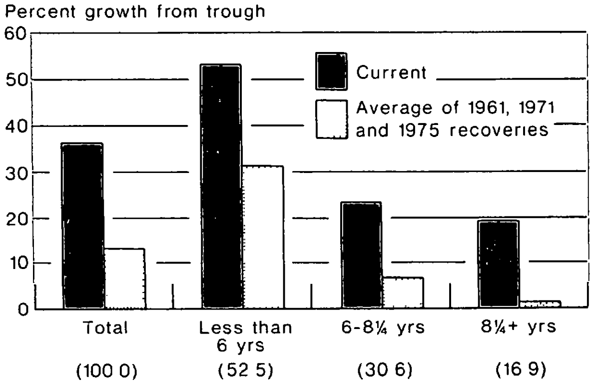
The Changing Durability of Business Investment Expenditures

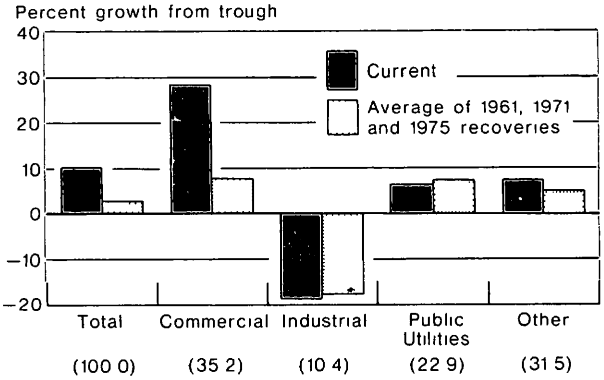
The composition of business fixed investment (BFI) in this expansion has important consequences for the growth of the capital stock If a large portion of BFI is being devoted to short-lived assets, then a growing share of future saving will have to go toward replacing depreciated capital, rather than adding to the capital stock. A look at the composition of BFI—including long- and short-lived producers' durable equipment (PDE), and structures—over the past seven quarters shows an encouraging pickup in long-lived investment, particularly when compared with earlier expansions However, spending on short-lived equipment has soared in this recovery, pushing the share of BFI going toward more durable assets to a new low

Purchases of producers' durable equipment, which

Real Producers' Durable Equipment in the First Seven Quarters of Expansion by Length of Productive Life



Real Nonresidential Construction in the First Seven Quarters of Expansion



The productive lives used here, which equal fifty percent of Bulletin F service lives, are based on the service lives employed by the Commerce Department to calculate the capital consumption allowance See Fixed Reproducible Tangible Wealth in the United States, 1925-79. United States Department of Commerce (1982). page T-17 The less than 6 years category is composed of office, store, construction, mining, oil field, and service industry machinery, trucks, tractors, and cars. The 6 to 8 1/4 category contains instruments, photo and communication equipment, general industrial machinery, electrical transmission and distribution equipment, miscellaneous and miscellaneous electrical, and household appliances The last category equals the balance of the expenditure groups presented in Table 5 7 in the National Income and Product Accounts Scrap was excluded from the total PDE expenditure category

The numbers in parentheses correspond to the average share of each group in either PDE or nonresidential construction in the first three quarters of 1984 The data for the third quarter of 1984 were taken from the preliminary estimate of GNP currently represent more than two-thirds of BFI, have registered impressive gains in this recovery Much of this surge has been concentrated in short-lived assets (chart) Expenditures on equipment with productive lives of less than six years, such as office and store machinery, cars, and light trucks, have climbed more than 50 percent from their 1982 trough level Their share of PDE has also increased to 52 0 percent from 46 2 percent

In contrast to earlier cyclical upturns, investment in longer-lived capital, such as communication equipment, electrical machinery, and steam engines, has also displayed a good deal of strength Spending on equipment with service lives from 6 to 8¼ years, for example, has advanced more than three times as fast in the current recovery as in previous upturns. Investment in assets with longer productive lives has shown even more resilience compared with the past usually it is still about equal to its trough value at this stage of the cycle

Business investment in structures, another long-lived asset, has been fairly robust in this expansion, increasing at more than triple the rate of prior recoveries As usual, spending on structures initially declined after the overall economy turned up But by the end of 1983, most categories of construction had started to grow, registering large advances in the first half of 1984 Most of the overall strength has come from the commercial sector. The other expenditure categories have moved approximately in line with previous cyclical upturns

Despite the relatively fast growth in spending on structures and longer-lived equipment, their share in BFI has tumbled in this expansion (to 62 percent in the third quarter of this year from 69 percent at the trough), continuing a trend that began in earnest in the early 1970s. This long-term shift to short-lived assets has been responsible for an increase in the amount of worn-out capital that needs to be replaced each year. In 1983, for example, about 10 5 percent of the private capital stock (excluding residential structures) was used up in the production of other goods and services, compared with less than 9 percent of the stock each year in the latter half of the 1960s

The current decline in the share of long-lived assets is likely to increase further the proportion of the capital stock exhausted each year. To be sure, the shift toward short-lived capital may be appropriate; reflecting, for example, concern that a faster pace of technological obsolescence may make long-lived investment unprofitable. But it also means that less of the economy's savings over time will be available to finance increments to the capital stock, with the balance being used to finance the replacement of obsolete capital.

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