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Chapter 14

ADDENDA

How would our Democritus have been affected, to see . . . him that makes shoes go barefoot himself. . . .

To see a man . . . starve his *genius*, damn his soul, to gather wealth, which he shall not enjoy. . . .

To see . . . one stumble at a straw, and leap over a block; rob Peter, and pay Paul; . . . penny-wise, pound foolish. Robert Burton, *The Anatomy of Melancholy*, with the original Latin quotations translated and embodied in an all-English text; edited by Floyd Dell and Paul Jordan-Smith (George H. Doran Company, 1927) I, 50-5. (Burton's first edition was published in 1621.)

BURTON RECOUNTS HOW Democritus spent much time cutting up beasts, seeking to identify the seat of melancholy, and how he was wont to laugh at the folly and madness of mankind. Burton pictures himself as Democritus, permitted by Pluto to return and view the modern scene, laughing again at human folly and madness. One of the follies at which 'Democritus Junior' laughs is the lack of a sense of proportion.

In this inquiry into moneyflows we have endeavored to preserve a sense of proportion. Certainly there has been need for this type of sense, because the inquiry has necessarily been highly selective. We have been compelled to bypass many paths because they appeared — as far as they relate to our main objective — to be bypaths. And doubtless we have bypassed many others through oversight.

When one does not go down a path, it is difficult to know where it leads — to be sure that it is a bypath. More broadly it is difficult to theorize about or make quantitative estimates of anything so elusive as moneyflows, and be sure that one has not been penny-wise, pound foolish in what he has selected for attention. When doing logarithms, one can be meticulous about the mantissa and slip up on the characteristic; when analyzing moneyflows, one can still more easily make a somewhat analogous slip.

However, we believe the danger is enhanced when one's attempts to theorize are not adequately complemented by efforts on the empirical side. If, with Archimedes, we venture to hope that specifying the magnitudes we speculate about will help us avoid wandering ideas and clarify our thinking, it is partly because quantitative determinations are necessary in distinguishing mountains from molehills.

The purpose of this chapter is to indicate some directions in which the inquiry might have been elaborated and was not, because it was necessary to pick and choose. The reader may have his own ideas whether we chose wisely.

At the end of Chapter 13 we went over a number of the decisions made in setting up the moneyflow and loanfund accounts: the exclusion of accrual and imputed items and technical transactions, the inclusion of offset settlement items, the drawing of the line between ordinary transactions and financial transactions, the schemes of classification for ordinary transactions, for loanfunds, and for transactors. On several of these decisions no further comment seems called for.

With regard to the classification of accounts there are two steps that seem to have more urgency than others but that still did not seem feasible in this exploratory study. The first is the provision of additional detail on customer moneyflows, at least a segregation of new durable commodity transactions, secondhand transactions in durables, other commodity transactions, and service transactions. This should be feasible for post-war years, and would make it easier to relate moneyflows to the gross national product account. The second step is a separation of stocks from loans and other debt claims in the portfolio estimates. The question here is whether enough of the obvious advantages of the separation can be realized with the limited accuracy the technical difficulties permit.

Of several proposals made in the early stages of this inquiry for additional detail by transactor groups, three seem specially worthy of mention. Two are highly intriguing from a theoretical viewpoint and technically extremely ambitious. It would be nice if separate accounts could be shown for rich and poor households. It would also be nice to have a regional analysis of moneyflows. Undoubtedly it would be illuminating to be able to relate the GNP expenditures of rich and poor households to their respective financial flows. A regional analysis is perhaps less urgent. But there must be many analogies between international and interregional moneyflows that have been slighted because we are so ignorant of the latter.

A third proposal for additional detail by transactor groups is that a number of large corporations believed to be especially active in the exercise of discretion over their moneyflows be pulled out of transactor Group III for more frequent than annual observation. This is a much less ambitious proposal. Sufficient current quarterly financial information is probably available to make it feasible to construct a separate quarterly statement of payments and balances for a substantial large

corporation sector, and such a statement might add a good deal to our information.

This suggests another direction in which it was necessary to be selective in setting up the moneyflow and loanfund accounts — the fiscal periods covered. A pragmatic explanation of why we began with 1936 and ended with 1942 was offered in Chapter 1. But two other proposals should be mentioned. One was to cover several benchmark years, at least 1929, 1933, and 1939. The other was to attempt to work in some quarterly observations. Rough figures for 1939 were developed some time before we attempted estimates for the other six years. We are convinced that one cannot get much of a sense of flows from estimates for an isolated year, and estimating the financial flows for an isolated year means making both opening and closing estimates of loanfund balances. Estimates for consecutive periods have a great advantage. It may be worth mentioning in this connection that estimates for 1936 and 1942 were not attempted until some months after figures for the intervening years had been developed. The addition of these two years contributed substantially to the flow picture.

As for the quarterly proposal, the main consideration was the work. Eight consecutive quarters might conceivably be more revealing than seven consecutive years. They could easily take twice as long to produce.¹

The selections so far listed all assume the general pattern of moneyflow and loanfund accounts. Much the most important selective step, on the empirical side, was clearly the adoption — or better, the conception — of this pattern. And this was not just one step but a whole series of steps. It is not easy to list them all; however, the starting point was a set of national income accounts, one for each sector, and these accounts were gradually worked over from an accrual-and-imputation to a moneyflows basis.

One basic decision in this process had to do with the kind of detail to be shown. Should transactor sources and dispositions of money be classified on a type of transaction basis (i.e., what is sometimes called an object basis) or should they be classified on a to whom from whom basis? The latter basis would mean showing sources of money for each sector by sector of origin, and dispositions by sector of destination. The type of transaction basis was chosen because it seemed clear that somewhat more can be done on this basis with the information at present available.

The choice between these two bases was not a categorical one. A good deal of to whom from whom information has been provided in the pre-

¹ They would presumably be subject to a wider margin of error.

ceding pages, for both ordinary transactions and loanfund balances. Many of the accounts automatically give this type of information, gross cash pay and net owner takeouts, Federal government obligations and cash balances; also, if the two government sectors are combined, taxes and tax refunds. Further, the supporting detail for public purpose payments is on a to whom from whom basis; we have attempted an obligor analysis of bank credit; and the allocation problems involved in putting instalments to contractors, and insurance premiums and benefits on a to whom from whom basis are not serious. Customer moneyflows are more difficult to apportion in this way, however, and cash interest still more so unless the number of sectors is somewhat reduced. For a three-sector setup — households, government, and all other transactors — it proved possible to make a rough to whom from whom allocation of all ordinary transactions. But with so few sectors no interesting interpretations were discovered. Hence this recasting of the accounts is not presented here.² A much more useful application of the to whom from whom approach seems to us to be the one we made in connection with bank credit in Chapter 13.

One other respect in which we have been selective in the estimates attempted must be noted. The inquiry has been confined to dollar volumes. Omission of any analysis of dollar volume changes into physical volume and price changes certainly does not imply that such analyses are not highly significant. Here again the preponderant consideration was to cut the inquiry down to a doable size.

So much for the directions in which we might have proceeded in developing the estimates. It is somewhat more difficult to say what we might have done on the analytical side.

One analytical step we didn't take would have affected our estimates had we taken it. We might have assumed that the composition of the cash balance is significant, and have shown its composition. Certainly in times past it has often made a great deal of difference whether one held coin, paper currency, or deposits, even a great deal of difference what types of coin and paper currency one held and at what bank one had one's account. But during 1936-42 in this country we believe composition was not of any material consequence.

One exception might be taken to this view. The cash balance of the rest of the world, as we noted in Chapter 13, is definitely not homogeneous. But since we confined our attention to the money circuit of

² Several revisions in the statements of payments and balances have never been incorporated in this three-way to whom from whom analysis.

the United States we did not have occasion to note any serious consequences of this fact during the seven years.

In Chapter 2 we emphasized the differences between accounting and habit patterns. Our analysis has made little use of habit patterns. What can be done with habit patterns when observations are confined to seven years is necessarily limited. But we would have liked to explore further the possibilities of using them as a means of identifying active balances. And it had originally been hoped to consider several other pattern types. Pressure of time made this impossible.

Our approach to moneyflows in the United States to some degree takes its cue from measurements of international moneyflows. But we have attempted to interpret our quantitative findings in terms of a discretionary hypothesis. The question naturally arises, Can this hypothesis be used in interpreting international moneyflows? Can it be so adapted as to help us to determine which nations are most active in spreading business expansion and contraction internationally? For this purpose it would presumably be necessary to reverse the debits and credits in the international moneyflow account for each country and to show product transactions on a gross rather than a net basis.³ One might then set up a table something like Table 33 with each nation (or larger area) appearing as a sector.

Our tentative hypothesis attempts to localize the kinds of discretion that are most important in the initiation and determination of moneyflows. We find the immediate responsibility in active hoarders and dis-warders. But in Chapter 13 we considered one type of third party discretion, the influence of the banking sector on the moneyflows of other transactors. It did not seem feasible to go into other third party influences, notably those of government. But we regard this as an omission. Such third party influences are undoubtedly important.

Table 33 was developed for the purpose of relating the moneyflows perspective to the accrual and imputation perspective. Much of our interpretative comment has centered around this summary table. Within the time available we could not really probe the possibilities of the more detailed information in the statements of payments and balances. But we have just implied that in one instance the netting of moneyflows in Table 33 conceals facts that are important for impact analysis.⁴ We had

³ See the proposal in Chapter 9, Section 2, that the concept of gross disposable product be used instead of gross national product. See also the note at the end of Chapter 13.

⁴ The netting of product transactions for the rest of the world.

hoped to explore the question, In what other respects are gross figures on ordinary transactions superior to net figures (net product receipts and net transfer payments) for purposes of impact analysis? Work in the areas of habit pattern analysis and of a detailed analysis of the business fluctuations during 1936-42 would doubtless help toward an answer to this question.

If summary figures on net product transactions and net transfer payments conceal significant plus and minus components, so do summary figures on net financial flows. We offered an analysis of these net flows in Chapter 13, but surely a more detailed analysis might have been more revealing. Such an analysis, however, would have particularly serious obstacles in the way of present data limitations to surmount.

While we are enumerating the things we have left undone that we might have done, it may be well to repeat a warning we have sounded from time to time. The system of moneyflows is in a sense a complete and independent whole. All the interacting transactions in the main circuit are included. Each transactor's account and each type of transaction account is a complete, balancing account. But the moneyflows picture of our economy is merely one aspect or one way of looking at the economy. We must not lose sight of the other aspects, the many facts that do not get into a mere moneyflows approach. What occurs in the moneyflows aspect and what occurs in other phases of our economy mutually condition each other.

One subject we did not touch on because we were largely preoccupied with recent United States history, is major inflations. But several people who read the preliminary drafts of Chapters 12 and 13 assumed that the discretionary hypothesis was not intended to cover such abnormal periods, that to deal with them one would have to fall back on the hydraulic analogy.⁵ That was not our intention. We think the social accounting approach in some form should be employed in the study of

⁵ Many economists have taken such inflationary spirals as evidence that the banking sector of an economy could, if it went far enough, greatly expand the quantity of nonbank cash balances and thereby greatly expand the quantity of moneyflows.

In Chapter 13 we considered and attempted to characterize the relation of the banking sector to the total flow in the main circuit. It may be appropriate to recall here four propositions from this characterization:

- 1) That banks as financial intermediaries can provide bulls with funds to finance their bullish expenditures, and that banks do not need the consent of those who really put up the money to do so.
- 2) That banks can — within limits — through the way they participate in the loan and security markets lower interest rates.
- 3) That banks can — within limits — through the way they participate in the loan

moneyflows wherever they are found. Perhaps the most important corollary of this approach to the study of major inflations — and it is certainly not a corollary suggested equally by the hydraulic approach — is that extremely rapid expansions in moneyflows are likely to differ significantly from one another because of differences in the institutional situations in which they occur.

To make clear what we mean by the social accounting approach to the study of major inflations we may venture to illustrate this proposition.

1) Our tentative hypothesis suggests the question, What sectors are bulls during these rapid moneyflow expansions? Possibly the answer is so obviously the central government in most cases that the question is unimportant. But we doubt it. We suspect that the rest of the world has sometimes played a bullish role in such circumstances — part of the time in some inflationary spirals the leading bullish role — and that the part it has played has varied from place to place and spiral to spiral. That part depends for one thing on the nature of a country's initial net external debt or credit.

2) The accounts we have presented have not broken down the cash balance. But we have suggested that such a breakdown is likely to be important when the monetary and banking system is not working properly. Certainly in a period of major inflation that system may be said to be out of order. It is out of order in a way that requires us to distinguish between cash balances in domestic and in foreign money of account. Nor does the social accounting approach permit us to confine this breakdown to cash. We must make a similar distinction in other loanfund balances. Think of the constituents of each loanfund balance — receivables and payables both — as so divided. The net domestic balance ceases to be a satisfactory storehouse of value; the net foreign balance retains its storing capacity. For this situation it is tempting to propose an

and security markets cause other transactors to enjoy capital gains on their portfolios.

4) That banks can — within limits — through the way they participate in the loan and security markets make the loanfund balances of other transactors more liquid.

Each of these four propositions indicates a way in which the banking sector can help other transactors to increase their moneyflows, or can encourage them to do so.

If there is some other peculiarly monetary influence that may operate during an inflationary spiral — some influence that does not operate in an ordinary cyclical expansion — it would appear to be that the external purchasing power of a currency may depreciate more rapidly than its internal purchasing power. When such a monetary development occurs, it can indeed be said to induce the rest of the world to become a bull. Also, when such a development occurs, the expansionary influences noted in Propositions 2, 3, and 4 largely cease to be of consequence, at least so far as loanfund balances receivable in the domestic monetary unit are concerned.

inversion of Gresham's Law — A good storehouse of value tends, where feasible, to supplant a bad one. But the way this rule works out depends upon the circumstances — the goods available for export in a physical sense and the feasibility of exporting titles in order to acquire foreign loanfund balances, the extent and effectiveness of exchange controls, the availability of jewelry and other tangible domestic means of storing value.

The way this rule works out, particularly as it applies to the flight of capital, helps to determine the extent to which the rest of the world appears as a bullish sector.

3) When huge war expenditures have been financed in part by a large accumulation of cash balances in the hands of households and private businesses the postwar sequel may be a period of rapidly expanding moneyflows characterized by a price spiral and little or no increase in the gross national product in a physical volume sense. But the postwar sequel may take a quite different form, if price controls are sufficiently effective. Moneyflows may stagnate and the excessive cash balances may contribute substantially to the stagnation. When people have a good deal of money and there is not much to spend it on, the pecuniary incentives to production are likely to be weak.

Our tentative interpretations of the moneyflows accounts have focused on an attempt to indicate the lines along which we believe monetary theory should be revised. But there are various implications in what we have suggested that go beyond the field of monetary theory. One may be mentioned by way of illustration. From a mathematical viewpoint general economic theory has tended to treat demand and supply as coordinate. The classical labor theory of value emphasized the supply side, and the Austrian school emphasized demand. But the model both had in mind for the determination of relative prices afforded little basis for either emphasis. The fact that this model focused on relative prices seems to have contributed to the persistence of a separate theory of the price level. Real demand and real supply were assumed to determine the various ratios between prices independently of the processes by which the quantity of money determined the quantity of moneyflows and so the price level.⁶ In this latter process primacy presumably resided in the demand side.⁷

⁶ Most versions of the neoclassical model assigned this role to the quantity of money; but in some the role was assigned to the selection of the commodity used as money of account.

⁷ Thus it has been customary to emphasize the purchasing power, rather than the remunerative power, of money in exchange for goods.

As we have noted Keynes sought to reunite these two divorced phases of economic theory. In his *General Theory* he tends to emphasize the demand side, and it may be argued that his model does support this emphasis. This argument may be stated in terms of those components of GNP expenditures that are treated as autonomous variables. Now we understand an autonomous variable to be one that is used to help account for the behavior of other variables but whose own behavior is not fully accounted for. The absence of a satisfactory accounting for the behavior of a variable, however, would seem to be an inadequate basis for attributing causal primacy to the variable. The argument may be stated also in terms of the assumption that government expenditure programs can be used to control or influence the volume of gross national product. With the latter form of the argument we agree, so far as government demand is concerned. But it is not so easy to apply this form of statement to the private demand for new capital goods.

We incline to think that demand and supply are not coordinate, and that for the most part it is correct to assign a more direct role to changes in aggregate demand as accounting for changes in total gross national product. The discretionary hypothesis offers a basis for thus emphasizing demand. Most transactors have somewhat more discretion to increase or decrease their total ordinary expenditures than they have to change their total ordinary receipts. Demand for the most part has primacy over supply, because there is a wider range of discretion on the demand side.

This way of stating the case, like the Keynesian approach, leaves the way clear for a theory of the price level (in the sense of some specified price index) that is also at the same time a theory of the individual prices that make it up. Demand increases are not at the outset diffused throughout the money circuit in a way that makes it difficult to localize them (as the idea that most of them originate with 'money creation' implies). If we are right, some of the demand increases in a particular market originate with bulls, and we should be able to identify them; others originate when sheep spend their increased receipts. Similar statements apply, *mutatis mutandis*, to demand decreases. We have urged that the moneyflows accounts are particularly adapted to intersector impact analysis, meaning impacts within the money circuit. We now suggest that this type of exhibit is adapted also to tracing impacts within the system of prices, although for this purpose somewhat more in the way of accounting detail may be needed.

It seems in accord with our tentative discretionary hypothesis to suppose that changes in the gross national product — and in total physical

production — originate chiefly on the demand side. But that hypothesis certainly does not require us to say the same of changes, for example, in the BLS index of wholesale commodity prices. Whether changes on the demand side or on that of supply have a larger influence on this index in a particular period would seem to be a matter for empirical determination.⁸

We have been proceeding from the particular to the general. Let us take one more step toward wider generality. Most students today feel that early psychological research — the endeavor of Democritus to find an anatomical 'seat' of melancholy is a good example — grossly over-rated the importance of morphological facts for the subject in hand and tended to slight the psychological facts. Dissection reveals the structure and condition of an organism at a given time — the bones and the glands, receptors, nerves, muscles, and other tissues. Melancholy is a characteristic of the behavior of an organism as a whole. A psychiatrist can profit by a knowledge of anatomy, but if he is treating a case of melancholia he is likely to be specially interested in the patient's behavior history.

Fisher, taking his cue from accountants, drew a sharp distinction between fund and flow in economics. The balance sheet or fund point of view in economics corresponds to the morphological (anatomical) viewpoint in biology; the flow viewpoint to physiology in that broader sense which includes psychology. It is not many years since accountants got over their early preoccupation with the balance sheet — the notion that balance sheet accounts were real accounts and that income statement accounts were nominal accounts. But with the growing emphasis on the income statement they have tended to discard their neoplatonic terminology.

The quantity of money is a fund fact; cyclical and secular expansions and contractions of moneyflows are characteristics of the behavior of an economy as a whole. We wonder whether there is a valid logical distinction between the approach of the quantity theorist to his subject and the approach of Democritus to the subject of melancholy. We believe the emphasis in a study of moneyflows should be on moneyflows accounts.

⁸ Cf. 25 *Journal of the American Statistical Association* 164-9, especially p. 168.