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Maximizing Value from ITFS Spectrum

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BIA FINANCIAL NETWORK

www.bia.com



BIA Financial Network

Maximizing Value from ITFS Spectrum

- Established in 1983 to serve the rapidly changing broadcast industry
- Business grew to include telecommunications: wireless/wireline and Internet
- \$28 + Billion in Valuations
- Current service offerings include valuations, fund-raising, strategic consulting, data management and research



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Agenda

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- Introduction to Valuations – key terms & issues to remember
- ITFS Case Studies
- Conclusion



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Why are Valuations needed?

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Due Diligence

Collateral

Taxation

Litigation

are key terms



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Valuations are needed...

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- Because business owners use the valuations to support possible acquisitions or strategic alliances
- Because business owners use this information to negotiate possible purchase and sale agreements
- Because the information is needed by lenders to support financing decisions
- Because the information is required to settle an estate
- Because the information is needed to settle disputes in court



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Who Does Valuations?

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First – Who does NOT do valuations?

Business Owners

Needs to be done by a trained professional as the valuation procedure is complex and time consuming

And more important, the **valuation needs to be done by an unbiased, objective observer**

(at "arms length" as we say)



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Basic Valuation Concepts

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Question:

What Gives an asset value?

Answer:

The capacity it has to make money for its owner?

Therefore, the source of value is the present value of future cash flows



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Basic Valuation Concepts

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- The influence of risk
- Present value is affected by the riskiness of the expected future cash flow (more risk = less value today)
- Captured by the **required rate of return** demanded by the buyer of the business



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Fair Market Value vs. Investment Value

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Fair Market Value:

-- Defined:

“The amount at which property would change hands between a willing seller and a willing buyer when neither is acting under compulsion and both have reasonable knowledge of the relevant facts” (Pratt, page 24)

-- Assumes a “typical buyer”

-- Assumes *prevalent economic and market conditions at the time*



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Fair Market Value vs. Investment Value

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Investment Value

-- Defined:

"Specific value of goods or services to a particular investor (or class of investors) based on individual investment requirements" (Pratt, pg 25)

-- Assumes a specific buyer in a specific situation



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Valuation Approaches

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- Income Approach
- Market Approach
- Cost Approach



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Income Approach – Discounted Cash flow (DCF)

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The basic methodology in valuation practice

- Solves for the value today of all the future cash flows (income) that the entity being valued is expected to produce

The Value Outcome depends on:

- future cash flows
- timing of the cash flows
- the riskiness of the cash flows

Good for going concern valuations of companies with established histories



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The Market Approach

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- Two variations of the market approach:

- M&A analysis of complete companies, private and (sometimes) public
- Guideline company analysis of publicly traded stock

In both cases the appraiser makes use of a number of *multiples* which serve as the basis for comparison



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Market Approach

Examples of common multiples employed include:

- Price to earnings multiple
- Price to operating cash flow multiple
- Price per "pops"
- Price per customer

The market approach is good for going concern valuations of companies without established histories

Also often used in combination with the income approach for companies with established history



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The Cost Approach

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The cost approach is based on the principle that the business in question cannot be worth more than the cost of the assets necessary to replace it

This method is used most often in valuations of individual assets, such as:

- machinery and equipment
- inventory
- assembled workforces
- licenses

The cost approach works best for assets for which there is an established market in which asset prices are easily obtainable.



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Case Study – Two typical Scenarios

Basic assumptions in both scenarios:

- BIA College
- 1 license, 4 channels, 300,000 households covered

Scenarios

- Approached by operator to renew lease of spectrum – What is the fair market lease payment?
- Approached by operator and offered cash upfront payment and an equity share in the company? What is that really worth?



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Fair Market Lease Payment

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- Select the most appropriate approach to valuing the lease payments!
- Here the Market approach is appropriate
- Therefore BIA College's appraising firm looked at the following:
 - Publicly available information for lease payments of ITFS spectrum
- Publicly available information related to similar spectrum transactions
- Performed sensitivity analysis to determine possible ranges of the lease values



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Fair Market Lease Payment

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Current public information on lease payments cannot be used because:

- Very limited sample size
- Limited knowledge of demographic characteristics of the markets involved
- Expiration date on leases was unknown
- Unclear what services was included/envisioned in the contract!



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Fair Market Lease Payments

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Relevant Multiples (M&A and Guideline analysis)

- No ITFS M&A info available
- Use MMDS as approximation

However.....

Remember to account for

- MMDS being more Marketable
- Whole companies are often purchased, not just a license



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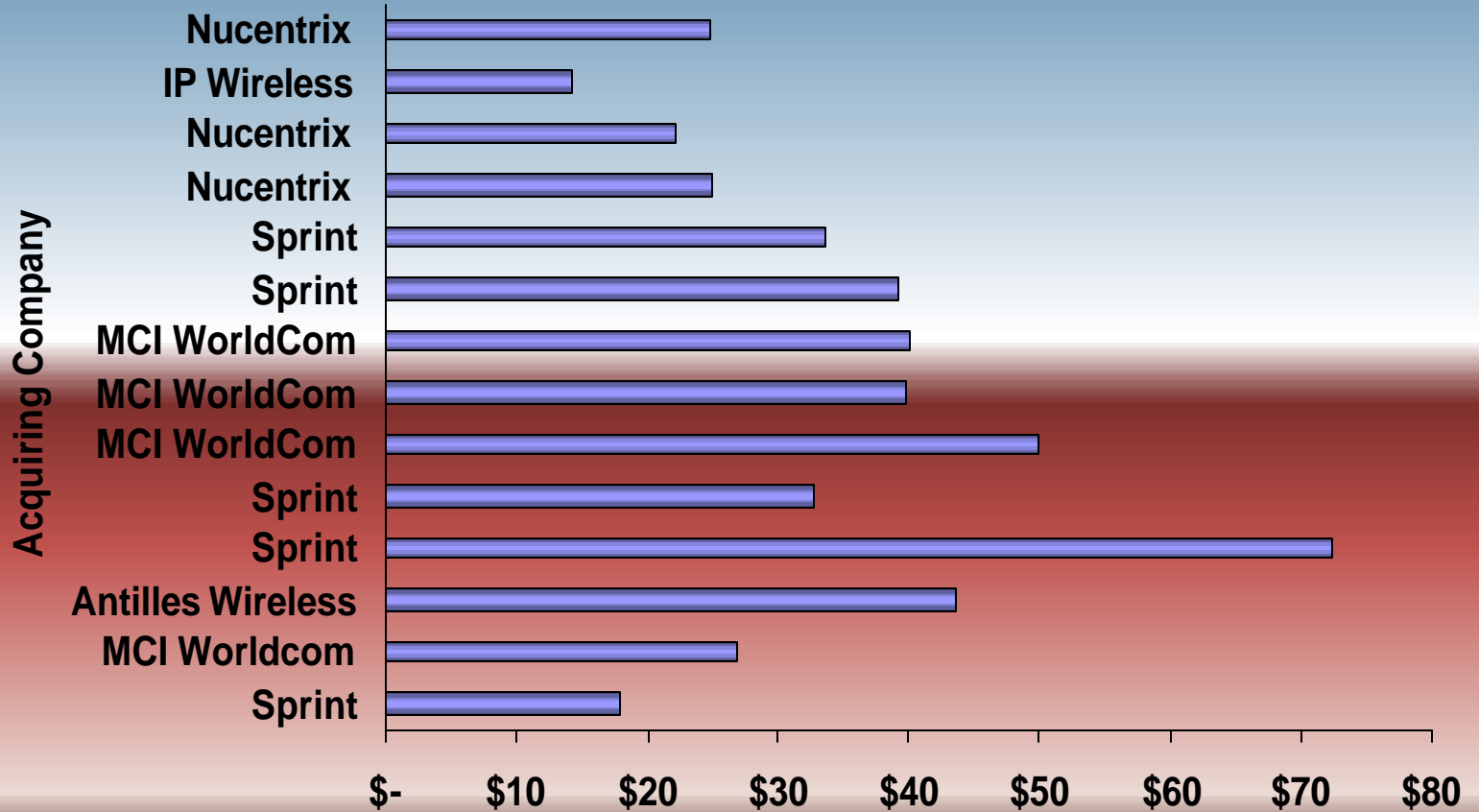
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Price to Household Multiple in Various MMDS Transactions



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Fair Market Lease Value

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What did we find:

Price/HH multiples range from:
\$12.5 to \$72.5, with a median of \$34.4

Median for sales less than \$10 million = \$24.8

We looked at the price/HH/Ch/Mkt:
Range of \$0.66 to \$3.6, median \$1.19

Median for sales under \$10 million = \$0.75
(Nucentrix as of Jan. 9, 2001 \$0.73)



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Fair Market Lease Payment

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	Asset Values		
	50% discount	25% Discount	No Discount*
Low Implied Value	\$397,358	\$596,038	\$794,717
Small Sales Implied Value	\$450,000	\$675,000	\$900,000
Median Implied Value	\$714,000	\$1,071,000	\$1,428,000
Average	\$520,453	\$780,679	\$1,040,906

*Implied value of MMDS Spectrum, FYI only



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Fair Market Lease Value

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	Sensitivity Analysis			
	Suggested Monthly Lease Payments			
	50% Discount		25% Discount	
Cost of Capital	10%	15%	10%	15%
Low Implied Value	\$3,169	\$4,655	\$4,753	\$6,983
Small Sales Implied Value	\$3,588	\$5,272	\$5,383	\$7,908
Median Implied Value	\$5,694	\$8,364	\$8,540	\$12,547

Note: High implied value is not included since the sales are top markets and/or of much larger size.



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Cash Payment & Equity Share

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BIA College was offered \$100,000 upfront and a 5% equity share in the company

- Is this a good deal?
- What is 5% worth and how much would be wise to get up-front?
- Projections of operating company supplied.....



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Cash Payment & Equity Share

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- BIA College hires a valuation company
- The appraiser performs a DCF analysis supported by a market approach to establish the value. (DCF based on operators projections)
- Value of \$18 million established
- Appraiser can sensitize the value and help BIA College make a more informed decision



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Cash Payment & Equity Share

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What does a change in main variables do to your value:

- Changes in subscriber base
- Increase/decrease in business/residential services
- Business recurring revenue
- Residential recurring revenue
- SG&A
- Capital expenditures
- Discount rate



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Sensitivity Analysis

Variable	Percentage Increase/decrease	New Value	Change in Value	Percentage change in Value
Increase Total Subscribers by:				
	20.0%	\$ 28,197,097	\$ 10,197,097	56.7%
	10.0%	\$ 20,434,559	\$ 2,434,559	13.5%
	-10.0%	\$ 22,967,066	\$ 4,967,066	27.6%
	-20.0%	\$ 9,540,553	\$ (8,459,447)	-47.0%
Increase % residential subs and decrease % business subs by ?? % per year :				
	5.0%	\$ 7,888,009	\$ (10,111,991)	-56.2%
	2.5%	\$ 12,960,065	\$ (5,039,935)	-28.0%
	-2.5%	\$ 22,995,722	\$ 4,995,722	27.8%
	-5.0%	\$ 27,991,444	\$ 9,991,444	55.5%
Increase Discount Rate by ?? Percentage Points:				
	2.50%	\$ 13,131,005	\$ (4,868,995)	-27.0%
	1.25%	\$ 15,319,872	\$ (2,680,128)	-14.9%
	-1.25%	\$ 21,333,715	\$ 3,333,715	18.5%
	-2.50%	\$ 25,561,193	\$ 7,561,193	42.0%



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Cash Payment & Equity Share

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- The sensitivity analysis gave a range of values
- Discounts for marketability and minority interest is taken by appraiser
- Value range of BIA College \$300,000 to \$700,000 within reasonable sensitivity



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Conclusion

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- Be informed!
- Consider all the risks/rewards
- What is important to your institution?
 - Cash payments
 - Equity interest
 - Revenue sharing
 - Bundled service discounts
 - Improved communication systems....



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