

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

Volume Title: Regularization of Business Investment

Volume Author/Editor: Universities-National Bureau Committee for  
Economic Research

Volume Publisher: Princeton University Press/NBER

Volume ISBN: 0-87014-195-3

Volume URL: <http://www.nber.org/books/univ54-1>

Publication Date: 1954

Chapter Title: Appraisal: National Bureau of Economic Research

Chapter Author: Ruth P. Mack

Chapter URL: <http://www.nber.org/chapters/c11714>

Chapter pages in book: (p. 497 - 502)

# APPRAISAL

RUTH P. MACK

NATIONAL BUREAU OF ECONOMIC RESEARCH

IF THE Conference is conceived as asking whether regularization of business investment can smooth out the business cycle, the conclusion is certainly an unequivocal no. But the question asked was not this one but rather: Can efforts toward the regularization of business investment contribute materially to reduction in the amplitude of business cycles? So viewed, the regularization of business investment is thought of as one of the many approaches to the problem of economic stabilization.

Throughout the Conference the point was made implicitly that the relationship between business action with respect to investment and other stabilizing measures is a geometric, not an arithmetic, one. It seems likely that for business action with respect to investment to be effective, the business environment must be viewed as one reasonably immune to grotesque alterations in employment. Similarly, regularization through other methods is likely to be made more feasible through the reduction of adverse secondary effects by the material lessening of the cyclical variations of business investment.

In discussing the intricate questions of how investment regularization could be attained, the Conference was plagued by ambiguity of language. Woodward, in his summary, complained that planning periods had been defined by various authors as ranging all the way from a year to twenty years. Yet there need be no disagreement in a range of this sort, for "planning period" can mean the time for which funds have been irrevocably committed, funds committed subject to recall, plans concretely formulated, or general notions clarified as to directions of further expansion. Obviously these increasingly vague "planning periods" will have increasing durations. Another confusion lay in the distinction between long-term and short-term capital investment and the motives that govern each. This distinction most usually applied to the difference between the period appropriate to the judgment of *whether* to undertake the investment and the period appropriate to the decision *when* to undertake it.

Whether or not the small or the large firm was the field of maximum concern produced similar difficulties. The thought was

tendered that business investment in small firms was more sensitive to cycles than that in large firms (though Gonzalez produced one small batch of evidence to the contrary), yet De Chazeau suggested that the large firm would provide the most productive point of departure. The apparent disagreement simply reflected a difference in point of view. Whether or not the large firm needs to smooth investment more than the small firm, it seems likely that it would be simpler to start work at this point. For one thing, there are fewer large firms and they are therefore easier to deal with. But more important perhaps is the fact that many large firms in cyclically variable industries have more to gain through smoothing the business cycle than they have through capturing markets from their competitors; they have therefore a greater relative financial stake in the general welfare. Finally, Schmidt's conception of the businessman whose desire to be a good citizen supersedes his desire for profits was at odds with the economist's picture of the pure entrepreneur so lovingly portrayed by Viner. Yet it is certainly clear that the entrepreneur is not simply a calculating machine but a man of flesh, blood, and ego who reacts to social as well as to economic pressures.

Through these hazards of terminology and thought the Conference waded toward a clarification of the problem. Certainly no clear-cut answer was achieved to the question: Can the effort to regularize business investment contribute materially to economic stabilization? The major achievement was a clarification as to what further information was required and what the fruitful approaches both to obtaining the information and to devising lines of attack on the problem might be.

As to the lines of attack, three kept reappearing in the discussions: (1) One was education: business decisions may be based in part on erroneous thinking—errors that can be discovered and pointed out. There may be a lag in the incorporation of the changing business environment—in this instance, a basically more stable economic milieu for the future than has been characteristic of the past—in the structure of investment decisions; and the notion of public advantage may be one that can be introduced into investment decisions where such introduction is relatively costless. (2) Financial inducements through change in tax laws and other methods may shift supply and demand schedules in an advantageous fashion. (3) The financing problems that inhibit investment in bad times may be subject to amelioration.

I would like to try to summarize a little more concretely just how these various approaches seemed hopeful. We can start with the negative case, as put with clarity and force by Joel Dean. He visualized a demand curve for investment goods as consisting, in effect, of a ranking of investment projects with respect to their expected rate of return. The "cut-off point" on the curve is determined by the intersection of the supply curve. This curve he viewed as a vertical line for firms in which funds were supplied from internal sources. When recourse to external funds was envisaged, the curve was flat with an upward hook somewhere along the line. The cyclical pattern of investment Dean viewed as due primarily to severe shifts in both the demand and supply curves during prosperity and depression. These shifts he considered "deep-rooted and inescapable." Yet, as Arthur Burns pointed out, there actually has been a great deal of depression investment undertaken and certainly Dean's formulation comprehends this fact. Hastay's summary of interindustry differences in investment demonstrated the varying impact of cyclical shifts on businesses in which institutional and other factors differed. Healy pointed out some very interesting examples in the railroad industry in which large investments that proved to be very advantageous were undertaken in depression periods. Is it possible, then, through the three approaches that we have just mentioned, to increase the amount of investment undertaken in periods of slack business?

To return to Dean's formulation: for one thing, implicit in much that was said during the Conference was the thought that both supply and demand curves should be drawn not with a sharp pencil but with a broad, flat brush. The point is that uncertainties with respect to matters intimately connected with a proper investment decision are such as to produce an area of essential unknowableness in the advantage to be expected from a given expenditure. Healy mentioned one dramatic example where a very large order for locomotives was simply doubled in the course of a very few minutes' discussion. It seems possible that, within this band of true indeterminacy, education with respect to public advantage might replace a frail whim with respect to possible business advantage.

A second difficulty with Dean's formulation appeared, again implicitly, in the notion that the actual constitution of the demand curve for capital equipment might change in prosperity and depression. A given specific investment might move up in rank during depression. This might apply to many sorts of delayed maintenance

work that could be performed by members of the staff so that the work would serve to keep the company organization intact. It would be true likewise of work in which installation produced severe disruption in usual production schedules. Another example is investment resulting in important product improvement where the cost might be partly thought of as a substitute for advertising expense. A similar notion applies to investment that will permit a firm to get the "jump" on its rivals.

Certainly, however, the matters of how demand and supply curves shift with business conditions and how these shifts may be reduced constitute the meat of the problem. Without trying to be systematic I shall list a few thoughts that appeared in one or more of the papers.

*The demand curve.* Perhaps the foremost reason for the shift is the fact that it seems disadvantageous to invest new money in a plant that is not being fully utilized, even with respect to its more or less first-line capacity. This difficulty typically applies to so-called replacement expenditures, but it also applies to plant expansion because the replacement of a machine or a bank of machines by currently available new equipment will usually involve an expansion in capacity as well as replacement of old with new, lower-cost capacity. Nevertheless, in view of the fact that most industrial equipment will be expected to last at least ten years, the period of underutilization must be assumed to be temporary. The "time discount" on expected earnings may therefore be unrealistically high—an area in which education might be useful. In other words, it may be foolish to calculate the earnings or the pay-out period on the basis primarily of current rate of operation. As companion piece to these errors of pessimism, there may well be errors of optimism during good times. Dean pointed out errors of this sort associated with high price levels and current output rates and the assumption that they will continue. Errors of a specific sort may be reinforced by general pessimism or optimism, which, in a sense, is built into a large management organization by the promulgation of such ideas as "it isn't cricket to ask for appropriations in bad times." The carrying cost of depression-built facilities until the time when they may be utilized is a cost that might conceivably be lessened by changing provisions with respect to tax carry-back.

*Possible blind alleys.* Schmidt, developing the indirect approach to regularization, told of various efforts by individual firms to reduce cyclical swings in output. But virtually no evidence was adduced to indicate how such regularization, were it achieved, would contribute to reduced cyclical fluctuation in *aggregate* business. Fundamen-

## APPRAISAL

tally, the difficulty seems to be that consumer buying is limited by consumer income, and the possibility of affecting, through the offering of more enticing goods, the amount that consumers buy in the aggregate during depression seems virtually nil. Insofar as businessmen are the final buyers we are back at the matter of investment stabilization.

*The supply curve.* Here, more was said on the subject of external than of internal funds. The need to maintain stable dividends was underscored as one reason why internal funds available for investment decreased sharply during depression. The decrease was greater than indicated by the available cash, since a great deal of the inflow of cash that occurs in many firms during depression is due to the liquidation of receivables and inventories—funds likely to be earmarked for call only when business increases again. It is therefore considered dangerous to sink these funds in durable equipment. Uncertainty about the length of depression usually plays an important part in underscoring conservative judgments; is it possible, then, that if business became convinced that long severe depressions were ruled out by other remedies, the supply curve for internal funds would moderate its leftward shifts during depression?

As to external funds, the preference for equity as contrasted with loan funds makes it difficult to secure money in depression. The difficulty may be regarded as a higher cost, but in general it seemed more usually thought of in terms of simple unavailability of money. This is an area in which more stable expectations might be of some help. It is also one in which possible measures directed toward the banking system or toward tax or other measures designed to lessen the prejudice against bond financing might be of help.

The papers presented at the Conference raised questions of the sort just outlined, but they were not able to answer them in the way in which they needed to be answered—in quantitative terms. We need to know the aggregate amount of capital investment the timing of which might be partially freed from considerations bearing on current business conditions or even tied to depressed conditions (though the latter is less likely to occur and not really essential). For this purpose a great deal of further study was indicated. Several thoughts on the character of such studies appeared in the course of formal and informal discussion. Industry studies in which intimate knowledge of business problems could be combined with technical competence and analysis, a characteristic perhaps most clearly demonstrated in Healy's paper, might be carried out in several other industries. Studies of specific investments during depression periods,

in particular industrial firms, could be analyzed in detail to find out the reasons, positive and negative, for passing some projects and rejecting others. To obtain some insight into the significance of overall problems and the points of view of different management organizations, it might be possible to select within a given industry firms that had made substantial purchases during depression and firms that had not, both groups to be otherwise as much alike as possible. These two groups could be subjected to concrete study. Finally, the use of hindsight in the examination of actual investment undertakings might throw light on the wisdom of the ways in which investment decisions were formulated. Gonzalez' paper had an interesting comment on this subject.

Concrete studies of motives and actions, whether of the sort we have mentioned or fashioned in some other way, might provide the wherewithal for judging the extent to which the smoothing out of investment would be feasible. Obviously, cyclical patterns in business investment will always move with the cycle and a maximum objective can be only that they should move materially less than they have in the recent past.

To achieve this degree of regularization, this two-day discussion emphasized first the need for "education"—the reexamination by businessmen and economists of the true advantage in investment undertaken at various stages of the cycle. The answer will probably differ for various sorts of investments, various sorts of businesses, and firms in various kinds of circumstances. It may be assumed that investment decisions have not been made faultlessly in the past; and there will probably be points where more regular timing of investment would improve profits in either the short or the long run, or where, in the face of inescapable areas of ignorance, furtherance of the public interest would be relatively costless to even a single firm (let alone to many firms acting together). Second, study is required to learn the precise points at which public measures might aid in weighting business judgments in salutary directions. The measures envisaged were primarily change in tax laws and in capital markets. Finally, it seemed clear that the investment approach at best could be only one of a battery of actions directed toward lessening business fluctuations and furthering economic development. Effective action in these other directions would further the objective of lessening fluctuation in investment, and the investment attack would in turn limit the scale, and thus increase the feasibility, of the other approaches.