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Further Observations on the Relations
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ment Credit



Further Observations on the Relations Between Consumer Saving and Instalment Credit

IN CHAPTER 2 the saving and dissaving of an individual were defined as positive and negative changes in his net worth,¹ that is, his assets minus his liabilities. Assets were defined as real goods plus cash and claims. The present appendix contains some elaboration of the definitional scheme adopted, a discussion of certain alternative definitions and of the correlative concept of investment, and a further consideration of possible effects of instalment credit on consumer saving.

THE CONCEPTS OF SAVING AND INVESTMENT

An individual's net new investment during a certain period may be defined as the value of the increment of real goods (exclusive of claims and debts) in his possession.² This increment may be positive (investment) or negative (disinvestment). Thus if a retailer increases his inventories by buying from a wholesaler or manufacturer he is said to invest. If he is able to pay for the goods out of his income (profits) of the period, he increases his net worth and must also be said to save. If he buys on credit he increases his liabilities along with his assets and hence does not save. But the wholesaler or manufacturer, who reduces his inventories, is said

¹A qualification must be made concerning unexpected capital gains and losses. These have to be excluded from income and hence from saving. The problem of defining these gains and losses is a difficult one, but we need not go into it, because the treatment of instalment credit in the computation of income and saving is not thereby affected.

²In everyday language and business usage the word "investment" is frequently used to include the purchase of securities (claims). People are said to invest their money in bonds or shares. Economists have become more and more accustomed to restrict the word "invest" to investment in real goods. It is in the latter sense that we shall use it in this study. (The definition must be qualified, like the above definition of saving, with respect to unexpected value changes of real assets.)

to disinvest, though he does not dissave, since he receives another asset (cash, or in case he sells on credit, a claim on the retailer).

For a closed economy as a whole the interpersonal exchanges of goods cancel out, and investment becomes equal to the value of new goods produced minus wear and tear and consumption, in other words, the value of unconsumed output.³ Since total claims (assets exclusive of real goods) are equal to total debt, and changes in outstanding claims are equal to changes in outstanding liabilities, they cancel out for the economy as a whole, and aggregate saving is equal to aggregate investment. For any individual, however, saving and investment may be different.⁴

It is true that these are not the only possible definitions of saving and investment; there are others under which saving and investment need not be equal, even for society as a whole. The relative merits of the various possible definitions need not be discussed here. It is sufficient to say that the proposed definitions

³ There are, of course, many difficult problems of detail, for example, those connected with the treatment of changes in the value of existing goods due to price changes or with the depreciation of fixed capital; but these need not be discussed here.

⁴ If we adopted the broader meaning of the term "investment" mentioned above, and included the purchase of bonds and other claims among "investments," saving and investment would become equal, or rather identical, for the individual as well as for society as a whole, except perhaps for increases in cash holdings (because if a person increases his cash holding he would not be said to invest in money, although he would be said to save).

It should be noted that "hoarding," that is, the accumulation of idle cash (notes or deposits), does not, under our definition, destroy the equality of saving and investment. If some people hoard during a certain period, say a year, they will hold more cash at the end of the year than at the beginning and to that extent they must be said to have saved. The question arises, where is the corresponding investment? The answer is as follows. Suppose, first, that the total amount of money has not changed. Then if some people hold more money others must hold less. Those who have parted with money must have received something in exchange. If they have consumed what they have received, then they have eaten up an asset which they possessed and must be said to have dissaved. If they have kept the goods which they received (stored up in the shape of inventories or in the value of the product, if they used the goods productively) they must be said to have invested. Hence the saving of the hoarders is either canceled by dissaving or matched by investment of the dishoarders. And if the quantity of money in existence has increased it is again true that those who hold more money have saved. But if the increase is in credit money (bank deposits or bank notes) it constitutes a liability of the banks, and hence the dissaving of the banks cancels the saving of the hoarders. And if it is gold (from import or from production) we would call the rise in the gold stock an investment. (This note has been prompted by comments made independently by Professors J. W. Angell and H. S. Ellis, for which the writer is much indebted.)

seem to be the most convenient for the present purpose; they correspond best to the accountant's usage of the terms and are used by a great number of contemporary economists.⁵

Some elaborations may be added to the distinction, mentioned in the text, between the narrower and the broader interpretation of saving and investment. This distinction depends on the exclusion or inclusion of durable consumer goods among the assets. The total assets of any individual may be divided into two categories: first, consumer capital (durable consumer goods); and second, securities (including bonds, shares, saving balances and cash) and producer goods (business capital). Saving in the broader sense is defined as an increment in the sum of all these items; in the narrower sense it is an increment in the items of the second classification only (in either case minus any increment in liabilities).⁶ If, for example, a consumer buys an automobile out of his annual income, he must be said to save in the broader sense, but in the narrower sense he does not save. According to the broader definition of saving he consumes the car gradually later on, when he uses it up; according to the narrower definition he consumes it when he buys it. The difference turns out to be a difference in dating the act of consumption.

Similarly for society as a whole. When the number of automobiles owned by consumers increases, we speak of investment or capital formation in the broader sense; if we adopt the narrower definition of investment we must say that consumption has increased. On the other hand, when the stock of automobiles in the hands of dealers and manufacturers goes up, or the number of cars used for business purposes increases, we have to speak of investment (and saving) also in the narrower sense.

If we adopt the broader definition we must be careful to make allowance for the gradual consumption (depreciation by wear and tear and obsolescence) of the durable goods included. For practical purposes this imposes serious limitations, because it is impossible to trace statistically certain durable goods after they have left the retail store and have entered the household. Strictly

⁵ Other definitions and their relation to the ones adopted in the text have been discussed by the present writer in "National Income, Savings and Investment" (in National Bureau of Economic Research, *Studies in Income and Wealth*, vol. 2, 1938) and in the book *Prosperity and Depression* (editions of 1939 and later) Chapter 8. The definition adopted in the text is equivalent to that of Keynes, and its adoption marks a terminological departure from the present writer's usage in *Prosperity and Depression*.

⁶ Since saving and investment are *both* defined either inclusive or exclusive of durable consumer goods, this distinction cannot give rise to a difference between saving and investment.

speaking, even a pair of socks is not consumed at the moment it is bought by the ultimate consumer but is only gradually used up after it has been bought. For reasons of statistical expediency, however, it is customary to regard not only comparatively short-lived goods, such as clothing and shoes, but also goods that are difficult to trace statistically, such as fountain pens and furniture, as having been consumed at the moment of purchase, even though they may later change hands many times through the secondhand market. Thus even the broader definition of saving does not, strictly speaking, include all durable goods. But it includes those regarding which it is possible to make allowance for gradual disappearance and eventual passing out of existence. Automobiles and dwelling houses are the most important.

What are the economic implications and what are the reasons that may prompt a writer to adopt the one or the other of the two definitions? From the point of view of theoretical simplicity and elegance the broader definition is superior.⁷ There are striking similarities between durable consumer goods and producer goods. The acceleration principle of derived demand applies in both cases.⁸ Hence it is tempting to regard durable consumer goods as capital goods, and only their services as the true consumption goods.

An objection to the adoption of the broader definition of saving has been that it obliterates the line between thrift and prodigality, between economy and waste.⁹ Those who take this position contend it is absurd to say that a man who buys a luxury car out of his income "saves" and does the same thing as a man who buys a saving bond. They declare that it is dangerous and unwise to blur the distinction between frugality and extravagance, and that it makes a significant difference whether productive resources are devoted to consumption or production.

The answer must be that these distinctions are very important but that the adoption of the broader definition of saving does not prevent the recognition of their importance. As was pointed out before, the difference between the two definitions is essentially one of dating the act of consumption. Under the narrower definition we register the act of consumption at the date of the purchase of the automobile. Under the broader definition we register it later at successive dates when the car is actually used

⁷ Therefore it is usually adopted by economic theorists. See, for example, I. Fisher and F. H. Knight in their various writings on capital and interest.

⁸ This point was discussed at various points in the text.

⁹ I am indebted to Cyril James and J. A. Schumpeter for stimulating comments and suggestions on this point.

up. It follows that for longer periods the two magnitudes designated by our two concepts tend to converge. If the analysis is carried through the whole life of the durable goods (until they are completely used up), it will yield the same result whether the broader or the narrower definition of saving is employed.

It certainly does make a difference whether many people devote a large part of their income to the purchase of durable consumption goods or, by buying bonds or shares, make it available for investment in factories, mines, power plants and other productive assets. It has been objected that the productivity of all goods, consumer as well as producer goods, depends ultimately on the stream of satisfaction ("psychic income") which they yield. Hence there is no essential difference, it has been said, between a factory, for example, and a swimming pool or an amusement park; ultimately both produce some sort of consumable goods or services. (That some forms of consumption may be objectionable from a moral standpoint, and others not, is irrelevant to the economic analysis.) In answer to this objection it should be pointed out that it makes a great deal of difference whether the wealth of a country is put in a form in which it is capable of producing more wealth (producer goods) or in a form in which it is committed to consumption (consumer goods).¹⁰

It must be said, however, that a recognition of this factor does not necessarily imply the rejection of the broader definition of saving and investment. In fact, the adoption of the narrower definition does not give sufficient expression to the circumstance in question. If there is an increase in the stocks of consumption goods, durable or non-durable, held by dealers and producers, even those who favor the narrower definition speak of saving and investment. But these goods (if they cannot be used for productive purposes) are committed to consumption whether they are held by dealers or by consumers.¹¹

Let us now apply these definitions to instalment credit transactions. We may assume first that the proceeds of a loan are spent on perishable consumer goods and that these are con-

¹⁰ This last is important, even though many goods can be used for either purpose and may, in fact, serve both purposes at the same time, that is, afford enjoyment *and* increase producing capacity. A swimming pool, for example, may not only afford pleasure and enjoyment to many people but also improve their health and thus raise their producing and earning power.

¹¹ It might be contended that the dealer does not intend to consume the proceeds of the consumer goods which he keeps in stock. The answer is that the consumer too may change his mind and sell his car and buy a bond instead. If he does not do this, if he actually consumes the good, his behavior will be registered as consumption under the broader definition of

sumed immediately. In this case it makes no difference whether we use saving and investment in the narrower or broader sense. Consumption has been increased without a corresponding rise in income. Total assets have remained unchanged while liabilities have increased. Hence the instalment buyer has dissaved to the extent of the loan; in other words, the consumption debt constitutes an act of negative saving in both the broader and the narrower sense.¹² But as the loan is gradually repaid out of income, by cutting down current consumption, the instalment debtor reduces his liabilities and must be said to save to that extent.¹³ Over the whole period of the loan dissaving and saving cancel out.¹⁴ Thus not only for each individual borrower, but also for all borrowers combined, instalment credit implies dissaving when the amount of outstanding credit expands, positive saving when outstandings contract, zero saving when they remain unchanged (new credits being balanced by repayments).

More important and more difficult to analyze is the case in which the loan is spent on durable goods. Let us first ask what such a credit transaction implies for saving in the broad sense of the term. Assume that a consumer buys an automobile in January on the instalment plan. The price is \$1000. He makes a down payment of \$200 out of his current income and promises to repay his debt of \$800 in eight equal monthly instalments. The automobile, we will say, depreciates to zero in fifty months, the depreciation allowance being uniformly \$20 a month. In Janu-

¹² His total saving during the period may be negative or positive according to whether the act of negative saving is compensated by acts of positive saving. The question whether people are likely to save and run into consumption debts during the same period of time was discussed in Chapter 2.

¹³ If the debtor refinances the loan (incurs a new debt in order to repay the old one) or if he repays the debt by liquidating an asset (for example, by drawing the money from a savings account or by selling securities), no saving takes place.

¹⁴ Interest payments are best regarded as deductions from the borrower's income.

saving too. The difference is that under the narrower definition he is said to consume at an earlier date, at the point when by buying the durable consumption good he declares, as it were, his intention to consume in the future. Under the broader definition the actual act of consumption is counted, not the mere declaration of intention.

There is this further inconsistency in the use of the narrower definition of saving and investment: the purchase of a car for pleasure trips is called consumption, but the purchase of a car that is to be rented to others for such trips is an act of investment, although economically the cases are similar. Many other examples could be found, such as one-family homes vs. apartment houses, washing machines in households vs. laundry equipment.

ary, then, the man invests \$1000 and saves \$200 (corresponding to that part of the price which he pays out of current income).¹⁵ In February he pays the first \$100 instalment on his debt out of his current income; this constitutes saving because it diminishes his liabilities. But he has also disinvested and dissaved to the extent of \$20, because (by assumption) the value of the automobile has decreased by that amount during the month. Hence his net saving is \$80. After eight months his aggregate saving amounts to \$1000, the original amount of his investment, but he has also dissaved and disinvested \$160 (depreciation of the car). Hence at the end of the eight-month period his net saving and net investment resulting from the instalment purchase is \$840—the value of the automobile at that date, its price having been paid out of the income of the whole period.

If we adopt the narrower sense of the terms “saving” and “investment” the analysis is simpler. The consumer dissaves and consumes \$800 in January and then saves \$100 per month until the debt is liquidated. After eight months his initial dissaving is completely canceled by saving. Over the whole period he has neither saved nor dissaved. According to the broader definition he has saved \$840 because it was assumed that the liquidation of the debt proceeds faster than the depreciation of the corresponding asset (or the durable consumer good).

It follows that according to the broader definition we obtain a higher saving figure. This is, of course, to be expected. It should be noted, however, that this difference becomes smaller the longer the period which we take into consideration (over which we figure saving and investment). If we draw up our balance sheet at a later date, when the automobile has been used up, there is no longer any saving arising from this transaction, even under the broader definition. But it remains true that if we have a continuous succession of overlapping credit transactions there will always be more saving and investment in the broader than in the narrower sense.

It goes without saying, and need not be demonstrated in great detail, that the actual consequences, the stimulating and de-

¹⁵ If we chose to evaluate the automobile at the lower resale value rather than at the purchase price we should have to say that as soon as the consumer buys his car he “consumes” (and hence “dissaves”) to the extent of the difference between the purchase price and the resale value. This may or may not outweigh the saving represented by the down payment.

The alternative assumption that the down payment is made out of past savings (rather than out of current income) may be very realistic in many cases, but it would complicate the example without raising essentially new problems and it may be left to the reader to work out its implications.

pressing effects of expansion and contraction of credit, can be described in terms of either of the two definitions. What is said in the text in terms of the narrower definition of saving could just as well be expressed in terms of the broader definition. To give an example, it is said in the text that the extension of new credit will entail a stimulating expansion of consumer expenditure if it leads to dissaving (in the narrower sense) by the consumer. If we adopted the broader definition the same stimulating effect ought to be described as investment expenditure rather than as consumption expenditure. In Keynesian language we would have to say, under the narrower definition of saving and investment, that the marginal propensity to consume has been shifted upward, and, under the broader definition, that the marginal efficiency of capital has been raised. The influence on output, employment and prices is in both cases the same.

POSSIBLE EFFECTS OF INSTALMENT CREDIT ON CONSUMER SAVING

Thus far this discussion has been concerned with matters of definition and language. The question has been not how credit influences the debtor's saving and consumption, but how certain assumed credit transactions are to be described in terms of certain accepted economic terminologies. These questions must be sharply distinguished from others, similar in appearance but different in nature—questions concerning cause and effect. These were broached in Chapter 2. There we asked how instalment credit influences the spending and saving habits of the consumer. What would consumers do if no credit were available? How would they then dispose of the sums otherwise needed for instalment payments on principal and interest?

A certain type of behavior was accepted as the most probable. Others were considered and rejected as unlikely. It may be useful to enumerate here in more systematic fashion various possibilities. By making two extreme assumptions with respect to the influence exerted on saving and expenditure by new credits, on the one hand, and by repayments, on the other, and combining these assumptions in complete credit transactions, we obtain four standard cases. In this we shall disregard the finance charge and adopt the narrower definition of saving, as described above. (The four cases could, of course, be rephrased in terms of the broader definition.) There follow, then, four extreme possibilities regarding consumer behavior if instalment credit were not available (or were refused because of its high cost).

1. *Consumers would NOT BUY the commodities otherwise bought on credit, and would SPEND on consumption the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits cause dissaving (because, without credit, liabilities would not increase and net worth would be greater), and repayments cause saving (because consumption is reduced in order to provide money for the repayment of the debt), the complete transaction effecting no change in saving.

2. *Consumers would NOT BUY the commodities otherwise bought on credit, and would SAVE the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits cause dissaving (for the same reasons as those listed above), but repayments have no effect on saving (because the money would have been saved anyway), the complete transaction effecting dissaving.

3. *Consumers would BUY from salable assets the commodities otherwise bought on credit, and would SPEND on consumption the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits have no effect on saving, but repayments cause saving, the complete transaction effecting an increase in saving.

4. *Consumers would BUY from salable assets the commodities otherwise bought on credit, and would SAVE the sums otherwise needed to meet instalment payments.* If this behavior is typical, saving is not affected by either new credits or repayments, the complete transaction differing from a cash transaction only in that the consumers increase and decrease their liabilities rather than deplete and accumulate their assets.

These four possibilities carry important implications with respect to total consumer expenditure; moreover, if we assume that the expansion and contraction of credit have no repercussions on the supply of credit for other purposes (if we assume that credit is not of the transfer type), these implications hold also for aggregate (consumer plus producer) expenditure. These implications play an important role in Chapter 3.

In the *first* case consumer expenditure is increased by the amount of new credits and decreased by the amount of repayments. Hence if this case is regarded as typical, net credit change measures the net contribution of instalment credit to consumer expenditure. Credit has a stimulating effect so long as net credit change is positive (outstandings grow) and a depressing effect so long as net credit change is negative (outstandings decline).

In the *second* case consumer expenditure is increased by the

amount of new credits but is not affected by repayments. The net contribution to consumer expenditure is thus measured by new credits. Credit stimulates so long as new credits are granted, and its stimulating force rises and falls with the rise and fall in the volume of new credits.

In the *third* case consumer expenditure is not affected by new credits but is decreased by the amount of repayments. The net contribution to consumer expenditure is thus measured by repayments. Credit exerts a depressing influence so long as repayments are made, and the force of its depressing influence rises and falls with the rise and fall in the volume of repayments.

In the *fourth* case consumer expenditure is not affected by either new credits or repayments. Credit has no effect at all; it is neither stimulating nor depressing.

There are, of course, intermediate possibilities in addition to these four standard cases. In the text the first case was accepted as the most realistic, but with possible qualifications in the direction of the third and fourth cases: some consumers would buy anyway (perhaps a cheaper version), and some would save a part of the sums otherwise required for instalment payments.

There is still another possibility, however, which cannot be classed as belonging in an intermediate position but must be regarded as a *fifth* case: in the absence of credit consumers might first save¹⁶ the necessary amount and then buy for cash (dissaving). Under the credit system the order of events is different, dissaving preceding saving. If we assume that the accumulation of cash under the cash system would be effected in precisely the same time span as the amortization of the loan under the credit system, it follows that in this, as in the first case, the complete credit transaction effects no change in consumer saving. There is, however, a significant difference: whereas in the first case the durable good would not be bought, if credit were not available, in the present case it would be bought just the same, although somewhat later. Hence in neither case does a change occur in the long-run ratio of consumer saving and consumption, but in the first case credit brings about a shift in

¹⁶ It may be remarked that Professor Schumpeter expressly excludes from saving cash accumulated for the purpose of buying a consumer good, durable or otherwise (see his *Business Cycles*, vol. I, 1939, p. 76). It seems clear, however, that from the point of view of the period during which the sum is assembled (but not yet spent) it makes no difference whether the individual who accumulates the money expects, for example, to spend it later on an automobile (which is not saving according to Schumpeter) or on a truck to be used in business (which is saving). It may well be that the individual will change his mind before he spends the money.

demand from non-durable to durable goods, while in the fifth case it does not.

The implications of the fifth case for the short-run fluctuations in consumer expenditure differ from those of the first case. In the fifth case repayments do not constitute a deduction from consumer expenditure. New credits cause an advance of consumer expenditure on durable goods by the full length of the contract period. It follows that in this case instalment credit has not much influence on consumer expenditure. There is no need, however, to elaborate this in greater detail, for the accumulation of cash in a cash system would not necessarily, or even presumptively, be strictly parallel to the amortization of loans in a credit economy.

SUPPLEMENTARY DATA ON CONSUMER SAVING

The generalizations and assumptions made above, and in Chapter 2, may be tested to some extent by data from the Consumer Expenditures study.¹⁷ The results are not conclusive; they by no means constitute a clear verification of our analysis. But at least they are not at variance with it.

Frequent reference has already been made to this invaluable work, and also to the limitations of its use for the present type of analysis. The most serious of these is that its data refer to only one year, 1935-36, and refer only to change in debt or savings, providing no information on the amount of accumulated savings or of instalment debt outstandings. It should be noted also that the special sample used here is a relatively small one; it consists of some 3,000 family expenditure schedules tabulated with special reference to savings, and of these about 600 indicated a net change in instalment debt. The sample was drawn only from small cities in the East Central region.

In the Consumer Expenditures study savings are defined as the net change in assets and liabilities during the year, exclusive of gains or losses resulting from the revaluation of assets. Changes in assets include all purchases and sales of capital assets, both tangible and intangible, and also changes in cash on hand and in banks. Amounts due on instalment debt are treated as liabilities, and increases (decreases) in such debt during the schedule year are included in liabilities (assets). Capital assets include houses, improvements on houses and capital goods used for business purposes. Durable consumer goods other than houses, such

¹⁷ National Resources Committee, *Consumer Expenditures in the United States* (1939).

as furniture and automobiles and repairs on houses, are excluded.¹⁸ Hence the definition of savings used in the Consumer Expenditures study is precisely the same as that used in the present volume—the narrower of the two definitions distinguished above. In the following discussion the term “families having a surplus” refers to those who saved, according to our terminology, and “families having a deficit” refers to those who dissaved, during the year 1935-36.

It is important to note that a family reporting a surplus, that is, positive saving, may have had either an increase in assets or a decrease in liabilities. Thus families counted as having a surplus may actually have been in debt at the end of the year, and families reporting a deficit, that is, negative saving (dissaving) may have had an increase in liabilities or a decrease in assets and may actually have had securities or money in the bank.

In Chapter 2 it was said that people who save probably do not at the same time incur instalment debt, though for special reasons this may sometimes happen. If that reasoning is correct we should expect the percentage of savers to be smaller among families increasing instalment debt than among the population as a whole. This is exactly what is indicated by the Consumer Expenditures data in Tables A-1 and A-3. Table A-1 shows that over three-fifths of the families that increased instalment obligations had a net deficit (decrease in net worth), that is to say, dissaved during the year. It is true that almost two-fifths of the debt-increasing families had net savings during the year despite their increased instalment debt liabilities. But this proportion is much smaller—in each income level as well as in all levels combined—than the comparable figure for *all* non-relief families. Table A-3 indicates that 65 percent of all families had a surplus and only 28 percent had a deficit.

We should also expect that a disproportionately large number of families that decrease instalment debt would have savings. This surmise is borne out by the fact that 85 percent of such families reported a surplus and only 15 percent reported a deficit for the period (Table A-2). In every income class except the \$3000-4000 group the percentage of families having a surplus was higher, and the percentage of families having a deficit was smaller, among families that decreased instalment obligations than among all non-relief families.

¹⁸ Life insurance, annuity and endowment policies are counted as assets, and all premiums paid on them are included under savings, no deduction being made for that part of the premium payment which might be treated as current expense for protection.

TABLE A-1
DEBT AND SAVINGS DATA ON NON-RELIEF FAMILIES THAT INCREASED THEIR INSTALMENT
DEBT DURING THE YEAR 1935-36, BY INCOME LEVEL^a

Income Level	Debt-Increasing Families Reporting a Net Surplus ^b			Debt-Increasing Families Reporting a Net Deficit ^c		
	Percent of Families Having a Net Surplus	Average Increase in Instalment Debt	Average Surplus (with debt increase not counted)	Percent of Families Having a Net Deficit	Average Increase in Instalment Debt	Average Deficit (with debt increase not counted)
\$ 500-750	20.0%	\$ 25	\$ 42	80.0%	\$109	\$168
750-1000	23.1	28	38	76.9	83	181
1000-1250	35.1 ^d	44	87	63.6 ^d	138	170
1250-1500	29.2 ^d	104	120	69.4 ^d	186	277
1500-1750	34.4	82	169	65.6	217	241
1750-2000	50.0	118	213	50.0	205	234
2000-2250	58.6	70	266	41.4	371	335
2250-2500	55.6	143	286	44.4	317	320
2500-3000	37.9	109	442	62.1	211	300
3000-4000	66.7	138	586	33.3	252	289
ALL LEVELS	38.3 ^d	86	211	61.2 ^d	173	227

^a Based on National Resources Committee, *Consumer Expenditures in the United States (1939)*. The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families, of which 439 increased their instalment debt during the schedule year 1935-36.

^b A net surplus results from an increase in assets or a decrease in liabilities.

^c A net deficit results from a decrease in assets or an increase in liabilities.

^d A small proportion of the debt-increasing families had no change in assets and liabilities.

^e Surplus rather than deficit.

TABLE A-2
DEBT AND SAVINGS DATA ON NON-RELIEF FAMILIES THAT DECREASED THEIR INSTALLMENT DEBT DURING THE YEAR 1935-36, BY INCOME LEVEL^a

Income Level	Debt-Decreasing Families Reporting a Net Surplus ^b				Debt-Decreasing Families Reporting a Net Deficit ^c			
	Percent of Families Having a Net Surplus	Average Decrease in Installment Debt	Average Surplus (with debt counted) decrease not counted)	Average Surplus (with debt counted)	Percent of Families Having a Net Deficit	Average Decrease in Installment Debt	Average Deficit (with debt counted) decrease not counted)	Average Deficit (with debt counted)
\$ 500-750	50.0%	\$ 54	\$ 103	\$ 49	50.0%	\$ 51	\$ 341	\$ 392
750-1000	83.3	90	68	(22) ^d	16.7	96	124	220
1000-1250	82.9	80	141	61	17.1	49	110	159
1250-1500	80.6	80	166	86	19.4	59	123	182
1500-1750	86.7	131	271	140	13.3	134	354	488
1750-2000	84.2	129	255	126	15.8	66	87	153
2000-2250	88.9	155	393	138	11.1	56	269	325
2250-2500	100.0	119	353	234	0.0	—	—	—
2500-3000	90.0	124	490	366	10.0	370	260	630
3000-4000	88.9	251	994	743	11.1	50	950	1000
ALL LEVELS	85.0	115	282	167	15.0	83	220	303

^a Based on National Resources Committee, *Consumer Expenditures in the United States* (1939). The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families, of which 173 decreased their installment debt during the schedule year 1935-36.

^b A net surplus results from an increase in assets or a decrease in liabilities.

^c A net deficit results from a decrease in assets or an increase in liabilities.

^d Deficit rather than surplus.

TABLE A-3

PERCENTAGE DISTRIBUTION OF NON-RELIEF FAMILIES REPORTING A NET SURPLUS, A NET DEFICIT OR NO CHANGE IN ASSETS AND LIABILITIES, DURING THE YEAR 1935-36, BY INCOME LEVEL^a

<i>Income Level</i>	<i>Reporting a Surplus^b</i>	<i>Reporting a Deficit^c</i>	<i>Reporting No Change</i>	<i>Total</i>
\$ 500- 750	31.0%	53.3%	15.7%	100.0%
750-1000	41.6	43.3	15.1	100.0
1000-1250	56.7	33.3	10.0	100.0
1250-1500	64.7	29.4	5.9	100.0
1500-1750	69.1	27.1	3.8	100.0
1750-2000	76.9	18.5	4.6	100.0
2000-2250	79.1	16.3	4.6	100.0
2250-2500	82.8	16.0	1.2	100.0
2500-3000	82.9	14.6	2.5	100.0
3000-4000	94.0	5.5	.5	100.0
ALL LEVELS	64.6	28.2	7.2	100.0

^a Based on National Resources Committee, *Consumer Expenditures in the United States* (1939). The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families.

^b A net surplus results from an increase in assets or a decrease in liabilities.

^c A net deficit results from a decrease in assets or an increase in liabilities.

Unfortunately, however, these figures are subject to certain qualifications which weaken the argument considerably. As previously indicated, in the Consumer Expenditures study positive and negative savings (surplus and deficit) are defined to include changes in instalment debt: instalment debt increases are negative savings and instalment debt decreases are positive savings. For the purposes of the present discussion, however, changes in instalment debt should not be counted in computing savings, since we wish to know what proportion of families had savings (other than instalment debt changes) for which the use of instalment credit might have been a substitute. The available material does not permit a calculation of such proportions, but it does permit a calculation, for each income level, of the average amount of positive or negative savings, exclusive of debt changes. These figures, too, are shown in Tables A-1 and A-2.

When increases in instalment debt are eliminated from the net worth figures the savings (surplus) figures are higher and

those for deficits are lower. Therefore the exclusion of instalment-debt increases cannot shift a family from the surplus to the deficit group, but it may very well shift a family from the deficit to the surplus group. It probably does not do this to any great extent, however, for as can be seen in Table A-1 there is only one income level in which the shift was great enough to transform the average deficit into an average surplus. Thus, while there is scarcely a doubt that among debt-increasing families the proportion of dissavers would be lower, if debt increases were not counted in calculating surplus or deficit, and the proportion of savers would be higher, it seems reasonable to believe that for the majority of families increased instalment debt would still be accompanied by other types of dissaving.

In regard to the families that decreased their instalment debt the situation is similar. When their debt decreases are not counted their savings figures are lower, but only in one income level does this adjustment transform the average surplus into an average deficit. Thus it appears that most of the families in the "surplus" group had net savings even without counting their decrease in instalment debt; in this case it would still remain true that the majority of debt-decreasing families were savers.

In view of these considerations it seems reasonable to believe that the elimination of instalment-debt changes from saving, while it weakens the argument, does not destroy it. From what we can see from these data, this adjustment does not cause strong enough shifts to nullify the finding that among debt-increasing families there is a lower percentage of savers, and a higher percentage of dissavers, than among all families.

Two further factors that may weaken the proof value of the present data should be pointed out. The first is that life insurance premiums are counted as savings. If they were not so counted some of the families now in the savers group might shift to the dissavers. It may be mentioned, however, that between a life insurance premium payment and instalment debt there is not the same freedom of choice as exists between instalment debt and cash savings, purchase of securities and the like. The second consideration is that the high percentage of dissavers among the debt-increasing families may be due, at least in part, to the fact that down payments on durable consumer goods are by definition regarded as dissaving.

Unfortunately it is not possible to evaluate quantitatively the importance of these detracting factors. We must be content that the statistical evidence is at least not in contradiction to *a priori* considerations.