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Business Ascendancy and Economic Impasse: A Structural Retrospective on Conservative Economics, 1979–87

Samuel Bowles, David M. Gordon,
and Thomas E. Weisskopf

Conservatives have been waging economic revolution since the late Carter years. Have they succeeded?

Some argue in the affirmative, pointing to lower rates of inflation and the long expansion since early 1983, insisting that “the fundamentals are sound.” Others argue in the negative, emphasizing the huge twin (trade and federal budget) deficits and the financial fragility underscored by the October 1987 stock market crash, warning that “the party’s over.” Both sides of this argument concentrate primarily on short-term phenomena in the 1980s; neither pays much attention to the experience of the conservative regime since 1979 in long-term historical perspective.

Ronald Reagan and the early architects of conservative economic policy made no such mistake. They sought their place in the history books as institutional innovators, not economic tinkerers. In this light, scrutiny of the usual cyclical macroeconomic indicators may miss far-reaching changes in economic structure which promise a sustained economic expansion in years to come. The budget and trade imbalances of the late 1980s, for example, may reflect nothing more than the growing pains of a new economic order whose long run prospects are as bright as the Reagan administration promised. Had the economic record of the New Deal been evaluated in the eighth year of Roosevelt’s presidency, one may doubt that we would have found in the standard economic aggregates signs of the profound institutional changes which were to provide the foundations for the long postwar boom.

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Viewed in this perspective, the conservative economic agenda has sought—and is often recognized as an attempt—to change the rules of the game. One might therefore properly ask: Did conservative economic leadership under Paul Volcker and Ronald Reagan succeed in transforming the underlying structure of the U.S. economy? If so, what have been the macroeconomic effects of this transformation?

Answering this question requires a somewhat unusual economic model, one which identifies and develops quantitative indicators of the key dimensions of the institutional environment of the economy and estimates the relationship of these dimensions to the behavior of key economic variables such as profitability and investment. We present here such a social structural model of macroeconomic performance.

Long-Term Trends in U.S. Macroeconomic Performance

The performance of the U.S. macroeconomy has markedly improved since the deep trough of the 1982 recession. But in a longer range historical perspective, the evidence suggests that the macroeconomy has been experiencing steady decline since the mid-1960s and that the conservative economic policy regime has yet to reverse that deterioration.

We have assembled some relevant data in Table 1. To avoid confounding short-run cyclical movements with long-run trends, the data represent averages for complete business cycles (running from peak to peak).¹ We have also distinguished among four key periods of the postwar U.S. economy: boom (1948–66), erosion of the institutional structure of that boom (1966–73), political and economic stalemate (1973–1979), and the business ascendancy (1979–87) of our title.²

The evidence in Table 1 underscores both the persistence of decline since the mid-1960s and the failure of conservative economics to reverse that decline. Among the outcome indicators, the inflation rate manifests improvement in the 1980s, but by every other measure the economy's performance has weakened with each successive cycle following the boom—or in the case of the unemployment rate, it has deteriorated in each successive cycle since 1966–73.

¹Our method of dating cycle peaks is premised in part on the need for consistency with our econometric estimates, in which we use a measure of capacity utilization as our primary cyclical variable. Peak years are thus defined in terms of the utilization of productive capacity as measured by the ratio of actual to estimated potential output in the domestic private non-residential economy. (See Appendix for data source and method.) Table 1 takes 1987 to be a peak year of the latest cycle, data permitting, in order to include the latest available annual data in the table. We treat the period from 1979 to 1987 as a single cycle in view of the barely perceptible character of the 1981 mini-peak and the better to evaluate the period of conservative economic policy as a whole.

²It seems reasonable to date the conservative period from 1979 for two reasons. First, many of the policies adopted under Reagan were presaged by policies begun in the waning years of the Carter Administration—for example, deregulation, the military build-up, the appointment of Paul Volcker to direct the Federal Reserve System, and the subsequent use of tight monetary policy to fight inflation. Second, according to the metric presented in the preceding footnote, 1948, 1966, 1973, 1979 and (in all likelihood) either 1986 or 1987 are cyclical peak years. In the text which follows, we shall refer to the 1979–87 cycle when data for 1987 were available to use at the time of writing and to the 1979–86 cycle otherwise.

Table 1

The Deteriorating Performance of the U.S. Postwar Macroeconomy

Period	1948–66	1966–73	1973–79	1979–87
<i>Outcome Variables</i>				
[1] Real GNP Growth Rate (%)	4.4	3.2	2.6	2.2
[2] Real Wage Growth Rate (%)	2.6	2.1	0.4	0.0
[3] Unemployment Rate (Ave. %)	5.2	4.6	6.8	7.7
[4] Inflation Rate (Ave. %)	2.0	5.1	8.9	5.2
<i>Supply-Side Indicators</i>				
[5] After-Tax Profit Rate (%)	6.9	7.0	5.5	6.0 ^a
[6] Rate of Capital Accumulation (%)	3.5	4.3	3.5	2.8 ^a
<i>Indicators of State of Economy</i>				
[7] Rate of Capacity Utilization	0.98	1.00	0.96	0.94
[8] Real Federal Funds Rate (%)	1.07	1.52	0.73	5.07

Sources & Definitions: Growth rates are calculated as logarithmic growth rates. Levels are calculated as average annual levels. *ERP* refers to *Economic Report of the President, 1987*; *BCD* refers to *Business Conditions Digest*, February 1988.

[1] Real Gross National Product (\$1982): *ERP*, Table B-2; *BCD*, Series No. 50.

[2] Real Compensation per Hour, Nonfarm Business Sector (1977 = 100): *ERP*, Table B-43; *BCD*, Series No. 346.

[3] Unemployment Rate for All Civilian Workers: *ERP*, Table B-35; *BCD*, Series No. 43.

[4] Implicit GNP Price Deflator (1982 = 100): *ERP*, Table B-3; *BCD*, Series No. 310.

[5] Rate of Net After-Tax Profit, Non-financial Corporate Business Sector (NFCB): See Data Appendix.

[6] Rate of Growth of Net Fixed NFCB Non-residential Capital Stock: See Data Appendix.

[7] Ratio of Output to Potential Output, Domestic Private Non-residential Economy: See Data Appendix.

[8] Real (Inflation-adjusted) Federal Funds Rate: *ERP*, Table B-68; *BCD*, Series No. 119. (Inflation adjustment by “expected inflation rate” as distributed lag on past inflation rates. N.Y. Fed Discount Rate used for 1948–1954.)

^aFigure for 1987 is preliminary.

Many conservatives set their sights, of course, on supply-side performance, hoping to reinvigorate productive investment by revitalizing corporate profits. The second set of indicators of Table 1 casts doubt on the success of this enterprise. Average after-tax corporate profitability improved slightly in 1979–86 compared with the previous cycle, but it still fell substantially below its levels in the 1950s and 1960s.³ And the rate of growth of the net capital stock continued to fall.

However, the conservative economists were not mistaken in their emphasis on the supply-side connection between profitability and investment. Figure 1 graphs annual values for the two supply-side indicators from Table 1, tracking the rate of accumulation and the rate of corporate profitability lagged two years. Evidently, the after-tax profit rate and rate of accumulation are not only closely related, but—equally important—the profit rate appears to lead the investment rate by two years.⁴ The

³Here and throughout, we use the term “corporate profitability” to refer to the net corporate rate of profit (see Data Appendix for full definition); we use the terms corporate profitability and corporate rate of profit interchangeably.

⁴The simple correlation between the rate of accumulation and the rate of profit lagged two years is 0.78.

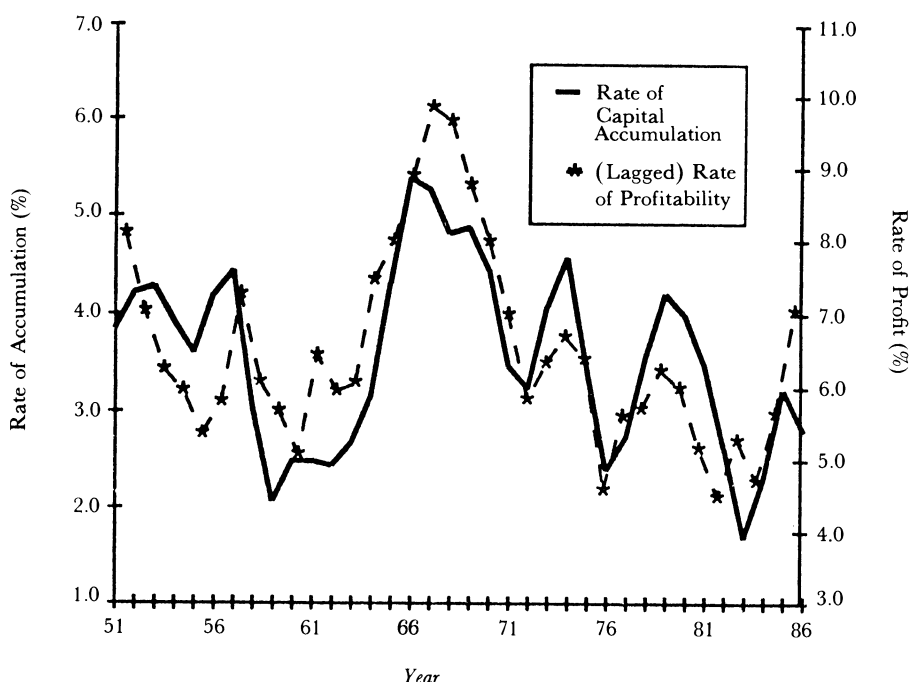


Fig. 1. Profitability and Accumulation in the U.S. Economy

stagnation of investment in the 1980s, by this evidence, is apparently related to the correspondingly lackluster performance of the after-tax profit rate.

What explains this failure of the profit rate to respond to the conservative medicine? It could be, of course, that the conservative offensive never got off the runway. But the political history of the period suggests otherwise: the 1981 tax cut benefited mainly the wealthy,⁵ for example, and the ratio of non-financial corporate business (NFCB) profit tax liabilities to NFCB pretax profits fell from .50 in 1979 to .44 in 1987.⁶ The progress of deregulation, even in such sensitive areas as environmental protection, further suggests that the conservative activists did not lack political clout.⁷

There is, moreover, ample economic evidence to suggest that the battle for a higher after-tax profit *share* of net output was substantially won. In a simple accounting identity, the profit share of net output is a negative function of the product wage (the wage deflated by the output price deflator) relative to real output per hour,

⁵For detailed evidence on the disproportionate concentration among the wealthy of benefits from tax changes during the 1980s, see Congressional Budget Office (1987).

⁶See the 1988 Economic Report of the President, Table B-12.

⁷For discussion of the particular components of deregulation which we regard as most favorable to business and most explicitly sought as part of the conservative economic agenda, see Bowles et al. (1983, Ch. 5); see also Bluestone and Harrison (1988).

the effective profit tax rate, and the real price of imports.⁸ Each of these three determinants had increased markedly in the 1973–79 cycle, cutting into profitability, and each then decreased significantly during the conservative regime from 1979 to 1986, considerably bolstering the profit share.⁹

The changes in these three variables in the 1980s, taken together, should have raised the rate of profit substantially—and with it the rate of investment. This frames a puzzle: How could an economic doctrine that won its political battles fail to win the economic war? What went wrong?

We shall see that while conservative economics did indeed win the battles, its weapons—low levels of capacity utilization and high real interest rates—battered the economy in order to save it. While the after-tax profit share of net NFCB output actually recovered enough during 1979–1986 to regain its levels in the 1966–73 cycle, the after-tax profit *rate* remained lower in large part because the rate of capacity utilization was lower. Investment languished both because the lower level of capacity utilization made it irrational to build new capacity in many sectors, and because the real cost of borrowing (for the purposes of investment) rose to unprecedented heights, as shown in Table 1. A strong upsurge in the after-tax profit rate might have offset these forces that depressed investment, but no such surge was forthcoming.

Power, Profits, and the Social Structure of Accumulation

Why were the costs of battlefield victory so high under the conservative regime? The military analogy is deliberate: We argue that profits may be represented as a deduction from net output made possible by the power of the capitalist class over other economic actors with which it deals. That profits are algebraically a deduction from net output is hardly in question, but we shall pause briefly to illustrate the sense in which this is the case to motivate the second and more controversial part of the preceding proposition: the size of this deduction depends on the power of the capitalist class.

We work for these purposes with an algebraic expression for the profit rate in an internationally open capitalist economy, building on a linear input-output model (Bowles, Gordon, and Weisskopf, 1986). We integrate the political dimension of the profit-making process into the model through an analysis of labor discipline and the

⁸A fall in the real price of imports is equivalent to an upward shift in the aggregate production function and hence, *ceteris paribus*, induces an increase in the profit share of net output. (This effect can be demonstrated most conveniently in a linear input-output general equilibrium model, in which a fall in the real price of imported inputs will always lower the maximal eigenvalue of the augmented input-output matrix, raising the equilibrium profit share of net output. Nothing in this demonstration hinges on assumptions concerning substitutability among inputs.) A lower real price of imports (termed a more “favorable” terms of trade) will also generally reduce net exports, depressing aggregate demand, reducing capacity utilization, and thereby potentially offsetting the positive effect of the increased profit share on the profit rate.

⁹These data are drawn from the 1987 Economic Report of the President, Tables B-43, B-12, and B-3 respectively.

determination of the terms of trade as well as through the more obvious effects of government tax, expenditure, and regulatory policy.

The after-tax rate of profit may be expressed in a sequence of two simple expressions: Profits per unit of gross output π is:

$$(1a) \quad \pi \equiv \left\{ 1 - a_d - (a_f/t) - [b_d + (b_f/t)](a_e/e^*) \right\}$$

where a_f and a_d are the amount of imported (f) and domestic (d) goods required to produce a unit of domestic good; and b_d and b_f are the amount of domestic and imported wage goods purchased by employees per hour of work. The expression (a_e/e^*) is the hours of labor required to produce a unit of gross output. It is definitionally equal to the flow of labor services required to produce a unit of output (a_e) divided by the average effort expended per hour of labor hired (e^*). The imported good is acquired through exchange, with the number of units of the imported good obtained for one unit of the domestic good defining the terms of trade, t .

In a purely formal second step, we can move from the expression for π in this first equation to an expression for the rate of profit. The level of output is simply the level of the capital stock, normalized as unity, times the ratio of output to utilized capital, z , multiplied by the rate of capacity utilization u . The after-tax rate of profit is then expressed as gross output (uz) multiplied by profits per unit of gross output π , multiplied by one minus the profits tax rate τ or:

$$(1b) \quad r \equiv uz\pi(1 - \tau).$$

From this sequence of expressions we can compile an exhaustive list of profit-rate determinants. In Table 2a, column 1 lists each proximate determinant of the profit rate from equations 1a and 1b, along with the sign of its effect.

Changes in some of these variables—capacity utilization, for example—may not directly involve conflicts among the relevant economic actors. But among the determinants of profitability in Table 2a, the real wage, the intensity of labor, the terms of trade, and the tax rate are likely to be objects of conflict. Even the input-output coefficients will vary with the degree of environmental and occupational safety regulation as well as union work rules, so they too will be objects of conflict between owners, workers and others. We therefore conclude that after-tax profits depend on the extent to which (with a given set of technological opportunities) businesses are able to strike favorable deals with labor, the government, and the rest of the world. The extent to which this is possible hinges critically on the power of the capitalist class relative to workers, foreign buyers and sellers, and potentially anti-business coalitions among domestic political actors.

These power relationships are grounded in the institutional environment of the economy. We define the institutional structures which regulate both the conflicting interests in the profit-making process and the closely associated process of accumulation and growth as the social structure of accumulation. (See Gordon, Edwards, and

Table 2a

**Determinants of the After-Tax Profit Rate and
Dimensions of the Social Structure of Accumulation**

[1] <i>Determinants of the After-Tax Profit Rate (& Direction of Effect on r)</i>	[2] <i>Primary Related Dimensions of the Social Structure of Accumulation</i>
1. The Real Wage (-)	Capital-Labor Accord, Moderation of Inter-Capitalist Rivalry
2. Labor Intensity (+)	Capital-Labor Accord
3. The Terms of Trade (+)	Pax Americana, Moderation of Inter-Capitalist Rivalry
4. Profits Tax Rate (-)	Capital-Citizen Accord
5. Capacity Utilization (+)	Capital-Labor Accord Pax Americana, Capital-Citizen Accord, Moderation of Inter-Capitalist Rivalry,
6. Input-Output Coefficients (-)	Capital-Labor Accord Capital-Citizen Accord

Table 2b

**Dimensions of the Social Structure of Accumulation and
Associated Quantitative Indicators of Capitalist Power**

[1] <i>Dimensions of the Social Structure of Accumulation</i>	[2] <i>Associated Indicators of Capitalist Power</i>
1. Capital-Labor Accord	Cost of Job Loss Index of Worker Resistance
2. Pax Americana	Trade Power
3. Capital-Citizen Accord	Index of Government Regulation Capital's Tax Share
4. Moderation of Inter-Capitalist Rivalry	Import Penetration Product Market Tightness

Reich (1982, Ch. 2) for definition and references.) The social structure of accumulation associated with the long post-World War II boom in the United States was initiated during the New Deal years with the recognition of labor unions and the extension of state responsibilities for the economic security of the elderly, the unemployed and the poor. It was consolidated during and immediately after the war with the evolution of a relatively open international trading and financial system under the

aegis of the Bretton Woods agreement and U.S. military hegemony, the emergence of Keynesian strategies of fiscal management of the macroeconomy, the ascendancy of the large corporation, and the secure influence of the business community over regulatory activities of the government. (For an historical and institutional account of this process, see Bowles, Gordon and Weisskopf (1983; 1986).)

We characterize the postwar social structure of accumulation in the United States as comprising four institutional relationships affecting the relative power of the capitalist class: the *capital-labor accord*, assuring management control over enterprise decision-making and relative “labor peace” in exchange for rising real wages, benefits and job security; *Pax Americana*, establishing general international economic stability and favorable terms for U.S. capital in dealing with foreign buyers and sellers; the *capital-citizen accord*, protecting the priority of capitalists’ pursuit of profits while meeting some basic citizen needs through government demand management, public programs, and transfers; and the *moderation of inter-capitalist rivalry*, limiting foreign competition with U.S. firms and preserving domestic oligopoly structures.¹⁰

Table 2a traces the connections between these dimensions of the postwar social structure of accumulation (SSA) and the key variables determining the rate of profit. Column 1, as noted before, lists each proximate determinant of the profit rate while column 2 identifies those dimensions of the SSA which most directly affect the respective variables in that first column.

Our next task is to provide empirical content to these dimensions of the social structure of accumulation so that we may estimate the key relationships among the institutional environment, profitability, and accumulation. In each case our objective is to measure underlying structural variables, representing the evolution of the institutional dimensions of the postwar SSA, and not to identify variables which are algebraically or definitionally associated with the profit rate. One could easily “predict” movements in the profit rate using measures of its algebraic components such as the real wage, or aggregate data such as the profit share of net output; but these near tautologies do not illuminate the fundamental relationships crucial to an understanding of secular trends in profitability.

We have developed a series of indices of U.S. capitalist power along each of these four SSA dimensions. Many of these measures build upon microeconomic foundations, since our aim in quantifying the dimensions of the social structure of accumulation is to trace the connections from models of the underlying power relationships among economic actors to the aggregate economic results of those power relations. We define and motivate these indices in the following paragraphs; we link them to the four respective power dimensions of the SSA, outlined above, in Table 2b. (Full definition and sources are provided in the Data Appendix.) In related econometric studies these

¹⁰While the social structure of accumulation (or SSA) framework provides a general methodological approach to the study of capitalist economies, we limit this particular model of the postwar U.S. SSA only to the United States in that period and do not intend this specific institutional characterization to be applicable to any other period in U.S. history or to any other economy in the postwar period.

or similar indices have proven to be robust estimators of the rate of profit, the rate of productivity growth, the incidence of strikes, a direct measure of work intensity, and the level of investment (Bowles, Gordon, and Weisskopf, 1986; Weisskopf, Bowles, and Gordon, 1983; Schor, 1987; Schor and Bowles, 1987; Rebitzer, 1987; Gordon, Weisskopf, and Bowles, 1988).

The power of capital vis-à-vis labor depends critically on the scarcity of jobs, for the simple reason that employers control access to jobs and workers need jobs to make ends meet. We measure the scarcity of jobs by the income opportunities enjoyed by employed workers relative to those without jobs. We term these income opportunities “rents,” for workers risk losing these employment rents in their conflicts with management. The *cost of job loss*, a key variable in our account, furnishes an estimate of these employment rents, measuring the income loss which a representative worker may expect to suffer if his or her job is terminated, taking into account the level of unemployment insurance and other means-tested social payments as well as the expected duration of unemployment. Because of the multidimensional nature of the capital-labor accord, we also use (the inverse of) an index of *worker resistance* derived from a principle components analysis of strike incidence, quits, and issues of contention in strikes.¹¹

The power of capital with respect to foreign buyers and sellers is reflected in advantageous access to markets and to sources of supply. One important example of the changing international power of U.S. capital and its impact on profitability is the successful CIA-organized overthrow of the nationalist Mossadegh government in Iran in 1953, which helped to assure almost two decades of stable oil prices, followed by the contrasting inability of the Western powers to prevent OPEC from raising oil prices sharply in the early and the late 1970s. Another example is the substantial improvement in the U.S. terms of trade during the early to mid-1980s resulting in large measure from the rise in the value of the dollar, itself the result of the rise in real interest rates in the United States compared to the rest of the world.¹² Both episodes, the military and the monetary, illustrate the power of U.S. capital to buy cheap and sell dear on world markets. While no adequate measure of this power dimension is available, we seek to capture some of its relevant proportions through an index of *U.S. trade power*. We define this index as the level of the U.S. terms of trade predicted by the U.S. real interest rate and an index of U.S. military power—the “threat of force” index initially developed by Barry Blechman and Stephen Kaplan (1978) and later used by Tom Riddell (1986, 1988) to explain movements in the terms of trade

¹¹This multidimensional index is further motivated and described in Bowles, Gordon, and Weisskopf (1986). We use it there successfully in analyses of the profit rate through 1979. Data cutbacks during the Reagan administration have made it impossible to update the multidimensional index through the 1980s. Given our interest in this paper in extending the analysis into the 1980s, we use instead (for the full period) one of the three components of the multivariate index (the frequency of strikes among unionized workers) as our proxy for worker resistance since this measure is indeed available for the last cycle in our period of observation.

¹²We have not extended our analysis past the mid-1980s and are agnostic about whether the sharp decline in the value of the dollar after 1985, and therefore in the U.S. terms of trade, can be fully accounted for by this set of hypotheses about trade power and its determinants.

econometrically.¹³ This measure of trade power varies directly with the terms of trade t in Table 2a; the higher trade power is, the more favorable are the terms of trade and, *ceteris paribus*, the higher the rate of profit.

The power of capital toward the domestic citizenry is represented by two variables: (the inverse of) an index of *government regulation*, measuring the extent of social and economic regulation of business, and (the inverse of) *capital's tax share*, the share of the total tax burden that is estimated to be borne by recipients of capital income.

Our measures of the degree of intra-capitalist class cohesion, finally, focus on the degrees of effective product market competition. Our rationale is that firms' mark up over costs—whether derived from equating marginal cost and marginal revenue or some other rule of thumb—will be a positive function of the perceived inelasticity of demand facing the firm, which will depend in turn on the number of competing firms and the extent to which competing firms are capacity-constrained. We therefore represent this dimension of the social structure of accumulation in two ways: as an inverse function of the ratio of *import penetration*, reflecting one major dimension of variations in the effective presence of competing firms, and as a direct function of *product market tightness* (as measured by the percentage of sellers reporting late deliveries), at least partly capturing the degree to which firms are capacity-constrained.¹⁴

Tables 2a and 2b, viewed together, trace the connections from these indices of capitalist power through the four power dimensions of the postwar social structure of accumulation to the proximate determinants of the rate of profit. How well do these necessarily indirect and imperfect measures of the power of U.S. capital empirically explain movements in the rate of profit? In the first column of Table 3 we present the results of a time series regression of the average after-tax rate of profit in the nonfinancial corporate business (NFCB) sector on these seven measured dimensions of capitalist power. We add to the regression the rate of capacity utilization, since the rate of profit on owned capital stock will vary both with the rate of profit on utilized capital and with the rate of utilization of that capital; and we add two other

¹³As noted in the text, it is U.S. interest rates relative to foreign interest rates which matter, not absolute rates in the United States; in this index of trade power, however, we have used only U.S. real interest rates and have not tried to control for movements in interest rates abroad. One minor additional consideration conditioned our derivation of this index. Under a regime of fixed exchange rates, there is no compelling mechanism for a real interest rate effect on the terms of trade (since this effect operates through the influence of capital flows on relative exchange rates and therefore has no potential channel of effect when exchange rates are fixed). To preclude the possible distortion of (presumably spurious) covariation between the interest rate and the terms of trade during the period of fixed exchange rates, therefore, the coefficient of the real interest rate in the regression generating the trade power index is constrained to be zero for years before 1971. The equation for the years 1955 to 1986 shows a highly significant positive effect of both the real interest rate and the military power variable and explains 90 percent of the variance of the terms of trade.

¹⁴One might suspect that this latter index of product-market tightness serves no other purpose than redundantly measuring the cyclical state of the economy, but the simple correlation coefficient between this variable and our index of capacity utilization is only 0.37, suggesting the usefulness of including both variables.

Table 3

Power, Profitability, and Accumulation in the Postwar U.S. Economy, 1955–86

<i>Dependent Variable</i>	[1] <i>r</i>	[2] <i>r</i>	[3] <i>k</i>	[4] <i>Betas for [3]</i>
Constant	−9.48 (11.61)	−8.94 (11.54)	−2.72 (7.01)	
Capacity Utilization	5.47 (9.96)	1.45 (3.07)	5.61 ^a (7.10)	0.690
Past. Capacity Util.	...	−3.42 (6.27)	...	
Real Fed. Funds Rate _{−4}	...	3.06 (5.73)	...	
Product Market Tightness	0.31 (4.66)	0.17 (3.21)	...	
Cost of Job Loss _{−1}	0.66 (5.58)	0.58 (4.14)	...	
Worker Resistance _{−2}	0.14 (3.21)	0.08 (1.70)	...	
Trade Power	6.01 (4.66)	9.63 (4.24)	...	
Government Regulation	−0.98 (3.78)	−0.95 (4.61)	− ...	
Capital's Tax Share	−2.94 (7.79)	−2.67 (8.45)	...	
Import Penetration	−1.65 (9.03)	−1.52 (9.03)	...	
Price Controls Dummy _{−1}	−0.09 (2.02)	−0.04 (1.14)		
Tech. Innovation _{−1}	0.51 (1.54)	0.64 (2.54)		
Rate of Profit _{<i>t</i>−<i>s</i>}	0.39 ^b (2.35)	0.272
Real Cost of Cap. Serv. _{−2}	−0.20 (3.77)	−0.234
<i>MA</i> (<i>q</i>)	...	(2): −0.78 (2.52)	(1): 0.62 (2.73)	
\bar{R}^2	0.91	0.96	0.91	
<i>D.W.</i>	2.25	2.25	1.88	

Notes: See Data Appendix for full variable definition. All variables entered in regressions in natural logarithms. Numbers in parentheses are *t*-statistics.

^aLagged one period in this equation.

^b2nd-order polynomial distributed lag over $t = -1, \dots, -4$.

exogenous variables likely to influence profitability: a measure of the rate of technological innovation and a dummy variable capturing the effects of the Nixon Administration's wage-price controls.¹⁵ The coefficients on all of the power variables have the expected signs and all are statistically significant at the 1 percent level. Most of the explanatory power of this equation is provided by our seven measures of capitalist power; for example, if one estimates an equation with precisely the same specification as that in column 1 but which excludes these seven power indices, the adjusted R^2 of that equation is only 0.39.

The estimated equation in column one of Table 3 conveys a clear message: The profit rate could be increased if it were possible to improve capital's power along the four SSA power axes without incurring losses on other profit rate determinants. This, as we shall see, is not an easy objective to attain; wielding power in the interest of profits is expensive. The reason, in a nutshell, stems from an apparent contradiction between our direct measures of capitalist power, on the one hand, and other indicators of the "state" of the aggregate economy, on the other: effective use of the main instruments of capitalist power entails operating the economy at low levels of output. This, as we will see, is the basic dilemma of conservative economics.

The Contradictions of the Social Structure of Accumulation

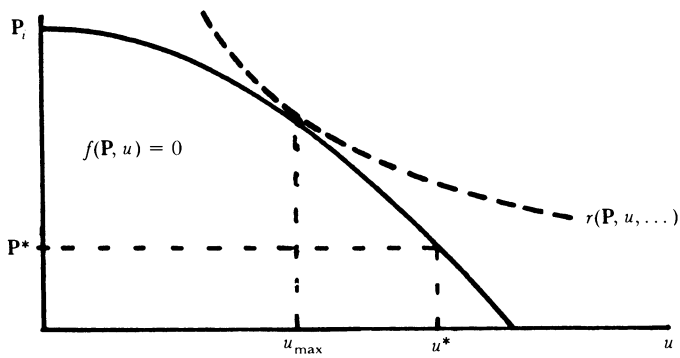
Why should enhancing capitalist power be so expensive? The costs of power can be modelled more precisely by representing capitalist power in terms of a feasible set of combinations of levels of the seven power variables introduced above and variables reflecting the state of the economy, such as the level of capacity utilization, which influence the observed levels of the power variables.

We begin by graphing in Figure 2a the relationship between our measures of capitalist power, represented by the vector \mathbf{P} , and one important measure of the state of the economy, the level of capacity utilization u . In that graph, the "capitalist power frontier," $f(\mathbf{P}, u) = 0$, illustrates the combinations of capitalist power and capacity utilization which are feasible *within a given institutional environment*.¹⁶ A shift in the frontier would reflect an institutionally conditioned change in capitalist power, with an upward-right shift indicating an increase in capitalist power and a downward-left shift indicating a decrease.

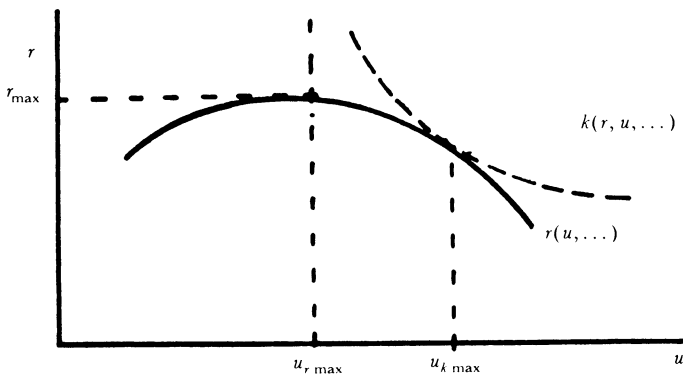
Why is there a negative relationship between capitalist power and capacity utilization? Consider a particular measure of capitalist power, P_i —for example, the

¹⁵We add the dummy for wage-price controls because numerous analyses have found evidence that those controls affected the rate of change of prices and wages; they would therefore be likely to influence the profit share of net output and, *ceteris paribus*, the profit rate. The regression is estimated in log-log form since we assume that the effects of capacity utilization and the determinants of the rate of profit on utilized capital will be multiplicatively interdependent.

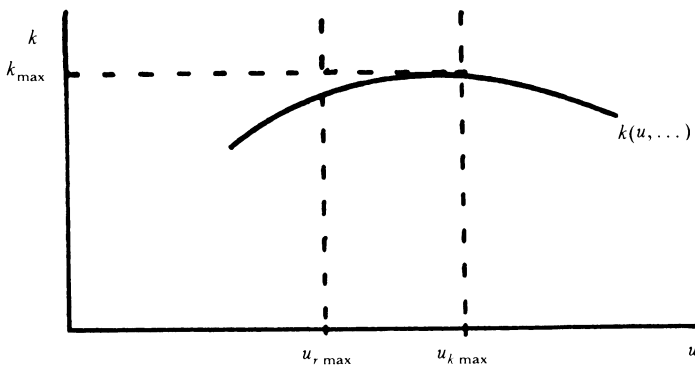
¹⁶In moving to a two-dimensional space in this graph, we are (for expositional convenience) treating the vector \mathbf{P} as if it can be compressed into a single composite index of capitalist power. We present below a reasonable method for establishing weights for the respective elements of \mathbf{P} to permit such aggregation into a single variable.



(a) *A Capitalist Power Frontier*



(b) *Profitability and Utilization*



(c) *Accumulation and Utilization*

Fig. 2. A Capitalist Power Frontier and the Determination of Profitability and Accumulation

cost of job loss. There is bound to be a notable negative relationship between the cost of job loss and capacity utilization because the cost of job loss rises with the expected duration of unemployment, which is itself a negative function of the level of capacity utilization.¹⁷ Both the cost of job loss and the level of capacity utilization have a positive impact on the profit rate, as shown in column 1 of Table 3. However, if the economy is operating on the capitalist power frontier, increasing one entails diminishing the other.

In Figure 2a we have also drawn an isoprofit contour, $r(\mathbf{P}, u, \dots)$, which describes combinations of capacity utilization and capitalist power giving rise to a constant profit rate r . Curves to the northeast of r in the figure represent loci of higher profitability. The point of tangency at $u_{r \max}$ thus represents the highest rate of profit consistent with the feasible set $f(\mathbf{P}, u) = 0$. As can be seen from Figure 2a, movements along the capitalist power frontier from lower to higher levels of capacity utilization are associated with first rising and then (to the right of $u_{r \max}$) falling profit rates. This pattern of association between profitability and utilization is transposed onto Figure 2b; there the curve $r(u, \dots)$ represents the feasible combinations of r and u consistent with $f(\mathbf{P}, u) = 0$ and with given values of other (exogenous) variables affecting profitability.

Now consider the rate of investment, which will vary positively with the average rate of profit as an indicator of expected future profitability. It will also vary positively with the level of capacity utilization, serving as a measure of the adequacy of the existing stock of capital to meet expected sales, and it will vary negatively with the real interest rate, reflecting the influence on investment decisions of the opportunity costs of the investment. (See Gordon, Weisskopf, and Bowles, 1988, for full development of the microeconomic foundations and macroeconomic logic of this approach.) Thus in Figure 2b we can draw iso-investment loci indicating those combinations of u and r (at a given level of the real interest rate) which induce a given rate of investment (or accumulation) k . As can be seen, the maximum rate of accumulation occurs at $u_{k \max}$. Like the profit rate, the rate of accumulation is a rising and then falling function of the level of capacity utilization, with $u_{k \max} > u_{r \max}$ as long as the rate of capacity utilization has an independent positive effect on the rate of accumulation. The relationship between investment and utilization is transposed onto Figure 2c; in this case the curve $k(u, \dots)$ represents the feasible combinations of k and u consistent with $r = r(\mathbf{P}, u)$ and $f(\mathbf{P}, u) = 0$.

Considering Figures 2b and 2c together, it can readily be confirmed that there is a range of values of capacity utilization over which there is a trade-off between profitability and accumulation. The logic of this trade-off, given the structure of our model, is quite straightforward. When capacity utilization rises between $u_{r \max}$ and $u_{k \max}$, accumulation is continuing to rise (as a result of the independent positive effects of capacity utilization on accumulation) even though profitability has begun to decline (and is therefore in its own right producing a dampening effect on accumulation). From the point of view of capitalists, this can be characterized as a regime of

¹⁷The simple correlation between the cost of job loss and the rate of capacity utilization (lagged one year) for the period 1951–85 is -0.28 .

“overaccumulation”—accumulation is more rapid than they would like from the vantage point of profit maximization. We will presently see that the U.S. economy has frequently operated in this overaccumulation domain.

This kind of potential contradiction also applies in the case of our other principal index of the state of the economy, the real interest rate. For example, our index of U.S. trade power is a positive function of the U.S. real interest rate, which is a negative determinant of the rate of accumulation. An increase in the real interest rate will raise trade power—because it will raise the value of the dollar and hence improve the terms of trade—but the positive effect of trade power on profits and thereby on investment will be countered by the direct negative effect of the higher real interest rate on investment. One could once again have a domain of overaccumulation in which relatively low real interest rates were boosting accumulation but eroding profitability.

In summary, this set of relationships compactly illustrates the high cost of raising profits. Over the relevant range of economic activity and public policy, given an existing institutional environment, the elements of capitalist power \mathbf{P} may be increased but only at the cost of movements in capacity utilization and/or the real interest rate adversely affecting either profits or investment.¹⁸

Viewed as a whole, this model suggests that an increase in the rate of accumulation may take place for any one or more of five reasons: (1) an outward movement of the capitalist power frontier, an improvement in either (2) the profit function or (3) the accumulation function, (4) a shift in capacity utilization or the real interest rate towards that configuration which maximizes accumulation, corresponding in Figure 2c to $u_{k \max}$, and (5) an improvement in the exogenous variables \mathbf{z} .

By estimating this system of relationships econometrically, we can diagnose the failure of the conservative economic program to invigorate the rate of accumulation.

¹⁸This description of the social structure of accumulation can be summarized more formally as a system of three equations in five unknowns, \mathbf{P} , r , k , \mathbf{x} , and \mathbf{z} :

$$f(\mathbf{P}, \mathbf{x}) = 0$$

$$r = r(\mathbf{P}, \mathbf{x}, \mathbf{z}) \quad \text{with } r_p > 0$$

$$k = k(r, \mathbf{x}) \quad \text{with } k_r > 0.$$

The vector \mathbf{z} is exogenous, while the vector \mathbf{x} represents the two state variables in our account: the level of capacity utilization and the real interest rate. These “state variables” may obviously be influenced by the choice of government policy. We do not seek, however, to close the system and define the equilibrium values which might result from an optimal control exercise designed, for example, to choose that level of utilization or the real interest rate optimizing k (or conceivably r) subject to this equation system and the exogenous variables. Rather we see the determination of the policy-related state variables as the outcome of conflicts arising among economic actors with differing preferences about profitability, accumulation and other outcome variables in the system; we shall treat those conflicts, and thus the values of \mathbf{x} , as exogenous for the purposes of this paper. In ongoing research, however, we are exploring the appropriate specification of fiscal and monetary reaction functions which would treat current levels of \mathbf{x} as functions, among many determinants, of lagged levels of profitability or of the elements of \mathbf{P} . See also Epstein and Schor (1988) for progress in specification of a monetary reaction function in this spirit.

An Econometric Model of the Social Structure of Accumulation

Our model is designed to analyze the connections between capitalist power and both profitability and accumulation. But it would clearly be misleading to consider the levels of our indices of capitalist power as measures of the structurally determined power of capital, for this power could evidently be increased simply by lowering the rate of capacity utilization, perhaps to the detriment of profits and investment. Instead, we will seek to distinguish between movements along the capitalist power frontier and shifts in the frontier itself. When the frontier shifts outward over the relevant range we say that the structurally determined power of capital has increased, and conversely.

We would like to be able to distinguish, then, between the measured level of capitalist power P and the underlying or structurally-determined level of capitalist power P^* , where the latter is measured by the level of P at given benchmark levels of our indicators of the state of the economy, x^* .¹⁹ This allows us further to specify the formulations for our capitalist power frontier: We can now express measured capitalist power P as a function of underlying capitalist power P^* determined by the social structure of accumulation, and of variables such as capacity utilization and the real interest rate, describing the state of the economy. This measure of underlying power P^* is thus an index of the position of the capitalist power frontier; we have indicated on Figure 2a the level of P^* corresponding to the benchmark value of u, u^* , for the frontier shown on the graph. The reinforcement or erosion of the social structure of accumulation is therefore measured by an increase or decrease in the elements of P^* , reflecting an outward or inward shift in the capitalist power frontier in Figure 2a.

This distinction between measured and underlying capitalist power also allows us to reformulate our specification of the determination of corporate profitability: Corporate profitability can now be viewed as a function of *underlying* (rather than measured) capitalist power as well as the state of the economy and other exogenous variables.

Figure 3 provides a schematic diagram of the structure of the interrelationships among our endogenous variables.²⁰ The arrows indicate causal and temporal orders of determination, with the variables to the left occurring prior to those on the right in both senses. Underlying capitalist power and the state of the economy jointly determine the level of measured capitalist power; measured capitalist power and the state variables jointly determine profitability; while profitability and the state variables jointly determine the rate of accumulation.

¹⁹ Because the given benchmark level of x^* will influence the measure of P^* and its movements (unless shifts in the capitalist power frontier do not alter its slope), this measure is arbitrary in the same sense that the choice of weights in a fixed-weight index number is arbitrary. The key state variable in our analysis of capitalist power is the level of capacity utilization, for which we use a benchmark of 1.0 (its mean value over the period 1955–1986 was 0.967 and it exceeded the benchmark value of 1.0 in seven years); a secondary state variable is the real interest rate for which a benchmark value of 0.0 is used (its period mean was 1.74 percent and dropped below the benchmark value of 0.0 in nine years).

²⁰ The figure ignores the influence of other exogenous variables z .

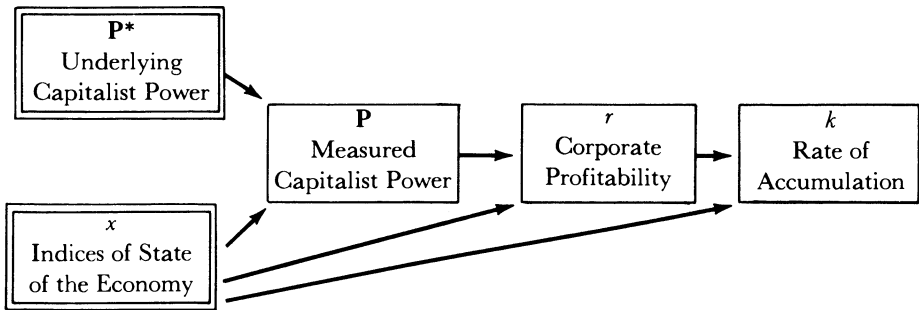


Fig. 3. A Recursive Model of Power, Profitability, and Accumulation

The recursive order of determination of the endogenous variables has a relatively obvious logic within the structure of our analysis. The lagged determination of the rate of accumulation arises in large part because the investment decision is made well before investment expenditures actually take place. The lagged determination of the profit rate is due to the institutional and social character of its determinants: A change in the cost of job loss, for example, will take time to alter the collective and individual behaviors of workers and employers both because it may not be immediately perceived and because of long term formal and informal contracts. Because our system is thus recursive rather than simultaneous, we may use ordinary least squares estimation without running the risk of simultaneous-equation bias.

Our first objective is to measure and then isolate the effects of underlying capitalist power P^* . To derive measures of P^* (which is unobserved) we must purge the observed P variables of their covariance with x , the variables describing the state of the economy. Thus, for example, we regress annual values of the cost of job loss on current and trend levels of capacity utilization, and define the relevant underlying power variable, P_i^* —in this case the underlying or structurally determined level of the cost of job loss—as the estimated cost of job loss which would obtain in a steady state at a benchmark level of capacity utilization. Underlying trade power is defined as the predicted terms of trade holding the real interest rate constant at its benchmark level.²¹

Consider now the relationship between underlying capitalist power and profitability. We present estimates of this relationship in column 2 of Table 3. The principal difference with column 1 of Table 3 is that our new indices of underlying capitalist power P_i^* have been substituted for the indices of measured capitalist power P_i ; the P_i^* variables by construction capture variations in measured capitalist power

²¹We used a systematic search procedure to test for association between each of the measured SSA power variables with both capacity utilization and the real interest rate. In testing for association with capacity utilization, we tested with both the current level of u and past trends in u —on the assumption that these effects may require some time to develop. In each case, where warranted, we eliminated from the P_i that portion of its variance which was due to its covariance with the state variable(s).

which remain after controlling for the influence of the state variables on those indices of measured capitalist power. To remain faithful to the structure of the system of relationships, we have included the other state variables, besides the current value of u , which were involved in the “purging” exercise: Past (trend) capacity utilization and the real interest rate.²² All the coefficients on the indices of capitalist power retain the signs and significance shown in column 1 of Table 3 (with only the worker resistance coefficient dropping to roughly 5 percent significance on a one-tailed test). The large negative coefficient of past capacity utilization reflects the corrosive effects of high levels of economic activity on (measured) capitalist power. Summing the two capacity utilization coefficients, we can see that a steady state increase in capacity utilization has a negative effect on the profit rate. The sign on the real interest rate (measured here by the real federal funds rate) is positive because of its positive effect on our index of (measured) trade power.

The estimated equation shown in column 2 of Table 3 provides a satisfactory rendering of the reduced form of a profit equation which successfully tracks the postwar behavior of U.S. NFCB after-tax profitability. The regression results also provide us with a means to aggregate our multidimensional indexes of underlying power into a single scalar variable. Weighting each index of underlying capitalist power P_i^* by its corresponding estimated coefficient in the profitability regression shown in column 2 of Table 3, we obtain a single index of underlying capitalist power P^* . Given the structure of our model, variations in P^* represent literally the variations in the NFCB after-tax profit rate which are associated with changes in the underlying power of the capitalist class, according to the results of the equation in column 2 of Table 3, and holding constant the levels of the remaining state and exogenous variables which also influence profitability.

What does this underlying profit power measure P^* tell about the long term dynamics of the postwar economy? Figure 4 presents a graph of P^* from 1955 through 1986.²³ Also shown is a corresponding summary index of measured capitalist power P , obtained in an analogous manner by weighting each element P_i by its estimated coefficient in column 1 of Table 3.

The rising level of P^* from the mid-1950s to the mid-1960s, followed by a long declining trend through the late 1970s, provides quantitative support for our institutional history of these decades. The institutional structure of the postwar social structure of accumulation in the United States was consolidated in such a way as to enhance the political-economic power of the capitalist class in the first two decades after World War II. Beginning in the mid-1960s, however, a series of challenges—from workers, European competitors and Third World suppliers, and citizens’ movements

²²This addition is required on purely formal grounds: Since we are substituting for P_i in the first equation in footnote 16, we must substitute for algebraic and econometric completeness not only the new indices of capitalist power but all those other structural determinants of measured capitalist power identified by our estimated “purging” equations.

²³The graph presents smoothed values for the variables, using three-year centered moving averages to clarify the pattern of their trend variations.

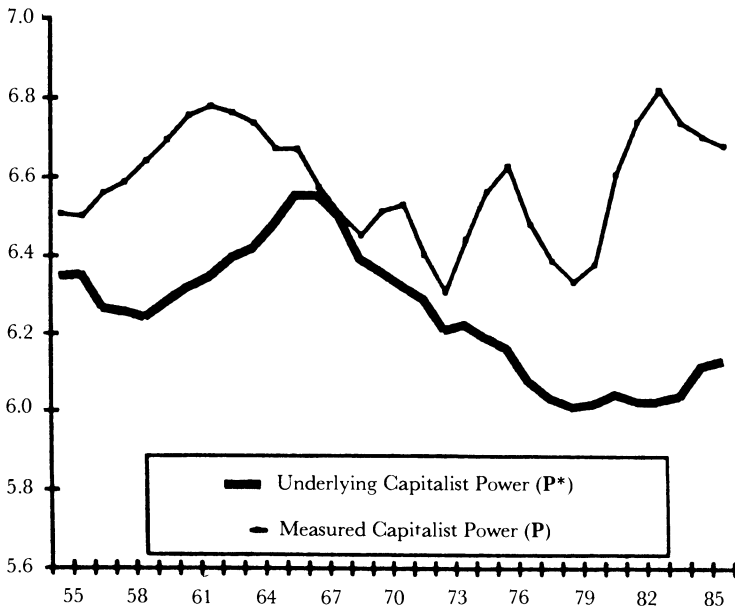


Fig. 4. Indices of Capitalist Power, 1955–86

—began to undermine the social structure of accumulation and erode the power of the capitalist class.

The differences between the measured and underlying power indices also tell an interesting story. Deviations of P^* from P reflect variations in the state variables—capacity utilization and the real interest rate. While the measured power of U.S. capital recovered strongly during the late 1970s and early 1980s, as shown in Figure 4, its underlying power did not. The reason for this anomaly seems clear. The improvement in the measured power variables was achieved primarily through variations in the real level of capacity utilization and the real interest rate, reflecting movements along the capitalist power frontier rather than outward shifts in the frontier itself; while those utilization and interest rate effects resulted in higher values for measured capitalist power (an upward-left movement along the frontier in Figure 2a), they were nonetheless consistent with a continuing decline (until the early 1970s) in our index of underlying capitalist power.

This dynamic is strikingly revealed through an analysis of the cost of job loss over the same period. The measure of the power of employers over workers displayed a slightly upward secular trend from the late 1940s through the late 1950s, after which it fell dramatically, stabilized at low levels during the 1970s, and then rose during the 1980s. But what of the underlying cost of job loss?

Figure 5 indicates that from the late 1950s to the mid-1960s, the measured cost of job loss varied negatively and systematically with the level of capacity utilization, describing an aspect of a capitalist power frontier which was relatively favorable to

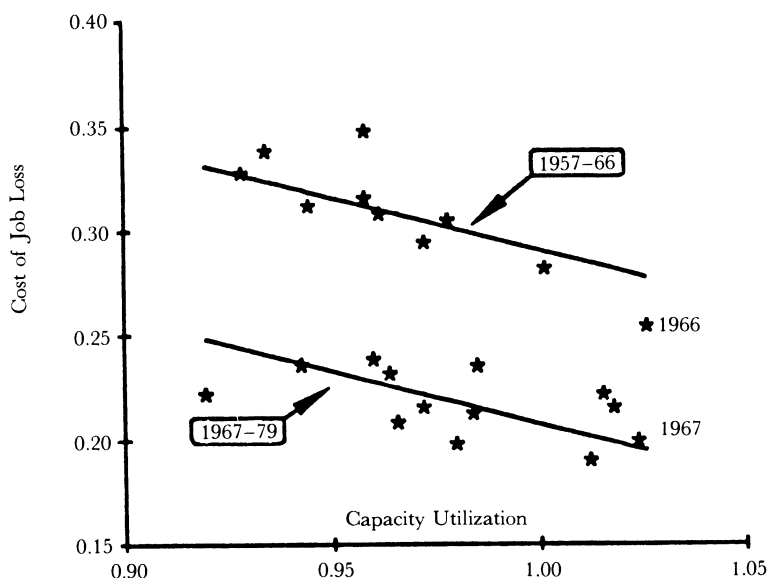


Fig. 5. The Tradeoff Between the Cost of Job Loss and Capacity Utilization Shifts Inward, 1957-66/1967-79

capital. However, under the pressure of increased access to government income support programs during the late 1960s, the frontier shifted dramatically inwards (this shift is analyzed in considerable historical detail in Bowles et al., 1983, Chs. 4-5), signalling a less favorable tradeoff which exposed macroeconomic policy makers to a less inviting menu of options: empowered workers or idle factories.²⁴ It is this inward shift and analogous shifts for the other power variables which are measured by movement in the underlying power variable P^* .

The final step of our econometric exploration of the social structure of accumulation model involves a test of the links of capital accumulation to profitability in the context of the social structure of accumulation. We expect that the after-tax profit rate and the level of capacity utilization will influence the rate of accumulation positively while the real interest rate will have negative effects.²⁵

²⁴ The lines in the figure derive from a regression from 1955 to 1985 of the cost of job loss on u and a dummy variable for the years 1967-85; the t -statistic on the dummy variable is 9.81. (1985 was the last year for which we had data available for the cost of job loss.)

²⁵ More precisely, assuming investors seek to maximize the present value of their assets, the firm's investment decision will depend on the present value of an investment project's expected stream of income, discounted at the opportunity cost of borrowing; for an investment project with an expected return equal to the average after-tax profit rate, this is equivalent to the ratio of the rate of profit to the real rate of interest. We would thus expect the coefficients of those two variables to be of roughly comparable magnitudes but opposite in sign when the accumulation function is estimated in double logarithmic form. Further, to be more precise about the opportunity cost of investment and to follow standard practice, we substitute a measure of the real (tax-adjusted) corporate cost of capital services for the real interest rate in our empirical analysis of accumulation.

These expectations are confirmed in column 3 of Table 3.²⁶ The normalized regression coefficients in column 4 present the fraction of a standard deviation in the log of the rate of investment associated with a change of one standard deviation in each of the independent variables.²⁷ These indicate that over the range of variation observed during the period under study, profitability had a major impact on accumulation.²⁸ So also did our two state variables, the level of capacity utilization and the real interest rate, since the corporate cost of capital services itself varies directly with the real federal funds rate.²⁹

The profit and accumulation functions in Table 3 allows us to consider empirically the accumulation-profitability trade-off identified in Figure 2. Combining our estimated profit and accumulation equations, we can actually estimate the curves sketched in Figures 2b and 2c. There, our analysis leads us to postulate an inverted *u*-shaped relationship between these two variables and the level of capacity utilization. Figures 6a and 6b graph the predicted rates of profit and accumulation—the values for the dependent variables “explained” by equations in columns 2 and 3 of Table 3, respectively—against the observed trend levels of capacity utilization for a period of generally rising capacity utilization near the end of the long post war boom (from 1963 to 1970).³⁰ As anticipated in Figures 2b and 2c, their empirical equivalents in Figure 6 suggest that the estimated maximum profit rate occurs at a lower level of capacity utilization than does the estimated maximum accumulation rate. The 1960s expansion saw progressively higher levels of capacity utilization, passing through a range of first rising profits *and* rising accumulation, followed by falling profits and still rising accumulation, followed by declines in both.

The end of the boom in the mid-1960s can thus be seen to have had two related “causes.” The erosion of the SSA institutions reduced underlying capitalist power,

²⁶The coefficient on the utilization variable in column 3 of Table 3 is relatively large for an elasticity, because the utilization term is expressed as a percentage of 1.00 while the dependent variable is expressed as a rate of change in decimal form (with mean = .035); as a result, a percentage point change in utilization is a much smaller percentage of the mean level of the utilization variable than is a percentage point change in the rate of accumulation as a percentage of its mean. The standardized regression coefficient in column 4 of Table 3 corrects for this difference in dimensionality.

²⁷We have also estimated the reduced form of the accumulation equation, $k = k(\mathbf{P}^*, \mathbf{x})$, and have confirmed the hypothesis of a positive and significant coefficient on our index of underlying capitalist power \mathbf{P}^* . The adjusted R^2 of the reduced form equation is .93 and the standardized regression coefficient on \mathbf{P}^* is .27—compared with .41 for (steady-state) capacity utilization and -.24 for the real cost of capital services.

²⁸Some economists are used to thinking of the rate of profit and the opportunity cost of borrowing as equal in equilibrium, but the simple correlation coefficient between those two terms is only .23.

²⁹In a regression of our measure of the real corporate cost of capital services for investment on the current and (one-period) lagged real federal funds rate (adjusted for autocorrelation), we get an adjusted R^2 of 0.74; the sum of the beta coefficients on the federal funds rate is 0.55, indicating that a standard deviation change in the federal funds rate is associated with roughly half a standard deviation change in the cost of capital services.

³⁰We use the predicted rather than the actual values of profitability and accumulation for this exercise to focus on their “structurally determined” range of variation and to abstract from the influence of random noise in the system.

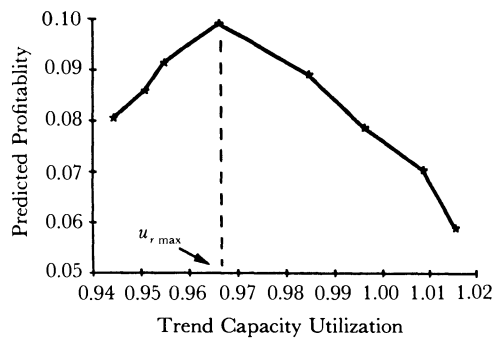


Fig. 6(a). Predicted Profitability and Trend Capacity Utilization, 1963–70

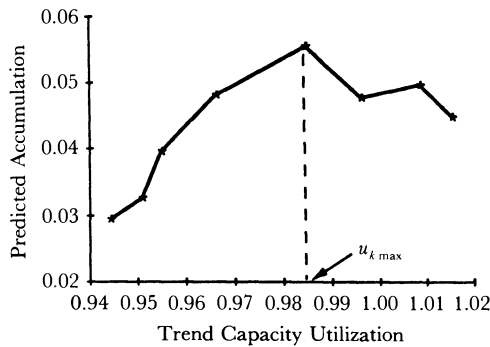


Fig. 6(b). Predicted Accumulation Rate and Trend Capacity Utilization, 1963–70

which lowered profitability. And the economy “overaccumulated”—moving toward levels of capacity utilization which initially sustained accumulation but further undermined profitability, thereby contributing ultimately to the further reduction of both profitability and accumulation.

Conclusion: The Structural Impact of Conservative Economics

Has the reign of conservative economics since 1979 reversed the decline in the vitality of the postwar U.S. social structure of accumulation? To do so, as we have seen, it would have had to bring about favorable shifts in the basic structural relations determining measured capitalist power, profitability and accumulation and/or favorable movements in the level of some of the state or exogenous variables. We have already seen (in Figure 4) that while the measured power of U.S. capital rose

dramatically in the 1980s, underlying power did not, indicating the absence of a favorable shift in the capitalist power frontier.³¹ Evidence of a favorable shift in either the profit function or the investment function is likewise not forthcoming.³²

What about movements in the state variables? Since 1979, the conservative regime has apparently moved the U.S. economy along the capitalist power frontier away from $u_{k \max}$ and towards (and perhaps even to the left of) $u_{r \max}$, thus (marginally) raising the after-tax rate of profit and lowering the rate of accumulation. The average level of capacity utilization in the 1979–87 cycle, indeed, was 0.949—well to the left of the estimated value of $u_{r \max}$ of 0.966 in Figure 6. Similar conclusions seem to apply to the second state variable, the real interest rate, whose contradictory consequences are manifested through a positive effect on profitability (operating through the exchange rate and consequently through the terms of trade) and through a negative effect on accumulation. The real interest rate rose substantially during the 1980s; by a set of calculations for the real cost of capital services comparable to those underlying Figure 6, we conclude that the real interest rate in the 1980s was substantially higher than that associated with peak accumulation rates.³³

How, then, are we finally to evaluate conservative economic policy in the 1980s? Given the ambitious nature of the conservative economic agenda and its focus on institutional change, it is surely too soon to offer a definitive reckoning. But from the vantage point of what appears to be the first completed business cycle under the conservative umbrella, the following conclusions appear warranted.

First, the disappointing performance of the U.S. economy in the 1980s (as was shown in Table 1) reflects a long-term deterioration of conditions governing profitability and investment, not primarily the deleterious effects of conservative economic policy.

Second, the key to understanding the conservative economic agenda, or indeed, any other attempt to restructure the U.S. economy (short of disposing of capitalism itself), is the critical nexus we have identified between power, profitability, and

³¹The conclusion that the underlying power of U.S. capital has not increased significantly in the 1980s is also suggested by a statistical analysis of the relationship between the cost of job loss and the level of capacity utilization. As manifested in Figure 5, there is a strong and statistically significant negative relationship between the two variables and an equally impressive and statistically significant downward shift in the relationship after 1966. But there is no evidence of an upward shift after 1979; the coefficient of an additional dummy variable for the most recent period is very small and not even close to being significant ($t = 0.67$). Statistical analysis of the trade power variable also reveals no favorable shift during the 1980s; in that case, indeed, there is evidence of an “upward” shift of the curve after 1979, with the dramatic increases in both the real interest rate and military activity purchasing less of an improvement in measured trade power than historical experience might have suggested. The coefficient on a dummy variable for 1980–86 in the trade power equation is negative with a t -statistic of -2.67 .

³²A dummy variable for the 1980s in the profit equation in column 2 of Table 3 is insignificant. A dummy variable for the 1980s in the accumulation function in column 3 of Table 3 is also insignificant.

³³No significant help for accumulation was forthcoming, moreover, from other exogenous variables. The principal exogenous variable appearing in the estimated versions of our structural system is the rate of change of an index of technological innovation. While that variable improved slightly from 1973–79 to 1979–86, it still fell considerably below its level in either the boom period or the 1966–73 cycle.

accumulation. Other economic variables and relationships—the rate of inflation, the federal deficit, the imbalance on external account, the value of the dollar—assume long term macroeconomic importance primarily insofar as they affect this crucial power-profit-and-accumulation nexus.

Third, the reign of conservative economics has thus far failed to alter the underlying structural relationships of the U.S. economy in a manner favorable to rapid accumulation. The apparent paradox of this failure—that the conservative agenda was largely adopted and highly successful in its particulars, yet failed to achieve a durable structural victory—can be readily resolved. The undeniable increase in the power of U.S. capital over the economic agents with whom it deals, over workers, external buyers and sellers, and those who would use the state in ways contrary to the interests of business, was won at a prohibitive cost. The net effect of the low levels of capacity utilization and high real interest rates which prevailed over the 1979–1987 period was to dampen investment even in spite of the beneficial effects that slack labor markets and the high demand for the dollar had on the power of capital to strike favorable deals with workers, citizens, and the rest of the world. Ironically, the economic doctrine which focused attention on improving profitability and investment through supply-side interventions appears to have won its only battles on the demand side, but with a decidedly non-Keynesian flavor, for it was demand contraction—not expansion—which was its most effective weapon.

Fourth, it is nonetheless the case that the long-term decline in the underlying power of capital may finally have been halted. While P^* , our measure of underlying capitalist power, did not turn up dramatically during the 1980s, its longer-term decline appears (in Figure 4) at the least to have bottomed out. We cannot rule out the possibility that the underlying power relationships may indeed have begun to shift in favor of capital in recent years. But the widespread perception of such a turnaround—the rise in measured power reflected in our index P —is largely the artifact of low levels of capacity utilization and high levels of real interest rates.³⁴

When all is said and done, it may turn out that the only sustained transformations effected by the conservative economic program will have been the sectoral changes in the U.S. economic structure brought about by the military buildup and high interest rates, and the regressive redistribution of wealth and income brought about by the major changes in tax and social policies.³⁵ One wonders whether the means of conservative economics were not, after all, the ends.

³⁴ There have been improvements in a few of the individual elements of P^* since 1979. There has been, according to our indices, a substantial reduction of capital's share of taxation, a rise in the military power variable, and a small and statistically insignificant increase in the underlying cost of job loss associated with a de facto reduction in eligibility for unemployment insurance and an increase in the expected duration of unemployment. But these changes have been largely offset by deterioration in some of the other elements in P^* , resulting in little overall change in that index of underlying capitalist power.

³⁵ For evidence on the considerable increase in income inequality which occurred during this period, see Congressional Budget Office (1988) and Bluestone and Harrison (1988).

Data Appendix

We define and provide source documentation here for all the variables used in or necessary for econometric results reported in equations (3-1)–(3-3) in Table 3. Other variables mentioned in the text are defined and documented in the notes to Table 1.

We use the following abbreviations: *NIPA*, National Income and Product Accounts; *SCB*, *Survey of Current Business*; *ERP*, *Economic Report of the President*; and *BCD*, *Business Conditions Digest*.

Dependent Variables

Corporate After-Tax Rate of Profit. Defined as (fully-adjusted net-corporate profits plus net interest payments minus corporate tax payments) divided by (net fixed capital stock plus inventories measured at their current replacement cost) for the non-financial corporate business sector (NFCB). Flow data in numerator from *NIPA*, Table 1.16, Lines 27, 35, 29, respectively. Capital stock as defined and documented for next dependent variable. Stock of inventories for NFCB from unpublished work sheets provided to authors by Bureau of Economics, Department of Commerce.

Corporate Rate of Capital Accumulation. Defined as (logarithmic) rate of change of total real net fixed nonresidential private capital stock (\$82), non-financial corporate business sector. From Department of Commerce, *Fixed Reproducible Tangible Wealth in the United States, 1925–85* (U.S. Government Printing Office, June 1987), Table A6; and *SCB*, August 1987, Table 7.

Capitalist Power Variables

Cost of Job Loss. Defined as a representative worker's expected percentage reduction in annual material living standard in the event of job loss. Full method and sources provided in Schor and Bowles (1987).

Index of Worker Resistance. Defined as the number of workers involved in strikes, expressed as percentage of all union members. Number of workers involved in strikes from *Monthly Labor Review*. (Data in *MLR* after 1979 presented only for "major" strikes with 1,000 workers or more; those data were transposed into workers involved in all strikes by assuming workers involved in major strikes as fraction of those involved in total strikes for 1980–86 to be equal to average for 1974–79 (during which years there was very little annual variation in that ratio).) Union members as % of all non-agricultural employment: For 1946–77 from *Historical Statistics of the United States*, Series D-951 and Bureau of Labor Statistics *Bulletin* No. 2079, Table 6. For 1978–80, from updated data in U.S. Department of Labor, *News Bulletin* No. 81-446, September 18, 1981. For 1981–86, based on data from Current Population Survey, with splicing factor based on Larry T. Adams, "Changing Employment Patterns of Organized Workers," *Monthly Labor Review*, February 1985, and series updated from annual issues of *Employment and Earnings*. (See Bowles *et al.* [1986] for definition of multi-variate version of this index for which data permit construction through 1981.)

Trade Power. Defined as that portion of the adjusted U.S. terms of trade associated with variations in a "threat index" of U.S. military power and in the real interest rate. *Adjusted terms of trade:* Real imports divided by real exports (raised to the power of the ratio of real imports to real GNP), based on *ERP*, 1987, Table B-2. (For justification of this approach to an adjusted measure of the terms of trade, see Bowles, Gordon, and Weisskopf (1986, p. 143 and notes #29, #30).) *"Threat index" of military power:* Defined as the number of incidents (per year) in which the U.S. Government brought its military forces to bear on a situation without actually engaging in active conflict. Method based on Blechman and Kaplan (1978); for 1947–81, from Riddell (1986); for 1982–85, updated with help of Tom Riddell from data in Joseph Kruzell, ed., *American Defense Annual* (Lexington, MA.: Lexington Books, various years). *Real interest rate:* Real federal funds rate, defined and documented under State of the Economy Variables below. Trade power index calculated from predicted value of regression of adjusted terms of trade on lagged threat index and (polynomial distributed) lag of real federal funds rate. Because there is no mechanism through which interest rates could affect the terms of trade in the fixed-exchange-rate era, the real interest rate was constrained to have no effect in that regression for years before 1971.

Government Regulation. Defined as the rate of change in the real level of government expenditures on social and economic regulatory activities. For 1947–80, from Friedrich Schneider and Wolfgang Pommerehne, "The Decline of Productivity Growth and the Rise of the Shadow Economy in the United States," Working paper 32-83-84, Graduate School of Industrial Administration, Carnegie-Mellon University, 1984. For 1981–86, from Paul N. Tramontozzi with Kenneth W. Chilton, "U.S. Regulatory Agencies under Reagan, 1980–88," Center for the Study of American Business, Washington University, May 1987.

Capital's Tax Share. Defined as the share of the total tax burden that is estimated to be borne by recipients of capital income. Based on data for personal tax and nontax receipts, corporate profits tax accruals, indirect business tax and nontax accruals, and contributions for social insurance from *NIPA*, Table 3.1, Lines 2–5; and for personal income, wage and salary disbursements, other labor income, transfer payments (from government) and personal contributions for social insurance from *NIPA*, Table 2.1, Lines 1, 2, 8, 15, 23.

Import Penetration. Defined as the ratio of real imports to [real GNP + (real imports – real exports)]. Source: *ERP*, 1987, Table B-2.

Product Market Tightness. Defined as the percentage of companies reporting slower deliveries. Source: *BCD*, Series #32.

State of the Economy Variables

Capacity Utilization. Defined as the ratio of actual to potential output for the domestic private non-residential economy. Potential output for this sector was estimated by the authors by applying the method traditionally used by the Council of Economic Advisers and by updating their calculations through 1986. Method and data through 1978 presented in Peter K. Clark, "Potential GNP in the United States,

1948–80,” *Review of Income and Wealth*, June 1979; updated series based on data from sources reported in that article.

Real Federal Funds Rate. Defined as nominal federal funds rate adjusted by expected inflation rate (calculated as distributed lag on past inflation rates), with federal funds rate from *ERP*, 1987, Table B-68 (with N.Y. discount rate used for 1947–54) and inflation rate taken as rate of change of GNP implicit price deflator from *ERP*, Table B-3.

Real Cost of Corporate Capital Services. Defined as the rental price of capital services for equipment for the aggregate economy. Source: Data for 1948–83 from series used in Robert J. Gordon and John M. Veitch, “Fixed Investment in the American Business Cycle, 1919–83,” in R. J. Gordon, ed., *The American Business Cycle: Continuity and Change* (Chicago: University of Chicago Press, 1986), with data kindly provided by Robert J. Gordon. Value for 1984 generated by forecast based on equation predicting rental price from real federal funds rate (see text note #20).

Exogenous Variables

Price Controls Dummy. Dummy variable to control for effects of Nixon round of wage-price controls. Defined as 0.5 in 1971, 1.0 in 1972 and 1973, as -1.0 in 1974 and 1975, and as 0 in other years. The fractional values correspond to controls operating during part of a year, and the negative numbers capture “catch-up” effects that operate in the period following the lifting of controls. For justification of this approach and values for quarterly data, see R. J. Gordon, “A Century of Evidence on Wage and Price Stickiness in the United States, the United Kingdom, and Japan,” in James Tobin, ed., *Macroeconomics, Prices, and Quantities* (Washington, D.C.: Brookings Institution, 1982).

Index of Technological Innovation. Defined as a multi-variate factor loading on the annual rate of change of the stock of research and development capital, the annual rate of change of the stock of scientists and engineers in private industry, and the annual flow of new books published on technology. Sources and estimating method reported in D. M. Gordon (1988).

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