Innovative Areas in Finance Research

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Purpose

- Develop solutions for the post-Covid world
- Emphasis on inter-disciplinary research
- Emphasis on meeting national agenda through research
- Take learning to class
- Potential of high impact publications and case studies
- Potential for attracting project funding and consulting
- Potential for MDPs/FDPs/CEPs

Innovative Areas in Finance Research

- Corporate governance
- Corporate social responsibility (CSR)
- Supply chain and finance (SC&F)
- Entrepreneurial finance
- Behavioral finance

1. Corporate Governance

- Corporate governance refers to

"the system by which companies are directed and controlled"

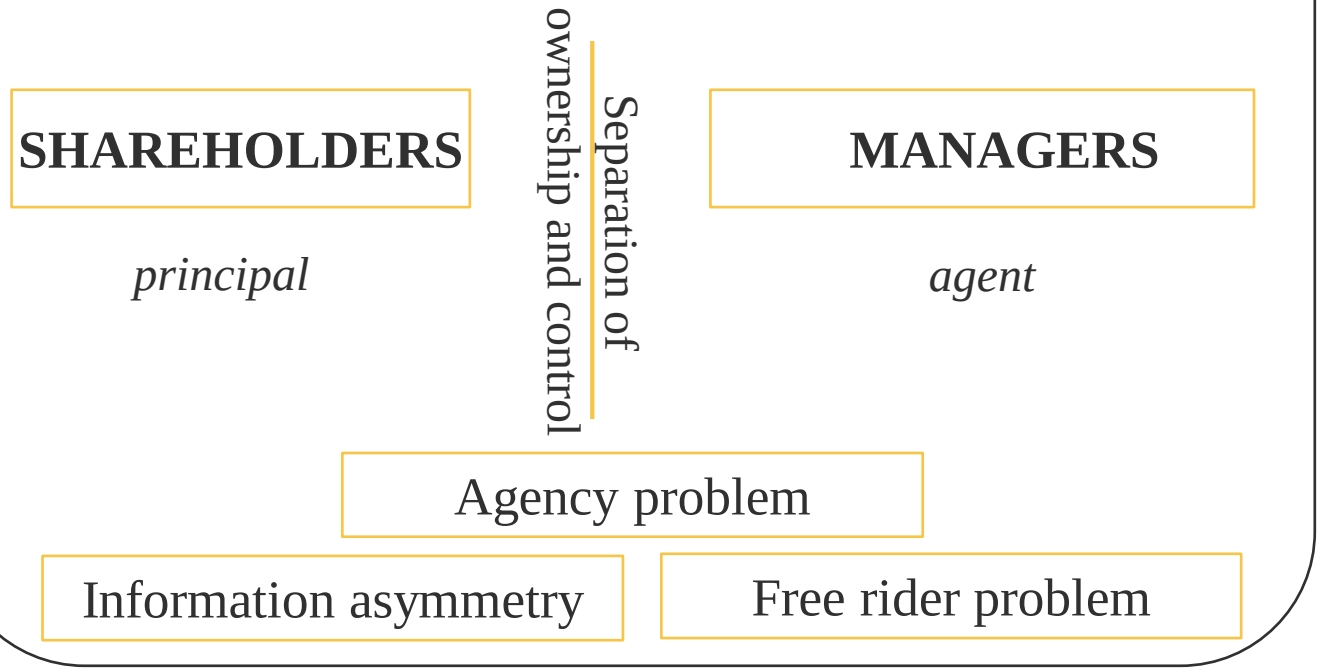
(Cadbury, 1992).

- Describes the rights and responsibilities of all the parties which have a share in the firm (Aoki, 2000).
- Assures the suppliers of capital to the corporates that they will get a return on their invested capital (Shleifer and Vishny, 1997).

Research Agenda

- **Berle and Means (1932)** description of modern corporations.

Fig. 1: Manager-shareholder agency conflict
(Type I agency conflict)



Research Agenda

- **La Porta et al. (1999)** indicate **that concentrated ownership is a common organisational form** across the world.

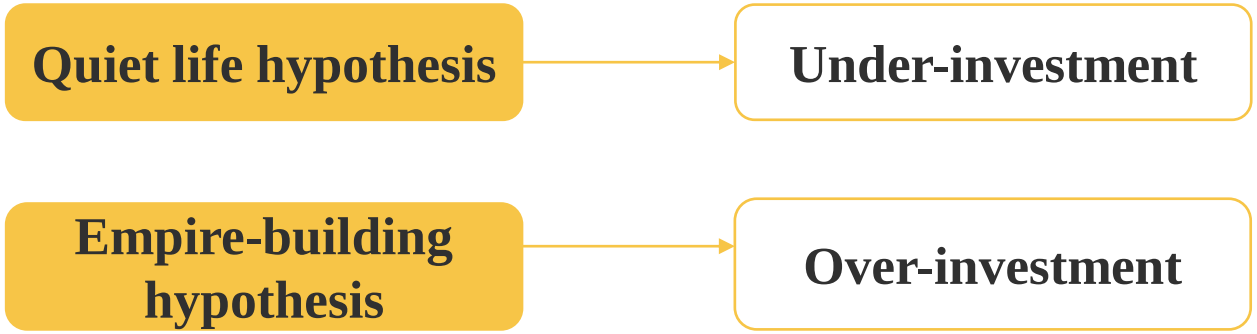
Fig. 2: Controlling-minority shareholder agency conflict
(Type II agency conflict)

Agency conflicts distort **investment, financing, and dividend decisions** of a firm.

Research Agenda

Agency Conflicts and Investment Decisions

- Observed investment expenditures tend to **deviate** from optimal investment levels due to **presence of agency conflicts** (Jensen, 1976).
- Agency conflicts may result in either under-investment or over-investment

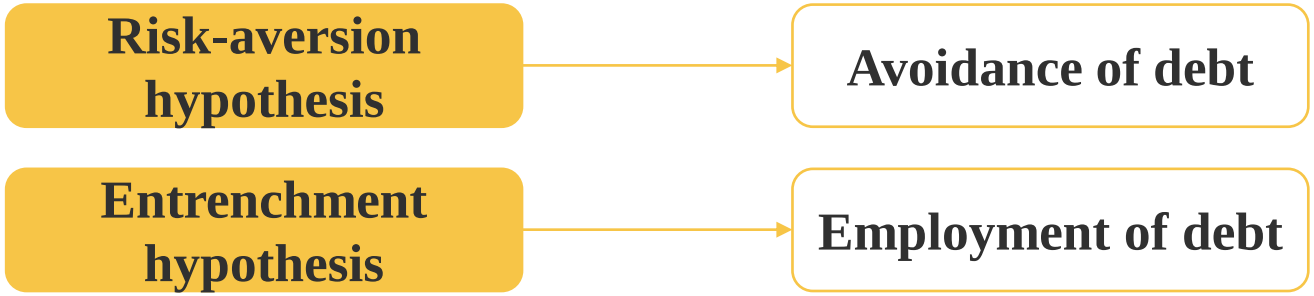


- Investment in cash holdings – **free cash flow hypothesis**

Research Agenda

Agency Conflicts and Capital Structure Decisions

- Debt serve as an **alternative governance mechanism** (Jensen, 1986).
- Studies purport two major hypotheses for capital structure decisions:



- Cost of debt and equity – **Higher risk premium**

Research Agenda

Agency Conflicts and Dividend Decisions

- Mitigate the **problem of free cash flow**, subject firms to the **scrutiny of capital markets.**
- Additional **bonding mechanism**

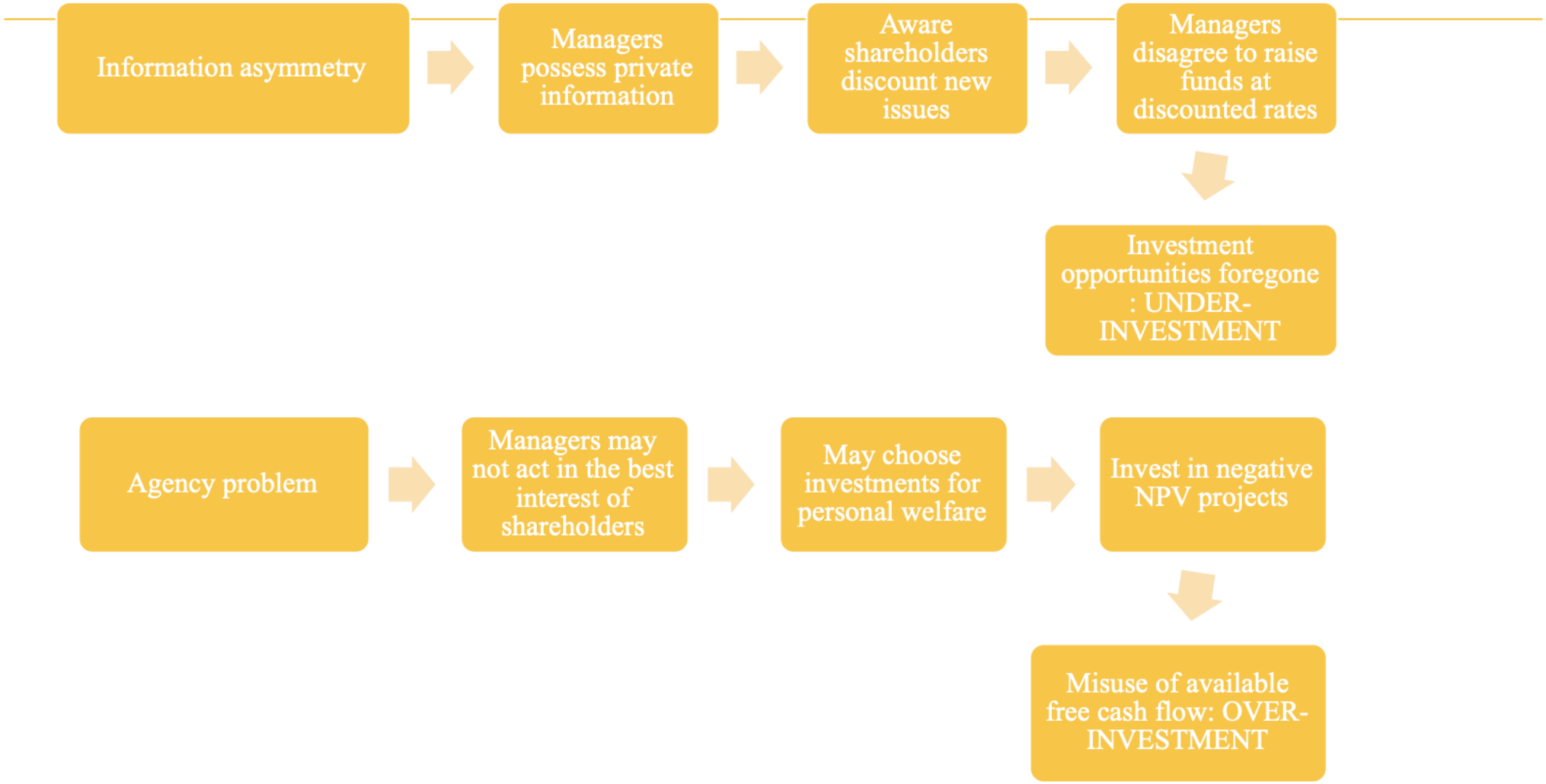
Corporate Governance and Dividend Decisions

- Studies purport two major hypotheses in respect of dividend decisions: Outcome hypothesis and Substitution hypothesis.

2. CSR (Corporate Social Responsibility)

Indicative Research Agenda –
Impact of Corporate Social Responsibility (CSR) disclosures on select financial management decisions

CSR and investment decisions



CSR and cost of equity

- CSR disclosure increases awareness of the investors about the firm
- Creates transparent information environment and reduces information asymmetry and mitigates problem of adverse selection
- Enlarges investor base and enables risk-sharing

- Higher analyst coverage
- Reduces investor's estimation risk
- Lowers the cost of equity capital

CSR and cost of debt

- CSR disclosure lowers information asymmetry and creates a transparent environment
- Builds corporate image and signal reputation

- Lowers default risk and reduces risk exposure
- Better ratings

- Lowers cost of debt since it is based on the assessment of the expected risk of the business.

CSR and dividends

- Involvement in socially responsible activities improves relationship with shareholders
- Better policies concerning labour and better management

- Competitive advantage
- Improved earnings (major determinants of the dividend policy of a firm)

- Ethical distribution of wealth
- Increased dividend payout

3. Supply Chain and Finance (SC&F)

The domain of Supply Chain and Finance (SC&F) is a relatively new research domain which explores the interface of supply chain management and finance.

Research in this domain focuses on modelling the interaction between the financial and operational arms of firms with an aim to better understand these interactions so that joint optimal decisions on both operations and finance can be made by firms at both the strategic and operational level.

Research in this domain encompasses not only the investigation of how joint operational and financial decisions can be made, but also the risks involved.

Why SC&F?

- In a perfect world, the interaction of the operational and financial arms of a firm should have no impact on its value. Each arm of the firm can make decisions independent of one another.
- However, in a world with transaction costs, taxes, information asymmetry and other such imperfections, decisions made by one arm of the firm will naturally affect the other.
- Consider for example, a car manufacturer. If the operations and supply chain arm of the firm decides to produce and sell cars to meet all of its demand, the financial arm needs to obtain financing to facilitate this production. The ongoing Covid-19 crisis drastically reduced the credit available to firms, dried up their cash reserves, and increased the risks faced by firms. Making joint optimal decisions on both operations and financing is now imperative for firms to remain competitive, protect themselves from further economic downturns, and give them the opportunity to take advantage of economic upturns.

Why is research alignment in SC&F required?

Much of the research that has been conducted in supply chain management takes one or more of the following three perspectives:

(1) development of methods and techniques to study SCM and its components/processes;

(2) developing solutions or answers to specific supply chain-related problems or challenges; and/or

(3) measuring the results or outcomes of supply chain strategies and tactics.

Finance is based primarily on the trade-off approach that is cost versus benefit analysis, which is applicable in all the three perspectives. Hence, a marriage of the two concepts would lead to enhanced value for the firm.

Areas of Research Alignment between SC&F

1. Linking Supply Chain Performance To Firm Performance
2. Supply Chain Governance
3. Global Value Chains/ Global Supply Chains
4. Supply Chain Disruptions / Supply Chain Degradations
5. Supply Chain Resilience / Ecological Resilience & Corporate Social Responsibility
6. Capital Budgeting / Leasing Decisions and Supply Chains
7. Working Capital Management and Supply Chains
8. Financial Analysis & Valuation of Supply Chains
9. Finance & Supply Chains

1. Linking Supply Chain Performance To Firm Performance

There are no overall accepted methodologies for measuring value creation within a supply chain, all literature suggests is that performance cannot be measured using only one key performance indicator from one side of the business, but more than one have to be used.

1. Accounting based measures – EBIT, EPS, ROE and ROTA.
2. Market based measures – P/E, P/B and Tobin's Q.
3. One model used for measuring financial performance at supply chain level is the governance value analysis (GVA), proposed by Gosh and John (Hammervoll, 2009). It takes into account two elements of the created value: the relationship value (joint profits) and the actors value (share of the joint profit).
4. Value chain creation measurement from Balanced Scorecard (BSC) to the Supply Chain Operations Reference model (SCOR) (Barber, 2008).

2. Supply Chain Governance

Supply chain management refers to the operational side of a supply chain, while supply chain governance is a more strategic approach regarding the partners of the supply chain. Usually governance stands for the framework where management acts, the rules which are imposed by shareholders and other bodies.

1. Corporate Governance regulations and its impact on Supply chains.
2. Ownership structures and their impact on supply chains.
3. Supply chain performance, reflecting the impacts of extended governance – ensuring a good reputation on the market and increase financial performance.
4. Are there any ways of modelling the relation between supply chain governance practices and its performance?

a. Supply Chain Governance and Ownership Structures

- a. **Cost of capital hypothesis (Jensen and Fama, 1983)** – states that increased ownership concentration decreases firm performance as it raises cost of capital due to decreased market liquidity or decreased diversification opportunities for investors. Hence, there appears a negative association between concentration and performance.
- b. **Effective monitoring hypothesis (Shleifer and Vishny, 1997)** – large shareholding block holders are better monitors as they may be represented in the Board and would have power to influence decision making.
- c. **Incentive alignment hypothesis (Jensen and Meckling, 1976)** - there is a positive alignment between concentration and performance due to the common interests.
- d. **Takeover premium hypothesis (Stulz, 1988)** – if managers hold significant equity in firms, they would be in a better position to thwart a takeover threat from the market for corporate control and hence the raiders would need to pay higher takeover premiums.
- e. **Entrenchment hypothesis (Morck et al., 1988)** – at high ownership levels, managers may be so wealthy that they no longer intend to maximise profits but get more utility from maximising market share or technological leadership. Hence, they will take lower risk. Himmelberg et al. (1999) predicted a non-linear relationship between ownership and firm value.

b. Modelling the relation between supply chain governance practices and its performance

There are many variables taken into account: corporate board dimensions, corporate board independence, corporate board structure, corporate board functioning as a social system, board succession planning, implemented corporate governance models, internal and external audit practices, and control mechanisms.

3. Global Value Chains/ Global Supply Chains

Typically corporate governance is a framework for companies, which have headquarters and manufacturing capabilities within one country. However, this framework is out-dated in comparison to reality, ruled by globalized companies, with supply chain partners placed all over the world.

Economic organizations act nowadays as inter-organizational entities. Chains of companies which collaborate realize a supply for customers, responding to their demand. They form “global supply chains”.

Hypothesis – Does the coordinator or the coordinators of the chain have the possibility to influence partners’ actions and how?

Theories/Models on Global Value Chains

- **Gerefii (2010)** has identified five types for value chain governance: hierarchy, captive, relational, modular and market – ranging from high to low levels of power asymmetry. One company can have total control over another, here we face a hierarchical relation – it is a hierarchy. The opposite situation is the market relation.
- Another model which can be adopted for supply chain governance is ***network governance*****.** This model exists as a policy network - instead of regional governments these networks are formed by several actors who share common interests and who consider that cooperation is the best way to achieve them **(Messner and Meyer-Stamer, 2000).**

4. Supply Chain Disruptions / Supply Chain Degradation

- One of the key issues facing organisations today is **supply chain disruption.** There are many internal and external factors that contribute to the risks facing firms. Often, these risks have a low probability, but significant negative impacts if they occur; and they often occur suddenly and without much warning.
- On the other hand, **supply chain degradation** might very well occur over a period of time that spans several business generations due to market imperfections (i.e., inefficient firms, externalities, flawed pricing mechanisms and information asymmetries) that contribute to environmental degradation and disruptions of supply chains wellbeing **(Cohen and Winn, 2007).**
- Each of these aspects can be studied.

5. Supply Chain Resilience / Ecological Resilience & Corporate Social Responsibility

Supply chains face increased pressure from stakeholders to incorporate a plethora of corporate responsibility and sustainability aspects in their constituents' business practices.

In order to manage supply chain risks, supply management must ensure that their local and international practices and relationships comply with their stakeholders' expected codes of conduct and that environmental and social misconducts do not occur, while maintaining profitability. This strategic fit denotes "supply chain resilience;" defined as "the capacity for a supply chain to survive, adapt, and grow in the face of turbulent change" (Pettit et al., 2010). Ecological resilience – Skilton, 2011.

6. Capital Budgeting / Leasing decisions

1. Financing equipment in supply chains
2. Life Cycle Costing as a tool to aid procurement in supply chain management - Benefits of early involvement in capital expenditure decisions
3. Leasing as an option in supply chain management
4. Inflation and its impact
5. Cost of Capital / Capital Structure – Relationship between financing and supply chain performance - Is the Modigliani-Miller approach applicable?

7. Working Capital Management & Supply Chains

1. Impact of ERP implementation on working capital management
2. An analytical approach towards JIT implementation and its effect on inventory to sales ratio of a particular sector
3. Factoring services in Supply chain management
4. Working capital management and supply chains - Optimizing collections, payables and inventory
5. How can supply chain finance drive cash flows?

(Supply chain finance is an invaluable tool for lengthening a buyer's days purchases outstanding and increasing cash flow)

8. Financial Analysis & Valuation of Supply Chains

1. A novel approach to reduce transportation cost or other cost cutting strategies and its impact on the overall profitability of a firm
2. Dimensioning value chain and discovering performance parameters
3. Identifications of some critical parameters for cost effective supply chain
4. Impact of contemporary e-biz practices on global supply chain performance
5. Reduction in costs due to innovations in logistics and supply chain management
6. Value chain analysis
7. Impact of recession and financial crisis on supply chain management
8. Impact of risk on supply chain management

9. Finance & Supply Chains

1. **Adopting the value maximization framework of finance in supply chain models -** This involves discounting for the systematic risk of the cash flows in supply chain models – will draw on concepts from risk management and valuation.
2. **Exploring the impact of financial constraints and different forms of financing in supply chain -** This involves modelling bank-firm interaction, fairly pricing loans, trade credit, supply chain finance and reverse factoring – will draw on concepts from cost of capital, capital structure and working capital management and financing.
3. **Integrating financial hedging decisions (using futures, forwards, and options)** with the operating and supply chain plans of the firm – will draw on concepts from risk management and valuation.

Looking forward to learning together!

Thank you.