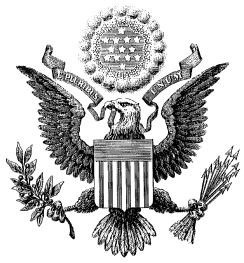
THE ROOTS OF BROADENED STOCK OWNERSHIP



Vice Chairman Jim Saxton (R-NJ)

Joint Economic Committee
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This analysis examines recent trends in stock ownership and explains the reasons for the dramatic increase in stock ownership among a broader and increasingly diverse number of Americans. The key reasons for this democratization of the stock market include:

- The popularization of the mutual fund.
- The general reduction in the multiple taxation of saving and investment that resulted from the genesis of the IRA and 401(k) plan.
- The emphasis of the Federal Reserve on price stability that has lowered interest rates, stabilized financial markets, and acted as a *de facto* tax cut.

Joint Economic Committee
1537 Longworth House Office Building
Washington, DC 20515
Phone: 202-226-3234
Fax: 202-226-3950

Internet Address:
http://www.house.gov/jec/

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I. INTRODUCTION

Recent data released by the Federal Reserve shows that nearly half of all U.S. households are stockholders. In the last decade alone, the number of stockholders has jumped by over fifty percent. According to one observer, this explosion in stock ownership has been "one of the great social movements of the 1990s."[1] The shift of many individuals from wage earners to worker capitalists has stimulated discussion on the implications of this economic shift. On the surface, it might seem that broadened stock ownership is of little importance. There are many positive benefits, however, to the expansion of stock ownership. Not the least of these benefits is the ability, over the long-term, for families to accumulate wealth to provide for their needs including retirement, education, medical care, and potential unemployment.

In addition to this effect on household wealth, saving and investment contribute to the capital needed for sustainable economic growth. According to one market strategist, financial market liquidity has been one of the main drivers of the bull market:

> You can have no inflation and earnings up 25 percent, but if you don't have money [from investors] forget it…The liquidity has come from you and me and our neighbors, who have been putting money into mutual funds to the tune of $20 billion to $25 billion a month.[2]

In addition to providing a basis for investment needed for economic growth, the increase in stock ownership appears to be cultivating a deeper appreciation and understanding of private enterprise. The involvement of new stockholders in the capitalization of the companies that create wealth allows these new investors to have a better understanding of financial matters. Furthermore, it is suggested that broadened stock ownership can erode class conflict, for "as capitalism expands, a lot of 'them' can become 'us.' It [stock ownership] brings us all together as stakeholders-in-common."[3]

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[1] Robert J. Samuelson, "Stocks Without Risks?" *Newsweek*, November 11, 1999.

[2] Alfred Goldman, chief market strategist at A.G. Edwards, a St. Louis based brokerage firm, cited in: Albert B. Crenshaw, "401(k) Plans Provide Benefits for the Wall Street as Well as the Workers," *Washington Post*, March 20, 1999.

[3] Ben J. Wattenberg, "Capitalism for the Masses," *Baltimore Sun*, January 9, 1997.

Richard Nadler, executive director of the American Shareholders Association and author of "The Rise of Worker Capitalism," has written:

> 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 towards the future – the investor's own and his family's.[4]

The purpose of this analysis is not to restate the benefits of worker capitalism. Rather this report analyzes the reasons behind the increase in stock ownership. Given the private and public benefits of stock ownership, it is appropriate to analyze the dynamics of stock market democratization and its policy implications.

The rise in stock ownership over the past twenty years can be mainly attributed to three factors, all of which made stock ownership more attractive relative to consumption or other methods of saving. First, the increasing use of mutual funds as an investment vehicle allowed small investors to diversify and receive professional management at a fraction of its previous cost. Second, the creation and proliferation of the Individual Retirement Arrangement (IRA) and the 401(k) plan led to a general reduction in the multiple taxation on saving and investment, increasing its after-tax return. Finally, the emphasis of the Federal Reserve on price stability has lowered inflation, brought interest rates down and stabilized financial markets, creating a stable macroeconomic climate.

This remainder of this paper is organized into four sections. Section II provides an overview of the mechanics of stock ownership, while Section III outlines prominent features of the current expansion in stock ownership. Section IV addresses the reasons behind the broadening of stock ownership, and Section V concludes the study with an articulation of some lessons to be learned from the broadening of stock ownership.

II. THE MECHANICS OF STOCK OWNERSHIP & SUPPLEMENTAL RETIREMENT ACCOUNTS

Shares of stock represent ownership shares in a corporation. Investors purchase these shares because they expect to share in the corporation's profits. It is these expectations of profit and loss that drive the demand for stocks. Owners of common stock hope to make money in two ways – through dividends and/or price appreciation. Dividends are a division of income among the firm's owners (i.e., shareholders) and stock appreciation arises from an increase in the market value of the stock relative to its purchase price. The profit on a sale of an appreciated stock is called a capital gain.

[4] Richard Nadler, "The Rise of Worker Capitalism," Cato Policy Analysis No. 359, November 1, 1999.

Direct purchase of common stock is one way to invest, although not the only method. Many investors choose to combine the advantages of many different types of stock (diversification) by purchasing shares in a mutual fund. A mutual fund is a financial institution that pools investor money to buy and sell stocks on their behalf. The advantage of mutual funds over individual investment is that they offer small investors diversification and professional management for a small fee. Mutual funds are usually organized around a specific objective such as long-term growth or income security. Ownership of mutual funds can result in the realization of dividends and capital gains.

The tax treatment of capital gains and dividends present an unfortunate aspect of the tax code, namely, the multiple taxation of saving and investment. Imagine a family wishing to save out of current income to invest for a large purchase in the future. The family pays all applicable federal, state, and local taxes on their earnings. They then decide to invest a portion of what remains. However, on the return of the investment's dividends and capital gains, the taxpayer is taxed again. The result is that the portion of income that is saved is being taxed twice. In contrast, the consumption component of the income stream is only being taxed once. Multiple taxation of the returns to saving and investment increases the cost of saving and investment relative to consumption, thus encouraging consumption.

Mutual fund shares and stock holdings can be held in a retirement saving account such as an Individual Retirement Arrangement (IRA), 401(k) plan, 403(b) plan, or Keogh plan. These plans were created to promote retirement saving and are subject to limitations and restrictions. All of these plans defer taxation of contributions, either by allowing contributions to come from pre-tax dollars or by allowing the deduction of contributions from taxable income.

IRAs were established by the Employee Retirement Income Security Act of 1974 (P.L. 94-406), and were strictly limited to those workers who lacked employer pension coverage. Expansion of eligibility to all workers occurred with the Economic Recovery Act of 1981 (P.L. 97-34), but restrictive income limits were then applied in the Tax Reform Act of 1986 (P.L. 99-514). As of 1998, a worker and a worker's nonworking spouse may both make annual tax-deductible contributions to IRAs of $2,000, subject to certain restrictions such as income tests. Assets of IRAs are required to be held at a financial institution and can only be invested in interest-bearing accounts, certain precious metals, and financial securities including common stock. Income from IRAs is taxed as ordinary income as long as funds are not withdrawn before age 59½ ; otherwise, a 10% tax penalty applies.

Named after the section of the Internal Revenue Code that created them, 401(k) plans allow workers to contribute pre-tax dollars to retirement saving accounts. The Revenue Act of 1978 (P.L. 95-600) formally authorized the 401(k) plan for use, although some 401(k) plans had already existed under earlier Internal Revenue Service rulings. 401(k) plans permit employees to contribute a portion of their wages into a retirement plan on a tax-deferred basis, up to a certain threshold. In 1998, the contribution limit was $10,000.

401(k) plans are similar to IRAs in that the worker decides how contributions should be allocated among various investment options. These options vary from plan to plan, with the worker having discretion over allocation of funds. 401(k) plans have a higher contribution threshold and generally allow employers to "match" employee contributions. Withdrawals of accrued 401(k) plan funds are taxed as ordinary income, with withdrawals before age 59½ incurring an additional 10% tax penalty.

The 401(k) plan and the IRA are supplemented by two other retirement saving plans that are available to specific groups. One plan is the Keogh plan for self-employed persons. The second type of group specific retirement saving plan is the 403(b) tax-sheltered annuity plan for employees of education and various non-profit institutions. Due to the specific nature of the individuals eligible for these plans, they are not as prevalent as 401(k) plans and IRAs.

III. CHARACTERISTICS OF STOCK OWNERSHIP

The most widely used data source in research on financial behavior is the *Survey of Consumer Finances (SCF)*, a survey conducted on behalf of the Federal Reserve Board by the Survey Research Center at the University of Michigan. The *SCF* occurs every three years and data from the survey is usually released two years after the survey date. Data from the *SCF* are used whenever possible due to its generally accepted status as the most accurate source on stock ownership. Table 1 presents data compiled in the Federal Reserve Bulletin from the *1989, 1992, 1995,* and *1998 SCF*.

Table 1. Percentage of Families Directly and Indirectly Holding Stocks,* by Selected Characteristics - 1989, 1992, 1995, and 1998

Characteristic	1989	1992	1995	1998
All Families	**31.6**	**36.7**	**40.4**	**48.8**
Cash Income (1998 dollars)				
Less than 10,000	**	6.8	5.4	7.7
10,000 - 24,999	12.7	17.8	22.2	24.7
25,000 - 49,999	31.5	40.2	45.4	52.7
50,000 - 99,999	51.5	62.5	65.4	74.3
100,000 or more	81.8	78.3	81.6	91.0
Age of Household Head				
Less than 35	22.4	28.3	36.6	40.7
35 - 44	38.9	42.4	46.4	56.5
45 - 54	41.8	46.4	48.9	58.6
55 - 64	36.2	45.3	40.0	55.9
65 - 74	26.7	30.2	34.4	42.6
75 or more	25.9	25.7	27.9	29.4

Source: Kenickell, et al.

* Indirect Holdings are those in mutual funds, retirement accounts, and other managed assets.

** Ten or fewer observations.

The data presented in Table 1 show that 48.8 percent of households were stockholders in 1998, an increase of over 17 percentage points since 1989. In addition, the ownership rates for all income groups and all age groups increased over the last nine years. A significant portion of the increase in the incidence of stock ownership has come through indirect ownership, as a majority of stockholders no longer directly own stock.[5] The majority of the new growth in stock ownership is not in the form of "direct" ownership, but has come from retirement saving accounts such as IRAs and 401(k) plans. In addition, the percentage of young Americans (households where the head is below age 35) investing has nearly doubled since 1989.

IV. REASONS BEHIND BROADENED STOCK OWNERSHIP

This section of the paper analyzes the reasons behind the broadening of stock ownership in recent years. This section argues that stock ownership expanded mainly due to three factors that made stock ownership an increasingly attractive option compared to alternatives. The rise of mutual funds, creation and proliferation of IRAs and 401(k) plans, and a declining risk premium due to lower and less variable inflation have all contributed to broadened stock ownership.

A. THE MUTUAL FUND REVOLUTION

A mutual fund is an investment company that pools money from individual shareholders and invests those funds into a diverse pool of securities. Mutual fund investors purchase shares of the fund, with each share representing proportionate ownership in all of the securities held by the investment company. Although data from previous years is not directly comparable due to different methodologies, it is clear that mutual fund ownership has increased exponentially. By one measure 44 million American households owned mutual fund shares in 1998, an increase of 39 million from the 4.6 million mutual fund-owning households in 1980.[6] In addition, the percentage of U.S. households owning mutual funds has increased sevenfold since 1980 (Chart 1).

Although mutual funds have been in existence since the Great Depression, they first gained real popularity in the late 1970s due to the conjunction of two unrelated factors – inflation and outdated banking regulations. A Depression-era banking regulation known as Regulation Q limited banks to offering a maximum of 5¼ percent return on passbook savings accounts. As long as inflation remained low, Regulation Q was of little concern. Starting in 1973, however, inflation began averaging over 5 percent annually. This meant that the assets held in passbook accounts were declining in value at the same time that inflation was pushing interest rates on money market funds higher.

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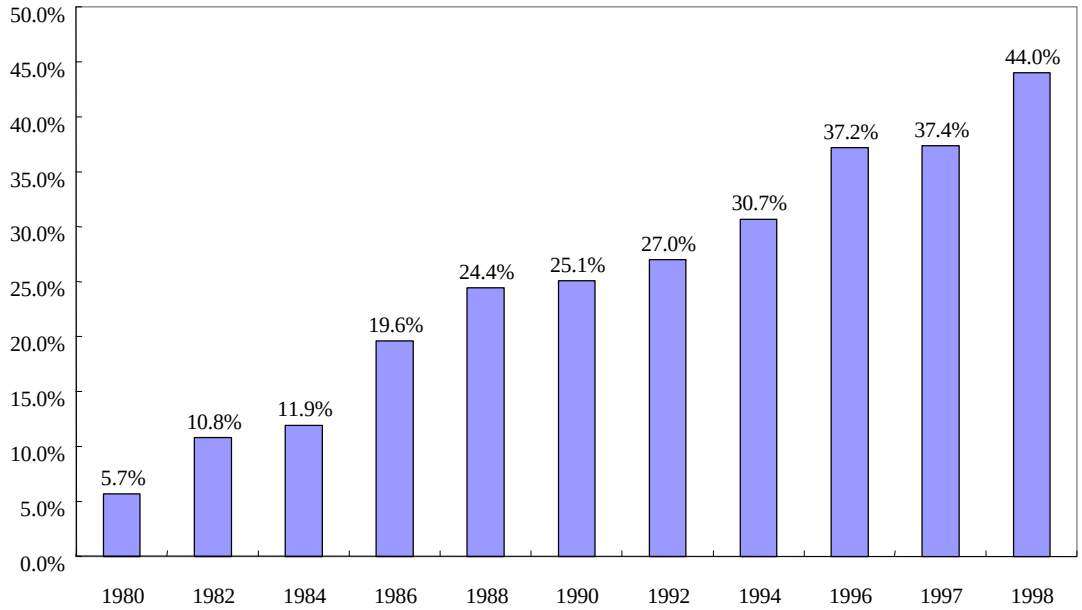
[5] Poterba, James, *Shareownership 1998: Based on the 1995 Survey of Consumer Finances*, (New York, NY: New York Stock Exchange, 1998), 9.

[6] Investment Company Institute, *1999 Mutual Fund Factbook*, (Washington, DC: Investment Company Institute, 1999), 11, and Investment Company Institute, *Mutual Fund Shareholders: The People Behind the Growth*, (Washington, DC: Investment Company Institute, Spring 1996), 1.

Chart 1. Percent of U.S. Households Owning Mutual Funds, 1980-1998*



Source: Investment Company Institute, *1999 Mutual Fund Factbook*, Washington, DC: Investment Company Institute, 1999, p. 40.
* 1998 data includes ownership through variable annuties and uses an improved method to calculate ownership through employer-sponsored retirement plans. Consequently, the 1998 number is not directly comparable with previous years.

In 1974 the spread between the regulated interest rates of passbook accounts and the unregulated interest rates of money market funds was about 4 percent. By 1981, the difference between the rates reached as high as 12 percent.[7] The locus of risk had shifted. It was now riskier to wait in a passbook account for inflation to decline than it was to place one's money in an investment vehicle. Money market funds and mutual funds soon began to compete for ex-passbook account money. Mimicking passbook accounts by allowing accountholders to write checks gave money market funds the initial edge. The advantage held by money market funds dissipated over time as interest rates came down and accountholders shifted assets into the stock market through mutual funds.

Consider the example of a hypothetical family, the Joneses, placing $1,000 into a passbook savings account at the beginning of 1975 and earning the maximum interest rate allowable (5¼ percent). According to the *1999 Economic Report of the President*, the Consumer Price Index rose by 6.9 percent in 1975. Although the Jones family would have ended 1975 with $1,052.50 [1000+(1000*0.0525)] in their account, after adjusting for inflation they would have lost money, the real value of their assets declining to $983.50 [1000+(1000(0.0525-0.0690))].

A few years of meager earnings or asset devaluation forced individuals to look for a way to protect their assets from inflation in a way that passbook accounts could not. Hard, or illiquid, assets such as housing were purchased as a hedge against inflation.

[7] Joseph Nocera, *A Piece of the Action: How the Middle Class Joined the Money Class* (New York, NY: Simon & Schuster, 1994), 197.

However, many individuals shifted assets into money market funds and the stock market. Stocks were not exactly a hedge against inflation; however, return was not restricted as in Regulation Q deposits. Joseph Nocera, editor-at-large of *Fortune* and author of *A Piece of the Action: How the Middle Class Joined the Money Class*, states that the inflation of the seventies destroyed some of the trust that households had in government bonds and savings accounts as safe places for their savings.[8]

The two main problems facing these reluctant investors were inadequate information regarding stock selection and insufficient funds to minimize risk through portfolio diversification. Mutual funds solved both of these problems. The assets in mutual funds are selected by a professional investment adviser to meet a specific objective. Rather than having to choose among various stocks to suit their financial goals (i.e., retirement income, current income stream), all families had to do was choose from among the variety of mutual funds, all with varying objectives. In addition, fund managers invest in a variety of securities, seeking portfolio diversification. The benefit of portfolio diversification is that it helps to reduce risk. In the eyes of these former savers, mutual funds were a good way to increase the return on their savings without increasing their effort or risk much over what it had been previously.

Mutual funds gave small investors the ability to adequately diversify with minimal outlay, and to receive professional management at a fraction of the cost of a stockbroker. Joseph Nocera noted in *A Piece of the Action*:

> Part of the original appeal of mutual funds was that they seemed to offer a path into the stock market that was both simpler and safer than the old call-a-broker-and-buy-a-stock route.[9]

Katherine Wilson, a certified financial planner for Financial Network Investment Corporation in Houston, agreed that before the advent of mutual funds it was difficult for the small investor to get started:

> This [investing in the stock market] was kind of a rich person's discipline because, in order to be cost-effective, you had to buy round lots (100-share increments of stock) or an individual bond. It was a very restricted market for this in many ways.[10]

Mutual funds companies played a large role in expanding stock ownership to the middle class. There exists a fund for just about any objective an investor could desire: growth funds, income funds, environmental funds, children funds, etc. By enabling investors to overcome their information and diversification problems the mutual fund helped to make the stock market a financial tool of the middle class.

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[8] *Ibid*., 178.

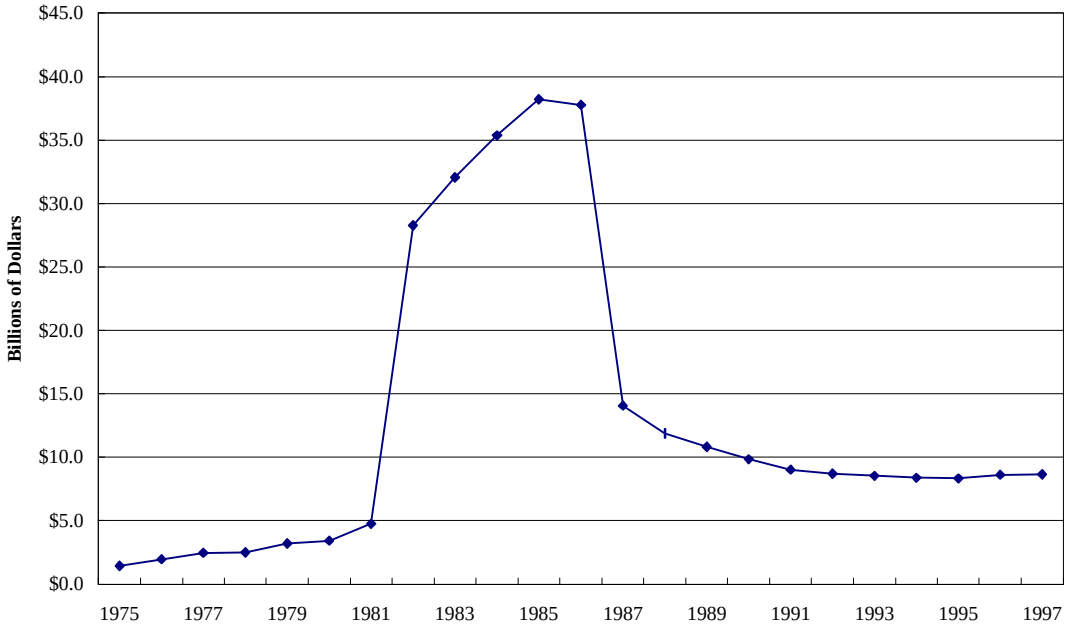
[9] *Ibid*., 333.

[10] Pamela Yip, "Spreading the Wealth: Changes Paved Way to 10K; Retirement Funds, High Tech, Strong Economy Fuel Climb," *The Houston Chronicle*, March 30, 1999.

B. INDIVIDUAL RETIREMENT ARRANGEMENTS AND 401(K) PLANS

In 1974, Individual Retirement Arrangements (IRAs) were created to encourage individuals to save for retirement if they were not covered by employer sponsored retirement plans. Assets in IRAs have grown steadily, rising from $200 billion in 1985 to $1,347 billion in 1996.[11] While assets in IRAs have been rising, however, annual contributions to IRAs precipitously declined and then have leveled off since the Tax Reform Act of 1986. Annual IRA contributions, which had risen from $5 billion in 1981 to nearly $38 billion in 1986, have declined to just over 8.6 billion by 1997 (Chart 2).[12] Not only have contributions fallen, but also IRA participation has declined in proportion with the decline in contributions (Chart 3). In 1986, there were over 15.5 million IRA participants. By 1997, there were only 4 million. The income and contribution limits established by the Tax Reform Act of 1986 appear to have had a "chilling" effect on IRA participation.

Chart 2. Contributions to Individual Retirement Arrangements (IRAs): 1975-1997

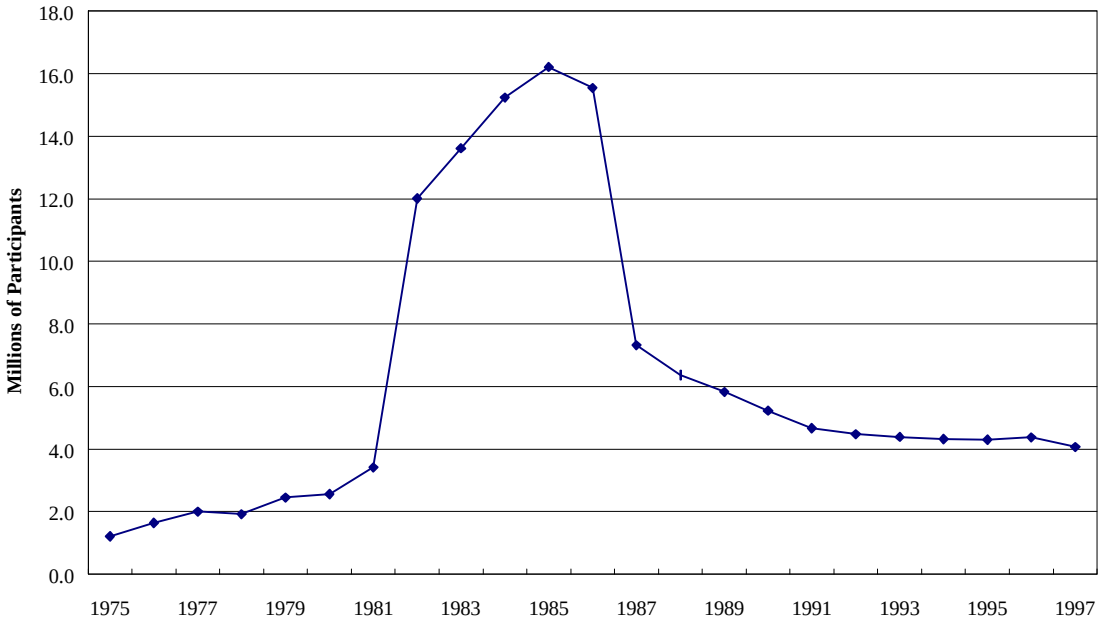


Source: Internal Revenue Service, *Statistics of Income Bulletin* , various years.

[11] U.S. Bureau of the Census, *Statistical Abstract of the United States 1998* (118th edition), (Washington, DC: Government Printing Office, 1998), Table 845.

[12] M. Poterba, Steven F. Venti and David A. Wise, "How Retirement Savings Programs Increase Savings," *Journal of Economic Perspectives* 10, no. 4 (Fall 1996), 91-92. Also, Internal Revenue Service, *Statistics of Income Bulletin*, Fall 1999, Washington, D.C., 1999

Chart 3. Participation in Individual Retirement Arrangements (IRAs): 1975-1997



Source: Internal Revenue Service, *Statistics of Income Bulletin,* various years.

401(k) plans, which allow employees to contribute a tax-deferred portion of their wages to a retirement plan, have grown steadily since the Internal Revenue Service issued rules regarding them in 1982 (Table 2).

Table 2. 401(k) Plan Trends, 1984-1993

Year	Number of Plans (thousands)	Participants (millions)	Contributions ($billions)	Plan Assets ($billions)	Distributions ($billions)
1984	17.3	7.5	16.3	91.8	10.6
1985	29.9	10.3	24.3	143.9	16.4
1986	37.4	11.6	29.2	182.8	22.1
1987	45.1	13.1	33.2	215.5	22.2
1988	68.1	15.2	39.4	277.0	25.2
1989	83.3	17.3	46.1	357.0	30.9
1990	97.6	19.5	49.0	384.9	32.0
1991	111.4	19.1	51.5	440.3	32.7
1992	139.7	22.4	64.3	553.0	43.2
1993	154.5	23.1	69.3	616.3	44.2

Source: James R. Storey, "Section 401(k) Retirement Plans: A Fact Sheet."

By eliminating some of the multiple taxation that exists on saving and investment, IRAs and 401(k) plans became attractive relative to other retirement saving options. Americans looking for a way to protect their savings from the ravages of inflation began to look towards investing in stocks and mutual funds. The creation of the IRA and the 401(k) account allowed their participants to maximize the return on their retirement savings by allowing contributions and earnings to accumulate on a tax-deferred basis. The new saving vehicles proved to be popular with onetime passbook account holders.

More importantly, the people brought into the stock market by IRAs and 401(k) plans were a new type of investor. A survey of money fund customers by the Investment Company Institute found that the investment purpose of 53 percent of money fund customers was "general savings."[13] Alternatively, "These new customers were still not *investors* – or rather they didn't think of themselves as investors. They still thought of themselves as savers."[14]

For many individuals, the IRA and 401(k) rules on early withdrawal made it quite clear that these were *retirement* accounts. Penalties for early withdrawal, combined with the ability to move assets from one investment to another, created the perfect haven for reluctant investors to get their feet wet. Being unable to touch the funds placed into their 401(k) plans or IRAs until age 59½ encouraged many to look long-term.

By having punitive penalties for early withdrawal, IRAs and 401(k) plans made investors focus on the long-term. The existence of these penalties helped IRA and 401(k) investors to consider the benefits that stock investment had over long periods. Being unable to remove the money in their 401(k) plan without penalty encouraged savers to take a long-term view of investment. In a manner of speaking, IRAs and 401(k) plans gave people a way to try the stock market on for size. A consultant to the financial services industry at the time was convinced that the IRA was the beginning of Americans taking responsibility for their financial future:

> It [the IRA] was the first real incentive for a great number of Americans to put money away for the long term. And these were generally people who up until then hadn't seen themselves as having any control over the long-term.[15]

Thus, the IRA and the 401(k) plan helped to transform savers into investors. Relief from the multiple taxation of saving and investment increased the attractiveness of saving and investment relative to consumption. Withdrawal rules and penalties assisted new investors in feeling comfortable assuming risk and planning for a longer term. Although few visualized the interaction between supplemental retirement accounts and the stock market, they have proved to be an immensely popular and efficacious retirement saving vehicle. Now that so many Americans have taken advantage of these

[13] Joseph Nocera, *A Piece of the Action*, 286.

[14] *Ibid.*

[15] *Ibid.*, 288.

accounts, support has increased for some liberalization of withdrawals without stiff penalties.

C. INFLATION

The past eighteen years have seen the stock market experience one of the greatest bull markets in U.S. history. An often overlooked contributor to this current economic expansion is the role of monetary policy. The distortionary effect of inflation on saving and investment decisions is well known among economists, with recent research documenting a strongly negative relationship between inflation and economic growth.[16]

Changing inflation rates have effected change in stock ownership by initially pushing - and later pulling - individuals into the stock market as inflation declined. As stated earlier, high inflation in the 1970's, combined with outdated banking regulations, pushed savers into the stock market. For many savers, there was little choice between getting into the stock market or remaining in a passbook savings account and allowing inflation to eat away at their retirement.

However, an important ingredient of post-1970's monetary policy has been price stabilization as Federal Reserve officials have repeatedly endorsed the goal of price stability. This emphasis on price stability has resulted in the steady decline in the inflation rate (Chart 4), leading to lower interest rates, stable financial markets, and an enhanced working of the price system. Lower interest rates, stable financial markets, and increased economic efficiency have increased the returns to investment, attracting more individuals toward the stock market.

Alan Greenspan, Chairman of the Board of Governors of the Federal Reserve System, while expressing some reservations about rising stock prices, has acknowledged the importance of price stability in economic growth:

> Importantly, the evidence has become increasingly persuasive that relatively stable prices – neither persistently rising nor falling – are more predictable hence result in a lower risk premium for investment. Because the nation's level of investment, to a large extent, determines our prosperity over time, stability in the general level of prices for goods and services is clearly a necessary condition for maximum sustainable growth.[17]

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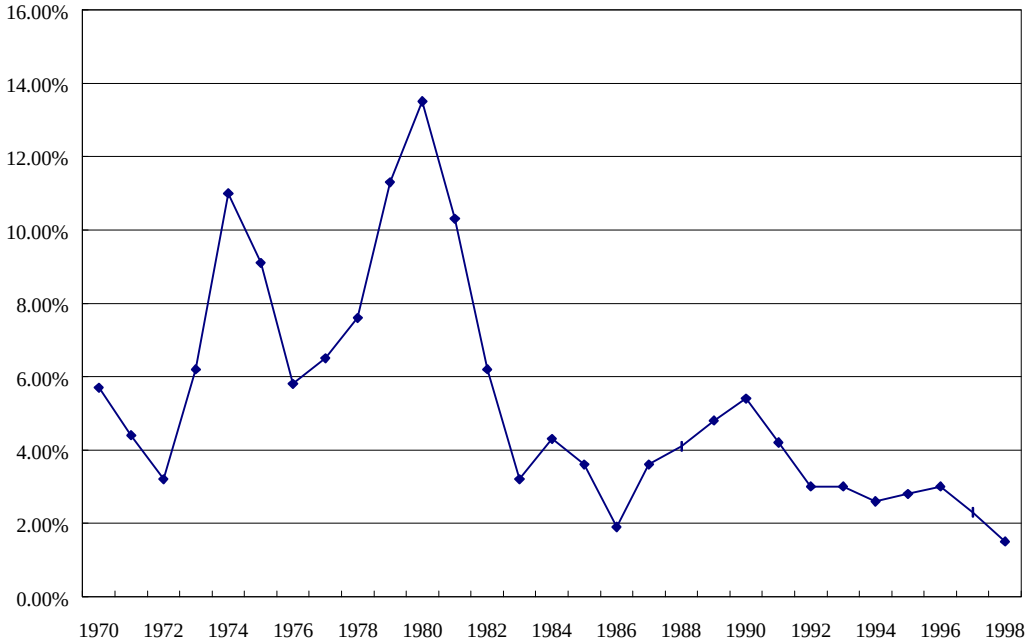
[16] See, for example, Robert Barro, "Inflation and Economic Growth," National Bureau of Economic Research, Working Paper 5326 (October 1995); and Stanley Fischer, "The Role of Macroeconomic Factors in Growth," National Bureau of Economic Research, Working Paper 4565 (December 1993). For more information on the economic and financial market effects of a credible anti-inflationary monetary policy and the effect it has on economic growth, see Robert Keleher, "The Roots of the Current Expansion," Joint Economic Committee Study, April 1997.

[17] Alan Greenspan, Testimony before the Joint Economic Committee, *The Economic Outlook and U.S. Monetary Policy*, U.S. Congress, June 17,1999, 9.

Low levels of inflation have played a large role in creating an environment where new investors feel comfortable. Many new investors viewed themselves as savers and stable financial markets allowed these savers to feel comfortable investing. Low levels of inflation helped to make individuals feel comfortable using mutual funds instead of banks to increase the return on their investment.

Chart 4. Annual Percent Change in Consumer Price Indexes (CPI-U): 1970-1998



Sources: *Statistical Abstract of the United States 1998*, Table 772 and *Montly Labor Review* 122, no. 6.

The harmful impact of high inflation is highlighted by the degree to which inflation has a negative marginal effect on equity valuations. Nobel Prize winner Franco Modigliani, along with Richard Cohn, documented a negative relationship between inflation and equity valuation in a 1981 paper. Using both time series and cross-sectional analyses, they found that stocks were presently undervalued due to the effect of inflation on nominal interest rates.[18] The effect of this undervaluation is not small. One study estimated that a one-percentage point increase in expected inflation would cause a 20 percent decline in stock prices.[19]

The magnitude of the inverse relationship between the price level and stock prices is also influenced by the tax code. Taxation of nominal capital gains, estate taxation, some forms of corporate taxation, and historic cost depreciation are all portions of the tax

[18] Franco Modigliani and Richard A. Cohn, "Inflation and the Stock Market," *Review of Economic Conditions in Italy*, (October 1981): 415-431.

[19] Steven A. Sharpe, "Stock Prices, Expected Returns, and Inflation," Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series, no. 1999-02 (April 1999).

code that are not indexed for inflation. Inflation raises the effective tax rate on corporate source income, lowering the after-tax return on investment and leading to a reduction in the price-earnings ratio.[20]

The individuals who may be most affected by the interaction between inflation and capital gains taxation are risk-averse individuals. Risk-averse individuals place their investments in assets with low variability and low rates of return. Taxation of inflationary capital gains imposes higher capital gains rates on individuals who are risk averse by reducing or eliminating the after-tax return on safe investments. Even relatively modest rates of inflation, when combined with burdensome capital gains tax rates, can turn real capital gains into after-tax losses, discouraging a safe and steady stream of equity from entering capital markets.

V. LESSONS FROM BROADENED STOCK OWNERSHIP

The first lesson to be taken from the broadening of stock ownership is that Americans want access, control, and choice over their retirement and other saving options. Prior to the introduction of the IRA and 401(k) plan, there was little to no choice in retirement saving. Firms promised a specific pension benefit based on salary and years of service. Accumulating retirement savings using stocks, bonds, or savings accounts was possible, but was unlikely due to burdensome taxes, low rates of return, and the large amount of money needed to invest adequately. The introduction of the 401(k) plan, the IRA, and the proliferation of the mutual fund industry changed retirement planning by allowing the middle class to control their financial future.

The second lesson is the importance of a tax policy that minimizes the multiple taxation of saving and investment while shifting attention towards longer-term planning. IRAs and 401(k) plans remove some of the excess burden that the income tax places on saving and investment and some recent changes in the tax laws have made important progress in expanding IRAs.

However, current tax policy continues to discriminate against saving and investment, an issue frequently addressed in recent legislation. For example, the $2,000 annual IRA contribution limit introduced in 1981 has not been adjusted for inflation. Several proposals have been introduced that would increase the IRA contribution limit to a level that reflects the eroding effects of inflation and the need for expanded saving incentives.[21] Increasing the contribution limits would enhance the tax benefits of IRAs, allowing middle class Americans to shield a larger portion of their saving and investment from multiple taxation.

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[20] For a broad discussion of the interaction between inflation, taxes, and the stock market, see Martin Feldstein, "Inflation and the Stock Market," *American Economic Review* 70, (December 1980): 839-847.

[21] For a legislative history of IRAs and a summary of legislative issues regarding IRAs in the 106th Congress, see James R. Storey, "Individual Retirement Accounts (IRAs): Legislative Issues in the 106th Congress," CRS Report for Congress 96-20EPW, Washington, DC: Congressional Research Service, 02/08/00.

Recent U.S. tax policy towards saving and investment contains an underlying trade-off – a general reduction in the multiple taxation of saving and investment in exchange for planning for long-term financial needs. This policy has been very successful in getting Americans to take a more active role in their future, a role that many have embraced.

However, an unfortunate aspect of the tax code works against this policy. According to current tax law, senior citizens are required to begin withdrawals from IRAs by April 1 the year after they reach age 70½ . Withdrawals must be of an amount sufficient to empty their account according to an actuarial schedule, or a 50 percent excise tax is applied to the deficiency. This unfortunate aspect of the current tax code seems to be at odds with prevailing views regarding the proper role of federal tax policy, since it directly promotes the erosion of personal saving.

Another example of federal tax policy promoting the erosion of personal saving is in the tax treatment of capital gains attributed to mutual fund shareholders. Mutual funds are required by the tax law to distribute capital gains to shareholders on an annual basis – a taxable event for the taxpayer over which they have little control. These realizations are involuntary and capital gains taxes are due on the forced realizations. This tax treatment of gains that would otherwise be unrealized has been estimated to reduce the annual return of the average mutual fund shareholder by 2.3 percentage points a year, at least 10 percent of their annual return.[22]

The final lesson to be learned from the past two decades is the recognition of the role that price stability plays in creating the long-term certainty that is a necessary but not a sufficient condition for long-term planning and capital formation. The emphasis of the Federal Reserve on price stability lowered interest rates, stabilized financial markets, and created an environment where citizens and companies felt comfortable planning for the long-term. Given the importance of price stability, not only to stock ownership and retirement planning, but also to general economic growth, it seems appropriate to institute price-stability as the primary goal of monetary policy.

This paper has detailed the roots of the increase in stock ownership to the middle class over the past two decades. Mutual funds, IRAs, and 401(k) plans have made the retirement tools of the upper class available to all.

Joshua Hall
Economist

[22] Jeffery Laderman and Amy Barnett, "Mutual Funds: What's Wrong," *Business Week*, January 24, 2000.

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