

# Southwest Economy



## Another Great Texas Boom

The mighty Texas economy is starting to take a breather after a decade of extraordinary growth. Rapid development of high-technology industries contributed directly and helped stimulate a construction boom and expansion of the region's distribution network. By some measures, the economic growth of the 1990s came close to matching that of the oil boom in the early 1980s. Texas employment is likely to expand at a more moderate pace in 2001 than in previous years during the boom.

### The New Texas Economy

During the latter half of the 20th century, the Texas economy evolved from resource-based industries toward more knowledge-based industries. This transformation was put on hold during the energy boom, when rising oil prices encouraged the Texas economy to take advantage of the increased value of one of its abundant natural resources. During the past decade, however, the Texas economy accelerated the shift to knowledge-based industries, such as computers, semiconductors and telecommunications as well as equipment and service suppliers of the high-tech industry.

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 a Bad Name*

*Raising Taxes in Mexico*

## The Rise of Stock Mutual Funds

Since the early 1990s, U.S. households have increasingly used mutual funds as a way of owning equity, with rising IRA assets responsible for much, but not all, of this growth (*Chart 1*). The percentage of all stock assets held in mutual funds almost tripled, from about 8 percent in 1990 to almost 24 percent in 1998, and the percentage of all non-IRA stock holdings in mutual funds more than doubled, from around 6 percent to roughly 14 percent.

This article reviews several explanations for this trend, including the possible effects of the increasing use of IRA and thrift plans, the aging of the baby boom generation, falling mutual fund costs and rising investor confidence. In addition, the implications of the increased reliance on mutual funds are explored, including effects on labor mobility, consumption and public policy. Finally, the advent of new financial products that may draw some households away from mutual funds is briefly discussed with an eye toward

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# The Rise of Stock Mutual Funds

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the future evolution of household portfolio behavior.

## The Move to Mutual Funds

**The Rise of IRA and Thrift Plans.** The liberalization of IRA regulations in 1982 bolstered the use of mutual funds in several ways. Regulatory changes encouraged the use of third parties, such as mutual funds, to manage IRA and thrift plan assets. Coupled with the tax-deferred benefits of these plans, the relaxed regulations encouraged stockholders to shift their assets from directly held stocks to IRA balances invested in mutual funds. Since the mid-1980s, big net purchases of equity mutual funds have been accompanied by households' big net sales of directly held stocks. The tax benefits also encouraged some households that previously didn't own stock to open IRAs and consider investing through mutual funds. For many households with limited wealth, mutual funds were the only feasible way to own a diversified portfolio of stocks.

Another factor boosting mutual fund use has been firms' fiduciary obligation to offer employees investment alternatives in their thrift plans, for which mutual funds are well-suited. In addition to tax law changes, a heightened sense

of long-term job insecurity may have raised the demand for portable pension-type assets like IRAs.<sup>1</sup>

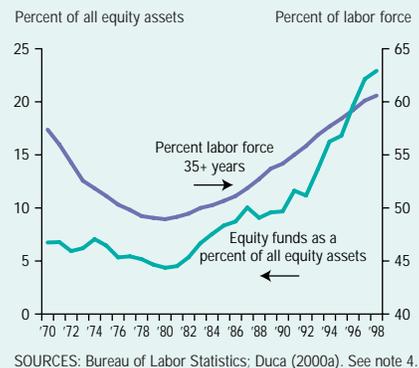
These factors also likely increased the use of mutual funds for non-IRA assets. Incentives to open IRAs prompted many households to incur the one-time cost of learning about investing in stock and bond mutual funds, thereby reducing their reluctance to invest non-IRA funds in such assets. And, because many mutual funds count IRA assets toward minimum balances for avoiding maintenance fees and opening asset-management accounts, IRA balances reduce the cost and minimum-investment barriers to investing non-IRA assets in mutual funds.

**Demographics.** In theory, two demographic factors may have boosted the use of equity mutual funds. First, the aging of the baby boom generation may have increased equity investing by raising the share of the population preparing for retirement, especially since stocks have outperformed other investments over the long run. Because of limited wealth and the need to diversify, many new investors may have chosen mutual funds rather than individual stocks. In addition, a longer life expectancy may have boosted mutual fund use by increasing the need to prepare for retirement. However, the impact of increased longevity on saving is theoretically ambiguous because the need to fund a longer retirement could be offset by a longer work life.

In practice, demographics do not appear to have substantially boosted the use of mutual funds. The saving rate has fallen, not risen, with the aging of the baby boomers. This suggests the retirement effect is unimportant or has been offset by other factors, such as larger inheritances or higher stock prices, which may have lowered the need to save. Also, the labor force share of middle-aged people in the mid-1990s was near that of the early 1970s, when equity fund use and stock ownership rates were much lower (*Chart 2*). Moreover, surveys of individual households show that

Chart 2

## Demographic Shifts Alone Cannot Track Relative Use of Equity Funds



demographic shifts account for little of the rise in the mutual fund share of household portfolios and that most of this aggregate rise reflects increased mutual fund ownership within each age group.<sup>2</sup> This implies that the rise of mutual funds stems from some factor common to households, such as falling mutual fund costs.

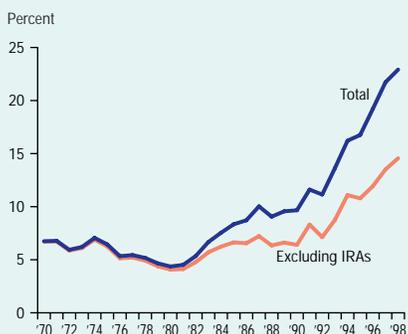
**Transaction Costs.** Lower mutual fund fees can increase the use of mutual funds by encouraging households that own stocks directly to shift these assets into mutual funds. Lower loads may also expand mutual fund use by spurring more families to invest in stocks. Earlier research examining why many people did not own equity found that the costs of buying stocks, such as mutual fund loads, may have been a barrier to stock ownership for many middle-income families, for whom mutual funds were the only feasible way of owning a diversified stock portfolio.<sup>3</sup> Indeed, large increases in overall stock ownership rates have accompanied large declines in the average load on equity mutual funds, with most of the rise occurring in indirect ownership, mainly through mutual funds (*Chart 3*).

To some extent, the rising use of equity funds may lower loads if economies to scale are substantial. However, empirical evidence indicates that the downtrend in mutual fund loads has tended to precede the rising use of equity funds, suggesting that the negative relationship between loads and equity fund use mainly reflects that loads

Chart 1

## Reliance on Mutual Funds for Stock Ownership Rises

(Equity fund assets as percent of households' total and non-IRA stock assets)



affect equity fund use.<sup>4</sup> The higher loads of the 1970s and early 1980s may thus account for the low stock-ownership rates of that era.

**Higher Confidence.** Another possible reason for the increased use of mutual funds as a means of owning stocks is higher investor confidence, which could have prompted equity purchases by middle-income households, who, in order to diversify, are more apt to buy shares in mutual funds rather than individual stocks. A University of Michigan consumer sentiment survey indicates that confidence in the future has generally risen since the 1970s (*Chart 4*).

The higher range of confidence in recent years is likely correlated with an increased investor willingness to own stock, which could stem from one or more of three factors.<sup>5</sup> First, a decreased risk of recession and an increased sense of economic stability reduce the downside risks of owning stock. Second, expectations of stronger growth in the economy and in profits may have encouraged stock ownership; however, this factor may have played a substantial role only in the late 1990s, when evidence of faster trend productivity growth became more apparent. Third, a greater willingness to own stock may also reflect an increased tolerance of risk by households. Investors' willingness to tolerate short-run declines in stock prices may have grown during the past two decades, partly in response to the two

long bull markets and economic expansions since 1982.

From a less conventional standpoint, the high returns of the 1990s may have led more people to own stocks out of myopia or fad behavior. However, it is difficult to say how much higher confidence owes to better fundamentals or to fads. It is also difficult to distinguish to what extent greater household confidence is attributable to lower business-cycle risk, more optimistic expectations of profit growth or increased tolerance of risk.

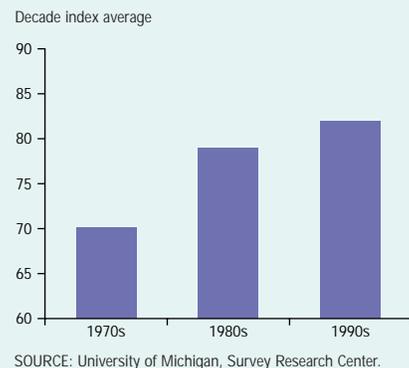
**Results from a Recent Study.** Despite the ambiguity about the source of increased confidence, a recent study found that the rising use of mutual funds over the past three decades resulted from greater confidence, changes in IRA and 401(k) rules, and declines in mutual fund loads.<sup>6</sup> This study also found that demographic shifts were not a major factor, consistent with cross-section data on mutual fund use. In contrast to lower loads that are likely to persist due to long-run declines in mutual fund computing costs, higher investor or household confidence could be partially or largely reversed when the next business-cycle downturn occurs, depending on its depth and length.

### The Significance of the Rising Use of Mutual Funds

**Employee Benefits and Labor Mobility.** The availability of mutual funds helped foster a shift away from tradi-

Chart 4

### Consumer Confidence in the Future Higher in the 1980s and 1990s than in the 1970s

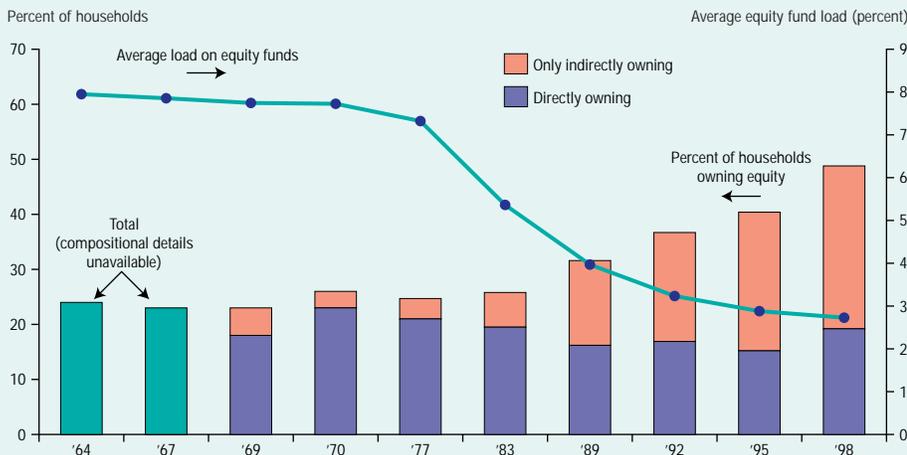


tional defined-benefit pensions to IRA and thrift contribution plans. Soon after regulations permitted the expansion of thrift plans, virtually all assets in defined-contribution—mostly 401(k)—plans were directly held stocks, most of which were likely shares the workers purchased under employee stock-ownership plans. This meant workers depended on one source for both their labor income and the investment returns on much of their retirement assets. Because the size of annual thrift contributions is restricted, the availability of mutual funds allowed firms to offer employees a feasible way of owning a diversified stock portfolio in their thrift plans. This attractive aspect of mutual funds likely accounts for their rise as a percentage of defined-contribution pension assets since the mid-1980s. Under most portable pensions such as thrift and IRA plans, a worker's retirement benefits are less hurt by changing jobs than under most traditional, defined-benefit pensions. The reduced cost of job mobility, in turn, has enabled the U.S. economy to transform itself with less disruption, as capital and labor have shifted away from declining industries to new industries during the long economic expansions of the 1980s and 1990s.

**The Effect on Consumption.** With the rise of mutual funds, a greater share of households owns equity, which implies that the spending of more families may be affected by swings in stock prices. A recent study found that a huge decline in mutual fund loads since the late 1970s is correlated with rising stock

Chart 3

### Equity Fund Loads Fall and Stock Ownership Rates Rise



SOURCES: Survey of Consumer Finances (conducted intermittently); Duca (2000a). See note 4.

ownership rates and is linked to a large increase in the sensitivity of consumption to stock market wealth.<sup>7</sup> In particular, a 100 percent rise in stock market wealth is now associated with a 3 percent rise in consumption, up from about 1.5 percent in the 1960s and 1970s.

**The Effect on Public Policy.** Greater stock ownership may also affect public policy. For example, the presidential candidates from both major political parties in 2000 supported, to differing degrees, expanding IRAs or other thrift-type plans as a way to supplement or partially replace Social Security. This may partly stem from many people's successful experience with mutual fund investing and increases in stock ownership rates since the early 1980s. In addition, an apparent rise in public support for a low-inflation monetary policy over the past two decades may be linked to a greater share of households having investments that are generally hurt by inflation. (The experience of enduring the rocky economic performance of the high-inflation 1970s probably contributed to this shift as well.)

### New Alternatives to Mutual Funds

While mutual funds have been associated with increases in stock ownership rates, new financial products offer people other ways to obtain diversified portfolios. For example, since December 1998, a new type of stock has traded on the American Exchange. Exchange-traded funds (ETFs) are shares in portfolios of stocks that trade continuously like individual stocks, in contrast to mutual funds, which can be bought or sold once a day. Most ETFs have tried to duplicate the composition of well-known stock exchanges or stock indexes. The first ETFs duplicated the S&P 500 and were called Standard & Poor's Depository Receipts, or SPDRs. Mirroring the abbreviation of their technical name, these ETFs are called spiders. Since then, nine other S&P 500-based ETFs (Select Sector SPDRs) have been created that replicate the sectors of the S&P 500.<sup>8</sup> Other ETFs now include World Equity Benchmark Series (WEBS), which duplicate indexes of foreign stocks, and "diamonds," which mimic the Dow Jones industrial average. ETF assets grew from about \$15.5 billion in 1998 to nearly \$57

billion by September 2000.

How do most ETFs compare with index funds? Like index mutual funds, most ETFs buy and sell securities to match changes in the composition of the stock exchange or stock index they mirror. As a result, like index mutual funds, they have low costs and are arguably a close substitute. Like index mutual funds, ETFs distribute dividends and realize capital gains or losses from selling securities in a rebalancing. However, ETFs offer a slight tax advantage over mutual funds. When enough investors sell shares in an open-ended mutual fund, the redemptions often force the fund to sell securities in its portfolio. This, in turn, incurs a potential capital gains tax for all investors owning shares in that fund on its annual capital gains distribution date. In contrast, because ETFs are independent shares that are bought and sold through exchange trading, an investor in an ETF is not exposed to the tax-related activities of other ETF owners.

While ETFs compete with index funds, a new type of investing service offers a substitute for actively managed mutual funds. Some Internet firms offer investors the ability to customize stock portfolios at costs that, for investments of at least \$30,000, are purportedly below the cost of purchasing actively managed mutual funds. In addition, a major financial firm has recently launched trading on a number of its actively managed non-U.S. mutual funds. Nevertheless, it is unclear when the Securities and Exchange Commission will permit actively managed ETFs to trade in the United States.<sup>9</sup>

The United States is increasingly becoming a nation of stockowners, principally because of the rise of mutual funds. However, we should keep in mind that innovations, such as exchange-traded funds and customized electronic portfolios, will offer substitutes for mutual funds and may further transform household investment and economic behavior.

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### Notes

Thanks to Evan Koenig for helpful suggestions and Daniel Wolk for excellent research assistance.

- <sup>1</sup> Although the average length of stay at a job has changed little, the probability of being dismissed has risen relative to the probability of quitting as a cause for job separations. See Valletta, Robert G. (1999), "Declining Job Security," *Journal of Labor Economics* 17 (October), pp. S170–97.
- <sup>2</sup> Laderman, Elizabeth, and Judith Goff (1997), "Deposits and Demographics?" Federal Reserve Bank of San Francisco *FRBSF Economic Letter* 97:19 (June 27).
- <sup>3</sup> Heaton, John, and Deborah Lucas (2000), "Portfolio Choice in the Presence of Background Risk," *The Economic Journal* 110 (January): 1–26.
- <sup>4</sup> Duca, John V. (2000a), "Mutual Fund Loads and the Rising Relative Use of Equity Mutual Funds," Federal Reserve Bank of Dallas, unpublished manuscript (June).
- <sup>5</sup> Balke, Nathan S., and Mark E. Wohar (2000), "Why Are Stock Prices So High? Dividend Growth or Discount Factor?" Federal Reserve Bank of Dallas Research Paper no. 0001 (Dallas, January).
- <sup>6</sup> Duca, John V. (2000a).
- <sup>7</sup> Duca John V. (2000b), "Mutual Fund Loads and the Long-Run Stock Wealth Elasticity of Consumption," Federal Reserve Bank of Dallas, unpublished manuscript (June).
- <sup>8</sup> "Standard & Poor's Depository Receipts," "SPDRs" and "Select Sector SPDRs" are trademarks of the McGraw-Hill companies.
- <sup>9</sup> Lucchetti, Aaron, and Sara Calian (2000), "Deutsche Bank's New Actively-Managed ETFs Aren't Likely to Spur Similar U.S. Products Soon," *The Wall Street Journal*, Southwest Edition (November 24), pp. B1, B19.