The Political Economy of Immigration Restrictions

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The United States has often celebrated its heritage as "a nation of immigrants," most recently during the festivities surrounding the renovation of the Statue of Liberty and Ellis Island. The centennial paid homage to romantic themes originally captured by the poet Emma Lazarus in the inscription on the Statue of Liberty:

Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore,
Send these, the homeless, tempest-tossed, to me:
I lift my lamp beside the golden door.

Yet a fundamental ambivalence has always marred this vision of the United States as a haven for the distressed. During the last century, this ambivalence has produced a series of laws restricting immigration.

Recently, an influx of illegal aliens has generated renewed interest in immigration as a public policy issue. The debate over illegal immigration...
culminated, on November 6, 1986, in the passage of the Immigration Reform and Control Act of 1986. The new law, originally introduced in 1983 as the Simpson-Mazzoli Bill, prohibits employers from hiring illegal aliens and offers legal status to millions of illegal aliens who already reside in the United States. The debate over passage of the bill predictably revolved around the opposing goals of maintaining America's traditional open-door policy and protecting American society from an onslaught of foreigners.

This Article attempts to pierce the traditional rhetoric by offering an alternative model that explains immigration policy enforcement. To do so, the Article uses the interest group theory of government to identify groups with a direct interest in immigration, and posits that the level of immigration policy enforcement will be determined by a balancing of their demands. Part I provides a brief historical overview of U.S. immigration policy. Part II sets forth a general outline of the interest group theory of government, and suggests specific hypotheses regarding the enforcement of immigration policy over the course of the business cycle. Specifically, the Article contends that the level of U.S. immigration policy enforcement is explained in part by the desire of organized interest groups to influence domestic wages. In times of economic contraction, groups interested in preventing wage reductions—labor unions, for example—have an incentive to lobby for enforcement of restrictive immigration laws in order to prevent unfavorable expansion in the work force. Similarly, when

The blood that made this nation great
Will now be tested at the gate
To see if it deserves to be
Admitted to democracy,
Or rather to that small elite
Whose hemoglobin counts can meet
Requirements of purity
Consistent with security
And with that small and rabid mind
That thinks itself above mankind.

Immigration: An American Dilemma, ix (B. Ziegler ed. 1953). For an interesting discussion of America's changing attitudes toward immigration from the colonial period to the present, see Adams, A Dubious Host, 7 Wilson Q., 108 (1983).


6. For example, Senator Phil Gramm (R-Texas), who led the opposition to the 1986 Act, felt it necessary to state, "This immigration bill is not a response to a fear of foreigners. We are not symbolically tearing down the Statue of Liberty. It is not my intention ever to slam the door to America." N.Y. Times, October 18, 1986, at A8, col. 5.

7. Upon signing the Act, President Reagan stated, "Future generations of Americans will be thankful for our efforts to humanely regain control of our borders and thereby preserve the value of one of the most sacred possessions of our people, American citizenship." N.Y. Times, Nov. 7, 1986, at A12, col. 1.
domestic labor markets are "tight," groups such as employers have an incentive to lobby for reduced enforcement of these laws in order to relieve upward pressure on wages. Part III describes the model and reports the results of its application. Based on data covering the years 1900 through 1982, immigration policy enforcement was indeed found to be countercyclical, becoming more restrictive during economic downturns and easing during economic expansions. The Article concludes with a brief discussion of the policy implications of this analysis.

I. An Overview of U.S. Immigration Policy

Since 1875, when Congress passed the first restrictive legislation governing the admission of aliens,8 at least seventy laws and Supreme Court decisions affecting immigration have been issued.9 Lawmakers have treated immigration from a variety of perspectives; restrictions have been based on narrowly defined characteristics, on broad qualitative criteria, such as national origin, and on precise numerical formulae.10 Most of these policy changes came in response to the arrival of waves of immigrants from a range of different countries.11 Although these influxes were fueled by a variety of causes, including religious and political persecution, the main factors driving immigration have generally been economic, as migrants have tended to move to countries where real wages are higher.12

The first legal restrictions on immigration to the United States barred such "undesirables" as convicts, prostitutes, idiots, lunatics, and paupers.13 This type of qualitative restriction was later extended to exclude those believing in anarchy or the assassination of public officials.14 As of 1984,

8. Act of March 3, 1875, ch. 141, 18 Stat. 477 (1875). The law provided for inquiry by consular officers as to contracts of immigrants coming from the Orient for "service" or for "lewd or immoral purposes," and barred convicts.
10. For a summary of the historical restrictions on immigration, see C. Gordon & E. Gordon, Immigration and Nationality Law §§ 1.1c-1.3 (1984).
11. See J. Kennedy, supra note 2, at 92-94.
12. See id. at 6-9 for a general discussion of forces motivating immigration. An extensive literature supports the view that immigration is largely driven by differences in real wages between countries. See, e.g., W. Adams, The Brain Drain (1968); Scott, Transatlantic and North American International Migration, in North American and Western European Economic Policies 436-38 (C. Kindleberger & A. Shonfield eds. 1971). Wage differentials are also important in explaining both external and internal migration patterns. See Dunlevy & Bellante, Net Migration, Endogenous Incomes and the Speed of Adjustment to the North-South Differential, 65 Rev. Econ. & Statistics 66 (1983). None of this earlier work focuses on enforcement as an important influence on immigration.
13. See V. Briggs, supra note 5, at 27.
14. See J. Kennedy, supra note 2, at 92.
there remained no fewer than thirty-three categories of qualitative exclusion.\(^{15}\)

Congress later supplemented these barriers with more stringent restrictions based on nationality. In 1882, Congress barred Chinese laborers from entering the United States;\(^{16}\) in 1917, Congress expanded on this theme by limiting entry into the United States based on an immigrant’s origin.\(^{17}\)

Congress placed the first quantitative limits on total immigration in 1921.\(^{18}\) In 1924, Congress combined national and quantitative restrictions by introducing the principle of “national origin” and putting in place the first immigration quota system.\(^{19}\) Under the national origin quota system, Congress set immigration limits on a country-by-country basis. Each nationality’s annual quota was based on its proportion of the total U.S. population in 1920, and total annual immigration was restricted to 150,000 persons.\(^{20}\)

A number of agencies within the executive branch have at various times been responsible for enforcing immigration laws. During the late nineteenth century, enforcement authority resided in the Treasury Department’s Bureau of Immigration. In 1903, jurisdiction was transferred to the newly-created Department of Commerce and Labor.\(^{21}\) When Congress divided the old department in 1913, responsibility remained with the Department of Labor.\(^{22}\) For the next twenty years, immigration and naturalization activities were carried out by two distinct bureaus within the Department of Labor; these were consolidated in 1933 with the creation of the Immigration and Naturalization Service (INS).\(^{23}\) The present organizational structure was established in 1940 when the INS became part of the Department of Justice.\(^{24}\)

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15. See V. Briggs, supra note 5, at 261. This list includes the insane, professional beggars, communists, Nazi war criminals, and graduates of foreign medical schools.
18. Immigration Act of 1921, ch. 8, 42 Stat. 5.
20. Id. at §§ 11(b). The formula for calculating each country’s quota was:

\[
\text{Quota of Country X} = \frac{\text{Persons of X Descent in U.S. in 1920}}{150,000} \times \frac{\text{All Inhabitants of U.S. in 1920}}{
\text{Quota of Country X} = \frac{\text{Persons of X Descent in U.S. in 1920}}{150,000} \times \frac{\text{All Inhabitants of U.S. in 1920}}{21. \text{Act of February 14, 1903, ch. 552, 32 Stat. 825. It is significant that, as immigration policy became more restrictive around the turn of the century, the government agency most sensitive to the problems of labor was empowered to handle immigration issues.}
Modern immigration policy dates from the 1952 Immigration and Nationality Act (INA), which repealed or revised most existing immigration laws and, for the first time, created an administrative process for deporting aliens. In 1965, Congress amended the INA to abolish the national origin principle effective July 1, 1968 and to change the ceiling on total annual immigration. The new ceiling exempted refugees, immediate relatives of U.S. citizens, and persons seeking political asylum. The amendments also created the current preference system that gives entry priority to family members of U.S. citizens. The Immigration Reform and Control Act of 1986 attempts to increase the effectiveness of the existing regulatory regime by improving its control over illegal immigration.

II. The Interest Group Model Applied to Immigration Enforcement

From the conventional perspective, normative questions dominate the debate over immigration policy; immigration is characterized as either “good” or “bad” in some sense. Current theoretical discussions, for example, have centered on whether immigrants “displace” domestic workers. In contrast, this Article uses the interest group theory of government to identify a political process through which self-interested groups influence INS enforcement activities in order to affect the wage rate.

The interest group theory suggests that the implementation of public policy is determined by the interplay between the concentrated interests of groups seeking wealth transfers and the more diffuse interests of groups that supply these transfers. This interaction produces a political equilibrium and a pattern of transfers in which some groups benefit at the

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27. A recent study concludes that, on balance, immigrants provide benefits to the economy. See J. SIMON, HOW DO IMMIGRANTS AFFECT US ECONOMICALLY? (1985). Simon argues that immigration does not have a statistically significant effect on aggregate employment and wages. See also Simon, For an Open-Door Policy, Wall St. J., October 9, 1986, at 32, col. 5. Our conclusion, that enforcement tends to restrict immigration during economic downturns and vice versa, thereby “smoothing out” immigration flows over the business cycle, helps explain Simon’s findings. When aggregate employment and wages are depressed, our model suggests that immigration will be curtailed, and vice versa; for this reason, swings in these economic statistics will be insulated, to a degree, from any significant immigration effect.
28. It is the role of regulators to enforce immigration laws which are enacted by legislators. This Article models the interaction between different constituencies and regulators in order to explain the level of enforcement of immigration policy. The process of developing policy, characterized by a similar dynamic between interest groups and legislators, is not examined in this Article.
29. We use “interest group theory of government” to describe an analytical approach commonly used in legal, economic, and political scholarship. The major theoretical building blocks of this theory were developed in Peltzman, Toward a More General Theory of Regulation, 19 J. L. & ECON. 211 (1976) and Stigler, The Theory of Economic Regulation, 2 Bell. J. Econ. & Mgmt. Sci. 3 (1971).
expense of others. Regulators and legislators, who administer these transfers and thus perform a brokerage function, seek to maximize their total political support. This model generates a rich set of empirical predictions about government behavior, and has been useful in explaining a large number of economic and social regulatory initiatives.30

The interest group theory is based on George Stigler’s generalization of the simple “capture theory” of economic regulation. Stigler recognized that “the political process automatically admits powerful outsiders to the industry’s councils,” and that government policy therefore frequently reflects the preferences of interested parties.31 Sam Peltzman extended and formalized Stigler’s argument by positing a vote-maximizing regulator who seeks to maximize his political majority subject to a limited political “budget.”32 When choosing policy, the regulator always faces a trade-off: The support of recipients of wealth transfers must be balanced against the ill will of those supplying the transfer.

This Article’s application of the interest group model to immigration policy enforcement focuses on the competing interests of two stylized groups, labor and producers.33 In this setting, a regulator’s political welfare rests on a successful balancing of domestic wage rates, \( w \), and producer wealth, \( \pi \). Assuming that, at some point, political support diminishes for regulators who attempt to raise or lower wages, and assuming no intra-group effects, the marginal conditions for the regulator can be represented in \( w-\pi \) space with a series of “iso-majority” curves. These curves trace out the various combinations of wage rates and producer profits that correspond to given levels of political support.

For producers, wealth (or success) is a function of price and production costs. If we assume that the former is constant and the latter depends only upon the level of wage rates, then given a limited supply of labor, the producer’s situation can be represented by a “profit hill,” which rises
initially as wages fall, reaches a maximum, and then declines as labor becomes scarce and wages rise. In the model, the political equilibrium among regulators, producers, and labor occurs where an iso-majority curve lies just tangent to the profit hill.

Changes in aggregate demand—and therefore in the size of the economy—shift the profit hill and the political equilibrium, thereby altering “the total surplus . . . over which the regulator might have control and the political payoff for its redistribution.” In the language of the theory of consumer choice, a parametric shift has given rise to a substitution effect and what Peltzman calls a “political wealth” effect, resulting in a new optimal political equilibrium. Because regulators operate on two margins, balancing two sets of interests, they “will, in general, not force the entire adjustment onto one group.”

To illustrate, suppose aggregate demand falls, decreasing the total wealth available for redistribution. Producer profits would decline, producer output would decline and, as a result, producer demand for labor inputs would drop, pressuring wage levels downward. If the political wealth effect is important, the regulator in this instance will have an incentive to prevent wages from falling by as much as they would in an unregulated setting; in other words, Peltzman’s regulator will call upon producers to share some of labor’s losses.

One way of redistributing these losses would be to enforce restrictive immigration laws by deporting previously admitted immigrants. In this case, the supply of workers available to domestic firms would decrease and wages would increase, thereby shifting some of the burden of the recession from domestic workers to domestic producers, who must pay more for labor, and foreign workers, who are denied entrance and job opportunities.

Similarly, if aggregate demand rises, immigration authorities would redistribute some of labor’s gains to producers because increased wealth raises the political payoff from redistribution. In this case, regulators would enforce immigration policy more loosely to prevent domestic wages from rising as much as they otherwise would. In sum, the interest group theory of government predicts that immigration regulators will tend to cushion domestic labor’s losses during economic contractions and attenuate labor’s gains during expansions. Immigration enforcement will thus be countercyclical, becoming more restrictive when demand declines and less so when demand increases.

34. Peltzman, supra note 29, at 224-25.
35. Peltzman, supra note 29, at 225.
36. This aspect of the interest-group hypothesis has been characterized as “share the gain, share
III. Empirical Model and Results

The interest group theory views changes in the level of immigration enforcement as responses to pressure from groups concerned with immigration's effect upon domestic wage rates. During downturns in the domestic economy, the theory predicts, enforcement activities will increase in order to prevent wages from falling as much as they otherwise would. Conversely, when domestic labor markets are "tight," the theory holds that immigration enforcement will be less restrictive.

In order to test this hypothesis, the authors constructed a regression specification of the following general form:

\[ Q_t = b_0 + b_1 \text{CYCLE}_t + b_2 \text{RBUD}_t + \sum_{i=3}^{6} b_i \text{D}_i + b_7 \text{PDUM}_t + e_t, \]

where

- \( Q_t \) = one of two alternative measures of immigration enforcement activity;
- \( \text{CYCLE}_t \) = one of three measures of general economic activity in the U.S., real Gross National Product, RGNP, the civilian labor force unemployment rate, U, and real average gross hourly earnings in manufacturing, RWAGE;
- \( \text{RBUD}_t \) = real budgetary appropriations of the agency having jurisdiction over immigration;
- \( \text{D}_i \) = a set of four dummy variables to account for important institutional and legal changes affecting immigration policy;
- \( \text{PDUM}_t \) = a dummy variable denoting the political party of the president; and
- \( e_t \) = regression error term.

Two different measures of immigration enforcement activity were utilized: (i) the ratio of aliens deported to total immigrants, and (ii) the ratio of aliens required to depart to total immigrants. These measures reflect the two ways in which aliens are expelled. The first, formal deportation, requires an order by an immigration judge based upon a finding that the alien in question, for one or more of a variety of reasons, is "deportable."\(^37\) The second, a request to depart, may be made by immigration

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37. The criteria for deportability are set forth in 8 U.S.C. § 1251. The procedures for deportation...
officers without a hearing before an immigration judge. Individuals who do not depart "voluntarily" will eventually undergo deportation proceedings.

These variables are designed to capture the two main enforcement mechanisms which immigration authorities have at their disposal. A shift toward a more (less) restrictive policy can be accomplished either by granting entry to a smaller (larger) number of foreigners, or by increasing (reducing) the number of deportations, or by doing both. Through the use of a ratio rather than an absolute number, the model controls for differences in total immigration from year to year.

It is important to note that our data on total immigration account only for those individuals who enter the country legally, since no reliable statistics on illegal immigrants are available. The Census Bureau estimates that three million to five million illegal aliens now reside in the United States. Illegal immigration is clearly a substitute for legal entry. When immigration policy is restrictive, we expect an increase in the number of aliens entering the U.S. illegally. Such considerations, however, should not greatly affect our hypothesis that the U.S. immigration authorities are in the business of influencing domestic wages.

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>386,357</td>
<td>305,509</td>
<td>0.79</td>
</tr>
<tr>
<td>D</td>
<td>10,126</td>
<td>7,638</td>
<td>0.75</td>
</tr>
<tr>
<td>E</td>
<td>297,464</td>
<td>336,578</td>
<td>1.13</td>
</tr>
<tr>
<td>D/M</td>
<td>0.07</td>
<td>0.12</td>
<td>1.71</td>
</tr>
<tr>
<td>E/M</td>
<td>1.04</td>
<td>1.13</td>
<td>1.09</td>
</tr>
<tr>
<td>RBUD</td>
<td>46.16</td>
<td>40.61</td>
<td>0.88</td>
</tr>
<tr>
<td>RGNP</td>
<td>413.51</td>
<td>325.84</td>
<td>0.79</td>
</tr>
<tr>
<td>U</td>
<td>6.70</td>
<td>5.15</td>
<td>0.77</td>
</tr>
<tr>
<td>RWAGE</td>
<td>2.06</td>
<td>0.76</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Variable M represents immigrants admitted, D represents aliens deported, E represents aliens required to depart (1931-82) minus aliens expelled, D/M is the ratio of aliens deported to immigrants admitted, E/M is the ratio of aliens required to depart to immigrants admitted, RBUD is the real immigration budget ($mil.), RGNP is the real GNP ($bil.), U is unemployment rate, and RWAGE is the real hourly wage rate in manufacturing (1919-1982).

38. We do not address naturalization activities as a control on the supply of labor because of the time lags involved in the process by which a foreigner becomes a U.S. citizen.
Observations on all but one of the variables were obtained from standard government sources. Table 1 presents the data in summary form. The data suggest that, on average, the number of aliens expelled in a typical year exceeds the number granted entry under the immigration laws: 7% are deported and over 100% are required to depart. The latter figure, of course, reflects in part the magnitude of illegal immigration, but it still suggests that the overall scale of enforcement activities is quite substantial. The principal test of the interest group hypothesis centers upon the estimated coefficients of \textit{CYCLE}. We expect negative signs on the dependent variables \textit{RGNP} and \textit{RWAGE}, and a positive sign on \textit{U}. Other things being equal, the interest group theory would interpret such results as indicating that the immigration authorities expel a higher proportion of aliens from the United States during downturns in the business cycle because the political payoff from protecting domestic labor increases when wages are falling. Conversely, fewer expulsions would occur in times when the labor supply is tight because the political payoff from assisting producers by expanding the workforce increases when wages are rising.

\textit{RBUD} represents yearly input expenditures by the various agencies that have had jurisdiction over immigration. This variable is expected to be positively related to immigration enforcement activity. By holding budgetary expenditures constant, we effectively have a model in which changes in the "demand" for enforcement by interest groups are traced along the INS "supply" schedule, where "price" is political support.

The regression specification contains a set of four dummy variables that account for important changes in United States immigration laws. These variables, defined in Table 2, control for changes in historical conditions and overall changes in Congressional policy. We make no predictions about the signs on these dummy variables.

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40. The macroeconomic data and the various enforcement activity measures were obtained from \textit{Bureau of the Census, Statistical Abstract of the United States} (1975, updated through 1982). Observations on the budget of the INS and its predecessors were provided by the Office of Public Affairs, U.S. Immigration and Naturalization Service, Washington, D.C. Manufacturing wage data were obtained from \textit{Economic Statistics Bureau, Handbook of Basic Economic Statistics} 24-25 (1986). These data are on file with the \textit{Yale Journal on Regulation}.

41. For an explanation of how dummy variables are used in regression analysis, see R. Pindyck & D. Rubinfeld, \textit{Econometric Models and Econometric Forecasts} 111-16 (2d ed. 1981). These variables are also referred to as "zero-one" variables; they are used to control for events which are exogenous to the regression model.

42. Although the national origin quota system was not implemented until the mid-twenties, we date the onset of substantial immigration barriers to the passage of the Act of 1917.
Immigration

Table 2

<table>
<thead>
<tr>
<th>Definition of Dummy Variables</th>
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<tbody>
<tr>
<td>D1</td>
</tr>
<tr>
<td>D2</td>
</tr>
<tr>
<td>D3</td>
</tr>
<tr>
<td>D4</td>
</tr>
</tbody>
</table>

Finally, PDUM accounts for the political party affiliation of the president, taking on the value of one for Democrats and zero for Republicans. This variable is intended to measure the responsiveness of immigration enforcement to partisan political pressures, because enforcement authority has always resided in the executive branch of government. Conventional wisdom suggests that party ties to labor interests would lead Democratic presidents to adopt a more activist role in immigration enforcement. But partisanship does not matter in the interest group model. Peltzman's regulators respond systematically to changes in the demand for regulation so as to maximize their chances for political survival. This behavior is largely independent of party labels. It depends on factors not systematically related to party affiliation, such as the amount of wealth available for redistribution and the nature of the trade-off between producer and labor protection. Accordingly, the interest group theory suggests that the identity of the party occupying the White House should have little influence on immigration enforcement activity. Only if the conventional wisdom is correct would we expect a positive sign on PDUM.

Regression data were corrected for serial correlation using the technique of Cochrane-Orcutt. In addition, some specifications were estimated using the technique of instrumental variables. The adjustment was necessary because the flow of immigration and the level of enforcement resources available to immigration regulators are unlikely to be independent of each other, or of the state of the economy. We therefore estimated separate regression equations to explain variations in annual immigration, M, and the immigration budget, RBUD, and used the

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43. See supra text accompanying notes 34-35.
44. The Cochrane-Orcutt methodology is discussed in R. Pindyck & D. Rubinfeld, supra note 41, at 157.
45. The instrumental variables technique involves development of a new variable, z, which is highly correlated with the independent variables, yet still uncorrelated with the error term. R. Pindyck & D. Rubinfeld, supra note 41, at 178-80.
predicted values as our instruments. The predicted values for immigration were then used as the denominator in calculating the dependent variable for our enforcement equation. Although we planned to treat the immigration budget as a policy tool used by Congress to influence enforcement efforts, no empirical relationship was found between appropriations and any measure of immigration enforcement activity. The predicted values, $FBGT$, from a regression of the immigration budget on a linear time trend, time squared, and $PDUM$ were nevertheless used as explanatory variables.

All continuous variables were then transformed by taking their natural logarithms. The redefined variables are $LB$, log of real enforcement budget; $LRGNP$, log of real GNP; $LU$, log of unemployment rate; $LRW$, log of real manufacturing wage; and $LT$, a log-linear time trend. The regression estimates using deportations as the enforcement activity measure are shown in Tables 3 through 5.

The results offer strong support for the interest group hypothesis.

46. In particular, we regressed the number of immigrants admitted to the United States in a given year on the level of real GNP in the previous year, on a linear time trend, and on three of our dummy variables.

The results were as follows:

$$M = 449,623.95 + 1,367.40 \text{RGNP}(-1) - 17,217.51 T + 444,545.28 D1$$

\[ \text{ } \] \[ \text{ } \]

\[
\begin{align*}
M & = 449,623.95 + 1,367.40 \text{RGNP}(-1) - 17,217.51 T + 444,545.28 D1 \\
& \quad + 78,067.50 D2 - 146,435.83 D3; \\
\end{align*}
\]

\[ \text{ } \]

\[
\begin{align*}
\text{RM} &= 0.4743, \text{R}^2 = 0.785, \text{d} = 1.93, F = 45.59, \\
\end{align*}
\]

where $\text{RGNP}(-1)$ is real GNP lagged one year, $T$ is a linear time trend, and $\hat{\rho}$ is the estimated first-order autocorrelation coefficient.

47. The fitted values were obtained from the following regression:

$$RBUD = 22,757.33 - 1,302.73 T + 33.42 T^2 + 3,108.07 PDUM;$$

\[ \text{ } \] \[ \text{ } \]

\[
\begin{align*}
RBUD & = 22,757.33 - 1,302.73 T + 33.42 T^2 + 3,108.07 PDUM; \\
\end{align*}
\]

\[ \text{ } \]

\[
\begin{align*}
\text{RBUD} &= 22,757.33 - 1,302.73 T + 33.42 T^2 + 3,108.07 PDUM; \\
\end{align*}
\]

\[ \text{ } \]

\[
\begin{align*}
\hat{\rho} &= 0.8037, \text{R}^2 = 0.990, \text{d} = 1.85, F = 1,877.25 \\
\end{align*}
\]

48. Logarithmic transformations can be used as a means of removing growth over time of the variance of the data. R. Pindyck & D. Rubinfeld, supra note 41, at 590.

49. The $R^2$ values for the deportation regression models were all in the range of 90-95% when GNP or unemployment were used as the measure of economic activity. In other words, over 90% of the variation in enforcement activity could be explained by the predictive variables in these models. The $R^2$ value for the deportation model which included wage rates as the dependent variable was approximately 75%.

In nearly every case, the regression coefficients on the economic variables in the deportation model were statistically significant. Specifically, the coefficients for GNP and the real wage rate were significant at the one percent level (99% confidence level) and unemployment was significant at the five percent level (95% confidence level). The coefficients on the trend and dummy variables for wartime were similarly reliable, but trend contributed little to the model which measured economic activity using the unemployment rate. The results for the remaining dummy variables, including the party indicator for the President, were not statistically significant, and in some cases the parameter value did not bear out the expected relationship.

The $R^2$ statistic may sometimes be misleading because it is sensitive to the number of predictive variables used in the model. In fact, including more independent variables in the regression "can never lower the $R^2$ and is likely to raise it. ..." R. Pindyck & D. Rubinfeld, supra note 41, at 79.

Since most of the models included at least seven independent variables, the $R^2$ values should be interpreted with caution.
The ratio of aliens deported to total immigrants increases as real GNP falls (Table 3), as the unemployment rate rises (Table 4), and as real wages decline (Table 5). Thus, the level of immigration enforcement appears to vary in a counter-cyclical fashion. This result supports the theory that the immigration authorities use deportations to transfer wealth, mitigating downward or upward pressure on wages.

The model also supports the notion that while political pressures matter to basic policy formulation, party labels do not—a conclusion which is consistent with Peltzman's hypothesis that regulators are responsive to the demand for regulation independent of party politics. Although immigration authorities receive significantly larger budgets during Democratic administrations, the additional resources do not translate into increased enforcement activities when all other factors are held equal. This finding implies that those favoring stricter enforcement efforts should consider alternatives to increased budgetary resources as a means of achieving their goal.

In addition, the model suggests that immigration enforcement was looser during the period preceding national origins quotas (D1), and more restrictive following the establishment of literacy tests and numerical quotas (D2). The data suggest that immigration enforcement was even more restrictive during wartime (D3), and that enforcement has not relaxed substantially under the current preference system (D4).

Because the data are entered in their logarithms, the estimated coefficients on the continuous variables can be directly interpreted as elasticities. The results suggest that immigration enforcement activities are most responsive to changes in real wages and least responsive to changes in the unemployment rate. For example, a 1% increase in real hourly manufacturing earnings leads to a 5.5% to 5.7% reduction in the ratio of aliens deported to total immigrants. In contrast, a 1% decrease in the civilian unemployment rate causes only a 0.20% to 0.28% fall in enforcement activity. This implies that domestic wages are indeed the main variable of interest to the immigration authorities.

Regressions that used required departures rather than the number of deportations as the measure of enforcement activity yielded similar results,

50. See supra note 47.
### Table 3

**Dependent Variable: Log Ratio of Aliens Deported to Total Immigrants, 1900 - 1982**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>INTERCEPT</td>
<td>-5.7807</td>
<td>-7.3615</td>
<td>-6.5031</td>
<td>-6.0902</td>
<td>-5.3082</td>
</tr>
<tr>
<td>LB</td>
<td>0.5811 (1.78)*</td>
<td>0.4822 (1.45)</td>
<td>0.5876 (1.79)*</td>
<td>0.4406 (1.33)</td>
<td>0.5975 (1.91)*</td>
</tr>
<tr>
<td>LRGNP</td>
<td>-2.5400 (-4.97)***</td>
<td>-2.5927 (-4.53)***</td>
<td>-2.6606 (-4.87)***</td>
<td>-2.9532 (-5.32)***</td>
<td>-2.6656 (-5.06)***</td>
</tr>
<tr>
<td>D1</td>
<td>-1.1970 (-2.49)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td></td>
<td>0.3280 (1.12)</td>
<td>1.2175 (2.52)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>0.9016 (3.66)***</td>
<td>0.6896 (2.94)***</td>
<td>0.9086 (3.67)***</td>
<td>0.6177 (2.72)***</td>
<td>0.9070 (3.72)***</td>
</tr>
<tr>
<td>D4</td>
<td></td>
<td></td>
<td>1.4335 (2.30)**</td>
<td>0.1453 (0.39)</td>
<td>0.2172 (0.60)</td>
</tr>
<tr>
<td>PDUM</td>
<td>0.0058 (0.04)</td>
<td>0.0142 (0.09)</td>
<td>0.0067 (0.04)</td>
<td>0.0226 (0.14)</td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>3.0274 (4.41)***</td>
<td>3.7263 (5.58)***</td>
<td>3.0527 (4.47)***</td>
<td>4.1194 (7.17)***</td>
<td>3.0400 (4.51)***</td>
</tr>
<tr>
<td>(\hat{p})</td>
<td>0.6737</td>
<td>0.6826</td>
<td>0.6669</td>
<td>0.6686</td>
<td>0.6646</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.935</td>
<td>0.931</td>
<td>0.936</td>
<td>0.930</td>
<td>0.936</td>
</tr>
<tr>
<td>D-W</td>
<td>1.78</td>
<td>1.84</td>
<td>1.78</td>
<td>1.86</td>
<td>1.78</td>
</tr>
<tr>
<td>(F)</td>
<td>150.77</td>
<td>140.62</td>
<td>130.77</td>
<td>138.26</td>
<td>151.52</td>
</tr>
</tbody>
</table>

**Notes:**
- t-statistics in parentheses.
- D-W is the Durbin-Watson d.
- Asterisks denote significance at the 1 percent (***) , 5 percent (**), and 10 percent (*) levels.
## Table 4

Dependent Variable: Log Ratio of Aliens Deported to Total Immigrants, 1900 - 1982

<table>
<thead>
<tr>
<th>Variable</th>
<th>LB</th>
<th>LU</th>
<th>DI</th>
<th>PDUM</th>
<th>LT</th>
<th>ŕ</th>
<th>R²</th>
<th>D-W</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERCEPT</td>
<td>-6.0606</td>
<td>-9.9899</td>
<td>-8.6188</td>
<td>-1.7335</td>
<td>-6.9597</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB</td>
<td>0.0525</td>
<td>0.0057</td>
<td>0.0667</td>
<td>0.3081</td>
<td>0.1409</td>
<td>(0.15)</td>
<td>(0.02)</td>
<td>(0.19)</td>
</tr>
<tr>
<td>LU</td>
<td>0.2653</td>
<td>0.2048</td>
<td>0.2705</td>
<td>0.1298</td>
<td>0.2828</td>
<td>(2.05)**</td>
<td>(1.55)</td>
<td>(2.06)**</td>
</tr>
<tr>
<td>D1</td>
<td>-2.0078</td>
<td>0.9332</td>
<td>1.9910</td>
<td>1.0452</td>
<td>1.7306</td>
<td>(-3.73)***</td>
<td>(2.95)***</td>
<td>(3.66)***</td>
</tr>
<tr>
<td>D2</td>
<td></td>
<td>0.7881</td>
<td>1.0452</td>
<td>0.6175</td>
<td></td>
<td></td>
<td>(3.02)***</td>
<td>(3.79)***</td>
</tr>
<tr>
<td>D3</td>
<td>1.0575</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3.85)***</td>
<td>(3.02)***</td>
<td></td>
</tr>
<tr>
<td>D4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2.36)**</td>
</tr>
<tr>
<td>PDUM</td>
<td>0.1624</td>
<td>0.1607</td>
<td>0.1550</td>
<td>0.1199</td>
<td></td>
<td>(0.93)</td>
<td>(0.90)</td>
<td>(0.89)</td>
</tr>
<tr>
<td>LT</td>
<td>0.4454</td>
<td>1.4471</td>
<td>0.5751</td>
<td>-1.2555</td>
<td>0.4735</td>
<td>(0.59)</td>
<td>(2.27)**</td>
<td>(0.80)</td>
</tr>
<tr>
<td>ŕ</td>
<td>0.7958</td>
<td>0.7699</td>
<td>0.7752</td>
<td>0.9225</td>
<td>0.7743</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.923</td>
<td>0.917</td>
<td>0.923</td>
<td>0.911</td>
<td>0.922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-W</td>
<td>1.75</td>
<td>1.79</td>
<td>1.75</td>
<td>1.96</td>
<td>1.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>124.91</td>
<td>115.68</td>
<td>108.31</td>
<td>106.83</td>
<td>124.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- t-statistics in parentheses.
- D-W is the Durbin-Watson d.
- Asterisks denote significance at the 1 percent (***) , 5 percent (**), and 10 percent (*) levels.
Table 5
Dependent Variable: Log Ratio of Aliens Deported to Total Immigrants, 1919 - 1982

<table>
<thead>
<tr>
<th></th>
<th>Estimate 1</th>
<th>Estimate 2</th>
<th>Estimate 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERCEPT</td>
<td>-14.7419</td>
<td>-15.9680</td>
<td>-15.1587</td>
</tr>
<tr>
<td>LB</td>
<td>-0.7708</td>
<td>-0.7472</td>
<td>-0.7055</td>
</tr>
<tr>
<td></td>
<td>(-1.10)</td>
<td>(-1.08)</td>
<td>(-1.04)</td>
</tr>
<tr>
<td>LRW</td>
<td>-5.4873</td>
<td>-5.6414</td>
<td>-5.7056</td>
</tr>
<tr>
<td></td>
<td>(-2.59)**</td>
<td>(-2.81)***</td>
<td>(-2.81)***</td>
</tr>
<tr>
<td>D2</td>
<td>-0.0949</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.27)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3</td>
<td>1.5630</td>
<td>1.5809</td>
<td>1.5145</td>
</tr>
<tr>
<td></td>
<td>(5.07)***</td>
<td>(5.20)***</td>
<td>(5.00)***</td>
</tr>
<tr>
<td>D4</td>
<td></td>
<td></td>
<td>0.0919</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.27)</td>
</tr>
<tr>
<td>PDUM</td>
<td>0.1274</td>
<td>0.1278</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.65)</td>
<td>(0.66)</td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>6.1043</td>
<td>6.3584</td>
<td>6.0724</td>
</tr>
<tr>
<td></td>
<td>(2.08)**</td>
<td>(2.32)**</td>
<td>(2.10)**</td>
</tr>
<tr>
<td>( \hat{\rho}_1 )</td>
<td>0.8935</td>
<td>0.9012</td>
<td>0.8544</td>
</tr>
<tr>
<td>( \hat{\rho}_2 )</td>
<td>-0.4063</td>
<td>-0.4070</td>
<td>-0.3994</td>
</tr>
<tr>
<td>R*</td>
<td>0.747</td>
<td>0.747</td>
<td>0.745</td>
</tr>
<tr>
<td>D-W</td>
<td>1.96</td>
<td>1.95</td>
<td>1.94</td>
</tr>
<tr>
<td>F</td>
<td>15.15</td>
<td>17.69</td>
<td>17.51</td>
</tr>
</tbody>
</table>

Notes:
- t-statistics in parentheses.
- D-W is the Durbin-Watson d.
- Asterisks denote significance at the 1 percent (**), 5 percent (**), and 10 percent (*) levels.
- \( \hat{\rho}_1 \) and \( \hat{\rho}_2 \) are the estimated first and second-order autocorrelation coefficients, respectively.

Although the estimated coefficients on real wages were not statistically significant, the weight of the evidence suggests that, as a proportion of total immigrants, the number of aliens required to depart in a given year depends on domestic economic conditions.

51. Because data on the use of required departures are only available beginning in 1931, a dummy variable for the pre-1917 national origins quota could not be used. As with the models using deportation as a measure of immigration enforcement, the R* values were fairly high. The R* value was approximately .87, regardless of the choice of economic variables. The coefficients on the wage rate were not statistically significant, while the coefficients on unemployment and GNP were significant at the five percent level. Coefficients on the trend and dummy variables were found to be significant at the one percent to ten percent levels.
Conclusion

This Article's analysis of United States immigration policy during the twentieth century is based on the methodology of positive economics. It represents an attempt to step back from the rhetoric surrounding recent proposals to reform immigration law, and ask whose public and whose interests are actually served by INS enforcement activities. Insofar as the empirical results presented here show that such enforcement efforts tend to "smooth" immigration flows over the business cycle, domestic labor and producer interests emerge as the elemental forces that shape practices affecting the admission of aliens to the United States.
The interest group model, as applied to immigration enforcement, sheds explanatory light on specific provisions of the Immigration Reform and Control Act of 1986. The Act can be seen as a means of regulating the flow of illegal laborers into the United States. In a provision that President Reagan described as "the keystone" of the legislation, Congress made employers who hire illegal aliens subject to penalties of $250 to $10,000 for each such alien. The President noted that this provision "will remove the incentive for illegal immigration by eliminating the job opportunities which draw illegal aliens here." Of course, the effectiveness of the new penalty will depend on its enforcement, which this Article has shown depends in turn on the interaction between regulators and their two major constituencies. Fines against employers who hire illegal aliens will undoubtedly serve as another tool with which regulators can adjust the labor supply in order to maximize political support.

Conversely, the Act's retroactive amnesty provisions may be viewed as an immediate concession to producers made in a time of tight labor supply. These provisions benefit producers—and tie the hands of regulators to some extent—by reducing the number of employed aliens who would otherwise be subject to administrative action. For example, the Act provides amnesty and legal status for illegal aliens who can prove they have been living continuously in the U.S. since before January 1, 1982. Since these illegal aliens presumably had some source of employment in this country in order to survive for four years, the Act bestows a benefit on producer interests by making an existing labor supply more secure. Similarly, the Act grants amnesty to agricultural workers who were employed for ninety days in the twelve-month period preceding May 1, 1986. This provision has openly been characterized as a concession to Western and Southern farmers, who want a dependable supply of migrant workers.

In the area of international trade, explicit protectionist tariffs are often used as a means of keeping jobs at home that would otherwise be lost to foreign countries. Immigration enforcement appears to be a similar device for government intervention in the economy: Restraints on immigration guard against competition from foreign workers residing in the United States, while restraints on imports of foreign goods guard U.S. jobs against competition from workers residing in other countries. The

53. Id.
55. Id.
Immigration enforcement thus operates in much the same fashion as other regulation: It mediates between interest groups, in this case domestic producers and labor. Because the distribution of respective gains and losses shift over the business cycle, immigration enforcement activities vary predictably, abating during economic expansions when output and wages are rising, and becoming more vigorous during economic downturns when output and wages are falling. In the authors' view, this type of hard economic analysis should supplant—or at least illuminate—the traditional, emotional debate over immigration, in which the advocates of restrictive legislation exploit latent xenophobia and the critics appeal to the nation's immigrant pride.