IC3 Paris – May 25, 2007

Financing based on intellectual capital

Valuation and vehicles



Think Tank of Deutsche Bank Group

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Agenda

A

Valuation of intellectual property (IP) and intellectual capital (IC)

В

Vehicles for IP/IC-based financing



No valuation, no financing

- Thus: If ever more successful companies thrive on their intellectual capital...
- we have to value it in a broader fashion



More reasons to value intellectual capital

Companies' perspective: ... to improve short-term ressource allocation and long-term investment strategies, to improve external communication with various stakeholders talent, partners, sponsors (and investors, of course)

Investors' and lenders' perspective: ... to **optimize investment and lending** portfolios by investing/lending even better in line with risk

Economies' perspective:

... to strengthen growth

by channelling capital more reliably to most efficient users, by making capital markets less volatile, by reducing information asymmetries in capital markets

Sounds good – but who makes the first move?



Chicken and egg problem

Typical chicken and egg problem...

- Companies: Why report, if capital market does not appreciate IC reporting?
- Capital market / banks: Why learn to evaluate IC, if hardly anybody reports it?

... but gradually more movement on all fronts

- Governments: sponsoring development of reporting frameworks/guidelines
- Companies: increasing number of pioneers publish IC reports
- Capital market / banks: joint actions to foster reporting/valuation, in Europe e. g. at
 - Action group for German financial sector (IFD)
 - Working group in Italian financial analysts society (AIAF)
 - Commission on Intellectual Capital of EFFAS





Commission on Intellectual Capital (CIC) @ EFFAS



Main aims of the CIC

- **Consistent positioning** of EFFAS regarding IC valuation and reporting
- Identification and bundling of IC expertise of European financial analysts
- Overview of the initiatives and experiences in US, Europe and Asia
- Development of excellence network with major experts world-wide







Don't forget IP-based financing

(IC = Intellectual Capital, IP = Intellectual Property)



- Build on experience in IP valuation
- Use IP-based products to acclimatise investors to intangibles



IP valuation

Monetary valuation

- All three "classic" approaches used Income, cost, market
- More recently also econometric methods used enabling efficient valuation of large patent portfolios
- A lot of real world experience

Non-monetary valuation

 Usually broad set of indicators used

breadth of protection, legal security, holders human ressources to capitalise IP etc.

- Mainly for internal IP management
- Econometric models used, too for academic and political purposes







IC valuation – monetary yardstick needed?

Monetary valuation

- Only "income approach" used "Cost approach" rarely makes sense for intangibles, "market approach" lacks sufficiently liquid and transparent market
- Many assumptions to be made
- Possible without inside knowledge
- Little real world experience but see e. g. Baruch Lev's "Intangibles Scoreboard" as IC valuation example

Non-monetary valuation

- Broad set of indicators used which should be company-specific?
- Worthwhile only if benchmarked be it with companies' own historical values or those of other companies
- Is complex, usually needs inside knowledge Laborious finding, filtering, assessing and integrating process
- Growing real world experience





IC valuation – a combined model...



... applied to specific valuation purposes



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Credit rating

- Monetary valuation not necessary
- Full version of non-monetary valuation (usually) too costly



M&A, major investment

- Monetary valuation decisive
- Non-monetary preparation possible owing to close contact with the company



Minor/medium-sized investment

- Monetary valuation desired
- Information for non-monetary valuation often not available



In-house planning

- Monetary valuation customary
- Full version of nonmonetary valuation sensible, as it can be put to many uses

IC-based	d financing
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A	Valuation of intellectual property (IP) and intellectual capital (IC)
В	Vehicles for IP/IC-based financing

Evolution of IP/IC-based financing vehicles

- Credit ratings will further embrace IP (and later IC) valuation Basel II might help
- Equity analysts will broaden their IC/IP valuation Analysts societies envision extension of their training
- More and more mergers and acquisitions are all about IC/IP Just look at the prices paid recently for internet community site companies
- Bundling IP in funds, securitising IP are growing markets and IP valuation the prerequisite

... and even more sophisticated IP/IC-based products are to follow

Example 1 IC/IP-embracing credit rating

A possible – if costly – procedure would be to:

- 1. Identify and analyse (only) those **intangibles of particular relevance** to the company-specific value-added process In doing so, (a) gear the approach to a proven method of (non-monetary) IC valuation, and (b) try to condense them into one single indicator (in a systematic way)
- 2. Analyse the **transmission mechanisms** that transform those pivotal intangibles into future revenues Are internal training and external networking synchronised with the R&D roadmap? Is the roadmap conducive to the realisation of the general corporate strategy? Etc.
- 3. Re-use this pattern for follow-up ratings The analysis profile developed in (1) and (2) can be applied again, decreasing average costs

These three steps can **complement the classic credit risk review** *but would make new/adapted business models necessary*

Example 2 Patent funds

- Products hit the market in recent years
- Level of sophistication is rising
- Latest examples: "Patent Select I, II"

Patent Select I, II (Deutsche Bank, Clou Partners)

- sophisticated patent selection process (starting from very large candidate pool)
- 12 patents (or patent families) acquired
- patents to be refined by fund (development of prototypes etc.)
- closed fund, finite duration (appr. 6 years)

Example 3 Securitisation of IP

The market is still young and mostly opaque – but promising:

Securitised intangibles

Securitisations of future income backed by intangible assets

Issuer	Assets	Value (USD)	Year
David Bow ie	Music rights	55 m	1997
James Brow n	Music rights	30 m	1999
DreamWorks	Film rights	1 bn	1997
DreamWorks	Film rights	1 bn	2002
Guess?	Brand rights	75 m	2003
Royalty Pharma*	Pharmaceutical patents	225 m	2003
Athlete's Foot	Franchising/brand rights	30-50 m	2003
Dunkin' Brands	Franchising/brand rights**	1.7 bn	2006

* Earlier securitisation of an individual patent failed owing to lack of diversification

** Includes a minor share of rights to tangible assets

Sources: The Pullman Group, Washington Core



Example 4 **Patent auctions**

Latest one last week in Munich, Germany

- "Live market valuation"
- Appr. 400 patents offered, in three hours
- About a third each by corporates, research institutes and individual inventors

Thank you for your attention

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