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A Study on Financial Management Constructs in Order to Improve Their Innovation Capability and Capacity

Dr. Tapan Kumar Nayak*

Professor, IMS, Ghaziabad

Abstract – In today's dynamic environment, creativity has become a critical component for companies seeking to expand. In this respect, financial accounting plays a critical position in enhancing a company's ability to innovate. The effect of financial management components on the innovativeness of Austrian SMEs is examined in this paper. The study found a substantial effect of the financial management paradigm on firm creativity, based on data from 118 workers from 41 SMEs in Austria. At the 1% stage, the three components of liquidity, regulation, and financial awareness are statistically important in explaining innovativeness. In order to enhance their innovation capabilities and capacity, the report recommends focusing on the three financial management constructs.

Keywords – Financial Management, Innovation Capacity, Innovation, Private Firms.

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INTRODUCTION

Thanks to the and rivalry in the dynamically rising industry, organisations are expected to react quickly and appropriately to high market conditions in order to satisfy evolving consumer demands. In this respect, the most fundamental yet most important factor is proper financial regulation, both in terms of financial preparation and liquidity management. Meanwhile, it has been suggested that today's businesses are more concerned with turnover and gross margins than with strategic goals and liquidity. Furthermore, in order to achieve the highest degree of strategic benefit within the respective sector, there is another noteworthy feature of the highly competitive environment that requires organisations to be considerate sufficiently. If the company wishes to remain a leading organisation even in the ever-increasing dynamic marketplace, innovation management is the most critical factor that has gained possible magnitude when combined with financial management. It has been claimed that these technologies are used to minimise the likely adversities within the technological areas when it comes to the aspect of handling creativity within an organisational context. The resulting outcomes, if properly managed, are ultimately beneficial in terms of both economic and ecological achievements. The ramifications of innovation management are undeniable, given the growing pattern of technology integrations around the market domain.

However, despite being a possible source of long-term strategic advantage, funding these technologies has proven to be a difficult circumstance for business enterprises. As a result, this specific aspect of handling the budgets of organisations in relation to the deployment of technologies has become a contentious topic in the recent literature. The confusion that exists across the market about asymmetric knowledge about innovation practices has become the primary source of funding restrictions for incorporation innovations. Firms must continuously innovate their business methods in order to maintain market competition, which necessitates managing continued expenditure in both tangible and intangible dimensions of business developments. According to Lee, Sameen, and Cowling, financial restrictions hinder the acceptance of technical technologies by small and medium-sized enterprises (SMEs) or entrepreneurial start-ups with future innovation opportunities. For the effective exploitation of innovatively diverging growth trends, adequate financial resources are required, especially in the areas of research and development (henceforth; R & D). In this regard, it has been developed that using external resources (preferably the equity market) is greatly beneficial for certain companies since it helps to eliminate asymmetry in knowledge about innovation practises. However, several other viewpoints on handling the organization's financials and liquidity in relation to the implementation of technologies have been presented in the literature; however, the findings have been found to be lacking in terms of promoting reliable outcomes. The key explanations for the problems have been inadequate detection of valuable trends in

the results, as well as the usage of incorrect controls and sampling inadequacies. As a result, by being cautious in following the research approach and all other related elements of the research design, this thesis hopes to fill a common void in the literature. Furthermore, it has long been understood that all strategic results of the innovation aspect pale in comparison to the guarantee of the most effective financial controls inside organizational activities. It contributes to the conclusion that creativity is based on finances; as a result, financial control and management become extremely important for an organization's competitiveness.

The Impact of Financial Innovation on Financial Performance

Because of the value of the bank-client partnership, the report focuses on the first mover advantage, which could be more likely in the banking sector than in other sectors. Theories of first mover advantages have traditionally emerged from the Schumpeterian theory that innovative technologies and methods developed by a company are shielded from copying for a set period of time. A good breakthrough creates a unique strategic opportunity for the company, providing it with a competitive edge and superior results. As a result of the imitation that happens during the Schumpeterian period of creative destruction, businesses must create many more inventions in order to retain a competitive edge. Cost, according to price theory, is a system that provides first mover advantages. In the one side, setting high rates before imitators arrive helps innovators to recoup their investment in new products. These monopoly rents, on the other hand, are only transient and can be lost until imitation occurs. This is the classic monopoly logic that Van Horne used to justify financial innovators' success. According to Berger, important facets of technical transition involve advances that minimise costs associated with data acquisition, storage, distribution, and delivery, as well as innovations that change how consumers access bank services. ATMs (automated teller machines), telephone banking, internet banking, and e-money, according to Humphrey, are among the significant developments influencing the banking delivery mechanism that have a significant impact on banking efficiency. Client relationship management systems, bank technology software, and a variety of other technologies, according to Goddard, are among the significant developments in internal banking systems that have influenced banking efficiency and profitability. Because of the elevated premiums they place or the expanded market positions they gain, the first institutions to introduce 11 successful emerging inventions make exceptional profits. To stop losing market share, other banks follow their example. Innovative banks will expect to make large returns from different new or upgraded goods as the process of growth progresses and new innovations are implemented over time. However, as inventions become more broadly embraced, exceptional revenues will dwindle.

Figure 1.1: Components of Financial Development

Financial Dependence of Innovation

Although companies need to innovate to achieve a competitive edge against their rivals, funding innovation is challenging due to the complexity and knowledge asymmetry associated with creative practices. Many businesses with creative ideas are cash-strapped. Stock markets may have a variety of advantages as a pool of foreign resources, including reducing asymmetric intelligence, decreasing capital costs, and allowing businesses to innovate. Understanding the relationship between innovation and a firm's financial dependence is a crucial but under-explored research question, given the increasing reliance of young firms on public equity to fund their R&D. We fill this void in the literature by exploring how access to equity market funding and the need for foreign funding affect innovation in our article, Financial Dependence and Innovation: The Case of Public versus Private Firms, which was recently made publicly accessible on SSRN. We analyse the effect of a company's public listing status on competition by capturing its entry to financial exchanges. Although selling on markets gives businesses access to a wide pool of low-cost money, myopic investors put strain on them to make short-term gains. As a result, we anticipate that the impact of public listing on innovation will be determined by the trade-off between the advantages and costs of stock market listing, which will differ among companies with varying degrees of reliance on foreign capital. We discovered that, on average, public firms in external finance based (EFD) industries have more patents of higher number, efficiency, and creativity than their private equivalents, but not public firms in internal finance dependent (IFD) industries, by studying the invention practices of a wide sample of private and public firms between 1994 and 2004. EFD (IFD) companies are those with internal cash balances that are less (more) than their assets.

Role of Financial Management in Innovation

Shift would become the norm as companies become increasingly involved in innovation. This would have an effect on finance, which is a support mechanism that must react to new market needs by adapting systems, procedures, and service offerings. In the one side, finance must improve as a business associate, assisting the company in creativity and expansion. Finance, on the other side, must become more competitive to cope with an increasing number

of external laws, necessitating the optimization of financial systems and financial management. As a consequence, some kind of "financial creativity" is also needed. What are CFOs' perspectives on creativity and their position in it? What are the main pillars and obstacles of financial transformation?

LITERATURE REVIEW

Lech Gąsiorkiewicz et al. (2020) Technology-based financial developments are putting the strain on financial markets around the world. Any of these changes are resulting in the emergence of alternative financial systems that operate alongside the "traditional" ones, whilst others are merely replacing the "old" ones. Alternative intermediating organisations, based on their technical and business superiority, are gaining ground on incumbents. To remain competitive in the conventional financial intermediation space, new technologies are needed. Any technical solutions often allow for partial or complete disintermediation of financial markets, eliminating some internal processing costs and allowing economic agents to match directly. Digitalization and datafication, along with artificial intelligence, are creating a slew of new operational and financial prospects. In the other side, they are a source of new threats to the regulatory and economic processes, as well as financial stability, public security, and customer well-being, both of which must be handled appropriately. In this article, we examine the key components of the latest wave of technology-based financial technologies, as well as their main drivers, and explore the significant strategic challenges and implications that we face in this sector.

Yusheng, K et al. (2019) In an intensely dynamic and uncertain banking market, the idea of creativity is slowly gaining traction. The aim of this study is to determine the importance of service innovation (SI) in the relationship between service delivery (SERVD), customer satisfaction (CSAT), and loyalty in the Ghanaian banking sector. A conceptual structure was created and evaluated using data from 450 sampled commercial bank customers in Ghana, based on banking and marketing literature. Partial least squares structural equation modeling was used to evaluate the results. SI seems to have a direct impact on SERVD and CSAT, according to the results. The findings once again showed a connection between SERVD, CSAT, and bank consumer loyalty. This research provides analytical guidance for the implementation of novel service delivery and provision approaches. This paper is a preliminary investigation into innovation management in the financial services sector in a developing economy.

Pradhan, Rudra P et al. (2018) the relationships between creativity, financial progress, and economic growth in 49 European countries were studied using panel unit root and panel co integration tests between 1961 and 2014. The findings point to the three series having a co integrating partnership. In the long term, financial development and creativity are all causative influences of economic growth, according to a vector error-correction model. As a result, focusing action on financial growth and creativity is a good way to improve these countries' economic efficiency.

Azimova, Tarana et al. (2017) Using panel data review, the paper discusses the connection between financial progress, financial creativity, and economic growth. For the years 2003 to 2016, the survey includes fifteen nations. Financial growth is a composite variable made up of four elements: financial access, financial depth, financial performance, and financial stability. The paper is notable for including financial creativity as a part of financial growth in comparison to the four previously mentioned. Financial innovation and economic development have a statistically important and optimistic association, according to our findings (The higher the number of financial innovation, the higher the rate of economic growth). Both financial progress and financial creativity, according to the report, have a direct effect on economic growth.

Hombert et al. (2017) we investigate how partnership lending influences venture funding. We demonstrate that a negative shock to relationships reduces the number of creative companies, especially those that rely on relationship lending, such as tiny, opaque businesses. This credit supply shock causes inventor reallocation, with young and productive inventors leaving small businesses and moving out of places where lending partnerships are strained. Our findings suggest that credit markets have an effect on both the degree of creativity and the allocation of creative human resources through the economy.

METHODOLOGY OF THE STUDY

The obtained data must be reliable and authentic in order for a testing method to be effective. It emphasises the undeniable significance of choosing the most suitable tool for data collection and analysis. As a result, Bryman has stated that it is essential to be careful in selecting a test tool, as the success of the study goals is highly contingent on the method chosen.

Data Collection

The data sources are essential since they guide the gathering of information in order to address the developed research questions, which lead to the achievement of the study's goal and objectives. There are two categories of data sources that are common in the analysis domain, each with a different degree of importance for a study: primary data sources and secondary data sources. The primary source of data was used in this analysis to gather information for the

purposes of analyzing the relationship between the specified variables. Primarily, this data source has the distinct feature of having first-hand or direct knowledge access, which ultimately validates its selection. As a result, using a random sampling technique, workers from accounting and finance divisions of 41 SMEs in Austria were selected. Random sampling has enabled the gathering of data through various market markets, as well as providing the researcher with greater versatility and usability. As a result, the study used a sample size of 148 workers from finance and accounting divisions from the SMEs in question. However, only 125 questionnaires were entirely filled out, with only 118 deemed useful and available in terms of the study's goals.

Research design

Research design has its multiple forms, including review-based design, meta-analytic design, experimental and semi-experimental design, descriptive design, correlation design and others. The descriptive design made it easier to analyze the identified variables in percentages, frequencies, and other ways. The correlation design, on the other hand, has aided in recognizing the relationship between the variables under consideration.

Statistical analysis techniques were used to generate the results after the information was collected via a questionnaire. Among the credible techniques of statistical analysis, the study has employed descriptive statistics, factor analysis, reliability test, and regression analysis. Descriptive analysis techniques highlight the basic trends or patterns that might foster the forecasting regarding the potential impacts on the study context. Factor analysis and reliability tests have aided the researcher in determining the hidden unpredictability within the identified and correlated variables once the patterns within the collected data have been understood. As a result of regression analysis, the relationship between the dependent and independent variables was identified, resulting in the study's success. As a result, the overall research process has been conducted in the most vigilant manner, since the credibility, objectivity, and integrity of the study could not be compromised at any cost.

Research Hypotheses

The following theories underpin the mathematical associations between financial management build and innovativeness in Austrian SMEs:

H1: Financial liquidity has a huge effect on the innovativeness of Austrian SMEs.

H2: Financial influence has a huge effect on the innovativeness of Austrian SMEs.

H3: Financial literacy has a huge influence on the innovativeness of Austrian SMEs.

RESEARCH RESULTS

Innovation in Austria

The aspect of creativity plays a major role in overall competition, not just at the organisational level but also at the nation level. Austria is ranked 11th in the world in total creativity and complexity variables, 8th in company sophistication, and 14th in innovation, according to the Global Competitiveness Report 2016 (Schwab, 2016). Furthermore, Austria is ranked highly in terms of innovation potential (7th), PCT patent applications (11th), and business R&D budget (19th) (Schwab, 2016). It implies that the government and companies in the world value creativity, science, and growth.

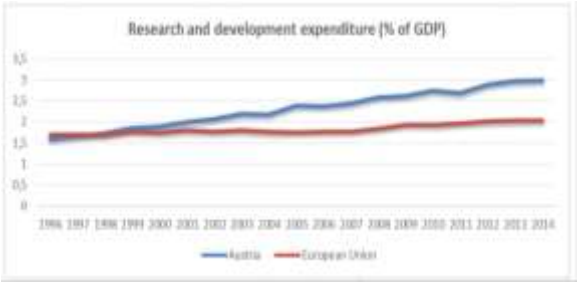

Figure 1.2: R&D Expenditure

According to Figure 1.2, R&D spending on artistic work (for growing knowledge) in Austria is steadily increasing as a percentage of GDP. Austrian R&D spending is still higher than the European Union's total R&D spending as a percentage of GDP.

DEMOGRAPHIC ANALYSIS

Table 1: Respondents' business sector

Business Sector

	Frequency	*Percent*
Food and Drink	20	16.9
Chemical and Automotive	10	8.5
Mechanical and Steel Engineering	16	13.6
Wood, Pulp and Paper	9	7.6
Financial Services	18	15.3
Electrics and Electronics	9	7.6
Textiles, clothing	15	12.7
Tourism	14	11.9
Others	7	5.9
Total	118	100.0

Source: Authors' own estimation

The plurality of participants (16.9%) in the latest research survey, which explores the effect of financial management on creativity in Austrian SMEs, function in the food and beverage industry, led by financial services (15.3 percent), and mechanical and steel engineering (13.6 percent) (Fig. 1.3 in Table 1)

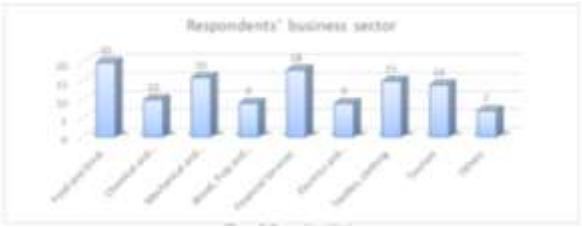

Figure 1.3: Respondents' business sector

Validity and Reliability

For inferential examination, the researcher ensured that the test tool, a 5-point Likert Scale questionnaire, was accurate and reliable. A professional analysis is used to determine the questionnaire's validity. Furthermore, elements from prior research are used to guarantee the relevance of the innovativeness construct. Cronbach's alpha statistic, which shows a reasonably high degree of internal consistency (greater than 0.7) of each build, is used to assess the test items' internal consistency reliability (liquidity, controlling, financial literacy, and innovativeness).

Factor Analysis

The principal component analysis (PCA) approach, which employs the varimax rotation procedure, is used to summarise the questionnaire elements. The sample is sufficient and suitable for running factor analysis, according to the KMO value and Bartlett's test.

Table 2: Rotated Matrix

Rotated Component Matrix

	Component			
	1	2	3	4
Your firm consider establishing and executing internal controls over financial and accounting procedures	.958			
It is important for your organisation to conduct appropriate financial planning and reporting	.939			
Your organisation performs in-depth financial analysis	.898			
Your organisation has sufficient free cash flows available		.943		
Your organisation has the ability to pay its short-term debts		.903		
Your organisation has a reasonable cash conversion cycle		.841		
Your organisation invests in research and development			.835	
Technical innovation is supported and readily accepted			.730	
Management actively seeks innovative ideas			.683	
You are appreciated for innovative and new ideas			.764	
You are aware of current financial needs of you company				.758
There is appropriate expenditure and income management				.877
Your organisation focuses on long term financial goals				.805

Extraction Method: PCA
Rotation Method: Varimax

From a total of 13 products, Table 2 extracts four components (factors) (liquidity = 3, managing = 3, literacy = 3, and innovativeness = 4). These factor loadings combined associated objects into unobservable (latent) constructs for regression analysis.

Regression Analysis

Multiple regression analysis is used to assess the mathematical association between the elements of financial accounting and the construct of creativity. The relationship between the variables can be expressed mathematically as:

$$I = \alpha + \beta 1L + \beta 2C + \beta 3FL + e \ldots\ldots\ldots (1)$$

The study's research hypotheses are evaluated in this segment, where I, L, C, and FL denote innovativeness, liquidity, power, and financial literacy.

Table 3: Multiple Regression Analysis

Dependent Variable: Innovativeness	B	t	Sig.
(Constant)	.035	.097	.923
Liquidity	.332	4.459	.000
Financial Literacy	.222	4.034	.000
Controlling	.435	9.953	.000
F Statistic			64.78
P Value			0.000
R Square			0.630
Adjusted R Square			0.621

Table 3 shows that the average multiple regression models are statistically important at the 0.01 mark, implying that financial management has a significant impact on Austrian SMEs' innovativeness or innovation ability. Financial liquidity, financial literacy, and financial controlling are both statistically important at 1% with optimistic beta values in this study's financial management components. It means that liquidity, financial awareness, and financial management increase the innovativeness or innovation potential of Austrian SMEs in a variety of industries. On the basis of the above findings, the following model is developed:

$$I = 0.332(L) + 0.435(C) + 0.222(FL) + e \ldots\ldots\ldots (2)$$

Because of its trivial interaction with the dependent variable, the constant word is omitted from the formula.

RESULT AND DISCUSSION

The aim of this study is to determine the effect of financial management elements on firm creativity. Financial literacy, power, and liquidity are some of these components. The research considers a substantial effect of the overall financial management paradigm on the innovation potential of Austrian companies based on quantitative analysis (regression

analysis). Each portion of the financial management model is examined using the following study hypotheses: H1: Financial liquidity has a major effect on the innovativeness of Austrian SMEs – H1 is confirmed, implying that increased liquidity in terms of free cash flows, willingness to cover short-term loans, and cash transfer period improves the firms' innovation potential. H2: Financial controls have a huge effect on the innovativeness of Austrian SMEs. – Internal controls on financial and accounting processes, financial forecasting and filing, and in-depth financial research expand the innovation potential of SMEs in Austria, according to H2. H3: Financial literacy has a major effect on the innovativeness of Austrian SMEs – the third theory is also supported, with higher understanding, proper spending and income control, and an emphasis on long-term financial targets both contributing to increased firm innovativeness. Based on the results, it is recommended that Austrian SMEs place a greater emphasis on the three financial management frameworks in order to enhance their creativity capabilities and capacity. A qualitative analysis (based on in-depth interviews) or a quantitative analysis (based on secondary data) can be used in future studies on the issue. Furthermore, for more representative and accurate data, future primary research could expand the sample size (firms and respondents).

CONCLUSION

Financial monitoring and regulation have a huge impact on a company's overall results. The importance of financial accounting in terms of creativity is evaluated in this article. The study considers a substantial effect of financial management components on firm creativity, based on primary data from 118 respondents from 41 SMEs in Austria. Financial liquidity, literacy, and power are both statistically important in describing a firm's ability to innovate. It proposes that Austrian businesses should concentrate on these financial structures in order to improve their creative skills and capacities.

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Corresponding Author

Dr. Tapan Kumar Nayak*

Professor, IMS, Ghaziabad