## ABC CORP.

## 5-STAR REPORT

# VALUATION OF A 100\% IN THE COMPANY 

## AS OF DECEMBER 31, 20XX

REPORT DATE: MAY 7, 20XX

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For further information contact:

DANIEL T. JORDAN, ASA, CBA, CPA, MBA

## CALIFORNIA BUSINESS VALUATIONS

(310) 704-8839
www.californiabusinessvaluation.com

## VALUATION OF A 100\% INTEREST IN

## ABC CORP.

## OPINION OF VALUE

In the opinion of the undersigned appraiser, using accepted methods of valuation, and subject to this report and the Statement of Limiting Conditions incorporated herein, the fair market value of a $100 \%$ common stock interest in the Company on an illiquid control basis as of December 31, 20XX is:
\$31,040,000

## Appraiser's Certification

I certify that to the best of my knowledge and belief that

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and they are my personal, unbiased, professional analyses, opinions, and conclusions.
- we have no present or prospective interest in or bias with respect to the property that is the subject of this report, and we have no personal interest or bias with respect to the parties involved.
- our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- the appraiser has made a personal inspection of the subject business.
- no person except the undersigned participated materially in the preparation of this report.

Sincerely yours,

## California Business Valuations

Daniel T. Jordan, ASA, CBA, CPA, MBA<br>Certified Business Appraiser

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## I. INTRODUCTION

## Background

Jim Johnson is the president and sole shareholder of ABC Corp. ("ABC" or "the Company"), an Anystate S corporation, incorporated in 19XX. Jim Johnson is planning to create a grantor retained annuity trust (GRAT) and to transfer his $100 \%$ ownership interest in ABC to the GRAT.

## Purpose of the Report

This document is a full narrative report of an Appraisal to calculate the fair market value of a $100 \%$ common stock interest in ABC for gift tax purposes as of December 31, 20XX.

## Intended Users

The intended users of our report are Jim Johnson, his professional advisors, and the IRS. Any other users are considered unintended users.

While it might seem logical that there is only one fair market value of an asset, that is not true. Value only has meaning in the context of a scenario, with its facts, assumptions, and the purpose of the valuation. Thus, our Appraisal may not be used for other purposes, valuation dates, size interests, or by other users without our written permission. Using our appraisal work in an unauthorized manner could be misleading and dangerous. The client agrees to indemnify California Business Valuations, Inc. and its owner, against any losses arising from unauthorized use of our report.

## Fair Market Value

## Definition

The term 'fair market value' is defined as the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts. ${ }^{1}$

## Fair Market Value vs. Investment Value

The fair market value of an asset is its value to a hypothetical buyer and seller. It is not the value of that asset to any particular buyer, which is investment value and is frequently different than fair market value. Investment value to a strategic buyer is almost always higher than fair market value. Although our valuation is intended to estimate fair market value, we

[^0]assume no responsibility for a seller's or buyer's inability to obtain a purchase contract at that price.

## No Auditing Procedures

In performing this Appraisal, we relied on the accuracy and reliability of the Company's financial statements and other financial data. We did not audit, compile, or review financial statements or other data, and we do not express an opinion or any form of assurance on them. Our study is not designed to disclose any errors in the financial statements, nor any fraud or defalcations.

## Valuation Considerations

The valuation of closely held securities and other fractional interests requires consideration of all relevant factors that may influence the market price. The factors recognized by tax courts, the Internal Revenue Service, and professional investors generally include the following:

- The nature and history of the business enterprise
- The outlook of the economy and the specific industry
- The book value and financial condition of the business
- The earnings capacity of the business
- The dividend paying capacity of the business
- The nature and value of the tangible and intangible assets (goodwill) of the business
- The market price of securities of publicly traded corporations engaged in the same or similar lines of business
- The marketability, or lack thereof, of the securities
- The existence, if any, of a control premium with regard to the block of securities being valued
- Sales of the stock (or partnership or LLC interest) and the size of the block of the stock to be valued

These considerations are outlined and described in Revenue Ruling 59-60, 1959-1 CB 237, as modified by Revenue Ruling 65-193, 1965-2 CB 370, and Revenue Ruling 77-287, IRB 1977-33. Although Revenue Ruling 59-60 specifically addresses itself to stock valuations for gift and estate tax purposes, the principles set forth may be applied to a wide spectrum of valuation problems, including those related to stockholder buy/sell agreements, mergers and acquisitions, Employee Stock Ownership Plans, corporate reorganizations, marital dissolutions, and bankruptcies. This report will discuss these factors and address other items relevant to the subject interests to determine their effect upon the fair market value of the subject interests.

## Sources of Data

- Source: Reviewed financial statements (20XX-20XX) and compiled financial statements (20XX-20XX) by Michael Mann \& Company, provided by Jim Johnson, CEO.
- Various correspondences (phone calls, emails) with Mike Brown Esq., Jim Johnson, CEO, William Stein, Esq. and Richard Miller.
- Statement of Class Settlement of DEF Comp, Inc., dated February 5, 20XX
- Lease agreement, 20 College Street, Anytown, XX, dated March 7, 20XX
- Tenant Estoppel Certificate, 40 Lauder Street, Anytown, XX, dated September 17, 20XX
- Lease agreement, 60 Main Street, Anytown, XX, dated February 1, 20XX
- Economic statistics published by the government or other sources.
- Other sources specified herein.


## II. History and Description of the Company

## Background

ABC Corp. (ABC) was incorporated as a Anystate C Corporation in 19XX by Jim Johnson. In 20XX, the Company elected to be taxed under the provisions of subchapter $S$ of the Internal Revenue Code. Jim Johnson is the sole shareholder of ABC.

## Products/Services

The Company is an international wholesale long distance provider. It provides services to distributors of prepaid calling cards through its affiliate, GHI Comp (GHI). The Company also provides long distance services to other long distance carriers. Through GHI, JKL Comp (JKL) provides prepaid calling card pins to customers all over the US and some in Canada and the UK.

The Company has five wholly owned subsidiaries:
(1) JKL Comp
(2) GHI Comp ${ }^{2}$
(3) MNO Comp, Inc, and
(4) PQR Comp, Inc.
(5) ERT Holding.

JKL Comp accounts for $15 \%$ of all revenues and buys and sells telecommunication minutes on a wholesale basis.

GHI Comp accounts for $85 \%$ of all revenues and provides telecommunication services to distributors of prepaid calling cards. More specifically, it provides prepaid calling card pins for calling cards.

MNO Comp provides local loops (or cables) needed for local telecommunication connections worldwide.

PQR Comp, Inc. provides human resource services to ABC and its wholly owned subsidiaries.
ERT Holding is wholly owned by GHI Comp. Its only assets and/or function is to hold licenses to several rock group labels that the Company's distributors put on the GHI serviced cards.

ABC provides all switching equipment necessary.

[^1]
## Location

The Company is renting facilities at three locations within the state of Anystate (an aggregate of about 28,000 square foot):
(1) 60 Main Street, Anytown, XX
(2) 40 Lauder St, Anytown, XX
(3) 20 College Street, Anystate, XX

## Management

| Name | Title |
| :--- | :--- |
| Jim Johnson | Chief Executive Officer, JKL |
| Peter Johnson | President, GHI |
| Miriam Bauer | Chief Financial Officer |

## Officers

The officers of the Company are as follows:

| Name | Title |
| :--- | :--- |
| Jim Johnson | Chief Executive Officer, JKL |
| Peter Johnson | President, GHI |
| Miriam Bauer | Chief Financial Officer |

## Customer Base

According to Jim Johnson, about 50\% of the revenues generated by GHI Comp consist of three customers:
(1) Customer A
(2) Customer B
(3) Customer C

Also, about $50 \%$ of the revenues generated by JKL Comp come from three to four customers:
(1) Customer D
(2) Customer E
(3) Customer F
(4) Customer G

Customer G is an Anystate licensed carrier wholly-owned by ABC. There is currently pending an arbitration in which an investor in IRW claims $17 \%$ ownership (per William Stein).

## Competition

The Company's Management identified the following primary competitors to ABC:

- Competitor A,
- Competitor B,
- Competitor C, \&
- Competitor D

These companies are located at the Anystate area. Competitor $A$ is public and has the greatest market share. Competitor $B$ has the second largest market share and is now owned by Anycompany, a NYSE listed company, per Mr. Johnson.

Mr. Johnson estimates their market share at about 65\% and ABC's at about 10\%.
It is not easy to enter the market. The biggest barriers are knowledge, equipment, building trust and having relationships with vendors and customers.

## Future Prospects for the Business

The Company's Management mentioned that the global financial and economic crisis affected the business. The profitability decreased in 20XX over 20XX. Mr. Johnson mentioned that $97 \%$ of calling card users are Hispanics. Specifically, immigrants from Mexico use these calling cards frequently. Due to the bad economy, many immigrants returned to their homelands, which is why ABC saw a large decrease in users of calling cards.

The Company is also involved in a class action lawsuit. Some of the claims were settled in 20XX (a settlement with a competitor ${ }^{3}$ at $\$ \mathrm{X}$ million). The Company's Management expects to settle with the Anyname Commission at \$X million in 20XX. While the claims and lawsuits against the Company pose added risks to the Company, however, we do not think they are a serious threat to the existence of the Company. We accounted for the detrimental effects of the economy and the risks of the lawsuits in our determination of the discount rate in Table V-1A.

[^2]
## III. Economic Outlook

## General Economy

Table III-1 contains forecasts for major economic indicators from the "Survey of Professional Forecasters" by the Federal Reserve Bank of Philadelphia.
Table III-1: Economic Indicators Forecast ${ }^{4}$

|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: |
| Real GDP Growth | $1.40 \%$ | $-0.20 \%$ |
| PCE Price Index | $2.30 \%$ | $1.70 \%$ |
| CPI Inflation | $2.40 \%$ | $2.00 \%$ |
| Unemployment Rate | $5.70 \%$ | $7.40 \%$ |

Table III-2 displays various key interest rates as of December 31, 2008.

## Table III-2: Key Interest Rates ${ }^{5}$

| Financial Instrument | $\mathbf{1 2 / 3 1 / 2 0 0 8}$ |
| :--- | ---: |
| Euro Dollar Deposits: 3 Month | $1.75 \%$ |
| Euro Dollar Deposits: 6 Month | $2.50 \%$ |
| Prime Rate | $3.25 \%$ |
| T-Bonds: 1 Year | $0.37 \%$ |
| T-Bonds: 20 Year | $3.05 \%$ |

## Financial Developments ${ }^{6}$

According to Chairman Ben S. Bernanke, financial markets in the United States and some other industrialized countries have been under severe stress for more than a year. The proximate cause of the financial turmoil was the steep increase and subsequent decline of house prices nationwide, which, together with poor lending practices, have led to large losses on mortgages and mortgage-related instruments by a wide range of institutions.

More fundamentally, the turmoil is the aftermath of a credit boom characterized by underpricing of risk, excessive leverage, and an increasing reliance on complex and opaque financial instruments that have proved to be fragile under stress. A consequence of the unwinding of this boom and the resulting financial strains has been a broad-based tightening in credit conditions that has restrained economic growth.

The financial turmoil intensified in recent weeks, as investors’ confidence in banks and other financial institutions eroded and risk aversion heightened. Conditions in the interbank lending market have worsened, with term funding essentially unavailable. Withdrawals from prime

[^3]money market mutual funds, which are important suppliers of credit to the commercial paper market, severely disrupted that market; and short-term credit, when available, has become much more costly for virtually all firms. Households and state and local governments have also experienced a notable reduction in credit availability. Financial conditions deteriorated in other countries as well, putting severe pressure on both industrial and emerging-market economies. As confidence in the financial markets has declined and concerns about the U.S. and global economies have increased, equity prices have been volatile, falling sharply on net.

## Economic Outlook

Even before the recent intensification of the financial crisis, economic activity had shown considerable signs of weakening. In the labor market, private employers shed 168,000 jobs in September, bringing the total job loss in the private sector since January to nearly 900,000. Meanwhile, the unemployment rate, at $6.1 \%$ in September, has risen $1.2 \%$ points since January. Incoming data on consumer spending, housing, and business investment have all showed significant slowing over the past few months, and some key determinants of spending have worsened: Equity and house prices have fallen, foreign economic growth has slowed, and credit conditions have tightened. One brighter note is that the declines in the prices of oil and other commodities will have favorable implications for the purchasing power of households. Nonetheless, the pace of economic activity is likely to be below that of its longerrun potential for several quarters.

## Conclusion

The housing market is struggling. Financial markets are weak and fragile. Most forecasters have reduced their expectations for GDP growth and believe that the U.S. economy has entered a period of recession. The forecasters think the recession started in April 2008 and will last 14 months. Overall, the economic outlook for the next one to several years is negative.

## Telecommunication Services ${ }^{7}$

## Industry Overview

In the US, about 11,000 companies provide telecommunication services, with total annual revenue over $\$ 400$ billion. Large companies include AT\&T, Verizon Communications, and Comcast. The industry includes 3,000 wireline carriers (annual revenues about $\$ 240$ billion); 3,000 wireless companies ( $\$ 100$ billion); 2,000 cable companies ( $\$ 60$ billion); and satellite companies and telecommunication resellers. The industry is highly concentrated: the 50 largest companies hold 90 percent of the market.

## Competitive Landscape

Demand is driven by technological innovation and by growth in business activity. The profitability of individual companies depends on efficient operations and good marketing. Large companies have big economies of scale in providing a highly automated service to large numbers of customers, and have the financial resources required to build and maintain a large network. Smaller companies can compete effectively only in small markets or by providing specialty services. Because of the large degree of automation, average revenue per employee is a high $\$ 300,000$.

## Products, Operations \& Technology

The industry provides mainly telephone, TV distribution, and data transmission services (such as the Internet). Companies provide these services through networks of wires, computers, transmitters, and receivers. In the voice and data segments, companies merely provide a channel over which customers transmit their own information. In the TV distribution segment, companies also supply the content transmitted to the customer.
The operations of telecom service providers revolve around building, maintaining, and operating networks to reach customers. Networks can be built by physically laying wires, building transmission towers, and interconnecting switching centers. Networks can also be assembled by buying existing facilities or leasing capacity on another company's network. Computers are the heart of all telecom facilities. Equipment is bought from large manufacturers like Cisco, Lucent, Motorola, and Nortel. Daily operations consist mainly of field maintenance work and tending interconnected computer systems.

## Wireline Telephone:

The modern US telephone industry is an outgrowth of the monopoly Bell telephone system. Rapid changes followed the 1982 AT\&T Divestiture Decree, which broke the AT\&T monopoly into regional bell operating companies (RBOCs), manufacturing operations, and a long-distance service. A number of the RBOCs created then have since consolidated into large regional companies.

[^4]The wireline (as opposed to wireless) telephone network in the US consists of wires and switches that carry and route signals to the correct receiver, and gateways that allow wireless services to connect to the wireline network. Most local telephone traffic is still sent via a process called circuit-switching, which requires that an end-to-end communications channel be opened and used for the duration of each telephone call. Data traffic (including Internet traffic) and many long distance calls are sent via more-efficient packet-switching, which cuts a stream of information into little pieces, commingles it with other traffic sent over the same channel, and reassembles it at the receiving end.

The telephone industry uses a large and sometimes confusing variety of signaling systems and communication conventions ("protocols"). The current signaling system used to set up a phone call is called Signaling System 7 (SS7). Integrated systems digital network (ISDN) and digital subscriber loop (xDSL) are protocols that allow high-speed communication over local access wires. Asynchronous transfer mode (ATM) can send mixed voice, data, and video information. Frame relay switching is often used for sending data between users.

Wireless Telephone: Wireless phone networks consist of handsets (cell phones, which are radio transmitters/receivers), a network of radio antennas and base stations that can send and receive signals within a local area (a cell), and a network of switching stations that connect the cells with each other and with the wireline telephone network. Computers monitor the signal from a caller and "hand-off" the call from one cell to an adjacent cell as a caller moves.

Wireless providers sell customized phones and operate networks of antennas, base stations, and switching centers. Each wireless network operates in a particular wavelength frequency range (the "spectrum"). Licenses to use spectrum are issued by the government and can be bought and sold by holders. Phones that operate at a higher frequency have greater signal capacity (needed to transmit high-quality sound, photos, or data) but lower signal strength, and therefore require a more concentrated network of antennas. Wireless companies use one of several incompatible signal processing systems. The most common wireless signal processing technologies are TDMA, CDMA, and GSM. Most wireless companies operate regionally but interconnect with other companies that use the same technology, allowing customers to have roaming service outside their local area.

## Cable Systems:

Unlike wireline or wireless telephone companies that can send only a fairly small amount of information through their copper wires and phones, cable companies can send a large amount of information through the special coaxial cable wires that make up their networks. First formed to transmit regular TV signals outside regular broadcast areas, cable companies have made large investments in facilities and equipment in recent years to provide additional services. They now use their high-capacity wires to simultaneously transmit hundreds of TV and radio channels, Internet access, telephone, HDTV, and ondemand movies.

In addition to operating a network that carries signals, cable companies provide TV and movie "content." Companies acquire content from large media companies like Disney, Fox, and Viacom or from independent producers, much in the same way that local TV stations operate. Cable companies may buy transmission rights to entire cable channels like MTV, CNN, HBO, and ESPN, or to individual productions. Many cable companies also produce some of their own content. Large content providers may require that cable companies take an entire package of channels.

## Other Systems:

Paging systems basically consist of one-way radio transmitters that receive an activation signal from the wireline phone system and signal a mobile receiving unit. The handsets for satellite systems must be able to communicate with a system of satellites, requiring greater power than cell phones. Satellite TV and radio systems send one-way signals from satellites in "geo-synchronous" orbit (they stay over the same spot).

The Internet is a computer-to-computer communication system that uses many of the same structural elements as the telephone system, such as local cable or phone access lines, but uses packet-switching signal processing and special computer switches called routers. Its signaling system is called TCP/IP or Internet Protocol.

## Technology:

Computers and computer chips are at the center of all telecom systems. To route traffic, wireline telephone companies use special computers called Class 5 switches; Internet networks use computers called routers. Wireless phones use special computer chips for transmitting and receiving signals. Wireline operators largely use high-capacity fiber optic cable for long distance transmission and are starting to bring fiber optic cable directly to customer locations. All telecom providers use computers to monitor traffic and provide detailed billing statements to customers.

## Trends and Opportunities

## BUSINESS TRENDS

Rapidly Growing Market Segments - As technology has changed, some segments of the telecommunication industry have experienced strong growth in demand. In the last decade, demand increased moderately for wireline telephone services, more for cable services, and more than 400 percent for cell phone service. Demand for satellite services has waned, and paging services have almost entirely been replaced by cell phones.

VoIP - While the traditional telephone system dedicates a single open line to each phone call, the packet-switching technology used by the Internet can send small pieces of many calls along one line, reassembling them at the end. This greater efficiency is pushing service providers to buy packet-switching equipment to build so-called VoIP systems. Analysts
expect that the conversion of the phone system to VoIP will require huge investments in new equipment.

Convergence of Telephone, Cable Technologies - The development of new technologies creates greater competition between wireline phone and cable companies. Because of their high-capacity coaxial cable into homes and businesses, cable companies can carry phone services in addition to high-speed Internet access, movie-on-demand, and TV services. To be able to match these services, phone companies are deploying fiber optic cable straight into consumer and business locations.

Wireless Spectrum Availability - The FCC increased the amount of frequency spectrum a single company may own in local markets, paving the way for consolidation among local wireless service providers. Until now, local wireless phone companies have been limited in the amount of local spectrum they may own, preventing large companies from shutting out small competitors. With more spectrum, a company can provide subscribers with additional services. The FCC has determined that, in most local markets, competition is sufficient to warrant eliminating restraints on new service additions.

## INDUSTRY OPPORTUNITIES

Fiber Optic Connection to Homes - Although most non-local telephone transmission runs over high-speed fiber optic lines, a large majority of the "last mile" connection to customers still consists of copper wires, as does "in-house" wiring. The technology to provide connections in fiber optic lines is still too complicated and expensive for general consumer use, as are handsets that can generate the required laser light signals. But an all-fiber-optic network would have very large capacity for services besides telephone.

Global Development - Communication systems in North America, the EU, and Japan are well developed, in the sense that most of the population has inexpensive access, but systems in much of the rest of the world are more rudimentary. Because of their experience in building and operating sophisticated systems, US communication companies are expanding their ownership and partnerships in other countries.

Using Electronic Billing Solutions - The new advanced features of Electronic Bill Presentment and Payment (EBPP) give telecom companies information they can use to keep customers, generate new business, and cut costs. Higher customer adoption, reduced customer turnover, and decreased billing costs help telecom companies retain control over their billing processes and brand name.

## VALUATION MULTIPLES

## Telecommunication Services

Acquisition multiples below are calculated using at least 22 private, middle-market (valued at less than $\$ 1$ billion) industry transactions completed between 10/1997 and $1 / 2008$. Last update: November 2008.

| Valuation Multiple | MVIC/Net <br> Sales | MVIC/Gross <br> Profit | MVIC/EBIT | MVIC/EBITDA |
| ---: | :---: | :---: | :---: | :---: |
| Median Value | 0.6 | 0.8 | 3.5 | 4 |

MVIC (Market Value of Invested Capital) = Also known as the selling price, the MVIC is the total consideration paid to the seller and includes any cash, notes and/or securities that were used as a form of payment plus any interest-bearing liabilities assumed by the buyer.
Net Sales = Annual Gross Sales, net of returns and discounts allowed, if any.
Gross Profit $=$ Net Sales - Cost of Goods Sold
EBIT = Operating Profit
EBITDA = Operating Profit + Noncash Charges
SOURCE: Pratt's Stats ${ }^{\text {TM }}$ (Portland, OR: Business Valuation Resources, LLC) To purchase more
detailed information, please either visit Www.BVMarketData.com or call 888-287-8258.

## Industry Forecast

The output of US telecommunications is forecast to grow at an annual compounded rate of 4 percent between 2008 and 2013. Data Sourced: December 2008


First Research forecasts are based on INFORUM forecasts that are licensed from the Interindustry Economic Research Fund, Inc. (IERF) in College Park, MD. INFORUM's "interindustry-macro" approach to modeling the economy captures the links between industries and the aggregate economy.

## IV. Financial Review

## Commentary to Tables IV-1, IV-1A: Historical Balance Sheets

In our Financial Review Section, we review the Company's historical balance sheets and income statements.

Table IV-1 shows the balance sheets for the calendar years 20XX-20XX. ${ }^{8}$ Table IV-1A shows the balance sheets in percentages of total assets.

Total Assets (row 19) increased from $\$ 18.6$ million in 20XX to $\$ 34.1$ million in 20XX. The largest assets as of December 31, 20XX are accounts receivable, net fixed assets, shareholder's loans, and cash, with 48.1\% (F7), 24.4\% (F17), 11.4\% (F12), and 11.2\% (F6), respectively, of total assets.

Fig. IV-1 depicts the composition of total assets as of December 31, 20XX.
FIG. IV-1: TOTAL ASSETS AS OF DECEMBER 31, 20XX (By Percentage of Total Assets)


Total current liabilities (row 26) grew from $\$ 13.4$ million in 20XX to $\$ 26.7$ million in 20XX. The long-term debt (row 31) grew from $\$ 1.4$ million in 20XX to $\$ 2.4$ million in 20XX. Total liabilities (row 32) grew from $\$ 14.8$ million in 20XX to $\$ 29.1$ million in 20XX. Total shareholder's equity (row 37) increased from $\$ 3.8$ million in 20XX to $\$ 5.0$ million in 20XX.

Fig. IV-2 depicts the composition of total liabilities as of the valuation date.

[^5]FIG. IV-2: TOTAL LIABILITIES AS OF DECEMBER 31, 20XX
(By Percentage of Total Liabilities)


## Commentary to Tables IV-2, IV-2A: Historical Income Statements

Tables IV-2 and IV-2A show the Company's historical income statements in dollars and percentages for the calendar years 20XX-20XX (col. B through F). ${ }^{9}$ Table IV-2A is the Company's common size historical income statements from 20XX to 20XX, where all line items are shown as a percentage of total sales.

Total Revenues (row 7) increased from $\$ 77.4$ million in 20XX to $\$ 222.1$ million in 20XX.
Figure IV-3 shows annual income for 20XX through 20XX.

[^6]
## FIGURE IV-3: ANNUAL TOTAL INCOME

(\$000’s)


Gross profit (row 9) equals total income as there is no cost of sales. Subtracting total expenses from gross profit results in operating income (row 42) and net income before taxes (NIBT) (row 49) after adding/subtracting interest income/expense. NIBT (row 49) increased from $\$ 1.5$ million in 20XX to $\$ 6.6$ million in 20XX.

Figure IV-4 shows the net income before tax for the years 20XX through 20XX.
FIGURE IV-4: NET INCOME PER YEAR
(\$000’s)


In rows 52-70, we adjust the net income to economic net income before taxes. Economic net income is an arm's length income representative of the Company's earning power after eliminating non-recurring items and adjusting all compensation to arm's length. This is the measure of income that an arm's length buyer would expect to make, based on the information available at the time.

In rows 53-65, we make adjustments to the compensations of Jim Johnson, Peter Johnson (brother of Jim Johnson), and Kara Johnson (wife of Jim Johnson).

There are no other family relatives employed. We add back their actual compensation and associated payroll taxes and subtract their arm's length compensation and an $8 \%$ allowance for payroll taxes.

Jim Johnson is the president and CEO of the Company. According to ERI Economic Research Institute, the mean compensation (salary plus bonus) for a CEO in the Telephone Communications industry based on revenues of $\$ 230$ million in 20XX is $\$ 815,642$ (F56), which we deflate at $4 \%$ for 20 XX .

As revenues were lower for 20XX through 20XX, we also requested from ERI the mean compensation for a CEO based on revenues of $\$ 80$ million (Year 20XX), $\$ 120$ million (Year 20XX), and $\$ 160$ million (Year 20XX), which were $\$ 597,222, \$ 671,085, \$ 730,708$, respectively. The ERI's survey reflects the executive's compensation as of December 31, 20XX. We therefore deflate the $\$ 597,222$ by 4 years at $4 \%$ to calculate the arm's length compensation for 20XX. We deflate the $\$ 671,085$ by 3 years at $4 \%$ to calculate the arm's length compensation for 20XX. We deflate the $\$ 730,708$ by 2 years at $4 \%$ to calculate the arm's length compensation for 20XX.

Peter Johnson is the president of GHI Comp. He manages the Company’s prepaid calling card distribution services, through GHI, and works very long hours. According to ERI Economic Research Institute, the mean compensation (salary plus bonus) for a COO (he acts in function similar to a COO, managing day to day operations of the largest division, GHI) in the Telephone Communications industry based on revenues of $\$ 230$ million in 20XX is $\$ 547,903$ (F61), which we deflate at $4 \%$ for 20XX.

Similarly to the above, we also requested from ERI the mean compensation for a COO based on revenues of $\$ 80$ million, $\$ 120$ million, and $\$ 160$ million, which were $\$ 419,388, \$ 464,493$, $\$ 499,592$, respectively, which we deflate at $4 \%$ as discussed above.

We add back Kara Johnson's compensation without subtracting an arm's length compensation as we do not think she is holding a relevant position in the Company. She is in charge of parties, gifts, travel accommodations, and accommodates her husband on business trips.

According to Jim Johnson, the rent expense is understated. The Company is renting facilities at three locations:

1. 60 Main Street, Anytown, XX
2. 40 Lauder St, Anytown, XX
3. 20 College Street, Anytown, XX

In rows 66 and 67, we adjust the rent expense by adding back actual rent expense and subtracting an arm's length rent for the above three locations based on interviews with several real estate brokers and information provided by the Management. ${ }^{10}$

[^7]For (1), we compute the arm's length rent at $\$ 27.50 \times 8,000 \mathrm{sq} \mathrm{ft}=\$ 220,000$.
For (2), we compute the arm's length rent at $\$ 27.50 \times 10,000 \mathrm{sq} \mathrm{ft}=\$ 275,000$.
For (3), we compute the arm's length rent at $\$ 35.00 \times 10,000 \mathrm{sq} \mathrm{ft}=\$ 350,000$.
The total estimated arm's length rent is $\$ 845,000$ (F67), which we deflate at $3 \%$ going backwards.

We add back the $\$ 4.0$ million extraordinary loss in D68 related to a ponzi scheme. We also add back the $\$ 2.0$ million extraordinary loss in F68 related to a settlement from a class action lawsuit. Additionally, we add back the charitable donations in row 69 as these are discretionary expenses.

Row 70 is total adjustments. Adding rows 49 and 70, we arrive at the economic net income before taxes in row 71.

In row 72 , we apply corporate income taxes of $40 \%{ }^{11}$ Subtracting row 72 from row 71 yields the economic net income after taxes (ENIAT) in row 73.

Figure IV-5 shows the economic net income after tax for the years 20XX through 20XX.
FIGURE IV-5: ECONOMIC NET INCOME PER YEAR
(\$000’s)


ENIAT (row 73) has an up- and down-trend. This justifies to use a sum-of-years digits (SYD) weighting, which we did in rows 74 and 75 . The SYD method weights the later years most heavily. We weight the last three years (20XX through 20XX) as they reflect better the earnings power of the Company. The weighted average ENIAT is $\$ 6.9$ million (B78), which is our basis to forecast ENIAT in Table V-1.

[^8]Table IV-2A is the Company's common size historical income statements from 20XX to 20XX, where all line items are shown as a percentage of total revenues.

## Commentary to Tables IV-3 and IV-4: Financial Ratios

Table IV-3 shows the financial ratios of the Company for 20XX-20XX. Table IV-4 compares the Company's ratios for 20XX to the ratios of a sample of similar size companies in the same industry. The data is from Fintel. ${ }^{12}$ The Company data in Table IV-4, column C comes from Table IV-3, column F. Table IV-4 shows comparative industry statistics for SIC Code \#4813-Telecommunication Services.

In our comments below, we compare the ratios for the Company to the industry data in the Almanac, i.e., columns B and C. The comparison ("Evaluation") appears in column D.

## Liquidity Ratios

Current Ratio: The current ratio is current assets divided by current liabilities and is an indication of the Company's ability to pay its current liabilities. A current ratio of less than 1 is a cause for concern. The Company's current ratio is 1.0 (Table IV-4, C7), which compares negatively to the Fintel sample of 1.8 (B7).

Quick Ratio: The Quick Ratio is the ratio of liquid assets to current liabilities. The numerator includes cash, cash equivalents, and accounts receivables. It excludes inventory and other assets that will not turn to cash very quickly. It is an indication of the Company's ability to meet its immediate needs. The Company has a quick ratio of 1.0 (C9), which is comparable to the Fintel median of 1.1 (B8).

In summary, the Company is less liquid than the Fintel group.

## Leverage Ratios

Leverage Ratios indicate the extent of financing of the Company. Risk and expected return both increase with financial leverage.

Debt/Assets: This ratio indicates the Company's ability to pay all its debts. It is an indicator of the long-run solvency of the firm. Total debt to total assets is 0.9 (C10). We evaluate this as a negative. The Fintel ratio was not available.

Debt/Equity: This ratio indicates relative amounts of capital provided by creditors and shareholders. A high Debt to Equity ratio indicates high financial leverage, and thus, high financial risk. The Company's Debt/Equity ratio of 5.8 (C11) compares negatively to the Fintel sample of 0.4 (B11).

[^9]Coverage Ratio (or Times Interest Earned): Times interest earned indicates how well the firm is able to cover its interest payments. A higher number indicates that the Company is more capable of paying its interest. The basic formula is: Times Interest Earned = EBIT / Interest. The Company's coverage ratio of 29.5 (C12) is superior to the Fintel sample of 4.0 (B12).

In summary, the Company's leverage ratios are mixed with two negative and one positive category. Overall, the Company's leverage ratios are inferior to the Fintel group.

## Activity Ratios

Accounts Receivable Turnover (Revenues/AR): The accounts receivable turnover provides an indication of the quality of the receivables and gives an idea of how successful the company is in collecting its outstanding receivables. A higher number turnover indicates a more rapid collection of receivables. In this instance, the accounts receivable turnover is 16.7 (C14), which means that the Company produced 13.6 times the value of its receivables in revenues per year. The Fintel was not available.

Inventory Turnover (COS/Inventory): This ratio measures how quickly the inventory is sold. The higher the inventory turnover, the better the entity is performing. The Company has no inventory. Thus, this ratio is not applicable in this case.

Asset Turnover (Sales/Assets): This ratio indicates how efficiently the company utilizes its assets. A high turnover indicates the company is using its assets effectively to generate sales. The Company's asset turnover of 6.5 (C16) means that the Company produces 6.5 times the value of its assets in sales per year. The Fintel industry average of 0.8 (B16) is lower. This is evaluated as a positive.

Working Capital Turnover (Sales/Net Working Capital): This ratio tells us how efficiently working capital is employed. A high ratio indicates efficient use of working capital. However, a too high ratio indicates risk for creditors. The Company's ratio of -195.3 (C17) compares negatively to the Fintel median of 2.7 (B17).

In summary, the Company's Activity Ratios are mixed with one positive and one negative category. Overall, the Company's activity ratios are comparable to the Fintel group.

## Profitability Ratios

The Company's arithmetic average annual sales growth (2004-2008) is 31.3\% (Table IV-3, H22). The compound average annual growth (CAGR) since 2004 is $30.2 \%$ (Table IV-3, B23).

Pre-Tax Profit Margin: This ratio, net income before income tax divided by net sales, indicates the contribution of sales to the profitability of the Company. Put another way, it indicates the amount of net income generated by a dollar of sales. The 2008 pretax profit margin of $3.0 \%$ (C19) is lower than the Fintel median of $5.0 \%$ (B19), which is evaluated as a negative.

Pre-Tax ROE: The return on equity (ROE) measures the return earned on the owners' equity in the firm. The higher the rate, the more the firm has increased wealth to the shareholders. The Company's pretax return on equity is $56.1 \%$ (C20), which is above the Fintel industry average of $12.0 \%$ (B20) and therefore evaluated as a positive.

Pre-Tax ROA: The return on assets (ROA) ratio indicates the Company's efficiency in its use of assets to generate profits. The higher the ratio, the more efficient and profitable is the Company in its use of assets. The Company's pretax return on assets is $9.5 \%$ (C21), which is above the Fintel industry average of $4.0 \%$ (B21) and therefore evaluated as a positive.

In summary, the Company's Profitability Ratios are mixed with two positive and one negative category. Overall, the Company's profitability ratios are superior to the Fintel group.

## Summary of Comparative Ratio Analysis

Based on the 2008 ratios, the Company is inferior in the liquidity and leverage ratios compared to the Fintel companies. The Company is overly leveraged during the period analyzed. The Company is superior in the profitability ratios compared to the Fintel companies. In summary, we evaluate the Company to be comparable to the industry.

## V. VALUATION

## Valuation Approaches ${ }^{13}$

A valuation approach is "a general way of determining a value indication of a business... using one or more valuation methods." A valuation method is, "within approaches, a specific way to determine value."

There are three valuation approaches:

- The Asset Approach. In this approach, we seek to measure value through the calculation of assets net of liabilities, i.e., this is a balance sheet approach. One can use book, market, or liquidation values of assets in this approach. The same is true for liabilities, except that, in addition, it may be necessary to use a discounted cash flow method to calculate the market value of some liabilities such as notes payable.
- The Income Approach. In this approach, we seek to measure value by converting anticipated economic benefits (cash flows or income, with the former being the better measure) into a present single amount.
- The Market Approach. In this approach, we seek to measure value through comparing the subject company to other businesses or business interests that have sold.

While there are three distinct valuation approaches, it turns out that there are interrelationships between the approaches that will become apparent over the next several pages.

## Valuation Methods

Below is a list of the most common valuation methods and their classification according to valuation approach. After the list, we describe each method, its salient strengths and weaknesses, and our reasons for whether or not we use it to value the Company.

- The Asset Approach, using
- Book Values
- Fair Market Values (aka Adjusted Net Book Value Method)
- Liquidation Values
- The Income Approach (aka Discounted Future Returns)
- Discounted Future Net Income Method

[^10]- Discounted Cash Flow Method
- Discounted Dividends Method
- The Market Approach
- Guideline Public Company Method
- Guideline Private Company Method
- Small private companies
- Guideline Merger \& Acquisition Method (large private firms)
- Hybrid Approach
- Excess Earnings Method, which is both an Asset and Income Approach


## Asset Appraisal Method (AAM)

As mentioned above, the appraiser can use book values, fair market values, or liquidation values in the AAM.

## Using Book Values

This method views the Company's fair market value as the book value of its stockholder equity. However, the net book value of a company only reflects its accounting history as expressed in nominal dollars, and this usually bear very little relationship to fair market values.

When there is a relationship, it is usually not 1-to-1. Instead, the importance of the book value of the Company is more accurately measured in a Market Approach regression analysis if the guideline company book values are available. Thus, the importance of the book value of the Company is generally as an input to the Market Approach and as a starting point for calculating liquidating values. It has no direct intrinsic importance in valuation.

## Using Market \& Liquidation Values

In these Asset Approach methods, we restate assets and liabilities at their fair market values. The fair market value of stockholder equity is then calculated by subtracting the fair market value of the liabilities from the fair market value of assets.

There are two potential premises of fair market value-going concern value and liquidating value. The AAM is generally unsuitable for valuing healthy, operating businesses, because it is unable to measure the fair market value of intangible assets. For this, the Income and Market Approaches are superior. The latter two approaches generally measure the FMV of the equity, including intangible asset value. One can then subtract the AAM's indication of value using market values of assets and liabilities from the FMV of equity to calculate the

FMV of goodwill and other intangible assets. Of course, it is necessary to maintain consistency in the levels of value ${ }^{14}$ (LOV) or make adjustments for differences.

However, the AAM is appropriate as the primary valuation approach for holding companies with no material intangible asset value and whose assets have FMVs that are easily measured, either because they are publicly traded securities or they can be appraised, such as real estate. Family holding companies, usually in the form of Family Limited Partnerships, are a typical example of the latter type of firm.

We also use the AAM to ascertain whether an operating company is worth more "dead or alive." If the Asset Approach with liquidating values yields a higher indication of fair market value than the Income and Market Approaches, then a control shareholder would be wise to liquidate the Company, and the Asset Approach should dominate the other two. A minority shareholder does not have the power to compel liquidation. Thus, the valuation of a minority interest will often rely on an Income Approach - even if its indication of fair market value is lower than the Asset Approach. Of course, when the indication of fair market value is higher from the Income Approach than the Asset Appraisal Method, then the Income Approach should dominate.

The Company is not a holding company. Therefore, we use the Asset Appraisal Method to ascertain that the Income and Market Approach dominate in this valuation.

## Income Approach Methods

The Income Approach methods are based on the concept that the value of a business is best measured by the present value of the net income, cash flow, or dividend streams it can generate in the future. The present value calculations adjust the forecast future cash flows to today's fair market value by incorporating the time value of money as well as the associated business and economic risks of that enterprise.

The Discounted Future Net Income, Discounted Cash Flow, and Discounted Dividends Methods are subsets (methods) of the Income Approach. One can forecast net income or cash flows and then discount them to their net present value.

For valuation purposes, cash flow is superior to net income. A business cannot pay its bills, employees, and shareholders with net income. It can only pay them with cash. A business with positive net income may have such poor cash flow that it can go bankrupt. Therefore, we never discount net income to present value. We only discount cash flows.

[^11]There are two general levels of cash flows in valuing businesses. Dividends are cash flows at the shareholder (micro) level, while the forecast cash flow of the Company is cash flow at the macro level. If one is valuing a minority business interest, the Discounted Dividends Method theoretically should be the ideal Income Approach method. In practice, though, it is rarely used, since most privately held firms do not pay dividends. Therefore, it is most common in valuing a business interest to first discount cash flows at the firm (macro) level and then make adjustments for differences in control and marketability for the interest being valued.

In Table V-1, we use the Discounted Cash Flow Method.

## Guideline Company Methods

The Guideline Company methods involve performing either regression analysis and/or calculating ratios of a dependent variable (usually the market capitalization if using publicly traded guideline companies or selling price if using a database of private company sales) to independent variables that are "valuation drivers", i.e., variables that investors would consider in how much they would pay for the guideline companies, such as cash flow, earnings, and book value, etc. The guideline companies ideally should be in the same business as the subject company. When there are no guideline companies available in the same business, then it is possible to use guideline companies in similar businesses or businesses that have similar demand characteristics.

In developing a mathematical relationship between fair market value and the valuation drivers, regression analysis is far superior to valuation ratios whenever possible for several reasons.

- It provides the specific mathematical relationship between fair market value and one or more valuation drivers. This is the x-coefficient(s) of the independent variable(s). Ratio analysis is limited to one variable at a time, while regression analysis can work with all variables simultaneously, which is a big advantage.
- It provides objective measurement of the strength of the explanatory power of the independent variables, measured by $\mathrm{R}^{2}$.
- $\mathrm{R}^{2}$ measures the percentage reduction in the forecast error compared to using the mean of the dependent variable. Thus, an $\mathrm{R}^{2}$ of $90 \%$ would mean that variation in the guideline company independent variables explains $90 \%$ of their variation in fair market value (the dependent variable) compared to using the average fair market value of the guideline companies.
- It measures the statistical significance of the independent variables with the p-value. This enables us to judge how likely it is that the relationship of the independent variable to fair market value is a mistake due to random variation.

However, regression analysis requires an absolute minimum of three guideline companies and often several more to be of much practical use. Thus, while it is a far more powerful analytic tool than valuation ratio analysis, it is more data intensive.

Tables V-2A and B show the private guideline companies (Transaction Method) that we received from the IBA database and Pratt's Stats. Table V-3 displays the public guideline companies.

## Excess Earnings Method

The Excess Earnings Method is a hybrid asset and income approach. One calculates a reasonable return to demand for the tangible assets of the firm and subtracts that from the actual income, the difference being "excess returns." One would then capitalize the excess returns at a rate of return appropriate for intangible assets, which is higher than that for the total income or cash flows of the firm. The result of that calculation would be the intangible assets of the firm. One would then add the intangible value to the tangible assets to obtain the value of all assets.

This valuation method has four significant disadvantages.

- It requires calculating two rates of return instead of the usual one.
- The return on intangible assets is not directly observable in the marketplace, while returns on investment are directly observable.
- It uses earnings instead of cash flow.
- The Internal Revenue Service disparaged this approach in Revenue Ruling 68-609, saying it may be used only if no better basis is available.

Because of these disadvantages, we do not use the Excess Earnings Method.

## Selection of Valuation Methods

We use the DCF Method in this appraisal. Additionally, we use both the Guideline Public Company Method and the Guideline M\&A Method.

## Commentary to Table V-1: Discounted Cash Flow

We begin Table V-1, the Discounted Cash Flow Valuation, with forecast economic net income after taxes (row 5) by multiplying economic net income from Table IV-2, B78 by 4\% growth (B34). ${ }^{15}$

We forecast the retention ratio to be $20 \%$ (row 6 ). ${ }^{16}$ The retention ratio is the amount that we forecast the Company will withhold from net income for the needs of the business. The needs of the business fall into two categories: capital expenditures and increases in net working capital for ordinary growth of the business, and the same for aggressively planned growth.
The Company is small compared to publicly traded C corporations, and it is midsize-to-large for an S corporation. Thus, we estimate a $20 \%$ Retention Ratio, which means an $80 \%$ Payout Ratio. ${ }^{17}$

We multiply row 5 by row 6 to calculate the income retained in row 7 . We add rows 5 and 7 to arrive at the forecast cash flow in row 8.

Row 9 is the Present Value Factor (PVF). This figure accounts for the time value of money and our assessment of the risk of the Company. It is calculated as follows:
$P V F=\frac{1}{(1+r)^{n}}$, where:
$r=$ the discount rate, or the investment rate of return required for an investment in the Company, given its risk, and
$n=$ the number of years from the midpoint of that year's cash flows to the valuation date. In present value terms, since cash flows come in evenly throughout the year, it is as if they came on the midpoint of the year.

Row 10 is the present value as of the valuation date of each year's forecast cash flow and is the result of multiplying the forecast cash flows in row 8 by the present value factors in row 9 . The cumulative present value for the years 1-5 in B11 equals the sum of the present values in row 10.

[^12]The forecast constant growth rate in cash flow after Year 5 is $4 \%$ (B34). ${ }^{18}$ B14 is forecast cash flow for Year 5, transferred from F10. We multiply this by one plus the $4 \%$ growth rate to arrive at the forecast cash flow of Year 6 in B13.

## The Gordon Model Multiple and Cash Flow Growth Rate to Perpetuity

We now apply a Gordon Model Multiple, which is a formula that allows us to calculate the present value of a growing perpetuity. Assuming a midyear convention, the formula is:

Gordon Model Multiple (GMM) $=\frac{\sqrt{1+r}}{r-g}$, where r is the discount rate and g is the growth rate to perpetuity. The GMM is the present value of each one dollar of forecast cash flow growing at a constant rate of $g$ forever.

Substituting $r=24 \%$ (B33) and $g=4 \%$ (B32), our GMM is 5.5678 (B14). This means that at our $24 \%$ discount rate and forecast $4 \%$ constant growth rate of cash flows (which means we forecast $\$ 1.00$ of cash flows in year $6, \$ 1.04$ in year 7 , etc.), a rational investor would be willing to pay approximately $\$ 5.57$ at the end of year 5 for each $\$ 1.00$ of forecast cash flow in year 6 (and grows forever at $g$ ).

The product of the Gordon Model Multiple (B14) and Forecast Cash Flow of Year 6 (B13) is the present value of the residual, which is the present value of cash flows from years 6 to infinity as of the end of year 5 .

To calculate its present value as of the valuation date (year 0), we discount that back 5.0 years. ${ }^{19}$ The present value of Year 6 -to-infinity forecast cash flow as of the valuation date appears in B17. To obtain the present value of the entire cash flow stream, we add the values in B11 and B17. The sum is $\$ 31.8$ million (B20), which is the Fair Market Value of the Company on a Marketable Minority interest basis before application of any necessary discounts and premiums.

In Table IV-2, row 72, we applied corporate income taxes. In B22, we add a $15 \%$ S corporation premium for Section 338(h)(10) election, which is appropriate for an S corporation seller. ${ }^{20}$ Adding the values in B18 and B21 results in the FMV-100\% marketable minority basis for an S corporation in B 22 .

[^13]The term "Marketable Minority Interest" requires explanation. Our calculation of discount rates, discussed below, uses as its source of data stock returns of publicly-traded companies. The shareholders of these firms have two primary characteristics: their investments are liquid, i.e., they can sell immediately and receive cash at the going market rate within three days of their sell order, and they are minority interests, i.e., they have no control over the firm. Since we are valuing a $100 \%$ interest in a privately-held company, we must make adjustments for differences in liquidity and control.

In cell B23, we apply a $25 \%$ control premium. ${ }^{21}$ Adding B22 and B24 yields the FMV-100\% marketable control basis in B25.

We apply a $15.5 \%$ discount for lack of marketability (B26) as we explain below. We subtract B27 from B25, which produces the Fair Market Value of the firm on a $100 \%$ Private Control Basis of $\$ 38.6$ million (B28).

## Discount For Lack of Marketability (DLOM)

By definition, the indicated value computed by the capitalization of earnings method yields a marketable interest in the subject entity. Since the Company is a closely-held company, it is less marketable to an investor. Therefore, to produce a non-marketable interest value, the appraiser must apply a Marketability Discount.

Marketability is defined as the ability to convert a property to cash quickly, with minimum transaction and administrative costs, and with a high degree of certainty of realizing the expected amount of net proceeds. The shares of the Company have no active market. This represents an added risk of ownership to an investor for which he must be compensated. This is accomplished by a lower price for the shares that are represented by the marketable interest value.

A variety of studies have been made to try to quantify discounts for lack of marketability. According to Gary Trugman in his book, Understanding Business Valuations, the average marketability discount ranges between $25 \%$ and $45 \% .^{22}$ Chris Mercer in his book, Quantifying Marketability Discounts, states that "marketability discounts can range from very small (in the range of $5 \%$ to $10 \%$ ) to quite large ( $60 \%$ to $80 \%$ or more)."23

According to Chris Mercer, business appraisers typically cite four sources of evidence when they determine the appropriate size of a marketability discount. These sources are:

[^14]- Restricted stock studies (measured discounts on sales of restricted shares of publicly traded securities).
- Pre-IPO studies (reviewed discounts on sales of closely held company shares compared to Initial Public Offering prices of the same company shares).
- Cost of flotation studies (the cost to a private company of going public), and
- Tax Court cases.

The first three sources are based on direct market evidence; the last on indirect evidence. ${ }^{24}$

## Marketability (Restricted Stock) Studies

There are a number of empirical data, studies, and analyses we considered in establishing an appropriate discount for lack of marketability for the subject interest. These studies have been summarized in the enclosed appendix.

Restricted stock studies are based on studies that measured the discount due to lack of marketability attributed to shares that were unable to be freely traded for a period of time due to some legal or other restriction. Investment companies and later some closed-end mutual funds invested in restricted stocks. The price differentials between the restricted stock and the freely traded stock of a variety of companies formed the basis of these studies.

The following table summarizes the marketability discount studies:
SUMMARY OF MARKETABILITY STUDIES

| Study | Marketability Discount <br> $\%$ |
| :--- | ---: |
| SEC Institutional Investor Study | $32.6 \%$ |
| Gelman Study | $33.0 \%$ |
| Trout Study | $33.5 \%$ |
| Maroney Study | $35.6 \%$ |
| Mather Study | $35.4 \%$ |
| Standard Research Consultants Study | $45.0 \%$ |
| Williamette Management Associates Study | $31.2 \%$ |
| Silber Study | $34.0 \%$ |
| FMV Opinions Inc. Study | $23.0 \%$ |
| Management Planning, Inc. | $27.7 \%$ |
| Average | $\mathbf{3 3 . 1 \%}$ |

Since these studies are based on restricted stock, they are applicable to minority interests. However, in Table V-1, we compute the DLOM for a control interest, which should be materially lower. Thus, we do not use the results from the Restricted Stock Studies.

[^15]
## Abrams' Regression of the Management Planning Study Data

Our calculation of the DLOM for the control interest is based on Abrams’ Regression of the Management Planning Study Data. ${ }^{25}$ Abrams calculates the DLOM, which range between 10 to 20 percent, depending on firm size.

## Table V-1B <br> Marketability Discount By Avg Firm Size

| FMV | DLOM |
| ---: | ---: |
| 25,000 | $10.8 \%$ |
| 75,000 | $11.0 \%$ |
| 125,000 | $11.1 \%$ |
| 175,000 | $11.2 \%$ |
| 225,000 | $11.6 \%$ |
| 375,000 | $13.6 \%$ |
| 500,000 | $15.6 \%$ |
| 750,000 | $19.9 \%$ |
| $2,000,000$ | $18.0 \%$ |
| $5,000,000$ | $15.8 \%$ |
| $10,000,000$ | $15.5 \%$ |

The DLOM for the size of the subject Company (FMV over $\$ 10$ million) should be $15.5 \%$ per the chart above.

[^16]
## Commentary to Table V-1A: Calculation of Discount Rate

Table V-1A is the calculation of the discount rate. Jay Abrams discovered a mathematical relationship between rates of return in the stock markets and the size of the firms. ${ }^{26}$ The larger the firm, the less volatility of returns to the shareholders, the less risk to the shareholders, and the lower the return the shareholders require to invest in those stocks. Smaller firms, on the other hand, are riskier than larger firms, and, hence, require a higher rate of return to justify investing in them.

The relationship is a downward sloping line whose equation is a forbidding:
$r=.41060-[.01176 \times \ln (F M V)]$, where

- $r$ is the discount rate, also known as the investment rate of return
- In is the natural logarithm
- FMV is the Fair Market Value (Marketable Minority Interest Basis) of the firm

Although publicly held firms have an objective stock price to insert in the FMV term (after being multiplied by the number of shares), privately held firms do not. Therefore, it is imperative to ascertain that the discount rate assumed in the discounted cash flow approach is consistent with the value calculated in that approach. If not, one must go through additional iterations in order to force consistency between the assumption and the result. This happens because we must first estimate a value for the firm to calculate a discount rate. Then, we use this discount rate to calculate the value of the firm! This circular reasoning is only valid if the assumption is consistent with the result, as mentioned above.

There are two characteristics of investors in the stock market that are different than the typical owner of a privately held business:

- Their interests are very liquid, or marketable. They can convert their investment to cash in three days.
- They are minority shareholders, i.e., they own small percentages of the firms in which they invest and do not control the operations of the firm.

Therefore, we characterize the rates of return as being those for marketable minority interests, and the net present value of the forecast cash flow (Table V-1, B18) is also the marketable minority fair market value of the firm. This value must be consistent with the discount rate assumption (Table V-1, B33). Substituting the FMV-100\% Marketable Minority Basis (Table

[^17]V-1A, B18) into the discount rate equation results in a discount rate of 20.7\% (B10). We subtract 2\% (B11) for a reduction in macroeconomic risk that has occurred since the 1990s. ${ }^{27}$

We add a 3\% (B12) premium to account for the global financial and economic crisis, based on professional judgment. The class action lawsuits add risk to the Company for which an investor wants to be compensated. We add a subjective premium of $2 \%$ (B13) to account for the added risk. The total discount after the above adjustment is $23.742 \%$ (B14), which we round to $24 \%$ (B15).

[^18]
## Market Approach

Next, we move to valuation using the Market Approach.

## Guideline M\&A Method-Pratt's Stats

We searched Pratt's Stats for transactions in Standard Industrial Classification (SIC) Code \#4813- Telecommunications and noted 98 transactions with net sales between $\$ 0$ and $\$ 755.1$ million. We eliminated transactions with no revenues or earnings, sales below $\$ 10$ million and above $\$ 700$ million, and that were not comparable to the subject Company, leaving 20 observations (shown in Table V-2A).

We display various multiples in col. H through L, for instance the Market Value of Invested Capital to Sales (MVIC/S) in col. H and Market Value of Invested Capital to Net Income (MVIC/NI) in col. I. We show the mean, median, standard deviation, and coefficient of variation of these multiples in rows 25 to 28 . We use the median multiples (row 34, transferred to row 26) and apply the client's data (row 33) to determine the indicated value in row 35.

The coefficient of variation (row 28) is the ratio of the standard deviation to the mean. It is a measure of relative dispersion. A lower coefficient of variation is favorable. We give $50 \%$ of weight to the MVIC/Gross Profit Multiple, since this multiple has the lowest coefficient of variation. We split the remainder equally among the other multiples, i.e., $12.5 \%$ each. The weighted value is $\$ 92.2$ million (G37).

As we applied invested-capital multiples, we have to subtract the interest-bearing debt to arrive at an equity value in G39. We consider G39 to be investment value as opposed to fair market value for the following reason:

All the guideline companies shown in Table V-2A were purchased by public companies, i.e., strategic buyers who can generate synergies. Hence, the price probably does not reflect fair market value but investment value which is almost always higher than fair market value. We apply a $30 \%$ discount (G41) to adjust investment value to fair market value. Leonce Bargeron shows in an article that public firms pay $55 \%$ more in an acquisition than private equity firms and $43 \%$ more than private firms. ${ }^{28}$ The $43 \%$ premium (P) is equivalent to a $30.1 \%$ discount $[(\mathrm{P} /(1+\mathrm{P})]$, which we round to $30 \%(\mathrm{G} 41)$.

The transactions in Pratt's Stats do not consider the global financial and economic crisis as these transactions occurred during 2000 and 2007. There are only two guideline companies that were acquired in January and February 2008, i.e., before the financial downturn. As mentioned in Section III, due to the loss in confidence in the financial markets, equity prices have falling sharply. We therefore subjectively apply a $30 \%$ discount in G44 based on professional judgment.

[^19]We also subjectively apply an additional discount of $10 \%$ in G47 to consider the pending legal action against the Company, which we have not yet accounted for in the market approach. The FMV after the above discounts is $\$ 39.4$ million (G49).

## Comparison to First Research

In Section III, we presented the valuation multiples from First Research (see page19). The chart below compares the median multiples we computed with those from First Research. ${ }^{29}$ Based on the guideline companies we selected, our multiples are higher and hence, lead to a higher value of the Company. We use our multiples to be conservative.

|  | Valuation <br> Multiple | MVICI <br> Net <br> Sales | MVICI <br> Net <br> Income | MVICI <br> Gross <br> Profit | MVICI <br> EBIT | MVICI <br> EBITDA |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| First Research | Median Value | 0.6 | N/A | 0.8 | 3.5 | 4.0 |
| NYBVG | Median Value | 0.6 | 22.4 | 2.2 | 12.5 | 6.6 |

## Institute of Business Appraisers (IBA)

We also requested guideline transactions from the Institute of Business Appraisers (IBA) for all transactions in SIC code \#4813, and we received 21 transactions with sales between $\$ 0$ and $\$ 17.4$ million (shown in Table V-2B). The Market Approach based on the IBA database is not applicable, since only one of the 21 observations is comparable to the subject Company. The other guideline companies are either too small to be comparable and/or have net losses.

[^20]
## Public Guideline Company Method

Under the Public Guideline Company Method (PGCM), the appraiser searches for publicly traded companies in a same or similar business, and uses pricing multiples based on these companies’ market prices and financial data to service an indication of value of the subject company. Guideline companies will rarely, if ever be "perfect" comparables, but they can be used in conjunction with other methodologies to assist the appraiser by providing guidance about the fair market value of the subject company.

In order to locate potential guideline companies, the following search criteria were utilized:

- The companies had to be located in the United States.
- The company's SIC code had to be 4813.
- Revenue of the subject company had to be less than $\$ 5$ billion, approximately 25 times ABC's revenues.

In Valuing Small Businesses and Professional Practices, 3rd edition, authored by Shannon P. Pratt, Robert F. Reilly and Robert P. Schweihs, the authors state, "We often use companies up to 10 times the size of the subject in the guideline publicly traded company method". Gary Trugman author of Understanding Business Valuation suggests that up to 25 times the size of the subject still provides a meaningful comparison.

We used finance.yahoo.com as a resource to identify guideline companies. We identified 67 companies listed under Diversified Communication Services ${ }^{30}$, which we display in Table V3.

We researched these companies to determine their similarity to the subject Company. Based on these companies' descriptions, we eliminated 66 of them. The reasons for elimination were as follows:

- Companies that traded on the "pink sheets" or on the "bulletin board". These companies are "penny stocks" that do not provide meaningful valuation results.
- Companies that filed for bankruptcy.
- Companies that are not in the same business.

The only one remaining is $W Q R$ Corporation (WQR). Our conversations with the Management revealed that Anyname, Inc. (ANY) is also a relevant guideline company. We therefore conducted our analysis based on these two guideline companies.

[^21]
## WQR Corporation (WQR)

WQR Corporation, together with its subsidiaries, provides telecommunications services and products. The company operates in five segments: Prepaid Products, Consumer Phone Services, Wholesale Telecommunications Services, WQR Energy, and WQR Capital. The Prepaid Products segment markets and sells prepaid and rechargeable calling cards, and prepaid wireless phone services. It distributes its products and services to retail outlets, including supermarkets, drug stores, and convenience stores. The Consumer Phone Services segment sells consumer local and long distance services. The Wholesale Telecommunications Services segment sells telecommunications services to its wholesale customers, as well as provides a range of voice over Internet protocol communications services to resellers, consumers, cable operators, and service providers. The WQR Energy segment resells natural gas and electrical power to consumers and small business customers in Anystate State. The WQR Capital segment consists of WQR Carmel, which manages and collects aged receivables; WQR Local Media that comprises CTM Brochure Display and WMET 1160 AM radio station; WQR Internet Mobile Group, which operate its Zedge Web sites to provide user-generated mobile content distribution and sharing, and IDW publishing; and alternative energy business. It operates in the United States, Europe, Latin America, and Asia. The company was founded in 1990 and is headquartered in Newark, New Jersey.

## Anyname, Inc. (ANY)

Anyname, Inc. operates as a wholesale carrier of international long distance telephone calls, and a provider of retail prepaid calling services and enhanced services for mobile operators worldwide. Its wholesale trading business enables carriers and other communications service providers to outsource international voice and fax traffic. The company's retail business involves in the retail and marketing of prepaid calling cards through distributors; and sale of prepaid calling services, under the name Pingo, directly to consumers through an Internet Web site. The company is headquartered in Burlington, Massachusetts. Anyname, Inc. is a subsidiary of Royal KPN N.V.

The next step in the analysis is to compare the subject Company with its public counterparts. Select financial ratios appear in the following table. These ratios have been analyzed in order to make quantitative and qualitative assessments regarding the similarities and dissimilarities between the companies.

|  | $\begin{aligned} & \text { WQR } \\ & \text { 20XX } \end{aligned}$ | $\begin{aligned} & \text { ANY } \\ & \text { 20XX } \end{aligned}$ | $\begin{aligned} & \text { ABC } \\ & 20 X X \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| LIQUIDITYI SOLVENCY |  |  |  |
| Quick Ratio | 1.1 | 0.9 | 1.0 |
| Current Ratio | 1.1 | 0.9 | 1.0 |
| TURNOVER |  |  |  |
| Receivables Turnover | 10.5 | 5.6 | 13.6 |
| Inventory Turnover | 80.7 | N/A | N/A |
| Total Asset Turnover | 1.9 | 3.0 | 6.5 |
| DEBT |  |  |  |
| Total Liabilities to Equity | 1.9 | 4.0 | 5.8 |
| PROFITABILITY |  |  |  |
| Gross Profit Margin | 21.8\% | 10.3\% | 13.9\% |
| Net Income Margin | -11.9\% | -17.5\% | 3.0\% |
| GROWTH 20XX-20XX |  |  |  |
| Revenue Growth 20XX-20XX | -8.2\% | 60.9\% | 16.0\% |
| SIZE OF REVENUES (\$000) | 1,877,990 | 1,323,585 | 222,113 |

Looking at the ratios in totality reveals several differences between $A B C$ and the guideline companies. In order to do a more comprehensive analysis, we analyzed the figures and ratios by ranking the information contained in the above table from highest to lowest to determine how ABC stacks up against the guideline companies.

| Size of Revenues $\mathbf{( \$ 0 0 0 )}$ |  |
| :--- | ---: |
| WQR | $1,877,990$ |
| ANY | $\mathbf{1 , 3 2 3 , 5 8 5}$ |
| ABC | $\mathbf{2 2 2 , 1 1 3}$ |

ABC is smaller than the two companies. WQR is approximately eight times the Company's revenues, while ANY is about six times larger. Next, we reviewed compound annual growth rates. Compounded annual growth of 20XX through 20XX follows. Looking at this period $A B C$ has grown more than WQR but less than ANY. While ABC had strong growth between 20XX and 20XX, we note that ABC's growth decreased during 20XX and 20XX. ANY had an exceptional 20XX growing its revenues by $84 \%$ over 20XX levels.

| Quick Ratio |  | Current Ratio |  |
| :---: | :---: | :---: | :---: |
| ABC | 1.0 | ABC | 1.0 |
| WQR | 1.1 | WQR | 1.1 |
| ANY | 0.9 | ANY | 0.9 |

In looking at these liquidity ratios, ABC is in line with the other two companies.
Turnover ratios measure how effectively a company utilizes its assets.

| Receivables <br> Turnover |  | Inventory <br> Turnover |  |  |  | Total Asset <br> Turnover |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| ABC | $\mathbf{1 3 . 6}$ | WQR | 80.7 | ABC |  | $\mathbf{6 . 5}$ |  |
| WQR | 10.5 | ANY |  | N/A | ANY | 3.0 |  |
| ANY | 5.6 | ABC |  | N/A | WQR | 1.9 |  |

ABC has no inventory. Based on the other two ratios, ABC is stronger in utilizing its assets than the guideline companies. It appears ABC utilizes its asset base more efficiently.

The debt to equity ratio indicates that ABC utilizes significantly more debt than the guideline companies. This is depicted in the following ranking:

| Total Liabilities to <br> Equity |  |
| :--- | ---: |
| WQR | 1.9 |
| ANY | 4.0 |
| ABC | 5.8 |

With respect to profitability, ABC’s profitability leads in the profit margin (after-tax) but not in the gross profit margin. ABC's gross profit margin is weaker than WQR but stronger than ANY.

| Gross Profit <br> Margin |  |  |  | 20XX |  | Net Income <br> Margin |  |
| :--- | :--- | :--- | ---: | ---: | :---: | :---: | :---: |
| WQR | $21.8 \%$ | ABC | $3.0 \%$ |  |  |  |  |
| ABC | $\mathbf{1 3 . 9 \%}$ | WQR | $-11.9 \%$ |  |  |  |  |
| ANY | $10.3 \%$ | ANY | $-17.5 \%$ |  |  |  |  |

In reviewing the guideline company multiples, we have utilized ratio analysis. According to Trugman, the factors most significantly affecting valuation multiples include size, growth and profitability. We performed a company by company analysis, comparing each of the guideline company's strengths and weaknesses to ABC . ABC outperforms its guideline companies in the activity and profitability ratios and but it is significantly inferior in the leverage ratios.

The next step in our analysis is to determine the appropriate multiples to calculate the value of ABC. The following valuation measures as of December 31, 20XX were considered.

|  | WQR | ANY | Average |
| :--- | ---: | ---: | ---: |
| Trailing P/E (trailing 12 months) | N/A | N/A | N/A |
| Price/Sales (ttm) | 0.02 | 0.04 | 0.03 |
| Price/Book | 0.13 | 0.59 | 0.36 |

A review of the multiples calculated in the previous table reflects the market's perception of the stock at the valuation date. The market shows a varying perception of WQR and ANY. We averaged the ratios of the two companies to arrive at multiples to apply to ABC.

Another consideration in adjusting multiples is the difference in the size of the companies. Although size can be measured in different ways (capitalization, assets) we have utilized revenues. WQR and ANY are substantially larger than the subject company but still comparable. In analyzing the multiples, the size differential did not appear to be directly correlated to the size of the multiple.

In Table V-3A, we determine the fair market value of the Company by applying the average Price to Sales and Price to Book Value ratios to ABC.

The Public Guideline Company Method produces a marketable, minority value. Since we are valuing a private, control interest, we must make adjustments for differences in liquidity and control. We first apply a discount of lack of marketability of $10 \% .^{31}$ We then apply a control premium of $25 \%^{32}$ to arrive at the Fair Market Value-Private Illiquid Control Interest.

| Price/Sales |  |
| :---: | :---: |
| ABC Revenue Stream | 222,113,399 |
| Selected Multiple | 0.03 |
| Estimated Equity Value | 6,663,402 |
| Less Discount-Lack of Marketability @ 10\% | -666,340 |
| FMV-Illiquid Minority | 5,997,062 |
| Plus: Control Premium @ 25\% | 1,499,265 |
| Indication of Value (Illiquid Control) | 7,496,327 |
| - |  |
|  |  |
| CALCULATION OF MARKET APPROACH VALUE Price/Book Value |  |
| ABC Book Value | 5,016,732 |
| Selected Multiple | 0.36 |
| Estimated Equity Value | 1,806,024 |
| Less Discount-Lack of Marketability @ 10\% | -180,602 |
| FMV-Illiquid Minority | 1,625,421 |
| Plus: Control Premium @ 25\% | 406,355 |
| Indication of Value (Illiquid Control) | 2,031,776 |

[^22]
## Conclusion

The guideline public company method results for Price to Revenue and Price to Book Value are much lower than the results from Pratt's Stats private transactions approach. We think this has to do with the current financial and economic crisis. Our Pratts' Stats analysis contains transactions through January 20XX. On the other hand the stock prices of WQR and ANY have plummeted dramatically during 20XX and 20XX. WQR plunged from $\$ 38.89$ (January 3, 20XX) to $\$ 1.20$ (December 31, 20XX). ANY declined from $\$ 5.85$ (January 3, 20XX) to $\$ 1.41$ December 31, 20XX). For conservative purposes, we give $100 \%$ of weight to the Price/Sales. Thus, the Public Guideline Company Method results in an estimated equity value of \$7,496,327.

## Commentary to Table V-4: Reconciliation of FMV

Table V-4 is a summary of the indicated values determined from each appraisal method. The various indications of value are weighted in order to arrive at a final estimate of value.

## Asset Approach

As of December 31, 20XX, the book value is $\$ 5.0$ million (C7).

## Income Approach

The income approach generated a FMV- illiquid control basis of $\$ 38.6$ million (C9) as of December 31, 20XX.

## Market Approach

The Transaction Method (aka Guideline M\&A Method) included using private guideline companies from Pratt's Stats and generated a FMV of $\$ 39.4$ million (C11). The Public Guideline Company Method generated a FMV of $\$ 7.5$ million (C12).

## Weighting

Since each approach has its own validity, our starting position is to weight each one equally, or one-third. While the premise of value for the income and market approach is going concern, the asset approach is used more to determine the value of the company in liquidation. In other words, the Asset Approach is used to ascertain whether the Company is worth more "dead or alive." If the Asset Approach with liquidating values yields a higher indication of fair market value than the Income and Market Approaches, i.e., the company is more valuable in liquidation than in operation, then a control shareholder would be wise to liquidate the Company, and the Asset Approach should dominate the other two approaches. However, a minority interest cannot force liquidation. Thus, the asset approach is only relevant when we value a control interest, since only a control interest has access to the value locked in the assets.

In our case, the asset approach yields a lower FMV than the income and the market approaches. Thus, we do not give any weight to the asset approach. We weight the income and market approaches equally. Within the market approach, we applied the Guideline M\&A Method-Pratt's Stats and the Public Guideline Company Method. We give equal weight to both of them.

The weighted average FMV of a $100 \%$ interest in the firm on an illiquid control basis is $\$ 31,036,066$ (E13), which we round to $\$ 31,040,000$ (E14).

## Conclusion

In our opinion, subject to the Statement of Limiting Conditions, the fair market value of a $100 \%$ common stock interest in the Company as of December 31, 20XX is $\mathbf{\$ 3 1 , 0 4 0 , 0 0 0}$.

## VI. Appendix

## Published Research on Marketability Discounts

In support of the marketability adjustment, the following is a summary of the evidence for marketability discounts found in published research.

## Marketability Discounts Evidenced by prices of Restricted Stocks

A "restricted stock" is identical to the freely-traded stock of a public company except that it is restricted from sale on the open market for a period of time. Because relative marketability is the only difference between the restricted stock and unrestricted stock in the same company, this difference provides evidence of the price discount between a freely marketable share and one that is identical but subject to restricted marketability.

## SEC Institutional Investor Study

In a major study of institutional investor actions, one topic was the amount of discount at which transactions in letter stock occurred compared to the prices of identical but unrestricted stock on the open market. The SEC study, which summarized observed discounts from open market prices on letter stock transactions by the market in which the unrestricted stock traded, found an overall mean discount of 25.8 percent. For non-operating OTC companies, which are more likely to resemble most closely held companies, the mean discount was 32.6 percent.

## Gelman Study

In 1972, Milton Gelman published a study of prices paid for restricted securities by four closed-end investment companies specializing in restricted securities investments. From 89 transactions between 1968 and 1970, Gelman found that both the arithmetic average and median discounts were 33 percent and that almost 60 percent of the purchases were at discounts of 30 percent or higher.

## Trout Study

In a study of 60 letter stock purchases by mutual fund companies from 1968 to 1972, Robert Trout found an average discount of 33 percent for restricted stock from freely traded stock.

## Maroney Study

In an article published in the March 1973 issue of Taxes, Robert E. Maroney presented the results of a study of the prices paid for the restricted securities by 10 registered investment companies. Moroney's study reflected 146 purchases and showed an average discount of 35.6 percent.

## Mather Study

J. Michael Mather compared prices paid for restricted stocks with the market prices of their unrestricted counterparts. Mather's analysis, which covered the period 1969 through 1973 showed an average discount for marketability of 35.4 percent.

## Standard Research Consultants Study

In 1983, Standard Research Consultants ("SRC") analyzed recent private placements of common stock to test the current applicability of the previously discussed SEC Institutional Investor Study. SRC studied 28 private placements of restricted common stock from October 1978 through June 1982 revealing a median discount of 45 percent.

## Williamette Management Associates Study

Williamette analyzed 33 private placements of restricted stocks for the period January 1, 1981 through May 31, 1984. The median discount for the restricted stock transactions compared to the prices of their freely tradable counterparts was 31.2 percent

## Silber Study

In a 1991 article in the Financial Analysts Journal, William J. Silber presented the results of an analysis of 69 private placements of common stock of publicly traded companies between 1981 and 1988. Silber found that the average discount was 34 percent

## FMV Opinions, Inc. Study

An article in the January/February 1994 issue of Estate Planning referenced a study by FMV Opinions, Inc. that examined over 100 restricted stock transactions from 1979 through April 1992. The FMV study found a mean discount of only 23 percent.

## Management Planning, Inc. Study

Management Planning performed a study entitled, "Analysis of Restricted Stocks of Public Companies: 1980-1995, which covered a total of 49 transactions after eliminations for various factors. These results arrived at an average marketability discount of 27.7 percent.

## VII. Statement of Limiting Conditions

This appraisal is subject to the following assumptions and limiting conditions, in conjunction with the previously presented Certification section:
(1) We have relied on the accuracy of the reviewed financial statements (20XX-20XX) and compiled financial statements (20XX-20XX) by Michael Mann \& Company, provided by Jim Johnson, CEO. We have accepted the above financial data as correct without further verification as though they fairly and accurately represent the financial condition and activities of the Company. This information has been provided to us and is the responsibility of the client.
(2) All other information used in this report is from sources we deem reliable. We have accurately reflected such information in this report; however, we make no representation as to our sources' accuracy or completeness and have accepted their information without further verification.
(3) Neither our engagement nor this report can be relied upon to disclose any fraud, misrepresentation, deviations from Generally Accepted Accounting Principles, or other errors or irregularities.
(4) The conclusions are based upon our review and analysis of documents and information provided. We visited the Company's physical premises in Anytown, XX and met with Management. We assume that the present owners would continue to maintain the character and integrity of the enterprise through any sale, reorganization, or diminution of the owners' participation or equity interest.
(5) All claims to property have been assumed to be valid and no investigation or consideration of legal title or any existing liens or encumbrances, which may be against the assets, were undertaken except as may be stated in this report.
(6) We have not considered the existence of potential environmental liabilities, which may or may not be present on the underlying property. This includes real estate either owned or leased by the Company. Therefore, no responsibility can be taken for hidden or unapparent conditions of the property or potential claims against the Company.
(7) Our opinion of value in this report is valid only for the stated purposes, and only as of the valuation date specified. The fair market value, as determined within our report, shall not be used for other purposes, size interests, or dates without our written permission.
(8) This report reflects facts and conditions existing at the valuation date. Subsequent events and conditions have not been considered unless specifically noted and discussed in the report. We have no obligation to update our report for any other subsequent events and conditions.
(9) The estimate of fair market value established by this report may rely on estimated values for some assets of the Company if independent appraisals for these assets are not available. Where such values are used in this appraisal no warranty is made with respect to these values. If these values are incorrect, the resulting estimate of the value of the subject ownership interest may be affected.
(10) An appraisal is not a legal or tax opinion. Its purpose is to estimate value according to the applicable standard of value. The appraiser assumes no responsibility whatsoever for legal or tax matters relative to its finding. Values are stated without reference to applicable legal or tax claims unless so noted.
(11) Though some similarities exist between value as used for this purpose and others, it would be incorrect to use the fair market value as determined within our report for any other purposes due to specific timing, performance, and marketability issues that arise in evaluating the fair market value of a company. Accordingly, any such use of the value as determined within this report for other purposes would be inaccurate and possibly misleading and no such use shall be made by the Company.
(12) Our determination of fair market value does not represent investment advice of any kind to any person and does not constitute a recommendation as to the purchase or sale of shares of the Company or as to any other course of action.
(13) Future services regarding the subject matter of this report, including, but not limited to, testimony or attendance in court shall not be required of California Business Valuations, Inc. unless previous arrangements have been made in writing.
(14) Neither all nor any part of the contents of this report shall be conveyed to the public through advertising, public relations, news, sales, mail, direct transmittal, or other media without the prior written consent and approval of California Business Valuations, Inc.
(15) All users that are not directly involved with the purpose of this study are considered unintended users and should not rely on the information contained in this report without the advice of their attorney or accountant. This report may not be distributed in part, as only a thorough reading of this report can accurately convey the logic contained within. Excerpts taken out of context can be dangerously misleading and are therefore forbidden without the written consent of California Business Valuations, Inc.

## VIII. Appraiser's Qualifications

Daniel Jordan, ASA, CBA, CPA, MBA, is the Managing Principal of California Business Valuations, Inc., specializing in the valuation of closely held businesses and intangible assets. Mr. Jordan provides business valuation services full time since 2000.

In addition to his CPA, Mr. Jordan has achieved multiple professional accreditations. He is an Accredited Senior Appraiser (ASA) and a Certified Business Appraiser (CBA). He earned his MBA Degree in Finance and Accounting from the Heinrich-Heine-University of Düsseldorf, Germany. Additionally, Mr. Jordan has published articles on valuation-related matters, lectured seminars, and provided expert testimony in court.

Mr. Jordan has been working for leading valuation firms. Prior to California Business Valuations, he worked nine years for Abrams Valuation Group, Inc. under the direct supervision of Jay Abrams, a nationally known authority in valuing closely-held companies who has written extensive material that is used in the profession. Mr. Jordan has assisted in the writing of Abrams' book "How To Value Your Business And Increase Its Potential", published by McGraw-Hill, which is also noted in the book. Mr. Jordan plays an integral role in valuations and litigation support work.

Mr. Jordan has played an integral role in valuations and transaction support work and has provided valuation/financial consulting services to clients representing a variety of organizations, from small entrepreneurs and family limited partnerships to firms with revenues of up to $\$ 246$ million, including the following:

- Mergers \& Acquisitions and Sales
- Venture Capital Funding
- Private Placements
- Shareholder Buy/Sell Agreements
- Debt Instruments (Notes, Viatical Settlement)
- Intangible Assets (Patents, Economic Damages, Non-compete Agreement)
- Purchase Price Allocation (SFAS 141)
- Litigation Settlement
- Estate, Income \& Gift Tax Reporting
- Financial Reporting

Industries that he has worked on include private equity, casinos, insurance, computer software, textile, auto repair, line tester technology, food manufacturer and broker, asset management, electronics manufacturers, furniture manufacturing, embroidery \& printing, retail pharmacy,
internet start-up, restaurants, art collection, internet mortgage leads, internet automobile and home improvement leads, manufacture of custom scientific equipment, swim wear, accounting practice, commodities, construction, various distributors of different lines of business, jewelry, etc.

## Books/Articles

- Assisted with the writing of How to Value Your Business and Increase Its Potential, Jay Abrams, McGraw-Hill, 2005.
- "Superiority of Regression Analysis over Ratio Analysis", Business Appraisal Practice, Fall 2007, p. 27-31.


## Lecture Summary

- "Superiority of Regression Analysis over Ratio Analysis", New York Sate Society of CPA’s, Business Valuation Committee, New York, NY, October 2007.
- "Understanding Business Appraisals", New York Legal Assistance Group, Inc., New York, NY, November 2008.
- "A Fresh Look at BV Theory", New York Association of Business Brokers, Tarrytown, NY, April 2009.
- "Business Valuation: Discounts and Premiums", American Association of AttorneyCertified Public Accountants, Uncasville, CT, May 2010.


## Business Valuation Education

- International Appraisal Conference of The American Society of Appraisers, San Diego, August 2002 (27 CPE Hours)
- Mastering Appraisal Skills for Valuing the Closely Held Business - Part A. Instructor: Paul Hyde, The IBA, San Diego, March 2005 (32 CPE Hours)
- Mastering Appraisal Skills for Valuing the Closely Held Business - Part B. Instructor: Rand M. Curtiss, The IBA, Cleveland, July 2005 (32 CPE Hours)
- Report Writing. Instructor: Steven Schroeder, The IBA, St. Louis, August 2005 (16 CPE Hours)
- Preparation For the CBA Exam. The IBA, Phoenix, November, 2005 (16 CPE Hours)
- Uniform Standards of Professional Appraisal Practice (USPAP): Instructor: Andrew Mantowani. Ivy Real Estate Education, New York, February 2006 (15 CPE Hours)
- International Appraisal Conference of The American Society of Appraisers, New York, August 2006 (6.5 CPE Hours)
- Valuation for Financial Accounting (FASB 141/142/144). Instructor: William Johnston, ASA. Center for Advanced Valuation Studies (CAVS), New York, August 2006 (7 CPE Hours)
- Advanced Financial Statement Analysis for Appraisers - Making the Calls, Instructor: Mike Adhikari, The IBA, Las Vegas, January 2008 (8 CPE Hours)
- Advanced Case Studies: Practical Applications, Instructor: Dennis Bingham, The IBA, January 2008 (16 CPE Hours)
- Valuing Intangibles, Instructor: Rob Schlegel, The IBA, January 2008 (8 CPE Hours)
- Forensic Accounting for Business Appraisers. Instructor: Dr. Laura Tindall, The IBA, Louisville, KY, July 2008 (16 CPE Hours)
- Business Appraisal for Divorce, Instructor: Rob Schlegel, The IBA, July 2008 (8 CPE Hours)
- Marketing Your Practice-Making the Phone Ring, Instructor: KC Conrad, The IBA, August, 2008 (8 CPE Hours)
- Advanced Planning Seminar -Estate \& Business Planning, New York, April 20, 2009 (7 CPE Hours)
- Estate Planners Day 2009, Estate Planning Council of NYC, New York, May 6, 2009 (7 CPE Hours)
- $14^{\text {th }}$ Annual Multi-State ESOP Conference of The ESOP Association, Scranton, Pennsylvania, September 2009
- ESOP Appraisals, Instructor: Chris Best, The IBA, November 9, 2009 (8 CPE Hours)
- ESOP Conference of The ESOP Association, Las Vegas, Nevada, November 2009 (12 CPE Hours)
- $44^{\text {th }}$ Annual Heckerling Institute on Estate Planning, Orlando, January 25-29, 2010 (33.5 CPE Hours)
- $45^{\text {th }}$ Annual Heckerling Institute on Estate Planning, Orlando, January 10-14, 2011 (33 CPE Hours)


## Member - Professional Organizations

- The Institute of Business Appraisers, Inc. (IBA)
- The American Society of Appraisers (ASA)
- National Business Valuation Group, LLC
- Los Angeles Estate Planning Council
- The ESOP Association


## IX. Tables

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Historical Balance Sheets
Common Size Balance Sheets
Historical Income Statements
Common Size Income Statements
Financial Ratios
Comparative Ratio Analysis
Discounted Cash Flow Calculation
Calculation of Discount Rate
Discount for Lack of Marketability by Avg Firm Size
Pratt's Stats
IBA Data
Public Guideline Company Method (PGCM)
Calculation of FMV using PGCM
Reconciliation of FMV

|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-1 <br> ABC Corp. <br> Balance Sheets [1] |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | Fiscal Year Ending 12/31 | 20XX | 20XX | 20XX | 20XX | 20XX |
| 6 | Cash | X,501,965 | X,703,435 | X,993,177 | X,665,220 | X,812,602 |
| 7 | A/R | X,348,238 | XX,130,694 | XX,192,705 | XX,750,086 | XX,382,729 |
| 8 | Investments |  | 2,311,282 | 1,681,536 | 109,372 | 109,371 |
| 9 | Other Receivables | 386,697 | 3,859,838 | 535,054 | 395,077 |  |
| 10 | Employee Loans |  |  |  | 92,544 | 553,944 |
| 11 | Prepaid Expenses \& Other Current Assets | 157,371 | 117,051 | 32,310 | 5,181 | 774,873 |
| 12 | Shareholder's Loans |  |  | 4,380,827 |  | 3,883,118 |
| 13 | Total Current Assets | XX,394,271 | XX,122,300 | XX,815,609 | XX,017,480 | XX,516,637 |
| 14 | Property \& Equipment |  |  |  |  |  |
| 15 | Fixtures \& Equipment | 7,454,453 | 8,323,939 | 12,099,527 | 9,492,037 |  |
| 16 | Accum. Depreciation | (2,330,848) | (3,264,272) | (4,404,535) |  |  |
| 17 | Net Fixed Assets | 5,123,605 | 5,059,667 | 7,694,992 | 9,492,037 | 8,322,002 |
| 18 | Security Deposits | 53,933 | 65,833 | 143,582 | 145,282 | 229,937 |
| 19 | Total Assets | XX,571,809 | XX,247,800 | XX,654,183 | XX,654,799 | XX,068,576 |
| 20 | A/P | X,752,212 | X,339,765 | X,776,501 | X,043,658 | X,952,413 |
| 21 | Installment Obligation - Short term portion |  | 167,072 | 167,072 | 29,630 | 1,000,000 |
| 22 | Deferred Revenue | XX,992,850 | XX,709,526 | XX327,277 | XX,111,769 | XX,269,376 |
| 23 | Installment Loans Payable | 537,784 | 645,086 | 1,059,854 | 1,533,695 | 1,432,037 |
| 24 | Officers' Loan Payable | 48,338 | 34,544 |  |  |  |
| 25 | Accrued Expenses \& Other Current Liab | 23,830 | 1,649,702 | 882,469 | 1,293,491 |  |
| 26 | Total Current Liabilities | XX,355,014 | XX,545,695 | XX,213,173 | XX,012,243 | XX,653,826 |
| 27 | Notes Payable - Long Term Portion |  | 218,266 | 40,409 |  | 833,333 |
| 28 | Installment Loans Payable | 727,764 | 429,789 | 2,036,764 | 2,838,129 | 1,545,685 |
| 29 | Customer Deposits Payable | 50,000 | 60,000 | 73,000 | 54,000 | 19,000 |
| 30 | Officers' Loan Payable-subordinated | 640,000 |  |  |  |  |
| 31 | Total Long Term Liabilities | 1,417,764 | 708,055 | 2,150,173 | 2,892,129 | 2,398,018 |
| 32 | Total Liabilities | XX,772,778 | XX,253,750 | XX,363,346 | XX,904,372 | XX,051,844 |
| 33 | Capital Stock | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| 34 | Additional Paid-In Capital | X,855,000 | X,855,000 | X,855,000 | X,855,000 | X,855,000 |
| 35 | Retained Earnings | X,941,031 | X,136,050 | X,432,837 | X,892,427 | X,158,732 |
| 36 | LT Debt (Stockholder Loan) |  |  |  |  |  |
| 37 | Total Equity | X,799,031 | X,994,050 | X,290,837 | X,750,427 | X,016,732 |
| 38 | Total Liabilities \& Equity | XX,571,809 | XX,247,800 | XX,654,183 | XX,654,799 | XX,068,576 |
| 39 |  |  |  |  |  |  |
| 40 | [1] Source: Reviewed financial statements Michael Mann \& Company, provided by | $\begin{aligned} & \text { 20XX-20XX) al } \\ & \text { im Johnson, C } \end{aligned}$ | and compiled fin O. | ancial stateme | nts (20XX-20XX) | X) by |


|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-1A <br> ABC Corp. <br> Size Balance Sheets |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | Fiscal Year Ending 12/31 | 20XX | 20XX | 20XX | 20XX | 20XX |
| 6 | Cash | 18.9\% | 26.3\% | 16.8\% | 18.7\% | 11.2\% |
| 7 | A/R | 50.3\% | 34.6\% | 42.6\% | 52.6\% | 48.1\% |
| 8 | Investments | 0.0\% | 7.9\% | 4.7\% | 0.3\% | 0.3\% |
| 9 | Other Receivables | 2.1\% | 13.2\% | 1.5\% | 1.1\% | 0.0\% |
| 10 | Employee Loans | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.6\% |
| 11 | Prepaid Expenses \& Other Current Assets | 0.8\% | 0.4\% | 0.1\% | 0.0\% | 2.3\% |
| 12 | Shareholder's Loans | 0.0\% | 0.0\% | 12.3\% | 0.0\% | 11.4\% |
| 13 | Total Current Assets | 72.1\% | 82.5\% | 78.0\% | 73.0\% | 74.9\% |
| 14 | Property \& Equipment | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 15 | Fixtures \& Equipment | 40.1\% | 28.5\% | 33.9\% | 26.6\% | 0.0\% |
| 16 | Accum. Depreciation | -12.6\% | -11.2\% | -12.4\% | 0.0\% | 0.0\% |
| 17 | Net Fixed Assets | 27.6\% | 17.3\% | 21.6\% | 26.6\% | 24.4\% |
| 18 | Security Deposits | 0.3\% | 0.2\% | 0.4\% | 0.4\% | 0.7\% |
| 19 | Total Assets | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| 20 | A/P | 9.4\% | 18.3\% | 19.0\% | 2.9\% | 5.7\% |
| 21 | Notes payable - Short term portion | 0.0\% | 0.6\% | 0.5\% | 0.1\% | 2.9\% |
| 22 | Deferred Revenue | 59.2\% | 50.3\% | 51.4\% | 62.0\% | 65.4\% |
| 23 | Installment Loans Payable | 2.9\% | 2.2\% | 3.0\% | 4.3\% | 4.2\% |
| 24 | Officers' Loan Payable | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% |
| 25 | Accrued Expenses \& Other Current Liab | 0.1\% | 5.6\% | 2.5\% | 3.6\% | 0.0\% |
| 26 | Total Current Liabilities | 71.9\% | 77.1\% | 76.3\% | 73.0\% | 78.2\% |
| 27 | Notes Payable - Long Term Portion | 0.0\% | 0.7\% | 0.1\% | 0.0\% | 2.4\% |
| 28 | Installment Loans Payable | 3.9\% | 1.5\% | 5.7\% | 8.0\% | 4.5\% |
| 29 | Customer Deposits Payable | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% |
| 30 | Officers' Loan Payable-subordinated | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 31 | Total Long Term Liabilities | 7.6\% | 2.4\% | 6.0\% | 8.1\% | 7.0\% |
| 32 | Total Liabilities | 79.5\% | 79.5\% | 82.4\% | 81.1\% | 85.3\% |
| 33 | Capital Stock | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 34 | Additional Paid-In Capital | 10.0\% | 6.3\% | 5.2\% | 5.2\% | 5.4\% |
| 35 | Retained Earnings | 10.5\% | 14.1\% | 12.4\% | 13.7\% | 9.3\% |
| 36 | LT Debt (Stockholder Loan) | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 37 | Total Equity | 20.5\% | 20.5\% | 17.6\% | 18.9\% | 14.7\% |
| 38 | Total Liabilities \& Equity | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |


|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-2 <br> ABC Corp. <br> Income Statements [1] |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 | Fiscal Year Ending 12/31 | 20XX | 20XX | 20XX | 20XX | 20XX |
| 7 | Revenues | XX,371,001 | XXX,287,937 | XXX,956,773 | XXX,886,086 | XXX,113,399 |
| 8 | Cost of Sales | 70,602,560 | 110,331,527 | 141,737,530 | 170,995,649 | 191,303,878 |
| 9 | Gross Profit | X,768,441 | XX,956,410 | XX,219,243 | XX,890,437 | XX,809,521 |
| 10 | SG\&A Expenses |  |  |  |  |  |
| 11 | Commissions | 419,043 | 675,259 | 1,274,719 | 1,739,398 | 2,421,583 |
| 12 | Advertising | 130,946 | 178,825 | 517,319 | 474,620 | 813,281 |
| 13 | Freight \& Delivery |  | 34,982 | 35,944 | 22,083 | 30,171 |
| 14 | Automobile \& Travel | 251,546 | 532,454 | 642,229 | 562,470 | 690,456 |
| 15 | Total Selling Expenses | 801,535 | 1,421,520 | 2,470,211 | 2,798,571 | 3,955,491 |
| 16 | Officer Salaries | 224,000 | 350,000 | 450,193 | 1,316,472 | 1,325,839 |
| 17 | Other Salaries | 1,306,126 | 2,393,433 | 4,397,687 | 5,951,005 | 7,330,978 |
| 18 | Rent | 303,829 | 609,338 | 618,430 | 619,443 | 627,772 |
| 19 | Professional Fees | 272,514 | 360,375 | 887,626 | 1,120,721 | 2,363,676 |
| 20 | Service Charges |  |  |  | 15,172 |  |
| 21 | Bank charges | 2,738 |  | 18,348 |  | 34,469 |
| 22 | Technical Support |  |  | 169,346 | 193,475 | 62,343 |
| 23 | Charitable contributions | 338,315 | 402,312 |  |  |  |
| 24 | Data processing |  | 61,193 | 84,953 | 40,464 | 42,297 |
| 25 | Shipping and Delivery | 34,036 |  |  |  |  |
| 26 | Maintenance and repairs | 280,094 | 270,316 | 180,227 | 186,982 | 656,034 |
| 27 | Equipment rental [2] | 22,184 |  | 8,590 | 8,058 | 1,060,462 |
| 28 | Employee Benefits | 181,398 | 253,151 | 407,899 | 485,902 | 589,354 |
| 29 | Employee Pension Expense |  |  |  | 142,579 | 275,319 |
| 30 | Utilities | 133,272 | 268,312 | 471,085 | 553,045 | 647,537 |
| 31 | Insurance | 49,638 | 64,044 | 185,414 | 151,390 | 360,274 |
| 32 | Licenses and permits | 19,498 | 2,840 | 33,489 | 26,275 | 34,956 |
| 33 | Office expense | 79,118 | 88,251 | 83,187 | 66,563 | 63,267 |
| 34 | Stationary and printing |  |  | 22,789 | 27,973 | 10,789 |
| 35 | Security and Protection | 44,927 | 93,393 | 217,492 | 152,788 | 180,052 |
| 36 | Dues \& Subscriptions | 18,843 | 53,033 | 12,596 | 8,306 | 17,228 |
| 37 | Telephone \& Internet | 54,777 | 89,006 | 120,832 | 161,543 | 176,108 |
| 38 | Payroll and Other Taxes | 155,287 | 248,003 | 456,775 | 443,012 | 539,613 |
| 39 | Total General \& Administrative Exper | 3,520,594 | 5,607,000 | 8,826,958 | 11,671,168 | 16,398,367 |
| 40 | Depreciation | 814,625 | 934,377 | 1,140,263 | 1,788,872 | 1,601,961 |
| 41 | Total Expenses | X,136,754 | X,962,897 | XX,437,432 | X,258,611 | XX,955,819 |
| 42 | Operating Income | 1,631,687 | 3,993,513 | 10,781,811 | 14,631,826 | 8,853,702 |
| 43 | Other Income | 4,772 |  |  |  |  |
| 44 | Interest Income |  | 76,370 | 320,624 | 64,568 | 48,332 |
| 45 | (Interest Expense) | (112,605) | $(146,444)$ | $(214,923)$ | $(261,191)$ | $(299,694)$ |
| 46 | Loss from investment in partnership int |  | $(78,718)$ |  |  |  |
| 47 | Extraordinary Loss |  |  | $(3,997,940)$ |  | $(2,000,000)$ |
| 48 | Gain (Loss) on Sale of Fixed Assets |  |  |  |  |  |
| 49 | Net Income Before Taxes | X,523,854 | X,844,721 | X,889,572 | XX,435,203 | X,602,340 |
| 50 | Income Taxes | XX,830 | X,649702 | XX9,296 | XXX,448 | XXX,000 |
| 51 | Net Income After Taxes | X,500,024 | X,195,019 | X,360,276 | X,730,755 | X,202,340 |
| 52 | Adjustments |  |  |  |  |  |
| 53 | Jim Johnson |  |  |  |  |  |
| 54 | + Owners' Comp (Jim) | \$ 239,000 | \$ 350,000 | \$ 450,193 | \$ 1,327,722 | 1,339,464 |
| 55 | + Est. Payroll Tax @ 8\% | \$ 19,120 | \$ 28,000 | \$ 36,015 | \$ 106,218 | \$ 107,157 |
| 56 | - Arm's-Length Comp (Jim) | \$ (510,508) | \$ $(596,592)$ | \$ $(675,581)$ | \$ $(784,271)$ | $(815,642)$ |
| 57 | - Est. Payroll Tax @ 8\% | \$ (40,841) | \$ $(47,727)$ | \$ $(54,046)$ | \$ $\quad(62,742)$ | \$ $(65,251)$ |
| 58 | Peter Johnson |  |  |  |  |  |
| 59 | + Owners' Comp (Peter Johnson) | \$ 78,240 | \$ 97,677 | \$ 273,849 | \$ 546,425 | 746,140 |
| 60 | + Est. Payroll Tax @ 8\% | \$ 6,259 | \$ 7,814 | \$ 21,908 | \$ 43,714 | \$ 59,691 |
| 61 | - Arm's-Length Comp (Peter) | $(358,495)$ | $(412,933)$ | $(461,901)$ | $(526,830)$ | $(547,903)$ |
| 62 | - Est. Payroll Tax @ 8\% | \$ (28,680) | \$ $(33,035)$ | \$ $(36,952)$ | \$ $(42,146)$ | \$ $(43,832)$ |
| 63 | Kara Johnson |  |  |  |  |  |
| 64 | + Owners' Comp (Kara Johnson) |  |  |  | \$ 160,175 | 274,368 |
| 65 | + Est. Payroll Tax @ 8\% |  |  |  | \$ 12,814 | \$ 21,949 |
| 66 | + Actual Rent | \$ 303,829 | \$ 609,338 | \$ 618,430 | \$ 619,443 | \$ 627,772 |
| 67 | - Arm's-Length Rent | \$ $(543,458)$ | \$ $(773,295)$ | \$ $(796,494)$ | \$ $(820,388)$ | $(845,000)$ |
| 68 | + Extraordinary Loss (row 47) |  |  | \$ 3,997,940 |  | 2,000,000 |
| 69 | + Charitable Contributions (row 23) | \$ 338,315 | \$ 402,312 | \$ | \$ | \$ |
| 70 | = Total Adjustments | $(497,217)$ | $(368,440)$ | 3,373,361 | 580,133 | 2,858,913 |
| 71 | Economic Net Inc Before Taxes | X,026,636 | X,476,280 | XX,262,933 | XX,015,336 | X,461,252 |
| 72 | Income Taxes @ 40\% (as if C corp) | -XXX,654 | -XXX,051 | -X,105,173 | -X,006,134 | -X,784,501 |


|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-2 <br> ABC Corp. <br> Income Statements [1] |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 | Fiscal Year Ending 12/31 | 20XX | 20XX | 20XX | 20XX | 20XX |
| 73 | Economic Net Income After Taxes | XXX,981 | X,085,768 | X,157,759 | X,009,201 | X,567,675 |
| 74 | Weights |  |  | 1 | 2 | 3 |
| 75 | Weighted ENIAT | \$ | \$ | \$ 6,157,760 | \$ 18,018,403 | \$ 17,030,255 |
| 76 | Aggregate Weighted ENIAT | \$ 41,206,418 |  |  |  |  |
| 77 | Total of Weights Applied | 6 |  |  |  |  |
| 78 | Weighted Avg. ENIAT | \$ 6,867,736 |  |  |  |  |
| 79 | [1] Source: Reviewed financial statements (20XX-20XX) and compiled financial statements (20XX-20XX) by Michael Mann \& Company, provided by Jim Johnson, CEO. <br> [2] The large jump of equipment rental in 2008 is because in prior years the equipment was recorded as an asset. Currently, the equipment is leased from the Company and when the lease expires, the Company buys it at market value and turns into an asset at that point. |  |  |  |  |  |
| 80 |  |  |  |  |  |  |
| 81 |  |  |  |  |  |  |
| 82 |  |  |  |  |  |  |
| 83 |  |  |  |  |  |  |
| 84 |  |  |  |  |  |  |
| 85 |  |  |  |  |  |  |


|  | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-2A |  |  |  |  |  |
| 2 | ABC Corp. |  |  |  |  |  |
| 3 | Common Size Income Statements |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 | Fiscal Year Ending 12/31 | 20XX | 20XX | 20XX | 20XX | 20XX |
| 7 | Revenues | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| 8 | Cost of Sales | 91.3\% | 90.2\% | 85.9\% | 84.7\% | 86.1\% |
| 9 | Gross Profit | 8.7\% | 9.8\% | 14.1\% | 15.3\% | 13.9\% |
| 10 | SG\&A Expenses |  |  |  |  |  |
| 11 | Commissions | 0.5\% | 0.6\% | 0.8\% | 0.9\% | 1.1\% |
| 12 | Advertising | 0.2\% | 0.1\% | 0.3\% | 0.2\% | 0.4\% |
| 13 | Freight \& Delivery | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 14 | Automobile \& Travel | 0.3\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% |
| 15 | Total Selling Expenses | 1.0\% | 1.2\% | 1.5\% | 1.4\% | 1.8\% |
| 16 | Officer Salaries | 0.3\% | 0.3\% | 0.3\% | 0.7\% | 0.6\% |
| 17 | Other Salaries | 1.7\% | 2.0\% | 2.7\% | 2.9\% | 3.3\% |
| 18 | Rent | 0.4\% | 0.5\% | 0.4\% | 0.3\% | 0.3\% |
| 19 | Professional Fees | 0.4\% | 0.3\% | 0.5\% | 0.6\% | 1.1\% |
| 20 | Service Charges | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 21 | Bank charges | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 22 | Technical Support | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% |
| 23 | Charitable contributions | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% |
| 24 | Data processing | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% |
| 25 | Shipping and Delivery | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 26 | Maintenance and repairs | 0.4\% | 0.2\% | 0.1\% | 0.1\% | 0.3\% |
| 27 | Equipment rental | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% |
| 28 | Employee Benefits | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.3\% |
| 29 | Employee Pension Expense | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% |
| 30 | Utilities | 0.2\% | 0.2\% | 0.3\% | 0.3\% | 0.5\% |
| 31 | Insurance | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.3\% |
| 32 | Licenses and permits | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% |
| 33 | Office expense | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% |
| 34 | Stationary and printing | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 35 | Security and Protection | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% |
| 36 | Dues \& Subscriptions | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% |
| 37 | Telephone \& Internet | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% |
| 38 | Payroll and Other Taxes | 0.2\% | 0.2\% | 0.3\% | 0.2\% | 0.1\% |
| 39 | Total General \& Administrative Exper | 4.6\% | 4.6\% | 5.4\% | 5.8\% | 7.4\% |
| 40 | Depreciation | 1.1\% | 0.8\% | 0.7\% | 0.9\% | 0.7\% |
| 41 | Total Expenses | 6.6\% | 6.5\% | 7.5\% | 8.1\% | 9.9\% |
| 42 | Operating Income | 2.1\% | 3.3\% | 6.5\% | 7.2\% | 4.0\% |
| 43 | Other Income | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 44 | Interest Income | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 0.0\% |
| 45 | (Interest Expense) | -0.1\% | -0.1\% | -0.1\% | -0.1\% | -0.1\% |
| 46 | Loss from investment in partnership int | 0.0\% | -0.1\% | 0.0\% | 0.0\% | 0.0\% |
| 47 | Extraordinary Loss | 0.0\% | 0.0\% | -2.4\% | 0.0\% | -0.9\% |
| 48 | Gain (Loss) on Sale of Fixed Assets | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 49 | Net Income Before Taxes | 2.0\% | 3.1\% | 4.2\% | 7.2\% | 3.0\% |
| 50 | Income Taxes | 0.0\% | 1.3\% | 0.3\% | 0.3\% | 0.2\% |
| 51 | Net Income After Taxes | 1.9\% | 1.8\% | 3.9\% | 6.8\% | 2.8\% |
| 52 | Adjustments |  |  |  |  |  |
| 53 | Jim Johnson |  |  |  |  |  |
| 54 | + Owners' Comp (Jim) | 0.3\% | 0.3\% | 0.3\% | 0.7\% | 0.6\% |
| 55 | + Est. Payroll Tax @ 8\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% |
| 56 | - Arm's-Length Comp (Jim) | -0.7\% | -0.5\% | -0.4\% | -0.4\% | -0.4\% |
| 57 | - Est. Payroll Tax @ 8\% | -0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 58 | Peter Johnson |  |  |  |  |  |
| 59 | + Owners' Comp (Peter Johnson) | 0.1\% | 0.1\% | 0.2\% | 0.3\% | 0.3\% |
| 60 | + Est. Payroll Tax @ 8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 61 | - Arm's-Length Comp (Peter) | -0.5\% | -0.3\% | -0.3\% | -0.3\% | -0.2\% |
| 62 | - Est. Payroll Tax @ 8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 63 | Kara Johnson |  |  |  |  |  |
| 64 | + Owners' Comp (Kara Johnson) | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% |
| 65 | + Est. Payroll Tax @ 8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |



|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Table IV-4 <br> Comparative Ratio Analysis - SIC Code \#4813 |  |  |  |
| 3 |  |  |  |  |
| 4 |  | Fintel [1] <br> Aggregate Data | $\begin{array}{\|r\|} \hline \text { Subject DATA } \\ 20 X X[2] \\ \hline \end{array}$ | Evaluation |
| 6 | Liquidity Ratios |  |  |  |
| 7 | Current Ratio | 1.8 | 1.0 | Negative |
| 8 | Quick Ratio | 1.1 | 1.0 | Neutral |
| 9 | Leverage Ratios |  |  |  |
| 10 | Debt Ratio |  | 0.9 | Negative |
| 11 | Debt/Equity | 0.4 | 5.8 | Negative |
| 12 | Coverage Ratio | 4.0 | 29.5 | Positive |
| 13 | Activity Ratios |  |  |  |
| 14 | Accounts Receivable Turnover | N/A | 13.6 | N/A |
| 15 | Inventory Turnover | 36.4 | N/A | N/A |
| 16 | Asset Turnover | 0.8 | 6.5 | Positive |
| 17 | Working Capital Turnover | 2.7 | -195.3 | Negative |
| 18 | Profitability Ratios [3] |  |  |  |
| 19 | Pre-Tax Profit Margin | 5.0\% | 3.0\% | Negative |
| 20 | Pre-Tax ROE | 12.0\% | 56.1\% | Positive |
| 21 | Pre-Tax ROA | 4.0\% | 9.5\% | Positive |
| 22 | [1] Source: First Research, Last Quartely Update 2/9//2009, SIC Code \#4813 for Telecommunication Services. We use the aggregate data, which contains 1,284 enterprises. |  |  |  |
| 23 |  |  |  |  |
| 24 |  |  |  |  |
| 25 |  |  |  |  |
| 26 | [2] We compare the subject's 20XX financial ratios to the industry data. |  |  |  |
| 27 | The subject's financial ratios are from Table IV-3, column E. |  |  |  |
| 28 |  |  |  |  |
| 29 | [3] These are based on unadjusted net income from Table IV-3 |  |  |  |




|  | A | B |
| :---: | :---: | :---: |
| 1 | Table V-1A Calculation of Discount Rate [1] Using Abrams' Log Size Model |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 | FMV Marketable Minority (Table V-1, B20) | \$31,815,908 |
| 6 | Constant | 41.060\% |
| 7 | Natural log (In) of Marketable Minority | 17.28 |
| 8 | X Coefficient | -1.176\% |
| 9 | B7 x B8 | -20.3\% |
| 10 | Total Calculated Discount Rate | 20.7\% |
| 11 | Reduction in Macro Economic Risk [2] | -2.0\% |
| 12 | Subjective Premium - Global financial and economic crisis | 3.0\% |
| 13 | Subjective Premium - Class Action Lawsuit | 2.0\% |
| 14 | Total Discount | 23.742\% |
| 15 | Total Discount Rate Rounded | 24\% |
| 16 | [1] Calculation is from Quantitative Business Valuation: A Mathematical Approach For Today's Professionals, Table 4-1, by Jay B. Abrams, McGraw-Hill, 2001, updated and based on returns from SBBI-2008 Yearbook, Ibbotson \& Associates, Inc., Chicago, IL, which contains stock market returns through 2007. |  |
| 17 |  |  |
| 18 |  |  |
| 19 |  |  |
| 20 |  |  |
| 21 |  |  |
| 22 | [2] Until very recently, the best assumption of future rates of return in the stock market have been |  |
| 23 | historical rates of return. Thus, B10 would be the correct rate of return to use as the discount rate. |  |
| 24 | However, a recent body of academic research is presenting compelling evidence that future returns should be lower than historical returns. Thus, we need to reduce our historical forecasts by our best estimate of the appropriate downward adjustment. |  |
| 25 |  |  |
| 26 |  |  |
| 27 |  |  |
| 28 | In "The Equity Premium," by Eugene Fama \& Kenneth French, Journal of Finance, April 2002, |  |
| 29 | p. 647-659, the authors forecast future returns will be lower than historical returns by approx. $4 \%$. |  |
| 30 | In "The Supply of Stock Market Returns," by Roger G. Ibbotson and Peng Chen, Yale ICF Working |  |
| 31 | Paper No. 00-44, the authors forecast future returns will be lower than historical returns only by $1 \%$. |  |
| 32 | In "The Declining Equity Premium: What Role Does Macroeconomic Risk Play?", by Martin Lettau, |  |
| 33 | Sydney C. Ludvigson, and Jessica A. Wachter, forthcoming in The Review of Financial Studies, http://www.econ.nyu.edu/user/ludvigsons/rgs.pdf, the authors demonstrate that |  |
| 34 |  |  |
| 35 | long-term decline in macroeconomic risk (standard deviation in growth of non-durables and services |  |
| 36 | and personal consumption expenditures) accounts for a significant portion of the decline in rates of return. They forecast a $2 \%$ decline. |  |
| 37 |  |  |
| 38 |  |  |
| 39 | It will take a long time to sort through the arguments and come to some consensus, if there ever |  |
| 40 | will be such a thing. Using professional judgment, we choose the $2 \%$ (B11) adjustment in the |  |
| 41 | meantime. Obviously, this creates uncertainty about values. |  |
| 42 |  |  |



|  | A | B | C | D | E | F | G | H | I | J | K | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 <br> 2 | Table V-2APratt's Stats-SIC Code \#4813-Telecommunications |  |  |  |  |  |  |  |  |  |  |  |
| 4 | BusinessDescription | NetSales | NetIncome | GrossProfit | EBITDA | EBIT | MVICPrice | MVICIS | MVIC/NI | MVIC/GP | $\begin{aligned} & \text { MVIC/EBITD } \\ & \text { A } \\ & \hline \end{aligned}$ | MVIC/EBIT |
| 5 | Distributor of Voice and Data Services | 10,427,101 | 2,393,640 | \$10,427,101 | \$4,874,844 | \$4,510,107 | 13,300,000 | 1.28 | 5.56 | 1.28 | 2.728292434 | 2.95 |
| 6 | Provider, Prepaid Phone Cards | 10,644,971 | 11,235 | \$1,246,727 | \$66,587 | \$36,282 | 5,000,000 | 0.47 | 445.04 | 4.01 | 75.08973223 | 137.81 |
| 7 | Telecommunications Services | 10,907,141 | 483,539 | \$3,747,748 | \$531,060 | \$474,444 | 4,259,750 | 0.39 | 8.81 | 1.14 | 8.021221708 | 8.98 |
| 8 | Provider, Prepaid Long Distance Services (Phone Cards) | 11,078,061 | 574,863 | \$1,661,128 | \$569,373 | \$552,251 | 6,150,000 | 0.56 | 10.70 | 3.70 | 10.80135517 | 11.14 |
| 9 | Provider of Local and Long Distance Telecommunication Services | 12,022,208 | 989,155 | \$5,406,888 | \$1,634,578 | \$1,159,890 | 10,760,004 | 0.90 | 10.88 | 1.99 | 6.582741234 | 9.28 |
| 10 | Local and Long Distance ResellerProviding Telephone Services and is also an Internet Service Provider | 13,525,472 | 68,384 | \$3,689,990 | NA | \$87,417 | 8,713,355 | 0.64 | 127.42 | 2.36 | NA | 99.68 |
| 11 | Telecommunications Construction Contractor | 15,008,780 | 518,549 | \$4,548,181 | \$1,654,876 | \$1,091,569 | 17,284,586 | 1.15 | 33.33 | 3.80 | 10.44464117 | 15.83 |
| 12 | Provides Business and Residential Long Distance Telephone Service,Cellular Airtime Internet Dial Up,Webdesign, Web Hosting Services, and Paging and Equipment Sales. | 15,813,491 | 23,958 | \$8,782,258 | \$1,339,259 | \$1,031,395 | 4,926,882 | 0.31 | 205.65 | 0.56 | 3.67881194 | 4.78 |
| 13 | Reseller, of Switchless Long Distance Services | 16,449,000 | 366,000 | \$4,600,000 | \$952,000 | \$721,000 | 9,500,000 | 0.58 | 25.96 | 2.07 | 9.978991597 | 13.18 |
| 14 | Provides Local Telephone Service and Access to Long-Distance Telephone Service through its Local Exchange Network | 16,565,919 | 3,429,436 | \$13,749,652 | \$5,189,063 | \$2,117,705 | 78,000,000 | 4.71 | 22.74 | 5.67 | 15.03161553 | 36.83 |
| 15 | Provides Multiple Source LongDistance Services | 21,142,000 | 1,386,000 | \$7,746,000 | \$2,426,000 | \$2,177,000 | 7,500,000 | 0.35 | 5.41 | 0.97 | 3.091508656 | 3.45 |
| 16 | Telecommunications (Voice, Data and Internet Services) | 22,047,203 | 657,840 | \$22,047,203 | \$5,741,205 | \$2,254,060 | 37,800,000 | 1.71 | 57.46 | 1.71 | 6.583983676 | 16.77 |
| 17 | Provider of Outsourced Telecommunications Management Services | 24,198,265 | 11,964,793 | \$6,890,506 | \$1,252,464 | \$715,192 | 4,168,387 | 0.17 | 0.35 | 0.60 | 3.328149152 | 5.83 |
| 18 | Contractor for Service and Maintenance Work Associated with the Telephone Industry | 24,419,000 | 2,398,000 | \$5,965,000 | \$4,432,000 | \$4,105,000 | 24,000,000 | 0.98 | 10.01 | 4.02 | 5.415162455 | 5.85 |
| 19 | Sells Prepaid Telephone Cards to Distributors and Small Retail Establishments | 35,156,895 | 10,592 | \$423,226 | \$26,222 | \$21,772 | 2,984,000 | 0.08 | 281.72 | 7.05 | 113.7975746 | 137.06 |
| 20 | Provider of Telecommunications and Network Solutions | 43,199,000 | 705,000 | \$7,973,000 | \$4,095,000 | \$1,303,000 | 36,593,000 | 0.85 | 51.90 | 4.59 | 8.936019536 | 28.08 |
| 21 | Provider of Long-Distance Telephone Service | 65,588,925 | 2,337,609 | \$65,588,925 | \$2,355,524 | \$109,564 | 51,487,500 | 0.79 | 22.03 | 0.79 | 21.85819376 | 469.93 |




|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Table V-3 <br> Public Guideline Company Method (PGCM) |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 | Guideline Company [1] | Comparable [2] | Reason |  |
| 5 | Action Industries, Inc. (ACTN.OB) | No | OTC |  |
| 6 | Advance Nanotech, Inc. (AVNA.OB) | No | OTC |  |
| 7 | American Tower Corp. (AMT) | No | Too different |  |
| 8 | Asian Dragon Group Inc. (AADG.OB) | No | OTC |  |
| 9 | Brasil Telecom S.A. (BTM) | No | Too different |  |
| 10 | Brookside Technology Holdings (BKSD.OB) | No | OTC |  |
| 11 | C2 Global Technologies Inc. (COBT.OB) | No | OTC |  |
| 12 | Champion Communication Service (CCMS.OB) | No | OTC |  |
| 13 | China Broadband, Inc. (CBBD.OB) | No | OTC |  |
| 14 | China Crescent Enterprises, In (CCSE.OB) | No | OTC |  |
| 15 | China Techfaith Wireless Commu (CNTF) | No | Too different |  |
| 16 | Cogent Communications Group In (CCOI) | No | Too different |  |
| 17 | Compliance Systems Corp. (COPI.OB) | No | OTC |  |
| 18 | Crown Castle International Cor (CCI) | No | Too different |  |
| 19 | DataMEG Corporation (DTMG.OB) | No | OTC |  |
| 20 | Dialpoint Communications Corp (DLPC.OB) | No | OTC |  |
| 21 | EarthLink Inc. (ELNK) | No | Too Big/Too Different |  |
| 22 | Embarq Corp. (EQ) | No | Too different |  |
| 23 | GeoEye, Inc. (GEOY) | No | Too different |  |
| 24 | Global Crossing Ltd. (GLBC) | No | Too Big |  |
| 25 | Global Telecom \& Technology, I (GTLT.OB) | No | OTC |  |
| 26 | Glowpoint, Inc. (GLOW.OB) | No | OTC |  |
| 27 | Hughes Communications, Inc. (HUGH) | No | Too different |  |
| 28 | Hungarian Telephone and Cable (HTC) | No | Too different |  |
| 29 | WQR Corporation (WQR) [3] | Yes |  |  |
| 30 | Internet Gold Golden Lines Ltd (IGLD) | No | Too different |  |
| 31 | ITC^DeltaCom Inc. (ITCD.OB) | No | OTC |  |
| 32 | IVI Communications Inc. (IVII.OB) | No | OTC |  |
| 33 | Level 3 Communications Inc. (LVLT) | No | Too Big/Too Different |  |
| 34 | MDU Communications Internation (MDTV.OB) | No | OTC |  |
| 35 | Medialink Worldwide Inc. (MDLK) | No | Too different |  |
| 36 | MER Telemanagement Solutions L (MTSL) | No | Too different |  |
| 37 | Metro One Telecommunications I (INFO.OB) | No | OTC |  |
| 38 | Mobilepro Corp. (MOBL.OB) | No | OTC |  |
| 39 | Montavo, Inc. (MTVO.OB) | No | OTC |  |
| 40 | Narrowstep Inc (NRWS.OB) | No | OTC |  |
| 41 | NeuStar, Inc. (NSR) | No | Too different |  |
| 42 | NexHorizon Communications, Inc (NXHZ.OB) | No | OTC |  |
| 43 | Nextwave Wireless Inc. (WAVE) | No | Too different |  |
| 44 | Nighthawk Systems Inc. (NIHK.OB) | No | OTC |  |
| 45 | ORBCOMM, Inc. (ORBC) | No | Too different |  |
| 46 | PAETEC Holding Corp. (PAET) | No | Too different |  |
| 47 | Pervasip Corp. (PVSP.OB) | No | OTC |  |
| 48 | Preferred Voice Inc. (PRFV.OB) | No | OTC |  |
| 49 | Premiere Global Services, Inc. (PGI) | No | Too different |  |
| 50 | Research In Motion Ltd. (RIMM) | No | Too Big/Too Different |  |
| 51 | RRSat Global Communications Ne (RRST) | No | Too different |  |
| 52 | Secured Digital Applications I (SDGL.OB) | No | OTC |  |
| 53 | Siena Technologies, Inc. (SIEN.OB) | No | OTC |  |
| 54 | SkyTerra Communications, Inc. (SKYT.OB) | No | OTC |  |
| 55 | Switch \& Data Facilities Co., (SDXC) | No | Too different |  |


|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |
| 2 | Public Guide | Method | (PGCM) |  |
| 3 |  |  |  |  |
| 56 | Syniverse Holdings Inc. (SVR) | No | Too different |  |
| 57 | Telecom Argentina S A (TEO) | No | Too Big |  |
| 58 | Telecom Italia SpA (TI-A) | No | Too Big |  |
| 59 | Telestone Technologies Corp. (TSTC) | No | Too different |  |
| 60 | Telkom SA Ltd. (TKG) | No | Too Big |  |
| 61 | Telkonet Inc. (TKO) | No | Too different |  |
| 62 | Telmex Internacional, S.A.B. d (TII) | No | Too Big |  |
| 63 | TerreStar Corporation (TSTR) | No | Too different |  |
| 64 | TowerStream Corporation (TWER) | No | Too different |  |
| 65 | Vemics, Inc. (VMCI.OB) | No | OTC |  |
| 66 | Vonage Holdings Corporation (VG) | No | Too different |  |
| 67 | Worldwide Strategies Inc. (WWSG.OB) | No | OTC |  |
| 68 | WPCS International Incorporate (WPCS) | No | Too different |  |
| 69 | Xfone, Inc. (XFN) | No | Too different |  |
| 70 | ZVUE Corporation (ZVUE) | No | Too different |  |
| 71 | 012 Smile.Communications Ltd. (SMLC) | No | Too different |  |
| 72 | [1] Source: finance.yahoo.com: Industry: Diversified Communication Services <br> [2] Only one of the above guideline companies (IDT) is comparable to GSI. The other ones are either too big, traded over-the-counter, or are or not in the same business. <br> [3] For the purpose of this sample report, we are using a fictitious name for the selected company. |  |  |  |
| 73 |  |  |  |  |
| 74 |  |  |  |  |
| 75 |  |  |  |  |
| 76 |  |  |  |  |
| 77 |  |  |  |  |
|  |  |  |  |  |


|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Table V-3A <br> Calculation of FMV using PGCM |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 | Price/Sales |  |  | Weight | Wtd Avg |
| 4 |  |  |  |  |  |
| 5 | ABC Revenue Stream (Table IV-2 F7) |  | 222,113,399 |  |  |
| 6 | Selected Multiple |  | 0.03 |  |  |
| 7 | Estimated Equity Value (Mkt-Min Basis) |  | 6,663,402 |  |  |
| 8 | Less Discount-Lack of Marketability @ 10\% [1] |  | -666,340 |  |  |
| 9 | FMV-Illiquid Minority |  | 5,997,062 |  |  |
| 10 | Plus: Control Premium @ 25\% [2] |  | 1,499,265 |  |  |
| 11 | Indication of Value (Illiquid Control) |  | 7,496,327 | 100\% | 7,496,327 |
| 12 |  |  |  |  |  |
| 13 | Price/Book Value |  |  |  |  |
| 14 | ABC Book Value (Table IV-1 F37) |  | 5,016,732 |  |  |
| 15 | Selected Multiple |  | 0.36 |  |  |
| 16 | Estimated Equity Value |  | 1,806,024 |  |  |
| 17 | Less Discount-Lack of Marketability @ 10\% [1] |  | -180,602 |  |  |
| 18 | FMV-Illiquid Minority |  | 1,625,421 |  |  |
| 19 | Plus: Control Premium @ 25\% [2] |  | 406,355 |  |  |
| 20 | Indication of Value (Illiquid Control) |  | 2,031,776 | 0\% |  |
| 21 |  |  |  |  |  |
| 22 | Total |  |  |  | 100\% | 7,496,327 |
| 23 |  |  |  |  |  |
| 24 | [1] In Table V-1, we applied a 20.5\% DLOM. We are conservative and apply only a 10\% DLOM |  |  |  |  |
| 25 | in this method. |  |  |  |  |
| 26 | [2] See Table V-1, footnote 5. |  |  |  |  |
| 27 |  |  |  |  |  |  |  |  |




[^0]:    ${ }^{1}$ International Glossary of Business Valuation Terms. IRS Treasury Regulations, Estate Tax Regulations 20.2031-1 and Gift Tax Regulations 25.2512-1 define the term similarly.

[^1]:    ${ }^{2}$ As of March 2009, GHI is owned by the ERT Holding Trust, but continues to purchase its telecommunications services from JKL only.

[^2]:    ${ }^{3}$ Per Management, the name of the Company is confidential under court order.

[^3]:    ${ }^{4}$ Released on November 17, 2008. Available at http://www.philadelphiafed.org/econ/spf/index.cfm
    ${ }^{5}$ Released on January 5 ,2009. Available at http://www.federalreserve.gov/Releases/H15/20090105/
    ${ }^{6}$ Source: Economic outlook and financial markets by Chairman Ben S. Bernanke, October 20, 2008, http://www.federalreserve.gov/newsevents/testimony/bernanke20081020a.htm.

[^4]:    ${ }^{7}$ Source: www.firstreaserch.com, Telecommunication Services, last quarterly update 2/9/09

[^5]:    ${ }^{8}$ Source: Reviewed financial statements (20XX-20XX) and compiled financial statements (20XX-20XX) by Michael Mann \& Company, provided by Jim Johnson, CEO.

[^6]:    ${ }^{9}$ Ibid.

[^7]:    ${ }^{10}$ Management provided us with the square footage of the three locations (estimates) and we researched the market rate per square foot.

[^8]:    ${ }^{11}$ We treat it as if the Company is a C corporation (i.e., $40 \%$ tax) and add a $15 \%$ S corporation premium in Table $\mathrm{V}-1$ as we will explain below.

[^9]:    ${ }^{12}$ First Research, Last Quarterly Update 2/9/2009.

[^10]:    ${ }^{13}$ Definitions in this section come from the International Glossary of Business Valuation Terms.

[^11]:    ${ }^{14}$ A complex concept covered at length in chapter 7 of Quantitative Business Valuation: A Mathematical Approach for Today's Professionals ©2001, Jay B. Abrams, McGraw-Hill. The LOV quantifies differences in value that result from differences in marketability resulting from the interaction of public versus private ownership, with the latter being more valuable, and different control attributes-in descending order: strategic, control, well-treated minority, and exploited minority interests.

[^12]:    ${ }^{15}$ As previously stated (see our Industry Analysis), First Research expects the industry to grow at an annual compounded rate of $4 \%$ between 2008 and 2013.
    ${ }^{16}$ In Moskowitz, Tobias J. and Annette Vissing-Jorgensen, "The Private Equity Premium Puzzle," American Economic Review, September 2002, Volume 92, No. 4., especially page 755, second column, the authors estimate Payout Ratios of $60 \%$ for C corporations and $80 \%$ for S corporations. Their discussion makes it clear they are assuming the former are larger than the latter, and it is the size and access to capital that matters.
    ${ }^{17}$ The Payout Ratio is the proportion of net income that can be paid as dividends to investors without impairing the operations of the business.

[^13]:    ${ }^{18}$ As previously stated (see our Industry Analysis), First Research expects the industry to grow at an annual compounded rate of $4 \%$ between 2008 and 2013.
    ${ }^{19}$ Note that this is not a midyear assumption.
    ${ }^{20}$ Erickson, Merle and Shiing-wu Wang, "The Effect of Organization form on Acquisition Price," Working Paper, July 2002. To download a copy, go to the authors' websites or obtain it from the Social Science Research Network. The article shows an $11 \%$ to $17 \%$ (avg. $15 \%$ ) non-tax entity premium. Therefore, we tax as a C corporation and add a $15 \%$ premium.

[^14]:    ${ }^{21}$ See Quantitative Business Valuation: a Mathematical Approach for Today's Professionals, by Jay B. Abrams, McGraw-Hill, 2001, Chapter 7, Page 230. The range for the control premium is between 21-28\%. We use the average of $25 \%$ as the control premium.
    ${ }^{22}$ Gary Trugman, Understanding Business Valuation: A Practical Guide to Valuing Small to Medium-Sized Businesses, AICPA, 1988, p. 373.
    ${ }^{23}$ Z. Christopher Mercer: Quantifying Marketability Discounts: Developing and Supporting Marketability Discounts in the Appraisal of Closely Held Business Interests, Peabody Publishing, LP, 1997, p. 29.

[^15]:    ${ }^{24}$ Ibid., p. 37.

[^16]:    ${ }^{25}$ Source: Quantitative Business Valuation: A Mathematical Approach to Today's Professionals, Jay Abrams, McGraw-Hill, 2001, Chapter 7.

[^17]:    ${ }^{26}$ See " A Breakthrough in Calculating Reliable Discount Rates", Jay B. Abrams, Valuation, pp. 8-24, August 1994, and his update article, "Discount Rates as a Function of Log Size and Valuation Error Measurement", The Valuation Examiner, Feb/Mar, 1997, and subsequent research appearing in "Quantitative Business Valuation: A Mathematical Approach for Today’s Professionals, by Jay B. Abrams, McGraw-Hill, 2001.

[^18]:    ${ }^{27}$ "The Declining Equity Premium: What Role Does Macroeconomic Risk Play?" Martin Lettau, Sydney C. Ludvigson, and Jessica A. Wachter, working paper, 2004, available on the authors' websites.

[^19]:    ${ }^{28}$ Source: Why do private acquirers pay so little compares to public acquirers?, Leonce Bargeron, Frederik Schlingermann, Rene Stulz, Chad Zutter, April 2007.

[^20]:    ${ }^{29}$ First Research does not show the median MVIC/Net Income multiple.

[^21]:    ${ }^{30}$ Source: finance.yahoo.com. Click Industries, Complete Industry Listing, select Diversified Communication Services under Technology, click Industry Browser.

[^22]:    ${ }^{31}$ In Table V-1, we applied a 20.5\% DLOM. We are conservative and apply only a $10 \%$ DLOM in this method.
    ${ }^{32}$ See Table V-1, footnote 5.

