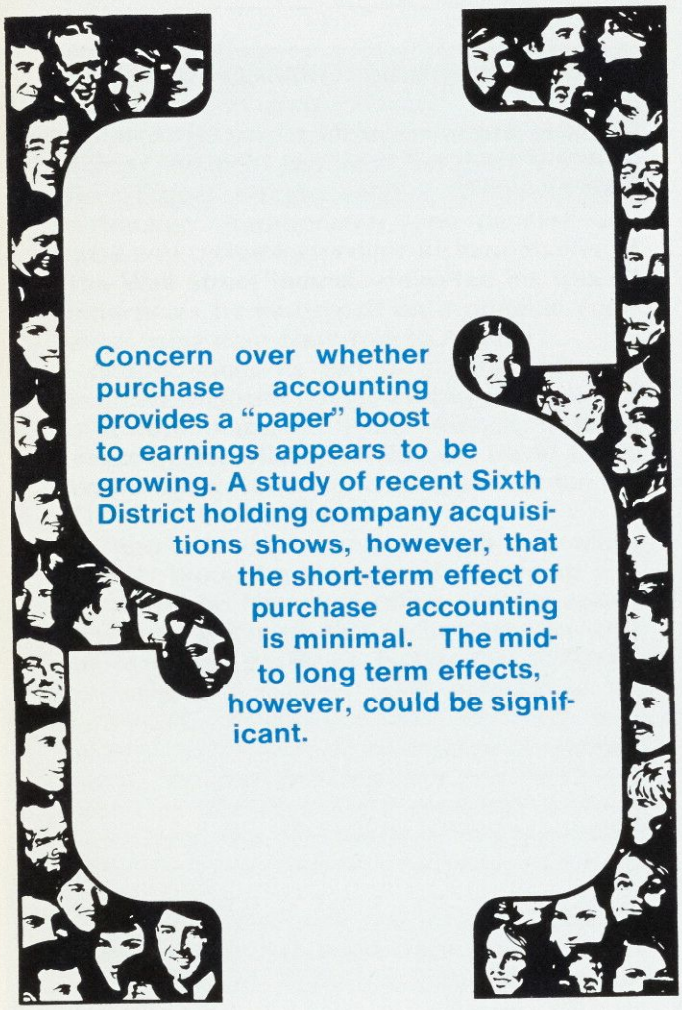
Purchase Accounting and the Quality of Bank Earnings



Concern over whether purchase accounting provides a "paper" boost to earnings appears to be growing. A study of recent Sixth District holding company acquisitions shows, however, that the short-term effect of purchase accounting is minimal. The mid- to long term effects, however, could be significant.

Investors, creditors, regulators and others interested in the financial condition of a banking firm rely heavily on its financial statements. To be useful, those statements must present the firm's condition fairly, accurately, and consistently. In spite of close monitoring of large banks by security analysts, however, we believe the effects of one accounting area—called "purchase accounting"—often are not fully understood. In particular, this method's treatment of "goodwill" in business acquisitions has proven somewhat controversial.

Purchase accounting, which deals with mergers or acquisitions, can have dramatic effects on a banking firm's reported income. If rising interest rates reduce the market value of some of a bank's fixed-rate assets, for example, purchase accounting could actually produce a temporary increase in earnings. On the other hand, when a company ends an aggressive acquisition policy, earnings growth might show a significant decline. If such changes reflected actual economic values, there would be no need for concern. But if they were attributable to arbitrary accounting decisions, investors, regulators and the general populace would be very interested.

Recently, some accountants have expressed concern over the "paper" boost to earnings arising from purchase accounting involving financial institutions. To address this problem the Financial Accounting Standards Board issued statement No. 72 "Accounting for Certain Acquisitions of Banking or Thrift Institutions." The changes in this statement would lessen the boost

to earnings in certain acquisitions after September 30, 1982; however, there would still exist the possibility of enhanced earnings. Interestingly, we found that this "paper" boost to earnings was not significant in recent holding company acquisitions in the Sixth District. FASB No. 72 would appear to be more applicable to the ailing savings and loan industry where substantial write-downs of the mortgage portfolio often result in liabilities exceeding the fair market value of assets by a large margin. The new accounting statement requires that if, and to the extent that, the fair value of liabilities assumed exceeds the fair value of identifiable assets acquired, the goodwill recognized should be written-off over a period no longer than the average life of long-term interest bearing assets. In effect, this reduces the paper boost to earnings but has no effect on the amount or method of amortization of existing goodwill on financial statements involving acquisitions prior to September 30, 1982. When looking at bank acquisitions we found this to be a more significant issue.

In this article, we explain what purchase accounting is and how it differs from the other method of accounting for mergers and acquisitions—"pooling-of-interests" accounting. We also examine how purchase accounting is being used and how it is affecting the earnings of bank holding companies that acquire banks in the Southeast.

To answer these questions, we recently surveyed bank holding companies in the Sixth Federal Reserve District. The results indicate that, in the short run, the accounting treatment of bank acquisitions in this District generally does not produce significant changes in a firm's net income. Under the right circumstances, the potential exists for temporarily enhancing net income substantially. Yet, apparently that has occurred infrequently because positive effects of asset write-downs are counteracted by write-offs of large purchase price premiums. We found that the average net effect of purchase accounting on consolidated income was only 0.6 percent of total consolidated income in the year of acquisition. However, looking at the long-run effects, once the purchase accounting adjustment runs out, the remaining write-offs of goodwill can have a significant negative impact on reported earnings. If this is the case, it may affect management's future acquisition policies and change the way outsiders analyze a firm's earnings performance.

"The accounting treatment of bank acquisitions in this District generally does not produce significant changes in a firm's net income."

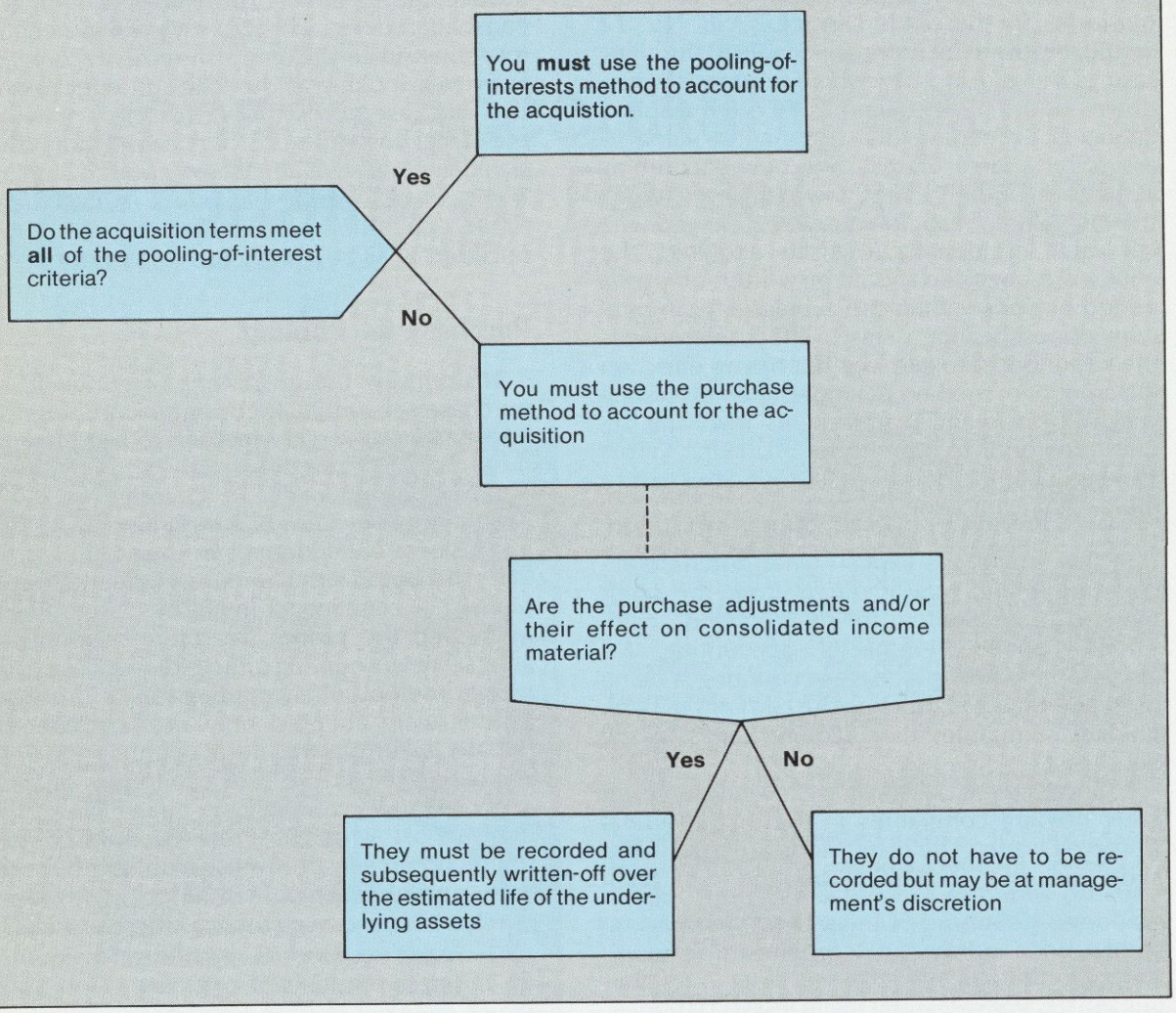
Purchase vs. Pooling

Historically, the treatment of goodwill and purchase accounting for business combinations has been controversial. Members of the accounting profession have long debated the appropriateness of recording goodwill. In October 1970, the Accounting Principles Board clarified its position on business combinations in their Opinion No. 16.[1] The board simultaneously issued Opinion No. 17, "Accounting for Intangible Assets," which addressed the proper treatment of intangible assets. The accounting principles that govern the proper method of accounting for various transactions were adopted only after considerable debate. It is crucial that the accounting principles accurately reflect the true economics of transactions. Understandably, in many cases it is unclear just what the "true economics" of a transaction really are. Thus, some of the controversy surrounding the treatment of goodwill and purchase accounting remains with us today.

There are two distinct methods of accounting for business combinations: pooling-of-interests—which does not revalue assets or liabilities—and purchase. To better understand how purchase accounting affects income, it is necessary to look at both approaches. These two methods of acquisition accounting are not alternatives with respect to any particular business combination, nor is the method used an elective of management. Detailed rules specify conditions under which the pooling-of-interests method must be used. If those conditions do not exist, the purchase method is appropriate (see Exhibit 1).

[1]The Accounting Principles Board was the rulemaking body of the accounting profession from 1959 to 1973. The APB was succeeded by the Financial Accounting Standards Board (FASB).

Exhibit 1
Accounting Decision Flow Chart
for Business Combinations



A number of conditions must be met to use the pooling-of-interests method (Box 1). The conditions are designed to assure that the combining companies are independent and autonomous, that relative rights and risks of ownership are combined proportionally, and that transactions are not contemplated after the combination that would be inconsistent with the concept of combining the existing interests of independent stockholder groups.

The pooling-of-interests method recognizes that two separate businesses are being combined and future operating results are based on original amounts of assets and liabilities. No revaluation of assets or liabilities takes place. Assets, liabilities, stockholders' equity, and net income for the entire year of the acquisition of the respective companies are combined. Because the basis of valuation in a pooling is the book value of net assets on the books of the acquired company, goodwill cannot be created at the date of combination. If an acquisition qualifies under the pooling criteria, the exchange of ownership of bank stock for holding company stock is eligible

POOLING OF INTERESTS - CRITERIA

Conditions for Pooling of Interest Method—(**All** must be met or it is a "Purchase")

A. Combining Companies Criteria:
   1. Subsidiaries or divisions of another corporation (if within two years before the plan of combination is initiated) are not allowed.
   2. Each of the combining companies is **independent** of the other combining companies.
      a. Thus no more than 10 percent of any company can be held as intercorporate investments prior to the initiation of the plan of combination.

B. Combining of Interests Criteria:
   1. The combination must be completed within one year after the plan is initiated.
   2. After the date the plan of combination is initiated, the issuing corporation issues **voting common stock** in exchange for at least 90 percent of the **voting common stock** of another combining company.
   3. Ratio of interest or predecessor owners must remain the same.
   4. "Voting rights" must remain the same, thus no "voting trusts" are allowed.
   5. "Contingent buy outs" not allowed (e.g., based on future earnings of either parent or sub, etc.).

C. Absence of "Planned Transactions" Criteria:
   1. No future "buy out" agreements allowed (for example, through treasury stock, to dissident shareholders).
   2. The combined corporation cannot guarantee loans on stock issued in the combination, thus allowing some previous stock owners to get cash (in effect "sell") from their stock.
   3. The combined corporation does not intend to plan or dispose of a significant part of the assets of the combining companies within two years after combination, except for disposals of duplicated facilities.

PURCHASE VS. POOLING-OF INTERESTS

The fundamental differences between the pooling and purchase methods are:

1. In a "purchase," the net income of a newly acquired subsidiary will be included in consolidated net income **from the date of acquisition**. In a "pooling," net income of the subsidiary for the **entire year** is added to consolidated net income regardless of the date of "pooling."
2. In a "purchase," only retained earnings from the date of acquisition are included in consolidated retained earnings. In a "pooling" **all** acquired retained earnings of the subsidiary are added to consolidated retained earnings.
3. In a "purchase," net book values of a newly acquired company are adjusted to acquisition date fair values. In a "pooling" net book values of the "pooled" companies remain the same.
4. In a "purchase," any difference between the amount paid for the subsidiary and the fair value of assets acquired would result in positive and negative goodwill which should be amortized over a period not to exceed 40 years. In a "pooling" no consolidated goodwill is created.
5. In a "purchase" where newly issued stock was exchanged for a newly purchased company, the shareholders' equity would be increased by the **fair market value** of the stock issued. In a pooling when new stock is issued for a newly acquired "pooled corporation," the shareholders' equity is increased by the total **net book value** of the newly pooled corporation.

for a tax-free exchange. The owner of bank stock merely exchanges his shares for stock of the holding company and would retain the same ownership percentage in the holding company as he had in the bank.[2]

Unlike a pooling, the purchase method is similar to the accounting treatment used in the acquisition of any asset group (Box 2). The fair market value of the consideration (cash, stock, debt securities) given by the acquiring firm is used as the valuation basis of the combination. Assets and liabilities of the acquired firm are revalued to their respective fair market values at the date of combination.[3] Any difference between the value of the consideration given and the book value of net assets obtained is known as the "differential" of net assets acquired.

This differential has two components: (1) an amount representing an adjustment of the book values of the net assets up (or down) to their respective fair market values (the purchase adjustment) and (2) an amount representing intangible assets. Some rules guide the accounting treatment of the differential, but there is considerable room for subjectivity in the valuation of intangibles. Depending on management decisions, treatment of the differential can produce varying results in the firm's income statement.

An important judgment in the accounting treatment of business combinations is the treatment

[2]This is generally true for one-bank holding companies, however, multibank holding companies cannot usually meet the strict pooling-of-interests criteria and thus a tax-free exchange is more difficult to structure and would be handled differently.

[3]Book values often differ from market values because accounting rules require assets to be recorded at "historical cost." Generally, acquired assets are recorded at their market value at the acquisition date. This value (now called "book value") remains constant and is not adjusted with temporary fluctuations in market value.

of intangible assets. There are two types of intangible assets: identifiable and unidentifiable. The unidentifiable intangible asset is more commonly known as goodwill. It can be defined as the differential ability of one business, in comparison with another or an assumed average firm, to make a profit.[4] The amount assigned to goodwill is usually capitalized as an asset and written off over a period of time. The write-off period should correlate with the anticipated length of benefit from the goodwill but in any case cannot exceed 40 years. Amortization of goodwill reduces net income but is not tax deductible.

"There is considerable room for subjectivity in the valuation of intangibles."

The other intangible assets, known as identifiable intangibles, represent expected future benefits from identifiable assets. Patents, franchises and trademarks are examples of identifiable intangibles. An identifiable intangible gaining popularity among financial institutions is "deposit base valuation" (see Box 3.) If an intangible asset is identifiable, it may qualify as a tax-deductible item and is thus preferable over the non-deductible goodwill (unidentifiable).[5] For this reason, most financial institutions would benefit from allocating a portion of the premium paid in a bank acquisition to identifiable intangibles instead of allocating the premium totally to goodwill.

To understand how the differential can actually affect reported income, let's discuss the specific accounting treatment of the purchase adjustment, identifiable and unidentifiable intangible assets. All three elements of the differential play an important role in the ultimate effect of purchase accounting on bank earnings (Exhibit 2).

DEPOSIT BASE VALUATION

Deposit base valuation is an intangible asset which seems to be gaining popularity with financial institutions. Its popularity is due principally to the tax advantages it offers. Unlike goodwill, deposit base valuation is an identifiable intangible asset whose underlying tangible asset is a bank's low-cost deposit base. If purchase accounting is used, the low cost deposit base can be discounted to yield the prevailing interest rates for similar deposits at the time of acquisition. This discounted value becomes known as the deposit base valuation and is written off over a period which reflects the pattern of expected run-off of the related deposits. As an identifiable intangible asset, the deposit base valuation's amortization has been treated as a tax deductible item by many financial institutions.

Depending on the underlying assets and current market conditions, the purchase adjustment may have varying effects on income. If the fair market value of assets is less than their book value (a likely condition for a financial institution in a period of high interest rates), the adjustment would be accreted over time to consolidated income. If fair market values are greater than book values, however, the purchase adjustment would be written-off over time as an expense item and have a reverse effect on income.

The write-off period for the purchase adjustment should correspond to the estimated life of the underlying assets. For investment securities, we might use the average maturity of the investment portfolio (which may range from several months to many years depending on the maturity structure of the portfolio); for premises and equipment we most likely would use the estimated remaining useful life of the property. Obviously, the shorter the estimated life of the underlying assets the larger the annual write-off of the purchase adjustment.

The estimated life of underlying assets is generally easy to quantify and thus the purchase adjustment write-off is based on a somewhat objective judgment of the economic value of assets. However, the accounting treatment of intangible assets requires more subjective judgement. Identifiable intangible assets are required to be written off over the expected life of the underlying assets. Identifying an amount and subsequent write-off period is more difficult than for the purchase adjustments. The valuation

[4]Goodwill in Accounting: A History of the Issues and Problems. Hugh P.Hughes, Research Monograph No.80, 1982, p. 7.

[5]Officially the Internal Revenue Service has been silent on the deductibility of "deposit base." It is not addressed in the current code, but many financial institutions across the country have been treating it as a deductible item.

EXHIBIT 2

Income Statement Effects of the Write-off of Goodwill and Purchase Adjustments

Item	Effect on Income	
	Positive	Negative
Goodwill		X
Purchase Adjustments		
Asset Accounts:		
Write-Up		X
Write-Down	X	
Liability Accounts		
Write-Up	X	
Write Down		X

of a deposit base again serves as a good example here. The intangible value of possessing a low cost deposit base is written-off to match the estimated run-off of the deposits. The anticipated run-off period then becomes a subjective decision influenced by anticipated behavior of depositors. Even though this write-off period is slightly subjective, management can monitor the actual deposit run-offs and adjust the write-off period accordingly.

The ability to monitor the "activity" of underlying assets is not present when dealing with unidentifiable assets and therefore the accounting treatment of goodwill is considerably more difficult and really quite subjective. Since goodwill represents the value assigned to future earnings from somewhat ambiguous sources such as market presence and name association, the precise period of benefit is clearly in doubt. This makes the goodwill amortization period mostly a subjective management decision. Generally accepted accounting principles call for the amortization to equal the expected period of benefit but not to exceed 40 years. The elusive nature of goodwill forces many firms to write it off over the maximum period allowed.Only recently, FASB No. 72 removed some (but by no means all) of the subjectivity in choosing the appropriate write-off period. It provided limited guidelines for only that portion of goodwill represented by the excess of the fair market value of liabilities over fair market value of identifiable assets. In our survey this situation existed in 14 out of 21 cases and averaged 26 percent of total goodwill created in the acquisitions.

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To determine purchase accounting's total effect on the income of a consolidated organization, you must net the write-off of the purchase adjustment against the write-off of intangible assets. This is then adjusted for taxes, if any, and compared to the consolidated organization's net income. Potentially, this impact can prove significant if: (1) the purchase adjustment is a large net write-down of assets, (2) it is written to income over a relatively short time and (3) intangible assets are small in relation to the purchase adjustment and are written off over a much longer period of time. These conditions could create a significant, positive effect on earnings—possibly not reflecting the true underlining value of the transaction.

Earnings Quality

Many people feel that purchase accounting and its treatment of intangible assets can affect a firm's earnings quality. The concept of earnings quality is somewhat elusive. At first glance a company's reported net income may look good compared to past performance, but this can be deceiving. Were there any unusual or one-time adjustments that temporarily enhanced income? If there were, we might determine that reported earnings are of "poor quality." This means the income that is reported does not reflect a firm's earnings potential from ongoing operations. In most cases earnings quality is a matter of subjective determination.

A recent survey of accountants, security analysts, and financial managers uncovered certain earnings characteristics those people felt resulted in poor

quality earnings.[6] For example, a company using the cost method to account for its investee would have poor quality earnings if it received an unusually large cash dividend from the investee in one year. Also, if a significant increase in earnings is due to the sale of land, most of those surveyed believed earnings quality would deteriorate. The gain from selling the land was a result of profits accumulated over a number of years. Realizing the whole gain in one year makes earnings unrealistically high.

One of many other characteristics cited in the survey as exaggerating earnings was a significant increase in intangible assets. The amount recorded as intangible assets may overstate future income-producing potential. It can also effect earnings quality if the intangible should have been expensed rather than capitalized as an asset. This is a consideration of earnings quality that should be analyzed closely when looking at a bank holding company going through an aggressive acquisition period. The effects of intangible assets on the quality of earnings usually arise in the use of purchase accounting.

Table: Selected Survey Results

	Number	Percent
Survey respondents	139	77.2
Method of accounting used for acquisitions:		
Pooling-of-Interests	75	54.0
Purchase	64	46.0
Number of institutions recording a purchase adjustment	21	15.1
Average size of the purchase adjustment as a percentage of average:		
Consolidates assets	0.3	
Acquired bank's assets	2.2	
Acquired bank's stockholders equity	31.6	
Net income of consolidated organization	0.6	
Average write-off period for purchase adjustments (years):		
Loans	9.2	
Investment securities	5.9	
Premises and equipment	25.7	
Other	4.0	
Average write-off period for intangibles (years):		
Identifiable	12.74	
Unidentifiable	30.88	

Survey Results

To determine the extent of purchase accounting being used in bank acquisitions and its impact on reported income, we surveyed 180 of the most recent holding company acquisitions in the Sixth District.[7] One hundred thirty-nine (77.2 percent) of the holding companies responded to our questionnaire. The majority of respondents (54 percent) used pooling-of-interests, while 64 (46 percent) used the purchase method (Table 1). Most respondents using the pooling method had formed a new holding company through the purchase of a bank. This is not surprising since the recent popularity of one-bank holding company formations is partly attributable to the ability to use the pooling method and transfer ownership from the bank to the holding company without the stockholders incurring any tax liability.

If the purchase method is appropriate in accounting for an acquisition, the acquiring firm must decide on the issue of "materiality" of the purchase adjustments. If the dollar amount of the adjustments and the effect on current and future income is small when compared to the consolidated organization, generally accepted accounting principles say it is acceptable not to book the adjustment. However, if the purchase adjustment is determined to be material it must be recorded and subsequently written off over time. Unfortunately, there are no hard and fast measures of what is material. Most survey respondents cited the fair value of acquired assets compared to book values. Others cited criteria such as the impact of the purchase adjustments on the financial statements of the acquired bank; size of the purchase adjustment in relation to expected earnings and its effect on consolidated net worth-to-assets ratio; and purchase price as a percentage of consolidated assets. Several respondents recorded the adjustment even though they did not feel it was a material amount.

Thirty-three percent of the institutions using purchase accounting either considered it material or recorded the adjustment regardless of materiality. Goodwill was recorded at 81 percent of these banking firms. Write-off periods for goodwill ranged from as little as 10 years to 40 years, with an average of 31 years.

The most common purchase adjustments are made to the loan portfolio, investment securities, and premises and equipment. The survey indicated

[6] Joel G. Siegel, "The Quality of Earnings Concept—A Survey," **Financial Analysts Journal**, March/April 1982, p. 60+.

[7] The survey included acquisitions consumated between June 1980 and September 1982.

that not all banks had adjusted the carrying value of their loan portfolios. Forty-three percent of the banks felt that adjusting their loan portfolios would be immaterial. Seven of the 12 banks making the adjustment are using the straight line method of write-off. The other five are using the interest method. (The interest method differs from straight line in that annual write-offs are adjusted to provide a constant yield.) Write-off periods ranged from 2.5 to 20 years with an average of 9.2 years.

The largest write-down of assets was found in the securities portfolio. Eighteen of the 21 banks using the purchase adjustment adjusted securities to market value. The average write-down amounted to 33.8 percent of the acquired banks' stockholders equity.

The typical adjustment to premises and equipment is a net write-up of book value to market value. Appreciating values in the real estate market have caused this adjustment to be quite large. In fact, at banks answering our survey it was large enough on the average to negate write-downs in the loan portfolios. At seven banks it was large enough to negate all other write-downs and resulted in a positive (net write-up) purchase adjustment.

The price paid for an acquisition generally was substantially above the adjusted book value of the bank being acquired. The purchase price to book value ratio ran from 95.7 percent to 244 percent with an average of 156.75 percent. These substantial purchase price premiums were allocated to intangible assets and primarily unidentified intangibles (goodwill). However, seven of the 21 respondents who booked the purchase adjustment capitalized a portion of the purchase price as the identifiable intangible "deposit base." The use of deposit base valuation seemed to be most prevalent in Florida.

The average net effect of purchase accounting on consolidated earnings in the year of acquisition was a positive 0.6 percent of total consolidated income. Any improvement in earnings generally decreased fairly quickly after the year of acquisition and in most cases disappeared by the third or fourth year. This is explained by the short write-off periods for adjustments to assets that required write-downs such as loans and securities. Once these adjustments are written off, the remaining purchase adjustment typically would be to premises and equipment for which write-offs flow through the income statement as an expense. Therefore, once adjustments that represent net write-downs of assets are written off, remaining adjustments representing net write-ups of assets become expense items.

The long-term effect of writing off goodwill after offsetting purchase adjustments are gone is, in some cases, significant. We found that earnings at the particularly large holding companies, over $1 billion in assets, could be affected significantly by write-offs of accumulated goodwill from prior acquisitions. If acquisitions were to slow or stop, some institutions would be left with write-offs of goodwill amounting to as much as 12.6 percent of 1982 consolidated income.

"We found that earnings at the particularly large holding companies, over $1 billion in assets, could be affected significantly by write-offs of accumulated goodwill from prior acquisitions."

To estimate the real impact on future earnings, we applied a compounded annual earnings growth rate of 11.25 percent to current consolidated income.[8] Looking 10 years into the future (after all the positive effects of purchase accounting have worn off), goodwill amortization at these large holding companies could represent from as much as 4.35 percent of consolidated earnings to 0.61 percent, with an average of 2.09 percent. The analysis of goodwill amortization only illustrates the potential future impact on earnings. Because of the small sample size, incomplete information, and uncertainty about the future, this data can only serve to illustrate possible income effects. Our survey did not include all acquisitions of Sixth District holding companies but rather only a few of the most recent acquisitions. It is also important to note that for any

[8]This is the 10-year average earnings growth rate for all insured commercial banks. Source: FDIC Bank Operating Statistics, 1970-1980.

particular holding company, we requested information on not more than two of their recent acquisitions. Many of these holding companies negotiated more than two recent acquisitions and therefore the effect of goodwill write-offs is probably conservatively stated.

Conclusion

In the short run, the overall effect of the write-off of the large purchase price premiums netted against the accretion of much smaller purchase adjustments was minimal. The ability to write off intangibles over such a long period of time versus accretion of the purchase adjustment over a much shorter time frame minimized the net effect on income. Purchase accounting has the potential to increase net income significantly in the early years after an acquisition under the right circumstances, but if our survey is indicative of all small to medium bank acquisitions, such windfalls would be rare.

The mid- to long-term effects on income after purchase adjustments to assets and liabilities are written-off can be significant. We found that many large holding companies, especially in Florida and Georgia, that have been going through a period of aggressive acquisitions have accumulated significant amounts of goodwill on their books. If these banking firms slow or halt their acquisitions, producing no new offsetting purchase adjustments, the future amortization of goodwill may affect their consolidated earnings significantly. The accounting treatment of acquisitions then may play an important role in future management decisions over corporate acquisition policies. A banking firm that has been acquiring aggressively might have to look for ways to offset the future effects of goodwill amortization. This may force such an institution to seek more acquisitions with large purchase adjustments or to plan for other means to smooth otherwise slightly irregular earnings.

—Donald L. Koch
and Robert M. Baker