

Appendix F.—The Database of Venture Economics, Inc., on Sources of Financial Capital

Venture Economics, Inc., the research and consulting division of Capital Publishing Corp., maintains an extensive database of information on the U.S. venture capital industry. The Venture Economics database currently tracks investments by the leading venture capital firms, both independent private and corporate groups, which account for more than 80 percent of the U.S. venture capital industry's total investment activity. In addition, the database covers the investment activities of Small Business Investment Corporations (SBICs) involved in classic venture capital type investments. The database does include a small degree of investment by foreign sources in U.S. companies as well as investment from unidentified sources, some of which may be non-venture-capital institutional funding.

Through extensive data collection efforts, Venture Economics has been able to research and computerize information on more than 4,300 companies that have received venture capital financing since the 1960s. Efforts to date have focused on the computerization of the following information on each portfolio company:

- company name and address,
- business description,
- industry or business codes including the Standard Industrial Classification code and more specific codes developed by Venture Economics,
- status of the firm (public or private),
- year founded, and
- for each round of financing:
 - amount of financing,
 - date of the financing round,
 - stage of development of the company, and
 - venture capital investors.

Table 30 in chapter 4, which listed the percentage of U.S. venture capital funds invested in medical imaging, other medical products, industrial products, and electronics, was based on the Venture Economics database's recorded venture capital investments for 1982. Although the investments recorded by the Venture Economics database do not account for all venture capital investments (see table F-1), in aggregate, they do offer a representative picture of venture capital investment activity. The categories of investors covered by the database are presented in table F-2. Medical imaging and the three other industry/product categories mentioned above, which were used in table 30 to classify firms receiving venture capital funds, are

shown in table F-3. Definitions of the stages of financing used to categorize financing rounds in table 30 are shown in table F-4.

Table F.1.—Total Investments by the U.S. Venture Capital Industry, 1978-82 (millions of dollars)

Year	Total venture capital investments	Investments recorded by the Venture Economics database
1978	\$ 550	\$ 282
1979	1,000	500
1980	1,100	803
1981	1,400	1,400
1982	1,800	1,760

SOURCE: Venture Economics, Wellesley Hills, MA, "Venture Capital Investment in the Medical Health Care Field," contract report prepared for the Office of Technology Assessment, August 1983.

Table F-2.—Categories of Investor Types Covered by the Venture Economics Database^a

<i>Independent private (225 investors):</i>
Independent private funds
SBIC subsidiaries of private funds
<i>Corporate financial (120 investors):</i>
SBIC and non-SBIC subsidiaries of financial groups
Other investments by financial groups including insurance companies
<i>Corporate industrial (125 investors):</i>
Venture capital funds wholly or jointly funded by nonfinancial corporations
Direct corporate venture capital investors
SBIC subsidiaries of these industrial corporations
<i>Nonaffiliated SBICs (140 investors):</i>
Public and private SBICs not affiliated with any of the above investor types
<i>Other (240 investors):^b</i>
Government affiliated groups
Community development corporations
Universities
Individuals
Foreign investors

^aThe number of investors in each category includes investment groups that are no longer active or that make only occasional investments.

^bThe majority of these are United Kingdom funds that do not invest in the United States on a regular basis.

SOURCE: Venture Economics, Wellesley Hills, MA, "Venture Capital Investment in the Medical Health Care Field," contract report prepared for the Office of Technology Assessment, August 1983.

Table F-3.—Four Product Categories Used in the Venture Economics Database

Medical imaging:
 X-rays
 CT scanning
 Ultrasound imaging
 Nuclear imaging
 Other imaging

Medical products and services:
 Diagnostic (not including medical imaging):
 Diagnostic services
 Diagnostic test products and equipment
 Other diagnostic

Therapeutic:
 Therapeutic services
 Surgical instruments and equipment
 Pacemakers and artificial organs
 Drug delivery and other therapeutic equipment
 Other therapeutic including defibrillator

Other medical or health related:
 Disposable products
 Handicap aids
 Monitoring equipment
 Other medical or health related (not including pharmaceuticals, fine chemicals, or hospital and other institutional management including management services and leasing)

Industrial products:
 Advanced materials (including production processes)
 Industrial automation
 Industrial equipment and machinery
 Chemicals
 Pollution and recycling equipment
 Other industrial products

Other electronics industry segments:
 Electronic components:
 Semiconductors
 Microprocessors
 Controllers
 Circuit boards
 Display panels
 Other electronic components

Batteries
 Power supplies
 Electronics-related equipment:
 Semiconductor fabrication equipment and wafer products
 Component testing equipment
 Other electronics-related equipment

Laser related
 Fiber optics

Analytical and scientific instrumentation:
 Chromatography and related laboratory instrumentation (including spectrometers)
 Other measuring devices (including infrared gas analyzers, moisture analyzers)
 Other analytical and scientific instrumentation

Other electronics-related equipment:
 Military electronics (excluding communications)
 Copiers
 Calculators
 Other electronics related

SOURCE: Venture Economics, **Wellesley Hills**, MA, "Venture Capital Investment in the Medical Health Care Field," contract report prepared for the Office of Technology Assessment, August 1983.

Table F-4.—Definitions of Stages of Venture Capital Financing

Early stage:
Seed—A relatively small amount of capital provided to an inventor or entrepreneur to prove a concept. It may involve product development but rarely involves initial marketing.
Startup—Financing provided to companies for use in product development and initial marketing. Companies may be in the process of being organized or have been in business a short time (1 year or less), but have not sold their product commercially. Generally such firms would have assembled the key management, prepared a business plan, and made market studies.

First stage—Financing provided to companies that have expended their initial capital (often in developing a prototype) and require funds to initiate commercial manufacturing and sales.

Expansion:
Second stage—Working capital for the initial expansion of a company which is producing and shipping and has growing accounts receivable and inventories. Although the company has clearly made progress it may not yet be showing a profit.
Third stage—Funds provided for the major growth expansion of a company whose sales volume is increasing and which is breaking even or profitable. These funds are utilized for further plant expansion, marketing, and working capital or development of an improved product.
Fourth stage—The last round of private financing prior to, but not in anticipation of, a public offering or prior to the point at which a company can qualify for credit-oriented institutional term financing. This round may enable institutional term financing or may involve turnaround aspects.

Bridge financing—Financing for a company expecting to go public within 6 months to a year. Often bridge financing is so structured that it can be repaid from proceeds of a public underwriting. It can also involve restructuring of major stockholder positions through secondary transactions. This would be done if there were early investors who wanted to reduce or liquidate their positions, or if management had changed and the stockholdings of former management, their relatives and associates, were to be bought out to relieve potential overhead stock supply when public.

Leveraged buyouts and acquisition:
Acquisition for expansion—Funds provided to a firm to finance its acquisition of another company.
Management/leveraged buyout—Funds provided to enable operating management to acquire a product line or business (which may be at any stage of development) from either a public company or private company (often such companies are either closely held or family-owned). This usually involves revitalization of the operation, with entrepreneurial management acquiring a significant equity interest.

other
Turnaround—Financing provided to a company at a time of operational or financial difficulty with the intention of "turning around" or improving the company's performance.
Secondary purchase—Purchase of securities from another venture capital firm, other stockholders, or on the open market.

SOURCE: Venture Economics, **Wellesley Hills**, MA, "Venture Capital Investment in the Medical Health Care Field," contract report prepared for the Office of Technology Assessment, August 1983.