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LATEST DEVELOPMENTS IN THE FIELD OF FINANCE

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Abstract

The paper surveys 1,840 articles published in four major business and finance journals over the 1980-1989 period in order to identify: a) the most widely researched areas in finance over this period, b) the new developments in the theory of finance, c) the techniques used by researchers, and d) the technical trends in the field of finance. The results suggest that there is a high relationship between the projected progress in areas of financial research and the actual areas which have been selected by both the practitioners and researchers. It also provides the “research tradition” or “paradigm” of the modern finance theory. And finally, it explores the possible future theoretical trends of the field.

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LATEST DEVELOPMENTS IN THE FIELD OF FINANCE

Introduction¹

Triggered by the volatile social, political, and economic conditions of 1980s, both the theory and practice of finance have experienced a great intellectual ferment. Keeping up with these developments is becoming an increasingly important part of the function of financial scholars and the executives. There are many ways by which they can update their knowledge of these developments. The most common and perhaps easiest way is to read the research papers appearing in financial journals. An investigation of these journals reveals the extent to which these developments have made an impact on the research and practice of the discipline.

This study attempts to identify the most widely researched topics of the finance field during the 1980s in order to assist both researchers and practitioners in keeping abreast with new developments.

Research Methodology

Of the more than 500 business and economics journals, a group of four journals which typically publish articles dealing with finance and are known as “core journals” were selected. They are: the *Journal of Finance* (JOF), the *Journal of Financial and Quantitative Analysis* (JFQA), the *Journal of Business Finance and Accounting* (JBFA), and the *Financial Analysts Journal* (FAJ). Among the selected journals three (JOF, JFQA, and JBFA) are known as research-oriented journals and are heavily used and referred to by researchers. In contrast, the FAJ is regarded as a pragmatic journal directed towards practitioners. All of the articles published in these journals over the 1980-1989 period were used to identify:

- The most widely researched areas in finance over this period;
- The new developments in the theory of finance;
- The techniques used (qualitative vs. quantitative) by researchers;
- The technical trends in the field of finance.

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Since some of the articles deal with more than one area, the abstract of the article was read and the most relevant area was selected for the classification purpose.

Survey Results

From 1,840 published articles, 16 areas were identified as the most widely researched areas over the 1980-1989 period. Table 1 contains a list of these areas with -1 their respective percentage of journal coverage. As can be observed, these percentages have fluctuated widely from one year to the next; however, a few areas have been repeated more frequently than others. For example, “asset pricing theories” and “capital markets efficiency.”

Table 1

Overall Coverage of Different Research Areas

All Numbers are in %

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Asset Pricing Theories	9,4	8,0	8,1	7,1	11,5	8,2	7,9	4,9	7,9	7,7
Capital Markets Efficiency	8,9	5,7	5,2	6,1	8,8	5,7	7,9	9,3	11,3	9,3
Capital Structure & The Cost of Capital	6,1	4,6	4,3	6,1	2,8	5,2	7,3	3,1	4,0	3,7
Option Theory	1,4	2,9	7,6	4,1	6,5	8,8	7,9	7,4	7,3	7,2
Finance & Economic Theory	6,6	7,4	5,7	7,6	5,1	6,2	2,4	2,5	4,0	3,8
Term Structure of Interest Rates, and Inflation	8,0	9,1	7,1	7,6	7,8	4,6	4,8	4,9	8,6	5,3
Related Topics in Information Economics	5,6	6,3	2,9	3,6	2,3	6,2	9,1	7,4	3,3	6,3
International Finance	5,6	6,3	6,2	3,6	6,0	6,7	4,2	4,3	4,6	6,4
Mergers, Bankruptcy, and Re-organization	1,9	1,7	1,4	4,6	2,3	5,7	2,4	5,6	4,6	4,6
Dividend Policy	1,4	0,6	2,9	2,5	1,4	4,1	4,2	2,5	6,0	2,9
Portfolio Selection & Performance	4,2	2,3	4,8	4,6	1,8	3,6	5,5	4,3	2,6	4,7
Research & Education in Finance	3,8	4,0	4,8	1,0	1,4	0,5	1,8	0,6	0,7	2,4
Futures Markets	2,8	1,1	2,4	2,0	4,1	2,6	2,4	3,1	2,6	3,8
Taxation & Regulations	2,3	6,9	3,8	3,6	4,6	4,6	4,2	4,9	4,0	1,5
Preference Models & Preference Under Uncertainty	8,0	10,3	9,5	7,6	6,9	6,7	4,8	4,3	2,6	7,3
Agency Theory	1,4	1,7	2,4	1,5	0,9	2,6	1,2	3,1	2,6	2,9
Others	22,5	21,1	21,0	26,9	25,8	18,0	21,8	27,8	23,2	20,2
Total	100	100	100	100	100	100	100	100	100	100

As is evident from the distribution of different research areas by journals (see Table 2), the percentage of the “others” area is higher in the JBFA and the FAJ, than in the JOF and the JFQA. This indicates that the former group of journals published a wider range of topics than the latter group. However, the cause of this discrepancy is different for the journals of the former group. As its name implies, the *Journal of Business Finance and Accounting* (JBFA) allocates a considerable percentage of its space to the coverage of research issues related to the field of accounting. In contrast, in the case of FAJ, the high percentage of “others” is mainly due to the wider range of topics it covers.

Table 2

Coverage of Research Areas by Journals

All numbers are in %

	JOF	JFQA	JBFA	FAJ
Asset Pricing Theories	11.4	7.7	5.6	5.5
Capital Markets Efficiency	8.8	6.9	6.7	7.5
Capital Structure & Coat of Capital	6.3	5.1	4.6	1.2
Option Theory	6.2	9.0	3.5	5.2
Finance & Economic Theory	4.6	4.6	7.5	4.6
Term Structure of Interest Rates & Inflation	7.6	6.2	3.5	10.1
Related Topics in Information Economics	7.8	4.6	4.8	0.9
International Finance	4.2	5.7	5.4	7.8
Mergers, Bankruptcy, and Re-organization	2.7	2.6	5.6	2.9
Dividend Policy	2.7	2.1	3.8	2.3
Portfolio Selection & Performance	3.5	6.2	1.3	4.9
Education in Finance	0.4	0.0	4.3	5.5
Futures Markets	3.6	2.6	0.3	4.0
Taxation & Regulations	5.3	2.1	3.2	4.6
Preference Models & Preference Under Uncertainty	6.2	12.9	6.4	2.6
Agency Theory	2.9	2.3	1.6	0.3
Others	15.6	19.5	31.9	30.3
Total	100	100	100	100

The Most Widely Researched Areas

Over the course of 1980 to 1989, the development and progress of research was very much in line with what had been projected by influential scholars in the early and late 1970s (Weston, 1974, Hakansson, 1979). According to these projections, rapid expansion of stock markets would be followed by a growing interest in research on related topics such as market efficiencies and information economics. The utilization of the relevant preference model and development of the option theory were projected to be another progressive area of research. Table 3 shows the ranking of different research areas according to their respective percentages of journal coverage. The “asset pricing theories” and the “capital markets efficiency” are the most frequent areas of research, followed by the “preference models and preference under uncertainty,” the “term structure of interest rates and inflation,” and the “option theory.”

One of the areas of obvious progress is “asset pricing theories.” As predicted by Hakansson (1979), ever since late 1970s, the so-called CAPM, or the Capital Asset Pricing Model, and the Arbitrage Pricing Theory (APT), continue to be the most significant milestones in the field of finance. Therefore, as shown in Table 3, with a share of 8.2%, this area has been ranked as the most popular research area. With a share of about 7.7%, the “capital markets efficiency” was another area that has attracted many researchers during the 1980s. Given the interdependence of these two areas, they could perfectly be considered a single unit. Therefore, with about 16% share, this area of finance was the most widely researched.

Table 3

Ranking of Research Areas

	1980-89
Asset Pricing Theories	8.2
Capital Markets Efficiency	7.7
Preference Models & Preference Under Uncertainty	7.0
Term Structure of Interest Rates & Inflation	6.9
Option Theory	6.0
International Finance	5.4
Finance & Economic Theory	5.3
Related Topics in Information Economics	5.2
Capital Structure & Coat of Capital	4.7
Taxation & Regulations	4.0
Portfolio Selection & Performance	3.8
Mergers, Bankruptcy, and Re-organization	3.4
Dividend Policy	2.7
Futures Markets	2.7
Education in Finance	2.2
Agency Theory	2.2
Others	22.8
Total	100

During the 1980-1989 period, the financial environment exhibited new instabilities. The relevant effects of these instabilities have been taken into account in the formulation of financial policies and decisions. This means that a more profound understanding of decision making and preferences under uncertainty was required. To achieve this objective, researchers have allocated a fair amount of their time to this area, ranked the third with a 7% share.

Another area which has attracted the interest of many financial researchers (about 7%) is the “term structure of interest rates and inflation.” The volatile interest rates during the 1980s, together with the high inflation experienced by most industrial economies over the first half of that decade, seems to be the main stimulating factor behind the attraction of the researchers and practitioners to this area.

The fifth area where progress has been made is the option theory or, more generally, the valuation of contingent contracts (Black and Scholes, 1973; Cox and Rubinstein, 1985). As is evident from the data presented in Table 1, this segment of finance research has really been booming in the last few years. Starting in 1980, with 1.4% coverage share, it increased constantly over the 1980-1989 period, reaching a 7.2% coverage share in 1989.

New Developments in Finance Theory

Up to mid-1960s the emphasis in finance was mainly on “funds flow,” and the finance function was defined as the design of a firm’s “controlling and planning” system in order to fulfill the goal of the firm; in other words, the maximization of the shareholder’s wealth (Weston, 1974). This traditional emphasis was later characterized by planning and control for profit (P&L), management by objective (MBO) and management information systems (MIS). Whatever its

designation, the essence was to give a narrow and mechanical role or so-called “system approach” to the finance function (Moag, Carleton, and Lerner, 1967).

During the late 1960s, new advancements in finance theory took place. The introduction of the pricing mechanism into financial decision-making could be named as one of these major advancements. This, together with the work of scholars like Hirshleifer (1971) in incorporating uncertainty into the model of general competitive equilibrium, led to further developments in finance. Extension of these concepts by other scholars led to the formulation of the modern theory of finance (Fama and Miller, 1972).

Over the remaining part of the 1970s and into the early 1980s, the new theory of finance provided an improved framework for understanding the role of financial instruments and institutions. As argued by Weston (1974):

“.....It (the new theory of finance) extends and illuminates economic theory as well. The various branches of finance are unified in the new theory.”

During the late 1970s and early 1980s, world economic developments introduced new instabilities into the financial environment. As a result, the international dimension of the financial environment in addition to the development of different mechanisms and instruments to confront the effects of this volatile environment, have received great attention from both academics and executives.

One of the areas of finance that progressed rapidly during the late 1970s and 1980s is “corporate finance.” Corporate finance received substantial research attention as a result of developments in finance theory in late 1960s, and changes that occurred in the capital market in 1970s.

Furthermore, over the 1980-1989 period, the closed system approach to finance has grown to recognize broader environments in an open system framework. The traditional paradigm built on shareholder’s wealth maximization went through the typical Kuhnian paradigmatic normal science methodological framework (Kuhn, 1962), through which it was substituted by a multi-valued paradigm, including, among other things social criteria. The evidence of this is the application of the principles of finance to include a wider range of organizations other than business firms. These include health care delivery, religious institutions, educational institutions, prisons, etc.

This indicates some clear changes and also the main trend of the theory of finance in the late 1960s, 1970s as well as the 1980s. These, together with rapid technological advancement, computerization of financial markets, and the deregulation of financial services, are some of the main factors that will affect the future trends of both the theory and the practice of finance and its related research areas.

The Techniques Used by Researchers

Almost 89% of all articles published by so-called pure research journals (JOF, JFQA, and JBFA) have contained at least some econometric models and statistical analysis (see Table 4). The degree of sophistication of the analytical models used in these papers ranges from very basic mathematical or statistical models to very advanced models.

Table 4

The Percentage of Articles with an Analytical Model

All numbers are in %

Year	JOF	JFQA	JBFA	FAJ	Average
1980	96	99	63	15	68
1981	95	99	68	26	72
1982	97	99	72	21	72
1983	96	99	75	15	71
1984	97	99	77	17	73
1985	97	99	80	29	76
1986	96	99	74	48	79
1987	98	99	69	56	81
1988	97	99	62	68	82
1989	96	99	73	69	84

On the other hand, as indicated in Table 4, the practitioners' journal (FAJ) has generally published more qualitative articles. Justification for this massive use of analytical and calculus language in financial research should be found in the research tradition of the modern finance theory.

The research tradition of modern finance theory owes much to the positivist tradition in neo-classical economics. This positivist tradition in general, and in finance in particular, has led the academic finance community to place an unwarranted reliance upon empirical testing as a means of settling theoretical disputes (Ryan, 1982). However, the testability of some of the financial models such as CAPM has been seriously questioned by some authors Roll (1977)². This research tradition can be also considered as the main explanation for many of the unrealistic assumptions that are used for derivation of most of the financial models. The following anecdote also demonstrates this fact:

An economist, an engineer and a chemist were stranded on a desert island with a large can of ham but no can opener. After various exercises in applied science by the engineer and the chemist aimed at opening the can, they turned to the economist, who all the while had been wearing a patronizing grin. "What would you do?" they asked. "Let's assume we have a can opener" came the unruffled reply (Ryan, 1982).

Ryan (1982) also argues that the epistemological contexts in which financial theories have been developed are overemphasizing the role of empirical testing in the validation of scientific theories. In his view, the main tenets of the positivist tradition in neo-classical economics can be summarized as follows:

1. Meaningful statements are either analytic or synthetic but not both.
2. Synthetic statements cannot be established as true or false a priori.

² For papers that discuss some of the econometric problems involved in testing the CAPM, the reader is referred to Miller and Scholes (1972), Roll (1977, 1981), Scholes and Willams (1977), Dimson (1979), and Gibbons (1982).

3. Analytic statements represent a formal language or calculus for organizing empirical material and facilitating our understanding of it. The truth or falseness of analytic statements can be determined from the terms employed within them and by recourse to the laws of logic; the truth of synthetic statements must, in contrast, be established by observation of the empirical domain in question.

The validity of these criteria that characterize the empiricist nature of positivism has been challenged by two different groups of authors. The first group believes that finance and accounting methodology should not blindly mimic the positivist tradition of the neo-classical economics, but rather should design a functional methodological form (Laughlin, 1981). Conversely, the second group advocates the use of more qualitative techniques in social sciences (Bonoma, 1985).

The Technical Trend in the Field of Finance

As mentioned earlier, the use of analytical models has been very frequent in published papers; and is growing further. The overall percentage of articles with an analytical model was about 68% in 1980, while in 1989 it reached about 84%. This is a clear indication of a technical trend in finance over the 1980-1989 period. In light of recent advancements in analytical models, this trend may well continue in the future. However, the heavy reliance of the field's researchers on econometric models, as well as the interpretation of results obtained by these models, have been criticized by some scholars. As argued by Black (1982), the language of econometrics encourages confusion between correlation and causation. The use of econometric models as an estimating tool can drive the researcher to erroneous conclusions. Black (1982) doubts that traditional econometric methods will survive in the future.

Summary

The analysis suggests that there is a high relation between the projected progress in areas of financial research and the actual areas that have been selected by both the practitioners and researchers.

We have identified the 16 most widely researched areas of finance over the 1980-1989 period. We further analyzed the evolution of the theory of finance over the 1960s, 1970s and 1980s with some predictors about the field's theoretical trend in the future.

The techniques used by researchers in the finance field were identified, and the reasons behind their utilization were explained. We also explored current as well as the possible future technical trends in the field.

The insights presented in this study could be of interest for researchers in different areas of finance in many ways. It can assist them in identifying the most widely researched areas. It provides the "research tradition" or "paradigm" of the modern finance theory. And finally, it demonstrates the growing interest in quantitative research in the finance discipline.

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