Volume Title: Conference on Research in Business Finance

Volume Author/Editor: Universities-National Bureau Committee for

Economic Research

Volume Publisher: NBER

Volume ISBN: 0-87014-194-5

Volume URL: http://www.nber.org/books/univ52-1

Publication Date: 1952

Chapter Title: The Financing of Investment by New Firms

Chapter Author: Lawrence Bridge

Chapter URL: http://www.nber.org/chapters/c4785

Chapter pages in book: (p. 65 - 88)

THE FINANCING OF INVESTMENT BY NEW FIRMS

LAWRENCE BRIDGE
Department of Commerce

The exceptionally high rate of new firm organization in the early postwar period brought into sharp focus an area of investment and financing about which little information had previously existed. Stimulated by the establishment of more than 1.5 million new businesses, studies conducted since the end of the war have gone far toward providing measures of the sources and uses of the initial investment funds of new firms during the early postwar period and represent the first reliable information of this type for any period. In addition, new statistical material on the business population useful in the development of historical series has become available. These studies, which will be discussed below, represented a forward stride in appraising the role of new firms in the economy.

Before discussing the available data on new firms and the supplementary data required for an adequate analysis of their financial characteristics, it may be worth while to consider the importance of such information.

In general, new businesses are small businesses and all the social, political and economic reasons for studying the small business (and alleviating its financial ills) apply as forcefully to the new. From an examination of the business population birth and death statistics it would appear that firms under three years of age normally account for one-fifth to one-fourth of the number of operating businesses.

Several considerations make necessary the segregation of new firms in economic analysis. The basis for their investment decisions, the sources of their financing, their impact on the business cycle, and their relationship to technological progress may be quite different from those of existing firms.

I Available Materials on New Firms

Prior to the end of the war, factual information on new firms came primarily from several studies in specified cities of the initial sources of funds of bankrupt concerns, and from the limited information obtainable from business population data. Since the end of the war, there have been two studies specifically designed to measure the sources and uses of funds for new concerns on a nationwide basis, two additional surveys which have devoted some attention to new firm financing, and several new related statistical series. Thus, the only comprehensive data on new firm investment and financing are confined to one period – a period affected by all the "aftermath of war" abnormalities. They provide no direct information on cyclical or secular changes – although the postwar data probably indicate the historical peaks for total investment by new firms.

NEW TRADE AND MANUFACTURING FIRM SURVEYS

This section summarizes the results of the two nationwide surveys of the sources and uses of initial investment funds for retail, wholesale and manufacturing firms established in the postwar period.[1] The discussion concentrates its major emphasis on the sources of capital supply for new businesses. In addition, external data have been utilized in a comparison of the new financing of new and existing firms.

These surveys carried on by the Business Structure Division of the Office of Business Economics were designed to appraise the effects of a changing business population on aggregate investment and to study the sources of capital for new concerns. Additional objectives were to evaluate sales and investment trends in the early stages of development, and to collect statistical information which could be used to correct short-term movements in series based on "constant firm" samples.

The studies, based on questionnaires mailed to a scientifically selected sample of newly organized firms, covered retail and wholesale firms starting operations in the 1945-47 period, and manufacturing firms in the 1946-48 period. In general, these surveys were successful and appeared to provide adequate measures of the items requested. Field and registered mail follow-ups were employed to eliminate bias, and estimates of sampling error were made. The final results were checked for consistency and were found to be reasonably in line with all available external data.

[1] The detailed results of these surveys are described in a series of articles by the author in the *Survey of Current Business:* "Capital Requirements of New Trade Firms," December 1948; "Sales and Inventory Trends of New Trade Firms," April 1949; "Capital Requirements of New Manufacturing Firms," April 1950; and "Sales and Investment Trends of New Manufacturing Firms," June 1950.

Probably the major shortcomings in the surveys were that they were not broad enough in the types of information requested and that they did not adequately cover the unsuccessful new firms and those without any paid employees. Adequate coverage of the latter types of new firms was not feasible, with the resources available at the time. Given the nature of the new firm universe, it was felt advisable to keep the original questionnaire as simple and short as possible. Experience gained in using it with trade firms, however, plus the circumstance that the average size of new manufacturing firms exceeded that of trade firms, made possible a considerable improvement in the questionnaire sent to new manufacturers. The latter called for more detailed information on capital stock subscriptions, bank credit, and supplier credit; more specific information on bond sales, parent company loans, and purchases of land; and new information on subsequent changes in the gross plant and equipment account.

Unless otherwise noted, data in the summary will refer to new trade firms in the three years 1945 through 1947 and to new manufacturing concerns in the three years 1946 through 1948. These industries accounted for somewhat over one-half of the firms starting operations in the postwar period; new trade and manufacturing firms probably made over 90 percent and over 60 percent, respectively, of the investment in inventories and fixed assets of all new firms in these years.

Investment by New Firms

In the respective survey periods, the total initial investment by new retail, wholesale, and manufacturing firms amounted to approximately $5 billion, $1.5 billion, and $2 billion, respectively.[2] The corresponding averages per new business were $9,500, $22,000, and $12,000.[3]

The immediate impact of the establishment of new firms on aggregate output results from their high initial fixed assets and inventory needs. About $2.9 billion and $1.9 billion, respectively, of the total investment of $8.5 billion by new manufacturing and trade firms in the three early postwar years were expended on new plant and equipment and on inventories. An additional $1.6 billion was spent for used plant, equipment and land, and $2.0 billion for working capital needs other than inventories (Table 1).

[2] The estimates for manufacturing were adjusted to allow for under-representation of discontinued firms in the reporting sample. This was not done in trade, where data were not as adequate — although rough calculations indicate that this adjustment might reduce the estimates for wholesale and retail combined by as much as 15 percent.

[3] These compare with an average initial investment in the twenties of about $8,400 by 941 Boston and New Jersey concerns in all industries which filed in bankruptcy in the 1929-31 period.

Table 1

SOURCES AND USES OF INITIAL INVESTMENT FUNDS FOR NEW TRADE AND MANUFACTURING FIRMS, IN THREE EARLY POSTWAR YEARS[a]
(in billions)

	RETAIL TRADE		WHOLESALE TRADE		MANUFACTURING	
	Corporate	*Noncorporate*	*Corporate*	*Noncorporate*	*Corporate*	*Noncorporate*
Sources						
Personal saving	..	$2.9	..	$.6	..	$.6
Capital stock	$.4	..	$.5	..	$.7	..
Bank loans (including mortgages)	.1	.7	[b]	.1	.1	.2
Supplier credit	.1	.3	.1	[b]	.1	.1
Other	[b]	.5	[b]	.1	.1	.1
TOTAL SOURCES	$.6	$4.4	$.7	$.9	$.9	$1.1
Uses						
Plant						
New	$.1	$.6	$.1	$.1	$.1	$.1
Used	[b]	.3	[b]	[b]	[b]	[b]
Equipment						
New	.1	1.0	.1	.1	.2	.3
Used	[b]	.5	[b]	.1	.1	.2
Inventories	.2	1.1	.1	.2	.2	.1
Other (including land)	.1	.8	.3	.4	.3	.3
TOTAL USES	$.6	$4.4	$.7	$.9	$.9	$1.1

[a] Department of Commerce, Office of Business Economics. Includes trade firms starting operations in the 1945-47 period and manufacturing firms starting operations in the 1946-48 period. Amounts are rounded and will not always add to totals.
[b] Less than $50,000,000.

After making allowance for new firms outside manufacturing and trade, we estimate that the initial and direct contribution of all new firms to aggregate nonfarm investment in the 1946-48 period amounted to about 10 percent in new plant and equipment and 15 percent in inventories.[4]

In general, fixed assets were found to be a relatively greater part of initial investment among the smaller firms than among the larger. While relative equipment outlays varied inversely with size of firms, investment in plant, inventories and other working capital varied directly.

Sources of Capital Supply

Equity financing (comprising capital stock issues and the personal saving of entrepreneurs) constituted about two-thirds of the total sources of new funds in manufacturing and trade. Bank credit was the most important

[4] These estimates make no allowance for additional inventories and fixed assets purchased after start of operations by these new firms. In addition, new firms stimulate investment by others through both their purchases of used plant and equipment and their rental of facilities. To some extent, their inventories may be acquired from unsuccessful new firms.

form of debt financing and accounted for over 13 percent of the total requirements of these new businesses. Merchandise and equipment suppliers made available credit amounting to about 10 percent of the initial capital needs in manufacturing, and 8 percent in trade. The remainder of the debt funds was supplied by nonbank mortgages, friends, relatives, partners and (especially for manufacturers and wholesalers) parent company advances.

More than 90 percent of equity capital was financed out of the past saving of the entrepreneurs themselves, including capital stock subscriptions by the officers and directors of new corporations. The proportion of total investment financed out of personal saving decreased with increasing firm size. Other forms of equity financing – stock subscriptions by the general public and by parent or affiliated companies – varied directly with size. Almost one-half of the sample firms utilized personal saving exclusively in starting their businesses. For all new firms this proportion would be higher since the sample included only firms with paid employees.

Funds supplied by the capital markets were totally negligible in financing new retail concerns and of little significance in wholesale trade and manufacturing. The net proceeds of stock and bond sales to the general public by new manufacturers in the 1946-48 period amounted to about $50 million and $10 million, respectively. Only about one-third of these funds was raised by sale of securities registered with the Securities and Exchange Commission. New manufacturing and trade firms combined raised about $100 million from public issues in the three postwar years – less than one percent of total net new issues by all corporations, old and new.

Bank credit to these new firms amounted to over $1 billion – or more than 10 percent of the total change in outstanding bank loans during the period. Bank credit was generally utilized to a proportionately greater extent by the larger firms, by concerns with a larger investment in fixed assets, and, for a given size of company, by noncorporate firms for which such credit was more readily available as a result of their unlimited liability. Within bank credit, nonmortgage loans and mortgage loans on business properties varied directly with size, while mortgages on nonbusiness properties varied inversely.

The data indicate that the proportions of both equipment and equipment credit to total investment varied inversely with size, while the proportion of both inventories and merchandise credit varied directly with size. However, there was a tendency for the ratios of credit to purchases of both equipment and inventories to increase with firm size, probably a reflection of the better credit standing of the larger firms.

New versus Established Corporations

In the absence of balance sheet data for all noncorporate business, comparison must be confined to new and existing corporations. The proportion of equity in new firms at the start of their operations was found to be little different from that of all existing corporations — but considerably higher than among small established corporations, which are more comparable in size to new firms. These differences are largely explainable by the sizable surplus and undivided profits of large existing companies, and by the concentration of net deficit firms in the small firm group. While such data were not collected in the new firm survey, it is possible that, were comparison made at the end of the first year of operation, the net worth of new firms would not be much different from, or might even be lower than, that of established firms of comparable size.

A comparison of liabilities indicated little relative difference in long-term debt by either size or age of corporations, although the short-term liabilities of new firms were somewhat lower than those of large existing companies, and were considerably below those of small established corporations. Within long-term debt, the relatively higher mortgage debt of new firms — the full value of mortgage loans to new firms is compared with the partly amortized mortgages of existing concerns — is offset by their much lower proportion of bonded debt.

When comparison was made with the new financing of all corporations during the 1946-48 period (rather than with their financial position as of a given date) it was found that existing firms relied relatively much more heavily than new corporations on net new security issues, and much less heavily on mortgages, trade credit and commercial and industrial bank loans. Total equity financing of the capital requirements of existing corporations — including internal financing as well as new stock issues — was considerably greater relatively than the proportion of equity capital of new corporations to their requirements.

Availability of Funds to Finance New Business

It is interesting to note that in spite of the much-discussed financing difficulties of new firms it was possible to finance a substantial volume of postwar investment primarily through the personal savings of the entrepreneurs. Investment in new enterprises during this period was at the highest rate on record. These observations, nevertheless, are subject to several qualifications.

First, the outstanding characteristic of the early postwar period was the sellers' market in both consumers' and producers' goods, with the concomitant expectations of a ready market and high profits on the part of prospective entrepreneurs. Under these circumstances, the difficulties of obtaining funds for new financing are apparently not insurmountable. Second, the level of the business population at the beginning of the postwar period was abnormally low, and many persons, including those who had previously been entrepreneurs, were able and willing to resort to past saving to open a business. Finally, despite the favorable business climate during this period, the mortality rate among new firms was quite high. Data collected in the survey indicate that discontinued new firms initially invested less, on the average, than did surviving new firms.

This suggests further study of the possibility that, if the establishment of new business is to be encouraged and new business is to be afforded a reasonable expectancy of survival, additional access to external financing may be necessary. The Department of Commerce is now preparing two surveys directed toward answering this question. The first will study the causes of business mortality. The second will inquire into external financing needs of all types of business, including new and small concerns, and their abiltity to obtain such funds.

MINNEAPOLIS SURVEY

The Federal Reserve Bank of Minneapolis conducted a survey of the initial sources of capital supply of 122 concerns in its area.[5] These firms came into being over a long period of years, and in many cases took over existing businesses. More than half of the concerns were in manufacturing, while the others were in retail, wholesale and service establishments.

The survey revealed that 92 percent of the initial funds was equity capital, 5 percent was supplied by banks and the remaining 3 percent was obtained mainly from friends and relatives, trade sources, previous owners and finance companies. Equity capital was supplied primarily by past savings of entrepreneurs, parent companies, relatives and friends, and, to an insignificant extent, by the security markets. Long-term debt accounted for about three-fourths of borrowed capital, with the banks supplying slightly over one-half of the long-term and most of the short-term funds.

FEDERAL RESERVE SURVEY OF BANK LOANS

The Federal Reserve survey of business loans of member banks as of November 20, 1946 – probably the most comprehensive survey of bank loans on record – collected data by date of organization of borrowers.[6] Tabulations of the data give the number and value of outstanding loans

[5] Oscar F. Litterer, *Where Does Small Business Obtain Its Capital?* (Federal Reserve Bank of Minneapolis, December 1948).

[6] *Federal Reserve Bulletin,* May and August 1947.

(both short- and long-term) by industry and size of borrower for firms organized before and after 1942. The Board also has available unpublished data on the structure of interest rates and the security pledged on loans to new firms.

It is estimated from the survey that firms starting operations in the 1943-46 period accounted for 9.5 percent of the value and 30 percent of the number of the outstanding member bank loans. Similar percentages for term loans were 8.5 and 44 percent, respectively. The average outstanding loan was about $6,300, for term loans and for all loans.

Data on the life span of firms discontinuing during the war reveal that about two out of every nine surviving firms (of those starting operations after 1942) had some form of bank debt in November 1946, and about one out of fifteen had long-term bank debt.

The number of term loans received by new firms was considerably higher as a proportion of all term loans than was their proportion in the total business population. This may be partly associated with business conditions during the period. At the time, banks were seeking investment outlets, risk was comparatively low, and established firms were at peak liquidity. New firms were relatively more dependent on banks because of their lesser access to both internal and other external sources of funds. Other factors may be the younger age of their capital assets and the proportionately larger number of unincorporated businesses (with unlimited liability) in the new firm population.

BUSINESS MORTALITY STUDIES

Several surveys were made in the late twenties and early thirties of the causes of business failures in specific geographical areas. Four of these studies inquired into the original sources of capital supply of the bankrupt firms.

The latter surveys were conducted by the Bureau of Foreign and Domestic Commerce, and covered the following: 420 New Jersey firms, in all industries, which filed in bankruptcy during 1929 and 1930; 521 Boston firms, in all industries, which filed in bankruptcy during 1930 and 1931; 55 Louisville and Philadelphia retail grocers failing in 1928, and 30 St. Louis druggists failing in the 1925-31 period.[7]

The initial sources of capital supply for the firms in the more comprehensive New Jersey and Boston studies and for new trade and manufacturing firms in the postwar period are shown in Table 2. Probably the out-

[7] U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Domestic Commerce Series, Nos. 54, 59, and 69, and Trade Information Bulletins, Nos. 627 and 700.

standing feature of these data is the significant regional diversity in the sources of funds for new concerns. This is evident not only in the Boston and New Jersey studies, but also in the 1928 surveys of Louisville and Philadelphia grocers and in the postwar Minneapolis study. For example, the twenty-five bankrupt grocers in Louisville with an average initial investment of $1,900 obtained about 18 percent of their original funds from banks, while the thirty Philadelphia grocers with an average investment of $2,900 did not receive any bank credit at all.

In all of these studies, most of the original investment came from the past saving of the entrepreneur and his friends and relatives – and the capital markets were insignificant as a source of funds.

Table 2

SOURCES OF INITIAL INVESTMENT FUNDS FOR NEW FIRMS
(percentage distribution of total capital supplied)

	New Jersey Firms[a]	*Boston Firms*[a]	*Trade*[b]	*Manufacturing*[b]
Equity capital	47%	81%	68%	65%
Banks	18	2	14	13
Supplier credit	22	8	8	10
Merchandise	17	3	[c]	3
Equipment	5	4	[c]	7
Other sources[d]	13	9	10	12
TOTAL SOURCES	100%	100%	100%	100%

[a] Based on results of U. S. Department of Commerce surveys covering 420 New Jersey and 521 Boston firms in all industries which filed in bankruptcy during the 1929-30 and 1930-31 periods, respectively.

[b] Based on universe estimates, compiled by the U. S. Department of Commerce, for trade and manufacturing firms starting operations during the 1945-47 and 1946-48 periods, respectively.

[c] Not available.

[d] Includes friends and relatives and other miscellaneous sources.

Another mortality survey meriting mention is that of E. A. Heilman on business mortality in Minneapolis, St. Paul and Duluth.[8] While this study does not inquire into the sources of funds, it contains some data useful in an analysis of new concerns, such as the life span of business, turnover rates and net worth distributions by industries.

OTHER DATA

By and large, the only other available information on new firms is in terms of numbers of the business population by state, size and industry. The most comprehensive of the business population data is the series estimated by the Department of Commerce. These series provide quarterly informa-

[8] Ernest A. Heilman, *Mortality of Business Firms in Minneapolis, St. Paul and Duluth, 1926-30* (University of Minnesota Press, May 1933).

tion since 1943 on the numbers of new and discontinued firms by industry and employee-size; on business births, deaths and operating firms by states and industry; and annual estimates back to 1929 of the number of operating businesses by industry.

Dun & Bradstreet provides an annual series back to the middle of the last century on the number of listed concerns and the number of additions to the list, and a monthly series on new incorporations begun in 1946.[9] The latter series can be carried back into the nineteenth century by Evans' indexes of new incorporations.[10] Unfortunately for present purposes, these series represent the number of new charters rather than the number of newly organized corporations. According to Department of Commerce data, the number of really new corporate firms in the 1946-48 period was only about 35 percent of the number of new incorporations — although the latter correctly measured the trend in new corporations in this period.

The Bureau of Internal Revenue tabulated corporations, for the 1945 and 1946 tax years, by date of charter. Businesses incorporated during the tax year were further tabulated as to number, by industry and asset size, and were segregated as new corporations, as successor corporations, or as successors to partnerships or proprietorships.

A series of articles on business population published during 1944-48 in the *Survey of Current Business* also has some bearing on this problem. These articles cover the cyclical and secular trends in the business population, the life span of firms discontinuing operations in 1944, reasons for failures in 1946, industrial concentration, and a study of new and discontinued firms in the 1939-43 period.[11] The last article provides data annually for 1940 and 1941 and quarterly for 1942 and 1943 on the number of new firms. These data are not quite comparable to the later estimates.

II Additional Research Needs

The available material on the sources and uses of funds for new firms is still quite limited. There are many gaps in our knowledge in this field, leaving room for much additional research.

The existing data provide little insight into secular and cyclical variations in the sources of capital supply. There is a pressing need for a historical series on the sources and uses of initial investment funds.

[9] *Dun's Statistical Review.*

[10] G. Heberton Evans, *Business Incorporations in the United States, 1800-1943* (National Bureau of Economics Research, 1948).

[11] Dun & Bradstreet in 1949 initiated a quarterly series on the causes of business failures. *Dun's Review,* December 1949.

The extremely high mortality rate of new enterprises, even in prosperous periods, necessitates a study of discontinued firms. This study, in addition to inquiring into the causes of failure, should determine the distinguishing characteristics of discontinuing and surviving concerns — with special emphasis on the relative adequacy of capital as a contributing factor. An additional useful feature of this survey might be an inquiry into the disposition of the assets of discontinued concerns and the amount of investment funds recovered by entrepreneurs and creditors.

A third subject meriting consideration is the volume of capital sought as compared to that acquired by would-be entrepreneurs. This would, of course, entail inquiry into financing costs for new firms and the demand and supply schedules at varying money rates. As noted earlier, the Office of Business Economics is now planning two surveys, the first designed to appraise the demand for capital, the second to analyze the experience of discontinued firms.

Other studies necessary to round out the postwar picture would include the sources and uses of initial investment funds by industries not covered in the postwar surveys so far — principally construction, services, transportation, and mining — and the financing of new firms without paid employees.

Finally, attention should be given to the financing problems and policies of new firms in their formative years. Some topics that need to be examined include: changes in capital requirements and sources of supply; the extent to which early growth is limited by the availability of funds for additional working capital and fixed assets needs; the burden of interest costs on profits; and the distribution of earnings between withdrawals and business savings.

Discussion and Comment

Discussion:

JOSEPH K. WEXMAN, *University of Chicago*

In discussing Mr. Bridge's paper, I should like to examine a point of view, and then submit my own suggestions in addition to those he has advanced for research in connection with the financing of new smaller business.

Mr. Bridge points out that there are several considerations which make necessary the segregation of new firms in economic analysis. He indicates that the basis for their investment decisions, the sources of their financing, their impact on the business cycle, and their relationship to technological progress may be quite different from those of existing firms.

Here I should like to suggest that we might well reverse the emphasis and instead of talking, for instance, of investment decisions, indicate perhaps more accurately the informal and often non-monetary motivations in entering business; instead of indicating the source of the financing of new firms as if there were a choice, place the emphasis perhaps upon the financing sources available. Instead of discussing *their* impact on the business cycle, we might then more properly refer to the impact of the business cycle upon new and small business, and view their relationship to technical progress as more likely to be a reflection of the impact of technological progress on new and small business.

The National Opinion Research Center asked of a representative national sample of owners of small businesses, "What is one of the main reasons you went into business for yourself?" Fewer than 16 percent of those interviewed gave as a primary motive the individual's need of a job. Personal ambition, expressed in the desire to create, or to secure prestige, or to expand beyond the job as an employee – these motives being apart from anticipated increase in earnings – accounted for 29.4 percent of all the answers. Monetary consideration, accompanying dissatisfaction with job status and preference for independence, furnished the incentive for almost another third of the respondents.

It should be observed, here, that at least two-thirds, and perhaps more, of the owners interrogated were motivated by independence, ambition and opportunism, characteristics usually not assocated with a flexible or responsive attitude toward guidance.[1]

In making an analysis of the "financing of investment by new firms" we should avoid the basic error of assuming that new small business singly or in aggregate controls its destiny in these respects, with the possible exception of making its own investment decisions. Actually, only larger established business has any real choice as to its sources of equity or credit.

The figures in Mr. Bridge's presentation indicate generally that new small business has little in the way of outside sources of capital or long-term unsecured credit. It is more than likely that practically all the credit extended to these businesses was on the basis of collateral of some sort. Credit limited to this type, like placing jewelry in a pawn shop, is a reflection of the credit estimate of the borrower in a negative way. Mr. Bridge's

[1] The National Opinion Research Center made a study for the Committee for Economic Development in 1944. This discussant conducted the survey which was for use in preparing a report for the CED on the prospects for small business. The survey was not published.

further examination of sources of capital reinforces this conclusion. It is quite likely that even the capital stock issues referred to, amounting to $1.6 billion, may be closely held, and hence to that extent are a contribution of friends, relatives, and business associates.

Bank credit, according to Mr. Bridge's report, constituted only 13 percent of the total requirement, and this proportion was apparently procured by pawning building, equipment, or personal assets. Even trade credit, usually considered a source of financing for new or small business, provided only 8 to 10 percent of the total requirement. If we eliminate parent company advances, because that could justifiably be included in owner equity, we could ascribe an even larger percentage to directly interested parties.

The financing of the purchase of equipment probably represented time payments on a secured basis. The fact that inventory and merchandise credit varies directly with size indicates a *lack* of trade credit as much as it does a *use* of trade credit.

In reference to the concentration of net deficit firms in the small firm group – which I adduce from BIR figures – it should be recognized that firms incur deficits in getting started, and may operate at a loss for several years; but as they become profitable they should tend to rise out of the lowest size class. The use of total assets rather than net assets or net worth as a criterion of size further distorts the data.

Again, in making a comparison of liabilities, Mr. Bridge indicates that short-term liabilities of new corporations were somewhat lower than those of large existing companies; that existing corporations relied relatively much more heavily on net new security issues, and much less heavily on mortgages, trade credit and commercial and industrial bank loans than did new corporations; and that total equity financing for existing corporations was greater relatively than the proportion of equity capital of new corporations to their requirements. These comparisons reinforce the statement that small business has insufficient equity in relation to its needs and has no well-defined source of such equity other than the resources of the proprietor and his friends.

Mr. Bridge also says that ". . . it was possible to finance a substantial volume of postwar investment primarily through the personal savings of the entrepreneurs." May I say that savings were available among a high proportion of the population for the first time since the twenties? In addition, a great number of individuals wanted to go into business for themselves, as both the GI and Minneapolis surveys showed. It is obvious from the figures that if there were no savings there would be no new businesses.

With reference to the high mortality rate to which Mr. Bridge alludes, I should like to suggest that discontinuances appear to be a function of entry whatever the effect on entry of changes in the level of business activity and that turnover is 95 percent within the 85 percent of firms employing three or fewer persons, so that the largest portion of entry and discontinuance is more akin to labor turnover than it is to business failure.

Assuming that our resources for research are not unlimited, I should like to suggest that we may have sufficient information for the moment on where new and small business gets its funds, and that we might subordinate the present emphasis on history and instead examine ways in which to deal with the problem of financing new and small business. If we meet the equity needs, short-term requirements can be met. Perhaps it may be possible to supplement the present type of research, which is preoccupied with history, by experimentation, or, if ways cannot be found to make controlled experiments, to observe and report the experiments of others.

From time to time I have seen press releases in connection with such projects as development corporations sponsored by Chambers of Commerce, the several New England projects for financing development of new products, bank plans with special provisions for more liberal lending to small business, etc. My impression is that generally these undertakings have not been too successful; but certainly from each of these attempts something can be learned which would suggest new or improved approaches to the problem. I will outline some of the questions presently, on the theory that if we know the questions we can find the answers.

At any rate, I should like to avoid floundering in an Alice-in-Wonderland atmosphere of indeterminate discussion and rather look for means by which we might resolve the problems of adequately financing new or small business.

To come, now, to Mr. Bridge's proposals: one of his suggestions is to develop historical series on the sources and uses of initial investment funds. While this would be generally desirable, just as any confirmation is desirable, I believe that it would be more vital to determine what changes or additions to facilities should be made; and it would be even more valuable to direct the investigation along the lines of the *use* that would be made of such facilities.

As Mr. Bridge suggests, any attempt to separate out the relative adequacy of capital as a contributing factor to continuance or to discontinuance must deal with a complex of highly variable interrelated factors. Not the least of these is managerial competence, involving skills in manufacturing or procuring, organization, and selling — in conditions where needs for goods or services in different communities and in different types of businesses differ, even in the same general line of activity.

The isolation problem is further complicated by the rate of entry, the general level of economic activity, and the services in a given community — such as cooperative effort, advertising and promotional assistance, research facilities and other contributions of the business community — which influence survivability. Additional financing may be as dangerous to the business owner as too little financing. It may, in such extreme cases as Lustron, make exit calamitous.

More to the point is Mr. Bridge's "third project": a study of the volume of capital sought as compared with that acquired by would-be entrepreneurs.

There are other questions that need to be asked and answered with more authority than our present vague impressions afford us. For example:

1) What loss reserve would be adequate in making capital loans? This suggests we would have a basis for evaluating the hazard of loss. This is much more difficult than it appears at first glance. What rate can we assign to it — 1½ to 10 percent?

2) What is the rate at which capital loans could be profitable enough to attract private investment? Is it the IBA 6 percent which eventually yields 19 percent to invested capital with the leverage of government loans, or is it the *minimum* of 20 percent which is deemed necessary by a Chicago firm?

3) To what extent is government purchasing policy and government allocation of research and development funds undermining the stability of the smaller manufacturer or his chances of a successful entry and, hence, his financial worth?

4) What is the volume of savings and where they are held? And what are the incentives which will attract these savings into small business investment?

5) What are the current incentives to invest in small business as against the alternative investment opportunities?

6) What effect do specific taxes have on investment in new business or in divestment of established businesses? What effect have tax-exempt securities?

7) Is the effect of regulations such as Regulation W, which restricts credit across the board, more advantageous to small business than selective restrictions on credit by lenders to progressively marginal businesses?

8) What changes in State Security Commissions' policies might be suggested to encourage easier flotation of small issues? How may marketing services for the securities of small business be improved?

9) How can we make a continuing study of business credit rejections by all classes of credit grantors?

10) To what extent is lack of financing a screening device barring entry? Might the alternative be easier financing and government control of entry?

11) What means may be found of measuring the influence of management ambition, impatience, and error in reported difficulties in obtaining financing?

These are only a few of the questions, but in working toward more information of a qualitative nature, we would be using available research funds and energies to their fullest purpose. In directing our efforts toward a solution of the narrower aspects of our financing problem, we may in the process find the means to achieve the broader economic objective of maintaining new and smaller businesses in financial good health.

Discussion:

ALFRED R. OXENFELDT, *College of the City of New York*

In the paper he prepared for this conference and in articles on the same subject published in the *Survey of Current Business,* Mr. Bridge presents a wealth of information. The sources and uses of funds for new businesses, heretofore a subject that was largely unexplored, now has a relatively firm empirical foundation. Those who have studied the financing of new firms before these studies were made will appreciate the increase in knowledge they represent, and will not fret much because the samples studied are rather small — especially for inter-industry comparisons. The more serious limitation on Mr. Bridge's results — their reference to a most atypical period — can and probably will be remedied by a continuation of similar studies in the future. Clearly, Mr. Bridge is using a method to identify and make contact with new firms that promises reliable results.

For the benefit of those who have not seen Mr. Bridge's articles in the *Survey of Current Business,* let me mention that space limitations of his paper restricted the author simply to the highlights of matters that were covered thoroughly in those articles. My comments, however, apply equally to the articles and to the paper submitted to this conference.

My concern is primarily with two issues. The first is semi-technical; its importance lies in a suggestion for modifying future studies of new firm financing. The second issue is more general and relates to the interpretation of the results reached by Mr. Bridge. I will conclude by listing three miscellaneous points that may deserve more emphasis than Mr. Bridge gave them.

IMPRECISE DEFINITION OF NEW FIRMS

Mr. Bridge indicates in his articles in the *Survey of Current Business* that he excluded "successions" from his sample of new firms. He does not make it clear why firms with parent concerns were considered new, but his final results probably are not much affected by this decision. A major problem of definition for an analysis of sources and uses of funds for new firms relates to the matter of timing: that is, when is the new firm started? More specifically, at what point in time and at what stage in the development of the firm should one take a snapshot of the sources and uses of funds?

This problem of definition has important implications for public policy. Very likely, though I cannot say for certain, many socially useful new firms never reach the point at which they have a chance to enter Mr. Bridge's sample — that is, they never become members of the Old Age and Survivors Insurance system. To devise a satisfactory public policy for new firms, it will be necessary to find out how many "desirable" firms perish before they even begin to hire employees, because funds are unavailable to them.

This problem of definition can also substantially alter the results obtained from a study of the sources and uses of funds. Both the sources and the uses of funds for new firms almost certainly change greatly during the first months, if not first few years, of their existence.

Mr. Bridge reports in one of the articles in the *Survey of Current Business*[1] that 92 percent of his sample of manufacturers reported their investment "essentially at the time they started production." About 3 percent reported their sources and uses of funds "on the last day of their first calendar or fiscal year in business." About 5 percent reported their investment some time before their start of production; the reports of this last group were eliminated from his tabulations.

In his study of trade firms there is no mention of the stage in their development to which their reports apply. It is not clear what "essentially at the time they started production" means. Does it mean the time that the first samples were produced, or production for sale for the first time? Perhaps it means first production "in quantity." Moreover, the addition of the word "essentially" suggests differences in the age of firms included in the survey, though presumably the reports of these firms apply to a time when they were less than one year old. It is urged here that such rapid changes

[1] *Survey of Current Business,* April 1950, p. 12.

occur in the sources and uses of funds during the first weeks and months of a new firm's existence that meaningful results can be obtained only if time is defined very precisely and narrowly. In addition, the considerable differences in the stage of development of firms included in Mr. Bridge's sample make it difficult to interpret his results with confidence.[2]

There may be some value in speculating about the changes in the sources and uses of funds during the earliest stages of a firm's life. My purpose is to indicate the impossibility of selecting any one stage at which we can obtain meaningful information about the sources and uses of funds for new firms. I submit that to derive a sources and uses analysis for new firms a moving picture is absolutely necessary and a snapshot really does not suffice.

Most new manufacturing firms undergo a stage of "exploration." In some industries this stage lasts several years. For example, in automobile manufacturing during the 1920's, the average time that elapsed between the date of incorporation and the sale of the first car was about three years.[3] During the exploration stage, the entrepreneur generally is engaged in seeking out customers and testing the market, finding a good location, exploring the availability of the kinds of employees he needs, investigating on what terms he can purchase supplies, selecting the particular quality and style of product to be produced or sold, and the like. All of these steps are essential to the initiation of most firms and they make take considerable time, during which the new firm generally has no employees and no place of business.

If the firm is to engage in production and survive, it must have adequate funds to withstand the costs of exploration. Consequently, it may be important for public policy, if it is dedicated to assist in the establishment of new firms, to study the availability of funds to firms during the early exploratory stages.

The pre-production stage often does not involve direct monetary outlays; the very real costs of the exploratory process, primarily in the form of reduced income from other sources and the effort and time, are therefore often excluded from calculations of the initial investment. True, considerable exploratory work is done while the entrepreneur is working for someone else, or in another venture of his own. But even then his efforts

[2] Perhaps a comparison of the many returns received, carefully classified by "stage of development," might provide valuable insight into the rapid financial changes in the business embryo and young infant.

[3] A. R. Oxenfeldt, *New Firms and Free Enterprise* (American Council on Public Affairs, Washington, 1945), p. 104.

expended on exploration presumably would have increased his income if they had been applied to some other activity and should be rewarded.[4]

Moreover, failure to be able to finance exploratory work may involve the firm in subsequent losses and expenses larger than are necessary. In such cases, the costs of exploration appear under a different name, but they must be paid all the same. (We may prefer to consider exploration a deferrable type of capital requirement.)

During this vital exploratory stage, one would think that the entrepreneur must be the only source of funds; or at least that his contribution is relatively larger than it will be during subsequent stages. In the first place, the usual entrepreneur probably starts by putting almost everything he owns into his venture. If the firm is to get additional funds, they *must* come from other persons, or from profits – an unlikely source during a firm's early days. Second, during the exploratory stage, expenditures yield a very intangible asset – information. Even though it probably is the most valuable asset a new firm can acquire, its resale value is low or nonexistent and most lenders prefer other kinds of security for their loans.

But as the firm grows older, it generally acquires tangible assets instead of information. It therefore comes into possession of accepted collateral for loans. Also, the firm's very existence supplies information on the basis of which prospective lenders or investors can better assess the profit expectation of the enterprise. As a result, relatives, suppliers, private capitalists, banks and public investors may be induced to contribute to the firm's resources.

An account of the *uses* of funds by a new firm during the early stages of its existence is implicit in the foregoing discussion of its sources of funds. Upon the acquisition of information, it tends to acquire highly specialized assets, generally fixed in character, like plant and equipment. Almost certainly, some funds must be spent to remodel premises and adapt them to the firm's particular needs and desires; probably most of the items covered by these expenditures have little or no resale value. Finally, and usually later, funds are devoted to inventories of goods, ordinarily the easiest type of purchase to finance.

Even if this brief description of the infancy of a new firm is incomplete, surely the fundamental conclusion – that the sources and uses of funds change dramatically during the early weeks and months, if not years, of a new firm's existence – is valid. Consequently, it is imperative that studies of sources and uses of funds for new firms do two things: first,

[4] In passing, I should therefore like to suggest that the source of capital in the form of unutilized time and special opportunities for exploration perhaps merits more attention than we give it.

endeavor to be very explicit about starting time; second, study sources and uses of funds at several times during the early stages of a new firm's development. The second course seems indispensable, for it probably is impossible to define the stages of a new firm's existence in a way that makes firms in different industries truly comparable in any given stage of development.

AN IMPLICIT CONCLUSION THAT MAY BE ERRONEOUS

Mr. Bridge has, discreetly, restricted his paper to a summary of the results obtained by himself and others from empirical investigations. He has not advanced generalizations that might be applied to other periods of history or to the future. But many people who hear or read his paper will lack Mr. Bridge's restraint and discretion, and will not be able to resist certain conclusions. In fact, I believe that Mr. Bridge has himself reached the major conclusion that I have singled out for comment.

Perhaps the most important conclusion implied in his paper is that new firms substantially increased the total volume of investment in both fixed assets and inventories between 1945 and 1948, and that they ordinarily constitute a fairly important potential customer for financial institutions and an important source of investment demand. In one article he says that his study indicates "the effects of changes in the postwar business population upon the total volume of investment in fixed assets and inventories."[5] He has also said that the demands of new firms for labor, plant, equipment, and inventories "were super-imposed on the needs of the existing business population going through the processes of reconversion."[6] Mr. Schmidt's paper includes a direct statement to the effect that the establishment of new firms is vital for full employment.

I question whether new firms' investment represents an equal increase in total investment. Their investment may simply replace equivalent investment by established firms. Two other hypotheses deserve consideration. One is that each dollar of investment by new firms offsets more than a single dollar of investment by established firms; second, that investment by new firms spurs established firms to additional investment. Sufficient information to determine the relationship between investment by new firms and investment by established firms is just not available, and it may not be possible to obtain such information. One must, however, resist the superficially reasonable position that investment in new firms constitutes an equal net addition to the total of investment that would have taken

[5] *Survey of Current Business,* April 1950, p. 11.

[6] *Ibid.,* December 1948, p. 18.

place otherwise. Some new firms probably stimulate added investment by established firms, e.g., by compelling retailers to bring their facilities up to the standard of attractiveness set by the new firms. In some industries new firms are so great a hazard to established firms that the latter invest far less than they would otherwise, and new firms do not compensate for the investment established firms would have made if they were certain that no new firms would be established. As Professor Schumpeter and others have pointed out, competition may well inhibit investment and reduce its total size.

Of course, the problem of the relationship between investment by new firms and investment by established firms is immensely more complicated than I have made it. In the absence of more empirical information, or of strongly convincing argument, the conclusion that investment by new firms represents a net addition to total investment and a necessity for full employment is not justified.

THREE MISCELLANEOUS POINTS

In conclusion, I should like to add three unrelated points:

a) The sources of funds actually drawn upon by new firms do not necessarily reflect the relative availability of funds to them. The entrepreneurs might have been able, say, to borrow more or get more credit from suppliers but preferred to draw upon their own savings. A full understanding of sources of funds available to new firms therefore will require a study of the avenues through which the new firms tried to, or would have liked to, obtain funds. One of the studies projected by the Office of Business Economics may provide the kind of information I have in mind.

b) Prewar studies of the sources of funds for new firms showed enormous variation among cities and over time; and Mr. Bridge's results differ substantially from those of Dr. Oscar Litterer for a similar period. It therefore is likely that a similar study at another time, or in a specific area, will give substantially different results. Consequently, one must not use Mr. Bridge's results for any purpose other than description of an earlier period. Also, it is valuable to recognize the probability that one is dealing with a highly unstable and dispersed universe, which makes it imperative that studies of new firms should be based on extra-large samples.

c) It is not clear how Mr. Bridge's results can be used to settle the question of whether special lending facilities should be provided for new firms, as some persons have proposed. Among other things, one would want to know whether firms that would then be able to borrow more easily would fail in any case – or would simply cause other firms no less efficient than they to fail. By an analysis of specific industries and local markets, information bearing on this question should be obtainable.

Perhaps all of my comments lead to the same general suggestion: Mr. Bridge's studies were not closely related to the questions of public policy with which we are primarily concerned. While they have real historical interest, and while they test and demonstrate a method of studying the sources and uses of funds by new firms, they leave unanswered the fundamental questions relating to new firms.

Comment:

DONALD B. WOODWARD, *Mutual Life Insurance Company of New York*

I should like to make three specific proposals for research on the subject of small business financing.

First, adequate investigation will show, I believe, that funds flow to small businesses in more different ways than appear at first view. We need a better understanding of all the ways in which small business is financed.

Policy loans by life insurance companies appear to be one significant way in which small business is financed. Recently the company with which I am associated sent a questionnaire to larger policy loan borrowers to ask the purpose of their loans. A very sizable proportion replied that the funds were used in business finance; and the proportion seems to rise with the size of loan. Another significant method of financing business is through real estate loans, which are made by all types of institutional lenders. The amount of funds and the proportion of loans in real estate mortgage portfolios that go to finance medium-sized and smaller businesses appears to be quite considerable.

Still another way in which smaller businesses are financed is by large loans to large business concerns which in turn finance smaller concerns who supply the larger institution or who are supplied by it. And yet another method is available in the small loan operations of commercial banks, which I expect are somewhat analogous in this respect to the policy loans of the life insurance companies.

Sufficient investigation of the subject would disclose how important these methods of small business financing are and would, I think, reveal still other indirect methods which are not frequently noted in discussions of the subject.

Secondly, a current and continuing sample census of new business units could be made, I think, and sufficient detail obtained to discover the source of funds. In a recent discussion at a Social Science Research Council Committee meeting on mortgage loans, the idea was developed that lenders might provide each month or each year some sample of loans made, and that analyses of the transcripts of these loans would provide a current picture of the mortgage market and information as well for experience studies in the future.

I am suggesting substantially the same technique for use with regard to new business, except that the information would come from the state authority issuing the permit to do business. Such a study could be carried on within as broad or narrow a scope and depth as resources would permit.

Thirdly, there are already major efforts that have been made to meet what has long been called the problem of small business finance. These results could be collected and analyzed to a greater degree than has thus far been done. I can remember vividly that one of the problems in the days of the National Recovery Administration was to note the effect on small business. Work which was done there contributed to Congressional enactments granting authority for both the Federal Reserve System and the Reconstruction Finance Corporation to make loans to small businesses. The experience of these two organizations could be more fully analyzed.

The American Research and Development Corporation is another interesting example of the effort to provide financing for certain types of newer and smaller businesses and its experience should be rewarding to study. It is said to undertake the financing in about one out of every one hundred applications. Groups of commercial banks have on one or more occasions attempted to assure that small business concerns had adequate financing facilities. I believe that these efforts could provide information that would add to our knowledge.

More recently, as some of you know, the Metropolitan Life Insurance Company announced during the hearings of the Joint Committee on the Economic Report that it would endeavor to make loans on smaller business concerns wherever the local bank would participate; presumably significant new information will come from this nationwide operation.

The discussion, so far as I recall, has not mentioned taxation, and this is surprising. Nearly all discussions of this subject, those at any rate that I have heard, have produced emphatic statements that high income, estate and corporation tax rates have had a major influence on small business finance. This is a matter that could surely be studied through interviews, and perhaps in other ways. In any case, observers of the various efforts to provide financial facilities for small businesses should bear the tax point in mind to see what evidence emerges.