

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date August 4, 1938.To Chairman EcclesSubject: Mr. Terborgh's latestOn Lauchlin Curriememorandum

Attached is the summary of the 13th memorandum on prospects for durable goods activity, which will go in next week's Current Comments. I would direct your attention particularly to page 4 and to a new estimate of the national wealth on page 5.

This series is now almost completed and it is proposed that Terborgh work on more immediate prospects upon his return from his vacation. The first twelve summaries were circulated among some 30-40 technical people before the new ruling went into effect. I should like very much to receive permission to meet current requests for these earlier memoranda. Most of them have been out a long time and, as I mentioned before, they accomplished much good and no harm.

SUMMARY OF THE THIRTEENTH MEMORANDUM
ON PROSPECTS FOR DURABLE GOODS ACTIVITY.

by

George Terborgh

Trends in the Depreciation and Retirement of Durable Goods.

The analysis and discussion in the memorandum summarized here is rather technical, and it has been thought best, therefore, merely to recapitulate some of the findings that may be of general interest. More extended reports of the study are available to those desiring further details.

1. Net saving in durable goods.

In the period just preceding the depression the net national saving in the form of durable goods (the excess of output over accruing depreciation on the stock in use) was about 10 billions of dollars yearly.^{1/} During several depression years there was no net saving at all; indeed a sizable excess of depreciation over new output developed. A favorable balance reappeared in 1936, but by 1937 net saving was still less than half the pre-depression volume. For the entire period 1929-37, saving and dis-saving have approximately offset each other, so that the stock now in use, in terms of the supply of unconsumed services it contains, is roughly the

^{1/} Output is computed exclusive of ordinary repairs and maintenance; that is, it is limited to new durable goods. The term "depreciation", as used here, includes wastage from obsolescence and accidental destruction as well as from wear and tear not made good by repair activity.

same as in 1929. If we break the stock down by major types, we find producers' and consumers' goods moderately lower, and public works decidedly higher, than in that year.

For durable goods as a whole the prospect is that output in 1938 will approximately equal accruing depreciation. If the business recovery now apparently under way carries through to a level of full prosperity in the next few years, net saving in durable goods should exceed the 1925-29 level (after adjustment for price changes) by a small margin, though it appears likely to represent a somewhat smaller fraction of the total output.

2. Depreciation and retirements.

Because the output of durable goods had been trending upward for a long time, accruing depreciation on the stock in use in the late twenties exceeded by a wide margin (more than 50 percent) the replacement cost of the goods currently being retired from service.^{1/} Even by 1937 the margin appears to have been as much as 25 percent. This means that the excess of output over retirements and replacements has been consistently higher than the excess over accruing depreciation. The estimates indicate that at no time during the depression did the output of durable goods as a whole fall significantly below the amount required to replace goods

^{1/} The amount of depreciation varies generally with the size of the stock of goods in use, whereas retirements depend chiefly on the volume of output many years earlier. Where this earlier output is below the average for subsequent years -- as it is when the trend has been upward -- replacement needs tend to fall short of depreciation.

currently retired, whereas it fell far below accruing depreciation on the stock in use. The result was that the stock was growing in terms of the number of units in use while it was shrinking in terms of the volume of unconsumed services which it contained.^{1/} By 1937 it was by the former measure definitely above 1929 for all the major categories of durable goods (at least a third higher for public works) while, as I have previously pointed out, it was by the latter measure lower for both producers' and consumers' goods.

Since the capacity of the stock of goods to render current services is much more closely related to its size in terms of the number of units in use than to its size in terms of unconsumed services contained, it seems likely that such capacity is now slightly higher than in 1929 for producers' and consumers' goods and very substantially higher for public works.^{2/}

This year's output (1938) appears likely to be roughly the same as replacement needs for producers' and consumers' durable goods, though greatly in excess for public works. If during the next few years we experience a full economic recovery, the excess of output over replacements

^{1/} In more technical language, its undepreciated value (in constant dollars) was rising while its depreciated value declined.

^{2/} In the case of producers' goods, the productive capacity of plant and equipment as compared with 1929 has been affected not only by changes in the amount in place, but by other factors such as the reduction in machine hours accompanying the shortening of the hours of labor, changes in the efficiency of labor and administration, alterations in the pattern of demand for industrial products, etc. The present study goes no further than to indicate that the total productive capacity of plant and equipment now in use would be slightly higher than in 1929 if used with the average efficiency of 1929.

should approximate in absolute amount the best pre-depression levels for producers' goods, and should exceed them somewhat for consumers' goods and public works. The proportion of the total durable output absorbed by replacements should, however, remain below the former ratios.^{1/}

3. Size and composition of the present stock of durable goods.

In terms of its reproduction cost new at present price levels the existing stock appears to be worth something like 430 billions of dollars. After deduction of accrued depreciation the figure is around 250 billions. Given a full economic recovery and prosperity during the interval, these magnitudes should reach about 520 and 310 billions, respectively, by 1945.

Of the total of durable goods, valued at reproduction cost new, only 36 percent is accounted for by producers' goods. Consumers' goods, including housing, make up 52 percent of the total and public works the remaining 12 percent. These figures contradict the widespread impression that saving and capital formation are concerned primarily with producers' goods. They emphasize, on the other hand, the importance of consumers' durable goods and of public works as outlets for the savings of individuals. The importance of producers' goods from this standpoint is further reduced by the fact that depreciation allowances, as noted above, are in general more than sufficient to provide for actual replacement needs and also by the prevalence of the corporate saving habit.

^{1/} Because of lag of replacements behind depreciation, the size of the stock of durable goods, in terms of the number of units in use, will expand 5 or 6 percent between now and 1945, even if during that interval output merely equals depreciation.

4. Size of the national wealth.

The national wealth includes, in addition to the stock of man-made durable goods in use, as estimated above: (1) land (including all natural resources); (2) unfinished goods of all kinds; (3) finished durable goods not yet in the hands of users; (4) all finished non-durable goods; (5) the metallic monetary reserve; and (6) net investment abroad. No very reliable estimate is available for the present value of land, but using an approximation for this item we find a present national wealth in the vicinity of 425 billions of dollars.