This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Personal Income During Business Cycles

Volume Author/Editor: Daniel Creamer assisted by Martin Bernstein

Volume Publisher: Greenwood Press

Volume ISBN: 0-313-24421-9

Volume URL: http://www.nber.org/books/crea56-1

Publication Date: 1956

Chapter Title: SUMMARY OF FINDINGS

Chapter Author: Daniel Creamer, Martin Bernstein

Chapter URL: http://www.nber.org/chapters/c2771

Chapter pages in book: (p. 110 - 114)

CHAPTER 9

SUMMARY OF FINDINGS

WE HAVE examined the shift in the relative importance of the major types of personal income over the forty-odd years 1909-1951. For selected years in which personal income was at a peak, we have expressed each type of income as a percentage of total personal income. Over these four decades labor income rose from about half of total income to about two-thirds. About half of this relative gain was made during and immediately after World War I. While labor income registered substantial relative gains during and after World War II, they were no more substantial than those made between 1929 and 1937. In both these periods the rise in transfer payments contributed significantly to the increasing share accruing to nonfarm labor. Our evidence suggests also that within the area of labor income clerical salaries made more rapid gains than executive salaries, particularly since the Great Depression, and that wages and salaries originating in government expanded faster than either total personal income or wages and salaries originating in private enterprise.

While labor income was gaining in importance, property income was declining, as, to a lesser degree, was net income of proprietors. The divergent movements in the shares of labor and property income were largely due to changes in the rate of return rather than in the volume of factor input.

Against this background of long-term shifts we have analyzed the cyclical movements in personal income. There is a one-to-one correspondence of personal income cycles and business cycles. At troughs the personal income cycle roughly corresponds with the business cycle, while at peaks it usually lags slightly. The turning points in personal income are very similar whether it is measured in current or in constant prices, except in periods of rapidly changing prices during war and its immediate aftermath.

Considering separately the major components of personal income, we have found that cycles in farm income over eighty years show a low conformity to business cycles, although this is less true after 1929. We should expect low conformity in this case, because farm income is influenced by the weather and by foreign demand for agricultural products. For the other major components—nonfarm labor income, net income of nonfarm proprietors, and property

income—the turns, as a rule, either coincide with those in general business or lag slightly; the few leads are short.

The largest fluctuations (cycle amplitudes) occur in net income of farm proprietors, and the second largest in net income of nonfarm proprietors. The third largest average amplitude, about three-fourths of the largest one, is in nonfarm wages and salaries. The smallest, in property income, is about half of the largest.

The major components of personal income—nonfarm labor income and property income—can be analyzed further in terms of their own components. Nonfarm labor income can be broken down according to source (type of industry, or government and private), wages can be separated from salaries, and the compensation of corporate officers (which indicates roughly the behavior of all executive and professional salaries) can be separated from other salaries. In the private economy, between 1929 and 1938, the turning points of wages and salaries in commodity-producing industries tend to coincide with those in general business, but in the distributive industries short lags are the rule, and service industries exhibit longer lags.

For information on salaries in manufacturing industries we were obliged to rely for the interwar decades on fragmentary statistics, some of which relate to employment rather than to salary payments. The available data indicate that turning points in salary payments lag behind those in wage payments, but these data do not suggest the typical length of the lag.

The turning points in labor income originating in government are different according to whether or not wages for work relief are included. Since unemployment rises during contractions in general business and falls during expansions, work-relief wages follow the same inverted cycle with a lag due to administrative delays. Inverted turns that lag, however, also appear as positive turns that lead. Hence in a period when work-relief wages are quantitatively important, as they were during most of the 1930's, wage and salary payments by government tend to lead turns in general business. If work-relief wages are excluded, the turns, if any, in the labor income of regular government employees lag markedly behind those in general business.

Fluctuations in labor income are much more marked in some types of industries than in others. The smallest amplitudes are found in service industries and the largest in commodity-producing industries. The latter group shows the greatest sensitivity to the business cycle in both amplitude and timing, and within this group the cycli-

SUMMARY OF FINDINGS

cal movements are dominated by labor income in the manufacturing industries.

Whether in expansion or in contraction, salary payments in manufacturing industries fluctuate less than wage payments. Moreover, among salaried personnel the compensation of corporate officers, and therefore of executives and professional personnel, typically fluctuates less than that of other salaried employees.

Did these prewar patterns in nonfarm labor income change in the war and postwar years? During the 1940's, specific cycles in labor income occur only in nonfarm commodity-producing industries and in government, and the timing of turning points follows in general the prewar pattern. In the case of salary disbursements, however, there is a significant departure: salary payments lead wage disbursements at the two troughs, those of 1945 and 1949, while at the 1945 and 1948 peaks salaries continue to lag, as before the war. The leading at the troughs is probably a temporary aberration in a period when salaries were catching up with the faster rate of increase in wages during the war.

During the war cycle, as before the war, salaries fluctuate less than wages, but this is not true in the expansion of the first postwar cycle. During the 1940's, fluctuations in executive and professional salaries are smaller than those in other salaries, repeating the prewar pattern.

When we turn from labor to property income, the data permit intensive analysis only of dividend and interest payments to individuals. Dividend payments turn later than corporate profits; it is clear that they also turn later than business activity. In recent decades this lag averages four to five months, and in the three decades preceding the outbreak of World War I the average lag is ten months. Similar measures for cycles in interest payments are not possible, since this type of property income has not traced a complete cycle from 1909 to 1950. Over these forty-odd years there are only two turning points, a peak in 1929 and a trough in 1943, while general business has twenty turns.

Because there were no specific cycles in interest, only fluctuations in dividends can be compared with those in other types of income. In the 1920-1921 contraction the fall in dividends is about 35 per cent of the fall in nonfarm labor income, but in the 1921-1929 expansion the former rises twice as much as the latter. Larger changes in dividends persist throughout the 1930's. Indeed, fluctuations larger than those in dividends are found only in the net income of proprie-

SUMMARY OF FINDINGS

tors, both farm and nonfarm, which includes the highly volatile element of business savings. During the expansion of World War II the rise in dividends, and in property income in general, is only about one-third of the rise in labor income and in the net income of proprietors. In the first cycle after World War II there is some indication of a reversion to the prewar relationship of amplitudes in dividends and labor income.

Capital gains and losses realized by individuals are closely related to property income. Their size is largely determined by changes in stock-market prices. The turns in the latter tend to lead turns in general business, and this presumably is also true of realized net capital gains or losses. But since we are obliged to use annual statistics this presumption cannot be tested. Annual estimates, however, are adequate for indicating the relative importance of capital gains and losses vis à vis the personal income total. These estimates are available for the thirty-four years 1917-1950. Net gains were realized in nineteen of these years and net losses in fifteen. In relative terms, the largest net gains and losses were realized in 1928 and 1932, respectively, and both equaled 6 per cent of personal income. In about 40 per cent of the years the net gain or loss amounted to less than 1 per cent of annual personal income.

Nonfarm personal income can also be broken down according to income-size groups. What has been the impact of business cycles on the share of total income going to the highest, middle, and lowest income groups? On the basis of Kuznets' estimates, we conclude that there is no clear-cut answer to this question. There is a tendency for the income shares of the highest income group (top 1 per cent) and middle income group (upper 2nd to 7th per cent) to decline during business expansions and to increase during business contractions. Conversely, the share of the lowest income group tends to conform with business cycle fluctuations. But for all groups, except the middle income group during business contractions, these tendencies are weak.

The long-term shifts, however, are unambiguous. The share of the highest income group, the top 1 per cent of the population, declined by nearly one-half from 1913 to 1948, from 16 to 9 per cent. For the middle income group, the upper 2nd to 7th per cent, a declining share has been evident only since the Great Depression. In 1932 this group's share was 16 per cent; by 1948 it had fallen to 13 per cent. These relative declines were offset by the relative gains of the lowest income group, the lower 93 per cent of the population. Its

SUMMARY OF FINDINGS

income share increased from 71 per cent in 1931 to 78 per cent in 1948. A large part of these relative gains can be attributed to relative gains in labor income, which in turn are explained in large part by the rise in average hourly earnings and in transfer payments.

In the previous chapter we have examined briefly several programs of the federal government commonly referred to as "built-in" stabilizers of personal income—agricultural price supports, compensation to the unemployed, and personal income taxes. In a quasi-automatic manner these programs provide offsets to cyclical losses in certain types of personal income or in the total of disposable income.

In the case of agricultural price supports, our data show only that this program has operated as a countercyclical force on the net income of farm operators during the period since World War II. We have not estimated the amount of this offset. For the other two programs measurement of direct effectiveness as offsets to income loss is possible. During the 1948-1949 business contraction, compensation to the unemployed offset about one-fifth of the loss in total payrolls and about one-eighth of the loss in disposable income, defined to exclude compensation to the unemployed. There is some evidence to suggest that under present provisions for the amount and duration of benefits the relative offset provided by compensation to the unemployed would be smaller in recessions more severe than that of 1948-1949.

The offset to the loss in disposable income in 1948-1949 provided by the personal income tax program was somewhat larger than that provided by compensation to the unemployed. Thus these two programs in combination offset about one-quarter of the loss in disposable income during the mild recession of 1948-1949.