

The Journal of Entrepreneurial Finance

Volume 1 Issue 3 *Spring 1992*

Article 6

December 1992

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Recommended Citation

Schilit, Howard M. and Schilit, W. Keith (1992) "The Winning New Issues: A Case Study," *Journal of Small Business Finance*: Vol. 1: Iss. 3, pp. 269-288.

DOI: https://doi.org/10.57229/2373-1761.1126

Available at: https://digitalcommons.pepperdine.edu/jef/vol1/iss3/6

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The Winning New Issues: A Case Study

Howard M. Schilit and W. Keith Schilit

INTRODUCTION

Several years ago, one of our good friends was fortunate enough to hear Sam Walton address a group of retailers. He was so enthused by Walton's remarks that when Walton's company, Wal-Mart, went public, he invested \$1,000 in the little known discount retailing chain. Today, that \$1,000 investment in Wal-Mart is worth over half million dollars. We frequently hear similar stories of other "small investors" who were savvy or fortunate enough to invest in Home Depot (which increased in value by over 7.000% over the 1980s), Liz Claiborne (up 3,400% over that time period) Adobe Systems (up 1,600%), LA Gear (up 1,400%) or several of the other successful growth companies of the last decade. Such investments have enabled these "small investors" to reach millionaire status solely as a result of their intelligent investments.

Unfortunately, for every LA Gear or Liz Claiborne or Lotus or Wal-Mart there are countless companies that have been major disappointments for their investors. Home Shopping Network, New World Pictures, Daisy Systems, and Continuing Care are just a few examples of emerging growth companies which apparently had extraordinary potential at the time they went public, but whose rapid decline resulted in substantial losses for their investors. There are even dozens of companies which have failed altogether, including Vector Graphic, Pizza Time Theatre, Wedtech, DeLaurentiis Entertainment, and ZZZZ Best.

Why do some early stage ventures perform remarkably well while others fail? Is there a fairly accurate way to predict which emerging growth business will become a high performing success story and which a low performing disaster? Is there a way for investors to increase the likelihood of investing in "winners" and decrease the likelihood of investing in "losers"? These are the central questions addressed in this article.

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The Journal of Small Business Finance, 1(3): 269-288 ISSN: 1057-2287

THE MODEL

Our objective was to establish a comprehensive model or framework for analyzing initial public offerings (IPOs), identifying factors which differentiated the "winners" from the "losers." We defined a "winner" as a company which substantially outperformed the stock market over the long term; likewise, a "loser" was defined as a company which substantially underperformed the stock market over the long term. Once we identified the key factors which differentiated the "winners" from the "losers" over the past two decades, we searched for these factors in more recent IPOs and, based on our model, predicted which companies would be successful and unsuccessful in the nineties.

Our research indicated that a careful analysis of early stage ventures, even prior to the time that these companies go public, can be valuable in predicting after-market stock performance. Such information, which is free, easy to use, and publicly available, is contained in the "prospectus" prepared by the investment firm underwriting the stock offering.

We examined over one hundred such prospectuses of companies which we had classified as either "winners" or "losers" (based upon their subsequent stock market performance), with the objective of identifying those factors common to each group. Based on our research, we have found that there were several common factors—which we call "predictive factors"—which could help predict long-term after-market stock performance of IPOs. We developed a model and grouped these predictive factors into the following four main categories:

- (1) product or service:
- (2) management and organization;
- (3) financial position;
- (4) financial arrangement.

The following table lists the predictive factors, arranged by category, showing the factors common to the "winners" (turn-ons) and the factors common to the "losers" (turn-offs).

The "winners" generally displayed a number of "turn-ons" while the "losers" generally displayed a number of the "turn-offs." Moreover, those offerings with a number of "turn-offs" can provide an early warning signal (or red flag) for investors, suggesting that they stay away from such investment opportunities.

For example, included in New York-based electronics retailer "Crazy Eddie's" prospectus were the following "turn-offs": (1) it funded a medical school in the Caribbean; (2) it invested in oil and gas limited partnerships;

Table 1 Factors for "Winners" and "Losers"

		"Turn-ons"	"Turn-offs"
		Predictive Factors	
Pro	duct/Market		
1.	Market focus	Clear	Disparate, unfocused
2.	Competitive advantages	Distinct advantage in terms of proprietary position; user benefit; quality; price/performance	Little or no advantages
3.	Growth	Sustainable, high growth business; high growth industry	Low growth; unsustainable growth
4.	Operating history	Established company with a track record	Early stage venture
5.	Linkages	Linkages or joint venture activ-	No linkages
	nagement and anization:	ity with established companies	-
l.		Solid management team (&	Weak management team &
• •	management team	directors & scientific advisors) with appropriate experience in industry	directors
2.	Dependence	Not overly dependent upon key personnel	Overly dependent
3.	Related transactions	Absence of questionable related party transactions	Existence of such transactions
4.	Litigation	Absence of lawsuits against	Existence of such lawsuits
Fin	ancial Position:	management or the company	
1.	Earnings	Strong earnings growth	Weak earnings growth
2.	Balance sheet/ cash flows	Strong balance sheet and cash flows	Weak balance sheet and cash flows
3.	Auditor's report	Audited financials with unqualified opinion	Absence of audited financials
Fin	ancial Arrangement:		
1.	Use of proceeds	Targeted to fuel growth	Targeted to repay debt or for "general corporate purposes"
2.	Selling shareholder(s)	No or few stockholders selling shares	Stockholders selling numerous shares
3.	Prior funding	Early stage funding from established venture capital firms	Little or no prior funding
4.	Valuation	Post offering valuation is reasonably priced	Too high a valuation
5.	Equity arrangement	Equitable arrangement for new investors	Inequitable arrangement

Note: This chart is a condensed list of the factors used in the model.

and (3) it made interest free loans to the chairman and members of his family. Not long after going public, Crazy Eddie experienced some major financial problems and was forced to file for bankruptcy. Were there any clues for investors about the impending doom? We think so—if they had noticed the "turn-offs" in the prospectus.

Los Angeles-based carpet cleaner, ZZZZ Best, founded by teenage wunderkind, Barry Minkow, is another example of an emerging growth company whose fortunes were about to change. In its prospectus, ZZZZ Best disclosed that it was being sued by someone who had borrowed money from the company at a "rate that exceeded the maximum permitted by law and he was under an FBI investigation." Wouldn't that make you as a potential investor a bit concerned about ZZZZ Best? Sure enough, ZZZZ Best not only was borrowing from someone with a suspect history, but its CEO Barry Minkow was involved in illegal activities of his own. He set up a scheme in which ZZZZ Best would collect proceeds from an insurance company for "bogus" fire losses. Unfortunately for unsuspecting investors, just as the auditors became aware of the fraud, ZZZZ Best filed for bankruptcy, making the stock worthless. Fortunately, there was some justice in this case: the founder, Barry Minkow, was sentenced to 25 years in prison for securities fraud and other charges.

USING THE MODEL TO PREDICT TOMORROW'S WINNERS AND LOSERS

Our model was applied to a group of recent initial public offerings. Using the factors that we have identified from our historical research, we demonstrate how to use our framework to "predict" which current IPOs will be winners and losers over the coming years. Thus, rather than explain what did happen to IPOs of the 1980s, our goal is to predict what will happen to the IPOs of 1990.

We provide a case study of six representative companies which have recently (i.e., the early part of 1990) filed registration statements for public offerings. The companies range from early stage to well established ventures; they range from having a partial management team to having an experienced and capable management team with a well qualified board of directors; they range from a situation in which none of the existing shareholders is selling shares of stock in the company to a situation in which significant amounts of shares are sold by the existing shareholders.

The Sample

The six representative companies we analyze in this article, listed alphabetically, are: Brooksfilms, Cellular Information Systems, Exide Electronics, Home Nutritional Services, MIPS Computer Systems, and Reader's Digest Association. A brief description of each follows.

Brooksfilms develops, produces, and distributes overseas feature length motion pictures and television programming. Mel Brooks (the entertainer) serves as the chairman of the board and the CEO. Over the past 20 years, the company, together with Mr. Brooks, has produced, co-produced, or been involved in the creation of 18 feature motion pictures. The company's strategy is to continue to produce quality motion pictures that are distributed domestically by major theatrical motion picture distributors while retaining foreign rights for the company. The company intends to expand its operations by acquiring foreign distribution rights to motion pictures produced by others and by retaining foreign distribution rights.

Cellular Informations Systems (CIS) is a cellular communications company that operates cellular telephone systems and owns controlling interests in cellular systems serving 13 Metropolitan Statistical Areas (MSAs). CIS also owns options or has agreements to acquire interests in systems serving other MSAs or Rural Service Areas (RSAs). As of November, 1989, there were nearly 7,000 total subscribers for the operating cellular telephone systems in which the company owned an interest. The company was in the developmental stage prior to 1988, during which time its activities were concentrated on the acquisition of controlling interests in cellular authorizations and construction and initial operation of cellular systems. Thus, there are only two years of operating history in which to base an analysis.

Exide Electronics Group designs, manufactures, markets, and services a broad line of uninterruptible power supply (UPS) products which protect computers and other electronic equipment against electrical power loss and distortions. The company is the leader in the UPS industry and is the largest independent company in the U.S. devoted exclusively to supplying UPS products.

Home Nutritional Services (HNS) is a provider of home infusion therapies and related services. HNS provides 20 different therapies, most of which involve the use of intravenous ("IV") administration of nutrients or antibiotics for patients in their homes. Typically, patients are referred to HNS after being discharged from a hospital in order to continue an infusion therapy initiated in the hospital. The company was founded in 1980 and now operates in 26 states. The company's strategy has been to grow through

internal expansion. HNS now wants to continue to expand by that means and, in addition, to grow through acquisition.

MIPS Computer Systems which was founded in 1984, is a leading supplier of reduced instruction set computer (RISC) technology for the computer system and embedded control markets. The company seeks to establish its RISC architecture as an industry standard by licensing its technology to leading semiconductor and computer system manufacturers. MIPS also sells fully configured computer systems, subsystems, and board products of its own design. MIPS derives its revenues from two principal sources by offering customers a choice of licensing the company's technology for use in their own systems or purchasing computer system products from the company. MIPS' customers include Digital Equipment, Control Data, A.G. Siemens, SONY, Nixdorf Computer, Sumitomo Electric, and Tandem Computers.

Reader's Digest Association (RDA) is an international publisher and direct mail marketer of magazines, books, recorded music, and other products. The company has been the publisher of Reader's Digest magazine, which has a worldwide circulation of 28 million, since 1922. The company's other products include Reader's Digest Condensed Books, special interest magazines, and home entertainment products.

ANALYZING THE COMPANIES BASED ON THE PREDICTIVE FACTORS

Using our model containing the predictive factors, we now examine how these companies scored on each of the four sets of predictive factors—product/service, management and organization, financial position, and financial arrangement—described above. All the information that we describe is based on a careful reading of the prospectuses of these companies. That information is readily available to any investor.

Category No. 1: Analysis of Product/Market

The "turn-ons" related to product/market include:

- 1. a clear focus on what their market is:
- 2. some distinct competitive advantage, such as proprietary technology;
- 3. a sustainable high growth business in a high growth industry;
- 4. a track record of success in both revenues and profitability;
- 5. linkages, such as joint ventures, with established companies.

Case Studies: Product/Market

Market Focus

Exide Electronics exhibits a clear, focused target market. It is a proven leader in its market niche—uninterrupted power supply (UPS) units—with 25 years of experience and contacts to support its reputation. Exide, however, has a presence in all segments of this focused UPS market, from personal computers to minicomputers to workstations to mainframes.

Competitive Advantages

Currently, Cellular Information Systems (CIS) owns controlling interests in cellular systems serving 13 Metropolitan Statistical Areas (MSA). However, the cellular markets in which CIS operates are generally "secondary" or "tertiary" markets. Its largest market is Duluth, MN; none of its current markets has a population of above a quarter million. That, by itself, is not a problem. After all, Wal-Mart demonstrated that a company can become a \$30 billion mega success story by targeting small regional markets. However, CIS is a long way off from demonstrating that it is on par with Wal-Mart—or any other highly successful venture—in terms of management and marketing capabilities. Thus, the big concern is whether CIS can continue to grow and dominate small regional markets. It is questionable whether there is something so special about CIS—i.e., a significant competitive advantage—that limits the ability of its existing and potential competitors to pose a significant competitive threat to CIS. There are numerous established competitors—for example, GTE Mobilnet, McCaw Cellular, Centel, Contel, etc.—which have strong managerial teams, substantial assets, and extensive experience in telecommunications who are much better positioned than CIS to dominate such markets. In addition, there is uncertainty as to the commercial feasibility of cellular telephone systems in small regional markets, whether for CIS or for any other competitor.

Growth

Both MIPS and Home Nutritional Systems (HNS) have shown dramatic levels of growth in recent years. Exide's growth, on the other hand, has been steady—but not phenomenal—with revenues increasing by an average of about 20% per year, from \$106 million in 1987 to \$128 million in 1988 to \$152 million in 1989. At the other extreme is Brooksfilms, which has shown a steady, but dramatic decline in revenues—from \$6 million in 1985 to less than \$3 million in 1987.

Operating History

Readers Digest Association (RDA) has been selling its products in the United States since 1922 and in the international markets since 1938. Its customer list exceeds 50 million. RDA is one of the most experienced direct mail marketers in this country. CIS, on the other hand, has only been operating for the past 2 years, during which time the company has grown impressively from a \$1.5 million business to a \$5 million company.

Linkages

As part of MIPS' strategy to establish its Reduced Instruction Set Computers (RISC) architecture as the industry standard, MIPS entered into a comprehensive technology licensing arrangement with Digital Equipment Corporation (DEC) in 1988. MIPS has also licensed to Japan-based Kubota the right to produce its system products and also has established a relationship with Tandem, who will provide on-site service in North America.

Category No. 1: Product/Market—Rating

In light of the comments noted above and based on additional information included in the prospectuses, we can evaluate the product/market of the six companies just described, based on a scale of "A" through "F" ("A" = outstanding and "F" = poor) as shown below:

	Brooks	CIS	Exide	HNS	MIPS	RDA
Product/Market	${f F}$	D/F	В	\mathbf{D}	В	В

Category No. 2: Analysis of Management and Organization

The "turn-ons" related to management and organization include the following:

- 1. solid management team with directors who provide leadership and experience;
- 2. not being overly dependent on one or two executives;
- 3. the absence of any questionable or related party transactions;
- 4. the absence of any serious litigation against the company or key executives.

Case Studies: Management and Organization

Management Team

The Brooksfilms' executives lack experience in managing successful companies in the entertainment industry. Rather, the executives include individuals with backgrounds in law, accounting, and investment banking, who in some cases, are working part-time yet drawing lucrative salaries. If Brooksfilms was in the business of "doing deals," then the current management team would be qualified. But, if that is the case, that would hardly be a reason to raise \$15 million in a public offering. Presumably, the proceeds from this IPO are largely for development and production of motion pictures and television programming. That would suggest a need for a management team with more operational and marketing experience in the entertainment industry. There are also some other concerns regarding specific managers of the company. Of note was the fact that the company's president was most recently a partner in the underwriter's law firm, the now defunct Myerson & Kuhn. Also, one of the executives and one of the directors (both of whom are attorneys) have been upper level managers with companies that have gone bankrupt. In the case of the director (who has the dubious distinction of being involved in two companies that have gone bankrupt), he was CEO of DeLaurentiis Entertainment, which was a financial disaster.

In contrast to Brooksfilms, it appears as if MIPS has assembled a talented and diverse "management team" to foster the continued growth of the company. The top managers have experience with such outstanding companies as IBM, Hewlett Packard, Data General, Digital Equipment [DEC], Apple Computer, etc., which will facilitate future business contacts. In addition, the executives have outstanding academic credentials, with most having earned master's degrees in either business or engineering from such prestigious schools as Stanford, Harvard, University of Illinois, Michigan State, etc. Moreover, there is an excellent balance of skills in engineering, marketing, finance, and general management. MIPS has also assembled a talented group of outside directors for the company. Several have experience in the venture capital industry-for example, William Davidow (of Mohr Davidow Ventures) and Grant Heidrich and Gibson Myers (of the Mayfield Fund)—and others have experience with successful high tech companies for example, Samuel Fuller (of DEC), Naohisa Matsuda (of Kubota, Ltd), and James Treybig (of Tandem Computers).

Readers Digest (RDA) has assembled a management with characteristics similar to many "Fortune 500" companies. Most of its top level managers have 30 or more years of experience with RDA and have spent their entire

career with the company. They are experienced, perhaps to the point of being "too senior" to foster significant growth over the coming years. Similarly, the directors of RDA include CEOs from such established corporations as Chemical Bank, GTE, CPC International, Metropolitan Life Insurance, etc., as well as noted philanthropists (for example, Laurence Rockefeller). Since the company is currently 100% owned by charitable trusts, it is not surprising that there is an overlap of foundation and corporate individuals represented as officers and directors of RDA.

Dependence

We certainly recognize that Mr. Brooks is the creative genius behind Brooksfilms. (And for that reason, we see a continued dependence on Mr. Brooks.) We can even justify, to some extent, his "baseball player size" compensation—which will, by the way, be reduced from \$4 million per year in 1989 to a base salary of \$400,000 (plus a percentage of profits and other incentives) for 1990. What would happen if he were to no longer be involved with the company? First of all, if Mr. Brooks were to be terminated due to a change in control of the company (why would some new owners want to do this to Mel?), he would be entitled to a \$10 million lump sum payment. Second, if Mr. Brooks were to end his employment with the company, regardless of the reason, we doubt that the company would have anywhere near the \$45 million value that it would have at the time of the IPO.

Related Transactions

We were concerned about the related party association between Cellular Information Systems (CIS) and Cable Holdings Inc (CHI). CIS is a holding company, with its cellular interests owned through subsidiaries and through partnerships which it controls. The CEO and other executives of CIS were and/or continue to be associated with CHI. CHI has provided loans, operating personnel, office space, and overhead to CIS since its inception. In 1988, CIS reimbursed CHI nearly half a million dollars in connection with the foregoing arrangement. It should also be noted that certain stockholders and directors have charged the company nearly half a million dollars over the period 1986-1988 for legal and accounting services, through the professional firms in which they have an interest.

We were also concerned about the related party association between Home Nutritional Services (HNS) and Healthdyne, Inc. One of HNS's executives, Dr. Winter, was recently promoted to the *full-time* position of medical director of Healthdyne, Inc. Thus, it appears Dr. Winters is compensated by both HNS and other affiliates. As such, his \$200,000

compensation from HNS (for his part-time involvement) seems excessive. We also have a concern regarding the relationship between HNS and Healthdyne, which currently owned 100% of the common stock of HNS before the offering and 66% of the outstanding common stock after the offering. As such, Healthdyne can exert full control over the company. More important, one officer and three directors of HNS are officers of the selling shareholder, and in two instances, are also directors of the selling shareholder. Moreover, the selling shareholder is expected to continue to provide the company with certain accounting, legal, and other services. HNS paid Healthdyne nearly \$1 million for administrative and personnel services over the past four years. HNS has also reimbursed Healthdyne \$3.5 million for insurance premiums during that time. HNS states in its prospectus that

"all transactions ... will be on an arm's length basis ... In addition, any such (transaction) ... will be approved by the vote of a majority of the independent and disinterested members of the Board ..."

In actuality, how can you have independent and disinterested members of the board if Healthdyne will control 2/3 of the stock of the company after the offering and will, therefore, control the make-up of the board? There are a few other issues related to the relationship between HNS and Healthdyne: HNS is obligated to reimburse Healthdyne \$2.8 million for prior tax benefits; there are business contracts between subsidiaries of Healthdyne; there are lease arrangements between subsidiaries; etc. Such related party transactions should be viewed negatively by potential investors.

Litigation

There are two pending cases that have been filed against Exide—one for breach of employment contracts, and the other for failure to pay sales commission for a government contract. The company believes it has "meritorious defenses to these claims and believes that any liability from these lawsuits should not have a material affect on its 1989 operations or financial conditions." Most companies will assert that virtually any litigation will not materially affect the company's financial condition. In the case of Exide, these cases may be serious.

Category No. 2: Management and Organization—Rating

In light of the comments noted above and based on additional information included in the prospectuses, we can evaluate the management and organization of the six companies on our "A" through "F" scale as follows:

Brooks CIS Exide HNS MIPS RDA Management & Organization F C/D B C/D A/B B

Category No. 3: Analysis of Financial Position

The "turn-ons" associated with the analysis of a company's financial position includes:

- 1. strong growth in revenues and profitability;
- 2. strong liquidity and not overly leveraged;
- 3. strong cash flows from operations;
- 4. efficient operation as evidenced by rapid turnover of inventory and collection of receivables;
- 5. a "clean" unqualified opinion accompanying recent audited financial statements.

Case Studies: Financial Position

Earnings

Of the six companies that we are describing in this article, there are significant differences in their revenues and earnings growth. MIPS, which has recently had the most dramatic level of growth of these six companies, was in the development stage for its first two years of operation (through 1986). The company generated over \$70 million in revenues through the first nine months of 1989, and has increased its revenues by approximately 8-fold over the past two years. Clearly, sales have increased dramatically; however, MIPS has yet to demonstrate a history of sustained earnings growth. Although MIPS has generated \$4.7 million in income from operations on sales of \$70.1 million for the first 9 months of 1989, it had an accumulated deficit of \$29 million through September, 1989.

In some ways, the revenues and earnings for HNS are even more impressive than for MIPS, since they have been sustained over a longer period of time. Revenues have increased steadily by approximately 30% per year over the past 4 years. Net income has increased more dramatically, although less steadily, during that same period of time. In addition, gross margins have been consistently above 50%.

In addition to Exide's steady 20% growth in revenues, its income from continuing operations has increased from \$799,000 in 1987 to \$3.9 million in 1988 to \$5.5 million in 1989. Although gross profit margins have also

been steadily increasing over the past few years, they are still just around 30%. Gross margins will have to remain at or above their current levels to enable the company to continue to operate profitably. Exide has demonstrated a commitment to long-term growth as evidenced by its increase in research and development (R&D) expenditures (from 3.7% of sales in 1987 to 4.2% of sales in 1989) and its obtaining 14 patents. An increase in R&D spending, coupled with increased revenues and profits, is generally a positive sign for the investor.

RDA has generally shown a steady, yet unspectacular, increase in revenues over the past few years, increasing by an average of less than 10% per year, from \$1.3 billion in 1984 to \$1.4 billion in 1987 to \$1.8 billion in 1989. Operating profit has increased from \$44 million to \$150 million to \$207 million during that time; in 1989 operating profit was approximately 11% of revenues, which is reasonably profitable for a company of this size in this industry.

Brooksfilms has been unable to demonstrate any positive growth in revenues. In fact, from 1985 to 1987, revenues declined from \$6 million to less than \$3 million. Revenues have begun to increase over the last two years to their most recent level of about \$6.5 million. Earnings have also been unsteady over this period, with a net loss of nearly \$2 million in 1987, and net profits of between \$250,000 and \$400,000 in the other four years. The unevenness of revenues and profits is largely dictated by the production schedules and the success of a given motion picture. Thus, it is likely that the same pattern of uneven revenues and profits will reappear in the future. It is important to note that during 1988 and 1989—when the company had revenues of \$4.6 million and \$6.5 million, respectively—Mr. Brooks' compensation was \$2.6 million and \$4 million. This indicates two things. First of all, the net income reported in the company's prospectus is artificially understated, due to the unreasonable compensation taken by Mr. Brooks. (In other words, if Mr. Brooks' compensation were just 1/4 or 1/2 of that amount, then the net income for the company would have been in excess of 20% of revenues.) Second, and more important, such excessive compensation on the part of the principal owner of the company is often indicative of a desire to accumulate personal wealth, rather than to invest the company's existing capital into the business. This represents a major "turn-off."

Balance Sheet/Cash Flow

CIS has been unprofitable since its inception. However, we are more concerned about the company's balance sheet and cash flow. CIS projects additional capital needs of over \$100 million, half of that which will be used to repay short term debt after the public offering. The company plans to

borrow \$160 million for this purpose. The problem is that we see continued debt mounting for the company, with long term debt and stock being used to pay off short term obligations. This is not an attractive position for a company with a current level of debt of nearly \$45 million, which has a negative net worth of over \$10 million.

CIS may benefit from receiving substantial recurring (monthly) revenues from cellular telephone subscribers. This makes it easier for CIS to project cash flows and reduces the risks to the company and to the investors. Of course, there are significant start-up costs for CIS before they can reap the benefits of these recurring revenues. However, the potential for recurring revenues should be viewed as a "turn-on."

Auditor's Report

Investors expect to see recent audited financial statements accompanied by a "clean" opinion from the independent auditor. Unfortunately, CIS provided only an audit report for the previous year (1988), but only a review report for the nine months ended September 30, 1989. Thus, the investors are on guard that the most recent financial statements provided have not been audited and reliance upon these statements increases the risks. Quoting from the company's prospectus,

"the degree of reliance on their (the accountants') report on such information should be restricted in light of the limited nature of the review procedures applied. ... the accountants are not subject to the liability provisions of Section 11 of the Securities Act of 1933 for their basic report is not a 'report' or 'part' of the registration statement prepared or certified by the accountants within the meaning of ... the Act."

Category No. 3: Financial Position—Rating

In light of the comments noted above and based on additional information included in the prospectuses, we can evaluate the financial position of the six companies just described, based on a scale of "A" through "F" as shown below:

	Brooks	CIS	Exide	HNS	MIPS	RDA
Financial Position	D	D	В	B/C	В	В

Category No. 4: Analysis of Financial Arrangement

The "turn-ons" related to the financial arrangement include:

- 1. use of proceeds to target future growth, rather than to pay off debt;
- 2. the existing shareholders decide to keep all or most of the stock at the time of the IPO;
- 3. the company had received early stage investments from an established venture capital firm;
- 4. the IPO price is reasonable, compared to industry norms and the company's performance;
- 5. the existing shareholders have made a financial commitment to the company—they're at risk.

Case Studies: Financial Arrangement

Use of Proceeds

HNS plans to use approximately one-half of the \$27 million in proceeds from its offering to pay off its entire long term debt. Of course, that will put HNS in a debt free position, which can look attractive for growth. However, such an action merely transfers the risk of the venture from the company to the new investors. Our position has generally been that proceeds from a public offering should be used primarily for activities that impact directly on the growth of the venture.

CIS also plans to use the proceeds from its IPO to repay bank indebtedness (rather than to fund future growth). We have always been cautious of such a financial arrangement, as it merely transfers the financial risks from the company to the outside investors.

Selling Shareholders

If many shareholders decide to sell their shares when a company goes public, it is often a sign that they no longer have faith in the future prospects of the company. Second, the proceeds will not be going to the company, but rather to individuals who are selling their stock. The offering for HNS is for 4 million shares of common stock to the public, with 1.8 million shares being sold by HNS and 2.2 million shares being sold by Healthdyne, Inc., which is the only current shareholder of HNSI. Consequently, the net proceeds to the company—at an offering price of \$16.50 per share—will be approximately \$27.6 million; the net proceeds to the selling shareholder, however, will be \$33.8 million. In essence, Healthdyne is "cashing out" a portion of its stock for 8 times its purchase price in 1983.

There is always a concern when all of the proceeds of an IPO are going to the selling shareholders, and not to the company, which is the case for RDA. However, in this particular situation, the concern is *lessened* somewhat

because the selling shareholders are charitable trusts which presently own 100% of the common stock; the trusts are "selling out" largely because of tax law, which will require that charitable trusts reduce their equity stake in publicly held companies to 50% by the year 2000. We still acknowledge that proceeds from a public offering should be used primarily to finance new operations which are indicative of the growth of the venture. Yet, we can be a little forgiving of RDA, which has been experiencing steady growth for several years, and is in a position that it really does not need a large infusion of capital to sustain itself.

Previous Funding

The existing shareholders in Exide include Inco (the largest shareholder, which currently owns 21.4% of the company), GE Pension Fund, Prudential Venture Partners, The Hillman Co., T. Rowe Price Threshold Fund, etc., none of which is cashing out at the time of the IPO. This should be viewed as an important "turn-on" for new investors.

MIPS has established the necessary contacts to attract prestigious corporate investors (Kubota, DEC), and first-rate venture capital firms (Mayfield Fund, Institutional Venture Partners, Merrill Pickard Anderson & Eyre, Sigma Partners, etc.), who are generally more knowledgeable and sophisticated investors than the general public. Although several of the early stage investors are selling a portion of their equity positions at the time of the IPO (quite common for venture capital firms) most of the other existing large shareholders are retaining their stock, presumably because they feel that there is significant upside potential to such an investment. Two companies which have business arrangements with MIPS—Kubota and DEC, which, combined, currently own more than 25% of the company—are retaining their entire equity stakes. The Mayfield Fund, a venture capital firm which has a 12.6% stake, plans to keep all its stock, another good indicator of a sophisticated investor's strong confidence in the investment value of MIPS.

Valuation

RDA was valued in line with other well-established companies in the publishing industry at approximately 1.1 times revenues or 13 times after tax earnings for 1989 at its post offering time. CIS, on the other hand, whose revenues are only \$5 million and whose earnings are nonexistent, appears to be overvalued at its offering valuation of \$90 million.

Equitable Arrangement

A sign of a company you should generally avoid is one in which the management and other shareholders have not made any financial commitment. That is, they have none of their own money at risk. The existing investors of Brooksfilms have only invested \$2,000 for 2/3 of the company—with Mr. Brooks, personally, controlling 63% of this venture after the offering. The new investors would have to invest \$15 million for only 1/3 of the business. Moreover, the \$45 million valuation of the company after the IPO (which would give Mr. Brooks nearly \$30 million in equity for an insignificant financial investment) just does seem realistic given the company's recent unsteady level of revenues and earnings over the last five years.

There are risks associated with the nature of the financial arrangement for investors in CIS. Specifically, the existing shareholders have contributed only \$4.6 million of capital (or 13% of the capital), but will retain 2/3 of the ownership of the company. The new investors are, therefore, paying 13 times what the existing owners paid for a share of stock in the company. (That's a 13-fold return for the original investors in a relatively short period of time.) It's even more attractive for the corporate officers—i.e., the insiders—particularly Mr. Treibick (CEO and Chairman), whose stock will be worth about \$40 million after the public offering. Not bad for a company that incorporated in 1988.

In contrast, the existing shareholders at Exide have made significant financial investments, having contributed more than half of the total cash. New investors are paying about 3 times what the existing investors paid for a share of common stock in Exide. That seems quite reasonable when compared to similar IPOs.

Category No. 4: Financial Arrangement—Rating

In light of the comments noted above and based on additional information included in the prospectuses, we can evaluate the financial arrangement of the six companies just described, based on a scale of "A" through "F" as shown below:

	Brooks	CIS	Exide	HNS	MIPS	RDA
Financial						
Arrangement	F	D/F	В	D	В	В

FINAL GRADES AND OVERALL ANALYSIS

Let's summarize our analyses of the six representative companies:

Brooksfilms. Mr. Brooks is an extremely funny individual—very likely, the funniest person in Hollywood. It is, therefore, very fitting that he put together a very funny deal. There are substantial risks associated with such a venture, with the expected returns not commensurate with those risks. There is little justification for the \$45 million valuation of the company. The proposed ownership arrangement appears quite inequitable for the new investor.

OVERALL GRADE: D/F

Cellular Information Systems. We have several concerns regarding the investment value of CIS. The service idea has potential. However, we see little evidence of significant competitive advantages nor of a well-developed, appropriately experienced, full-time management team to give us the impression that CIS will be a stellar performer over the coming years. Moreover, we have concerns with the apparent inequitable stock dilution of this offering. The potential returns do not seem to be commensurate with the risks of this offering.

OVERALL GRADE: D

Exide Electronics Group. Exide Electronics has prepared a quality prospectus for its public offering. It appears as if it has presented an honest, open picture of where the company has been and where it is headed. However, we are concerned about the pending litigation. The management of the company have taken a long term orientation throughout. There's nothing very "flashy" about this venture; it's merely a company with a strong product line; a history of steady, but increasing, revenues and earnings; a good management team; and a strong level of support from Inco, its largest investor. If the litigation does not have an adverse affect on the company, Exide appears to be a reasonable investment value; if, however, the litigation impacts severely on the company, then the stock price could suffer.

OVERALL GRADE: B/C

Home Nutritional Services. We have several concerns regarding the investment value of HNS. The company has potential. However, we are not convinced that the company has demonstrated a significant enough

competitive advantage nor an appropriately experienced management team to become a leading performer over the coming years. More important is the apparent questionable relationship between the selling shareholders (Healthdyne), its officers and directors, and those of HNS. Moreover, we have concerns with the apparent inequitable financial arrangement of this offering, which seems like a good opportunity for Healthdyne to cash out a portion of its holdings, but less of an opportunity for new investors to profit. The potential returns do not seem to be commensurate with the risks of this offering. This may very well turn out to be a solid performing stock over the years to come. However, the factors noted above suggest that the proposed offering price is significantly too high at this time.

OVERALL GRADE: C/D

MIPS Computer Systems. MIPS is a company with attractive product/ market opportunities. Of course, there are significant obstacles due to the competitive nature of the industry and the rapidly changing technology. Yet, MIPS has developed an attractive customer base and has established business and financial linkages to foster continued growth. Perhaps the most attractive feature of MIPS is its management team. They seem to be an experienced, diverse group of professionals who have played key roles in the growth of similar high tech ventures in the past. There are concerns regarding the company's failure to demonstrate a consistent earnings stream prior to going public. However, there are enough experienced investors in high tech companies that are confident of MIPS' future to retain their ownership stakes in the company. We are still concerned about the high valuation of the company and feel that it could take a few years for the company to realize its potential. In summary, MIPS looks like a fairly attractive (and, possibly, a "superstar") long term investment opportunity, provided that the company can sustain its revenue growth and can demonstrate a steady stream of positive earnings.

OVERALL GRADE: A/B

Reader's Digest Association. It can certainly be argued that there's nothing too exciting about the Reader's Digest Association. This is merely a company with a 50 year history; a strong and established product line; an enormous customer base; steady, but increasing revenues and earnings; and a well respected management team. RDA appears to be a reasonable investment value.

OVERALL GRADE: B

SUMMARY OF OVERALL GRADES

Based upon the characteristics we've identified and discussed, we have rated the six companies as follows:

	Brooks	CIS	Exide	HNS	MIPS	RDA
Product/Market	\mathbf{F}	D/F	В	\mathbf{D}	В	В
Management	\mathbf{F}	C/D	В	C/D	A/B	В
Finan. Position	D	D	В	B/C	В	В
Finan. Arrange	\mathbf{F}	D/F	В	\mathbf{D}	В	В
OVERALL	D/F	D	B/C	C/D	A/B	В

A Few Notes About the Grading

- 1. While any grading system using letter grades involves subjectivity, we were careful to apply our standards *consistently* across companies. Thus, a company receiving a letter "D" was demonstrably riskier than one receiving a letter "C." You will also note that since we tend to be tough graders and new issues, as a rule, are risky investments, no company received an "A."
- 2. While each of the four categories in our model have a significant weighting in calculating the letter grade, management is the most important factor. (Since the actual weighting of each category is proprietary, we are unable to provide the precise weights.)

CONCLUDING REMARKS

The objectives of the paper were two-fold: (1) To present a framework for evaluating the prospectuses of emerging growth IPOs, and (2) To use that framework in analyzing six representatives 1990 initial public offerings. The predictive factors included in our framework were derived from analyzing the "winners" (the top performing IPOs) and the "losers" (the worst performing IPOs) over the last two decades.

By knowing the key factors common to such "winners" as Home Depot, Adobe Systems and Autodesk and lacking in such "losers" as Kaypro, Vector Graphic, and ZZZZ Best, investors are in a better position to weed out tomorrow's "losers" from "winners." We have chosen to apply our model to a group of companies going public in 1990. How accurate are our predictions? There's only one way to know—by continuing to monitor the after-market performance of these companies. We expect to report on the accuracy of our predictions in a future issue of this publication.