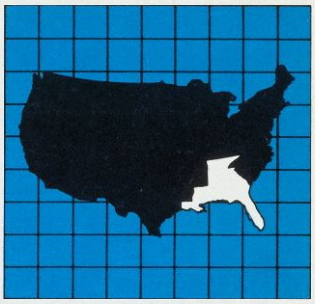
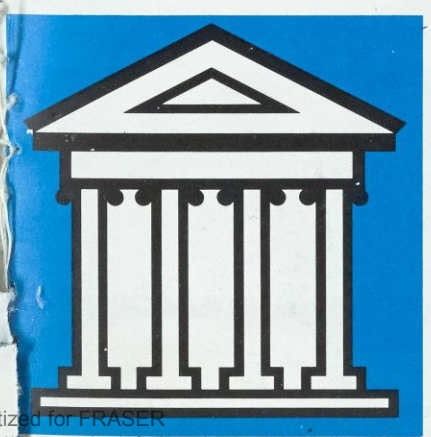
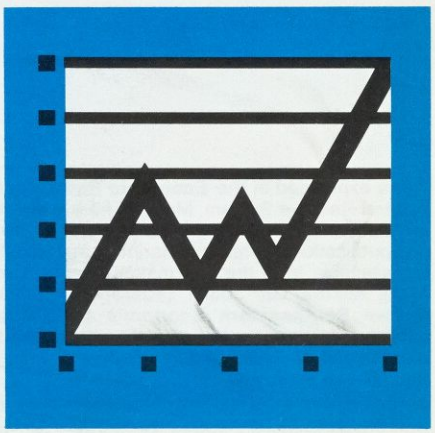
Economic Review



FEDERAL RESERVE BANK OF ATLANTA SEPTEMBER 1982





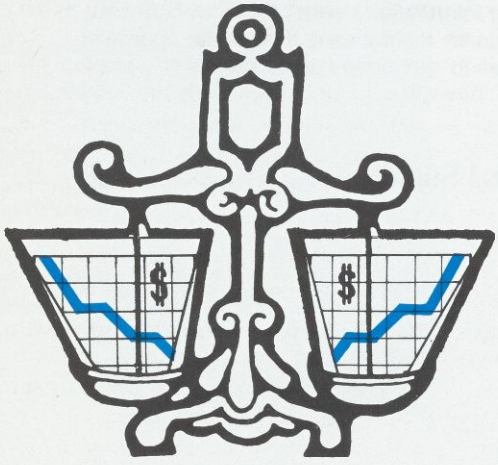
Economic Review

FEDERAL RESERVE BANK OF ATLANTA

The purpose of the **Economic Review** is to inform the public about Federal Reserve policies and the economic environment and, in particular, to narrow the gap between specialists and concerned laymen.

Financial Futures as a Risk Management Tool for Banks and S&Ls

Southeastern S&Ls in increasing numbers are turning to the financial futures market as a shield against unexpected interest rate changes. Banks in the region, which generally managed to align their asset and liability maturities better than S&Ls, have shown less enthusiasm.



Financial managers have learned the dangers of interest rate risk in recent years as rates reached new heights and increased in volatility. Wide swings in financial markets underscored the sensitivity of banks' and S&Ls' portfolios to interest rate changes. When assets have a longer maturity structure than liabilities, liability costs respond more quickly to interest rate fluctuations than do returns on assets. As a result, rising rates squeeze earnings.

One of the newest and least understood tools employed by asset/liability managers to cope with high and volatile interest rates is hedging in the financial futures market. Financial futures represent an obligation to buy or sell a particular financial instrument at a specified future delivery date, at a price established on an organized exchange (see "Mechanics of Hedging," pp. 6 & 7).

Drawing from 230 replies to a mail survey of 370 banks and savings and loan associations, we recently explored southeastern institutions' use of financial futures as a risk management tool.[1]

We found that 22 responding financial institutions — 15 S&Ls and seven banks — are now using financial futures. Our findings indicate that more of the responding institutions entered the futures markets over the past year than in any year since trading began in financial futures in 1975.

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[1]Our sampling procedure for the survey of 370 financial instiutions was random and stratified. Sixth District banks and savings and loan associations were stratified by state and by size of institutions, with both divided into two size classes. We counted the large institutions as those with assets of more than $150 million and the small as those with assets less than that amount. The large bank category also includes multi-bank holding companies. We sampled more heavily in the large category in the belief that the larger institutions would more likely be knowledgeable about and involved in futures trading. Questionnaires were mailed on May 27, 1982. Our analysis is based only on those responding to the survey. For both banks and S&Ls, our response rate was slightly over 60 percent.

The response suggests that an increasing number of southeastern S&Ls are turning to the financial futures market as a shield against unexpected interest rate changes, while banks in the region show less enthusiasm. Since a higher percentage of the responding S&Ls indicate they also plan to use the market more in the future, this pattern should continue.

The S&Ls' enthusiasm may seem surprising in light of the depressed state of the thrift industry and the way hedging with interest rate futures "locks in" current earnings. But most S&L managers indicate they are limiting their involvement until earnings improve. Once earnings increase, they plan to expand their futures activity, drawing on the experience they are gaining now.

Most of the survey respondents who are not using financial futures attributed their decision to a lack of trained personnel, the risks of futures trading, and their own ability to hedge risks without relying on futures.

Hedging with financial futures (taking offsetting positions in the futures market) is a management technique for limiting the interest rate exposure in balance sheets. Hedging replaces the risk of interest rate fluctuations with the risk of changes in the difference between cash yield and yield on a particular futures contract.

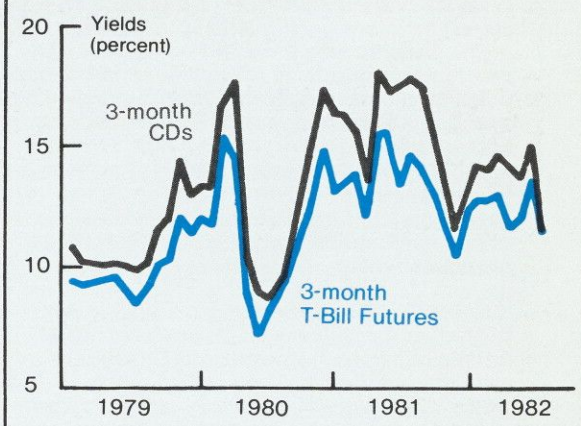
Chart 1 illustrates yield patterns for certificates of deposit and Treasury bill futures contracts—contracts often used for hedging borrowing costs. The difference between the two yields is less volatile than either individual yield. Financial managers hedging with futures instruments are protecting their earnings from volatile interest rates by subjecting earnings instead to a smaller, more manageable risk.

In investigating the futures market participation of banks and thrifts, we examined reasons for and against hedging interest rate risk, methods and strategies of those currently trading in the futures market, and the effects of regulatory and accounting guidelines on hedging strategies.

Who is Using Financial Futures in the Southeast?

Our survey suggested that S&Ls rely on the futures market far more than do banks. A larger proportion of S&Ls are currently hedging their interest rate exposure or planning to do so later.

Chart 1.
Three-month Domestic Certificates of Deposit and Three-month Treasury Bill Futures*



*Treasury bill futures yields correspond to the close-in contract.

Traditional differences between S&Ls and banks help explain their different levels of activity. Through the years, S&Ls have dealt in long-term, fixed-rate residential mortgages. Associations with many fixed-rate loans on their books face a greater threat that interest rate increases which raise the costs of deposits will reduce their earnings.

A Georgia S&L commented, "although our experience is short, we see hedging as an essential tool to reduce the rate risk associated with long term assets supported by short term liabilities."

Banks and S&Ls increasingly rely on variable rate loans to help restructure their balance sheets and pass along interest rate exposure to customers. Banks have been more successful in this effort, largely because of the generally shorter maturities of their outstanding loans, and, as a result, they have managed to align their asset and liability maturities better than S&Ls. Their success encourages banks to favor hedging in the cash market instead of the futures market. For this reason, many banks are staying out of the futures market altogether. Several banks currently hedging say they are using futures positions only to cover temporary mismatches.

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The general goal of hedging is to protect against possible unexpected price changes. Keeping this in mind, several important points should be noted.

First, hedging with financial futures gives protection only from unanticipated interest rate moves. Hedging does not provide protection from future interest rate changes which are generally held and embedded in futures prices. For example, if the overall market expects a rise in interest rates, and, reflecting this, futures prices for distant delivery dates are lower in correspondence to higher interest rates, the seller of futures contracts cannot gain protection from the anticipated rise.

Second, when a financial institution is hedging in the true sense of the word, its goal is not to gain from futures positions, but instead to smooth out income over time. A hedge is placed to "lock in" today's return. The user of financial futures is foregoing possible gains from a favorable interest rate change to prevent the losses from unfavorable rate moves. The third important point is that hedges are rarely perfect in the sense that any gain or loss in the futures position will completely offset any loss or gain in the cash position.

The futures industry uses the term "basis" to refer to the arithmetic difference between the cash price (or yield) of a financial instrument and the price (or yield) of a particular futures contract. The outcome of a hedge depends directly on the difference in the basis at the time the hedge is placed and lifted. With no change in basis, the hedge will be "perfect" in the sense that any gain (or loss) in the futures market will exactly offset any loss (or gain) in the cash market. If the basis changes, there will be a net gain or a net loss in the futures and cash positions combined.

A short hedge is the sale of futures contracts, and a long hedge is the purchase of futures contracts. Short hedges are appropriate when the objective is to guard against rising interest rates. Financial institutions that hedge are, in the majority of cases, short hedgers. Since today's balance sheets are sensitive to rising rates, the applications of long hedges are more limited.

The hedging of six-month money market certificates with 90-day Treasury bill futures was by far the most common hedge among our sample. Since the objective of such a hedge is to lock in current borrowing costs, short positions are taken. The following example illustrates the mechanics of this common liability hedge.

Suppose a bank issues $10 million of six-month money market certificates (MMCs) at 13.4 percent in November. To protect borrowing costs from any increases in interest rates between November and May, they short 90-day T-bill futures.

In November, the bank's cash market transaction is the issue of $10 million of MMCs at 13.4 percent.

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At the same time, it sells 20 June 90-day T-bill contracts. Each T-bill contract has a face value of $1 million. The T-bill position is double that for MMCs because the maturity of the T-bill contract is half that for MMCs. For example, consider the effect of hedging a $1,000,000, pool of six-month MMCs with a single ($1,000,000) T-bill contract. A one basis point change in the yields of both cash and futures instruments would bring about a change in the market value of MMCs equal to twice that of the futures contract.

In May, when the MMC pool is refunded, the bank goes back into the futures market and buys 20 June 90-day T-bill contracts. Suppose that interest rates have risen to 15.35 percent so that the cost of the pool of MMCs increases by $97,500. Since futures yields tend to move with cash yields, the yield of the June futures contract is also higher in May (14.72 percent). There is then a gain in the futures market to offset the loss in the cash market. Following is a summary of the hedge:

	Cash Market	Futures Market	Basis
Nov. 5	Issues $10 million of MMCs at 13.4 percent. Six-month interest cost = $670,000	Sells 20 June T-Bill contracts at 87.23 (12.77 percent) Value: $19,361,500	.63
May 6	Renew $10 million of MMCs at 15.35 percent. New six-month interest cost = $767,500	Buys 20 June T-Bill contracts at 85.28 (14.72 percent) Value: $19,264,000	.63
	Loss (equal to increase in six-month interest cost) $97,500	Gain $97,500	

Increased interest cost	$97,500
Futures gain	$97,500
Net increased cost	-0-

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In this example, borrowing costs increased $97,500 because of the increase in interest rates from 13.40 percent to 15.35 percent. This represents the feared loss in the cash market. To offset this there is a gain in the futures market of $97,500. This particular hedge was "perfect," since the futures gain is identical to the cash market loss. The offset is exact only when the basis does not change. Note that when the hedge was placed the basis expressed in yields was .63 (13.40-12.77). When the hedge was lifted the basis was also .63 (15.35-14.72).

The perfect hedge is the exception rather than the rule. Normally the basis does fluctuate somewhat. Consider the results of the above hedge if the yield on the June T-bill contract increased to 14.00 percent rather than 14.72 percent. In this case the basis would differ at the time the hedge was placed and lifted, resulting in a less than perfect offset. The following transactions summarize the results of such a hedge.

	Cash Market	Futures Market	Basis
Nov. 5	Issues $10 million of MMCs at 13.4 percent. Six-month interest cost = $670,000	Sells 20 June T-Bill contracts at 87.23 (12.77 percent) Value: $19,361,500	.63
May 6	Renew $10 million of MMCs at 15.35 percent. New six-month interest cost = $767,500.	Buys 20 June T-Bill contracts at 86.00 (14.00 percent) Value: $19,300,000	1.35
	Loss (equal to increase in six-month interest cost) $97,500	Gain $61,500	

Increased interest cost	$97,500
Futures gain	$61,500
Net increased cost	$36,000

Note that the gain of $61,500 in the futures market partially offsets the $97,500 cash market loss. Even though the gain in the futures position did not completely offset the loss in the cash position, the hedge successfully reduced interest rate exposure by reducing the impact of rising rates on borrowing costs.

The prices of futures contracts fluctuate with interest rate changes and in response to supply and demand, but the coupon rate, maturity, quantity and issuer remain standard.

A futures transaction is rarely taken with the objective of taking or making delivery. The holder of a futures position can at any time cancel his position by reentering the market and placing an offsetting position. The liquidity of the market which allows such offsets is a product of both the standardization of the futures contracts and the large volume traded on the markets. For example, an individual who bought a June T-bill futures contract in January can clear his position by selling a June T-bill contract any time between January and the June delivery date. If the price he paid for it in January exceeded the selling price, the futures position would result in a loss. If the selling price was higher than the buying price, a gain would result.

A futures position such as in this example is not inherently either speculative (risk-increasing) or hedging (risk-reducing). Whether such a futures position is used as a hedge or for speculation depends on the underlying cash position of the holder of the futures position. Banks and S&Ls are restricted by their respective regulations to entering the futures market only for hedging (not speculative) purposes.

Since the introduction of the GNMA contracts in 1975, new futures contracts have become available on a number of exchanges. The Chicago Board of Trade (CBT) and the International Monetary Market (IMM) are the most active exchanges for financial futures. The CBT has the successful (high volume) GNMA and Treasury bond futures contracts. In May 1982 it offered a new ten year Treasury note contract which has high early volume figures.

The highly successful Treasury Bill contract is traded on the IMM. The new CD future offered by the IMM has been the most successful of the new CD futures contracts.

Credit risk is eliminated in futures transactions, since the exchanges in their role as a clearing corporation act as a buyer to every seller and a seller to every buyer. The futures markets are cleared daily. Trading cannot begin on any day until all transactions from the prior day are resolved. Margin accounts are important in this process. Each individual with a futures position must maintain a margin account with his broker. When the markets are cleared each day, the margin accounts of all the winners are credited and the margin accounts of all the losers are debited. When a margin account falls below a certain specified minimum, it must be replenished. If the account is not brought up to the required minimum, it will be closed out. This process limits losses and insures market integrity.

A Tennessee banker explained how he expects financial futures to cover temporary imbalances: "We view the futures markets as something like an insurance policy. While we may not feel the need to use them, the capacity to do so could be important. Under certain market conditions, futures market activities could provide a temporary solution to unwanted balance sheet exposure, allowing us time to develop more nearly permanent solutions through cash market strategy."

Another banker noted: "The experience of our bank is that financial futures provide an invaluable tool for managing the swings in interest rates when the exact asset or corresponding liability cannot be obtained immediately. Futures have helped immensely over the last several years in many areas of spread management."

Larger institutions, whether banks or S&Ls, are definitely more active participants in financial futures markets. All the banks using futures came from the ranks of the largest institutions. Among the S&Ls, the largest are most active, but some small-sized institutions with $50 million to $150 million in total assets are also hedging with futures.

Among holding companies and independent banks with assets greater than $150 million, 13 percent of those who responded are now using financial futures, 24 percent are planning to use futures and 63 percent are not using futures. The large S&Ls with assets exceeding $150 million show higher participation and planned participation rates. Of the large responding S&Ls in our sample, 18 percent are now using futures, 55 percent are planning to, and 27 percent are not using futures.

No responding small banks are currently using financial futures, and only 3 percent are drawing plans to participate. Small S&Ls generally were knowledgeable and more heavily involved in planning than their bank counterparts, with 6 percent now participating and another 18 percent planning to begin in the near future.

"Larger institutions . . . are definitely more active participants in financial futures markets."

Varieties of Futures Positions

Of 15 S&Ls involved in financial futures, most place Treasury bill futures positions to hedge the cost of their money market certificates or other CDs. A few have short Government National Mortgage Association (GNMA) futures positions on loans or other existing investments. Among the S&Ls planning to hedge, the majority will start with a short hedge on six-month money market certificates using three-month Treasury bill futures.

The strategies of the seven banks using futures were varied. Three of the five large multi-bank holding companies reported limited activity, with two hedging in the trading account only and one hedging only mortgage commitments in a mortgage subsidiary. The other four banks use a variety of strategies. Financial futures are most commonly used to hedge borrowing rates and returns in the investment portfolio. The average size of the hedge position expressed as a percentage of total assets was 2 percent for banks. The reported plans of banks that will begin hedging later reflect the same varied patterns.

S&Ls are hedging a larger proportion of their portfolios than banks, which is not surprising in light of their larger interest rate exposure. The average total hedged position as a percentage of total assets for S&Ls is 8 percent. Several S&Ls have futures positions in excess of 15 percent, while the banks' positions were 5 percent or less.

The majority of these institutions plan to increase their degree of involvement; none expects a decrease. Nineteen of the 22 participating banks and S&Ls expect to increase their use of futures, while the remaining three anticipate that their use will remain the same.

The limited current activity in some cases reflects necessary caution while institutions gain the expertise to hedge effectively. In other cases, depressed earnings restrict institutions from full-scale futures activity. Many S&Ls burdened with large quantities of below market fixed rate mortgages are in such a situation. Hedging today will not help them recover losses on the devalued assets. Recognizing this, many of these S&Ls are currently following a strategy of remaining exposed and hoping to gain from falling rates.

Some institutions plan to hedge liability costs if the anticipated decline in rates widens interest

spreads. A large Mississippi S&L reported limited involvement now but plans to "hedge liability cost as the level of interest rates appears more favorable." A Florida S&L said, "our hedging program is expected to expand in size as cost of borrowings reaches (falls to) attractive levels for 'lock-in'."

Because banks have been much more successful in aligning asset and liability maturities, they have narrower, more volatile maturity gaps. To be certain that hedging does not increase interest rate risk, banks with small gaps must monitor hedges more closely. Hedging strategies for these banks are therefore more complicated than appropriate strategies for the typical S&L and normally require detailed information on maturities of portfolio items.

Planning and Managing the Hedging Program

The majority of institutions studied the markets and mechanics of hedging for less than a year before launching their programs. Executives demonstrated a strong reluctance to delegate hedging responsibility far from the top of the chain of command or to turn the program over to outsiders. Top managers in both banks and S&Ls bear the largest responsibility for administering hedging programs and are actively involved in determining when hedges are placed and lifted. In small S&Ls, the president is commonly an active participant. In large S&Ls and banks, various combinations of senior vice presidents, financial officers, treasurers, and portfolio managers were most often cited as key players.

Outside consultants and brokers are working quite closely with internal management in determining futures positions in 60 percent of the active institutions. S&Ls are relying more heavily on outside input, and are consulting with brokers to a much greater degree than with financial consultants.

Several institutions indicated a reluctance to rely on any form of outside assistance. One large S&L just entering the futures market said its major concern "involves advice from brokers who try to churn the accounts for their own benefit." A non-participating S&L explained that the "primary reason for not using financial futures is having to deal with brokers who may or may not act in the association's best interest."

"The majority of institutions studied the markets and mechanics of hedging for less than a year before launching their programs."

None of the S&Ls and only one of the banks hired additional personnel for their futures hedging programs. However, two other banks and one S&L had people on their staff with prior trading experience in futures. We found the institutions' failure to hire many new people somewhat surprising, particularly since the mechanics of hedging are rather complex for the inexperienced and since several respondents said they lacked trained personnel. There appears to be a shortage of skilled individuals, and there may be a reluctance to bring in new people to manage a program which directly affects profits.

Rather than hiring new people, the majority of institutions gave employees additional training in futures. Professional seminars were the most commonly cited source of training and information, and all futures markets participants in our survey had attended at least one. Besides seminars, the most frequently cited source of training was self study, using information from a variety of sources such as journals, publications, and commodity exchanges. Others said they benefited from discussions with brokers, financial consultants, and peer institutions already involved with financial futures.

Why Some Institutions have Decided Against Financial Futures

Some financial institutions say they are staying out of the futures market largely because they lack the skilled analysts and knowledge to assess the risks and rewards of hedging interest rate exposure.

Among those not trading in futures, we found different levels of expertise. At one end of the spectrum were institutions that had seriously

compared financial futures with alternative risk management strategies and concluded that futures were not the tool for them. At the other end were those that knew little or even nothing about financial futures.

Among the banks neither using nor planning to use financial futures, 90 percent said their ability to match assets and liabilities in the cash market influenced their decision not to hedge with futures.

Given banks' success in the cash markets, many bankers limit futures hedging to situations of temporary imbalances. At the same time, the costs of starting and administering a futures program are significant in terms of management's time. Finally, the performance of the futures hedge is likely not to be perfect.

A Tennessee banker who reported coping successfully with interest rate volatility through increasing the sensitivity of assets decided against financial futures after extensive study. He expressed the sentiments of many peers when he noted as factors in his decision, "the commitment of resources for a successful use of the program in terms of time and expertise, the accounting treatments, the imperfect nature of the hedge through futures and the necessity to educate state supervisory authorities." These comments reflect the concerns of many large banks in our sample that have seriously investigated and rejected futures hedging.

For the total sample, a shortage of trained personnel was most often cited as the greatest obstacle to using financial futures. Two-thirds of the non-participating S&Ls reported that a conservative board of directors was a major influence in their decision not to hedge. For some institutions that decided to use futures, educating the board was an important step in starting their programs.

Several banks and S&Ls mentioned that they lack knowledge about futures markets, the mechanics of hedging, and the risks involved. Another, "We have no working knowledge of financial futures; not even enough to answer the above questions intelligently."

Regulatory Guidelines for Futures

Regulators, charged with ensuring that financial institutions avoid excessive risk, allow financial institutions to use financial futures for hedging purposes only. Financial futures can be used to either increase or decrease interest rate exposure. "Speculators" enter the futures market to increase their interest rate exposure and profit by outguessing the market in predicting interest rate fluctuations. "Hedgers" enter the futures market to decrease interest rate exposure by taking a futures position to offset a cash position that fluctuates with interest rates. Therefore, regulators are challenged to design guidelines allowing financial institutions the flexibility to decrease interest rate risk while preventing speculative abuses.

The regulators have all been very clear on one point: financial institutions should use interest rate futures only to reduce their interest rate exposure. The regulatory agencies have adopted different approaches to ensure that depository institutions maintain this objective. The guidelines

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Hedging with financial futures does not eliminate risk, but rather exchanges one type of risk for more manageable risks. Any financial institution involved in hedging should be aware of the risks associated with financial futures.

The hedging process exchanges the risk of price fluctuations for the lesser risk of fluctuations between the cash price and the price of a particular futures contract. As long as the cash and futures prices move together, hedging reduces interest rate risk. While it is not common, cash and futures prices occasionally move in opposite directions. When this happens, the hedge could result in losses in both the cash and futures markets.

Another potential pitfall of playing the financial futures game is that margin calls (see "Mechanics..." pp. 6 & 7) create cash flow problems. When the institution experiences losses in the futures position, meeting margin calls can create serious cash flow problems for under-capitalized institutions.

Institutions should be aware of potential risk when they take a futures position to lock into a given interest rate on an anticipated future transaction. If the expected cash position fails to materialize, there will be no cash gain to offset any loss in the futures market. As a general rule,

# of Hedging
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bank regulators do not consider such anticipatory hedges to be valid.

There is some concern, particularly among regulators, that the financial futures markets could be "cornered" by speculators as was the silver market. The exchanges themselves argue that, while theoretically possible, the risk of cornering is miniscule because of the size and diversity of financial futures markets.

There are a few other potential drawbacks of hedging with financial futures, discussed more fully later in this article. First, those "hedges" that do not reduce the net interest rate exposure in the balance sheet actually increase interest rate risk. A mismanaged program thus can increase an institution's risk position. Secondly, the accounting treatment of futures positions for banks, by increasing the volatility of reported income, may make the banks' positions appear riskier to stockholders when, in fact, the futures hedge has decreased risk. Third, the optimal time to place a hedge is when earnings are at an acceptable level. If a full-scale hedging program is put in place when spreads are at a low point in the cycle, the institution will be "locking in" a relatively low earnings spread.

for insured commercial banks are very similar even though they come from three regulatory bodies — The Federal Reserve Board, the FDIC, and the Comptroller of the Currency. S&Ls are covered by a different set of guidelines issued by the FHLBB.

Since many banks have been much more successful than S&Ls at matching maturities of assets and liabilities (i.e. hedging in the cash markets), their interest rate gaps are in general lower and more variable than S&Ls' gaps. Therefore, the banks' guidelines must be flexible to permit banks with a variety of balance sheet configurations to utilize futures to reduce interest rate exposure. Toward that objective, bank regulators have been reluctant to dictate specific position guidelines and banks are permitted to take both long and short hedge positions.

The accounting profession has yet to agree on generally accepted standards for financial futures, but public accounting guidelines are currently being developed by the Financial Accounting Standards Board. It is not yet clear what effect the guidelines still to be issued by the FASB ultimately will have on regulatory guidelines. Their influence will likely depend on the degree to which they include safeguards deemed necessary by regulators.

As a deterrent to speculation, bank regulators require that banks recognize futures losses in current income. Under mark-to-market accounting for futures positions, any gains on futures positions are recognized as current income and any losses as current expenses.[2] By reflecting the changes in an open futures position, this accounting treatment prevents speculative positions from being hidden for long periods, a situation which could allow large losses to accumulate. While it successfully deters banks from speculative abuses, mark-to-market accounting also may discourage legitimate uses of financial futures.

Most banks have no objections to marking futures positions to market when the item being hedged is also marked-to-market. Since items in the trading account are currently marked-to-market, the accounting treatment of a futures position and any hedged trading account item is symmetrical. Objections are normally raised to mark-to-market accounting treatment when hedging the investment portfolio, since gains and losses on these assets are normally reported only after they are sold.

If a bank hedges an investment portfolio item with a futures contract,[3] normally the portfolio item would be carried on the books at

[2]Banks may opt to use a "lower of cost or market" accounting treatment, which requires current recognition of futures losses, but defers gains until a futures position is offset.

[3]A specific hedge sample is used to illustrate the accounting issue. See 'Futures Hedging Strategy' for a discussion of specific versus net balance sheet hedges.

"Regulators are challenged to design guidelines allowing financial institutions the flexibility to decrease interest rate risk while preventing speculative abuses."

cost while the futures position would be marked-to-market. Thus, any loss on the futures side would be reflected in the bank's income statement, but any offsetting gain in the value of the investment portfolio item would be recognized not in the current period but when the item is sold. For this reason the mark-to-market accounting treatment would result in greater volatility in bank income when banks have outstanding futures positions. The asymmetrical accounting treatment makes a bank's position appear risky when actually the outstanding futures position has decreased the risk of income fluctuations resulting from interest rate changes. For this reason, the current accounting treatment is a disincentive for banks to hedge in futures markets.

The guidelines for S&Ls differ from those for banks and in large measure reflect the differing balance sheet construction. Since almost all S&Ls possess large negative gaps because of their long-term mortgage lending, there is less variation in appropriate risk-reducing hedging strategies. The FHLBB was able to issue more specific regulatory guidelines which restrict most S&Ls to short positions in futures. This requirement ensures that S&Ls are closing their negative gaps, provided they do not "over hedge" the gap.

Since it can control potential speculative abuses through specific guidelines, the FHLBB has given S&Ls guidelines more favorable than those covering banks. New regulations adopted by the FHLBB in July 1981 relaxed some earlier restrictions on S&Ls' futures trading. The new guidelines emphasize that net interest rate exposure is the appropriate basis for hedges. They authorize a wider range of futures contracts and permit S&Ls to use a type of deferral accounting for futures. Under deferral accounting, futures positions are accounted for in the same manner as the item hedged, thereby better reflecting the true effects of hedge positions.

We asked the financial futures users how the accounting guidelines affect their involvement. As we expected, S&Ls and banks differed in their responses to this question. Fourteen of 15 active S&Ls said the accounting guidelines either encouraged or had no effect, while six of the seven banks said the current guidelines discouraged their involvement. Several commented that the guidelines were currently dampening their involvement. For the banks not using financial futures, the influence of the accounting guidelines on their decisions was in most cases marginal. Somewhat surprisingly, very few said this was a major factor in their decision against hedging.

We asked S&Ls whether the recent changes in accounting guidelines affected their involvement in futures. A few indicated that the changes made it possible for them to hedge with futures. The majority, however, commented that while the new guidelines encouraged their involvement, they would have begun a futures program without the changes. Those that began hedging before the accounting changes took effect commented that the changes encouraged them to become more involved than they might have been in the past. So, for the majority, the changes likely affected the degree but not the fact of their participation.

We also asked how regulatory guidelines other than accounting regulations and examination practices affected involvement in futures. The responses suggested that the overall regulatory environment is at present neutral for S&Ls and slightly discouraging for banks.

The regulators all emphasize through their guidelines that placing a financial futures position

Hedging in Isolation

To demonstrate how a specific hedge seen in isolation can increase the interest rate exposure, consider the case of an institution that is perfectly matched in the cash market. That is, its asset and liability maturity structures are such that both sides of the balance sheet are equally sensitive to interest rate fluctuations.

Suppose this institution fears that future interest rate fluctuations could adversely affect its costs of liabilities (deposits). To lock in current rates paid on six-month Money Market Certificates, it shorts Treasury bill futures. But if the institution is perfectly matched in the cash market, then the six-month MMCs have a "match" on the asset side, such as variable rate loans which reset interest rates every six months. If interest rates rise, the return on the variable rate loan increases to offset the higher interest paid on MMCs. The short T-bill position generates a gain not offset by a cash position. If rates fall, the futures position results in a loss with no offset. Thus, a futures position in this case would increase interest rate exposure and make earnings more sensitive to rate fluctuations.

"Since it can control potential speculative abuses through specific guidelines, the FHLBB has given S&Ls guidelines more favorable than those covering banks."

is appropriate only when it reduces net interest rate exposure. They stress that for this reason hedges on specific assets or liabilities cannot be considered in isolation, but must be examined in light of the effect on net interest rate exposure in the balance sheet.

Futures Hedging Strategy

Bank regulators insist that banks hedge net interest rate exposure in the balance sheet, a practice often called "macro" hedging. Taken to the extreme, this strategy has been interpreted as placing futures positions to hedge their entire gap without regard for the underlying assets or liabilities comprising the maturity mismatch or "gap." This type of hedging strategy may be referred to as "blind macro" hedging.

Hedging specific assets and liabilities instead of hedging a measure of net interest rate exposure is often called "micro" hedging. The extreme, where specific hedges are placed with no regard for the overall net interest rate exposure in the balance sheet, may be called "blind micro" hedging.

In practice, probably the most common strategy is placing micro hedges to reduce overall gaps. Bank regulators have indicated that placing micro hedges with proof of reducing net interest rate exposure complies with their regulations. Many financial institutions use sophisticated information systems which allow them to hedge gap or net interest rate exposure while at the same time hedging specific items in the portfolio. Others lack such complex information systems but determine the offset in some gap measure brought about by any hedge.

All the participating banks said they measure gap regularly. Two said that when the particular gap they monitor reaches a threshold level, they hedge all or part of the gap with futures. Only two of the seven active banks indicated that their futures positions do not correspond to specific assets or liabilities.

S&Ls are not measuring gap to the degree that banks are, with slightly over half the active S&Ls regularly constructing a measure. Among the S&Ls planning to enter the futures market, less than half currently measure gap, but most of these plan to start before beginning a futures program.

Ten of the S&Ls classified themselves as blind micro hedgers and only one a macro hedger. The other four S&Ls place micro hedges to reduce a measure of gap. The micro hedging of such S&Ls is likely no cause for concern, because the combination of large negative gaps and the regulation-guaranteed short hedges should ensure a reduction of interest rate risk. Also, many of the micro hedgers are among those hedging on a limited basis while awaiting the hoped-for fall in interest rates.

In short, it appears that institutions generally are employing futures for their intended purpose - to reduce interest rate exposure.

Another controversial issue is whether or not institutions should base their futures positions on the expected direction of interest rates. "Core" hedges are placed in order to avoid predicting interest rates. The intent of core hedging is merely to smooth income fluctuations and break even in the futures market. "Timed" hedges are placed and lifted only when a futures gain is expected. Thus, timed hedgers attempt to gain in the futures market with every hedge. Succeeding at timed hedging requires interest rate projections consistently better than the market's.

One view holds that the purpose of hedging by financial institutions is to avoid the necessity of predicting interest rates; in other words, only core hedges are appropriate. Proponents of this view usually cite the poor forecasting records of financial experts and econometric models. Further, they argue that placing hedges only when a profit is expected from the hedge is in a sense speculation.

We asked the institutions in our sample if their hedging programs depend on interest rate pre-

"Two-thirds of the active banks and one-fourth of the active S&Ls indicated that their hedges do not depend on interest rate predictions."

dictions. Two-thirds of the active banks and one-fourth of the active S&Ls indicated that their hedges do not depend on interest rate predictions. Some institutions using interest rate forecasts qualified their responses to this question, often noting that their hedging is part of a larger spread management program. Since for many aspects of spread management an interest rate forecast is needed, the hedge positions in this sense rely at least indirectly on an interest rate forecast.

The S&Ls' greater reliance on interest rate forecasts reflects several different uses of interest rate predictions in a futures program. Some institutions forecast rates to help in pinpointing an optimal time for a full-scale hedging program. Other S&Ls with more active futures programs use their rate projections for timed hedges. Since many S&Ls currently need tactics that can increase expected profits, most tend to be more enthusiastic about timed hedges. The drawback with the timed program is that if they consistently fail to predict interest rates better than the market, hedging will worsen their situation.

Summary

While a few of the southeastern respondents were among the early users of financial futures, most began in the last 18 months. Our results suggest that more southeastern institutions began hedging in the past year than ever before. On average, S&Ls had 8 percent of their total assets in futures positions—compared to 2 percent for banks. Since in general S&Ls tend to have large negative interest rate gaps, it was not surprising that they have both larger participation rates and larger positions in the financial futures markets.

Our sample included institutions with a variety of hedge positions. By far the largest number of hedges are placed to lock in borrowing costs. The most commonly reported hedge was the shorting of T-bill futures to hedge money market certificates and other certificates of deposit.

Almost all of the participating S&Ls and two-thirds of the participating banks plan to increase their futures activity. Many are proceeding cautiously until they gain more experience and knowledge in the mechanics of hedging. Others, particularly S&Ls, are choosing not to hedge all their interest rate exposure, hoping that falling interest rates will improve their earnings spreads.

Among those involved in hedging activity, the banks reported that overall regulations, especially the accounting guidelines, have discouraged their use of futures. The accounting guidelines seem to have the most significant impact on the degree of involvement rather than on the decision to hedge with futures. Somewhat surprisingly, only a small percentage of the non-participating banks cited the accounting guidelines as the reason they are not hedging. S&Ls reported that the recent changes in their accounting guidelines have encouraged their participation in futures.

Our results suggest that the major reason that banks are not using futures as much as S&Ls is that banks have been more successful at reducing their gaps in the cash market. Many, particularly large banks, have examined futures carefully and decided that, in light of the risks involved with using futures, their interest rate risk is insufficient to justify adopting this complex new tool.

Financial institutions can benefit from the use of the financial futures market as a tool to stabilize income during periods of highly volatile interest rates. In the Southeast, banks and S&Ls are cautiously beginning to explore financial futures hedges. Financial managers will be seeking greater understanding of the mechanics of hedging and possible problem areas as they decide whether to adopt financial futures as one of their risk management tools.

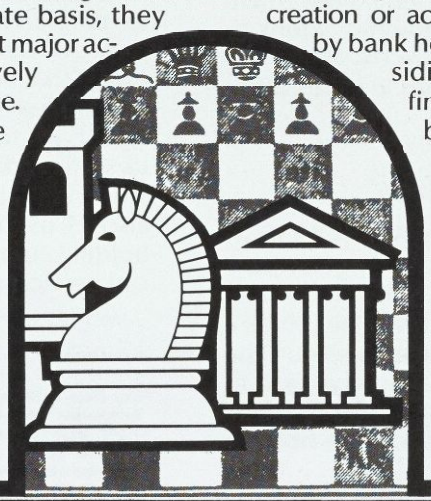
—Donald L. Koch
Delores W. Steinhauser
and Pamela Whigham

Positioning for Interstate Banking

Although interstate banking is prohibited by the McFadden Act and bank holding companies are prohibited from interstate expansion by the Douglas Amendment to the Bank Holding Company Act, the fact is banking organizations are providing financial services across states lines and have been for some time. Nothing prevents a commercial bank in one state from accepting demand deposits or saving deposits from consumers in another state. In fact many large commercial banks aggressively sell large certificates of deposits on an interstate basis, they have calling offices which seek out major accounts nationwide, and they actively market their credit cards nationwide. In addition, commercial banks are offering such financial services as cash management, electronic funds transfer accounts, loan production offices, loan participations and a variety of correspondent banking services which know no state boundary.

The laws prohibiting interstate banking effectively eliminate the ability of a formal banking organization to offer both demand deposits and commercial loans at a single brick and mortar location in more than one state. Any organization which offers both demand deposits and commercial loans may be defined as a commercial bank and, hence, would fall under the interstate banking restrictions. By separating the lending and deposit functions it is possible for banking organizations to circumvent the interstate restrictions and provide financial services on an interstate basis.

One way to accomplish this is through the creation or acquisition of nonbank subsidiaries by bank holding companies. Nonbank subsidiaries offer a more limited array of financial services than commercial banks and do not offer both demand deposits and commercial loans. The nonbank subsidiary would not, therefore, constitute a commercial bank and, hence, would be free to open offices on an interstate basis. Through the use of nonbank subsidiaries the bank holding companies are capable of providing various types of financial services on an interstate basis.



Few bank holding companies in the Southeast are offering interstate financial services. Florida holding companies, which have not shown much interest in entering other states, should expect an influx of out-of-state competitors if interstate banking is permitted.

This in turn allows the bank holding company to establish its name, its expertise and contacts in geographic areas prohibited to its banking subsidiaries. Besides the profit and/or risk diversification motives, the establishment of nonbank subsidiaries across state lines may be a good indication that a given holding company may be more likely to move to interstate banking if or when the law permits. (This is not to say that some bank holding companies that have not diversified in this manner might also be interested in expansion if it were permitted.) This article analyzes the degree and geographic extent to which bank holding companies in the Southeast are engaged in nonbank activities in states other than their headquarters state.*

"By separating the lending and deposit functions it is possible for banking organizations to circumvent the interstate restrictions and provide financial services on an interstate basis."

Allowable Nonbank Activities

The Bank Holding Company Act of 1956 as amended in 1970 defines a bank holding company as "—-any company which has control over any bank or over any company that is or becomes a bank holding company by virtue of this Act." The Board of Governors of the Federal Reserve System has wide latitude in determining what constitutes control and, hence, what is or is not a holding company.[1]

Section 4(c)8 of the Bank Holding Company Act states the criteria the Board must apply in its determination to allow bank holding companies to engage in certain nonbank activities some of which are prohibited to individual banks. The majority of the nonbank activities approved by the Board, however, are activities in which nationally chartered banks may engage.[2] Researchers have observed that the Board has approved activities in which banks have historically engaged, or activities complementing services normally provided by banks or activities in which banks clearly possess technical skills.[3]

To date, the Board has approved and added to the "laundry list" 16 activities which bank holding companies may engage in by either establishing de novo nonbank subsidiaries or acquiring nonbank subsidiaries (Table 1).

Through an application process, one bank and multibank holding companies may gain approval to establish a nonbank subsidiary to engage in any or a combination of the approved activities. By definition, a nonbank subsidiary is not a bank and, hence, does not fall under regulation or laws which apply only to banks. The nonbank entities are, therefore, capable of unrestricted geographic expansion both intra and interstate. Since the vast majority of the approved nonbank activities are activities in which banks may engage, i.e. "activities which are closely related to banking or managing or controlling banks...," the 4(c)8 provisions effectively allow bank holding companies to provide financial services similar to those provided by banks but on an interstate basis. The extent that bank holding companies have actively proceeded to offer financial services on an interstate basis through the 4(c)8 vehicle should give us some indication of what we can expect if and when interstate banking is permitted. It should also tell us something about the characteristics of holding companies that provide interstate financial services.

*The Southeast in this article will be defined as those states all or partly within the Sixth Federal Reserve District—Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee.

[1]See statutory appendix to Regulation Y.

[2]See Dale S. Drum, "Nonbanking Activities of Bank Holding Companies," **Economic Perspective**—Federal Reserve Bank of Chicago, March/April 1977, page 13.Under 4(c)8 a banking holding company may be exempted from the general prohibition against acquiring or establishing nonbank activities and allowed to acquire "shares of any company the activity of which the Board after due notice and opportunity for hearing has determined (by order or regulation) *to be so closely related to banking or managing or controlling banks as to be a proper incident thereto.* In determining whether a particular activity is a proper incident to banking or managing or controlling banks the Board shall consider whether its performance by an affiliate of a holding company can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."

[3]See for example, Harvey Rosenblum "Bank Holding Companies: An Overview" **Business Conditions**, Federal Reserve Bank of Chicago, August 1973, or Samuel H. Talley, "Developments in the Bank Holding Company Movement" **Proceedings of a Conference on Bank Structure and Competition** 1972, Federal Reserve Bank of Chicago.

Table 1. Permissible Nonbank Activities for Bank Holding Companies Under Section 4(c)8 of Regulation Y, May 1, 1982

Activities permitted by regulation	Activities permitted by order	Activities denied by the Board
1. Extensions of credit[2] Mortgage banking Finance companies: consumer, sales, and commercial Credit Cards Factoring	1. Issuance and sale of travelers checks[2,6]	1. Insurance premium funding (combined sales of mutual funds and insurance)
2. Industrial bank, Morris Plan bank, industrial loan company	2. Buying and selling gold and silver bullion and silver coin[2,4]	2. Underwriting life insurance not related to credit extension
3. Servicing loans and other extensions of credit[2]	3. Issuing money orders and general-purpose variable denominated payment instruments[1,2,4]	3. Real estate brokerage[2]
4. Trust company[2]	4. Futures commission merchant to cover gold and silver bullion and coins[1,2]	4. Land development
5. Investment or financial advising[2]	5. Underwriting certain federal, state, and municipal securities[1,2]	5. Real estate syndication
6. Full-payout leasing of personal or real property[2]	6. Check verification[1,2,4]	6. General management consulting
7. Investments in community welfare projects[2]	7. Financial advice to consumers[1,2]	7. Property management
8. Providing bookkeeping or data processing services[2]	8. Issuance of small denomination debt instruments[1]	8. Computer output microfilm services
9. Acting as insurance agent or broker primarily in connection with credit extensions[2]		9. Underwriting mortgage guaranty insurance[3]
10. Underwriting credit life, accident, and health insurance		10. Operating a savings and loan association[1,5]
11. Providing courier services[2]		11. Operating a travel agency[1,2]
12. Management consulting for unaffiliated banks[1,2]		12. Underwriting property and casualty insurance[1]
13. Sale at retail of money orders with a face value of not more than $1000, travelers checks and savings bonds[1,2]		13. Underwriting home loan life mortgage insurance[1]
14. Performing appraisals of real estate[1]		14. Orbanco: Investment note issue with transactional characteristics
15. Audit services for unaffiliated banks		
16. Issuance and sale of travelers checks		
17. Management consulting to nonbank depository institutions		

FOOTNOTES:

[1]Added to list since January 1, 1975.
[2]Activities permissible to national banks.
[3]Board orders found these activities closely related to banking but denied proposed acquisitions as part of its "go slow" policy.
[4]To be decided on a case-by-case basis.
[5]Operating a thrift institution has been permitted by order in Rhode Island and New Hampshire only.
[6]Subsequently permitted by regulation.

Nonbank Subsidiaries in the Southeast

The Southeast contained 257 bank holding companies in June of 1981 which controlled $72.3 billion in deposits representing 57 percent of the region's total. These 257 holding companies controlled 637 banks or 30 percent of the region's total bank charters.

Four of the states in the Southeast (Alabama, Florida, Georgia and Tennessee) allow multibank holding company formation, while banks in Louisiana and Mississippi are restricted to one bank holding companies. (See the Box on southeastern banking laws regarding holding companies and branching.) Table 2 shows the number, size and type of bank holding companies by state. Of the 257 holding companies

Table 2. Number, Deposit Size and Type of Multibank Holding Companies Located in the Sixth District by State as of June 30, 1981
(Deposits in Millions)

	All Bank Holding Companies		Multibank Holding Companies		One Bank Holding Companies	
	Number	Deposits	Number	Deposits	Number	Deposits
Alabama	23	8,873.8	9	8,519.0	14	354.8
Florida	78	33,420.8	26	27,035.7	52	6,385.1
Georgia	66	12,459.7	16	6,423.7	50	6,036.1
Louisiana	36	7,943.4	1	94.6	35	7,848.8
Mississippi	15	2,959.9	0	0.0	15	2,959.9
Tennessee	39	6,654.9	5	5,317.9	34	1,337.0
TOTAL	257	72,312.5	57	47,390.9	200	24,921.6

Source: Federal Reserve Bank of Atlanta

Table 3. Geographic Distribution of Holding Companies Performing 4(c)8 Activities on an Inter or Intrastate Basis

	Total Number of Holding Companies in the State	Number with 4(c)8 Subs	Number with only Intrastate Subs	Number with Interstate Subs
Alabama	23	7	3	4
Florida	78	18	16	2
Georgia	66	6	2	4
Louisiana	36	3	3	0
Mississippi	15	3	2	1
Tennessee	39	6	2	4
TOTAL	257	43	28	15

in the region, 200 are one bank and 57 are multibank. In terms of relative size the multibank holding companies dominate controlling 437 or 69 percent of all holding company banking subsidiaries and 66 percent of all deposits held by bank holding company subsidiaries in the Southeast.

The geographic distribution of holding companies in the Southeast is heavily skewed toward Florida and Georgia. Florida houses better than 30 percent of the region's holding companies, 46 percent of the multibank and 26 percent of the one bank holding companies. Georgia, a relatively recent entry into the ranks of states which allow multibank holding companies, houses 26 percent of the region's total holding companies and 28 percent and 25 percent respectively of the multibank and one bank holding companies. Alabama, Tennessee, and Louisiana are in the mid-range, even though Louisiana does not allow the multibank form of holding companies. The one multibank holding company in Louisiana is a "grandfather" situation. Mississippi is on the low end of the scale, allowing no multibank holding company formations and housing only 15 of the region's 200 one bank holding companies. Therefore, each state in the Southeast houses bank holding companies of one form or another, but the majority of both the one bank and multibank holding companies in the region are concentrated in Florida and Georgia.

Deposit holdings of the organizations show a somewhat similar pattern, with Florida leading the way with $33.4 billion which represents 81.5 percent of the state's total.

Of the 257 bank holding companies in the Southeast, only 43 control nonbank subsidiaries engaged in one of the 4(c)8 activities. Table 3 shows the geographic distribution of bank holding companies performing one or more of the 4(c)8 activities. Table 3 also shows the extent to which these organizations are engaged in interstate 4(c)8 activities.

Table 4. Asset Distribution of Nonbank Subsidiaries by Geographic Coverage of the Nonbank Subsidiary, Intra or Interstate
(Assets in Millions)

	Total Nonbank Assets	Intrastate Subsidiaries		Interstate Subsidiaries	
		Assets	% of State Total	Assets	% of State Total
Alabama	$153.5	74.0	48	79.5	51.8
Florida	167.7	159.6	95	8.1	4.8
Georgia	384.8	133.4	34	251.4	65.3
Louisiana	21.3	21.3	100	—	—
Mississippi	17.4	4.7	27	127.5	73.3
Tennessee	114.6	13.1	12	101.4	88.5
District	859.5	406.2	47	453.2	53

Only 8.3 percent of the bank holding companies in Louisiana engage in 4(c)8 activities through nonbank subsidiaries, and none of these subsidiaries is engaged in these activities on an interstate basis. This is in marked contrast to Alabama in which 33 percent of the bank holding companies have 4(c)8 subsidiaries and four have subsidiaries which engage in at least one 4(c)8 activity on an interstate basis. In total only 15 bank holding companies in the region control at least one subsidiary which performs 4(c) 8 activities on an interstate basis. Interestingly, Florida, which has the largest number of bank holding companies and the largest number of holding companies with nonbank subsidiaries, houses only two bank holding companies which have subsidiaries offering at least one 4(c)8 activity on an interstate basis.

In terms of asset size, nonbank subsidiaries of bank holding companies in the Southeast control total assets of $859.5 million. Table 4 shows the distribution of these assets both by state and by interstate status of the nonbank subsidiary. An interstate subsidiary is one that has established offices external to the state where the home office of its parent holding company is located.

Within the region, asset sizes of interstate and intrastate nonbanking subsidiaries are approximately equal ($453 million as compared to $406 million), just slightly favoring interstate subsidiaries. In Alabama, Georgia, Mississippi and Tennessee, nonbank subsidiaries with interstate locations account for the majority of the assets. Louisiana has four holding companies which hold eight nonbank subsidiaries, no one of which is larger than five million dollars in assets. Consequently, it is not surprising that each of these nonbank subsidiaries has only intrastate offices. This contrasts to Mississippi, which has three holding companies with nonbank subsidiaries, but one of these subsidiaries controls 73 percent of all nonbank subsidiary assets in the state. Consequently it is not surprising that this organization has interstate offices of 4(c)8 subsidiaries.

"Florida houses only two bank holding companies which have subsidiaries offering at least one 4(c)8 activity on an interstate basis."

The only state which has a sizable number of relatively large nonbank subsidiaries which limit themselves to intrastate locations is Florida. While Florida houses the largest number of bank holding companies in the Southeast, the largest number of bank holding companies controlling 4(c)8 subsidiaries, and ranks second in terms of asset size of nonbank subsidiaries, it has only two bank holding companies which control 4(c)8 subsidiaries with interstate locations. Perhaps the reason for this is that given

Table 5. Number of Bank Holding Companies with Nonbank Subsidiaries Engaged in 4(c)8 Activity by State and Type of Activity, August 1, 1980

4(c)8	Activity	Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	Total
a(1)	Mortgage Company	1	8	4	-	1	2	16
	Finance Company	2	3	3	1	-	1	10
	Factor	-	-	1	-	-	1	2
a(2)	Industrial loan company	-	1	1	-	1	-	3
a(3)	Servicing loans	1	9	3	1	1	3	18
a(4)	Trust company	2	3	-	-	-	-	5
a(5)	Investment or financial advisor	2	3	-	-	1	-	6
a(6)	Leasing	3	4	3	3	1	2	16
a(8)	Data Processing	2	8	1	1	-	-	12
a(9)	Insurance extension of credit related to insurance	4	12	6	2	1	4	29
a(10)	Underwriting credit life insurance	2	-	2	-	-	5	9
a(11)	Providing Courier Services	-	-	1	-	-	-	1
a(12)	Providing management consulting advice	-	-	-	-	1	-	1

the rapid population and economic growth in Florida, the Florida bank holding companies have had their hands full simply providing financial services in Florida.

In total, 43 of the region's bank holding companies perform some type of 4(c)8 activity through at least one nonbank subsidiary. Table 5 shows the number of bank holding companies engaging in a given 4(c)8 activity by state.

The most popular type of 4(c)8 activity appears to be insurance related to the extension of credit; 29 holding companies in the Southeast perform this activity at more than 482 locations. In large part these locations are the banking subsidiaries of the holding company. The second most popular activity was the servicing of loans, an activity closely related to a number of the other 4(c)8 activities. Next in order of popularity comes mortgage companies, leasing companies, data processing, finance companies and underwriting credit life insurance. Interestingly, bank holding companies in Florida are more active in providing 4(c)8 services and over a broader range than are holding companies in other states in the region.

Interstate Positioning

Turning to the question of interstate positioning, we find that only 15 bank holding companies in the Southeast operated nonbank subsidiaries which perform 4(c)8 activities on an interstate basis as of November 1981 (Table 6).

All of the holding companies with interstate 4(c)8 subsidiaries are multibank holding companies except Deposit Guaranty Corporation which is a one bank holding company. Each of these organizations is relatively large in terms of its deposit size within its state; each ranks 6th or higher in its respective state. And except for two cases all of these bank holding companies have home offices in the same city in their respective states; Birmingham, Alabama; Jacksonville, Florida; Jackson, Mississippi; Atlanta, Georgia (except for one located in Augusta); and Nashville, Tennessee (except for one located in Chattanooga). These characteristics are consistent with the view that relatively large multibank holding companies are more probable interstate competitors (Table 7).

The most popular 4(c)8 activity is acting as an insurance agent in connection with credit extensions. This activity, however, is not highly visible and is normally provided as a complementary service to some other 4(c)8 activity on an interstate basis, such as mortgage banking and/or finance company subsidiaries. These latter two activities account for the vast majority of highly visible activities which may be used to establish a presence in an interstate environment. Only two industrial loan banks and leasing companies with interstate offices are controlled by southeastern holding companies

Table 6.
Financial services offered on an interstate basis by nonbank subsidiaries of bank holding companies in the Southeast
(as of November 1981)

	Mortgage Banking	Financial Company	Credit Cards	Factoring	Industrial Bank	Servicing Loans	Trust Company	Financial Advisor	Leasing	Investment in Community Welfare	Data Processing	Insurance Agent	Underwriting Credit Life	Courier Service	Management Consulting	Money Order $1000, Travelers Checks	Real Estate Appraisal	Audit Services	Travelers Checks	Management Consulting Nonaffiliate	Check Verification	STATES IN WHICH PERFORME
Alabama																						
Am South Alabama Finance Corporation		X							X				X									GA(1),SC(1)
Central Bancshares of the South, Inc. Trust Company of California							X															CA(1)
First Alabama Bancshares, Inc. First Alabama Life												X										AR(1)
Southtrust Corporation Southern State Life													X									AR(1)
Florida																						
Barnett Banks of Florida, Inc. Verification, Inc.																					X	GA(1),AL(1),NC(1)
Florida National Banks of Florida, Inc. Florida National Credit					X				X													GA(9),NC(12),SC(7)
Georgia																						
Citizens and Southern Georgia Corporation Citizens and Southern Finance		X																				AL(8),FL(4),LA(1),NC(2),SC(1)
Citizens and Southern Mortgage Co.	X	X																				TN(1),NC(1)
First Atlanta Corporation Gulf Finance		X										X										AL(19),FL(14),LA(18),MS(37),TN(SC(10),NC(1),IN(4)
Amelia Properties																						FL(1), Hold Title to Real Estate
First Grand Junction Industrial Bank					X																	
First Railroad and Banking Company of Georgia CMC Group		X										X										NC(16),SC(7),TN(5),MD(1),DC(1
First Financial											X											AL(1)
Capital Credit												X										TN(5)
Trust Company of Georgia Trust Mortgage	X											X										FL(1)
Fickling & Walker	X																					SC,FL
Mississippi																						
Deposit Guaranty Deposit Guaranty Mortgage Corp.	X											X										LA(3),FL(2)
Tennessee																						
Ancorp Bancshares, Inc. Ancorp Insurance												X										AR(1)
First American Corporation Atlantic Discount		X										X										FL(28),GA(4)
First American Tennessee Insurance												X										AR(1)
Commerce Union Corporation Tennessee Valley Life Insurance												X										AR(1)
Third National Corporation Third Financial	X	X										X										SC(1),KY(6)
Tennessee Life Insurance												X										AR(1)

Note: The above analysis is based on records of 4(c)8 activities filed by individual holding companies with the Federal Reserve System.
It does not include Southeast Banking Corporation of Florida's acquisition in December 1981 of Churchill Mortgage Corporation of Atlanta, which has two offices in Texas.

Table 7. Rank Within State of Holding Companies With Interstate 4(c)8 Subsidiaries by Deposit Size

	Alabama
1	AmSouth Bancorporation (MB)
2	Central Bancshares of the South, Inc. (MB)
3	First Alabama Bancshares, Inc. (MB)
4	SouthTrust Corporation (MB)
	Florida
1	Barnett Banks of Florida, Inc. (MB)
4	Florida National Banks of Florida, Inc. (MB)
	Georgia
1	Citizens and Southern Georgia Corporation (MB)
2	First Atlanta Corporation (MB)
3	Trust Company of Georgia (MB)
6	First Railroad and Banking Company of Georgia (MB)
	Mississippi
1	Deposit Guaranty Corporation (One-Bank)
	Tennessee
1	First American Corporation (MB)
2	Commerce Union Corporation (MB)
3	Third National Corporation (MB)
4	Ancorp Bancshares, Inc. (MB)

and only one interstate trust subsidiary. Therefore, to the extent that southeastern holding companies are attempting to establish an interstate presence, they are doing so through two vehicles, mortgage banking subsidiaries and finance company subsidiaries.

In total, only eight of the fifteen holding companies in the region control either or both a mortgage banking and finance company subsidiary. All four Georgia holding companies with interstate 4(c)8 subsidiaries have a mortgage or finance company subsidiary, three have finance company subsidiaries and two have mortgage company subsidiaries. Two holding companies in Tennessee, one in Mississippi and one in Alabama also control these types of subsidiaries, three finance companies and two mortgage subsidiaries.

In contrast, not a single Florida holding company controls either a finance company or a mortgage company with interstate offices. Again this indicates that Florida holding companies have very little need or propensity to look outside their home state for profitable financial activities. Looking at the other side of this coin, of the eight holding companies with interstate mortgage or finance company subsidiaries, five have Florida subsidiaries. While Florida holding companies have little propensity to provide these interstate services to the other states in our region, holding companies in other states evidently view Florida as an attractive opportunity. From an overall perspective, southeastern holding companies with interstate finance and mortgage company subsidiaries have, with only one exception, limited their geographic scope to the states of Alabama, Georgia, South Carolina, North Carolina, Florida, Louisiana, Mississippi, Tennessee and Kentucky.

Conclusion

Three interesting conclusions arise from this analysis. First, few bank holding companies in the Southeast show a propensity to offer high profile 4(c)8 financial services on an interstate basis. If these holding companies are the most likely interstate competitors if or when full interstate banking is permitted, then the region will have few organizations likely to be competitive at the district or national level.

Second, quite obviously, the most attractive target for interstate expansion in the region is Florida. Competition from southeastern holding companies through 4(c)8 subsidiaries in Florida is markedly greater than Florida holding company presence in the other states in our region. Given the 4(c)8 activity, Florida banks and bank holding companies should expect a tremendous influx of financial competitors from both within the region and from the nation. And third, again if the interstate 4(c)8 activities may be used as a gauge, Florida holding companies are not likely entrants into other states if interstate banking is permitted. It appears Florida will be a financial battleground.

—David D. Whitehead and Pamela Frisbee

GEOGRAPHIC LIMITATIONS ON INTRASTATE BANK EXPANSION IN THE SOUTHEAST

As the probability increases that the nation will adopt some form of interstate banking and as banks find ways to cross state lines without branches, the issue of expansion within a state is becoming more intense. A frequently-heard, though empirically unsupported argument from advocates of intrastate banking is that restricting geographic expansion within a state may severely handicap banking organizations if the nation adopts interstate banking. In other words, unless geographic expansion by banks is allowed, no banking organization within the state may be capable of growing large enough to compete with a large interstate organization. Geographic limitations on banking expansion vary widely among the southeastern states.

Geographic expansion by a banking organization through a deposit taking facility may take either of two formalized procedures; branching through merger or de novo (new charter), or multibank holding company by acquisition or de novo entry. Branching restrictions within the region vary from state to state. In most of the southeastern states these restrictions have eased somewhat during the past ten years. States which allowed some type of branching and holding company formations have in most cases relaxed their limitations to encourage greater geographic expansion within the state.

Each of the region's states now allows branching of one form or another (generally limited to the county of the home office of the parent bank) and four of the six states now allow expansion by multi-bank holding companies. Georgia, which prior to 1970 limited branching to the municipality of the parent bank, now allows branching countywide by independent banks and statewide banking by holding company subsidiaries. Florida which allowed statewide acquisition by holding companies but did not allow branching prior to 1975, now allows branching statewide by merger and multibank holding companies. Alabama also allows branching statewide by merger and holding company acquisition. Rules applying to branching by de novo entry are in most cases more limiting geographically than those concerning branching by merger.

Regulations concerning holding company acquisitions of banks also vary from state to state. Unless a state explicitly prohibits or restricts holding company expansion, multibank holding companies are permitted by federal laws. Alabama, Florida, and Tennessee were the first states in the region with multibank holding companies—their laws were silent on bank holding companies, and bank holding companies took advantage to expand statewide. Georgia followed several years later with a similar ruling. Louisiana and Mississippi still prohibit the formation of multibank holding companies, although attempts are being made to change the Louisiana law.

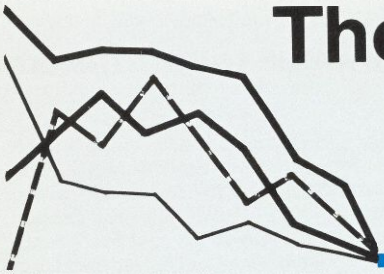
Branching of one form or another is allowed in each of the states in the Southeast, though the degree to which it is permitted varies from state to state. Banks in Alabama and Florida have more geographic freedom than banks in other states; they are allowed to branch statewide by merger with few restrictions. Certain counties in Alabama do not permit branching within the county, while banks in Mississippi may branch within a one hundred mile radius. Except for "grandfathered" cases and those banks established to protect the depositors of a closed state bank, branching of any form in Tennessee is limited to the county of the parent bank.

Regulations applying to bank holding companies are basically the same in each of the states, except Louisiana and Mississippi. Holding companies are authorized by the federal government, but each state can impose its own restrictions. In each of the region's states except Louisiana and Mississippi holding companies may own banks statewide. Multibank holding companies in a state tend to bring changes in that state's geographic restrictions. Georgia changed its laws in 1976 to permit multibank holding companies to bank statewide, while holding companies in Alabama, Florida, and Tennessee took advantage of the silence of the law and expanded statewide before the law could prevent it.

Southeastern states in which multibank holding companies are allowed have eased their geographic limitations on branching somewhat. Florida, for example, was a unit banking state prior to holding company activity. Branching restrictions gradually eased as holding companies began expansion. Florida moved through the following phases: unit banks, unit banks with limited facilities, banks with limited branching, and now to statewide branching through merger. Statewide branching by merger is also allowed in Alabama through both independent banks and holding company subsidiaries. Georgia and Tennessee also allow holding company expansion statewide, but branching is limited to the county of the parent bank.

States which do not allow multibank holding companies have seen very few changes in their branching and geographic restrictions. Louisiana and Mississippi have kept out multibanks and have virtually the same geographic limitations on branching as they did ten years ago. Louisiana and Mississippi limit the ownership of holding companies to one bank. One bank holding companies do not enjoy the same ability to acquire banks as multibank holding companies, they are prohibited from acquiring a second bank and hence do not enjoy the ability to expand across the state. These restrictions have tended to concentrate holding companies in areas of high economic growth.

Southeastern states have moved progressively toward easing the geographic restrictions applied to banks as they prepare themselves gradually for the advent of statewide and interstate banking. Holding companies are eyeing the possibilities of acquisitions of holding companies in other states. The probabilities are increasing that geographic restrictions on expansion by banking organizations will continue to loosen in the future.



The Flat-Rate Income Tax: Boon or Boondoggle?

In spite of the income tax cuts recently enacted by Congress, discussions of alternative tax plans continue. Because cuts in marginal tax rates are largely offset by bracket creep, boosts in Social Security taxes and increases in state and local taxation, many middle-income taxpayers remain in tax brackets originally intended for the rich.[1] Thus, the tax rate structure continues to erode economic incentives. Moreover, the numerous exemptions, deductions, and loopholes remain imbedded in a complicated tax structure. (See page 27 for a discussion of the evolution of the U.S. income tax structure.) The tax program, then, provided some relief from tax rate increases but not genuine tax reform. Not only is the current tax system both inefficient and costly to maintain, but tax evasion is growing and horizontal inequities (that is, individuals with similar incomes paying widely different amounts of taxes) persist. Marginal tax rates remain high and, because of the various exemptions, deductions, and loopholes, we have a narrow tax base. As a consequence, more and more policymakers have turned their attention to more comprehensive tax reform. This article will examine one widely-discussed reform—the flat-rate income tax.

Proponents of the flat-rate tax say it could eliminate "bracket creep" (where higher salaries, pushed up by inflation, propel taxpayers into higher tax brackets). The plan's simplicity would reduce the huge amounts of time and money currently spent on calculating taxes. Advocates also argue that a flat rate tax would reduce the incentives to shelter or otherwise avoid taxes. Finally, replying to critics who fear the plan would hurt lower bracket taxpayers, advocates say the plan can be modified to prevent that from happening.

Advantages of the Flat-Rate Income Tax

A flat-rate income tax promises many substantial advantages. One obvious major advantage is *simplicity*. A flat-rate tax would be easy for taxpayers to comply with and easy for tax collectors to administer. This simplicity would save resources for both taxpayer and tax collector. It has been estimated, for example, that 40 percent of all taxpayers currently pay for professional help with their tax returns. And $60 billion a year is spent by people complying with or taking advantage of IRS regulations.[2] Thus, a great deal of human ingenuity and entrepreneurial talent is devoted to legal tax avoidance. A flat-rate income tax would end this distortion and misdirection of entrepreneurial talent and direct these resources back toward making economically productive investments.

Second, a flat-rate tax is more *fair*. It would provide similar treatment to taxpayers with the same incomes (horizontal equity) rather than imposing different tax rates on individuals who happen to spend their incomes differently. Accordingly, this system would ensure that all wealthy taxpayers would pay some taxes and, in addition, it would eliminate the marriage penalty (the higher taxes paid when couples combine their income and enter a higher bracket).

Moreover, all flat-rate tax proposals have provisions to protect the poor, and some (notably the proposal by Senator Bill Bradley and

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[1]See, for example, Richard B. McKenzie, "Supply-Side Economics and the Vanishing Tax Cut," this **Review**, May 1982, pp. 20-24; James R. Barth and Joseph J. Cordes, "Industrial Impacts of the 1981 Business Tax Cuts," this **Review**, May 1982, pp. 42-49; and Stephen A. Meyer and Robert J. Rossana, "Did the Tax Cut Really Cut Taxes?" **Business Review**, Federal Reserve Bank of Phiadelphia, Novermber/December 1981.

[2]See, for example, Peter Brimelow, "One Tax Bracket?" **Barrons**, August 3, 1981, p. 22; and William Safire, "The Flat Tax," **New York Times**, April 30, 1982, p. 29.

A flat-rate income tax would broaden the tax base and thus lower marginal tax rates. Its simplicity and fairness are appealing, but the proposal faces serious economic and political obstacles.

Representative Richard Gephardt) even maintain a degree of progressivity in effective rates (the percentage of income paid in taxes). Specifically, the impact of a flat-rate system on lower income groups could be lessened by raising the individual exemption or by changing the zero bracket. The system could even incorporate a negative income tax (payments to people with low incomes).

A third major advantage is that the elimination of most (or all) exemptions, deductions, and loopholes would substantially *broaden the tax base*. This would reduce the incentive to cheat through fraudulent deductions and consequently would bring about greater voluntary compliance with the tax laws. It might even enhance citizens' respect and compliance for other laws and government regulations. Moreover, eliminating exemptions would remove many of the distortions that cause savings and investment to flow into below-market-rate investments and inefficient projects. As a result, economic efficiency would improve.

But most important of all, a broadening of the tax base would enable marginal tax rates to be lowered significantly from the current aggregate marginal rate of about 32 percent. As supply-side economists have continually insisted, a lowering of marginal tax rates would improve significantly the economy's incentive-reward system. As a result, the supply of labor, capital, innovation, entrepreneurial skill and market activity would be increased.[3] People would again be able to concern themselves with earning additional income without worrying that their rewards would be confiscated by ever higher marginal tax rates.

[3]Jerry Hausman, for example, has indicated that a flat-rate tax would increase the supply of labor. See Jerry Hausman, "Labor Supply," **How Taxes Affect Economic Behavior**, edited by Henry J. Aaron and Joseph A. Pechman, Brookings Instituiton, Washington, D.C., 1981.

THE FLAT-RATE INCOME TAX: SOME HISTORICAL PERSPECTIVES

Although a flat-rate system seems novel, history reveals that it had several early proponents. Perhaps the earliest mention of such a system can be traced to an eminent advisor to Louis XIV, Sebastian de Vauban. During his era, the tax system of the French economy was both prohibitive and complex. Tax rates, for example, were in some instances as high as 82 percent of the net produce of small proprietors.[1] Indeed, it was cheaper in some cases, to ship wine from China to Paris than to transport it to Paris from other French provinces.[2] A prestigious occupation of the day was an appointment to one of the various bureaus that dealt with the accounting and legal aspects of taxation. By then, the tax code was open to so many interpretations that tax computation often depended on the whimsical judgement of the court's appointees.

In reaction to this state of affairs, Vauban proposed his well-known version of the flat-rate income tax, the Dixme Royale (10 percent income tax). He suggested that the entire tax system with all its complexities be scrapped in favor of a simple 10 percent tax on a strictly defined base of income. Vauban is recognized as one of the first to view fiscal policy as an important determinant of economic prosperity. For all of his efforts, however, Vauban was banished from the court of Louis XIV. His banishment illustrates the political risks associated with comprehensive tax reform. Unfortunately for France, politics did not permit comprehensive reform until after the French Revolution. Curiously, Napoleon is often credited with being a fiscal "genius," since he was able to reform the French tax system and, in the process, to cut the tax rate by over 70 percent.[3]

Theoretical arguments for a tax system like the flat-rate scheme were spelled out clearly by classical economists of the 19th Century such as James Mill, J. R. McCulloch, and John Stuart Mill. They were guided by the fiscal insights of Adam Smith, who posited four maxims of taxation—equality, certainty, convenience of payment, and economy in collection. These maxims were considered indispensable standards for the development of tax policy.[4] *The flat-rate scheme is fully consistent with all of these classical principles.*

continued

THE FLAT-RATE INCOME TAX: SOME HISTORICAL PERSPECTIVES
continued

The pro-growth perspective of these classical economists led them to maintain that *tax rates must remain light or moderate.* They specified, for example, that if tax rates exceeded even 10 percent of the national income, such rates would eventually result in a "slowdown of public wealth."[5] They repeatedly stressed that high tax rates would encourage tax evasion, cheating, smuggling, and the development of an underground economy. In fact, some of these economists argued that an increase in these activities was one sure way to recognize that tax rates were too high.[6]

To keep tax rates moderate, they realized the *tax base must remain as broad as possible.* Consequently, they gave close attention to certain administrative aspects of taxation. Specifically, they maintained that the tax system must remain free of special exclusions and arbitrary interpretations; they abhorred the tendency of policymakers to create tax loopholes.

For these classical writers, the complexity of the 18th Century French tax system with its special favors and mammoth bureaucracy served as a model to avoid. They noted the physiocrats' discussion of the "tax farmers" who engaged in tax manipulation, interpretation, and lobbying.[7] As a consequence, they stressed the taxation maxims of certainty, convenience of payment, and economy in collection. Thus, these economists were among the first to identify the problems of a tax code characterized by high rates and many loopholes.

In addition, they noted that such a complex system can produce inequities. A system with many exceptions and seemingly arbitrary interpretations leads to unequal taxation of people with the same income. Finally, these writers recognized that a complex tax code distorts the allocation of resources. Many of the exceptions and deductions associated with a complex code stimulate certain sectors of the economy by drawing resources from other, higher valued activities.

In short, the low-rate, broad-based tax system finds its theoretical roots in the doctrines of 19th Century classical writers. These economists emphasized all of the desirable features claimed for a flat-rate scheme—equity, simplicity, and incentive.

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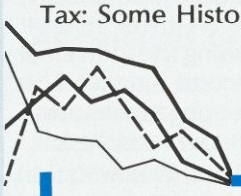
[1]Henry Higgs, **The Physiocrats**, Langland Press, New York, 1952, p. 10.
[2]David Ames Wells, **Theory and Practice of Taxation**, D. Appleton and Sons, New York, 1900, p. 76.
[3]Jude Wanniski, **The Way the World Works**, Simon & Schuster, New York, 1978, p.36.
[4]Robert E. Keleher and William Orzechowski, "Supply-Side Effects of Fiscal Policy: Some Historical Perspectives," Working paper, Federal Reserve Bank of Atlanta, August 1980, p.44.
[5]Keleher and Orzechowski, *ibid.*, p. 50.
[6]Keleher and Orzechowski, p. 37.
[7]See Ronald Meek, **The Economics of Physiocracy**, Harvard University Press, Cambridge, 1963.

The flat-rate system would also eliminate bracket creep. And a substantial lowering of marginal tax rates could be accompanied *without* lowering tax revenues. Indeed, it is possible that a lowering of marginal tax rates could actually increase tax revenues. A flat-rate income tax system, then, is in full accord with the basic premises of supply-side economics and, indeed, has been endorsed by several well known supply-side economists.

Finally, the flat-rate system is fully consistent with the four maxims of taxation originally set out by Adam Smith in the **Wealth of Nations:** equality, certainty, convenience of payment, and economy in collection. (See box on "The Flat-Rate Income Tax: Some Historical Perspectives.")



A FLAT-RATE TAX CAN BE PROGRESSIVE

The simplicity and the economic incentives of a flat-rate tax system are widely acknowledged. But in the popular discussion, many observers claim that gaining these advantages would cost us the basic "progressivity" of the U.S. income tax. That claim is incorrect. With appropriate use of income exemptions, a flat-rate tax can be made quite progressive.[4]

To illustrate the design of a progressive flat-rate tax, let us begin with the median taxpayer in 1983. That taxpayer will report an adjusted gross income of approximately $25,000 and, under current income tax laws, will pay about $2500, or 10 percent of that income, in federal income tax.[5] The median tax-payer's marginal "tax bracket" will be much higher than 10 percent, of course, but his average tax rate will be reduced to about 10 percent by deductions and exemptions of the current system, and by the increase in tax brackets with higher incomes.

If we wanted to apply a flat-rate tax which would leave that median taxpayer unaffected, the simplest way would be to impose a flat-rate tax of 10 percent (see page 29). Regardless of income level, each taxpayer would pay 10 percent of income A taxpayer with a $10,000 income would pay $1,000, a taxpayer with a $1 million income would pay $100,000, and so forth. This is apparently the kind of flat-rate tax that critics have in mind when they claim a flat-rate tax cannot be progressive.

But it can be, as we can see by looking at the right-hand column of the table. This alternative provides for a flat-rate tax of 20 percent on all income in excess of $12,500. Our median taxpayer still pays 10 percent in federal income taxes. But as the table clearly shows, a taxpayer with a $15,000 income only pays about 3⅓ percent of his income in taxes, whereas the taxpayer

Problems with the Flat-Rate Income Tax

In spite of the many important advantages of the flat-rate income tax, several problems remain. These relate to both economics and politics. One problem is the costly transition it would involve. Individuals, corporations, and nonprofit organizations have made major decisions and investments designed to maximize returns based on the current tax structure. They have made these decisions on the premise that certain deductions and tax rules would continue. Thus, the introduction of a flat-rate scheme and elimination of all deductions, exemptions, and loopholes would alter longstanding tax rules sharply.

with a $1 million in income would pay 19¾ percent in federal income taxes. The resulting pattern is obviously progressive, and in fact the higher-income taxpayers wind up paying about 20 percent of their income in taxes, twice the proportion of the median taxpayer.

Obviously, the exemption level introduces progressivity to the flat tax rate. As the exemption level is increased from $5,000 to $10,000 to $12,500, the tax schedule becomes more and more progressive. In each case, the median taxpayer winds up paying 10 percent of his income in federal income taxes, because the flat rate itself is increased from 10 percent, to 12½ percent, to 16⅔ percent, to 20 percent so as to capture the same revenue from the median taxpayer.

For the exemption level to introduce progressivity to the flat-rate tax, the level needs to be stipulated in dollars rather than as a percent of income. Saying "the first 20 percent of income is exempt from tax" is equivalent to cutting the flat rate and does not introduce progressivity. The exemption level could be tied to a price index, however. It could also be specified according to the number of persons in a household without losing the progressivity feature.

The accompanying tables are not meant to be concrete proposals for tax schedules. What they do illustrate clearly is that, with appropriate use of a simple dollar income exemption, the progressivity of the existing tax system can be combined with the appealing simplicity of the flat-rate proposal for tax reform.

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[4]"Progressive" means that taxpayers with higher incomes pay a higher proportion of those incomes in taxes.

[5]**Monthly Tax Features**, June-July 1982, Tax Foundation, Incorporated.

EVOLUTION OF THE U. S. INCOME TAX SYSTEM

The evolution of the U. S. tax system exemplifies how a well-designed tax system developed by well-intentioned policymakers can grow into a form drastically different from the intentions of its original architects. The federal income tax started out well, almost as if it were designed to be consistent with the maxims of Adam Smith (see Box on page 25 for a description of these maxims). When Congress passed the first income tax law in 1913, it provided for a 1 percent tax on income over $3,000—a level exceeded by only 3 percent of American wage earners. A tax of up to 7 percent was levied on high incomes—from $20,000 to over $500,000.[1] Few expected these rates ever to go much higher.

Rates did rise during World War I but were reduced soon after the war. They were reduced mainly at the insistence of (Secretary of the Treasury) Andrew Mellon, who understood quite well the connection between taxation, incentive, and economic growth.[2] Marginal tax rates increased during the 1930s and soared as high as 94 percent during World War II. However, few taxpayers actually paid these confiscatory rates. As late as 1947, fully 80 percent of all American families had annual incomes of less than $5,000. Consequently, the effective tax rate was about 8 1/2 percent.[3] Thus, after two world wars, few people were in high marginal tax brackets.

Today, the situation has changed dramatically. Over 80 percent of all families in the U. S. report incomes over $11,000 and 50 percent have incomes over $23,000. Consequently, the median income earner faces marginal rates of over 25 percent and those with double the median income confront marginal rates in excess of 40 percent. Moreover, maximum Social Security taxes have risen from $30 annually in 1947 to $2,179 in 1982, an increase of 7,233 percent![4] It is noteworthy that most of these developments were not planned or consciously designed. Rather, they are the consequence of decades of inflation in conjunction with a progressive income tax. Bracket creep has pushed average taxpayers into tax brackets originally designed only for the rich.

The increase in marginal tax rates over recent years has induced legislators to find various new ways to lighten their constituents' tax burden. Under the pressure of special interest groups, their desire to lessen the tax burden resulted in a proliferation of special exemptions. Legislators used tax shelters, tax credits, deductions, and exemptions to reward special interests. The important point is that because of these various exemptions, tax shelters and deductions, the tax base has narrowed steadily. In one widely cited study, for example, Pechman and Okner estimated that elimination of selected tax exemptions

continued

EVOLUTION OF THE U.S. INCOME TAX SYSTEM
continued

would increase the tax revenues by 75 percent.[5] This continually narrowing tax base has prompted legislators to rely on bracket creep to raise tax revenues—something for which they cannot be held personally responsible. Consequently, the tax system has been trapped in a "vicious circle" of rising tax rates and proliferating loopholes that has created an incredibly complex tax structure. The result is a set of tax provisions so complicated "that no mortal can comprehend and that no national tax legislature starting from scratch could or would devise."[6]

The wastes and inefficiencies of the present tax system are reflected in a number of ways. For example, tax laws and interpretations have doubled in the past 15 years, to about 40,000 pages. As a consequence, nearly 50 percent of all taxpayers need some kind of professional help. Virtually all large business firms maintain full-time legal and accounting staffs. However, not only do individuals need help, but so do the professionals. A few years ago, when the IRS tested its agents on their knowledge of the tax laws, 80 percent failed. Indeed, the costs of administering the tax code are quite formidable, some estimate it to be as much as $60 billion annually.[7]

In sum, as the tax system has evolved, marginal tax rates have increased dramatically, the tax base has narrowed, and the tax structure has become incredibly complex. Supply-side economists emphasize that high tax rates are adversely affecting incentives. The empirical evidence and many economists now largely support their contentions. The distorting effects of various costly tax loopholes now are receiving emphasis. If these many loopholes, deductions, and exemptions could be eliminated, tax rates could be reduced through the widening of the tax base. This is the major advantage of all flat rate income tax proposals.

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[1]See David Boaz, "A History of the Income Tax: It Jes' Grew," **Wall Street Journal**, May 14, 1982. This section draws from this article.
[2]See, for example, the discussion of Andrew Mellon in Robert E. Keleher and William P. Orzechowski, "Supply-Side Effects of Fiscal Policy: Some Historical Perspecitves," Working paper Series, Federal Reserve Bank of Atlanta, August 1980, pp. 52-56.
[3]See Boaz, *op. cit.*
[4]Boaz, *op. cit.*
[5]Joseph A. Pechman and Benjamin A. Okner, "Individual Income Tax Erosion by Income Tax Classes," Brookings Institution, Reprint No. 230, Washington, D.C., 1972.
[6]Milton Friedman, "Tax Follies of 1970," **An Economist's Protest**, Thomas Horton & Co., Glen Ridge, New Jersey, 1972, p. 83.
[7]Edgar K. Browning and Jacquelene M. Browning, **Public Finance and the Price System**, MacMillan, New York, 1979, pp. 345-47; and Peter Brimelow, "One Tax Bracket?" **Barrons**, August 3, 1981, pp. 11, 21-23.

Because of the disruptions that such an implementation would involve, any change would probably have to be gradual and/or include various "grandfather" clauses.

A second important problem is that the implementation of such a system would have definite effects on the distribution of income and wealth. That is, it would increase taxes on some income groups and lessen taxes on others. The critical question is who gains and who loses. The answer depends, of course, on various considerations such as personal exemption levels, the zero bracket level, the actual tax rate chosen, and various other factors. The answer to this question would determine the political feasibility of the system. That is why the notion that progressivity can be incorporated with the use of personal exemptions is so important.

Political realities, of course, pose other important barriers to implementating a flat-rate tax allowing for *only* personal deductions. After all, behind every existing deduction stands a powerful constituency. The elimination of *all* deductions, for example, probably would encounter heated resistance from special interest groups and lobbies representing churches, schools, state and local governments, the real estate and housing industries, oil and gas properties, veterans, the elderly, women's groups, Wall Street interests, and many others. And, if a single exception (such as mortgage interest deductions) were allowed, there would be a "stampede" of other special interest groups to get their exemptions.

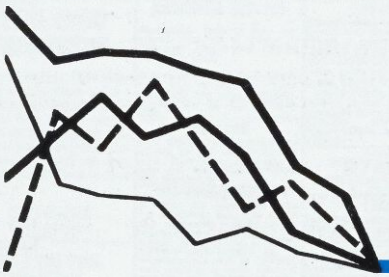
For the legislator, then, broadening the tax base implies taking away tax favors rather than giving them out. Consequently, Congress can be expected to resist giving up some of its discretionary powers. Thus resistance to a flat-rate tax scheme can be expected from both the suppliers and demanders of special tax breaks.

Welfare Reform Through a Negative Income Tax

The introduction of a simple income exemption also opens up the opportunity to combine welfare reform with tax reform. This can be done by substituting the negative income tax for current welfare programs. Under a negative income tax, "taxpayers" with lower incomes would receive negative tax payments directly from the Treasury. Their taxes would be negative, rather than zero. The shaded portion of the accompanying table, illustrates that applying the same arithmetic of

Table. A Progressive Flat-Rate Tax

Income Level	Flat-Rate Tax on Total Income	Flat-Rate Tax on all but the first $5000 of Income	Flat-Rate Tax on all but the first $10,000 of Income	Flat-Rate Tax on all but the first $12,500 of Income
Flat-Tax rate to equalize taxes paid on median income of $25,000	10%	12½%	16⅔%	20%
15,000	10% on $15,000 = $1500 or **10%** of income	12½% on $10,000 = $1250 or **8⅓%** of income	16⅔% on $5000 = $833 or **5½%** of income	20% on $2500 = $500 or 3⅓% of income
20,000	10% on $20,000 = $2000 or **10%** of income	12½% on $15,000 = $1875 or **9⅜%** of income	16⅔% of $10,000 = $1666 or **8⅓%** of income	20% on $7,500 = $1500 or **7½%** of income
25,000	10% on $25,000 = $2500 or **10%** of income	12½% on $20,000 = $2500 or **10%** of income	16⅔% on $15,000 = $2500 or **10%** of income	20% on $12,500 = $2500 or **10%** of income
37,500	10% on $37,500 = $3750 or **10%** of income	12½% on $32,500 = $4063 or **10.8%** of income	16⅔% on $27,500 = $4583 or **12.2%** of income	20% on $25,000 = $5000 or **13.3%** of income
50,000	10% on $50,000 = $5000 or **10%** of income	12½% on $45,000 = $5625 or **11¼%** of income	16⅔% on $40,000 = $6667 or **13⅓%** of income	20% on $37,500 = $7500 or **15%** of income
100,000	10% on $100,000 = $10,000 or **10%** of income	12½% on $95,000 = $11,875 or **11⅞%** of income	16⅔% on $90,000 = $15,000 or **15%** of income	20% on $87,500 = $17,500 or **17½%** of income
500,000	10% on $500,000 = $50,000 or **10%** of income	12½% on $495,000 = $61,875 or **12⅜%** of income	16⅔% on $490,000 = $81,666 or 16⅓% of income	20% on $487,500 = $97,500 or **19½%** of income
1,000,000	10% on $1,000,000 = $100,000 or **10%** of income	12½% on $995,000 = $124,375 or **12⅜%** of income	16⅔% on $990,000 = $165,000 or **16½%** of income	20% on $987,500 = $197,000 or **19¾%** of income
10,000	10% on $10,000 = $1000 or **10%** of income	12½% on $5,000 = $625 or **6¼%** of income	16⅔% on zero = zero or **0%** of income	20% on −$2500 = −$500 or **−5%** of income
7,500	10% on $7500 = $750 or **10%** of income	12½% on $2500 = $313 or **4⅛** of income	16⅔% on $2500 = −$417 or **−5½%** of income	20% on −$5000 = −$1000 or **−13⅓%** of income
5,000	10% on $5000 = $500 or **10%** of income	12½% on zero = zero or **0%** of income	16⅔% on −$5000 = −$833 or **−16⅔%** of income	10% on −$7500 = −$1500 or **−30%** of income
2,500	10% on $2500 = $250 or **10%** of income	12% on −$2500 = −$313 or **−4** ⅛ of income	16⅔% on −$7500 = −$1250 or **−50%** of income	20% on −$10,000 = −$2000 or **−80%** of income



the flat-rate tax with exemption produces a negative income tax at incomes below the exemption level.

Milton Friedman summarized the advantages of such a negative income tax system 20 years ago.

> "The advantages of this arrangement are clear. It is directed specifically at the problem of poverty. It gives help in the form most useful to the individual, namely, cash. It is general and could be substituted for the host of special measures now in effect. It makes explicit the cost borne by society. It operates outside the market. Like any other measures to alleviate poverty, it reduces the incentives of those helped to help themselves, but it does not eliminate that incentive entirely, as a system of supplementing incomes up to some fixed minimum would. An extra dollar earned always means more money available for expenditure."[6]

Under a 16 2/3 percent flat-rate tax with a $10,000 exemption, for example, a $2,500 income would "pay" a minus $1,250 in taxes, implying a negative tax rate of minus 50 percent. That would carry the progressivity of the flat-rate tax down through the exemption level, offering the much-discussed advantages of simplicity, direct delivery and elimination of the disincentive effects of current welfare programs.

Conclusion

In theory, a flat-rate income tax would save taxpayers and the government considerable time and money by simplifying the tax laws. It would also make the tax system fairer and more equitable by reducing deductions, exemptions and loopholes. By including some degree of progressivity, and/or a negative income tax scheme, it also could protect the poor. Finally, it would broaden the tax base, thus reducing people's incentive to avoid the tax laws, and would allow for a significant lowering of marginal tax rates.

Despite these advantages, the flat-rate proposal faces serious economic and political obstacles. The shift to a flat-rate tax would disrupt investments and other business plans based on the present system. Depending on exactly what version of the flat-rate tax was adopted, the tax also could be vulnerable to charges of inequities—helping the wealthy more than middle-income taxpayers. Finally and perhaps most damaging to the proposal's chances, eliminating all deductions, exemptions and loopholes would meet resistance from a broad range of special interest groups.

Much of the flat-rate tax's appeal rests on its dramatic simplicity. Paradoxically, however, its chances for enactment will depend on the delicate balancing of economic and political complexities.

—Robert E. Keleher
William N. Cox
and William P. Orzechowski

Orzechowski is assistant professor of economics at George Mason University.

[6]Milton Friedman, **Capitalism and Freedom**, Chicago: University of Chicago Press, 1962, p. 192.

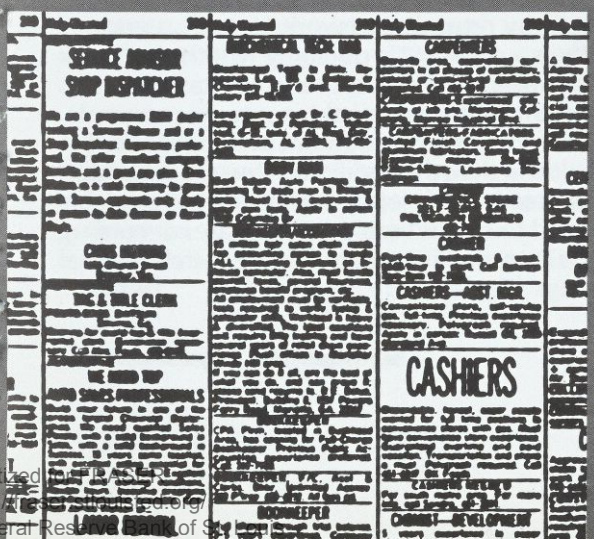
Does Unemployment Insurance Affect the Composition of Joblessness?

When Georgia unemployment insurance benefits went up . . .

— employers were more likely to resort to temporary layoffs...

— the share of men and older workers on temporary layoff tended to increase...

— as temporary layoffs increased, the average duration of unemployment declined.



U.S. unemployment insurance programs are designed to provide temporary maintenance for unemployed workers and to allow them to refuse jobs substantially below their skill levels. In the current debate over how to reduce the nation's chronically high unemployment rate, many argue that liberal benefits tend to increase the unemployment level by lengthening the job search.[1] Studies suggest, in fact, that increased unemployment insurance (UI) benefit levels will increase unemployment by increasing its mean duration.[2]

As Martin Feldstein has noted, the concentration of previous research on UI's effects on the duration of unemployment is both unfortunate and surprising, since UI can actually increase the volume of unemployment while simultaneously reducing its mean duration.[3] By providing benefits that offset a high proportion of lost after-tax wages, the system of unemployment insurance could increase the frequency of very short spells of unemployment. The average duration of unemployment might then fall while the percent of the labor force unemployed increased.

In this article, we review the rationale for this effect and then examine another, widely ignored, effect of unemployment benefits. We find that the unemployment insurance system is changing the composition of unemployment from indefinite unemployment to temporary. Our study of Georgia, for example, showed that the 1981 increase in maximum benefits from $95 to $115 resulted in a 2 percent increase in the share of unemployed on temporary layoff.

Examining UI's Effects on Frequency of Unemployment

In the absence of UI, firms would be more reluctant to lay off workers for short spells in response to an unexpected reduction in demand. The perceived risk of losing trained workers to other firms would serve as a restraint. The existence of UI lessens this risk by significantly reducing workers' economic incentive to seek jobs while on temporary layoff. This tendency is likely to be greater for those on temporary layoff versus

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[1]Kathleen Classen, "The Effects of Unemployment Insurance on the Duration of Unemployment and Subsequent Earnings," **Industrial and Labor Relations Review** (June 1977), pp. 438-444.

[2]Dale T. Mortensen, "Job Search, The Duration of Unemployment and the Phillips Curve," **American Economic Review** (April 1977), pp. 847-862.

[3]Martin Feldstein, "Unemployment Compensation: Adverse Incentives and Distributional Anomalies," **National Tax Journal** 27 (June 1974), pp. 231-234.

those on indefinite layoff. It is important to note that our focus is not on whether UI increases the overall length of unemployment. Instead, this analysis deals exclusively with whether UI shifts the composition of the unemployed toward temporary as opposed to indefinite unemployment.

Our primary objective was to determine the degree to which unemployment compensation increases the probability that a worker will be laid off on a temporary basis rather than indefinitely. For our purposes, an unemployed person is considered to be on temporary layoff if he expects to be recalled by his previous employer.[4]

To measure the consequence of unemployment insurance on temporary layoffs, we used two variables designed to represent the extent to which unemployment compensation replaces net-of-tax foregone wages. First, we used marginal benefit replacement rates (MBRR), which represent the extent to which unemployment compensation replaces foregone wages at the margin. Next, we replaced this measure with a weighted average replacement rate with weights reflecting the share of income represented by different marginal net replacement rates. Our hypothesis would be supported, for instance, if people with higher replacement rates have a greater likelihood of being on temporary layoff than those with lower replacement rates.

Our second objective was to examine whether socio-demographic factors such as age, race, sex, marital status and education affect the probability of a worker's being laid off temporarily rather than indefinitely. Is an older worker, for example, less likely to be laid off indefinitely because firms fear losing experienced workers to other companies?[5]

Replacement Rates

Slightly over three-fifths of the 223 unemployed individuals we studied in Georgia were on temporary layoff (that is, they expected to be recalled by their previous employer). Unemployment compensation replaced an average of 67 percent of prior net wages. Married men, however, could replace only 61.5 percent of net-of-tax prior earnings, while married women were able to offset nearly 71 percent of their prior after-tax wages. Slightly over half (53 percent) of the sample was male and roughly the same proportion was married. The typical unemployed UI claimant was 34 years old and had completed 11 years of schooling. Finally, 58 percent of the claimants were white and 17 percent had completed some type of vocational training.

"The 1981 increase in Georgia maximum benefits from $95 to $115 resulted in a 2 percent increase in the share of unemployed on temporary layoff."

The average family income of female applicants was $18,930 per year in 1981 (Table 1). Married women's income was responsible for as much as 45.4 percent of the typical husband-wife annual employment income. Taking federal, state, and Social Security taxes as well as personal exemptions into consideration, and assuming the standard deduction, the marginal tax rate on the last dollar of the wife's wages was 33.8 percent. Finally, taking into account that Georgia's UI pays 50 percent of the average weekly wages during the high-quarter, married women were able to replace as much as 70.7 percent of the after-tax wages they could have earned by returning to work at the prior wage (Chart 1). However, forty percent of the married women could replace from 72 to 84 percent of what they would earn in disposable income by returning to work.

When a claimant is deciding whether to work or not work, perhaps the average tax rate is as important as the marginal tax rate. For example, the first dollar of employment income is taxed at a rate lower than the last dollar. Thus we calculated a weighted benefit replacement rate with weights assigned to benefit replacement rates according to their respective share of the wife's annual earnings (Table 2).

[4]So measured, it is a binary dependent variable which assumes a value of one if he is on temporary layoff and zero otherwise.

[5]The statistical examination was conducted using the linear probability model. However, problems usually associated with this model were not a particular handicap to our study. The primary difficulty with the model is with the unconstrained predicted values falling outside of the 0-1 probability range of the binary dependent variable. To determine the importance of this problem with our study, we reported the predicted values of the ordinary least squares equations. In only 4.5 percent of the 223 observations in our sample did predicted values lie outside the 0-1 range. Performing the tests without these values did not significantly alter the results. Therefore, the linear probability model provided reliable estimates of the importance of unemployment compensation and other socio-demographic variables on temporary layoff probability.

Table 1. Distribution of Married Females by Family Income, Benefit Replacement Rate, and Age
(percent)

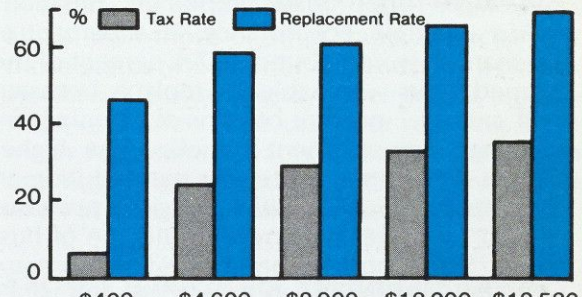
Category	Sample Proportions, Means and Medians		
	Minimum	Maximum	Mean
Benefit Replacement Rate (percent)	100.0	100.0	100.0
54.2 – 60.2	4.7	4.7	4.7
60.3 – 66.3	34.4	28.1	31.3
66.4 – 72.4	23.4	25.0	24.2
72.5 – 78.5	20.3	26.6	23.5
78.6 – 84.7	17.2	15.6	16.4
Mean Ratio	70.4	71.0	70.7
Median Ratio	70.2	70.2	—
Family Income (dollars)	100.0	100.0	100.0
Under 10,000	34.4	29.7	32.1
10,000 – 20,000	29.7	21.9	25.8
20,000 – 30,000	23.4	26.6	25.0
30,000 and over	12.5	21.9	17.2
Mean Income	$17,703	$20,157	$18,930
Median Income	$16,320	$18,319	—
Age	—	—	100.0
25 – 34	—	—	15.6
35 – 44	—	—	35.9
45 – 54	—	—	14.1
55 and over	—	—	10.9
Mean Age	—	—	37.0
Median Age	—	—	33.0

Source: Federal Reserve Bank of Atlanta.

Although this weighted benefit replacement rate for married women is lower than the marginal benefit replacement rate, it is still surprisingly high. The mean was 66.2 percent compared to 70.7 percent for the marginal benefit replacement rate.

Married men in the sample lived in families with lower combined incomes than married women, but had higher annual employment incomes than women—$12,925 vs. $8,602. Married men were also older than married women, having a median age of 36 compared with 33, which partly explains their higher income. However, higher employment income for married men also reduces the share of their net-of-tax wages that potentially can be replaced by unemployment compensation (Tables 3 and 4).

Chart 1. Marginal Tax Rate and Benefit Replacement Rate by Income for Married Female*



*Combined family income totaled $19,520 in this case. Of this amount, $6,000 was earned by the female's spouse. Figures based on household of four.

Source: Federal Reserve Bank of Atlanta

Table 2. Distribution of Married Females by Wife's Earnings, Benefit Replacement Rate, and Marginal Tax Rate
(percent)

Category	Sample Proportions, Means and Medians		
	Minimum	Maximum	Mean
Benefit Replacement Rate – Weighted Average (percent)	100.0	100.0	100.0
53.4 – 59.4	23.4	20.3	21.9
59.5 – 65.5	26.6	20.3	23.5
65.6 – 71.6	29.7	28.1	28.9
71.7 – 77.7	17.2	25.0	21.1
77.8 and over	3.1	6.3	4.7
Mean Ratio	65.7	66.6	66.2
Median Ratio	65.1	66.6	—
Marginal Tax Rates (percent)	100.0	100.0	100.0
Under 24	25.0	21.9	23.5
24 – 30	20.3	20.3	20.3
31 – 40	26.6	18.8	22.7
Over 40	28.1	39.1	33.6
Mean Rate	32.8	34.8	33.8
Median Rate	33.3	33.3	—
Wife's Earnings (dollars)			
Over 3,000	—	—	100.0
Over 5,000	—	—	96.9
Over 7,000	—	—	73.4
Over 9,000	—	—	34.4
Over 11,000	—	—	15.6
Over 13,000	—	—	6.3
Mean Earnings			8,602
Median Earnings			8,320

Source: Federal Reserve Bank of Atlanta

Averages often mask important variations within a sample. For instance, 16.4 percent of the married women but only 7.4 percent of the married men were able to replace between 78.4 and 84.7 percent of prior net earnings by drawing unemployment benefits. The higher benefit replacement rates for married women stem from the high initial marginal tax rates caused by higher employment income of husbands. Since most husband-wife families combine their incomes for tax purposes, the wife's income is taxed at rates determined by the higher earnings of her spouse. Furthermore, since women generally earn less than men, the first dollar of a wife's earnings is subject to higher marginal tax rates than the first dollar of a husband's wage income. These higher tax rates tend to make nontaxable income and benefits more valuable to married women than to married men. Other things being equal, lower employment income and higher marginal tax rates produce higher benefit replacement rates for women. Theoretically, married females' labor force participation rates would tend to be more sensitive to reduction in marginal tax rates.

Our final sub-group consisted of 113 single individuals about evenly divided between men and women. As was true of married males and married females, single men earned more than

Table 3. Distribution of Married Males by Family Income, Benefit Replacement Rate, and Age
(percent)

Category	Sample Proportions, Means and Medians		
	Minimum	Maximum	Mean
Benefit Replacement Rate (percent)	100.0	100.0	100.0
Under 54.2	26.1	25.0	25.6
54.2 – 60.2	9.1	9.0	9.1
60.3 – 66.3	26.1	20.5	23.3
66.4 – 72.4	25.0	23.9	24.5
72.5 – 78.5	9.1	11.4	10.3
78.6 – 84.7	4.6	10.2	7.4
Mean Ratio	61.1	61.9	61.5
Median Ratio	64.9	65.2	—
Family Income (dollars)	100.0	100.0	100.0
Under 10,000	17.1	17.1	17.1
10,000 – 15,000	34.1	26.1	30.1
15,000 – 20,000	25.0	27.3	26.2
20,000 – 25,000	13.6	18.2	15.9
25,000 and over	10.2	11.4	10.8
Mean Income	$15,840	$16,618	$16,229
Median Income	$14,840	$15,600	—
Age (years)	—	—	100.0
Under 25	—	—	8.0
25 – 34	—	—	37.5
35 – 44	—	—	28.4
45 – 54	—	—	15.9
55 and over	—	—	10.2
Mean Age	—	—	38.0
Median Age			36.0

Source: Federal Reserve Bank of Atlanta

single women—$11,424 compared to $8,222. Lower wages for single women are also consistent with our findings that single women were an average 3.6 years younger than single men. Employment income enabled single women to replace 67.1 percent of potential wages compared to 64.6 percent for single men, despite higher marginal tax rate for men.

These results are not substantially different from those found by others. Feldstein noted that for families in which the husband earned the median male earnings and the wife is unemployed but earned 70 percent of the median of females, the mean benefit replacement rate was 77 percent. The slight difference in results suggests that Georgia's UI law is less liberal than those of other states, especially for those states which offer dependency benefits. However, Georgia's slightly lower benefit replacement rate offers little cause for rejoicing. High mean replacement rates, even for those with low wages, suggest that the disincentive effect of UI in Georgia should not be ignored.

Factors Influencing Temporary Layoff

Our tests showed that the marginal benefit replacement rate had a statistically significant effect on the probability of being temporarily laid off. The age and sex of the individual were

Table 4. Distribution of Married Males by Husband's Earnings, Benefit Replacement Rate, and Marginal Tax Rate
(percent)

Category	Sample Proportions, Means, and Medians		
	Minimum	Maximum	Mean
Benefit Replacement Rate – Weighted Average (percent)	100.0	100.0	100.0
Under 53.4	25.0	23.9	24.5
53.4 – 59.4	28.4	26.1	27.3
59.5 – 65.5	25.0	23.9	24.5
65.6 – 71.6	14.8	13.6	14.2
71.7 – 76.9	6.8	12.5	9.7
Mean Ratio	56.5	57.3	56.9
Median Ratio	58.9	59.4	—
Marginal Tax Rates (percent)	100.0	100.0	100.0
Under 24	14.8	14.8	14.8
24 – 30	39.8	35.2	37.5
31 – 40	36.4	34.1	35.3
Over 40	9.1	14.8	12.0
Mean Rate	29.5	30.4	30.0
Median Rate	29.1	29.6	—
Husband's Earnings (dollars)			
Over 3,000	—	—	100.0
Over 7,000	—	—	88.6
Over 11,000	—	—	59.1
Over 15,000	—	—	27.3
Over 19,000	—	—	14.8
Over 23,000	—	—	6.8
Mean Earnings			12,925
Median Earnings			11,752

Source: Federal Reserve Bank of Atlanta

"The higher benefit replacement rates for married women stem from the high initial marginal tax rates caused by higher employment income of husbands."

also important determinants of temporary layoff. Education, marital status, vocational training, and ethnic group, however, seemed insignificant. When we used the weighted average replacement rate, the results were similar but not as significant as the marginal replacement rate.

These results imply, for example, that a one percentage point increase in the percentage of previous wage income replaced by UI raises the fraction of the unemployed on temporary layoff by a half percentage point. We also found that each year of age adds fully one percentage point to this fraction and that men

Table 5. Factors Influencing Temporary Layoff Unemployment For Single Women and Men

	Single Women					Single Men				
		Regression Coefficients					Regression Coefficients			
Variable	Mean	(1)	(2)	(3)	(4)	Mean	(1)	(2)	(3)	(4)
Marginal Benefit Replacement Rate	.67	.317		.467[b]		.65	.507		.699[a]	
		(.772)		(.294)			(.644)		(.306)	
Average Benefit Replacement Rate	.62		.085		.463[b]	.60		.581		.753[a]
			(.818)		(.319)			(.653)		(.325)
Ethnic Group (White=1)	.38	.302[b]	.290[b]	.328[a]	.328[a]	.52	−.213	−.215	−.187	−.188
		(.157)	(.157)	(.148)	(.148)		(.143)	(.142)	(.140)	(.140)
Age	31.92	.004	.006	.003	.003	27.70	.010[a]	.010[a]	.009[b]	.009[b]
		(.007)	(.007)	(.006)	(.006)		(.006)	(.006)	(.006)	(.006)
Education	11.12	.008	.018			11.26	.006	.005		
		(.036)	(.035)				(.033)	(.032)		
Vocational Training (Yes=1)	.16	−.153	−.171			.18	.206	.210		
		(.203)	(.203)				(.190)	(.189)		
R^2		.136	.133	.126	.118		.072	.075	.044	.047
F-statistic		1.778	1.732	3.374	3.151		.872	.917	1.089	1.160
Mean of Dependent Variable		.520	.520	.520	.520		.600	.600	.600	.600
Sample Size		50	50	50	50		50	50	50	50

Note: Numbers in parentheses are standard errors of regression coefficients.
a – significant at 5 percent level
b – significant at 10 percent level

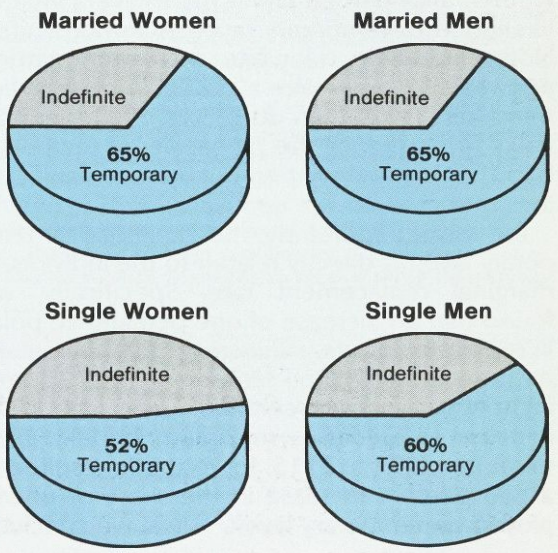
are 10 percent more likely to be on temporary as opposed to indefinite layoff than women.

For single women, a one point increase in their replacement rate will result in a 0.47 point increase in the percent of unemployed women on temporary layoff. For single men, on the other hand, a one point increase in their replacement rate will result in a 0.70 point rise in this percentage. Unemployed nonwhite single men have a greater likelihood of being on temporarily layoff than whites.

Age, a proxy for seniority, is the most significant factor among married females (Table 5). Each additional year adds two percentage points to their likelihood of temporary layoff compared to the indefinite alternative. For married males, the level of benefits was the most significant factor. A one point increase in the replacement rate increases the likelihood of temporary layoff by 0.47 percentage points. Unemployed whites are 18 percent more likely to be on temporary layoff than nonwhites.

In summary, the regression results imply a significant relationship between demographic characteristics and temporary layoff probability. Age is positively related to this probability in all cases, implying an additional year of experience

Chart 2. Percent of Unemployed Who Expect to be Recalled



Source: Continued Wage and Benefit History (CWBH) project (Georgia State Department of Labor).

Table 6. Factors Influencing Temporary Layoff Unemployment For Married Women and Men

	Married Women					Married Men				
		Regression Coefficients					Regression Coefficients			
Variable	Mean	(1)	(2)	(3)	(4)	Mean	(1)	(2)	(3)	(4)
Marginal Benefit Replacement Rate	.70	.833[b]	.071			.60	.502[b]	.474[a]		
		(.562)	(.249)				(.336)	(.271)		
Average Benefit Replacement Rate	.65			.438	.005	.55			.519[b]	.503[a]
				(.558)	(.263)				(3.59)	(.294)
Ethnic Group (White=1)	.78	−.198	−.162	−.163	−.145	.61	.179	.178	.186	.185
		(.144)	(.143)	(.146)	(.143)		(.124)	(.122)	(.124)	(.122)
Age	37.13	.018[a]	.020[a]	.020[a]	.020[a]	37.62	.007[b]	.007[b]	.007[b]	.007[b]
		(.004)	(.004)	(.004)	(.004)		(.005)	(.005)	(.005)	(.005)
Education	10.52	−.042[b]		−.023		10.42	−.001		.000	
		(.028)		(.026)		.22	(.019)		(.018)	
Vocational Training (Yes=1)	.11	.040		.030			−.039		−.040	
		(.182)		(.185)			(.142)		(.142)	
R^2		.320	.288	.300	.287		.067	.066	.065	.064
F-statistic		5.754	10.304	5.198	10.248		1.156	2.334	1.119	2.262
Mean of Dependent Variable		.648	.648	.648	.648		.652	.652	.652	.652
N		54	54	54	54		69	69	69	69

Note: Numbers in parentheses are standard errors of regression coefficients.
a – significant at 5 percent level
b – significant at 10 percent level

will increase the likelihood of temporary versus indefinite layoff. Unemployed men have a greater likelihood of assignment to temporary layoff than women (Chart 2). Single white women and married white men have a greater likelihood of temporary layoff than nonwhites. However, single nonwhite men and married nonwhite women have a greater probability of temporary layoff than do whites. Higher educational levels reduce the probability of temporary layoff for married women but are not significant for other groups.

But more importantly, the likelihood of temporary layoff is directly related to the individual's marginal replacement rate. Specifically, we found that an increase of one percentage point in replacement rate will increase the percentage of the unemployed on temporary layoff approximately one-half percentage point. The 1981 increase in Georgia's maximum benefit allotment from $95 to $115, for example resulted in a two percent increase in the share of unemployed on temporary layoff.[6] Thus, we conclude that the UI system is changing the structure of unemployment toward more temporary layoffs. In particular, those people with more seniority and those whose UI benefits replace a large portion of previous net income are more likely to be on temporary than indefinite layoff. Although the empirical results are only moderately significant, the effects are sufficiently important to warrant further research in this area.

"The likelihood of temporary layoff is directly related to the individual's marginal replacement rate."

[6]The maximum benefit allotment change resulted in an increase from 67.09 to 71.33 in the mean marginal replacement rate. Since a one point increase in the replacement rate raises temporary layoff incidence .5 percent, a 4.24 point increase results in a two percent increase in temporary layoffs.

DATA SOURCE AND SYSTEM PARAMETERS

The data used in performing the empirical tests come from the Georgia Department of Labor's surveys of new applicants for unemployment insurance under the Continuous Wage and Benefit History (CWBH) project. Response to the questionnaire is completely voluntary, yet the response rate is high because many participants believe that failure to complete the questionnaire will delay processing of their claim. Ten percent of all claimants are selected at random based upon the last four digits of their social security number. Since the sample is drawn from the population of all new UI claims applicants, many responses are from individuals whose claims are not valid. The sample size is determined by the number of people who file applications. For example, there were approximately 46,000 unemployment insurance applications filed in the state during December 1981. So the 10 percent sample comprised 4,600 questionnaires being mailed in the month of December.

The purpose of the CWBH is to obtain economic and demographic characteristics of the applicants. Thus, such information regarding the applicant's age, sex, race, and marital status provides the basic demographic characteristics necessary for our study. Number of dependents, the worker's previous wages, his reason for being unemployed, whether or not he expects to be recalled, and income of other members of the household provide the basic economic information. Combining the economic and demographic data from CWBH with some basic parameters of the unemployment insurance system enabled us to compute benefit replacement rates for 265 individuals in Georgia who were presumably unemployed.

To be eligible for unemployment compensation in Georgia, the applicant must have earned a minimum amount and those earnings must have been earned in more than one calendar quarter during the base-period. The purpose of these requirements is to limit eligibility only to those who have been genuinely attached to the labor force of covered workers.

To be sure, the Georgia UI system has no explicit minimum period of work or eligibility. However, the stipulation that base-period wages are more multiple in excess of unity of high-quarter wages indirectly requires more than one quarter of employment. To be eligible for minimum benefits in Georgia, the applicant must have earned a minimum of $413 during the base-period defined as the first four of the last five completed calendar quarters preceding the date the claim is filed. Moreover, at least $275 of the base-period wages must have been earned in one of the four calendar quarters that constitute the base period.

To be eligible for the maximum benefit under the current Georgia system, the claimant must have had wages of at least $2,225 in one quarter of the base-period and aggregate base-period wages must have been at least $3,338 during this period. There is a one-week waiting period before the benefit year begins.[1]

The actual weekly benefit amount is computed as 4 percent of the applicant's high-quarter wages plus one dollar. Unlike 13 other states, Georgia's UI system offers no allowance for dependents of the claimant. Since there are 13 weeks in the statistical quarter, a weekly benefit amount of 4 percent of high-quarter wages is slightly more than half (52 percent) of the average weekly wages earned during the high-quarter.

The applicant who qualifies for Georgia's unemployment insurance is eligible to receive those benefits up

1. Under Georgia law, the one-week waiting requirement does not apply to those who have lost their job due to reasons other than refusal to work.

to a maximum of 26 weeks. With a minimum weekly benefit of $115, the maximum amount of benefit comes to $2,990. In April 1981, 56 percent of those who receive UI in Georgia received between $88 and $96 per week. Recipients are also allowed to earn up to $8 per week, which does not affect benefits.

Figuring the Cost of Remaining Unemployed

In evaluating the cost of remaining unemployed, the rational job seeker should compare UI benefit levels with net-of-tax potential wages from accepting a specific job offer. The potential disincentive effect of unemployment compensation can perhaps be understood better by thinking of unemployment benefits as imposing a high tax on employment income if the individual returned to work. This "net tax rate" is the UI benefits that the individual foregoes relative to net after-tax wage income gained from returning to work. So defined, such a tax rate measures the extent to which unemployment compensation replaces prospective after-tax employment income. In cases in which the insured unemployed lives in a family where other employment income exists, the marginal tax rate is determined by the combined family income.

After-tax wages are more relevant for those whose unemployment insurance benefits are not taxable. However, when wages exceed $25,000 per year for joint filers and $20,000 per year for individuals, one-half of UI benefits is subject to federal income taxes at ordinary rates. This widely overlooked observation in existing UI research tends to understate the net cost of remaining unemployed to higher income families and individuals making for measurement errors in those studies. After-tax UI benefits should, therefore, be compared with after-tax wages to more accurately capture the net cost of remaining unemployed. Therefore, the relative cost to a member of a two-income family of remaining unemployed, C, may be stated conditionally as:

$$(1)\quad C = \begin{cases} \dfrac{B}{W_p\,(1-t)}, & \text{for } W_p + B \leqq 25{,}000 \\ \dfrac{B(1-\frac{1}{2}t)}{W_p(1-t)}, & \text{for } W_p + B > 25{,}000 \end{cases}$$

where W_p is the individual's potential weekly wage, t is the marginal tax rate applied to those wages, and B is the weekly benefit allowance from unemployment insurance.

Ideally, Wp would be the individual's post-unemployment wage. However, post-unemployment wages are unobservable from our data source. Some authors have used alternative data sources where pre-unemployment and post-unemployment wages are directly observable. Others have used a measure of the discounted present value of wages from expected future job offers. Given data limitations and time constraints, we assumed that the individual's pre-unemployment and post-unemployment wages were equal.

In summary, we computed marginal tax and benefit replacement rates for levels of earnings consistent with applicable ranges in computing federal income taxes. Since Georgia's taxable income brackets were not compatible with those of the federal income tax, the applicable marginal state tax rate is a weighted average of that portion of income that lies in the federal income tax range. Finally, weighted overall marginal tax and benefit replacement rates were computed on the total annual earnings.

—Charlie Carter
and Edward Waller

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Supply-Side Economics: Guiding Principles for the Founding Fathers

Not only did leading American statesmen identify with the supply-side views of Locke, Montesquieu, and the Physiocrats in the 18th century, but those supply-side views were popularized in America through the pamphlets of Trenchard and Gordon.

Supply-side views were the very essence of the economic principles serving to inspire the American Revolution and to guide the architects of the U.S. Constitution. Supply-side economic principles, then, constitute a re-emergence of the economic principles governing the founders of the American experience—in a sense, an American Renaissance.

A reaction to mercantilist economic policies of government intervention and planning as well as high tax rates served to unite the American colonies into revolt and to inspire the Founding Fathers. And it was the English Whig-Libertarian heritage that served as the philosophical base upon which these principles developed.

It is ironic that so much opposition to supply-side economic policies has arisen in a country where these principles were part of its conception, a country that has prospered and developed largely as a result of its supply-side foundations.

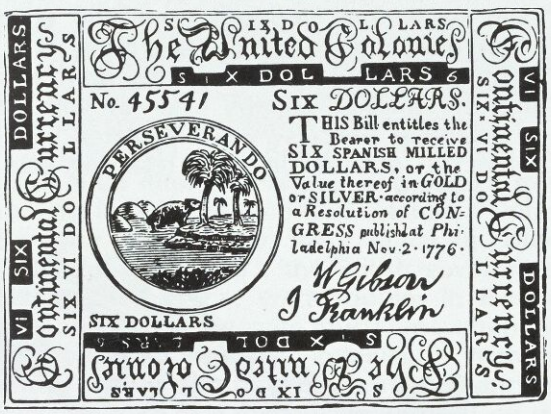
Essential Features of Supply-Side Economics

Supply-side economics recognizes that human behavior responds to changes in economic incentives. In other words, the quantity supplied and demanded responds to price. Since taxes *always* affect the prices paid and received for goods and services, poor economic performance is related to the existence of high tax rates and regulatory burdens on work, saving, and output. Supply-siders contend that if you want more of something, tax it less. Consequently, to get more work, saving, and output, these economists recommend lowering tax rates on these activities. Thus, supply-side economics has to do with the use of fiscal and regulatory policy to increase production and aggregate supply by making work more attractive than nonwork and saving more attractive than nonsaving. In short, supply-side economics focuses on the effects that tax rates have on relative prices, aggregate supply, and, hence, economic growth.

There are three basic elements of this view. **First,** and probably most fundamental, is the idea that changes in (marginal) tax rates *are* changes in relative prices and, consequently, will always affect choice, the allocation of resources, and real economic activity. Accordingly, changes in tax rates will have important repercussions on individuals' incentives to supply labor and capital to the market. Tax-induced relative price changes affect choices between (1) work and leisure, (2) consumption and saving, and (3) market activity and nonmarket activity. Consequently, reductions in tax rates—by inducing shifts from leisure to work, from consumption to saving, and from nonmarket activity to market activity—have important implications for changes in aggregate

supply and economic growth. In sum, supply-side economists view changes in tax rates as incentive changes rather than income changes.

A **second fundamental element** of supply-side economics is the relationship between tax rates and output. Specifically, when tax rates are near zero, output is low because certain essential public goods are not being provided. Examples of such goods might include justice (a conducive legal framework), defense, law and order, the maintenance of roads, and primary education. As tax rates rise, these essential public goods and services are provided and economic activity expands. That is, the provision of these public goods contributes to rapid increases in the productive efficiency of capital and labor and, consequently, output. At this initial stage, the effects of these increases in productive efficiency outweigh (or increase faster than) any disincentive effects of higher tax rates (i.e., efficiency gains due to government expenditures are greater at initial stages than efficiency losses due to increased tax rates).



"Supply-siders contend that if you want more of something, tax it less."

However, as tax rates are increased further, disincentives and inefficiencies due to these higher tax rates begin to emerge. Increased tax rates alter relative prices and cause the after-tax rewards to saving, investing, and working for taxable income to decline. Individuals, then, have less incentive to save, invest, and work for taxable income. Consequently, people shift out of these activities into leisure, consumption, tax shelters, and working for nontaxable income. As a result, the market supply of goods and services—that is, aggregate supply and, hence, economic growth—is less than would otherwise be the case. At the same time, public good-induced improvements in the productive efficiency of factors increase at a *slower* rate (because fewer essential public goods are provided). Consequently, output gains become smaller and smaller. Eventually, total output peaks and begins to decline as the efficiency gains due to government expenditures are more than offset by efficiency losses and disincentives due to high tax rates. Additional tax rate increases lead to even further declines as factor supplies continue to be withdrawn from production.

This relationship between aggregate market output and tax rates represents the basic concern of the supply-side view, which is to support those public policies under which economic growth is maximized. The fact that tax rate changes affect the supply of factors of production and, in turn, aggregate supply implies that tax rate changes also have implications related to tax revenues. In particular, tax revenue is equal to the product of the tax rate times the tax base. Since tax rate changes affect aggregate supply, these rate changes also affect the tax base—sometimes in the opposite direction. This recognition has led to the explicit depiction of the relationship between tax rates and tax revenues or the Laffer curve. The Laffer curve is essentially a by-product of the above relationship between tax rates and output.

A **third** basic element of supply-side economics is the recognition that the various relationships of changes in tax rates to incentives, factor supplies, output, and tax revenues are long-run relationships. All economists recognize that elasticities become larger the longer the time frame under consideration. Hence, the longer the time frame, the more potent will supply-side tax cuts become. Supply-side economics, then, relates to policies for long-run economic growth and not to policies for smoothing the business cycle—it pertains to growth, not stabilization.

The Mercantilist Era

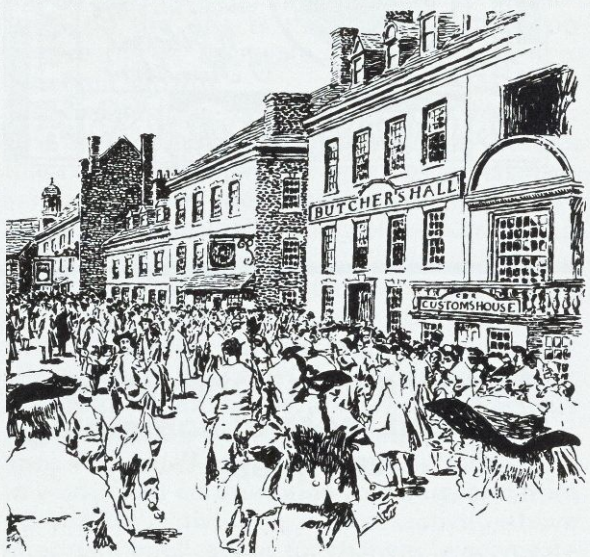
To understand both the reasons for the American Revolution and the philosophical underpinnings and economic principles guiding the Founding Fathers, we need to appreciate the economic circumstances and environment of the mid-18th Century. This period was dominated by mercantilist thought and mercantilist economic policies, consisting of various forms of governmental intervention and control of both the domestic and colonial economies. Mercantilists "considered it one of the functions of government to guide, encourage, and direct economic activity,"[1] i.e., "to promote the national interest through economic controls."[2]

Governmental intervention took the form of strict regulation of markets and guilds, the fixing of prices, wages and interest rates,[3] quotas, licensing for export and import trade, royal or state enterprise, public works, paternalism, the subsidization of certain industries, grants of monopoly charters and patents, and all sorts of special restrictions on economic activity in the colonies. Special interest groups were able to obtain governmental favors ranging from price-fixing to the exclusion of competitors. High tariffs and other taxes (such as transportation tolls, church taxes, and excise taxes) were commonplace. Mercantilists, then, were not at all adverse to high tax rates.

Like the tax and regulatory policies of the mercantilists, the wage policies they endorsed were intended to bring about a balance of trade surplus. Since mercantilists viewed lower production costs as being beneficial to exports and, hence, the balance of trade, they prescribed policies which promoted and maintained low costs of production, including wages, the largest component of these costs. Low wages, according to mercantilist writers, would not only contribute to low (export) production costs and, hence, to a favorable balance of trade but were also viewed as a stimulus to productive work effort. According to this "low wage doctrine," workers would increase their effort only out of necessity; if the existing structure of low wages fell, workers would increase their efforts, whereas high wages led to idleness. Necessity, then, was the mother of industry and invention, according to the mercantilists. Consequently, these writers supported policies which promoted low wages. Accordingly, mercantilists endorsed schemes to increase population growth and were not adverse to taxation on work effort, believing that if such taxes lowered (after-tax) wages, work effort, productivity, and innovative activity would increase. These writers, then, did not recognize the efficacy of positive incentives to work effort. And high rates of taxation on work effort were not at all in conflict with the mercantilist scheme.

Moreover, mercantilists viewed wealth creation as a zero-sum game, something gained at the expense of someone else. So mercantilists were more concerned with the transfer than the creation of wealth. In short, mercantilist policies were characterized by both high tax rates and a high degree of government regulation of the economy; a conspicuous feature of mercantilist policies was the royal (governmental) control of the national and colonial economy.

In accordance with their interventionist policies, mercantilists advocated the strict regulation of colonial commerce and industry because "the purpose of the colonies was to increase the wealth of the mother country by providing a market for the products of the homeland and a source of essential raw materials.... The rules and regulations imposed upon the colonies were designed to promote (the interests of the mother country)."[4] The colonies, then, existed for the mother country and—as with other mercantilist policies—were regulated with the objective of attracting and retaining gold for the mother country.[5]



British Colonial Policy and the American Colonies

British colonial economic policy was generally consistent with these mercantilist policies. The Navigation Acts of 1651 and 1660 as well as the Staple Act of 1663, for example, provide ample support for this contention. These acts provided that all colonial exports of certain goods first had to be shipped directly to England, that all exports and imports of both England and her colonies had to be carried in either English or colonial ships, and that the master and three-fourths of the crew had to be Englishmen.[6] As a further illustration, a 1699 law banned the export of colonial wool products to any foreign country or even to other colonies.[7] Moreover, the Molasses Act of 1733 forced the colonies to buy from the British West Indies when cheaper alternatives were available. Colonial merchants, then, had to ship their products first to England, pay a tax, and then reship them to the ultimate consumer. It was illegal for the colonists to buy certain products from foreign producers. They had to be sent to England for the payment of English customs duties before reshipment to the colonies.[8] These laws forced the colonies to buy directly from England, to pay English customs duties, and generally to limit the scope of colonial trading activities.[9]

Before 1763, the British government had made little effort to enforce strictly such mercantilist laws in the American colonies. "During the long series of wars with France and other nations prior to 1763, the British government had been too busy with troubles in Europe, Asia, and Africa to devote much time, attention, or effort to the American colonies."[10] With the British victory over the French in 1763 and the heavy burden that the war had placed on the treasury, however, the British decided to enforce tightly their mercantilist policies over the colonies. The national debt in Britain had, after all, nearly doubled during the Seven Years War and the debt as a percentage of national wealth was at its highest level of the 18th Century.[11] This decision to regulate more rigorously the economic life of the colonies and to increase various colonial taxes and tariffs was therefore intended (in part) to raise revenue, and thus to relieve heavy burdens on the British Treasury.

There are many examples of increased taxes and other restrictive-interventionist measures imposed by the British on the American colonies after 1763.[12]

The American Reaction

Some Background: The Evolving Influence of Liberal Economic Writings in America

John Locke

To understand the colonial reaction to these mercantilist policies, an appreciation of evolving intellectual influences on American writers and statesmen during the mid-18th Century is important. Many scholars have demonstrated the strong influence of John Locke on American writers and the influence of Lockean ideas on the American Revolution.[13]

One of Locke's most important ideas was that, as part of the "social contract" in the formation of government, men surrendered some of their freedom so that the state could protect each citizen in enjoying the fruit of his labors. Property rights guaranteed by government were a form of *protection for incentives to produce*. If a man's property could be stolen or expropriated at any moment, for example, what incentive would he have to produce and accumulate wealth? According to Locke, then, the consent of the governed was necessary before government could demand a portion of a person's property through taxes.[14] And if government infringed too much on its citizens' enjoyment of the fruits of their labor, these citizens had a right to dispose of their government. In this regard, Locke believed the role of government in the management of the economy to be a limited one. As Vaughn has indicated:

> Locke believed civil government to be naturally subordinate to the economy in its function in social life, and that the ability of the government to play an active role in the economy was therefore limited."[15]

Thus, Locke believed that in organizing economic activity, the market was superior to the "bungling of men" and consequently government should have a limited role in economic affairs.[16] All of this related to Locke's concern with economic growth. He showed that the right to own property—and hence the incentive to produce and accumulate such property—was necessary for economic well being. Locke

tried to show how a wisely administered country could be industrious and thereby grow to become wealthy.[17] Locke, then, presented some early essentials of the relationships between governmental policy, incentives to produce and accumulate, and economic growth; that is, he offered some early rudiments of supply-side economics.

The Whigs—Trenchard and Gordon

Lockean views influenced American thinkers and laymen not only directly but through the writings of other Whigs. In particular, the popular writings and pamphlets of such Whigs as John Trenchard and Thomas Gordon—whose writings were largely based on Locke—were especially influential, particularly in the American colonies.[18] Since the lay public did not read formal political theory and hence were not familiar with Locke, Trenchard and Gordon were able to spell out these views in an easily understandable form. These popular writings made possible the rapid spread of Lockean thought among the masses.

One of the elemental promises of the Whig argument presented by Trenchard and Gordon was that liberty was more important than all other concerns. To Gordon, *liberty meant the right of producers and workers to reap the rewards of their labors.*

In addition, Trenchard and Gordon indicated that incentives to work and produce were very much dependent on such just rewards:

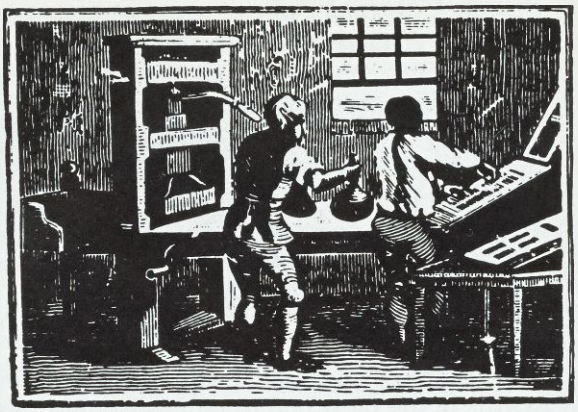
> Men will not spontaneously toil and labour but for their own advantage, for their pleasure or their Profit, and to obtain something which they want or desire, and which, for the most part, is not to be obtained but by Force or Consent."[19]

Moreover, they contended *any state that promotes such incentives by taxing less and rewarding more will produce more aggregate supply and wealth.* According to Trenchard and Gordon, only under conditions of liberty—where men were rewarded for their efforts—would commerce flourish.[20]

If governments confiscate rewards to labor and production and act in an arbitrary manner without regard to incentives, then production, growth, and the economy will languish. Under such circumstances, they argued:

> "Great Men will rather throw their Estates into Forests and Chaces, for the Support of wild Beasts, and for their own Pleasure in hunting them, than into Farms, Gardens, and fruitful Fields, if they can get nothing from the Productions of them."[21]

Trenchard and Gordon, then, writing in the early 18th century, summarized much of the essence of the supply-side position. They recognized the importance of rewards and incentives to produce and accumulate and recognized the importance of incentives in fostering economic growth. They spelled out the forms of government interference such as taxation and arbitrary behavior which would destroy these incentives and hence cause economic growth to languish.



Although their work passed into obscurity by the mid-18th century and remained there for much of the 20th, their significant influence in the American colonies has recently been reestablished by various scholars. Jacobson demonstrates, for example, that Trenchard and Gordon had a much more profound and significant affect on American colonial thinking than they had in Great Britain.[22]

"Trenchard and Gordon, writing in the early 18th century, summarized much of the essence of the supply-side position."

There is little doubt, then, that the Whig principles presented by writers such as Locke and Trenchard and Gordon had a profound influence on the American colonies. Even English spokesmen of the day acknowledged that "the American cause....was the cause of Whiggism."[23]

Montesquieu

Another influential work of the mid-18th century was Baron De Montesquieu's *The Spirit of Laws* (1748, first published in English in 1750). Montesquieu reaffirmed much of the essence of the supply-side position.[24] For example, Montesquieu attacked the prevalent mercantilist "low wage doctrine." He noted that:

> "...some have concluded from the poverty of (certain) states that in order to render the people industrious they should be loaded with taxes. But it would be a juster inference, that they ought to pay no taxes at all.... The effect of wealth in a country is to inspire every heart with ambition: that of poverty is to give birth to despair. The former is excited by labor. The latter is soothed by indolence."[25]

Montesquieu, then, contended that workers respond to positive incentives,—that the supply of labor will increase with increases in rewards and tax burdens will serve to discourage work effort. In addition to recognizing the effect of taxes on incentives to work, he realized that the economy had to be healthy for tax revenues to be substantial; he sensed the difference between tax rates and tax revenues. He contended that excessive taxation fails to inspire industry and weakens the tax base by depressing the fortunes of the individuals capable of supporting the government.[26] Montesquieu, then, certainly recognized and endorsed several of the key features of the supply-side position.[27]

His influence on the American colonies was substantial. Many scholars have documented the fact that the "colonials were surprisingly well acquainted with Montesquieu."[28] Several of these scholars contend that Montesquieu had more influence on eighteenth century American political thought than any other writer.[29]

David Hume

Montesquieu's views reached the American colonies not only directly but indirectly through the influential writings of David Hume. Hume had carefully read *The Spirit of Laws* by at least 1749 as indicated in his correspondence with Montesquieu.

Hume challenged several tax-related views held by mercantilist writers. He challenged the mercantilist view that tax rate increases stimulate work effort and create a new ability to bear the tax burden, for example. He stated clearly that under general circumstances, tax rate increases could destroy work effort and cause output and aggregate supply to diminish. Specifically, he believed that exorbitant tax rates (and sharp increases in tax rates) would destroy industry and productive work effort. Indeed, he believed that this was occurring in Europe at the time he wrote:

> *"Exorbitant taxes, like extreme necessity, destroy industry, by producing despair;* and even before they reach this pitch, they raise the wages of the laborer and manufacturer, and heighten the price of all commodities."[30]

Thus, Hume recognized that taxation had profound effects on production, output, and growth.[31] Consequently, his work suggested that government should support those tax policies tending to enhance and encourage productive effort, aggregate supply, and economic growth.

Also contrary to mercantilist notions, Hume recognized the importance and significance of *positive* work incentives—which he believed would stimulate rather than discourage work effort. According to Hume, then, cultivating incentives in a positive direction could enhance output and growth.

"[Hume] believed that exorbitant tax rates (and sharp increases in tax rates) would destroy industry and productive work effort."

Hume also recognized the relationship between tax rates and tax revenues. He indicated that, in certain circumstances, tax rate increases may lead to tax revenue decreases.

Because he recognized the counterproductive effect of high tax rates, Hume argued that governments should pursue those tax strategies which provide for numerous sources of revenue and maintain a wide tax base.[32]

In sum, Hume endorsed many essentials of the supply-side view. Hume recognized the adverse effects of high taxation on aggregate supply and growth, the importance of positive incentives to productive work effort, and the essence of the tax rate/tax revenue relationship (or the Laffer curve).

The Physiocrats

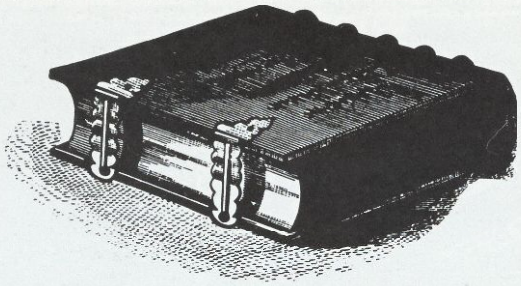
Other economists who influenced economic thought in the colonies were writing in France during the mid-18th century, attacking mercantilist policies and prescribing alternatives consistent with supply-side views. They were known as the physiocrats and included Gournay, Cantillon, Quesnay, the elder Mirabeau, Turgot, Dupont de Nemours, and Mercier de la Riviere. The physiocrats rejected the mercantilist preoccupation with accumulating precious metals and instead emphasized the level of economic activity or the annual flow of goods and services (i.e., net product). They maintained that the king "should be concerned to achieve the largest possible **product** net for the entire country (and hence the highest revenue from taxes)."[33] In so doing, their analysis stressed the circular nature of commodity and money flows in the exchange process and, hence, the general equilibrium nature of economic activity at the macroeconomic level. Given no obstructions to this circular flow, increases in output would always lead to increases in income and spending. That is, demand would keep pace with an expansion of output:

> The central lesson of (Quesnay's) *Tableau* is...that the creation of output automatically generates the income whose disbursement makes it possible to enter upon another cycle of production."[34]

Thus, the primacy that the physiocrats placed on aggregate supply led them to anticipate Say's inference that an increase in output always generates an increase in demand; i.e., the origins of Say's Law are found in the writings of the physiocrats.

Physiocrats also stressed the importance of positive incentives in fostering the supply of labor. They saw high wages as enhancing rather than inhibiting innovative activity and productive work effort.

According to the physiocrats, exorbitant taxation adversely affected the circular flow of spending and, hence, the level of economic activity. High rates of taxation reduced the rewards to produce and, hence, adversely



affected aggregate supply which, in turn, brought about a reduction in aggregate demand and in the circular flow of spending.[35] French tax rates during this period were exorbitant. In some sectors, for example, the tax rate was estimated to be as high as 80 percent. As a result, the French economy was stagnant, with output and production well below capacity.[36]

Since the physiocrats were aware of the adverse effects these tax rates were having on the French economy, they insisted that tax rates be lowered. Such a reduction, they contended, would increase importantly the economy's output and production. They maintained that exorbitant tax rates would reduce the income of the people and the revenue of the sovereign.[37] Moreover, the physiocrats indicated that the increasingly higher tax rates which the government had imposed to reduce the public deficit more likely had the effect of increasing it.[38] On the other hand, the physiocrats contended that lower tax rates would increase tax revenue.

The physiocrats, then, supported several elements of the supply-side view, recognizing the importance of positive incentives to encourage work effort and acknowledging the relationship between tax rates and output as well as the relationship between tax rates and tax revenues.

Benjamin Franklin, Thomas Jefferson, and many later-day followers of Jefferson were influenced importantly by these French writers. Some scholars even contend that Franklin was a "disciple" of the physiocrats. Jefferson often mentioned the physiocrats in his letters. One author contends that "if we would define briefly Jefferson's role in the history of economic thought in the U. S., we should say: Franklin introduced physiocracy to this country, Jefferson spread it...."[39]

Benjamin Franklin

By far the most important figure in the colonial history of American economic thought was

Benjamin Franklin, frequently called "the first American economist."[40] Franklin was a friend of many of the leading economists of his age. During his sojourn to Europe, he met David Hume and many of the French physiocrats. Moreover, Franklin had met Adam Smith in 1759 and probably saw him later in London.[41]

Much of Franklin's economic thinking was formulated well before his sojourn in Europe and, consequently, before he met these influential economists. Nevertheless, his economic thought is consistent with both that of these economists and the supply-side views outlined above.

Franklin's economic beliefs were based on his opposition to mercantilist policies, especially British mercantilist policies which he recognized as adversely affecting the American colonies. Long before he met the French physiocrats, Franklin believed strongly in free trade and opposed British government regulation of economic activity and interference with free trade in the American colonies.[42] This regulation and interference, he believed, was adversely affecting colonial economic growth.

Franklin attacked the prevalent mercantilist low wage doctrine as "both cruel and ill-founded" in that it hindered rather than aided industry.[43] In his *Reflections on the Augmentation of Wages*, Franklin argued that high wages stimulated the incentives and motivation of workers and hence served to increase the supply of labor and thereby of output.[44] He recognized clearly the importance of positive incentives to work effort:

> "High wages attract the most skillful and industrious workmen. Thus the article is better made, it sells better, and in this way the employer makes a greater profit then he would do by diminishing the pay of the workmen. A good workman spoils fewer tools, wastes less material, and works faster than one of inferior skill; and thus the profits of the manufacturer are increased still more."[45]

In addition to recognizing how positive incentives affect the supply of labor, Franklin saw the incentive-stifling effects of taxes. He indicated, for example, how tariffs and duties prevent the wholesale exchange of products between two countries and destroy honest trade; he believed that tariffs work to lessen commerce and industry in general.[46] In short, Franklin acknowledged a relationship between tax rates and output. He argued that if taxes, tariffs, and restrictions were removed, economic activity and industry would flourish. On the other hand, when government imposed high taxes and various restrictions, economic activity would languish.

In fact, Franklin presented the essentials of an early version of the Laffer Curve. He stated, for example, that although the intention of an increase in the tariff imposed by Connecticut was to increase the revenue of its treasury, the result may have been to lessen its revenues as trade decreased.[47] Moreover, he indicated that high taxes lead to tax avoidance activity, spelling out how tariffs (which at that time constituted the main source of revenues) lead to evasion and smuggling.[48]

Franklin also opposed mercantilism because of its stifling effects on economic growth. His concern for growth is manifest in the title of his influential pamphlet, *The Way to Wealth*. In this pamphlet, Franklin espoused individual industry, frugality, and enterprise, all vital ingredients for economic growth from a supply-side perspective.

Franklin's work was quite influential. *The Way to Wealth* was "printed and translated oftener than anything else ever penned by an American (during this period). It appeared in more than 150 editions and was translated into every European language."[49]

"In fact, [Benjamin] Franklin presented the essentials of an early version of the Laffer Curve."

The American Revolution

With the British victory over the French in 1763 and the heavy burden that the war had placed on the Treasury, the British decided to raise taxes and enforce stringently their mercantilist policies after 1763. From 1763 to 1775, the British continuously attempted to impose more taxes and enforce additional restrictions and controls on the American colonies.[50]

That certain of these taxes were excessive is evidenced by the adverse revenue response to the Stamp Act. Initially expected to yield between 60,000 and 100,000 pounds, "the actual yield for the six months the tax was in force was

4,000 pounds, which...proved insufficient to pay the expenses attending the execution of the Act."[51]

Given the influence of the writers reviewed above and the firmly established supply-side beliefs existing by this time in the colonies, it is no wonder that these increased tax and regulatory burdens induced a sharp American reaction. Most authorities concur that the American Revolution had economic origins.[52] But it was in terms of the above-cited pattern of ideas and attitudes that the colonists responded to the new British regulations and taxes.[53] In brief, the "Americans concluded that the English mercantilist policies... were detrimental to their economic welfare and growth.... British restrictions and regulations came to be viewed as a threat to future economic expansion and prosperity."[54] *Thus, the American Revolution was a revolt against the British mercantilist polices of governmental regulation and high taxes—taxes imposed in order to relieve heavy burdens on the British Treasury but that stifled the colonies' economic growth.*

That a revolution was the predictable outcome of excessive government intervention, high taxes, and regulations is evidenced in the prophetic statements made as early as 1722 by the English Whigs Trenchard and Gordon:

> "The proper method of keeping the loyalty of the colonists would be to encourage their growth and prosperity through wise trade regulations designed to increase their production.... Restraints or restrictions...would finally lead to the 'Independency' of the Americas."[55]

The Period 1781-1789

The Continued Endorsement of Supply-Side Principles: Adam Smith and the *Wealth of Nations*

Supply-side principles continued to be endorsed during and after the American Revolution. In this regard, American writers such as Pelatiah Webster, Tench Coxe, and Albert Gallatin merit mention. The year 1776, however, was notable not only because of the Declaration of Independence but also because it marked the publication of Adam Smith's *Wealth of Nations*, perhaps one of the most important supply-side books of all time. Smith was the most influential economist on American leaders and in America in general after 1776.

In presenting his arguments, Adam Smith—who was a Whig—restated and refined many of the positions consistent with the supply-side view, especially as presented by the physiocrats and Hume. There is no doubt that these latter writers influenced Smith's thinking.[56] Smith's view was fully supportive of the supply-side position.

Thus, the intellectual linkage between the American Revolution and the *Wealth of Nations* is fairly simple—both were products of the same intellectual origins and influences. Both emerged in opposition to mercantilist policies of high taxes and government intervention and both had the objectives of promoting economic growth and development and thereby making a country's independence secure.

The Supply-Side Content of the *Wealth of Nations*

Part of the reason Smith was able to construct such a supply-side view relates to his idea

regarding the nature of wealth. As suggested above, mercantilist views were premised on some misconceptions of wealth.[57] Mercantilistic concepts of the wealth of a nation, for example, "tended to amount to the power of the national government in general"[58] as well as to its stock of precious metals. According to Smith, though, wealth was neither state power nor precious metals but rather the supply of useful goods and services being produced and made available to the people in the marketplace.[59]

This concept of wealth is basic to the supply-side view and formed the basis of his primary theme, namely, the nature and causes of wealth, aggregate supply, and growth.

Since their concepts as to the nature of wealth differed, it is not surprising that the prescriptions offered by Smith and the mercantilists differed as well. Unlike the mercantilists, Smith indicated that increases in the quantity of money tended to be neutral or to have no predictable long-run effect on aggregate supply, output, or growth. Hence, increases in the supply of money could not produce wealth. To increase wealth, Smith indicated that emphasis must be placed on facilitating production, aggregate supply, and growth but not necessarily on the money supply of aggregate demand.[60]

Smith's emphasis on aggregate supply rather than demand was based on his belief that the demand for most products was "indefinitely extensible."[61] Smith, for example, found no limits to the expansion of consumption "in civilized commercial societies.... Societal pressures made for the expansion and multiplication of wants and self-interest prompted receivers of money income to spend or invest it promptly."[62] Smith, therefore, endorsed views which, although rudimentary at the time, later became known as Say's Law when further developed by J. B. Say and James Mill.

Smith always emphasized the importance of positive incentives for both labor and capital. Unlike the mercantilists, Smith indicated that high wages would not reduce the incentive to work. He contended that an increase in wages would *always* induce an increase in the supply of labor services.[63] In addition to the supply of labor, capital accumulation also played a major role in the growth process envisioned by Smith.

In short, Smith emphasized aggregate supply and growth and advocated the use of positive incentives to stimulate the supply of factor inputs such as capital and labor into the production process. In accordance with these objectives, Smith supported various fiscal tax-related policies or principles by which to enhance the supply of both factor inputs and aggregate output. In this regard, Smith made some important contributions to the principles of public finance. In particular, Smith posited four maxims of taxation, namely, equality, certainty, convenience of payment, and economy in collection.[64] It should be noted that of the various concerns of taxation emphasized by Smith, little was said about distribution in the *Wealth of Nations*.[65] Distribution, then, was not nearly as important a tax concern to Smith as was economic growth.

Direct taxes on the wages of labor were "absurd and destructive," according to Smith, since they led to decreased employment as well as to a "diminution of the annual produce of the land and labour of the country."[66] Moreover, taxes on capital and profits would have disincentive effects on saving and investment, might induce an out-migration of capital, and, hence, would adversely affect growth.[67]

While emphasizing the disincentive effects of taxation, Smith recognized the importance of the provision of a limited set of essential governmental services such as justice, defense, police and fire protection. Smith always emphasized, however, that public expenditures should be held to a necessary minimum.[68]

In addition to recognizing the relationship between tax rates and output described above, Smith also recognized clearly the relationship between tax rates and tax revenues. In several passages, for example, Smith indicated clearly that tax rates and tax revenues were often negatively rather than positively related. One such statement could hardly have been more explicit:

> "High taxes, sometimes by diminishing the consumption of the taxed commodities, and sometimes by encouraging smuggling, frequently afford a smaller revenue to government than what might be drawn from more moderate taxes."[69]

Smith recognized the primacy of aggregate supply for economic growth and always emphasized the importance of positive incentives to enhance the supply of factors of production and to promote economic growth. Indeed, the growth process was the central policy concern for Smith; his *Wealth of Nations* contained a remarkably advanced theory of economic development.[70] In addition, Smith recognized the relationships between tax rates and output

as well as between tax rates and tax revenues. Smith's supply-side view was important not only in and of itself but because he was so influential in America during the constitutional era.

The Influence of Smith's *Wealth of Nations* in America

Adam Smith's *Wealth of Nations* had a powerful influence on those statesmen who mapped out the structure of American government. Grampp indicates that Smith's influence during the constitutional period exceeded that of Locke, Hume, the physiocrats and others.[71] Grampp contends that Smith "was the *most important single influence* on the men who wrote and debated the Constitution and first put it into practice."[72]

It is well known that a number of American statesmen and leaders had a direct knowledge of the *Wealth of Nations*. There can be no doubt, for example, as to Benjamin Franklin's knowledge of the *Wealth of Nations*; he once was believed to have contributed to it.[73] Thomas Jefferson, John Adams, James Monroe, and James Wilson also were all familiar with the *Wealth of Nations*.[74]

The influence of Smith on Alexander Hamilton is especially apparent. Hamilton apparently changed his views regarding economic policy after reading Smith. Of course, he may have changed his mind for other reasons, but his policy prescriptions after becoming familiar with the *Wealth of Nations* changed and became quite similar to those of Smith. In his later and more persuasive writings, for example, "Hamilton disclaimed any wish to impose direct and detailed controls over the economy;" i.e., he rejected mercantilist policies.[75]

Madison—"probably the most influential of all the men who made the Constitution"—was familiar with the *Wealth of Nations* at least as early as 1785.[76] He was essentially a free trader and often explicitly supported "the theory of 'let us alone'."[77] One of Madison's first speeches in the House of Representatives related to protecting commerce "was taken out of Smith's *Wealth of Nations*."[78]

The available evidence, then, clearly indicates that many of the principal statesmen who designed the structure of American government were familiar with and importantly influenced by Adam Smith.

The Federalist Papers and the Constitution

The influence of Locke, Montesquieu, the English Whigs, Hume and especially Smith on American thought is unmistakable in the major post-Revolutionary written products of the founding fathers—namely *The Federalist Papers* and the Constitution. The *Federalist* has been called the most important work in political economy ever written in the U. S. It has always commanded widespread respect as the first and still most authoritative commentary on the Constitution and is rightly counted among the classics of political theory. The U.S. Constitution, of course, is "one of the most important presentations of American economic thought."[79]

The authors of these documents clearly were importantly influenced by the supply-side principles outlined by the various economists cited above. The essential ideas set out in the *Federalist Papers,* for example, were close enough to those supply-side views in the *Wealth of Nations*" to make one think Hamilton and Madison had Adam Smith in mind when they wrote."[80]

The influence of supply-side principles on the Founding Fathers is particularly evident in the realm of economic policy. Both the Federalists and the architects of the Constitution were above all concerned with *economic growth.* The primary objectives of the Federalists, for example, were "to promote the *economic development* of the country, particularly to increase the amount of industrial capital ....(and) to make the country's independence secure."[81] Similarly, a principle issue before the delegates to the Constitutional Convention when they met in Philadelphia was to maximize economic growth while preserving individual liberty. They believed that governmental control and regulation should be minimized since such interference would affect adversely the incentives of suppliers of labor and capital and hence constrain economic growth. Significantly, many such common governmental powers of the day as the power "to control prices, wages, interest rates, the quality of goods, the conditions of their sale, and the allocation of labor" were not even considered by the Founding Fathers.[82] That is, mercantilist policies of the day were clearly rejected. The resulting Constitution was a pro-growth, anti-government intervention document, fully consistent with the essentials of supply-side economics.

In addition to their predilection for economic growth, the Founding Fathers understood the essence of the relationship between tax rates and output. After the Revolution, these American statesmen became familiar with the economic problems of the existing confederation. Various taxes between states taught them that such taxes were destructive to commerce and should be prohibited. They recognized that high taxes were associated with a languishing economy and low output.

These American statesmen supported the provision of a limited set of government services viewed as consistent with a policy of *laissez-faire* and as essential for markets to properly function. The limited powers recommended by the Founding Fathers included the power to tax, borrow, regulate commerce, pass uniform bankruptcy laws, coin money, establish post offices and post roads, and grant patents.[83] Thus, the role of government they advocated was almost identical to that endorsed by Adam Smith in the *Wealth of Nations*.

Of course, the provision of these limited but essential services implied that some taxes were necessary in order to finance them. They realized that when tax rates increase from low levels, output initially increases because the efficiency gains from these public goods outweigh the disincentive effects of higher tax rates. Expanded governmental services and further tax increases, however, decrease output as the disincentive effects of taxes outweigh any efficiency gains from additional public goods.

The Founding Fathers' recognition of the relationship between tax rates and tax revenues is even more apparent. Hamilton's contributions to the *Federalist Papers* underscore this contention. Experience has shown, Hamilton notes, that moderate taxes yield more aggregate revenue than high taxes.[84] Hamilton notes that high tax rates also induce tax avoidance activity which also works to reduce tax revenues.

According to Hamilton, this was especially relevant to the various states where, because of the geographic proximity and social likeness, taxes of one state on the commerce of another would be evaded easily. Consequently, if such taxes existed at all, they would have to be very low in order to produce any revenue.[85]

Summary and Conclusions

American statesmen and the American public were influenced importantly (either directly or indirectly) by such writers as Locke, the English Whigs, Montesquieu, Hume, and the Physiocrats. These writers' views were fully consistent with and indeed synonymous with supply-side principles. Benjamin Franklin supported many of these supply-side views. As a result of these firmly held views in the American colonies and the sudden imposition of additional British taxes and regulations after 1763, the American Revolution occurred.

In the post-Revolutionary period, American thinking was further influenced by Adam Smith's *Wealth of Nations*. Smith and the leaders of the American Revolution had been influenced by the same supply-side-oriented writers; they had a common intellectual heritage that helps to explain the immediate American acceptance and endorsement of Smith's views. Nevertheless, Smith's lucid articulation of these supply-side principles had a powerful influence on American statesmen who mapped out the structure of a new government. This influence is unmistakable in the economic policy realm of the *Federalist Papers* and the U.S. Constitution.

Supply-side economics, then, was the very essence of the economic principles serving to inspire the American Revolution and to guide the architects of the U. S. Constitution. Supply-side economics represents a re-emergence of the economic principles governing the founders of the American experience.

It is, consequently, astonishing to observe the opposition to and skepticism of supply-side economics not only by the American leaders and statesmen but especially by economists in the U. S. This is particularly surprising in view of the increases in both marginal tax rates and government regulation in recent years. These additional burdens are in many ways identical to the government intervention imposed by mercantilists that was resisted by our American forefathers centuries earlier.[86]

This article is excerpted from a longer working paper, "Supply-Side Economics and the Founding Fathers: The Linkage," Working Paper Series, Federal Reserve Bank of Atlanta, July 1982.

—Robert E. Keleher

NOTES

[1]Gilbert Fite and Jim Reese, **An Economic History of the U.S.**, p. 98.
[2]Thomas Sowell, "Adam Smith in Theory and Practice," **Adam Smith and Modern Political Economy**, p. 4.
[3]Wages, for example, "were kept low through maximum wage laws, in order to lower production costs and help domestic producers to undersell foreign competitors in the world market. Prices were controlled to create a consumption pattern suited to government's desires and beliefs." (Thomas Sowell, **ibid**, p. 4.)
[4]Fite and Reese, **op. cit.**, p. 72. (See also p. 98.)
[5]Virgle Glenn Wilhite, **Founders of American Economic Thought and Policy**, p. 66.
[6]Fite and Reese, **op. cit**, p. 73.
[7]Robertson, **op. cit**, p. 85.
[8]Fite and Reese, **ibid.**, p. 73. See also Ross Robertson, **History of the American Economy** (second edition) p. 84.
[9]Fite and Reese, **ibid.**, p. 73.
[10]Wilhite, **op. cit**, p. 113.
[11]Harvey E. Fisk, **English Public Finance**, 1920, p. 93. See also Jude Wanniski, **How the World Works**, pp. 181-182.
[12]In addition to new and higher taxes and increased regulation of commerce and industry, these laws pertained to restrictive land policies as well as to restrictions on the fur trade.
[13]See, for example, William Grampp, **Economic Liberalism** Volume 1, p. 130, and Gerald P. O'Driscoll, Jr., **Adam Smith and Modern Political Economy**, pp. X, XV, footnote. Grampp indicates that "Jefferson inserted in the Declaration of Independence a paragraph very similar to one in Locke's **Second Treatise on Civil Government**," p. 130, and R. R. Palmer and Joel Colton, **A History of the Modern World** (third edition), pp. 285-287. (O'Driscoll, **op. cit**, p. XV.)
[14]See, for example, James Ring Adams, "Supply-Side Roots of the Founding Fathers," **Wall Street Journal**, November 17, 1981, and Karen I. Vaughn, **John Locke**, pp. 78-79, 121.
[15]Vaughn, **ibid**, p. 111.
[16]Vaughn, **ibid**, p. 123.
[17]Vaughn, **ibid**, p. 134.
[18]"Many of the revolutionary leaders knew the work of Trenchard and Gordon directly; others, like Thomas Paine, knew of it indirectly." (O'Driscoll, **op. cit**, pp. XV, XI, and David L. Jacobson, **The English Libertarian Heritage**, p. VII.)
[19]John Trenchard, "Arts and Sciences the Effects of Civil Liberty only, and ever destroyed or oppressed by Tyranny," February 24, 1721, **Cato's Letters**, Jacobson, **op. cit**, p. 172.
[20]Jacobson, **op. cit.**, p. XXXVI.
[21]Trenchard and Gordon, **Cato's Letters**, Jacobson, **op. cit**, pp. 173, 181-2.
[22]Jacobson, **op. cit**, p. XLVIII.
[23]G. H. Guttridge, **English Whiggism and the American Revolution**, p. 142.
[24]Many of the important insights made by Montesquieu were "derived from his study of the English constitution and English political system." (Paul M. Spurlin, **Montesquieu in America 1760-1801**, p. 23.)
[25]Baron De Montesquieu, **The Spirit of Laws** (translated by Nugent) p. 208.
[26]Baron De Montesquieu, **The Spirit of Laws** (edited by D. W. Carrithers), p. 229.
[27]Montesquieu also perceived some elements of the relationship between output and tax rates described above. He noted that people often do not object to initial increases in tax rates (in republics, for example) because the citizens believes he is paying himself for the few public goods he receives in return. That is the citizen sees a connection between the cost (taxes) and benefits of government. But as taxes increase, the citizens recognizes less and less of such a connection. He sees little, if any, connection between the tax dollar and the benefits of government spending.
[28]Spurlin, **op. cit**, p. 258.
[29]**Ibid.**, pp. 9-10, 23, 258-259.
[30]David Hume, **Writings on Economics** (edited by Eugene Rotwein), p. 85. footnote (emphasis added).
[31]See, for example, E.A.J. Johnson, **Predecessors of Adam Smith**, pp. 175-177.
[32]See Johnson **op. cit**, p. 175.
[33]Louis Gottschalk, Loren MacKinney, and Earl H. Pritchurd, **History of Mankind**, Volume IV, p. 529.
[34]Mark Blaug, **Economic Theory in Retrospect**, p. 30 (parenthesis added).
[35]J. J. Spengler, "The Physiocrats and Say's Law of Markets," **Essays in Economic Theory**, edited by Spengler and W. R. Allen, p. 177-178.
[36]Henry Higgs, **The Physiocrats**, p. 10. Higgs indicates that some estimates of the tax rate on small proprietors were as high as 82 percent of net produce. Moreover, E. J. West indicated that when Adam Smith was in France in 1766, "his friend Turgot...found that in his district the proportion of net income of the peasant proprietors taken by the government was about 80 percent." (E.J. West "Adam Smith's Economics of Politics," **Adam Smith and Modern Political Economy**, O'Driscoll, editor, p. 149.) Indirect tax rates were so high, according to David Wells, that it was "not an infrequent occurrence that prior to the Revolution of 1789, a duty was levied 27 times on a barrel of wine in the course of its transportation from the place it was grown to that where it is sold; so that it was said to be cheaper to send wine from China to France than from one of the departments of France to Paris," David Ames Wells, **Theory and Practice of Taxation**, p. 76.
[37]Spengler, **op. cit**, p. 173.
[38]Ronald Meek, **The Economics of Physiocracy**, p. 25.
[39]Normano, **op. cit**, p. 50.
[40]Frank A. Fetter, "The Early History of Political Economy in th e U.S.," **Economic Thought**, edited by James Gherity, p. 475.
[41]Eliot, **ibid.**, p. 70, 86. See also Nutter **op. cit**, p. 2.
[42]Wilhite **op. cit**, p. 307. See also Lewis J. Carey, **Franklin's Economic Views** p. 162.
[43]W. A. Wetzel, "Benjamin Franklin as an Economist," **Johns Hopkins University Studies in Historical and Political Science**, Thirteenth Series, IX September 1895, pp. 23-24.
[44]Wetzel, **op. cit**, p. 24.
[45]Franklin, quoted in Wetzel, **op. cit**, p. 24.
[46]Benjamin Franklin, **Essays on General Politics, Commerce and Political Economy**, p. 386. See also Carey, **op. cit**, p. 160.
[47]Carey, **op. cit**, p. 200.
[48]Wetzel, **op. cit**, p. 41. See also Carey, **op. cit**, pp. 158, 199-200.
[49]Fetter, **op. cit**, p. 475.
[50]Gerald Gunderson, **A New Economic History of America**, p. 87.
[51]Stephen Dowell, **History of Taxation and Taxes in England**, 4 volumes, p. 3:149, as quoted in Jude Wanniski, **The Way the World Works**, p. 182.
[52]See, for example, Fite and Reese, **op. cit**, pp. 104, 114; Robertson, **op. cit**, pp. 87, 90, Wilhite, **op. cit**, pp. 3, 114; and Fetter, **op, cit**, p. 475.
[53]See Bernard Bailyn, **The Ideological Origins of the American Revolution**, p. 54.
[54]Fite and Reese, **op, cit**, pp. 104, 114 (parenthesis added). See also Fetter, **op, cit**, p. 475.
[55]Jacobson, **op, cit**, p. XLIX.
[56]It is well documented that Smith was a close friend of Hume's and that he thought well of the Physiocratic writings. It is known, for example, that "Smith was intimately acquainted with Hume and his works," W. L. Taylor, **Francis Hutcheson and David Hume As Predecessors of Adam Smith**, p. 131. Hume and Smith, it will be recalled, were often in correspondence with one another, and, as indicated by Taylor, "mutually influenced each other's thinking." (Taylor, **op, cit**, p. 35.) Indeed, Taylor contends that:

> "There can be little doubt that Smith's close intimacy with Hume...exercised a powerful influence on his economic philosophy.... Hume was both the perceptive anticipator of Adam Smith and his acute critic, and Smith benefited greatly from almost thirty years of close relationship with him." (Taylor, **Ibid**, p. 51.)

In addition, as indicated by Spengler, "Adam Smith thought well of the physiocratic system.... Of this we have evidence n his characterizing it as 'the nearest approximation to the truth...yet...published...upon political economy.'" (J.J. Spengler, "The Physiocrats and Says's Law of Markets," **op. cit**, pp. 182-183.)
[57]See, for example, Sowell, **op cit**, p. 5.
[58]Sowell, **ibid.**, p. 5.
[59]Overton H. Taylor, **A History of Economic Thought**, pp. 91-92.
[60]Thus, "whereas mercantilism concentrated on the **transfer** of wealth...Smith and classical economies in general concentrated on the **production** of wealth." (Sowell, **op, cit**, p. 6.)
[61]J. J. Spengler, "Adam Smith's Theory of Economic Growth - Part I," **Southern Economic Journal**, Volume XXV, No. 4, April 1959, p. 403.
[62]J. J. Spengler, "Adam Smith's Theory of Economic Growth - Part II," **Southern Economic Journal**, Volume XXVI, No. 1, July 1959, p. 10.
[63]Blaug, **op, cit**, p. 48. See Adam Smith, **An Inquiry into the Nature and Causes of the Wealth of Nations**, edited by Edwin Cannan, p. 92, for his rejection of the notion that low wages stimulate work effort.
[64]The Maxims set out by Smith were derived in part from earlier writings of the physiocrats. See, for example, Higgs, **op. cit**, p. 41, and Meek, **op, cit.**, p. 231.
[65]Richard Musgrave, for example, indicates that "on (the distribution...function of the fiscal system) very little is to be found in the **Wealth of Nations**.... The distribution issue was...largely omitted from Book V." (Musgrave, "Adam Smith on Public Finance and Distribution," **The Market and the State: Essays in Honour of Adam Smith**, edited by Thomas Wilson and Andrew S. Skinner, p. 296.)
[66]Smith, **op, cit**, ii, p. 394. See also Musgrave, **op, cit**, p. 307, and E. Rotwein, "Introduction," Hume **op, cit**, p. LXXXIII.
[67]Smith, **op, cit**, ii, p. 376, and Musgrave, **op. cit.**, p. 308.
[68]Smith, **op. cit**, Book V. See also Musgrave, **op. cit**, p. 296, and J.J. Spengler, "Adam Smith's Theory of Economic Growth - Part I," **op. cit**, pp. 412, 414-415.
[69]Smith, **op. cit**, ii, p. 414.
[70]Lawrence J. Moss, "Power and Value Relationships in the **Wealth of Nations," Adam Smith and Modern Political Economy**, p. 86.
[71]See, for example, Grampp, "Adam Smith and the American Revolutionists," **History of Political Economy**, 11:2, 1979, p. 180; and Grampp, **Economic Liberalism:** Volume 1, p. 129.
[72]Grampp, **Liberalism**, p. XII (emphasis added).
[73]See, for example, Grampp, "Adam Smith and the American Revolutionists," p. 180. See also Wetzel, **op. cit.**, and Carey, **op. cit.**
[74]Spengler, "The Political Economy," p. 9.
[75]Grampp, **Liberalism**, pp. 135, 145. Grampp emphasizes (p. 145) that tax-related proposals—and the reasoning underlying them—were quite similar to those endorsed by Smith.
[76]This is indicated in a letter from Madison to Jefferson in April 1785. Nutter, **op. cit.**, pp. 6, 10. See also Spengler, "The Political Economy of Jefferson, Madison, and Adams," p. 9.
[77]Grampp, **Liberalism**, p. 129.
[78]Nutter, **op. cit**, p. 11 (quoted from Fisher Ames).
[79]Normano, **op, cit**, p. 39.
[80]Grampp, **Liberalism**, p. 121.
[81]**Ibid.**, p. 127. See also Nutter, **op. cit.**, p. 6, (emphasis added).
[82]Grampp, **Liberalism**, p. 109.
[83]Grampp, **Liberalism**, p. 108.
[84]Wilhite, **op. cit.**, p. 253.
[85]Hamilton, "No. 12: Hamilton," **The Federalist Papers**, p. 94.
[86]See, for example, O'Driscoll, **op. cit**, p. XIV.

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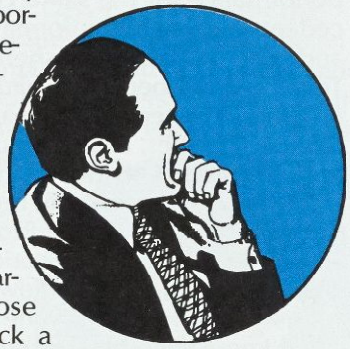
Asking the Right Question:

Small Business and the Information Future

Information makes the difference between a decision and a guess, between success and failure, between wealth and poverty. Knowledge is power.

Andrew Garvin
How to Win with Information or Lose without It

Information—the only inexhaustible resource—has become as important to the entrepreneur as capital, labor and natural resources, the triumvirate historically viewed as the chief ingredients of our economy. Just as a scarcity of any of those three can sidetrack a small business, an information deficit can prove fatal to the businesses, which suffer an awesome mortality rate within their first five years. This article examines some of the information-gathering problems facing small businesses and suggests that a systematic approach to information-gathering will be increasingly vital to these businesses' survival.



Today's small business failure rates are running close to the records set in the 1930s.[1] Just how many of these failures are attributable to misinformation can only be surmised, but observers are repeatedly pointing a finger in that direction. Joe Lommer, who directs Atlanta's Service Corps of Retired Executives, flatly states: "A high percentage of new businesses go out of business and the No. 1 reason, and it's a harsh word, is incompetence."[2] He equates this incompetence with inadequate knowledge about running a business. The case also is stated emphatically by Gumpert and Timmons, authors of **The Insider's Guide to Small Business Resources,** when they claim that, "an entrepreneur who doesn't know what his or her options are is operating at a serious competitive disadvantage."[3] And a Small Business Administration (SBA) source agrees that, "One of the greatest needs of managers of small business is to have adequate, accurate, and current information on which to base their decisions."[4]

Despite the good sense of these warnings, small business owners might still be inclined to shrug off information as something of a long-term luxury. For after all, doesn't their

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[1]Dun and Bradstreet data, cited in David K. Secrest, "Small Business No Small Feat," **Atlanta Journal**, February 21, 1982, sect. D, p. 1.

[2]Quoted in Secrest, **op. cit.** p. 1.
[3]David D. Gumpert and Jeffrey A. Timmons, **The Insider's Guide to Small Business Resources** (Garden City, N.Y., 1982), p. viii.
[4]Small Business Administration, "Marketing Research Procedures," SBA Bibliography No. 9 (April 1979), p. 2.

Acquiring information quickly and accurately is essential for small businesses, but the small business owner is generally not an information specialist. Asking the right question is the first step in an information-oriented approach to business problems.

survival follow Mr. Micawber's law? "Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery." It is in controlling income and expenditures that leeway for decision-making is minimal, and where information can make the largest contribution. As Gumpert and Timmons point out, "It's one thing to make an incorrect decision, but quite another to make an uninformed decision. . . . Decisions made out of ignorance can be disastrous, and are avoidable."[5]

For a simple example, let's talk apples and oranges. Imagine the restaurateur who budgets for these at a price only slightly above what he paid in September 1981. Depending on the volumes of fruit his business requires, he may have made a serious error. The information-conscious entrepreneur, rather than relying on routine, might have consulted one of the many fruit-price forecasts published since last spring's untimely freeze. Armed with these facts he can fend off unpleasant surprises on the expenditure side, adjusting either his budget or his menu to absorb the shock of price changes.

Payroll is another inevitable expenditure that bears heavily on small business survival, and which further illustrates the advantages of good information. Anyone who follows current events can vaguely anticipate the general course of wage trends. But the business person who actively ferrets out information on such wage-related topics as the health insurance industry and Social Security legislation can zero in on those specific areas where his business might need help.

Beyond planning a profitable response to economic events, the informed entrepreneur can have a hand in actually shaping them. Over 85 percent of the members of Congress who responded to a recent survey by **Nation's Business** affirmed that small business had a strong involvement in their campaigns and that its voice was increasingly heard. They offered this advice for using their clout to the best advantage: "Small business can also be more effective in seeking to influence congressional policy decisions, senators and representatives say, if their communications give concrete information on how they are directly affected by an issue."[6] To do this, entrepreneurs must monitor closely issues that may have an impact on small business, and close monitoring involves gaining access to information.

The Information Future

If acquiring good information gives the competitive edge to a small business today, it will be essential for success in the near future. In the last half of the 1970s alone the number of components that can be fit on a silicon chip increased by a factor of 100. More than likely, this rate of progress will persist through the 1980s, "resulting in a 10,000-fold increase in performance for the same cost."[7] This unprecedented growth in information processing and control is already ushering in what Alvin Toffler has dubbed the "Third Wave" civilization, one that engages predominantly in information-related activities, as opposed to the agricultural and industrial activities of the first two waves.

Information access will be democratized—not monopolized by Big Brother—in the envisioned Third Wave civilization. Sociologist Marie Haug shares this view of the information future. As early as 1975 she wrote, "No longer need knowledge be packed only in the professional's head. . . . It can be available not just to those who know, but also to those who know how to get it."[8] Additionally, Toffler and fellow futurists perceive distinct socio-economic trends towards the customization of products and services, the ascendance of regional economies, and a scaling-down in the size of businesses. Together, these trends point to a uniquely productive and profitable future for the information-conscious small businessperson.

What is it that transforms information from a paralyzing burden to a vital business bonus? Above all, it is the attitude of the information's recipient. For example, the entrepreneur can submit to being bombarded by indiscriminate volleys of information in each day's mail, or he can develop a system for rapidly scanning and

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[5]Ibid.

[6]Michael Thoryn, "Small Business Speaks, Government Listens," **Nation's Business,** May 1982, pp. 38-42.

[7]Robert D. Hamrin, "The Information Economy: Exploiting an Infinite Resource," **The Futurist** (Aug. 1981), p. 25.

[8]Marie R. Haug, "The Deprofessionalization of Everyone?" quoted in William F. Birdsoil, "Librarianship, Professionalism, and Social Change," **Library Journal,** Feb. 1, 1982, p. 225.

seizing on whatever information has productive value for him. Similarly, he or she can passively worry about his business "problems" or can actively consider them to be "information needs." To state a problem as a need for information implies some confidence that the need can be met and incites the business owner to act. Just as a business problem can ultimately detract from the entire enterprise, a specific information need derives from the larger context. To meet that need well is to improve the business overall.

What is Your Real Question?

In **How To Win with Information or Lose without It,** Andrew Garvin emphasizes that you, the small business owner, should begin to think of an information need as a whole series of questions requiring answers.[9] Garvin says the importance of articulating these questions in a painstaking, thoughtful manner cannot be stressed enough. Without the guidance of clear and accurate questions, he says it is unlikely that you can recognize the answers. To spend time and money on the crucial step of problem statement and question formation is to save time and money on the entire project and to ensure success. As an anonymous sage once wrote, "A problem without a solution is usually a problem which is put the wrong way."

Garvin outlines a preliminary question process which begins by asking why you need the information. You might, for instance, require voluminous data on trends in magazine publishing to bolster a loan application, or you might need a trade anecdote for a speech to your local chamber of commerce. To incorporate a statement of end use into your question directly points the way towards an appropriate array of sources and thus increases accuracy. You eliminate such futile steps as seeking current data in an encyclopedia or an anecdote in an industry handbook.

For greater precision you next attempt to narrow down your question. Do you, for instance, really "want to know all about the wide-screen television," or do you specifically wish to know the state-of-the-art for color tube development? To ask the more general question will certainly muddy the waters, possibly turning up sociological studies on the importance of wide-screen television at the corner tavern!

Having specified the overall question, you might next break it down into component parts that will direct your research into discrete areas. Perhaps Atlanta's tavern market for wide-screen television is indeed your chief interest. In that case the sociological study may be a welcome find, but you will probably wish to venture into demographic, market, and industry studies as well. What are the characteristics of Atlanta's population? Who are your competitors in the field? What are the cutting-edge developments in wide-screen television technology? Taken together, the answers to clusters of questions such as these enable informed decision-making about your market as opposed to costly assumption.

Additional preliminary questions arise when you are relying on a librarian or other information broker for professional research. For example, at the start you should ask yourself the priority value of your information need. To return to our publishing example, hiring a researcher to find a particular **Life** magazine anecdote which you only dimly recall can mean a hefty expenditure of time and money. But if you clarify at the outset that nearly any publishing-related anecdote will suffice and that you are not delivering the speech for another three weeks, this can make a vast difference in the way the professional carries out the search, and hence in its cost. Likewise, to inform a researcher that you already have consulted several industry trade associations for data on growth rates for magazine subscriptions, and that you have found a per-capita expenditure figure for the Southeast eliminates wasteful duplication of this portion of the search. Furthermore, expressing what you have already found helps you to define what you really want to find (for example, per-capita expenditure on sports magazine subscriptions by state), which makes the search even more direct and economical.

[9]Andrew Garvin, **How To Win with Information or Lose without It** (Washington, 1980).

There is one more important factor in question formation. Regardless of whether you are carrying out the research yourself, or hiring a professional researcher, make sure you are personally involved. Failing to participate personally in negotiation of the question risks short-circuiting the entire problem-solving process. An unsatisfactory answer is nearly always guaranteed.

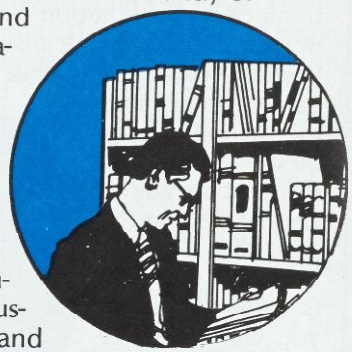
Finding the Source

And so, having framed preliminary questions to approach your particular need, what next? You can begin your information-gathering process by identifying where among the major business categories your question falls: the political, economic, social, and regulatory environment for doing business; the structure of your own industry, as well as that of your supplier and consumer networks; your competition; or management issues. While each of these categories may possess unique information sources, abundant general sources exist that can enable you to find answers to questions in any of the categories.

By keeping handy a few essential resources, like **The Wall Street Journal,** a good dictionary, an atlas, and an almanac, you can easily dispatch many of the quick factual questions that threaten to interrupt your daily business.[10] For more detailed research, a wealth of resources abound and, with some sleuthing, can be readily obtained from the major information gathering and disseminating organizations: libraries and information centers; federal, state, and local government agencies; and trade and professional associations. Even if you have access to an in-house reference library or you plan to contract out your research to an information broker, an understanding of what resources are available and how to find them will assist you in planning any research project.

As Andrew Garvin reminds us, "rather than making any assumptions that might lead to failure, make the assumption that the information needed for success is out there somewhere and available at a reasonable price. Then go look for it."[11] The best place to begin looking is the business section of the local public library. You can discusss your series of questions with the library's information professionals to determine whether what you need is already available in published form. In addition to its catalog, indexes, and bibliographies, your library may have access to computerized databases, which can yield literally millions of current references to publications on every imaginable topic from sweep accounts to shrimp farming. Even if your library does not own a specific publication that you need, a vast inter-library loan network can deliver the information to you within days.

Probably the largest publisher of all kinds of information is the U.S. government. Every federal agency produces a vast array of reports, studies, and statistical publications; each agency has its own cadre of experts in almost all industries. Of particular interest to the entrepreneur should be the regularly publiched industry market studies and reports available from the U.S. International Trade Commission (USITC), the Department of Commerce, and the Federal Trade Commission. The USITC's published report contained statistcal data on production, shipments, capacity, and imports which any small businessperson in that industry would value highly—free for the asking. Similar market information can be obtained from time to time from reports of the CIA, GAO, Department of Justice, and from Senate and House Committee hearings. The Securities and Exchange Commission (SEC) maintains files on all companies with publicly traded stock; these filings are available to the public.



To help track down U. S. government information, two sources in particular are worth remembering: the *American Statistics Index* helps you find government publications on your subject; U. S. Federal Information

[10]Lorna M. Daniells, of Harvard University's Baker Library, recommends "A Basic Bookshelf" for businesspeople in **Business Information Sources** (Berkeley, 1976), p. 351+.

[11]Garvin, p. 21.

"Knowledge of the general information resources available, together with mastery of question formation, can take you a long way towards solutions to present business information problems."

Centers help find experts in a wide variety of fields whom you can contact directly. Federal Information Centers are scattered throughout the U. S. in strategic cities, and so you can most likely contact the center nearest you with a local telephone call. And, of course, the Small Business Administration is even more accessible. It should always be considered as a principal resource, for the SBA's job is to assist small firms in almost every way: by providing counseling, educational publications, and seminars on small business management; by assisting with locating fair credit terms; and by providing financial aid. Even closer to home, state and local governments furnish valuable information, particularly on regional issues. Although the names vary, each state has an agency for promoting commerce and industry within the state. There are even agencies devoted to one particular industry, such as the Georgia Film Commission.

SEC reports and other common sources abound for facts about publicly held companies. The small business owner, however, is probably concerned with privately held companies when tracking competitive information. Each state's secretary of state's office has annual reports, articles of incorporation, and other information on companies incorporated there.

Industry, trade and professional associations are excellent sources of information covering every imaginable special interest group. Still interested in publishing statistics? Try the Magazine Publishers Association. Need information on the market for a new carbide drill bit? Call the Cutting Tool Manufacturers Association. Want some background on the horseradish industry? The National Association of Horseradish Packers should be able to help. The *Encyclopedia of Associations* (Gale Research) offers convenient access by key word of the organization's name to over 15,000 groups, their membership, services, and publications.

In addition to the association in your own field, you may wish to investigate and join one of the many associations dedicated to small business concerns, such as the International Council for Small Business, the American Federation of Small Business, or the National Small Business Association.[12] These groups can help you cope with small business's special problems by offering lobbying assistance as well as information on regulations, methods of handling operational problems, and other issues. Of particular importance, say Gumpert and Timmons, is the fact that "small business organizations can help relieve the sense of isolation many entrepreneurs feel. Through their publications, meetings, seminars, and other functions, they bring small business owners into contact with each other."[13]

Knowledge of the general information resources available, together with mastery of question formation, can take you a long way towards solving present business information problems. But the same process of controlled questioning and answer-seeking—your information-gathering system—can have a significant bearing on the future of a small business. The skills it develops can strengthen planning and budgeting skills as well. The challenge of the information future is now upon us. Preparedness for that future will position the small businessperson to seize its unique opportunities.

—Cynthia Walsh-Kloss and Leigh Watson Healy

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[12] In addition to the associations listed in the **Encyclopedia of Associations**, you may wish to contact some of the regional small business associations listed in **The Insider's Guide to Small Business Resources.**

[13] Gumpert and Timmons, **Insider's Guide,** p. 344.

FINANCE

STATISTICAL SUPPLEMENT

	JUL 1982	JUN 1982	JUL 1981	ANN. % CHG.		JUL 1982	JUN 1982	JUL 1981	ANN. % CHG.
UNITED STATES									
Commercial Bank Deposits	1,153,599	1,136,532	1,026,246	+ 12	Savings & Loans				
Demand	296,907	289,180	293,800	+ 1	Total Deposits	534,361	529,824	513,658	+ 4
NOW	58,571	56,820	42,159	+ 39	NOW	10,492	9,792	5,936	+ 77
Savings	151,534	150,908	155,001	- 2	Savings	93,211	92,348	98,719	- 6
Time	681,429	672,810	564,740	+ 21	Time	432,086	428,344	408,247	+ 6
Credit Union Deposits	49,551	47,715	37,332	+ 33		JUN	MAY	JUN	
Share Drafts	3,305	3,176	2,046	+ 62	Mortgages Outstanding	503,618	505,000	506,053	+ 0
Savings & Time	42,210	40,697	33,061	+ 28	Mortgage Commitments	16,762	16,549	17,923	- 6
SOUTHEAST									
Commercial Bank Deposits	124,578	123,302	109,687	+ 14	Savings & Loans				
Demand	34,789	34,138	33,449	+ 4	Total Deposits	78,686	78,295	75,039	+ 5
NOW	7,614	7,376	5,330	+ 43	NOW	1,700	1,582	912	+ 86
Savings	14,881	14,848	15,151	- 2	Savings	11,666	11,639	12,304	- 5
Time	71,134	70,329	58,531	+ 22	Time	65,539	65,099	61,062	+ 7
Credit Union Deposits	4,633	4,502	3,442	+ 35		JUN	MAY	JUN	
Share Drafts	329	321	230	+ 43	Mortgages Outstanding	69,933	74,256	73,831	- 5
Savings & Time	3,874	3,804	2,974	+ 30	Mortgage Commitments	3,142	3,242	3,753	- 16
ALABAMA									
Commercial Bank Deposits	13,828	13,852	12,603	+ 10	Savings & Loans				
Demand	3,527	3,468	3,311	+ 7	Total Deposits	4,521	4,472	4,385	+ 3
NOW	653	641	475	+ 37	NOW	89	83	48	+ 85
Savings	1,569	1,558	1,628	- 4	Savings	553	552	630	- 12
Time	8,711	8,694	7,460	+ 17	Time	3,905	3,860	3,174	+ 23
Credit Union Deposits	818	794	553	+ 48		JUN	MAY	JUN	
Share Drafts	64	62	49	+ 31	Mortgages Outstanding	3,946	3,963	4,010	- 2
Savings & Time	660	656	496	+ 33	Mortgage Commitments	78	59	109	- 28
FLORIDA									
Commercial Bank Deposits	40,816	40,388	36,308	+ 12	Savings & Loans				
Demand	12,318	12,070	12,227	+ 1	Total Deposits	47,524	47,551	45,533	+ 4
NOW	3,332	3,219	2,331	+ 43	NOW	1,171	1,087	645	+ 82
Savings	6,276	6,282	6,435	- 2	Savings	7,768	7,773	8,165	- 5
Time	20,036	19,791	16,073	+ 25	Time	38,660	38,598	36,479	+ 6
Credit Union Deposits	2,133	2,061	1,588	+ 34		JUN	MAY	JUN	
Share Drafts	186	177	129	+ 44	Mortgages Outstanding	41,364	45,525	44,924	- 8
Savings & Time	1,654	1,617	1,231	+ 34	Mortgage Commitments	2,519	2,650	3,133	- 0
GEORGIA									
Commercial Bank Deposits	17,448	17,165	14,670	+ 19	Savings & Loans				
Demand	6,158	5,977	5,791	+ 6	Total Deposits	9,916	9,802	9,541	+ 4
NOW	1,094	1,051	762	+ 44	NOW	184	172	92	+100
Savings	1,659	1,656	1,613	+ 3	Savings	1,203	1,193	1,289	- 7
Time	9,508	9,426	7,481	+ 27	Time	8,596	8,490	8,169	+ 5
Credit Union Deposits	839	817	608	+ 38		JUN	MAY	JUN	
Share Drafts	29	30	16	+ 81	Mortgages Outstanding	9,062	9,279	9,497	- 5
Savings & Time	757	738	588	+ 29	Mortgage Commitments	171	180	151	+ 13
LOUISIANA									
Commercial Bank Deposits	22,597	22,301	19,705	+ 15	Savings & Loans				
Demand	6,102	6,073	5,804	+ 5	Total Deposits	7,858	7,733	7,121	+ 10
NOW	1,041	1,015	722	+ 44	NOW	109	105	53	+106
Savings	2,473	2,466	2,478	- 0	Savings	1,236	1,221	1,240	- 0
Time	13,595	13,313	11,120	+ 22	Time	6,535	6,420	5,840	+ 12
Credit Union Deposits	124	122	83	+ 49		JUN	MAY	JUN	
Share Drafts	10	13	5	+100	Mortgages Outstanding	7,293	7,260	7,001	+ 4
Savings & Time	115	114	77	+ 49	Mortgage Commitments	242	267	238	+ 2
MISSISSIPPI									
Commercial Bank Deposits	10,324	10,260	9,148	+ 13	Savings & Loans				
Demand	2,354	2,309	2,257	+ 4	Total Deposits	2,438	2,414	2,376	+ 3
NOW	563	550	395	+ 43	NOW	51	47	22	+132
Savings	747	741	767	- 3	Savings	225	221	242	- 7
Time	6,899	6,878	5,919	+ 17	Time	2,175	2,158	2,115	+ 3
Credit Union Deposits	N.A.	N.A.	N.A.			JUN	MAY	JUN	
Share Drafts	N.A.	N.A.	N.A.		Mortgages Outstanding	2,182	2,145	2,204	- 1
Savings & Time	N.A.	N.A.	N.A.		Mortgage Commitments	21	19	38	- 45
TENNESSEE									
Commercial Bank Deposits	19,564	19,336	17,253	+ 13	Savings & Loans				
Demand	4,331	4,242	4,059	+ 7	Total Deposits	6,428	6,323	6,083	+ 6
NOW	932	899	645	+ 44	NOW	95	89	52	+ 83
Savings	2,157	2,145	2,230	- 3	Savings	681	679	738	- 8
Time	12,385	12,227	10,478	+ 18	Time	5,667	5,572	5,285	+ 7
Credit Union Deposits	719	708	610	+ 18		JUN	MAY	JUN	
Share Drafts	40	39	31	+ 29	Mortgages Outstanding	6,086	6,084	6,195	- 2
Savings & Time	688	679	582	+ 18	Mortgage Commitments	111	67	84	+ 32

Notes: All deposit data are extracted from the Federal Reserve Report of Transaction Accounts, other Deposits and Vault Cash (FR2900), and are reported for the average of the week ending the 1st Wednesday of the month. This data, reported by institutions with over $15 million in deposits as of December 31, 1979, represents 95% of deposits in the six state area. The major differences between this report and the "call report" are size, the treatment of interbank deposits, and the treatment of float. The data generated from the Report of Transaction Accounts is for banks over $15 million in deposits as of December 31, 1979. The total deposit data generated from the Report of Transaction Accounts eliminates interbank deposits by reporting the net of deposits "due to" and "due from" other depository institutions. The Report of Transaction Accounts subtracts cash in process of collection from demand deposits, while the call report does not. Savings and loan mortgage data are from the Federal Home Loan Bank Board Selected Balance Sheet Data. The Southeast data represent the total of the six states. Subcategories were chosen on a selective basis and do not add to total.
N.A. = fewer than four institutions reporting.

EMPLOYMENT

	JUN 1982	MAY 1982	JUN 1981	ANN. % CHG.		JUN 1982	MAY 1982	JUN 1981	ANN. % CHG.
UNITED STATES									
Civilian Labor Force - thous.	111,569	109,914	109,904	+ 2	Nonfarm Employment- thous.	90,741	90,440	92,056	- 1
Total Employed - thous.	100,683	99,957	101,419	- 1	Manufacturing	19,074	19,043	20,445	- 7
Total Unemployed - thous.	10,886	9,957	8,485	+28	Construction	4,102	4,002	4,350	- 6
Unemployment Rate - % SA	9.5	9.5	7.4		Trade	20,721	20,632	20,671	+ 0
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	16,055	16,148	16,168	- 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	19,124	19,024	18,711	+ 2
Mfg. Avg. Wkly. Hours	39.2	39.0	40.2	- 2	Fin., Ins., & Real Est.	5,402	5,340	5,353	+ 1
Mfg. Avg. Wkly. Earn. - $	334	330	320	+ 4	Trans. Com. & Pub. Util.	5,112	5,096	5,199	- 2
SOUTHEAST									
Civilian Labor Force - thous.	14,207	14,114	13,776	+ 3	Nonfarm Employment- thous.	11,390	11,439	11,447	- 0
Total Employed - thous.	12,811	12,818	12,695	+ 1	Manufacturing	2,182	2,190	2,329	- 6
Total Unemployed - thous.	1,396	1,296	1,080	+29	Construction	678	676	718	- 6
Unemployment Rate - % SA	9.4	9.6	7.6		Trade	2,684	2,698	2,646	+ 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	2,114	2,142	2,129	- 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	2,235	2,228	2,140	+ 4
Mfg. Avg. Wkly. Hours	39.7	39.3	40.6	- 2	Fin., Ins., & Real Est.	641	642	632	+ 1
Mfg. Avg. Wkly. Earn. - $	284	279	273	+ 4	Trans. Com. & Pub. Util.	698	699	703	- 1
ALABAMA									
Civilian Labor Force - thous.	1,707	1,714	1,676	+ 2	Nonfarm Employment- thous.	1,334	1,335	1,351	- 1
Total Employed - thous.	1,469	1,485	1,485	- 1	Manufacturing	343	345	368	- 7
Total Unemployed - thous.	238	229	191	+25	Construction	64	64	68	- 6
Unemployment Rate - % SA	13.1	13.9	10.7		Trade	271	272	272	- 0
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	295	295	284	+ 4
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	213	213	211	+ 1
Mfg. Avg. Wkly. Hours	39.8	39.3	40.3	- 1	Fin., Ins., & Real Est.	59	59	60	- 2
Mfg. Avg. Wkly. Earn. - $	290	284	281	+ 3	Trans. Com. & Pub. Util.	71	71	72	- 1
FLORIDA									
Civilian Labor Force - thous.	4,763	4,710	4,557	+ 5	Nonfarm Employment- thous.	3,763	3,786	3,726	+ 1
Total Employed - thous.	4,398	4,364	4,265	+ 3	Manufacturing	452	456	466	- 3
Total Unemployed - thous.	366	346	292	+25	Construction	257	257	284	-10
Unemployment Rate - % SA	7.5	7.9	6.2		Trade	1,016	1,028	972	+ 5
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	613	617	628	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	907	905	861	+ 5
Mfg. Avg. Wkly. Hours	39.4	39.1	40.6	- 3	Fin., Ins., & Real Est.	280	281	273	+ 3
Mfg. Avg. Wkly. Earn. - $	272	269	263	+ 3	Trans. Com. & Pub. Util.	230	231	230	0
GEORGIA									
Civilian Labor Force - thous.	2,683	2,663	2,606	+ 3	Nonfarm Employment- thous.	2,155	2,163	2,186	- 1
Total Employed - thous.	2,466	2,467	2,441	+ 1	Manufacturing	493	496	527	- 6
Total Unemployed - thous.	216	196	164	+32	Construction	100	100	103	- 3
Unemployment Rate - % SA	7.6	7.6	5.8		Trade	497	498	501	- 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	431	439	429	+ 0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	367	365	360	+ 2
Mfg. Avg. Wkly. Hours	39.5	39.2	40.7	- 3	Fin., Ins., & Real Est.	116	116	114	+ 2
Mfg. Avg. Wkly. Earn. - $	267	263	257	+ 4	Trans. Com. & Pub. Util.	143	142	145	- 1
LOUISIANA									
Civilian Labor Force - thous.	1,894	1,866	1,804	+ 5	Nonfarm Employment- thous.	1,620	1,622	1,635	- 1
Total Employed - thous.	1,676	1,670	1,647	+ 2	Manufacturing	202	204	224	-10
Total Unemployed - thous.	218	197	157	+39	Construction	134	132	140	- 4
Unemployment Rate - % SA	10.6	10.7	7.8		Trade	370	370	371	- 0
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	311	315	303	+ 3
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	296	296	289	+ 2
Mfg. Avg. Wkly. Hours	40.4	40.2	41.4	- 2	Fin., Ins., & Real Est.	76	76	75	+ 1
Mfg. Avg. Wkly. Earn. - $	379	373	351	+ 8	Trans. Com. & Pub. Util.	132	131	133	- 1
MISSISSIPPI									
Civilian Labor Force - thous.	1,059	1,076	1,066	- 1	Nonfarm Employment- thous.	794	805	822	- 3
Total Employed - thous.	936	968	969	- 3	Manufacturing	210	210	225	- 7
Total Unemployed - thous.	123	107	97	+27	Construction	39	40	44	-11
Unemployment Rate - % SA	10.3	10.6	7.8		Trade	163	163	165	- 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	176	185	182	- 3
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	119	122	120	- 1
Mfg. Avg. Wkly. Hours	39.5	38.8	39.8	- 1	Fin., Ins., & Real Est.	33	33	33	0
Mfg. Avg. Wkly. Earn. - $	253	248	237	+ 7	Trans. Com. & Pub. Util.	40	40	41	- 2
TENNESSEE									
Civilian Labor Force - thous.	2,101	2,085	2,067	+ 2	Nonfarm Employment- thous.	1,724	1,728	1,727	- 0
Total Employed - thous.	1,866	1,864	1,888	- 1	Manufacturing	482	479	519	- 7
Total Unemployed - thous.	235	221	179	+31	Construction	84	83	79	+ 6
Unemployment Rate - % SA	11.2	11.0	8.6		Trade	367	367	365	+ 1
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	288	291	303	- 5
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	333	327	299	+11
Mfg. Avg. Wkly. Hours	39.7	38.9	40.5	- 2	Fin., Ins., & Real Est.	77	77	77	0
Mfg. Avg. Wkly. Earn. - $	283	275	272	+ 4	Trans. Com. & Pub. Util.	82	84	82	0

Notes: All labor force data are from Bureau of Labor Statistics reports supplied by state agencies.
Only the unemployment rate data are seasonally adjusted.
The Southeast data represent the total of the six states.
The annual percent change calculation is based on the most recent data over prior year.

CONSTRUCTION

	JUN 1982	MAY 1982	JUN 1981	ANN % CHG		JUN 1982	MAY 1982	JUN 1981	ANN % CHG
12-month Cumulative Rate									
UNITED STATES									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	50,117	51,099	50,230	- 0	Value - $ Mil.	34,819	35,175	49,790	- 30
Industrial Bldgs.	6,242	6,271	7,857	- 21	Residential Permits - Thous.				
Offices	14,617	15,367	13,045	+ 12	Number single-family	466.8	473.1	733.8	- 36
Stores	5,653	5,859	6,666	- 15	Number multi-family	381.1	380.9	498.9	- 24
Hospitals	1,646	1,594	1,304	+ 26	Total Building Permits				
Schools	879	790	705	+ 25	Value - $ Mil.	84,936	86,275	100,020	- 15
SOUTHEAST									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	6,605	6,683	7,069	- 7	Value - $ Mil.	6,648	6,770	10,270	- 35
Industrial Bldgs.	817	810	859	- 5	Residential Permits - Thous.				
Offices	1,420	1,447	1,333	+ 7	Number single-family	94.9	96.9	159.7	- 41
Stores	1,059	1,089	1,007	+ 5	Number multi-family	85.7	85.6	128.7	- 33
Hospitals	293	286	169	+ 73	Total Building Permits				
Schools	92	90	96	- 4	Value - $ Mil.	13,257	13,451	17,348	- 24
ALABAMA									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	401	400	432	- 7	Value - $ Mil.	241	241	415	- 42
Industrial Bldgs.	82	79	50	+ 64	Residential Permits - Thous.				
Offices	41	41	65	- 37	Number single-family	4.1	4.1	8.6	- 52
Stores	70	68	72	- 3	Number multi-family	5.1	5.0	7.3	- 30
Hospitals	32	32	16	+100	Total Building Permits				
Schools	8	7	13	- 38	Value - $ Mil.	642	641	847	- 24
FLORIDA									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	3,340	3,393	3,910	- 15	Value - $ Mil.	4,272	4,445	6,969	- 39
Industrial Bldgs.	407	393	428	- 5	Residential Permits - Thous.				
Offices	658	654	561	+ 17	Number single-family	51.7	54.4	94.7	- 45
Stores	553	574	566	- 2	Number multi-family	55.3	56.5	90.4	- 39
Hospitals	169	165	46	+267	Total Building Permits				
Schools	18	23	25	- 28	Value - $ Mil.	7,613	7,838	10,878	- 30
GEORGIA									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	1,056	1,054	1,142	- 8	Value - $ Mil.	1,055	1,016	1,303	- 19
Industrial Bldgs.	177	177	197	- 10	Residential Permits - Thous.				
Offices	256	260	330	- 22	Number single-family	20.7	20.0	27.5	- 25
Stores	119	122	104	+ 14	Number multi-family	9.9	9.2	10.8	- 8
Hospitals	27	24	20	+ 35	Total Building Permits				
Schools	35	32	30	+ 17	Value - $ Mil.	2,112	2,070	2,444	- 14
LOUISIANA									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	920	931	832	+ 11	Value - $ Mil.	555	553	719	- 23
Industrial Bldgs.	89	90	105	- 15	Residential Permits - Thous.				
Offices	282	309	271	+ 4	Number single-family	9.2	9.1	12.2	- 25
Stores	166	172	99	+ 68	Number multi-family	7.6	7.6	9.3	- 18
Hospitals	29	30	56	- 48	Total Building Permits				
Schools	24	21	18	+ 33	Value - $ Mil.	1,476	1,483	1,551	- 5
MISSISSIPPI									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	189	180	179	+ 6	Value - $ Mil.	144	141	254	- 43
Industrial Bldgs.	23	22	13	+ 77	Residential Permits - Thous.				
Offices	44	43	35	+ 26	Number single-family	2.9	2.9	4.9	- 41
Stores	40	38	49	- 18	Number multi-family	1.9	1.8	4.0	- 53
Hospitals	6	6	5	+ 15	Total Building Permits				
Schools	1	1	1	0	Value - $ Mil.	334	320	433	- 23
TENNESSEE									
Nonresidential Building Permits -	$ Mil.				Residential Building Permits				
Total Nonresidential	699	725	574	+ 22	Value - $ Mil.	381	374	610	- 38
Industrial Bldgs.	39	49	66	- 41	Residential Permits - Thous.				
Offices	139	140	71	+ 96	Number single-family	6.3	6.4	11.8	- 47
Stores	111	115	117	- 5	Number multi-family	5.9	5.5	6.9	- 14
Hospitals	30	29	26	+ 15	Total Building Permits				
Schools	6	6	9	- 33	Value - $ Mil.	1,080	1,099	1,195	- 10

NOTES:
Data supplied by the U. S. Bureau of the Census, Housing Units Authorized By Building Permits and Public Contracts, C-40. Nonresidential data excludes the cost of construction for publicly owned buildings. The southeast data represent the total of the six states. The annual percent change calculation is based on the most recent month over prior year. Publication of F. W. Dodge construction contracts has been discontinued.

GENERAL

	JUL 1982	JUN 1982	JUL 1981	ANN. % CHG.		JUL 1982	JUN (R) 1982	JUL 1981	ANN. % CHG.
UNITED STATES									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	2,518.6	2,493.1	2,327.4	+ 8	Prices Rec'd by Farmers				
Retail Sales - $ mil.- SA	88,723	87,887	87,292	+ 2	Index (1977=100)	137.0	137.0	142.0	- 4
Plane Pass. Arrivals (thous.) MAY	N.A.	N.A.	N.A.		Broiler Placements (thous.)	82,704	84,455	81,103	+ 2
Petroleum Prod. (thous. bls.)	8,701.0	8,649.1	8,626.7	+ 0	Calf Prices ($ per cwt.)	61.10	61.90	62.00	- 1
Consumer Price Index					Broiler Prices (¢ per lb.)	28.6	28.6	30.1	- 5
1967=100	292.2	290.6	274.4	+ 6	Soybean Prices ($ per bu.)	6.05	6.12	7.13	-15
Kilowatt Hours - mils. (MAR)	173.9	182.8	169.8	+ 2	Broiler Feed Cost ($ per ton)	217	215	233	- 7
SOUTHEAST									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	297.0	294.5	271.3	+ 9	Prices Rec'd by Farmers				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		Index (1977=100)	128.0	122.6	129.6	- 1
Plane Pass. Arrivals (thous.) MAY	4,240.8	4,463.9	4,216.3	+ 0	Broiler Placements (thous.)	32,847	33,744	31,629	+ 4
Petroleum Prod. (thous. bls.)	1,389.0	1,387.0	1,427.8	- 3	Calf Prices ($ per cwt.)	57.30	58.02	55.49	+ 3
Consumer Price Index					Broiler Prices (¢ per lb.)	27.7	27.6	29.2	- 5
1967=100	N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	6.14	6.24	7.17	-14
Kilowatt Hours - mils. (MAR)	25.9	27.8	25.6	+ 1	Broiler Feed Cost ($ per ton)	218	213	224	- 3
ALABAMA									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	33.0	33.1	31.2	+ 6	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		(Dates: APR, APR)	572	-	561	+ 2
Plane Pass. Arrivals (thous.) MAY	111.4	106.2	119.0	- 6	Broiler Placements (thous.)	10,368	10,826	10,198	+ 2
Petroleum Prod. (thous. bls.)	56.0	55.0	60.0	- 7	Calf Prices ($ per cwt.)	53.70	55.20	53.50	+ 0
Consumer Price Index					Broiler Prices (¢ per lb.)	26.5	27.0	28.5	- 7
1967=100	N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	6.14	6.12	6.91	-11
Kilowatt Hours - mils. (MAR)	3.5	4.0	3.7	- 5	Broiler Feed Cost ($ per ton)	225	215	245	- 8
FLORIDA									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	108.7	107.3	96.9	+12	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	66.8	67.2	63.9	+ 5	(Dates: APR, APR)	1,907	-	1,839	+ 4
Plane Pass. Arrivals (thous.) MAY	2,114.9	2,251.3	1,826.2	+16	Broiler Placements (thous.)	2,064	1,887	1,771	+17
Petroleum Prod. (thous. bls.)	76.0	77.0	101.0	-25	Calf Prices ($ per cwt.)	61.00	62.50	59.70	+ 2
Consumer Price Index - Miami	**JUL**	**MAY**	**JUL**		Broiler Prices (¢ per lb.)	27.0	28.0	29.0	- 7
Nov. 1977 = 100	155.1	155.7	146.1	+ 6	Soybean Prices ($ per bu.)	6.14	6.12	6.91	-11
Kilowatt Hours - mils. (MAR)	6.7	6.9	6.6	+ 2	Broiler Feed Cost ($ per ton)	225	225	240	- 6
GEORGIA									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	51.8	51.7	48.2	+ 7	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		(Dates: APR, APR)	801	-	803	- 0
Plane Pass. Arrivals (thous.) MAY	1,548.8	1,640.1	1,784.6	-14	Broiler Placements (thous.)	12,863	13,065	12,365	+ 4
Petroleum Prod. (thous. bls.)	N.A.	N.A.	N.A.		Calf Prices ($ per cwt.)	56.00	56.50	52.20	+ 7
Consumer Price Index - Atlanta	**JUN**	**APR**	**JUN**		Broiler Prices (¢ per lb.)	27.0	27.0	29.0	- 7
1967 = 100	291.1	280.2	269.2	+ 8	Soybean Prices ($ per bu.)	6.25	6.12	7.03	-11
Kilowatt Hours - mils. (MAR)	4.4	4.5	4.0	+10	Broiler Feed Cost ($ per ton)	215	205	210	+ 2
LOUISIANA									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	43.0	42.5	39.0	+10	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		(Dates: APR, APR)	420	-	441	- 5
Plane Pass. Arrivals (thous.) MAY	269.7	284.3	293.5	- 8	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Petroleum Prod. (thous. bls.)	1,164.0	1,164.0	1,171.5	- 1	Calf Prices ($ per cwt.)	59.50	58.80	57.90	+ 3
Consumer Price Index					Broiler Prices (¢ per lb.)	31.0	29.5	31.0	0
1967 = 100	N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	6.22	6.36	7.44	-16
Kilowatt Hours - mils. (MAR)	4.1	4.2	3.8	+ 8	Broiler Feed Cost ($ per ton)	250	260	250	0
MISSISSIPPI									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	18.9	18.9	17.7	+ 7	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		(Dates: APR, APR)	605	-	559	+ 8
Plane Pass. Arrivals (thous.) MAY	32.7	31.7	35.8	- 9	Broiler Placements (thous.)	6,247	6,566	6,031	+ 4
Petroleum Prod. (thous. bls.)	93.0	91.0	95.3	- 3	Calf Prices ($ per cwt.)	57.40	59.60	56.30	+ 2
Consumer Price Index					Broiler Prices (¢ per lb.)	30.5	29.0	30.5	0
1967 = 100	N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	6.07	6.29	7.13	-15
Kilowatt Hours - mils. (MAR)	1.7	1.8	1.6	+ 6	Broiler Feed Cost ($ per ton)	205	210	210	-2
TENNESSEE									
Personal Income-$ bil. SAAR					Agriculture				
(Dates: 1Q, 4Q, 1Q)	41.5	40.9	38.3	+ 8	Farm Cash Receipts - $ mil.				
Taxable Sales - $ mil.	N.A.	N.A.	N.A.		(Dates: APR, APR)	486	-	415	+17
Plane Pass. Arrivals (thous.) MAY	163.3	150.3	157.2	+ 4	Broiler Placements (thous.)	1,305	1,399	1,264	+ 3
Petroleum Prod. (thous. bls.)	N.A.	N.A.	N.A.		Calf Prices ($ per cwt.)	56.30	55.30	53.30	+ 6
Consumer Price Index					Broiler Prices (¢ per lb.)	28.0	27.5	29.0	- 3
1967 = 100	N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	6.09	6.22	7.24	-16
Kilowatt Hours - mils. (MAR)	5.5	6.4	5.9	- 7	Broiler Feed Cost ($ per ton)	188	192	210	-10

Notes:
Personal Income data supplied by U. S. Department of Commerce. Taxable Sales are reported as a 12-month cumulative total. Plane Passenger Arrivals are collected from 26 airports. Petroleum Production data supplied by U. S. Bureau of Mines. Consumer Price Index data supplied by Bureau of Labor Statistics. Agriculture data supplied by U. S. Department of Agriculture. Farm Cash Receipts data are reported as cumulative for the calendar year through the month shown. Broiler placements are an average weekly rate. The Southeast data represent the total of the six states. N.A. = not available. The annual percent change calculation is based on most recent data over prior year.

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