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The Rise of Worker Capitalism

by Richard Nadler

Executive Summary

The most significant demographic shift of this century is the rise of history's first mass class of worker capitalists—men and women whose wealth-seeking activities include both wage earning and capital ownership.

Today, 76 million Americans, members of 43 percent of U.S. households, own stocks or stock mutual funds. This represents a 126 percent increase in shareholding over 15 years.

Demographically, capital ownership, once the signature of wealth, has become widely diffused. From 1989 to 1995, shareholding increased dramatically among every age group, income bracket, racial cohort, and occupational category for whom statistics are available. The rate of increase was particularly steep among laborers and farmers (106 percent), householders 34 years old or younger (64 percent), and families with incomes under $25,000 (80.4 percent).

Next the study chronicles the extent to which members of this expanding shareholder class have internalized their new role as capitalists. We find them actively utilizing new sources of information to evaluate, reallocate, and mange the contents of their portfolios.

Americans' increased involvement in capital markets has affected other aspects of their lives: notably, their retirement planning, job satisfaction, and productivity in the workplace. The growth of investment has rewarded, and appears to have thus encouraged, an orientation toward the future—the investor's own and his family's.

Finally, the study explores how capital ownership affects opinions relating to public policy. Shareholders display favorable attitudes toward programs that reduce taxes on savings and investment for retirement, education, health care, and other major life-cycle occurrences. At the same time, they register high levels of skepticism toward government "investments" for these same purposes.

Original research is introduced that indicates that stock holding affects investor attitudes independent of race, age, sex, income level, or marital status.

The growth of share ownership is changing the values and perceived political interests of voters—increasing the body politic's support for investor-friendly policies.

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Introduction

. . . He does not even reckon labour as part of his life, it is rather a sacrifice of his life. Hence, also, the product of his activity is not the object of his activity. What he produces for himself is not the silk that he weaves, not the gold that he draws from the mine, not the palace that he builds. What he produces for himself is wages, and silk, gold, palace resolve themselves for him into a definite quantity of the means of subsistence, perhaps into a cotton jacket, some copper coins and a lodging in a cellar.

—Karl Marx
First International

Stock ownership by employees aligns the interests of employees and employers. It reduces the "we versus they" perspective and enhances productivity, stressing long term goals—savings, security, and wealth for the individual, and workforce commitment, prosperity, and growth for the company. A symbiotic relationship develops with tangible long-term payoffs for both employer and employee.

Who better to own a large piece of Corporate America than the people who can collectively have the greatest impact on the bottom line?

—David Wray, Profit Sharing/401(k) Council of America

Fifty years before Karl Marx theorized that voluntary exchange alienates labor, an American statesman, Albert Gallatin, implemented the first profit sharing plan at his glass works in New Geneva, Pennsylvania. The "democratic principle upon which this Nation was founded," he wrote, "should not be restricted to the political processes, but should be applied to the industrial operation." Advocates of worker capitalism held that the laborer must become a stakeholder in the means of production not through a "vanguard of the proletariat" or some other political device, but in his own person, through ownership.

In its earliest forms, worker capitalism emphasized profit sharing at one's place of employment and, later, ownership of workplace stock—practices that continue to flourish in the capitalism of the twentieth century. But the development of history's first mass class of worker capitalists—laborers who derive income or net worth from both wages and investments—required the development of more flexible tools that allow ordinary workers to participate not merely in their employer's fortune but in the fortunes of capital markets generally.

As a result of those innovations, today some 76 million Americans, representing 43 percent of U.S. households, own stocks or stock mutual funds. This constitutes a 126 percent increase in shareholding over fifteen years. And the increase has not been confined to narrow segments of the population, but includes many groups that have historically not participated in these markets. The new shareholders are increasingly involved in the evaluation, purchase, and management of portfolio assets.

To the propertyless wage earner as Marx envisioned him, work is an involuntary detour on the path to consumption. Business activity is therefore an imposition, an alienation, a theft. The laborer is himself the antithesis not only of the owner but of ownership. But to the extent that the worker's wealth seeking combines wage earning with investment, Marx's theory founders in paradox. The worker capitalist voluntarily defers consumption in order to share profits in someone else's good idea. And his attitude toward ownership becomes, in some degree, participatory. Marx's cotton jacket, copper coins, and cellar hovel are consigned to the trash bin of history.

The question this study investigates is whether the growth of worker capitalism has altered the relationship between labor and capital in any fundamental way. Have increases in stock market participation by workers changed their behaviors and attitudes?

The answer to these questions is yes.

The active involvement of tens of millions of Americans in capital markets has affected their retirement planning, productivity, and attitudes toward capital and free markets. The growth of investment has rewarded, and appears to have thus encouraged, an orientation toward the future—the investor's own and his family's. Shareholding workers support policies that cut taxes on savings for important life-cycle events, such as education, health care, and retirement. Conversely, workers who have investments exhibit rising skepticism toward government-run entitlements.

Portfolio owners are shown to be likelier than nonowners to support a capital-gains tax reduction. This effect is found in almost every demographic group, suggesting that investment influences opinion independently of the income, race, or other characteristics of the investor. The growth of share ownership, in other words, is changing the perceived political interests and values of voters—increasing the electorate's support for investor-friendly, pro-growth policies. Given these salutary efforts of a rising investor class, Congress should enact policies that expand worker ownership and financial self-sufficiency. Expansions of IRAs and 401(k)s and individual investment of Social Security funds would help achieve the goal of spreading wealth to larger segments of the population.

Breadth of Stock Ownership

America is the homeland of worker capitalism. Indeed, the widespread participation in capital markets spread from the New World to the Old. The Lincoln administration financed the Civil War by mass marketing national debt in small denominations—a financial innovation whose military significance paralleled the income tax. Jay Cooke & Company, and then other brokers, created nationwide sales forces to encourage popular ownership of public debt. Those forces formed the financial base from which a hitherto minimalist government equipped the mightiest army of its time.

The sales force thus created could market private stocks and bonds, too. From the Civil War onward, American workers invested more in financial assets than their European counterparts. The growth of that investment was measurable by the growth of the sales force that serviced it, from 4,000 in 1900 to 11,000 in 1920 to 22,000 in 1930. But a decline set in with the Great Depression, reducing the number of brokers to 18,000 in 1940 and 11,000 in 1950.[1]

The earliest scientific polling of market participation, by The Gallup Organization, occurred during the Depression. In 1935, 21.5 percent of adults polled owned securities (i.e., stocks or bonds).[2] That figure remained stable throughout the Great Depression. A June 1938 poll reported Americans' investment preferences: 12 percent held government bonds, 10 percent stocks.[3]

After the General Agreements on Tariffs and Trade reopened international markets, stocks began their long postwar rise. By 1960, 29,000 stock and bond salesmen were servicing Americans' increased desire for financial assets.[4] In 1962, when the U.S. Bureau of the Census first measured corporate equity ownership among American households, 18 percent of them held stocks.[5] But shareholding was stagnant for the next two decades. In 1983, 19 percent of American households owned stocks.[6]

Since then, however, the percentage of *households owning corporate shares* has exploded: to 31.6 percent in 1989, 36.6 percent in 1992, and 40.3 percent in 1995.[7] Shareholders constituted 29 percent of *adult citizens* in 1989 and 37 percent in 1995. Stockowners as a *proportion of total population* rose from 4 percent in 1952 to 26 percent in 1995.

The raw number of shareholders rose from 52.3 million in 1989 to 69.3 million in 1995—a 32.5 percent increase over six years. "If the trend for the six years ending in 1995

Portfolio owners are likelier than nonowners to support a capital-gains tax reduction.

continues through the second half of the 1990s," wrote Massachusetts Institute of Technology (MIT) economist James Poterba, "the number of individuals who will own stock by the year 2000 will exceed 80 million."[8]

Two innovations distinguish the stock populism of the 1980s and 1990s from earlier and smaller waves of equity ownership: a new means of entering capital markets (the tax-advantaged defined-contribution plan), and a new way of reducing risk (the mutual fund). From 1989 to 1995, the direct ownership of individual stocks, primarily through brokerage accounts, increased a mere 1.5 percent, from 27 million Americans to 27.4 million. But direct ownership of mutual funds increased 149 percent, from 4.5 million to 11.2 million. And the numbers of Americans owning equity shares or stock mutual funds through supplemental retirement accounts or defined contribution plans increased 48 percent, from 20.8 million to 30.7 million.[9]

"Two . . . trends may have accelerated the growth of holdings of financial assets, particularly stocks," explained the *Federal Reserve Bulletin* in January 1997. "First, the variety of mutual funds available to families continued to expand, as did the number of no-load funds. Second, employers increasingly offered tax-deferred saving plans as a way for workers to accumulate savings for retirement. Often such employer-provided plans offer an option that allows participants to invest in corporate equities."[10]

The greatest inducement to invest in stocks was of course their yield. The average annual after-inflation rate of return from 1990 to 1997, based on the Standard & Poor's index, was 13.1 percent.[11] The Dow Jones Industrials rose from 2,508.9 in 1989 to 5,117.1 in 1995. The Standard and Poor's 500 composite rose from 323.1 to 615.9. At the end of 1997, the indexes stood at 7,908.3 and 970.4, respectively. And on March 29, 1999, the Dow Industrials crossed 10,000, finishing the day at 10,006.8.

How many stock owners are there now? It is possible to make an educated guess based on the growth of mutual fund accounts and the stability in the numbers of persons owning stocks directly. From 1995 to 1997, the number of individual accounts in equity mutual funds rose from 70.7 million to 103.6 million—a 32.9 million increase.[12] The average mutual fund owner holds four accounts, so the 2-year increase in individual accounts implies an 8.2 million increase in shareholders. Since 54 percent of mutual fund shareholders also own stocks directly, the numbers have to be adjusted to avoid double-counting. That yields 4.44 million more stockowners from 1995 to 1997—or, extrapolating for an added year, 6.66 million more over the entire three years, 1995 to 1998.

If these calculations are correct, there are currently some 76 million stockholders in the United States. That's 38.2 percent of the resident adult population. This estimate closely approximates a January 1999 Rasmussen Research survey of 6,400 people, which measured stock ownership at 39.9 percent.[13] These figures on individual stock ownership imply that at least 43 percent of American households currently own equities, up from 40.3 percent in 1995.

Depth of Stock Ownership

Both mean and median portfolio sizes have continued to grow despite the massive influx of first-time investors. From 1989 to 1995, the Survey of Consumer Finances reported an increase in median stock holdings from $10,400 to $14,500. New York Stock Exchange (NYSE) researcher James Poterba of MIT calculated 1995 median portfolio values at $15,500. He estimated mean holdings at $88,800 in 1992, $95,000 in 1995.

The mean and median sizes of investor portfolios vary predictably with age and income. The NYSE reports that the 24.6 percent of stockholders below age 35 own 5 percent of shares while the 14.1 percent of stockholders over 64 own 30 percent. The 3.5 percent of shareowners earning under $15,000

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own 1.6 percent of shares while the 14.3 percent of shareowners earning over $100,000 own 53.9 percent of shares.

From 1989 to 1995, only the smallest stock portfolios—those valued at $5,000 and less—declined in absolute numbers. Portfolios of $100,000 and greater increased most rapidly. By 1995, 18.4 million Americans held stock portfolios worth $50,000 or more—more than double the 1989 level.

Those large portfolios did not necessarily belong to persons with high incomes. During the 1990s, most of the growth of stock ownership occurred within defined contribution plans. In 1996, the Investment Company Institute (ICI) and the Employee Benefit Research Institute (EBRI) developed a data bank of 2.5 million participants in some 23,000 401(k) plans. Workers in their twenties had account balances averaging $6,000; those in their sixties had on average accumulated $67,000. Among workers with 20 to 30 years of tenure, accounts averaged over $100,000. Plan participants with 30 years of tenure averaged over $150,000.

These numbers date to 1995. Since then, most broad market indices have doubled. The dispersion of portfolio wealth is clearly accelerating.

The Means of Ownership

Government statistics are inadequate to disentangle the means by which Americans now own stock, largely because official measures of financial assets may include stocks, stock mutual funds, bonds, and nonstock mutuals. Moreover, the government uses overlapping categories to track privately held financial assets. Nonetheless, an examination of growth trends in defined contribution plans, 401(k) plans, mutual funds, individual retirement accounts (IRAs), employee stock options, and other profit sharing arrangements helps to clarify how the explosion in shareholding occurred.

Defined Contribution Pension Plans

The rise of the worker capitalist is inextricably linked with the rapid and recent substitution of defined contribution (DC) plans, which create individual investors, from defined benefit (DB) plans, which create individual entitlements.

Under a defined *benefit* plan, the employer provides a particular retirement benefit, generally a payment of income, to each covered employee. The stipend is fixed, based on how long the employee has worked for the company and how much he has earned. The employer makes all decisions, including how much to contribute to meet his obligation and how to invest the funds. Generally, the benefit is not portable if the employee changes jobs before he is vested; and even if he is vested, the pension remains frozen until retirement. The benefit does not increase or decrease based on asset performance.

Under a defined *contribution* plan, the employee and (in most cases) the employer make contributions to an account that the worker owns. The employee generally directs the investment of account assets. The Internal Revenue Service recognizes DC contributions as deferred income, and they are allowed, within certain limits, to accumulate tax free until retirement. The size of the retirement benefit depends on how much the employee and employer contributed and how much the investments returned. The employee's contributions, and in many cases the employer's, are portable.

To qualify for tax-advantaged status, a DC plan must be widely available to a company's workforce, not just to key employees. Employers must provide multiple investment options with varying degrees of risk; and they must provide extensive information on each, including historical rates of return, annual fees, investment goals, and total assets for each fund. If companies meet these requirements, the employer is not held liable for losses incurred as a result of the employee's choices.[14]

Portfolios of $100,000 and greater increased most rapidly. By 1995, 18.4 million Americans held stock portfolios worth $50,000 or more—more than double the 1989 level.

Fifty-five million workers are currently enrolled in private-sector DC programs. Such plans held $2.2 trillion in assets in 1998.

Within limits, DC plans allowed an employee to increase his total compensation based on his willingness to save for the long term. A worker who contributed to his plan had less current expendable wages than one who did not, but a higher total of expendable-plus-deferred wages. He also owned the accumulations of his deferrals, invested as capital. In effect, employees engaged in an act of self-selection for a particular kind of raise, based on their agreement to engage in two defining behaviors of the capitalist: deferred consumption and capital investment.

The obvious reason DC plans became popular among workers was that they substantially outperformed the DB plans that they replaced. According to EBRI, during the five-year period ending December 31, 1994, DCs had an annual inflation-adjusted return of 6.8 percent, compared to 6.0 percent for the DBs.[15] But this 13.3 percent differential understates the superiority of DC plans over the last generation. "The defined benefit plan assumes a return that will provide the promised benefit if earned during the employee's lifetime," said Profit Sharing/401(k) Council of America (PSCA) president David Wray. "To the extent that the return is greater than the assumption, the employer's contribution is reduced." Thus, if a DB plan assumes a 7 percent rate of return to meet its benefit obligation, and the plan investments net 10.6 percent, the employer keeps the difference. In a DC plan with comparable returns, the employee would earn the full 10.6 percent.

Using 1983–1995 data from the Federal Reserve's Pension Provider Surveys and Surveys of Consumer Finance, Dartmouth's Andrew A. Samwick and Jonathan Skinner recently computed the average and median pension benefits of workers in DB and DC plans. "The workers covered only by DB plans can expect an average of $10,533 in retirement benefits annually if they continue to work until age 65," they wrote. "If these same workers with identical earnings histories are given randomly chosen DC plans, their expected pension benefits are $25,275. The disparity is less severe at the medians, with the worker receiving $7,214 and $10,841 under the DB and DC plans, respectively."[16]

Under most DC plans, the laborer selects not only the object of his investment but (up to a $10,000 annual limit) how much to invest. As companies converted DB plans into DCs, the higher rates of return elicited higher levels of investment among plan participants.

In 1980, DC plans enrolled little more than half as many workers as DB programs. By 1994, however, DC plans enrolled more active participants and took in nearly three times the contributions of DB plans. EBRI calculated that DB programs held 66 percent of all private pension assets in 1985, versus 34 percent for DC plans. By 1993, that ratio was 56.7–43.3 percent. ICI, think tank for the mutual-fund industry, projects that in 1999 DC plan holdings will exceed those of DB plans, 51.4–48.6 percent (Figure 1).

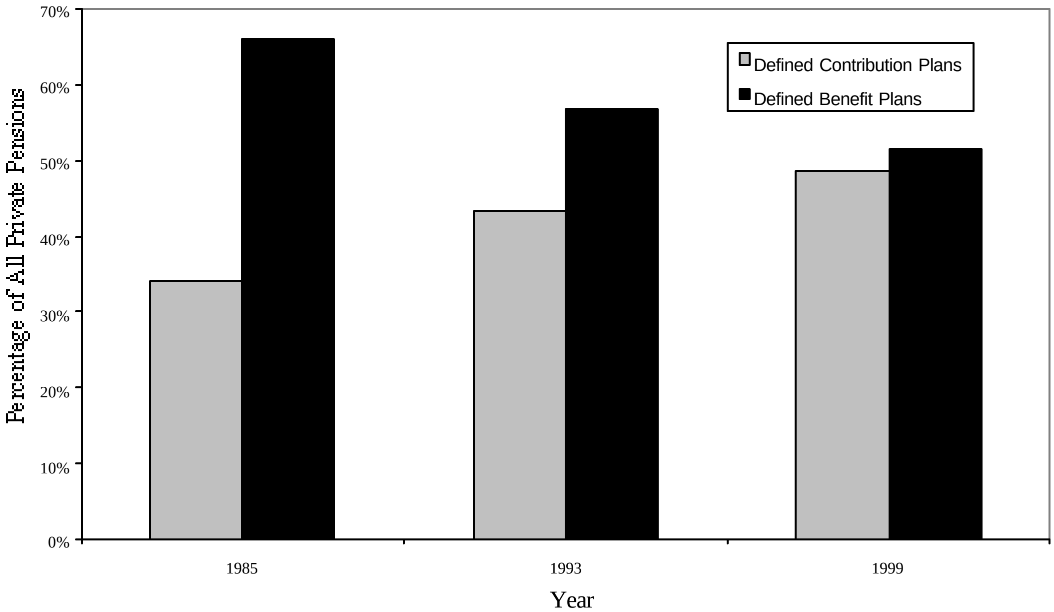
According to the U.S. Bureau of Labor Statistics, DC programs covered 55 percent of all employees in establishments with 100 or more workers in 1995 and 38 percent of all employees in establishments with fewer than 100 workers in 1996. The comparable figures for DB plans were 52 and 15 percent.[17]

The 1996 Retirement Confidence Survey, conducted by EBRI, Mathew Greenwald and Associates, and the American Savings Education Council, found that "61 percent of workers reported that their employer offered a retirement saving plan . . . that allows pretax worker contributions to the worker's own account. Three-quarters (74 percent) of workers who were offered a plan reported making contributions to it."[18]

The U.S. Department of Labor's Pension and Welfare Benefits Administration estimates that 55 million workers are currently enrolled in private-sector DC programs. Such plans held $2.2 trillion in assets in 1998.[19]

Critics of the DC revolution predicted that the shift from defined benefits would reduce employee security due to "leakage." Many workers, they warned, would cash in their accounts when they changed jobs, endangering long-term savings. The phe-

Figure 1
Defined Contribution Plans vs. Defined Benefit Plans



Source: Employee Benefit Research Institute, and Investment Company Institute.

nomenon is real. But the degree of job transition leakage that *actually* occurs in DC accounts is large when the account is small and the worker is young, small when he is mature and his accumulation considerable. Samwick and Skinner have found that a typical worker may change jobs five times, with most of the changes concentrated early in his career. Samwick and Skinner found that "the probability of reinvesting lump-sum distributions . . . rises steadily with age, and is 48 percent for those age 35 to 44, 57 percent for those age 45 to 54, and 73 percent for those age 55 to 64."

Even after incorporating job-change leakage into their model, Skinner and Samwick calculated that worker benefits under DC plans are 135.5 percent greater on average, and 50.3 percent greater at the median, than worker benefits under DB plans. *Given more freedom to choose, workers saved more for their retirement rather than less.*

401(k) Plans

One type of plan held 68 percent of DC assets—roughly $1.5 trillion. Named for the section of the Internal Revenue Code that defines them, 401(k)s allow employees to accept a portion of their wages as "deferred contributions," usable for investment but not for current consumption.

In 1998, a worker in a qualified plan could contribute as much as $10,000 per year into a personal retirement account. He could allocate his contribution among the investment options provided in his plan—typically stock or bond mutual funds. His income taxes on the contributions were deferred until the funds were withdrawn. If he liquidated his investments prior to retirement, he would generally pay a 10 percent penalty in addition to taxes due.

Compared with IRAs, 401(k)s offered employees higher contribution limits and (generally) an employer match. When the Tax Reform Act of 1986 forced many workers to choose between them, 401(k)s replaced IRAs as the most popular tax-deferred savings vehicle for workers.

Assets in 401(k)s increased from $92 bil-

Given more freedom to choose, workers saved more for their retirement rather than less.

Table 1
Stock Portfolios by Value, 1989–1995

Size of Portfolio (thosands of dollars)	1989 No. of owners (in millions)	1989 % of total shareholders	1995 No. of owners (in millions)	1995 % of total shareholders	% Change in no. of owners 1989-1995
<5,000	20	39	18	27	-10
5-10	8	15	9	13	14
10-25	10	19	14	20	35
25-50	5	10	10	14	95
50-100	4	8	7	11	76
100,000+	5	9	11	16	140
Total:	52	100	70	100	

Source: James M. Poterba, "Shareownership 1998," New York Stock Exchange, 1998, and calculations by the author.

lion in 1984 to $1.5 trillion in 1997 ($1.05 trillion of it in equities).[20] According to the PSCA, companies offering 401(k)s more than tripled during the 1990s.[21] The ranks of active plan participants swelled from 17.3 million in 1989 to 34.0 million in 1998.[22]

In 1995, Poterba, Venti, and Wise studied how 401(k)s affected overall savings. They discovered "little evidence that 401(k) contributions substitute for other forms of personal saving, including IRA contributions."[23] Comparing workers eligible to participate in 401(k)s with demographically similar but ineligible workers, they found that over a seven-year period, the former accumulated financial assets at more than double the rate of the latter. The effect held, with slight variation, at all income levels. (See Table 2.)

But financial savings did not "crowd out" other savings. The 401(k) savers accumulated nonfinancial assets—cars, homes, real estate—at the same rate as their nonplan peers. The increase in net worth was genuine.

Mutual Funds

Mutual funds—shares in a managed portfolio of stocks, bonds, or other financial assets—became the investment of choice in the 1980s and 1990s.

Earlier booms in employee shareholding had been based on workers' ownership of a specific stock, often their employer's. Those booms collapsed when depressions wiped out particular companies. Through mutual fund investment, however, workers pooled risk. Their participation in capital markets reflected the overall performance of the economy, or at least of broad sectors thereof. From the first dollar, the worker-investor could own a diversified, professionally managed portfolio. Fifty-four percent of investors in the 1997 Nasdaq survey preferred mutual funds to individual stocks, agreeing: "There is less risk, because funds invest in many different companies."

The growth of this industry can be traced through the proliferation of funds, the number of shareholder accounts, and total mutual fund assets. (See Table 3.)

The mutual-fund holdings of private pension plans grew from $29.2 billion in 1990 to $457.0 billion in 1997. About half of mutual-fund assets were equities.

Employee Ownership Plans

Early theoreticians of worker capitalism

Table 2
Median Total Financial Asset Balances, 1991 ($)

	Income Interval						
Eligibility Status	<$10k	$10–20k	$20–30k	$30–40k	$40–50k	$50–75k	>$75k
Eligible for 401(k)	2,033	4,045	5,499	8,683	14,470	26,093	51,080
Not Eligible for 401(k)	1,378	1,997	2,558	3,256	6,206	10,080	29,842

Source: James M. Poterba, Steven F. Venti, and David A.Wise, "Do 401(k) Contributions Crowd Out Other Personal Saving?" *Journal of Public Economics* 58 (1995): 1–32.

hoped to reconcile the interests of labor and management through stock ownership in the employer's company. As mentioned above, the theory was limited by the frequency with which individual stocks crash. But employee ownership continues to thrive among two types of companies: industrial giants and young tigers.

Stock option plans allow workers to buy shares in their company at a fixed "grant price" over a defined time span. Typically, only a certain percentage of the guaranteed-price shares can be purchased for each year of service. For a young company experiencing dramatic growth, this is a way to finance worker benefits directly from that growth. Stock options are the rule rather than the exception among high-tech companies.

Originally an incentive for upper management, stock options are increasingly used as a general benefit. In 1998, 6 million nonmanagement employees had grant-price stock options.[24] In 1997, 22 percent of 401(k) assets were invested by employees in the companies for which they worked.[25]

The most famous worker ownership tool is the Employee Stock Ownership Plan or ESOP. ESOPs hold roughly $213 million in company stock.[26] The 8.7 million ESOP participants are all, of course, stockholders. ESOPS have the advantage of giving workers a stake in the companies' performance. They have the drawback of failing to diversify the workers' financial risk.

Individual Retirement Accounts (IRAs)

IRAs remain the private investment of choice for workers who lack access to a tax-deferred plan with an employer match. Within limits, annual contributions to traditional IRAs are deductible and can accrue value tax free until retirement. The Tax Reform Act of 1986 lowered allowable tax-deferred contributions to IRAs for participants in 401(k) and other defined contribution plans. As a result, the proportion of tax filers contributing to IRAs declined precipitously, from 15 percent in 1986 to 4 percent in 1994.

But total assets in IRA accounts have continued to grow, and recent laws will accelerate the trend. One, effective this year, increases deductible contributions on behalf of nonworking spouses. The other, known as the "Roth IRA," is designed for investors who anticipate substantial income in retirement. The Roth accounts, like traditional IRAs, are taxed only once. But the levy is timed in reverse. The investor buys his Roth with after-tax income, then withdraws his earnings tax free after retirement.

Assets invested by individuals in tax-deferred IRAs grew from $200 billion in 1985 to $455 billion in 1989, $746 billion in 1992, and $1.347 trillion in 1998.[27] In 1997, 58 percent of all investors held stocks in IRA accounts.[28]

The mutual-fund holdings of private pension plans grew from $29.2 billion in 1990 to $457.0 billion in 1997.

Table 3
Mutual Funds and Equity Funds, 1980 to 1997

Type of Fund	Unit	1980	1985	1990	1992	1993	1994	1995	1996	1997
Total no. of funds	Number	564	1528	3105	3850	4558	5357	5761	6293	6778
No. of equity funds	Number	267	579	1127	1356	1615	1944	2211	2626	3014
Total shareholder accounts	Millions	12	35	63	80	94	115	132	151	171
Accounts w/equity funds	Millions	6	12	23	33	43	59	71	87	104
Total assets	Billions of dollars	135	496	1067	1646	2075	2161	2820	3539	4490
Equity fund assets	Billions of dollars	44	117	246	523	749	866	1269	1751	2399

Source: No. 844, Mutual Funds—Summary: 1980 to 1997. U.S. Bureau of the Census, *Statistical Abstract of the United States: 1998* (118th ed.) Washington, D.C., 1998.

The Demographics of Ownership

Worker capitalism has infiltrated many sectors of society. From 1989 to 1995, stock ownership increased dramatically in every age group, income bracket, racial cohort, and occupational category for whom statistics are available. The rate of increase was particularly steep among laborers and farmers (107 percent), householders younger than 35 (65 percent), and families with incomes under $25,000 (80 percent).

Income

In 1935, 68.7 percent of "prosperous" and 33.5 percent of "upper middle class" participants owned securities (including bonds). But among the "lower middle class" and "poor" households, only 14.9 and 2.9 percent, respectively, held securities.[29]

By 1995, however, shareholding had increased sharply among households in every income bracket (except the highest, where it remained pervasive). The most dramatic percentage increases were among the poor and lower middle classes. Fifty percent of stockholders had household incomes of $50,000 or less. Indeed, the spread of share-ownership to lower income strata was so dramatic that from 1992 to 1995, the median and mean family income of shareholders declined even as the median and mean income of households generally rose.[30] The NYSE estimates that ten million stockholding families have incomes of $25,000 or less.[31] (See Table 4.)

Age

Young adults and the elderly have long been the age groups least likely to own stocks—the young because they have not yet started to save, the elderly because they convert their savings to annuities, bonds, and other sources of retirement income. Shareholding has been most common among Americans between the ages of 45 and 64. It still is. But the sharpest increases in shareholding have been among young adults and seniors in the first decade of their retirement. (See Table 5.)

A 1997 ICI survey also polled householders younger than 25. In 1997, 23 percent of that cohort owned mutual funds.[32] In other words, householders 25 and younger now own shares at roughly the rate that householders 34 and younger owned them in 1989. The NYSE calculates that the median age of stockowners declined from

Table 4
Stock Ownership by Income Bracket, 1989–1995

Family Income (constant 1995 dollars)	Families Owning Stock (%) 1989	1995	Increase
<$10,000	3	6	+88
$10,000–$24,999	13	23	+79
$25,000–$49,999	32	47	+46
$50,000–$99,999	52	67	+28
$100,000 & more	82	81	-0

Source: Board of Governers of the Federal Reserve System, *Federal Reserve Bulletin*, January 1997, and unpublished revisions.

45 in 1992 to 43 in 1995—this in an aging American population.

Seniors, meanwhile, have started to wait longer before liquidating their equities. The last three Surveys of Consumer Finances—1989, 1992, and 1995—chronicle a striking increase in stock ownership during the first decade of retirement. Among families headed by persons aged 65 to 74, the percentage holding stock increased from 26.7 to 34.2, a 28.1 percent spike in six years. By 1995, seniors 65 to 74 were replicating stock ownership patterns formerly associated with those a decade younger. Investors are preparing for longer, more active lives. They are accumulating capital assets earlier and holding them well into retirement.

Education

The absolute numbers of investors increased across every educational grouping between 1989 and 1995—an unsurprising fact, given the broad dispersion of DC plans. But the median educational level of investors remains distinctly higher than that of the general public for two reasons: the proportion of high-school dropouts who invest is low, and the proportion of college graduates who invest is high. In 1995, 39.9 percent of investors had four or more years of college, compared to 23.0 percent of the general population; 93.4 percent had completed high school, compared to 81.7 percent of Ameri-cans generally.

Occupation

Shareholding increased among all the occupational categories reported by the Surveys of Consumer Finance from 1989 to 1995. Executives and professional workers continued to dominate the ranks of shareholders. But farmers, laborers, and housewives had above-average rates of growth in stock ownership. (See Table 6.)

Race

In 1935, The Gallup Organization reported that only 3.9 percent of "Negros" owned securities.[33] This was less than one-fifth the ownership rate of the general population.

Government sources have only recently begun to track investment habits by race. The most comprehensive source, the Federal Reserve Board's Survey of Consumer Finance, reports financial assets in only two ethnic categories, "White non-Hispanic" and "nonwhite or Hispanic." Two facts emerge from those sketchy data: stock ownership among nonwhites has been rare but is becoming less so. (See Table 7.)

For the most part, it is DC plans that are bringing minorities into capital markets. From 1992 to 1995, nonwhites increased their participation in such plans by 35.2 per-

Fifty percent of stockholders had household incomes of $50,000 or less.

Table 5
Stock Ownership by Age Bracket, 1989–1995

Age of Head of Family (years)	Families Owning Stock (%) 1989	1995	Increase
<35	22	37	65
35 to 44	39	46	19
45 to 54	42	49	17
55 to 64	36	40	11
65 to 74	27	34	28
75 plus	26	28	7

Source: Board of Governers of the Federal Reserve System, *Federal Reserve Bulletin*, January 1997, and unpublished revisions.

The absolute numbers of investors increased across every educational grouping between 1989 and 1995

cent, roughly triple the rate of their white coworkers. In a January 1999 survey by Rasmussen Research, 21.25 percent of black respondents owned "more than $5,000 of stocks, bonds or mutual funds"—roughly half the rate for whites.

The Convergence of Wall Street and Main Street

How involved were the new stockholders in capital markets? Were they active managers or passive participants? The available evidence suggests that during the 1990s both investor activity and investor awareness increased—that Wall Street and Main Street are indeed converging.

Increased Account Activity

Americans added mutual funds to their portfolios at an amazing pace and are actively managing them. In 1989, half the investors in mutual funds held only one. Only 6.9 percent owned five funds or more. By 1995, a quarter of mutual fund investors held one fund, and 24.1 percent owned five or more. (See Table 8.)

In 1996, ICI reported the level and variety of account activity among mutual shareholders over the past 12 months: 22 percent purchased a mutual fund, 46 percent added money to a fund, 25 percent exchanged one mutual fund for another or moved money between them, 32 percent automatically purchased shares in a fund from a bank account or paycheck, and 16 percent chose to reinvest dividends.

Expanded Choice

"The 401(k) asset-allocation choice," wrote James Poterba and David Wise, "reflects two decisions: one by the employers with regard to which investment options to offer, and a second by employees with respect to which investments to choose, given the available menu. Broad choice is now the rule, rather than the exception. . . ."[34]

IRS regulations require 401(k) plan providers to offer workers a range of investment choices. In 1990, the average number of choices available to 401(k) participants was 3.2. By 1993, the average had increased to 5, and the median was 4.[35] The PSCA reports that the number of 401(k) plans offering five or more funds increased from 77.7 percent in 1996 to 87.7 percent in 1997; whereas the number offering 10 or more increased from 16.2 percent in 1996 to 30.6 percent in 1997. That year, the average number of plan investment alternatives climbed to eight.

Table 9 shows the results of a 1994 study that provides a mid-decade snapshot of the types of options employers were offering through 401(k)s and the degree to which employees were exercising them.

Table 6
Stock Ownership by Occupational Category, 1989–1995

Occupational Category	No. of Persons (millions) 1989	1995	Increase (%)
Executive/professional	17	21	28%
Clerical/technical/sales	14	17	27%
Service/craftspeople	6	8	25%
Laborers/farmers	3	7	107%
Homemakers or not in labor force/retirees	7	8	16%

Source: "Shareownership 1998," New York Stock Exchange, and calculations by the author

Through mutual funds, workers not only assembled portfolios but diversified them by strategy and by risk.

Through mutual funds, workers not only assembled portfolios but diversified them by strategy and by risk. The most popular funds included long-term growth, growth and income, aggressive growth, and company stock. Among risk-averse investors, index funds and guaranteed investment contracts (GICs) were popular.

A 1997 survey of 401(k) plans reported the most common investment options available to workers in broad categories: 82.3 percent of plans offered actively managed domestic equity funds, 74.5 percent offered balanced stock/bond funds, and 67.4 percent offered actively managed international equity funds.[36]

The frequency with which workers can make investment choices has also increased throughout the 1990s. The PSCA reports that the percentage of plan providers who allow participants to reallocate assets on a daily basis rose from 7.8 percent in 1990 to 61.3 percent in 1997. (See Table 10.)

Employers have also increased the frequency of their own contributions[37] and the speed with which employees are vested.[38]

Choice has also expanded with regard to stock options. While regulations require 401(k) plans to be open to most workers, stock options have traditionally rewarded management and key employees. That changed in the 1990s. A 1997 survey of 1,100 stock option plans by ShareData, Inc., and the American Electronics Association found that 53 percent of respondents offered all employees stock options. Among the largest companies, those with 5,000 employees or more, 45 percent offered universal stock options in 1997 compared with 10 percent in 1994. Over the same period, the percentage of middle-sized companies—those with 500–999 employees—offering stock options to all employees rose from 30 to 51.[39]

Active Prepurchase Behavior

As workers expanded their market activities, they obtained more information from more sources. In an extensive survey of mutual-fund customers' prepurchase behavior, ICI found that "shareholders typically reviewed 13 separate items of information about the fund or its sponsoring company." The survey estimated how many potential buyers considered various factors:[40] risk level, 90 percent; total return, 88 percent; reputation of the company, 88 percent; investment goals of the fund, 82 percent; types of company in which the fund invests, 81 percent; annual fees, 76 percent; fund performance vis-à-vis the performance of similar funds, 75 percent; sales charge, 73 percent; length of time the company has done business, 71 percent; fund company's selection of funds, 69 percent; fund

Table 7

Stock Ownership among Whites and Nonwhites, 1992 and 1995

Race or Ethnicity of Head of Household	Stocks 1992	Stocks 1995	Stocks Change	Retirement Mutual Funds 1992	Retirement Mutual Funds 1995	Retirement Mutual Funds Change	DC Retirement Accounts 1992	DC Retirement Accounts 1995	DC Retirement Accounts Change
White non-Hispanic	20	18	-11%	13	15	14%	43	47	9%
Nonwhite or Hispanic	6	6	-13%	3	4	3%	22	29	35%

Security Held and Year (percent of households owning)

Source: *Federal Reserve Bulletin*, Vol. 83, No. 1, January 1997.

performance compared to an index, 59 percent; price per share, 59 percent; fund manager's investment style, 59 percent; minimum investment, 58 percent; total assets, 57 percent; manager's tenure with fund, 51 percent; portfolio turnover rate, 46 percent; fund manager's background, 45 percent; 800 customer phone, 42 percent; 24-hr/day access, 30 percent.

In their first forays into capital markets, workers relied on employer-provided materials, some mandated by law. Based on its 1996 Retirement Confidence Survey, EBRI reported that employers of 71 percent of DC plan workers provided educational materials or seminars for plan members. Given the opportunity, 81 percent of participants used the materials. The users identified the information they obtained:

1. "A description of the investment options available in the plan": 98 percent;
2. "The advantages of saving in tax-deferred plans": 96 percent;
3. "The effect of compounding over time": 83 percent;
4. "The principles of risk and return": 81 percent;
5. "The principles of asset allocation and diversification": 77 percent; and
6. The amount of saving needed to finance a comfortable retirement: 66 percent.

By 1997, PSCA found that 93 percent of 401(k) companies offered investment education materials to their employees.

Active Postpurchase Behavior

Most investors monitor their stocks carefully, using a wide variety of materials. A 1997 survey conducted by Peter D. Hart Research Associates for the Nasdaq stock market asked 1,214 investors how often they checked the prices of their stock or mutual fund shares. The results: 51 percent of respondents checked their investments once a week or more, 75 percent at least once a month. Eighteen percent checked "every day."

In 1996, ICI asked fund shareholders about the types of information they monitor.[41] The information they tracked, by the percentage who tracked it, included: total dollar value of an account, 90 percent; yield or rate of return, 80 percent; price per share of a fund, 78 percent; economic or market conditions, 61 percent; fees and charges of the fund, 46 percent; and changes in the fund manager, 24 percent.

ICI found that fund owners typically used three information sources to monitor their investments. The major sources are as fol-

Table 8
Total Mutual Funds Owned by Investors Who Own Stock Funds, 1989–1995

Total No. of Mutual Funds	Percentage of Stock Fund Owners 1995	1992	1989
1	28	37	49
2	22	25	20
3	15	15	14
4	12	6	9
5	8	7	3
6 or more	16	10	4

Source: Tabulations from James M. Poterba, "Shareownership 1998," New York Stock Exchange, 1998, based on Surveys of Consumer Finance, 1989 and 1995.

lows: account statements, 65 percent; fund listings in a daily paper, 54 percent; mutual fund annual reports, 50 percent; professional financial advisors, 38 percent; business magazine fund rankings, 35 percent; ranking and information services, 13 percent; and on-line services, 5 percent.

Increased Use of Technology

Whereas 33 percent of households owned PCs in 1995, 56 percent of investors did. Households owning mutual funds were 28.6 percent more likely to use the internet and 14.8 percent more likely to subscribe to on-line services than the population at large.[42] The Nasdaq Stock Market reported in 1997 that 7 percent of investors used on-line computer services to buy or sell stocks or mutual funds.[43]

The best indicator of the growing relevance of computers to the consumer market for corporate shares is not in the sketchy consumer data but in the growth of Web services among brokerages. A June 1997 survey of mutual-fund companies found 51 percent of funds, and all of the fund groups with assets in excess of $50 billion, had Web sites. Two-thirds of the others were planning to launch a site within the next two years. The companies use these sites primarily to promote sales: 76 percent offer fund perspectuses and 68 percent offer backgrounds on portfolio managers.

The sites are becoming increasingly interactive. Downloading capacity is available for prospectuses on nearly a third of sites. Twenty-four percent allow customers to monitor their accounts on-line; 11 percent enable them to exchange investments within a fund group. Another 6 percent are equipped to take on-line purchase orders, and 5 percent allow on-line redemption.[44]

Managers of 401(k) plans are also developing interactive Web sites. A 1997 survey of plan providers found that 4 percent used Internet enrollments, and 36 percent permitted Internet balance inquiries.

Investment Behavior of the Shareholder Class

In 1939, Sears, Roebuck & Co. president General R. E. Wood told the Senate Finance Committee, "We believe that a successful profit sharing plan does increase the employees' responsibility, it helps to avoid labor unrest and strikes, and gives the employee a feeling of greater security and unity of interest with the employer. We believe, if adopted generally, that profit sharing would lead to a more flexible wage scale. We believe firmly in the joint contribution of employees and employer. It creates a feeling of mutual responsibility and trust."[45]

The PSCA reports that the percentage of plan providers who allow participants to reallocate assets on a daily basis rose from 7.8 percent in 1990 to 61.3 percent in 1997.

Fifty-one percent of respondents checked their investments once a week or more, 75 percent at least once a month. Eighteen percent checked "every day."

Table 9
Availability and Use of Investment Options in 401(k) Plans

Investment Option	Availability (%)	Use, Given Availability (%)
Equity Funds		
• Long-term growth	60	61
• Growth and income	52	64
• Aggressive growth	45	60
• Company stock	42	59
• Index fund	34	41
• International	27	50
• Balanced funds	24	58
Bond Funds		
• Guaranteed investment contract	42	55
• Money market fund	36	36
• U.S. government bond	24	30
• Long-term bond	19	33
• High-yield bond	14	26
• Short-term bond	10	22
• Corporate bond	9	34
Asset-allocation funds		
• High risk	15	45
• Moderate risk	19	43
• Low risk	14	39

Source: Access Research 1995.

The chief impediment to the expansion of worker capitalism was the philosophy that the worker's status as a capitalist should be kept hostage to the specific fortunes of his company. Thus, many early profit sharing experiments perished in the stock crash of 1892. Later, the market meltdown of 1929 liquidated roughly 70 percent of such plans.[46]

Still, businessmen who had run profit sharing workplaces remained enthusiastic about their potential. A group of industrialists testified to that effect before the Senate Finance Committee in 1939. They maintained that laborers, as stock owners and profit sharers, would develop event horizons longer than a paycheck period. They further believed that through profit sharing the material interests of labor and management would be reconciled; that labor unrest and political class struggle would decline; and that labor productivity *and* compensation would rise in consequence.

They persuaded Congress to allow them to write off shared profits as a wage expense, avoiding double taxation on compensation. The DC plans of today are the lineal descendants of their efforts. Such programs are now sufficiently widespread that we *can* gauge the accuracy of the industrialists' predictions. The available evidence tends to confirm them.

Event Horizons

The great mass of American stockholders invest as a long-term strategy, as the early pio-

Table 10
Frequency of Asset Allocation Changes Allowed to Participants in 401(k)s (%)

Period	1990	1995	1997
Daily	8	38	61
Monthly	7	13	12
Quarterly	27	30	19
Semiannually	21	3	2
Annually	19	15	3
Other	18	1	3

Source: Profit Sharing/401(k) Council of America.

neers of worker capitalism had hoped. By margins of 48 to 6 percent, shareholders told Nasdaq researchers that they invested for "growth in value over time" rather than for "regular dividend income."[47]

Two recent surveys invited investors to identify the concerns that brought them to the market. The ICI poll of mutual-fund shareholders reported these priorities: 84 percent invested for supplementary retirement income, 26 percent to pay for education expenses, 9 percent to supplement current living expenses, and 7 percent to buy a home or other real estate.[48]

Investors interviewed by Peter D. Hart Research Associates for Nasdaq listed similar priorities: 89 percent invested for retirement security, 28 percent to pay for a child's education, 18 percent to afford major purchases such as a new car, 13 percent to be able to support a parent or elderly relative, 10 percent to start a business, 10 percent to buy a home, and 5 percent to finance their own education.

The goal of contemporary investors, in short, is to finance the major expenses that can be expected to occur at discrete points during a normal life cycle: for example, the purchase of a home, a child's education, a parent's medical bills, and, above all, retirement. Investors are planning for their families. And they are more likely to live in families than noninvestors. The percentage of American adults who are wed is 59.7. The percentage of married stockholders is 70.4 according to a Rasmussen Research poll,[49] 71 according to ICI,[50] and 82 according to the New York Stock Exchange.[51]

These worker-owners' increasingly long-term orientation has led them to question the wisdom of reliance on government systems of social insurance. When EBRI in 1996 asked workers to list sources of retirement income they regarded as "major" or "most important," Social Security barely beat out postretirement employment. Sixty-one percent listed work-based defined contribution plans; 56 percent listed other personal savings or investments; 50 percent listed money an employer put in a pension plan; 26 percent listed Social Security; and 25 percent listed post-retirement work.

And they are doing something about the situation. From 1989 to 1995, the percentage of heads of households below age 35 who owned stock increased 64 percent. "[P]eople aged 45 to 64 report that they first began to prepare for retirement at age 35," reported the PSCA, "while those aged 25 to 44 say that they first began to prepare at age 26."[52]

Poterba, Venti, and Wise present further evidence of the aggressive participation of the youngest cohort of investors in retirement planning, as shown in Table 11.

The best indicator of the growing relevance of computers to the consumer market for corporate shares is not in the sketchy consumer data but in the growth of Web services among brokerages.

Table 11
401(k) Participation Given Eligibility (percent)

Income (thousands of dollars)	Age Category (years) 25–35	35–45	45–55	55–56	All
<10	80	58	73	85	71
10–20	63	68	52	68	63
20–30	70	60	58	49	62
30–40	74	64	59	73	67
40–50	74	69	82	68	73
50–75	76	67	75	84	73
>75	86	84	88	86	86
All	74	68	72	72	71

Source: James M. Poterba, Steven E. Venti, and David A. Wise, "Do 401(k) Contributions Crowd Out Other Personal Saving?" *Journal of Public Economics* 58 (1995):1–32.

In all but one income bracket, "Generation-Xers" (aged 25–35) are participating in workplace investment programs at higher rates than late Baby Boomers (35–45). But more astonishingly, they are outpacing every age bracket of preretirement workers, driving up the overall participation rate.

How committed are DC account holders to long-term savings?

Despite the problem of leakage, discussed above, most data indicate that workers are mindful of the future. A 1993 study of 401(k) plan participants by John Hancock Financial Services found that only 4 percent of participants withdrew money from their plans over the previous two years. The 1997 Retirement Confidence Survey found that only 18 percent of 401(k) participants had any intention of using their accounts for anything other than retirement, even home purchases.[53]

The chief impediment to the expansion of worker capitalism was the philosophy that the worker's status as a capitalist should be kept hostage to the specific fortunes of his company.

Do the New Investors Panic?

During periods of market turmoil, worker-investors have held their ground. "Hewitt Associates research shows that throughout the recent market changes, 401(k) participants kept their eyes on the the long-term goal," wrote David Wray, president of PSCA, after a precipitous market decline late in the summer of 1998. "According to Hewitt's 401(k) Index, on August 31, 401(k) participants as a whole moved less than one quarter of one percent of their assets. And on September 1, the heaviest trading day in history, participants only reallocated approximately one tenth of one percent of the total value of their account balances."[54]

There is ample evidence to suggest that most worker-investors, while paying close attention to markets, are unimpressed by short-term fluctuations. Asked why they invested, respondents to the Nasdaq's 1997 survey agreed, 44 to 6, that "over the long run, stocks consistently outperform other investments" rather than "stock prices have been increasing in recent years." Asked to contemplate a situation in which stock prices "were generally to go down significantly in the next year," 8 percent said they would sell to avoid further losses, 31 percent said they would increase their equity holdings to take advantage of lower prices, and 54 percent said they would make no major changes at all. The contemporary small investor is anything but skittish.[55]

Table 12
Effect of Profit Sharing on Hourly Benefits, Wages, and Total Compensation

	Hourly Wages	Hourly Benefits	Profit Sharing Benefits	Hourly Total Compensation
Manufacturing				
Profit sharing	$11.01	$3.88	$0.43	$15.32
Non–profit sharing	$11.04	$4.03	$15.08	
Nonmanufacturing				
Profit sharing	$10.73	$3.33	$0.47	$14.53
Non–profit sharing	$10.10	$3.44	$13.53	

Source: "Helping Americans to Help Themselves," Profit Sharing/ 401(k) Council of America, April 1998.

Are Worker-Owners More Productive?

The entrepreneurs testifying before the Senate in 1939 contended that worker capitalism improved not only a worker's character but also his productivity. "In our estimation," a Hammerhill Paper Co. executive told the Senate Finance Committee, "based upon approximately 30 years' experience, a profit sharing plan or bonus system . . . helped to key up the organization, has provided an incentive for extra effort, and has been a means of stimulating and maintaining high standards of quality and the elimination of undue waste."[56] "During the short time our plan has been in effect," testified the representative of Pacific Iron & Steel Company, "we have noticed a reduction in waste. Men are very much interested in keeping costs down, hence are more careful when using machines. . . . [P]rofit-sharers work for the best interest of the company."[57]

Several industrialists argued back then that profit sharing, by making labor costs more flexible, might help reduce layoffs and bankruptcies.[58] At the same time, it could yield higher total compensation. H. S. Murray, president of Kalak Water Company, provided a hypothetical case: "John Smith receives a pay of $5,000 per year. The company has had a good year, and Smith asks for an increase to $7,000. He is entitled to it, but the $7,000 may result in increasing the fixed overhead of the company to a point where it would be burdensome during subsequent and less prosperous years. When those poor years come, no executive likes to reduce salaries and wages, and usually defers doing so until it becomes necessary to take drastic action. Rather do I prefer to see John Smith continue to receive an annual stipend of $5,000 with a profit sharing plan whereby at the end of a good year he will not only receive the additional $2,000 which he desires, but perhaps $5,000. . . . Then, if off years ensue, the fixed overhead of the company has been maintained at a point where it is bearable under adverse conditions."[59]

Those predictions, too, can now be tested. Various studies have assessed attitudinal changes among employees offered stock options or defined contribution plans.[60] In 1987, D. Wallace Bell and Charles G. Hanson surveyed a random sample of 4,060 British profit sharing workers. Seventy-three percent said the plan improved their attitude toward their work, 68 percent that it improved their attitude toward their employer. In a 1989 Ph.D. dissertation,

From 1989 to 1995, the percentage of heads of households below age 35 who owned stock increased 64 percent.

Table 13
Attitudes toward a Capital Gains Tax Cut, by Portfolio Ownership

A Category	B No. of People in Sample	C People with Portfolio (% Who Support)	D People with Portfolio (% who Oppose)	E People without Portfolio (% who Support)	F People without Portfolio (% who Oppose)	G Gap Change (C-D) Minus (E-F)	H Total Favor-Oppose (%)
All persons	6400	66	20	46	23	23	54–21
All aged 18–29	1040	54	25	43	22	8	
All aged 30–39	1059	68	15	51	17	20	
All aged 40–49	1282	69	19	47	27	31	
All aged 50–64	1658	*67*	22	48	28	25	
All aged 65+	1361	67	22	43	29	31	
All earning < $20k	1249	52	25	40	23	10	
All earning $20–40k	2130	63	21	46	24	19	
All earning $40k–60k	1360	65	23	51	21	12	
All earning $60k–75k	538	70	16	54	24	22	
All earning $75k+	831	72	18	57	25	22	
All males	2525	72	20	53	25	23	61– 22
Males aged 18–29	453	64	25	50	24	14	
Males aged 30–39	456	72	16	6	16	11	
Males aged 40–49	541	74	19	49	32	38	
Males aged 50–64	625	74	21	58	28	22	
Males aged 65+	450	73	21	49	34	37	
Males earning $40k–60k	583	70	23	58	21	10	
Males earning $60k–75k	250	76	15	58	26	29	
Males earning $75k+	370	74	20	58	25	23	
Married males	1577	72	20	56	25	20	64 – 22
Unmarried males	948	71	19	51	25	26	56 – 22
All females	3875	60	21	39	22	22	47 – 21
Females aged 18–29	587	41	26	36	20	-2	
Females aged 30–39	603	64	14	40	18	28	
Females aged 40–49	741	63	19	45	23	23	
Females aged 50–64	1033	61	22	41	28	26	
Females aged 65+	911	61	23	39	26	25	
Females earning <$20k	846	48	27	36	24	9	
Females earning $20k–40k	1318	55	22	39	22	16	
Females earning $40k–60k	777	59	22	44	20	13	
Females earning $60k–75k	288	60	19	50	21	13	
Females earning $75k+	459	69	16	57	25	21	
Married females	2422	63	19	41	22	25	51–20
Unmarried females	1453	52	25	37	23	12	41–23
All Whites	5339	67	20	47	24	24	56–22
All Blacks	672	56	28	40	22	9	49–34
All Married	3999	68	19	48	23	23	57–21

A	B	C	D	E	F	G	H
Category	No. of People in Sample	People with Portfolio (% Who Support)	People with Portfolio (% who Oppose)	People without Portfolio (% who Support)	People without Portfolio (% who Oppose)	Gap Change (C-D) Minus (E-F)	Total Favor-Oppose (%)
All Unmarried	2401	61	22	44	24	19	49–22
Republicans	2106	75	14	54	19	26	65–16
Private employee	3087	68	18	50	20	20	
Retiree	1735	*64*	24	44	28	26	

Source: Data from Rasmussen Research; calculations by the author.

"The Organizational Impact of Profit Sharing," Gary W. Florkowski of Syracuse University found a significant positive statistical link between profit sharing on the one hand and job satisfaction and organizational commitment on the other.

A 1989 Brookings Institution anthology, *Paying for Productivity: A Look at the Evidence,* contains two major essays on labor output and worker capitalism. In "Alternative Pay Systems: Firm Performance and Productivity," Daniel J. B. Mitchell et al. concluded that 401(k)s and other profit-sharing plans had improved employee performance in the 1980s. "Profit Sharing and Productivity," by Martin L. Weitzman of Harvard University and Douglas L. Kruse, was a meta-study of 16 previously published investigations. The authors concluded that profit-sharing companies experienced a median 4.4 percent productivity increase.

More recently, Douglas L. Kruse of Rutgers University investigated worker productivity in 500 companies, half with profit sharing plans, half without, from 1971 to 1991. He reported that profit sharing increased worker productivity by 3.5 to 5.0 percent. Cash profit sharing had a more immediate impact on productivity, while deferred profit sharing plans such as 401(k)s had a greater long-term impact.

The notion that profit sharing companies would exhibit greater stability in employment but greater variability in compensation over the course of a business cycle is now known as the Weitzman Theory—in honor of Martin Weitzman, whose 1984 book *The Share Economy* recapitulated an argument the industrialists had made in 1939.[61] In 1987, Kruse provided empirical support for the Weitzman Theory by showing that employment fell less in manufacturing companies during economic downturns if they had profit sharing plans. For every 1 percent increase in the overall unemployment rate, the profit sharers reduced their workforce 2 percent, compared with a 3.1 percent layoff rate among non–profit sharers.[62]

A 1989 Employee Benefits Report by the U.S. Chamber of Commerce lends support to H. S. Murray's 1939 suggestion that a more flexible wage might actually *increase* the overall compensation of labor. (The figures given in Table 12 use Commerce Department indexes to correct for the different mix of industries in each category.)

Community of Interests

The businessmen who testified in 1939 thought that profit sharing and stock ownership plans would reduce labor strife, a rising concern at the time. "We have not had a strike in 50 years," said Proctor & Gamble's Richard Deupress. "Our turn-over of labor

Annual surveys conducted jointly by PSCA and Hewitt Associates between 1973 and 1988 found that profit sharing companies had a 13 percent turnover rate among participants compared with a 21.6 percent national turnover rate.

Asked to contemplate a situation in which stock prices "were generally to go down significantly in the next year," 8 percent said they would sell to avoid further losses, 31 percent said they would increase their equity holdings to take advantage of lower prices, and 54 percent said they would make no major changes at all.

is almost nothing." Added Frank Gannett of Gannett Newspapers: "If most of our corporations would work out such a policy, we would have few strikes, for the worker would understand that to tie up the production of a factory would be to lessen his own reward."[63]

M. L. Joslyn, President of Joslyn Manufacturing & Supply Company, extolled the role of profit sharing in uniting divergent interests within an organization: "A corporation has three distinct interests—ownership, management, and labor—and each of those interests is essentially selfish. There is just one way to weld them together in a common cause, by devising a plan which secures better results to all those interests at the same time. . . . Taking away from one interest and giving to another is never going to bring that about. We believe our plan recognizes all those truths. . . . That is why it works and pays."[64]

Apparently it still does. In 1989, James Chelius of Rutgers University and Robert S. Smith of Cornell reported on labor conditions in 3,000 small businesses with defined contribution plans. They found that profit sharing increased labor stability, particularly during downturns in sales.[65] Annual surveys conducted jointly by PSCA and Hewitt Associates between 1973 and 1988 found that profit sharing companies had a 13 percent turnover rate among participants compared with a 21.6 percent national turnover rate reported at the Bureau of Labor Statistics in 1987.[66]

It is impossible to isolate how the growth of worker-owned retirement accounts affected labor relations. But the correlation is remarkable. In 1977, the year before the Revenue Act added section 401(k) to the Internal Revenue Code, there were 298 work stoppages that idled 1.2 million workers for 21.2 million working days—0.10 percent of the nation's work time that year. By 1997, there were only 29 strikes that idled 339,000 workers for 4.5 million working days—0.01 percent of the nation's work time.

That working investors are internalizing attitudes long associated with the capitalist class is also evident from their reading habits. In 1997, the *Wall Street Journal* had the highest circulation of any daily newspaper in the nation (1.8 million); a second national financial newspaper, *Investor's Business Daily*, claimed a readership of 235,000. *Business Week*, *Forbes*, and *Fortune* ranked 8th, 9th, and 12th respectively in magazine ad revenues, and *Money* reached a circulation of 1,935,402. There has also been a proliferation of finance-oriented television programming, including CNN-FN, CNBC, and Bloomberg.

More to the point, the pool of investors in 1997 was better read than the more economically elite pool of 1985. In 1997, 2 percent more investors read the *Wall Street Journal*, 6 percent more read *Forbes*, 14 percent more read *Money*, and 2 percent more read *Business Week*. Other popular financial publications, such as *Kiplinger's Report* (read by 10 percent of shareholders) and *Investor's Business Daily* (consulted by 6 percent), were not around in 1985.[67]

The big losers in readership were daily newspapers, whose share as primary sources of business advice declined from 58 percent in 1985 to 20 percent in 1997. The print generalists lost market share to the financial specialists. And although the impact on workers' attitudes is impossible to quantify, the editorial content of *Forbes*, the *Wall Street Journal*, and *Investor's Business Daily* certainly varies from the fare in the *Philadelphia Inquirer*, the *Washington Post*, and the *Los Angeles Times*.

Worker-Capitalist Politics

This section addresses the issue of whether stock ownership has an impact on attitudes about public policy issues. Hypothetically, as workers accumulate capital, their support for free-market and progrowth policy reforms will increase. The available evidence suggests that this is precisely the case.

Privatization of Social Security is one such example. In the population as a whole, 30 percent of men and 40 percent of women agreed that “Social Security Trust Fund exhaustion will leave [the] system broke and unable to pay benefits.”[68]

The young trust government insurance least. Only 5 percent of Generation X workers (aged 34 and younger) surveyed by EBRI expected Social Security to be their most important source of income. Thirty-six percent of them expect the system to be bankrupt by the time they retire, and another 64 percent feel the same about Medicare. But investors are even more skeptical of Social Security. From 1990 to 1997, the percentage of shareholders listing the program as their primary anticipated source of retirement income decreased from 15 to 4.[69]

We find investors and noninvestors similarly divided with respect to tax policy. For example, in April 1997, the Index of Investor Optimism, conducted quarterly by The Gallup Organization for PaineWebber Incorporated, surveyed investor preferences on tax policy:

1. By a margin of 75 to 9 percent, investors supported “a significant cut in the capital gains tax on the sale of homes.”
2. By 66 to 15 percent, investors supported “a significant cut in the capital gains tax on the sale of other investment securities, such as stocks and bonds.” Support was lowest among investors with portfolios of $40,000 and less (54 percent) and highest among shareholders with investments of $500,000 or more (82 percent).
3. President Clinton’s “Hope Scholarship” tax credits for higher education received 79 percent assent, with 16 percent opposed. Investors aged 30 and younger gave it 88 percent approval.
4. The runaway winner among proposed tax policies was a proposal “[e]xpanding the IRA program to permit penalty-free withdrawals in order to pay for higher education, first-time home purchases, medical care, or living expenses while unemployed.” This “universal” IRA garnered 82 percent support among investors, with only 10 percent opposed. It was particularly popular among investors 30 years of age or younger (91 percent assent) and among investors with portfolios worth $40,000 and less (87 percent assent).[70]

The PaineWebber/Gallup survey results confirm that stockowners strongly endorse lower tax rates on investment and tax breaks to deal with life-cycle events. The preferences of younger and poorer investors trend toward liquidity, those of older and wealthier investors toward lower marginal rates on capital gains.

A vast and growing class of shareholders has favorable attitudes toward capital, not because its members have stopped earning wages but because their wealth seeking is dual-sourced. They are both workers and capitalists, and, during the 1990s, the fastest-growing component of their wealth was in that humble IRA or 401(k) that kept growing and growing and growing.

But what has not been known until recently is the degree to which “investment” influences opinion as an independent variable. Stockholders marry in unusual numbers; their mean income is slightly above the norm. They are disproportionately white, college educated, and middle-aged. Do their opinions on taxation merely reflect those traits? Or does investment help to shape them?

From January 20th to 24th, 1999, Rasmussen Research conducted a 6,400-person poll that queried respondents not just on standard demographic variables—race, sex, age, and income—but also on whether they owned more than $5,000 worth of stocks, bonds, and mutual funds. Respondents were then asked a key question on tax policy: “Do you favor or oppose a capital-gains tax cut?” Asking that question rendered it possible to test whether investment made workers conscious of their policy interest as investors. By comparing the answers among owners and nonown-

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ers of portfolios within 45 demographic groups, researchers could observe, for the first time, how stock ownership correlated with pro-capital tax preferences. The results of the poll are shown in Table 13.

Unsurprisingly, the Rasmussen data show that 65.7 percent of investors favor a capital-gains tax cut compared with 45.9 percent of noninvestors and 53.8 percent of the general public. But the correlation of portfolio ownership and procapital tax policy is not restricted to traditional shareholding groups.

Portfolio ownership is associated with higher margins of support for a capital-gains tax cut among blacks and whites; among retirees, private-sector workers, and government employees; among men and women, both married and unmarried; and among Democrats and Republicans, rich and poor.

Aggregate support is greatest at high income levels and among married couples, whites, Republicans, and private-sector workers. But within each of those groups, support increases sharply with portfolio ownership. The same effect is evident among population segments that are less enthusiastic about a capital-gains tax cut: blacks, females, Democrats, and unmarried adults.

The single exception occurs among young women. Even here, portfolio ownership is associated with a 5-point increase in support for a capital-gains tax reduction; but the total percentage of young women expressing an opinion increases 11 points. Among those stockholders, an additional 7 percent oppose the tax cut.

For now, it appears that worker-capitalist interests, diffused through every major demographic group by the growth of defined contribution plans, now influence opinion formation—just as they influence worker productivity, long-term planning, and retirement security. Worker-capitalist effects operate broadly across and within a large range of demographic variables. Everywhere they tend to align worker interests with those of capital.

Conclusion

Broadly stated, our findings show that as wage earners become owners of capital, they favor policies that reduce taxes on savings, investment, and capital gains. Americans are entering capital markets by the millions each year, largely through mutual funds offered by providers of work-based defined contribution plans. Indeed, shareholding households will soon constitute a majority of the electorate.

But beyond sheer numbers, American workers are accumulating a reservoir of experience encompassing investment strategies, portfolio diversification, and market yields. Markedly, tens of millions of wage earners have learned how defined contribution plans can enhance their retirement security. Polls indicate that they are contrasting this experience with the perennial crises of entitlements, particularly Social Security—once the untouchable "third rail" of American politics.

Because of Americans' increased experience with markets, policymakers must rethink their traditional aversion to policy models that include personal capital accumulation. Tax-free savings for education, health care, first-time home ownership, and small business start-ups are increasingly popular among a rising population of worker capitalists. And politicians who resist market-based reform of Social Security—individually owned and managed personal savings accounts—may soon find themselves straddling that "third rail" whose avoidance rationalized their inaction.

Notes

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