IPR, Intangibles & Valuation: Visualising Information for Finance Access

(abstract)

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Introduction

A well known institutional economist once wrote: "The substantial foundation of the industrial corporation is its immaterial assets", and "the nucleus of the modern corporate capitalization is the immaterial goods covered by the common stock".

It would be easy to relate these statements to the today's knowledge society and the services-dominated economy, but in fact they were written by Prof. Thorstein Veblen in 1904, and appear not only to be still up-to-date, but more and more truthful. Indeed, as Veblen states, it is nowadays commonly believed that the value creation processes of the "modern corporation" as well as of economic systems are largely founded on, and fostered by, intangibles, within which IPR (intellectual Property Rights) play an important role.

However, even though the relevance of intangible assets is unanimously recognised, the delicate and complex issue of the valuation of and reporting on intangibles remains wide open. Despite the existence of various proposals, the methods for a rational, reliable and generally accepted measurement system of these resources still seem to be lacking.

On the other hand, the need for identifying such valuation and reporting methods has now become more important than ever before. The knowledge-oriented character of today's economy – where innovations, services, IPRs and intangibles play a fundamental task in the evolution of firms, networks, regions, and countries – makes the availability of adequate measurement metrics a crucial instrumental condition for this new type of economic development to fully take off, not differently from the role that traditional accounting has played vis-à-vis the spreading of mercantile, industrial, and financial capitalism.

The Conceptual Company and Its Risks

The today's typical company has important conceptual features:

- Negligible physical assets (low PP&E, inventories);
- Intangibles-intensive: R&D, brands, alliances, human resources, organization capital;
- Strong patent/trademark protection;
- Extensive outsourcing of manufacturing, distribution and other low-knowledge functions;
- Extensive trade in intellectual property (IP): patent sale and licensing, know-how sale;
- Flexible business model.

However, investment in intangibles is also associated with high levels of uncertainty in terms of outcomes and timing. Hence, intangibles have also a negative side. Recent history has shown that intangibles may "evaporate" very rapidly, giving rise to large losses. Intangibles are also a potential

liability, and this explains why the conceptual company is exposed to several intangibles-linked risks. It should be noted that there is a fundamental lack of methodologies for measuring and assessing intangibles-related risks.

Definition of Intangibles and Intellectual Capital

Intangible assets can be defined as a source of future benefits that is without a physical embodiment. Intellectual property is an intangible asset with legal rights. This definition includes innovation-related intangibles (*R&D*, *patents*), but also market-related (*brands*), human resource (*competencies & skills, training*), and organizational intangibles (*internal structures, systems, procedures, routines, and processes*). A significant distinction can be drawn between "hard" intangibles, which are tradable in the marketplace, and "soft" intangibles, which cannot be sold or negotiated.

Intellectual Capital (IC) can be defined as the internal (*competencies*, *skills*, *leadership*, *procedures*, *know-how*, *etc.*) and external (*image*, *brands*, *alliances*, *customer satisfaction*, *etc.*) stock of intangibles "available" to an organisation, which allows this entity to transform a set of tangible, financial and human resources into a system capable of creating stakeholder value through the pursuit of sustainable competitive advantages (Zambon, 2000). Intangibles become IC only when they are durably and effectively <u>internalised</u> or <u>appropriated</u> by an organisation.

More and more there is a perception by managers of the need for regaining control on the performance and knowledge generation processes through understanding long-term value creation drivers. According to Mr. Sam J. Palmisano, Chief Executive Officer (CEO) of IBM (April 2006), "the economy is re-aggregating itself around the Intellectual Capital, the capacity of making technology and information live together as innovation".

The Traditional Accounting Approach to Intangibles ("the problem")

Upon the consideration that companies need to manage their intangibles in order to manage in a conscious way value creation processes, information becomes a crucial element. However, in reality companies have to face a fundamental problem, owing to the lack of structured, systematic, reliable, and comparable information on their intangibles.

In this sense, the traditional accounting approach used to measure intangibles (cf. International Accounting Standard no. 38) is not able to give a substantial "help" to this situation, in particular because of seven reasons:

- A general "suspicion" attitude of accountants towards intangibles;
- The stress on reliability and not on relevance: as a consequence, if there is not reliability, there is not accounting recognition f these resources;
- The lack of recognition of internally generated intangibles (e.g. R&D, brands, training, own goodwill);
- A conservative measurement criteria, which leads to the general principle according to which intangibles are immediately expensed as a cost;
- Goodwill is a too synthetic representation of intangibles, appearing only in M&A transactions: therefore, goodwill is part of the problem and not a solution of the issues;
- Presence of a rather poor information on long term growth drivers (key performance indicators KPIs) linked to intangibles;
- Backward-looking information disclosed on company annual reports.

This situation of very poor information on intangibles and IPRs induces many adverse economic consequences. It easily induces short-termism, behavioral myopia, ill-informed allocation decisions, market volatility, information asymmetry, insider information, credit crunch for companies, etc. In this situation of reporting and valuation deficit as to Intangibles, there is a serious risk that an information cascade phenomenon could take place (Zambon, 2003). In behavioural finance, this effect occurs when one agent looks at the behaviour of other agents for making a decision, this way causing a spreading of partial ignorances. A "blind that leads the blind" effect is thus created, generating an increase in price volatility in the financial markets and in company cost of capital. Further, costs of mismeasurement at every level, from micro to macro, are to be taken into account. At firm level this cost is represented by the risk of following wrong strategies; at industry level by a misallocation of resources within and between industries and a skill bias; at capital market level by under- or over-valuation of companies, misallocation of resources and volatility; and finally, at country and supra-national level, policy making based on imperfect set of indicators may result in inappropriate decisions.

A New Approach to the Management and Reporting of Intellectual Capital

As a consequence of the above delineated state of affairs, a new management and reporting tool has become necessary. In this sense, Intellectual Capital (IC) Statements or a Report on Intangibles have been experimented in practice: these are based on indicators, most of which have a <u>non-financial nature</u>. The partitioning of IC indicators into three inter-related sections is today quite widely accepted: <u>Human Capital</u>, <u>Organizational Capital</u> (including Innovation Capital), <u>Relational Capital</u> are visualised/measured through indicators and parameters, and accompanied by a <u>narrative</u> that links these parameters with company <u>strategy</u>.

Using this tool, it is possible for a company to get benefits both internally and externally.

As to the internal benefits, we can mention the following:

- Creation of a measurement and codification culture;
- Knowledge management and sharing within organization;
- Identification of intangibles-linked value drivers & risks;
- Support to the investment/divestment decisions;
- Definition of new executive compensation and incentive systems;
- Improvement of the internal corporate image;
- Aid in the recruiting of the best talents;
- Help to get R&D/IPR Departments out of a sort of "organizational ghetto".

As to the external type of benefits, we can stress the following:

- Better visualisation of company value creation processes for investors & financial analysts;
- Easier and possibly cheaper access to funding sources from banks (Basel 2 ratings);
- Increased transparency on financial markets;
- Support to merger and acquisition operations and stock exchange listings (initial public offerings IPOs);
- Positive impact on external company image and reputation;
- More solid and documented disclosure on sustainable competitive advantages.

Beyond the positive aspects just described, such a tool could allow also a sort of "intertwining" between the concepts of Intellectual Capital and Corporate Social Responsibility (CSR). Social and

Environmental Issues can in fact be seen as part of the management of Intellectual Capital (image/reputation/risk management), and therefore social and environmental capital can be considered as particular intangibles to be managed by companies for achieving long-term sustainability and preserving income generation capacity, so that a <u>convergence</u> towards "one integrated/interconnected report" could be envisaged.

Obviously, despite their value and innovativeness, these non-financial measures relating to intangibles/IC face also some *critical issues* concerning their consistency/comparability (some form of authoritative international standard is needed); reliability (auditability); thoroughness/completeness; and meaningfulness, given to the potential subjectivity and specificity in the choice of the "useful" indicators. Finally, the fact that such indicators do not possess additive properties may also cause a problem of synthesis.

International Initiatives

A series of European and international initiatives at an institutional level has taken place:

- 2002-2003: Official Study for the European Commission (DG Enterprise) on The Measurement of Intangible Assets and Associated Reporting Practices". Partners: University of Ferrara (lead partner); New York University (Prof. Baruch Lev); Melbourne University (Prof. Margaret Abernethy) (cf.
 - http://ec.europa.eu/enterprise/services/business_related_services/policy_papers_brs/intangib lesstudy.pdf);
- 2005-06: European Commission's (DG Research) Study on IC reporting to increase R&D in SMEs and help these companies access bank credit (RICARDIS), that has been published in June 2006 with the title "Reporting Intellectual Capital to Augment Research, Development and Innovation in SMEs (RICARDIS)" (cf. http://ec.europa.eu/invest-inresearch/pdf/download_en/2006-2977_web1.pdf).
- The Intellectual Assets-based Management (IAbM) initiative by the Japanese Government;
- Series of Paris Conferences by the World Bank (Regional/Cities//Communities IC)
- Research made in this area by the Organisation for Economic Cooperation and Development (OECD):
- The World Intellectual Property Organisation (WIPO) has an "IC Readiness" project;
- 1st International OECD Policy Conference in collaboration with the University of Ferrara & WIPO was held in Ferrara on 20-22 October 2005 (cf. www.ferraraonintangibles.eu);
- 2nd International OECD Policy Conference in collaboration with the METI of the Japanese Government was held in Tokyo on 7-8 December 2006;
- Increase in the interest by statistical agencies at national and international level (e.g. U.S. Federal Reserve, UK Statistical Office, Eurostat), using the "Growth Accounting" approach;
- The United Nations International Conference held in New York, 23-24 June 2008 on "Information Gaps at Micro- and Macro-Level" had a session on IC information and reporting;
- Intellectual Assets Centre in Glasgow funded by the Scottish Government.

Other relevant international initiatives:

- "Wissenbilanz phenomenon" in Germany;
- Austrian law mandated IC Reports for universities;
- The "PIP Project" in Nordic countries;

- The "Observatoire sur l'immaterial" in France;
- The "Value Reporting" by PwC;
- The IC Rating;
- The "VALI Project" in Italy for IC Reporting of micro and small-medium enterprises.

Principal Guidelines on IC Reporting published thus far:

- International Federation of Accountants (IFAC) Study no. 7 (1998);
- Danish Agency for Trade and Industry (DATI) Guidelines (2000; latest edition 2003);
- Nordika Project Guidelines (2001);
- Meritum Project Guidelines (2002);
- German Ministry of Labour (2004);
- Japanese Ministry of Economy (METI) (2005);at
- Australian IC Guidelines (2002 e 2005);
- Putting IC into Practice Guidelines (PIP) by Nordic countries (2006).

Some Future Scenarios

The IASB's Management Commentary

In June 2009 IASB has published an Exposure Draft on company Management Commentary (MC) due to be a voluntary Guidance and not a Standard. It sets out principles, qualitative characteristics, and content elements of Management Commentary to provide capital providers with decision-making useful information, that is a context for understanding management's objectives and related strategies. Management Commentary should <u>especially</u> provide forward-looking (future-oriented) non-financial information, especially on intangibles. Attention should be given to the commentaries on the nature of the business, management objectives and strategies, main <u>resources-risks-relationships</u>, results of operations and prospects, & critical performance measures and indicators. Considered that Management Commentary includes financial and non-financial information, this opens the way to the inclusion of <u>key-performance indicators</u> (KPIs) therein in order to highlight how non-financial factors have influenced and will be able to influence financial performance.

The "World Intellectual Capital/ Assets Initiative Network" (WICI Network)

Since 2007, the aim of this global network is to operate towards a new, comprehensive and generally accepted framework for business reporting worldwide based on industry-centred KPIs. This aim is carried out by a number of private/public organizations, that today are:

- Japanese METI (Ministry of Economy, Trade & Industry);
- U.S. Enhanced Business Reporting Consortium (EBRC) [including American Institute of Certified Public Accountants, PricewaterhouseCoopers, Grant Thornton, Microsoft];
- European Financial Analysts (EFFAS);
- OECD:
- Brazilian Development Bank (BNDES) (observer);
- Society for Knowledge Economics in Australia (SKE);
- European Commission (observer);
- Waseda University;
- University of Ferrara.

The next WICI deliverables comprise:

- Commentaries on relevant international documents (e.g. the above mentioned IASB's Exposure Draft on Management Commentary);
- Development of a more comprehensive business reporting framework (combining generalisability and specificity of indicators);
- Development of KPIs per sector/industry:
 - Electronics (WICI Japan)
 - Pharmaceutical (WICI Japan)
 - Automotive (WICI Japan)
 - Telecommunications equipment & services (EFFAS CIC)
 - Software and IT services (EBRC + Gartner);
- XBRL-ization of KPIs information.

To pursue these deriverables the so-called "inverted pyramid" approach is adopted, according to which non-financial indicators should be articulated at three levels, that is "general" (which includes 3 to 5 generalised KPIs at maximum), "industry" (from 10 to 20 KPIs), and "company-specific" (without a limit in the number of KPIs), so that it will be possible combining comparability and uniqueness of company processes and indicators. Obviously only the first two levels will need to be agreed upon in the future.

Besides the above mentioned members, national jurisdictions are going to be establish to better coordinate the related actions and research. On 29 May 2009 in Paris WICI Europe was founded and at the moment, there are a number of European countries where the formation process of a national WICI jurisdiction is ongoing (France; Luxembourg; Italy; Austria).

As for WICI Europe, its basic aims are:

- To promote the management and reporting of intellectual capital/assets at company level throughout the world and primarily in Europe through cooperation among members;
- To promote European and international dialogue on the management and reporting of intellectual capital/assets with other organisations and interested parties such as investors, companies and their representative bodies, policy makers, regulatory authorities, stock exchanges, standard setters & universities throughout the European region.

Concluding remarks

- Today's economic environment and the Conceptual Company pose new challenges to managers, investors, policy makers.
- It is important to learn how to visualise the link between value creation, management and intangibles/IPR through a new information set and reporting system. This has to become a market standard.
- Intangibles are also associated with risk, and therefore risk management overlaps with intangibles management.
- The communication of appropriate information on intangibles is necessary to value and price company processes for financial analysis purposes.
- Today the main policy indication is to improve information on intangibles and IPR at micro level initially in a non-mandatory perspective, because good indicators at micro level will

also allow to build better indicators at regional, meso and macro level. The main policy aim is to identify in a <u>collaborative way</u> (public & private), with a bottom-up approach, at an <u>international level</u> a standardised set of intangibles non-financial indicators serving as minimum common information denominator. In this respect, the World Intellectual Capital Initiative Network (WICI) is open to collaborations and to join forces.

- There is a need to develop and promote an innovative, integrated, reliable, and verifiable company reporting system.
- It is also important to achieve a convergence between various forms of reporting and avoidance of proliferation of guidelines and alike.
- As a final consideration, we face a major paradox: the more the economic system is based on intangible assets, the stronger it is, because they are major drivers of growth & value creation. However, at the same time, the more the economic system is based on intangibles, the more vulnerable, risky and volatile it becomes. The challenge we all face is to learn how to manage, organise, and report on these "invisible" resources.