Vincent C. Ross Institute of Accounting Research
and
The Intangibles Research Project
at New York University
Present the

INTANGIBLES AND CAPITAL MARKETS CONFERENCE

May 15-16, 1998

Sponsored by
Coopers & Lybrand, L.L.P. Foundation and
Price Waterhouse Foundation

ABOUT THE CONFERENCE

This is the first academic conference fully devoted to intangible investments (intellectual capital). The conference will focus on the relationship between intangibles, such as R&D, information technology, brands and human resources and capital markets. The research studies presented deal with key issues of concern to managers, investors and regulators: in particular, the extent to which intangibles' values are incorporated in stock prices, the financial and non-financial measures of intangibles most relevant to investors' decisions, adverse consequences of the deficient information on intangibles in corporate financial reports, and new developments in the intellectual capital area, such as securitization of intangibles, and regulators' attitude toward disclosure of intangibles.

The papers presented are all based on empirical studies. Comments on the relevance and applicability of the research will be made by practitioners. Following is a detailed outline of the conference, subject to changes and modifications.

SCHEDULE AND CONFERENCE OUTLINE

FRIDAY, MAY 15, 1998

11:30am - 12:30pm Registration and lunch

12:30 - 12:45pm Welcome and opening remarks: *Dean George Daly and Baruch Lev, Conference Organizer*

First Session: **ARE INTANGIBLES VALUED BY INVESTORS?**
12:45 - 3:30pm

The following studies examine the relevance to investors and venture capitalists of information on the cost and market values of intangibles.

1. Asset Revaluations by Australian Companies
   Mary Barth, Stanford University
   This study finds that investors consider the voluntary revaluation of assets reported by Australian companies relevant to security pricing. The revaluation of intangible assets are found to be more relevant to investors than those of tangible assets.

2. Capitalized Values of Software Development Costs
   David Aboody, UCLA
   This research indicates that capitalized values of software development costs reported by firms are strongly associated with stock prices and returns and assist in the prediction of future earnings. The attitudes of managers and financial analysts to the disclosure of intangibles is also examined in this study.

3. Fair Market Values of R&D-In-Process
   Baruch Lev, New York University
   Acquiring firms in high-tech sectors have to assign fair market values to acquired R&D-in-process. Research results indicate that these values are strongly associated with stock prices and returns, and thus seems to be useful to investors. Furthermore, contrary to widespread beliefs, cost values of R&D are found to be highly correlated with market values. Finally, the immediate expensing of R&D-in-process inflates substantially the subsequently reported performance of acquiring companies.

4. Control Allocation in Biotechnology Alliances
   Joshua Lerner, Harvard University
   These alliances between typically small, research-intensive firms and larger pharmaceutical corporations provide the major source of financing to the biotechnology industry. This study examines the determinants of the allocation of control rights (property rights, sharing rules) between partners to the alliance. In addition, various issues related to the valuation of biotechnology companies by venture capitalists will be discussed.

   Discussant: **Robert Herz, Coopers & Lybrand**

Second Session: **<u>CONSEQUENCES OF DEFICIENT REPORTING OF INTANGIBLES</u>**

4:00 – 7:00pm Friday, May 15, 1998

Studies in this session focus on adverse consequences to investors and firms of the inadequate public information on intangibles investments.

1. <u>Analyst Coverage, Mispricing and Intangibles</u>
   Ron Kasznik, Stanford University
   This study reports that stock prices of intangible-intensive firms are less informative (deviate more from intrinsic values) than prices of firms without significant intangibles. Also, analysts expend more efforts on intangible-intensive firms, presumably due to inadequate reporting.

2. <u>Intangibles and Bid-Ask Spreads of Stocks</u>
   Jeff Boone, Mississippi State University
   K.K. Raman, University of North Texas
   The stocks of intangible-intensive companies are found to have larger bid-ask spreads than those of other companies and are more price-sensitive to information. Larger bid-ask spreads imply higher transaction costs to investors and consequently a higher cost of capital to corporations.

3. <u>Deterioration in the Relevance of Financial Information</u>
   Paul Zarowin, New York University
   This study provides evidence on the decline over the last 20 years in the usefulness to investors of key financial variables: earnings, cash flows and book (equity) values. This loss of usefulness is found to be most pronounced in firms that were subject to significant change and increases in the rate of investment in intangibles.

4. <u>Intangibles and Gains from Insider Trading</u>
   Baruch Lev, New York University
   The inadequate public reporting on intangibles creates significant information asymmetries (differences) between managers and investors. Are these asymmetries exploited by managers trading in their companies' shares? This study answers the question in the affirmative: gains to insiders of intangible-intensive firms are found to be significantly larger than gains to insiders in firms without significant intangibles.

   Discussant: **Jon Low, Ernst & Young**

7:30 pm **Presenters' Dinner**

SATURDAY, MAY 16, 1998

Third Session: **NEW MEASURES OF INTANGIBLES' VALUES**
9:00 - 12:00 noon

The studies presented in this session report on the relevance of various non-financial measures of intangibles' values.

1. Customer Satisfaction Measures and Firm Values
   David Larcker, University of Pennsylvania, Wharton
   Tests reported in this study indicate that customer satisfaction measures are leading indicators of sales growth, firm performance and market value. Measures of customer satisfaction dominate various financial indicators in predicting firm performance and value.

2. Human Resources and the Measurement of Risk
   Joshua Rosett, University of Chicago
   An innovative measure of corporate human capital is developed in this study. It is shown that this measure improves the estimation of firms' risk.

3. Bibliometrics and the Value of Intangibles
   Bronwyn Hall, University of California at Berkeley
   Citations analysis is gaining recognition as a tool for measuring the impact and importance of innovations. This study reports on the valuation of firms' R&D by the intensity of patent citations, and establishes association between patent citation (reflecting R&D value) and market value of companies.

4. Does CEO Human Capital Make a Difference?
   John Hand, University of North Carolina
   This study correlates attributes of CEO's human capital, such as age, education, experience and ability, with firms' profitability, risk and market value. The association between such CEO attributes and unusual business events (e.g., acquisitions, restructuring) is also explored.

   Discussaant: **Harold Kahn, Price Waterhouse**

12:00 – 12:30pm **Lunch**

Fourth Session: **<u>FRONTIERS OF INTANGIBLES</u>**
12:30 - 3:00pm Saturday, May 16, 1998

1. <u>The Social Returns to Intangibles</u>
   Frank Lichtenberg, Columbia University
   This study examines the contribution of pharmaceutical research in the US since 1939 to medical progress, in terms of increasing mean age at death and decreases in life years lost before age 65. This innovative approach enables the author to compute the social rate of return to pharmaceutical R&D.

2. <u>Alternative Accounting Rules for R&D</u>
   Paul Healy, Harvard University
   This study develops a financial simulation model for a pharmaceutical company's drug discovery process which captures the underlying costs, probabilities of success and economic benefits from drug development. The data to develop the model are derived from earlier studies and discussions with financial executives of pharmaceutical and biotechnology firms. The model is used to estimate how different accounting rules for R&D affect measured profitability in the industry, and the relation between these reported profitability measures and intrinsic values.

3. <u>Human Resources, Productivity and Shareholder Wealth</u>
   Mark Huselid, Rutgers University
   Based on internal date of about 1,000 companies, this study establishes that human resource policies are significantly associated with corporate financial performance and shareholder value creation.

4. <u>Regulatory Developments</u>
   J.M. Neel Foster, FASB
   The size, growth and prominence of intangible investments in the manufacturing and service sectors severely test accounting measurement and reporting rules, most of which were set decades ago. This presentation will review the current thinking and plans of accounting standard-setters concerning the need for and ability to change corporate reporting requirements concerning intangibles

Final Session: **<u>PROGRAM SUMMARY AND FUTURE RESEARCH DIRECTIONS</u>**
3:00 - 3:30pm
Katherine Schipper, University of Chicago