Industrial Property : The 2006 Paris Meetings

The financial methods for valuing IP: critical analysis

Session 1 : An updated overview of the methods for valuing Industrial Property assets

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Agenda

- Intangible assets are an essential source of value creation
- The financial valuation methods normally used are still very traditional
- They fail to adequately take into account the economic specificity of intangible assets
- Conclusion: new approaches must be used

Intangible assets are an essential source of value creation

An essential component of value

- The value of companies relies heavily on intangible assets …
  - 70% of the market value of listed US companies
  - In 2004, HLHZ analyzed the breakdown of acquisition prices in the US:
    - 23% identifiable intangible assets
    - 38% goodwill
    - 39% tangible assets
- …with very diverse characteristics:
  - Accounting standards recognize 5 major categories: contracts, technologies, marketing, clients, artistic property
  - However the persistence of considerable goodwill reveals the existence of numerous other intangible assets that are more difficult to pinpoint:
    - Innovation in products and services
    - Customer relations
    - Human capital
    - Organizational capital

Value is the result of a unique alchemy

- The nature of intangible assets is radically different from that of tangible assets
  - Abundance:
    - Simultaneous use
    - No wear and tear on the asset
  - Increasing returns
    - Large “sunk costs”
    - Negligible production and transfer costs
  - Network effects
    - The advantages of the assets increase with the number of users
- It is the judicious combination and unique use by each company that creates value by constructing competitive advantages
  - Innovation
  - Differentiation
  - Entry barriers
  - Growth options

Financial valuation methods that remain traditional

Valuation of intangibles: a managerial imperative

- Intangible assets must be measured regularly
  - Accounting obligations
    - Allocation of the acquisition cost (IFRS 3 and SFAS 141)
    - Depreciation tests (IAS 36 and 38, SFAS 142)
  - Adage: “you can’t manage what you can’t measure”
    - Allocation of resources
    - Measurement of performance
    - Bank guarantees
  - Financial communication
    - Detailed information about the most important Cash Generating Units in the company’s goodwill
    - Investors’ expectations will be modified by this information
      - Value of assets for management
      - Ability to manage them appropriately

Value stems from a few key parameters

- The valuation principles are the same as those that form the basis of any valuation
  - Profitability: Identification of the future economic advantages (cash-flows) directly attributable to the intangible asset(s)
  - Duration of the competitive advantage
  - Risk: appropriate discount rate reflecting the volatility of performance (specific and routine risks)

$$VA = \sum_{i=1}^{n} \frac{F_i}{(1+t)^i}$$

Some methods need to be discarded

- Assets reference
  - Methods: Difference between the market value and the book value
  - Shortcoming: The historical accounting method introduces significant biases
- The cost approach
  - Methods: Historical costs or Replacement costs
  - Shortcomings
    - Method detached from profitability and the risk associated with the asset
    - The result of a creative activity has nothing to do with its cost
- The comparative approach
  - Methods: Comparable transactions or observation of the value in similar markets
  - Shortcomings:
    - No organized markets exist
    - Unique nature of intangible assets

The financial methods are still the most suited

- All financial approaches seek to measure the additional cash flows of the intangible asset
- Three main approaches:
  - Comparison with a generic business
    - Of the operational margin differential
    - Of the economic profitability differential
    - Of the excess earnings differential
  - The economics of royalties
  - The intrinsic excess earnings approach
- These approaches present significant application problems
  - Existence of generic reference companies
  - Analytical separability of the assets valued
  - No rigorous method for assessing the discount rates used (the rate applicable to goodwill generally being a “plug” that makes it possible to converge the “WARA” with the “WACC”)
  - Determination of the terminal value

The financial methods do not adequately take into account the economic specificity of intangible assets

The economics of the intangible is still poorly understood

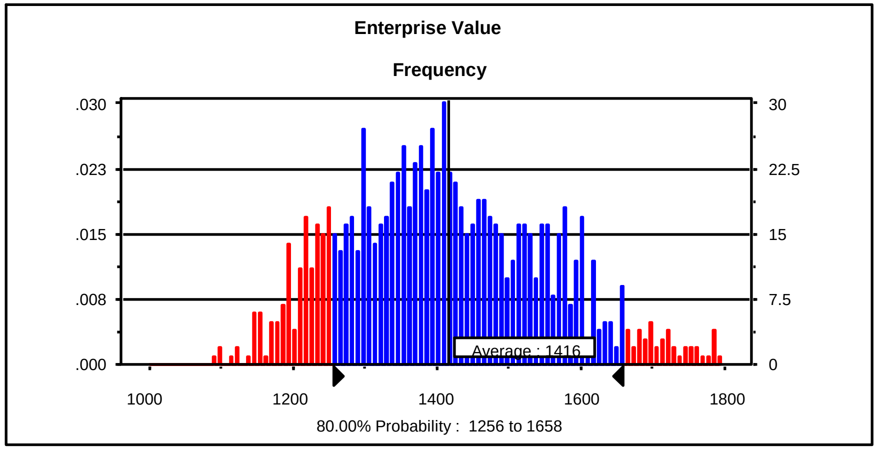
- Which cash flows are to be taken into account when the borders of value creation are unstable?
  - Temporary alliances of circumstances between competitors
  - Creation of joint offerings between independent companies
  - Emergence of “business webs” where the value of the business stems largely from the existence of the web
- How long does the competitive advantage last?
  - 71% of Inc500 companies were founded by people who responded to an idea encountered in their previous company
  - Shortening of the useful life of products and processes (from a few years to a few weeks)
- What discount rate is applicable when the risk is greater?
  - Asymmetry of information due to accounting deficiencies
  - Ownership rights are more uncertain than for tangible assets
  - Fragility of the competitive advantages created
  - Lower liquidity (absence of organized markets)

The economics of intangibles is still poorly understood

- What is the sequence of cash flows?
  - Increasing returns
    - Identification of the break-even point
  - Shortening of the time frames between: sending and receiving, production and sale, purchase and delivery
  - Managerial flexibility
- What is the nature of the cash flows?
  - The “service” component of products becomes essential
  - The content of the exchange is more complex with the addition of intangible components to the economic dimension
    - Emotions
    - Information
  - Connectivity progressively gives the real market the same characteristics as the financial market
    - Variable price based on supply and demand
    - Better informed buyer and seller

A few emerging approaches

- Several complex dimensions …
  - The operational and strategic risk
  - Managerial flexibility
- …can be taken into account by emerging approaches
  - Monte Carlo simulations
  - Real options



Conclusion

- The complexity of the economics of intangibles makes the application of new approaches necessary
- It is probably pointless (from a managerial standpoint) to try to value intangible assets separately while retaining overall consistency
- The objective: to be directionally correct in making decisions. The key is then to use techniques that allow better understanding of the key parameters of value creation
- Can the real options method help us in this task?