE1 = 1 if the delegate voted to require a degree of judicial consent for a presidential veto (0 otherwise).
- VOTE2 = 1 if the delegate voted to give the national legislature veto power over state laws (0 otherwise).
- VOTE3 = 1 if the delegate voted to *strike* a clause allowing national legislators to determine their own compensation (0 otherwise).
- VOTE4 = 1 if the delegate voted to *strike* a clause specifying direct election of state ratifying assemblies (0 otherwise).
- VOTE5 = 1 if the delegate voted to disqualify government pensioners from service as legislators (0 otherwise).
- VOTE6 = 1 if the delegate voted to set the quorum at no less than a majority of the members of the national legislature to prevent the passage of laws by a minority (0 otherwise).
- VOTE7 = 1 if the delegate voted to prohibit export tariffs by the national government (0 otherwise).
- VOTE8 = 1 if the delegate voted to establish a national army and to give the national government power over the army (0 otherwise).
- VOTE9 = 1 if the delegate voted to prohibit the issuance of paper money by the state (0 otherwise).
- VOTE10 = 1 if the delegate voted to prohibit ex post facto laws (0 otherwise).
- VOTE11 = 1 if the delegate voted to prohibit trade embargoes by states (0 otherwise).
- VOTE12 = 1 if the delegate voted to prohibit import tariffs by states (0 otherwise).
- VOTE13 = 1 if the delegate voted to prohibit import and export tariffs by states (0 otherwise).
- VOTE14 = 1 if the delegate voted to require a two-thirds majority for the national legislature to enact laws concerning trade (0 otherwise).
- VOTE15 = 1 if the delegate voted to assign western lands to the national government, not the states (0 otherwise).
- VOTE16 = 1 if the delegate voted to prohibit interference in the internal affairs of a state by the national government without the state's permission (0 otherwise).
- VOTEC = 1 if the delegate to a state ratifying assembly voted to ratify the Constitution (0 otherwise).

# **Economic Interests**

- DLAND = 1 if the delegate speculated in western lands (0 otherwise).
- \*DMERC = 1 if the delegate had mercantile interests (0 otherwise).
- \*DFARM = 1 if the delegate was a "farmer" (0 otherwise).
- \*DDEBT = 1 if the delegate was in deep personal debt (0 otherwise).
- DBANK = 1 if the delegate had banking interests or other private securities (0 otherwise).

# Economic Interests and the American Constitution 519

ABANK = value (in dollars) of the delegate's banking interests or other private securities.

DPUBS = 1 if the delegate held public securities (0 otherwise).

APUBS = value (in dollars) of the delegate's public security holdings.

DCREDIT = 1 if the delegate was a creditor—either DBANK or DPUBS is one (0 otherwise).

ACREDIT = value (in dollars) of the delegate's banking interests, other private securities, and public securities—ABANK plus APUBS.

DSLAVE = 1 if the delegate owned slaves (0 otherwise).

NSLAVE = number of slaves owned.

## Personal Characteristics

DIST1 = distance from the delegate's home to the Atlantic coast (in miles), a proxy for a general commercial interest.

DIST2 = distance from the delegate's home to the nearest major city (in miles), a proxy for a general commercial interest.

AGE = the age of the delegate.

REV = 1 if the delegate had experience in the American Revolution (0 otherwise).

## State Characteristics

POPW = the population of the delegate's state (excluding slaves) in 1790.

 $STATE_i = 1$  if the delegate was from state i (0 otherwise).

<sup>\*</sup> These variables are the only variables affected by Main's and Brown's corrections.