Learning to innovate: The role of exploration and exploitation strategies in different institutional contexts

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Structure of the presentation

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- Background
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Introduction

Innovation and Institutions

Firms' innovative search activities and knowledge management practices are important for innovation

Institutions shape innovation activities

However, little is known about their interdependencies and effective contingencies

Theoretical background

Exploration and exploitation

- Creation or acquisition of new knowledge and capabilities is known as *exploration*, whereas its utilization or leveraging is known as *exploitation* (March, 1991)
- Exploration and exploitation are essential for a firm's long-term viability and help in incremental and radical innovations (Faems et al., 2005; Rothaermel, 2001)
- Firms' explore and exploit through both internal investments and collaborations (Gupta, Smith, & Shalley, 2006; Shukla, Mital, Qureshi, & Wang, 2016)

Theoretical background

Innovation

- Innovation is described as "a process for incremental or significant technical advance or change, which provides enhancement of measurable value *"Source: Oslo Manual (2005)*

- This multidimensional phenomenon relates to technology, market, organizational change, and environmental changes (Danneels and Kleinschmidt, 2001; Schulze & Brojerdi, 2012)

Objectives of the study

1. Establish an understanding about the interrelations between institutions, organizational innovation activities and firm innovation performance

2. Evaluate contingencies between organizational knowledge practices, collaborative search and firm innovation outcomes

Background

Global Innovation Index (GII) Ranking (Year-wise)		
GII	**India**	**Switzerland**
2017	**60**	**1**
2016	66	1
2015	81	1

Source: *"GII 2017 Report | Global Innovation Index"*.

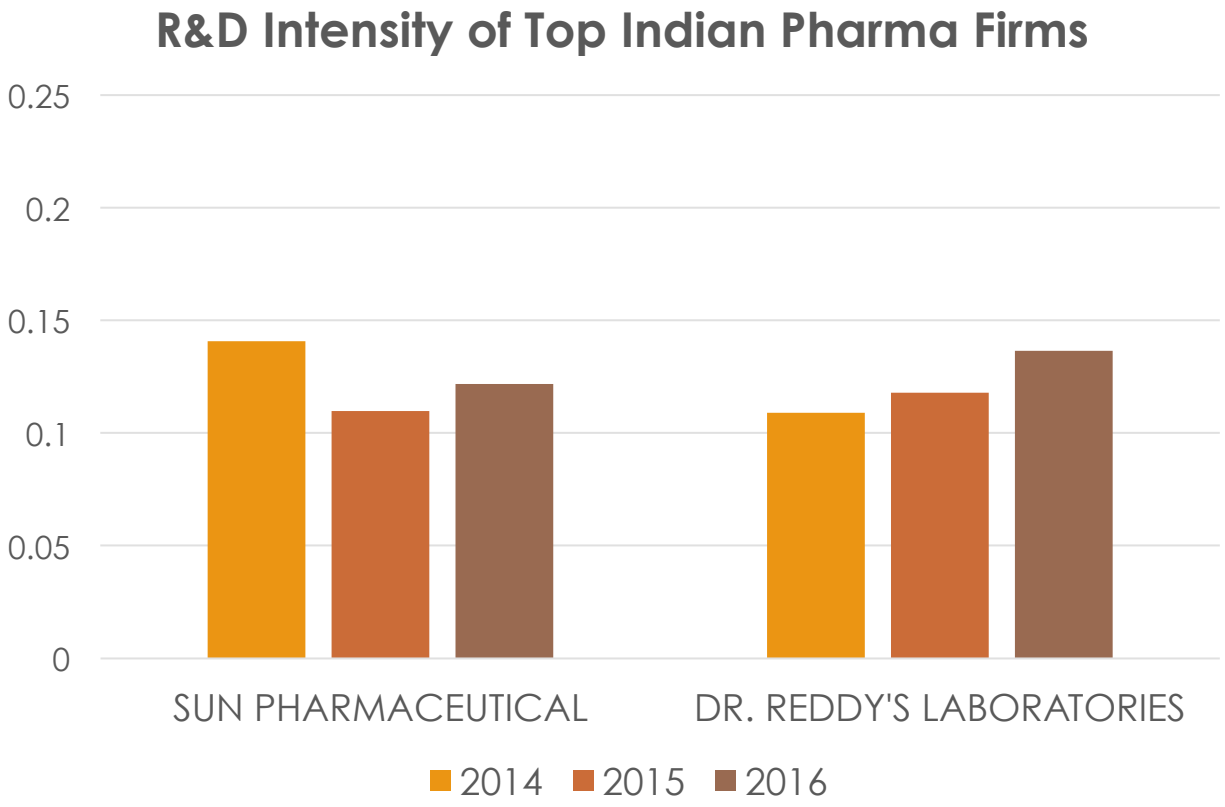
Indicator-wise Ranking for 2017		
Indicators	**India**	**Switzerland**
Institutions	92	8
Human capital and research	64	7
Infrastructure	73	6
Market Sophistication	39	7
Business Sophistication	55	3
Knowledge and Technology Outputs	38	1
Creative Outputs	85	3

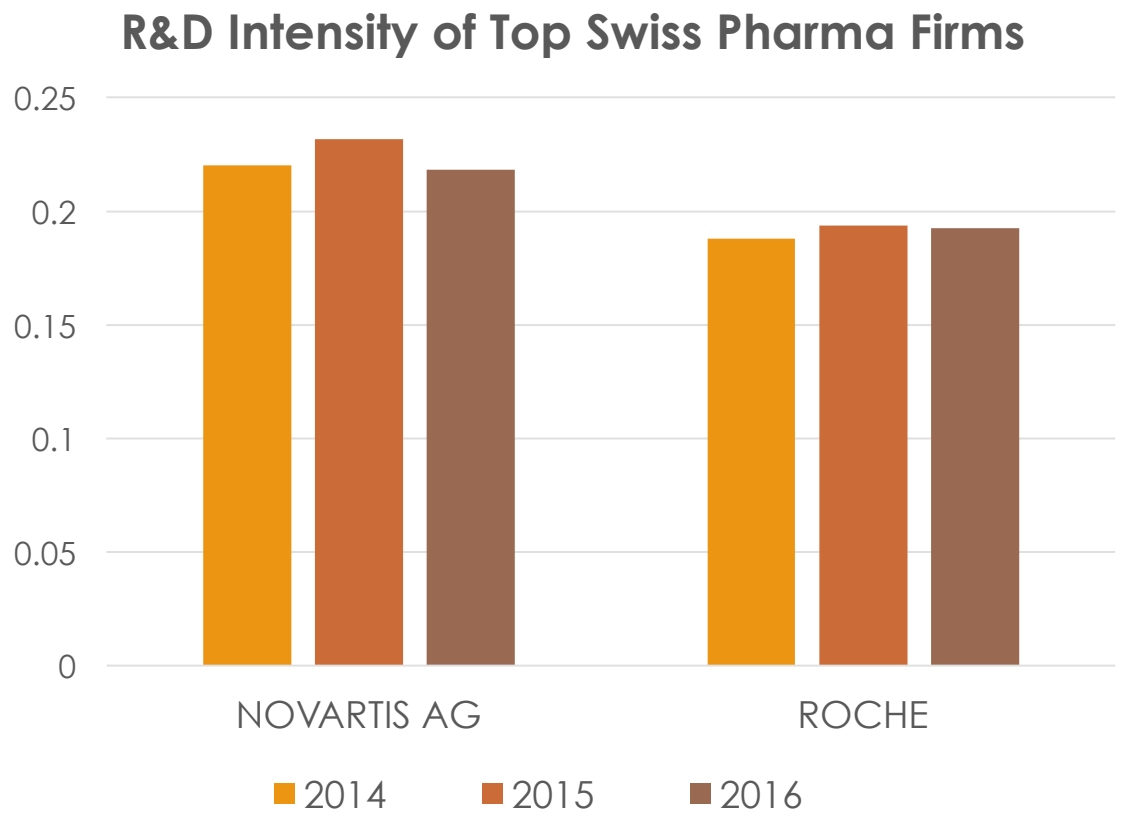
Background

Source: *http://www.un.org/sustainabledevelopment*

Source: *Firstpost*

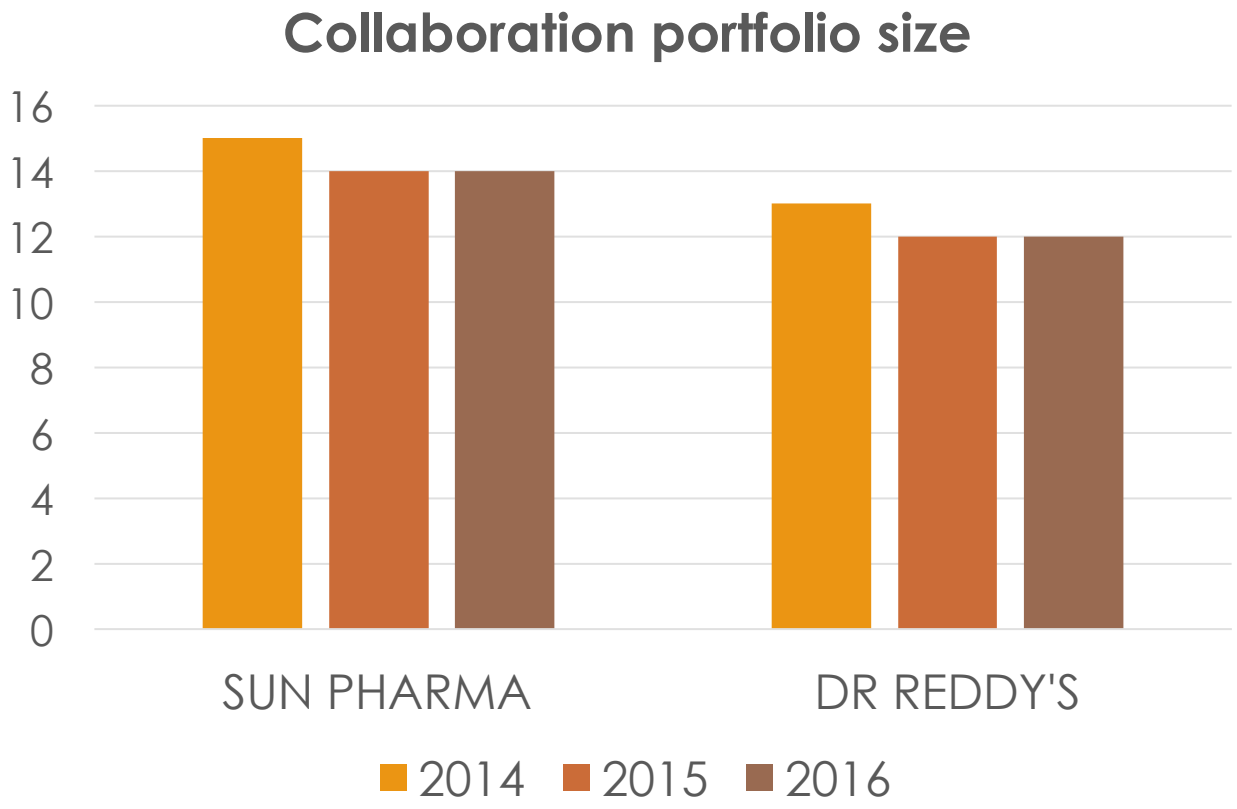
Background





Source: Annual reports

Background



Source: Securities Data Company (SDC) Platinum and annual reports

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Dr. Reddy's plans more R&D alliances with foreign firms

The drug maker had in July announced a strategic tie-up with US-based Purdue University to strengthen pharmaceutical R&D and accelerate innovative drug development

Source: *Livemint*

Research questions

1. How do institutions shape the outcomes of exploration and exploitation strategies?

2. How does partner diversity affect the innovation-related outcomes of organizations' learning in different institutional contexts?

Methods

Innovation surveys

Swiss innovation survey

- Six waves of Swiss innovation survey covering the period 1997-2013 (Beck et al., 2016; Beck & Schenker-Wicki, 2014; Meuer, Rupietta, & Backes-Gellner, 2015)

Representative sample of Swiss firms.
Firm level aggregated data (>=5 employees).
both manufacturing as well as service sectors.
Responses rates between 33.8% and 39.6%.

Indian innovation survey

- India had its first wave of National Innovation Survey conducted in 2010, covering the three years period of 2007-2010 (Arora, 2011; NSTMIS, 2014)
- A survey of 9001 firms (both manufacturing and services) across 26 states and Union Territories of India

Methods

Additional data sources

- Securities Data Company (SDC) Platinum database (Dhir & Mital, 2013; Shukla & Mital, 2016)
- Patent data
  - Swiss Federal Institute of Intellectual Property
  - Indian Patent office
  - World Intellectual Properties Organization (WIPO)

Methods

Evaluation approach

Qualitative and Quantitative – Mixed Approach – Triangulation!!

Implications

Theoretical

- Intends to enhance the extant understanding of the effectiveness of firms' exploration and exploitation strategies by comparing whether and how innovation outcomes vary in different institutional contexts

- Intends to contribute to the innovation literature by examining the interplays between institutional and organizational determinants of innovation

- The study will have implications for partner diversity literature as well, as findings may help how the costs and benefits of diversity may vary with institutions

Implications

Managerial and public policy

- Findings will inform practitioners that which of the organizational and collaborative attributes facilitate organizational innovativeness in different institutional contexts

- Findings may apprise policy makers regarding the role of institutions with respect to innovation

Thank You