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*Artículos Científicos*

**Efecto de las Estrategias Financieras en la Competitividad y la  
Innovación de empresas**

***The effect of Financial Strategies on Competitiveness and Innovation of  
companies***

***Efeito das Estratégias Financeiras na Competitividade e Inovação das Empresas***

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## Resumen

La planificación financiera ha incrementado la dependencia sobre la administración estratégica y la planificación financiera para responder a las constantes externas del mercado (Altay et al., 2023; Rådberg y Löften, 2022). Por lo tanto, se determinó el efecto del control financiero, el control de riesgo y la planeación de inversión sobre la competitividad y la innovación de empresas manufactureras en el estado de Aguascalientes, mediante la metodología de Troise et al. (2022) para la medición de variables y la de Pinto et al. (2023) para la correlación lineal. La metodología consistió en el análisis correlacional de variables y rotación varimax de información recolectada mediante un cuestionario tipo Likert, encontrándose que las estrategias financieras tienen una correlación de 0.948 con la competitividad y de 0.927 con la innovación, lo que indica la existencia de planificación financiera mediante un proceso de estructuración en sus modelos de negocio a través de incentivos financieros para operar de forma activa y permanente en el mercado. Estos hallazgos limitan la brecha del conocimiento entre la capacidad financiera y las capacidades aprehendidas, ya que, a mayor desarrollo de las estrategias financieras, habrá más nivel de competitividad e innovación, mejorando las estrategias financieras y los modelos de negocios.

**Palabras clave:** estrategias, finanzas, competitividad, innovación.

## Abstract

Financial planning has increased the dependence on strategic management and financial planning to respond to external market constants (Altay *et al.*, 2023; Rådberg y Löften, 2022). Therefore, the effect of financial control, risk control and investment planning on the competitiveness and innovation of manufacturing companies in the state of Aguascalientes was determined using the methodology of Troise *et al.* (2022) for the measurement of variables and that of Pinto *et al.* (2023) for linear correlation. The methodology consisted of a correlational analysis of variables, a varimax rotation analysis and a Lykert-type questionnaire. It was found that financial strategies have a correlation of 0.948 with competitiveness and 0.927 with innovation, which is reflected in the planning through a structuring process in their business models through financial incentives to operate actively and permanently in the market. These findings limit the knowledge gap between the financial capacity and the apprehended capabilities of a company, since the greater the development of financial strategies, the higher the level of competitiveness and innovation, improving financial strategies and business models.

**Keywords:** strategies, finance, competitiveness, innovation.

## Resumo

O planejamento financeiro aumentou a dependência da gestão estratégica e do planejamento financeiro para responder às constantes do mercado externo (Altay et al., 2023; Rådberg e Löften, 2022). Portanto, foi determinado o efeito do controle financeiro, controle de riscos e planejamento de investimentos na competitividade e inovação das empresas manufatureiras do estado de Aguascalientes, utilizando a metodologia de Troise et al. (2022) para a mensuração das variáveis e o de Pinto et al. (2023) para correlação linear. A metodologia consistiu na análise correlacional das variáveis e rotação varimax das informações coletadas por meio de um questionário do tipo Likert, constatando que as estratégias financeiras possuem correlação de 0,948 com a competitividade e 0,927 com a inovação, o que indica a existência do planejamento financeiro por meio de um processo estruturante em seus modelos de negócios por meio de incentivos financeiros para atuar de forma ativa e permanente no mercado. Esses achados limitam a lacuna de conhecimento entre capacidade financeira e capacidades apreendidas, pois quanto maior o desenvolvimento de estratégias financeiras, maior o nível de competitividade e inovação, aprimorando estratégias financeiras e modelos de negócios.

**Palavras-chave:** estratégias, finanças, competitividade, inovação.

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## Introduction

The rise of emerging economies and international markets has increased the demand for strategic knowledge in business models for the formulation of adaptation strategies (Aparicio et al., 2023). Concisely, attention has recently focused on the way in which a company's financial planning affects competitiveness and innovation (Coveri and Zanfei, 2023). However, the causal relationship between these variables is not clear (Aparicio et al., 2023), so their analysis has been broken down based on stratifying financial strategies into financial control, risk control and investment planning (Altay et al. al., 2023), so that the analysis of its impact on competitiveness and innovation is clarified and establishes an area of knowledge that closely relates finance to the competitiveness and innovation of companies (Ugur and Vivarelli, 2021; Schwab, 2019 ).

On the other hand, the gradual development of companies has increased their demand to depend on a business model adaptable to a strategic financial plan in order to achieve a fixed coupling

similar to that of other companies of different sizes and capital operating in the same market (Schwab, 2019). In this way, the dependence of firms on a traditional business model has created a weakness for them by not allowing them to be competitive or develop significant innovation processes (Altay et al., 2023); Therefore, one way for companies to stand out, not only within emerging economies but also within their sector, is by structuring their business models through financial strategies (Coveri and Zanfei, 2023). To know the nature of their relationship with competitiveness and innovation is of vital importance (Singh and Gaur, 2018), so it is necessary to deepen the way in which these constructs are coupled within the business model of the company and the how they are influenced by financial capital (Altay et al., 2023; Pinto et al., 2023).

In order to achieve the purpose of the investigation, information was collected through a Likert scale questionnaire aimed at small and medium-sized companies in the manufacturing industry of the state of Aguascalientes, collecting information with a significance level of 93% and a margin of error of 0.07, which made the sample of 100 companies statistically significant; the methodology, according to Pinto et al. (2023) and Coveri and Zanfei (2023), consisted of the analysis and correlation of variables through different models, finding that financial strategies have a correlation level of 0.948 and 0.927 with competitiveness and innovation respectively, which implies that risk control, financial control and investment control have a significant impact on the development of competitiveness as well as facilitating the innovation processes of a company.

The structure of the project consists of an introduction with specific contributions of the project, later the review of the literature clarifies the most relevant bibliographic contributions in relation to these variables, then the methodology is detailed so that in the next section of results it is shown. the findings supported by hard data and, finally, the discussion and conclusions show the contribution to knowledge of this project.

## **Literature review**

### **The role of financial strategies within a company**

Financial strategies play a key role within an efficient, competitive and innovative business model (Pinto et al., 2023). This conception stems from the ability that a company has a financially strategic model confers at the same time that it confers a differentiation from traditional business models for their immediate integration in emerging economies (Ugur and Vivarelli, 2021), to provide them with a outstanding performance after integrating this practical and theoretical knowledge into their DNA, which entails a gradual integration into their daily activities (Gao, 2006). However, it also

sets a requirement to develop and adopt additional capabilities and skills, such as competitiveness and innovation practices, a topic studied in the literature with a considerable impact on this area of knowledge (Singh and Gaur, 2018).

In order to address the clear conception that clarifies the relationship of financial strategies with the development of business capabilities, defined as competitiveness and innovation according to Coveri and Zanfei (2023), the study of financial strategies in financial control, control of risk and investment planning, to clarify how they impact the development of the capabilities mentioned above. Similarly, Bonanno et al. (2023) provide a contribution by suggesting that the specific characteristics of a company tend to affect its performance in relation to the development of its competitiveness and the promotion of innovation practices. On the other hand, the contributions provided by Schwab (2019) have been an important reference to set the course of research towards the determinants of financial strategies in relation to competitiveness and innovation, this regarding access to resources that a unit business have to adopt these strategies in their business models.

### **Classification of financial strategies.**

The different financial strategies that can be adopted by a company directly impact their business models (Pinto et al., 2023), so that different resources defined as intangibles are incorporated, which are identified as knowledge, as well as development of learned skills, which allows a strategic change that provides an organizational unit to survive, remain and differentiate itself in the market (Belling et al., 2021). On the other hand, financial strategies cover a wide range of concepts; however, Troise et al. (2022) identify them as financial control, risk control and investment planning. In other words, this classification has made it possible to identify strategic financial planning within a company.

Thus, from this perspective, it is easy to approach a process of interpretation and decision-making in the financial area of a company (Ward, 2016). Likewise, it allows contemplating the impact of said financial strategies on the competitiveness and innovation of a company (Belling et al., 2021), this is due to the fact that the intangible resources integrated into financial strategies allow administrative and financial control to provide said organization of a strategic change in their business models (Radic et al., 2022). Similarly, strategic changes in financial strategies generate an impact on the market that is often positive, that is, it allows companies that know how to take advantage of an unstable environment to stand out and take advantage by consolidating in said

market. , reducing its volatility through competitiveness and innovation processes, which are derivatives, according to Belling et al. (2021), of the aforementioned financial strategies.

On the other hand, financial strategies are an immediate result of strategic planning (Hartwig et al., 2016), presented as a process of identifying growth opportunity areas for the firm, as well as integrating potential risks. in order to make the organization less vulnerable to sudden changes in the environment (Radic et al., 2022). In short, financial planning through financial control, risk control and investment planning aims to make the system safer, less susceptible to unstable markets, as well as confer an internal capacity for strategic adaptation, providing both Valuable information such as the development of competitiveness and innovation for the continuity of the firm (Radic et al., 2022).

### **Competitiveness as a business financial strategy**

Competitiveness is defined as the ability of a company to achieve sustainable economic growth through the efficient use of the resources available in its environment, which range from human to natural resources, as well as the structures that allow it to carry out their processes, as well as their relationship with institutions and the way in which policies regulate their functions (Carayannis and Grigoroudis, 2014). Generally, competitiveness is referred to as a multidimensional concept; However, its study in a company starts from the measurement of its performance in relation to its technological, sustainable and permanence capacity (Satyanarayana et al., 2021; Singh and Gaur, 2018).

Thus, competitiveness will be evaluated from the perspective of financial strategies, which, according to Satyanarayana et al. (2021), found evidence that companies with strong strategic planning tend to be more competitive. Thus, it is possible to establish a relationship between both concepts (Radic et al., 2022). Therefore, in order to understand the nature of this relationship, it is necessary to explicitly identify to what extent financial control, risk control and investment planning impact competitiveness, which can be identified through the identification of simple financial parameters, which have been integrated into the questionnaire that makes up the database of this research.

### **Impact of financial strategies on competitiveness**

The study of financial strategies in the competitiveness of a company has been analyzed from the continuous improvement that enables these units to remain in the market, highlighting that this has been more evident in companies with outstanding use of technology (Bagis et al., 2023). Likewise, an increase in the dependence on competitiveness for the correct functionality of a company has been identified (Aparicio et al., 2023). It has also been identified that financial strategies facilitate the process of adopting competitiveness by training them in different aspects, from their human capital to their processes and infrastructures (Bagis et al., 2023).

The financial strategies of a competitive company are characterized by viable competition in the market, as well as increased profits by operating in global markets, resulting in long-term sustainable growth and profitability benefits (Aparicio et al., 2023; Bagis et al., 2023). Likewise, competitiveness and good strategic planning are characterized by an ability to optimally deploy and mobilize assets in order to form an efficient advantage in the market. (Satyanarayana et al., 2021).

### **Measuring competitiveness from financial strategies.**

The measurement of competitiveness from the financial aspect is based on the evaluation and identification of specific results, ranging from the growth of the company, export performance, profits, added value, customer satisfaction and even the social value generated. for the unit (Aparicio et al., 2023). On the other hand, it is possible to set a measurement parameter based on the input metrics that characterize a company, such as its human resources, the technology it implements, innovation processes, the efficient implementation of its capabilities, and the deployment strategic use of their financial resources (Satyanarayana et al., 2021). Finally, the administrative practices and leadership abilities shown by the people of the company and its founder are also a benchmark for measuring this construct (Carayannis and Grigoroudis, 2014). It is thanks to these parameters that it is possible to set metrics to measure competitiveness for the purposes of this research.

### **Innovation as a business financial strategy.**

Innovation is defined by a dynamic set of resources for the creation and dispersal of new knowledge after the division of labor and the application and exchange of practical knowledge (Mulgan, 2007). Thus, innovation implies the application or development of a new product, process, policy or practice and can be defined as innovation (Coad et al., 2022). This dynamic system can be focused on an innovation of a scientific nature, such as one of a technological or administrative or operational nature, as well as on keeping the market system far from a monotonous equilibrium (Altay et al., 2023; Coad et al., 2022).

Similarly, innovation from the perspective of financial strategies constitutes an intangible resource that impacts specific areas of the company, especially its processes and the way the company manages its assets (Coveri and Zanfei, 2023). However, it has been clarified that in order for innovation processes to be carried out, there must be a financial incentive, which is an investment asset that will give the business unit a distinctive advantage in the market (Pinto et al., 2023). Thus, innovation constitutes a business strategy, which despite being long-term, must be integrated into business models so that they are competitive and allow the permanence of the company. (Aparicio et al., 2023).

### **Impact of financial strategies on innovation.**

Innovation represents an investment asset integrated into the financial planning of a company (Pinto et al., 2023). In this way, the financial strategies integrated into the business plan of an organization contemplate innovation as an intangible resource that will generate future rewards (Rådberg and Löften, 2022), therefore, innovation is related to planning investment of a company, according to what was found in the investigation by Bonanno et al. (2023), however, its relationship with financial control and risk control is not entirely clear, despite having a basic notion of the nature of this relationship, since financial assets finance innovation as well. how risk control regulates that there are no losses in assets due to processes that escape the capital of the organization (Bagis et al., 2023).



**Measuring competitiveness from financial strategies.**

However, for the measurement of the innovation construct, from the perspective of financial strategies, an integrated index has been identified in a questionnaire to identify, through the company's human capital, the innovation processes integrated into it, which are classified as facilitators, which allow the integration of innovation to be carried out, mediators, which allow its coupling, and outputs, identified as the results of innovation (Aparicio et al., 2023; Rådberg and Löften, 2022). Finally, the parts evaluated include the financing capacities, licenses, property rights, patents, investments and processes of an organization, in order to address the multidimensionality of innovation and its aspects from a qualitative perspective. (Bagis et al., 2023).

Figura 1. Modelo teórico de la investigación (Autor, 2022)

**Modelo teórico de la investigación**

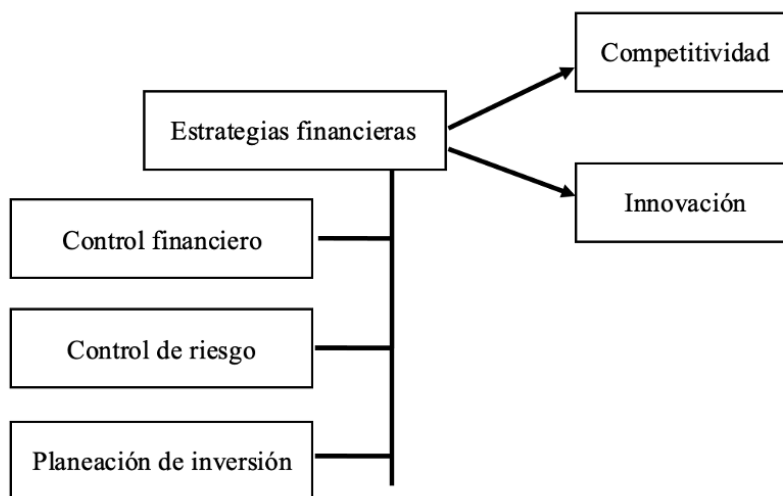


Figure 1 shows the theoretical model of the research, denoting the study of the variables: financial strategies, competitiveness and innovation, which represent the study focus of the research, being the intangible knowledge integrated into the business models represented. through financial strategies and the capabilities of a company represented by competitiveness and innovation. Therefore, the following hypotheses are formulated:

H1. Financial strategies have a positive effect on competitiveness.

H2. Financial strategies have a positive effect on innovation.

## Method

### Research relevance

The main objective of the research is to provide a contribution to the knowledge of the area of financial strategies, financial control, risk control and investment planning, in relation to the competitiveness and innovation of a company. This is based on the foundation of Guevara (2020), which denotes the challenges and barriers that manufacturing companies face in Mexico, one of the main ones being their little or no implementation of financial strategies, as well as a lack of ability of a company to develop a competitive advantage and innovation processes that characterize them in the market in which they operate. Thus, through the findings of this research, it is expected to clarify a little the relationship that exists between these variables in order to positively impact the development of these skills through financial strategic planning.

### Sample used for research.

The sample used in the research was integrated by a total of 100 business units from the state of Aguascalientes, which is made up of an important nucleus of manufacturing companies. Therefore, through the formula for the calculation of the sample and through a significance level of 92% and a sample error of 0.08, the maximum probability with which the parameter to be estimated within the sample interval could be determined was obtained. . This is because the population value was in the determined range of values with a 92% certainty of providing a statistically representative sample. On the other hand, it focused on the manufacturing companies of this state since, according to Guevara (2020), these companies have business models with integrated financial strategies, at the same time that these models allow the coupling of an adaptable business model. for the development of competitiveness and innovation processes.

### Sample collection

The data was collected through a questionnaire addressed to small and medium-sized companies operating in the state of Aguascalientes, Mexico. Information was collected from 100 business units according to the calculation of the sample with a significance level of 92% and a margin of error of 0.08, constituting a statistically representative sample of the total population. Said questionnaire was carried out directly and the database was integrated once the results were gathered, so that the hard data was available in a spreadsheet for subsequent analysis.

### **Data analysis process**

The information was analyzed by means of a structural equation analysis with the help of the statistical software AMOS SPSS. In this way, 12 items were defined for the Financial Strategies variable, of which 4 represented Financial Control, 4 Risk Control and 4 Investment Planning. For its part, 18 items were defined for the Competitiveness variable and, finally, 22 for Innovation.

Likewise, a varimax rotation analysis was carried out to measure and identify the margin of error between the items, so that the structural model of the relationships between variables could be clarified in accordance with the theoretical model proposed for the investigation. Thus, six different models were built to explain the causal relationship between the variables. Specifically, a structural model was integrated for the analysis of Financial Control on competitiveness and another for Innovation; In the same way, it was carried out for Risk Control and Investment Planning, having in an integral way the analysis of the causal relationship of the variables. This allowed the analysis of the research hypotheses and, subsequently, the structuring of results, discussions and conclusions, which accompany the document.

## **Results**

### **Measurement of variables**

The methodological design was integrated from the research by Rådberg and Löften (2022), Belling et al. (2021) and Hillman and Wan (2005). Thus, the measurement method of the three study variables was developed: financial strategies, competitiveness and innovation by evaluating certain items through five models, listed as X1, X2, X3, X4 and X5. In this way, the best probability of a causal relationship between the items and the study variables could be determined. This methodological design extends the study of dependent and independent variables, integrating five different prediction models through a structural model to determine the best scenario in which the causal relationship between the items and the variable in question is greater.

Tabla 1. Medición de la variable de Estrategias Financieras (Autor, 2022)

|  | X1           | X2           | X3           | X4           | X5           |
|--|--------------|--------------|--------------|--------------|--------------|
| Competitividad                             |              |              |              |              |              |
| Recursos de los accionistas                | 0.008        | 0.115        | 0.035        | <b>0.860</b> | 0.687        |
| Adquisición de maquinaria                  | 0.267        | 0.167        | 0.368        | 0.673        | <b>0.845</b> |
| Costes de producción                       | 0.007        | 0.178        | 0.456        | 0.567        | <b>0.843</b> |
| Estandarización de prácticas               | 0.256        | 0.145        | 0.256        | 0.654        | <b>0.864</b> |
| Especialización de procesos                | 0.145        | 0.098        | 0.467        | 0.568        | <b>0.904</b> |
| Eficiencia de métodos                      | 0.076        | 0.256        | 0.345        | 0.456        | <b>0.902</b> |
| Innovación                                 |              |              |              |              |              |
| Sistema administrativo                     | 0.098        | 0.367        | 0.239        | <b>0.878</b> | 0.476        |
| Contabilidad de costos                     | 0.178        | 0.267        | 0.356        | <b>0.987</b> | 0.234        |
| Control presupuestal                       | 0.167        | 0.375        | 0.367        | <b>0.907</b> | 0.435        |
| Costos de entrega                          | 0.467        | 0.256        | 0.189        | 0.789        | <b>0.908</b> |
| Costos de <i>inputs</i>                    | 0.128        | 0.128        | 0.579        | <b>0.907</b> | 0.309        |
| Costos de producción                       | 0.102        | 0.287        | 0.678        | 0.580        | <b>0.938</b> |
| Resumen                                    |              |              |              |              |              |
| Índex de confiabilidad (Co-eficiente alfa) | <b>0.238</b> | <b>0.458</b> | <b>0.648</b> | <b>0.947</b> | <b>0.925</b> |

Table 1 shows the measurement of the financial strategies variable. The way in which the items were measured according to the competitiveness and innovation variables is illustrated, as well as with each of the five X models, which allowed us to define the best causal relationship scenario between these variables. It should be noted that this measurement was made based on each of the items that made up the questionnaire for the integration of the database.

For its part, Table 2 shows the measurement of the competitiveness variable based on the financial strategies variable, which is made up of financial control, risk control and investment planning, according to the X models. to determine the best scenario of causal relationship between these

Tabla 2. Medición de la variable de Competitividad (Autor, 2022)

|   | X1           | X2           | X3           | X4           | X5           |
|---|--------------|--------------|--------------|--------------|--------------|
| <b>Control Financiero</b>                     |              |              |              |              |              |
| Retorno de inversión                          | 0.028        | 0.176        | 0.256        | <b>0.967</b> | 0.837        |
| Promedio de ventas                            | 0.167        | 0.093        | 0.378        | 0.768        | <b>0.983</b> |
| Resultados de operación                       | 0.018        | 0.278        | 0.378        | <b>0.987</b> | 0.790        |
| Utilidades                                    | 0.278        | 0.227        | 0.327        | <b>0.876</b> | 0.736        |
| Disminución de deudas                         | 0.270        | 0.089        | 0.178        | 0.789        | <b>0.938</b> |
| Créditos adquiridos                           | 0.182        | 0.253        | 0.009        | <b>0.987</b> | 0.687        |
| <b>Control de riesgo</b>                      |              |              |              |              |              |
| Costos de coordinación                        | 0.267        | 0.167        | 0.345        | <b>0.924</b> | 0.876        |
| Costos de pedidos                             | 0.082        | 0.07         | 0.287        | <b>0.949</b> | 0.789        |
| Costos de transporte                          | 0.178        | 0.167        | 0.098        | <b>0.897</b> | 0.763        |
| Costos de entrega                             | 0.298        | 0.09         | 0.178        | 0.763        | <b>0.925</b> |
| Costos de materia prima                       | 0.108        | 0.128        | 0.267        | <b>0.876</b> | 0.725        |
| Costos de producción                          | 0.016        | 0.267        | 0.348        | <b>0.879</b> | 0.647        |
| <b>Planeación de Inversión</b>                |              |              |              |              |              |
| Tecnología                                    | 0.272        | 0.08         | 0.267        | <b>0.858</b> | 0.769        |
| Procesos                                      | 0.082        | 0.162        | 0.365        | <b>0.963</b> | 0.801        |
| Producción y servicios                        | 0.009        | 0.027        | 0.126        | <b>0.960</b> | 0.798        |
| Planificación de proyectos                    | 0.167        | 0.178        | 0.235        | <b>0.864</b> | 0.796        |
| Inversión en mejoras                          | 0.076        | 0.223        | 0.189        | <b>0.980</b> | 0.856        |
| Desarrollo de TICs                            | 0.198        | 0.082        | 0.345        | <b>0.840</b> | 0.794        |
| <b>Resumen</b>                                |              |              |              |              |              |
| Índex de confiabilidad<br>(Co-eficiente alfa) | <b>0.197</b> | <b>0.389</b> | <b>0.629</b> | <b>0.938</b> | <b>0.870</b> |

variables. Finally, the reliability index is observed, which allows us to quantitatively determine the causal relationship between the variables.

On the other hand, Table 3 shows the measurement of the innovation variable based on the financial strategies variable, which is integrated by financial control, risk control and investment planning, according to the X models. to determine the best scenario of causal relationship between these variables. Finally, the reliability index is observed, which allows us to quantitatively determine the causal relationship between the variables.

Tabla 3. Medición de la variable de Innovación (Autor, 2022)

|                            | X1    | X2           | X3           | X4           | X5           |
|----------------------------|-------|--------------|--------------|--------------|--------------|
| Control Financiero         |       |              |              |              |              |
| Implementación             | 0.238 | 0.134        | 0.578        | 0.678        | <b>0.898</b> |
| Comercialización           | 0.128 | 0.234        | 0.298        | 0.678        | <b>0.986</b> |
| Procesos                   | 0.034 | 0.128        | 0.356        | <b>0.924</b> | 0.867        |
| Producción y servicios     | 0.129 | 0.289        | <b>0.905</b> | 0.789        | 0.659        |
| Sistemas de gestión        | 0.290 | 0.175        | <b>0.940</b> | 0.478        | 0.807        |
| Compras                    | 0.089 | 0.176        | 0.459        | <b>0.927</b> | 0.817        |
| Ventas                     | 0.120 | 0.438        | 0.389        | 0.867        | <b>0.903</b> |
| Control de riesgo          |       |              |              |              |              |
| Percepción de riesgo       | 0.367 | 0.478        | <b>0.902</b> | 0.549        | 0.790        |
| Costos                     | 0.189 | 0.238        | <b>0.938</b> | 0.780        | 0.860        |
| Financiamiento             | 0.390 | 0.190        | 0.289        | <b>0.930</b> | 0.708        |
| Turbulencia económica      | 0.293 | 0.348        | 0.584        | <b>0.906</b> | 0.759        |
| Información de mercado     | 0.289 | 0.430        | 0.309        | <b>0.940</b> | 0.840        |
| Cooperación entre empresas | 0.275 | 0.398        | 0.493        | <b>0.938</b> | 0.598        |
| Planeación de Inversión    |       |              |              |              |              |
| Infraestructura            | 0.380 | <b>0.938</b> | 0.769        | 0.640        | 0.598        |
| Apoyo gubernamental        | 0.198 | 0.598        | <b>0.948</b> | 0.287        | 0.450        |
| Orientación tecnológica    | 0.349 | 0.390        | 0.127        | <b>0.890</b> | 0.659        |
| Resistencia al cambio      | 0.290 | 0.378        | <b>0.982</b> | 0.735        | 0.590        |

|  |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|
| Personal especializado                       | 0.179        | 0.389        | <b>0.930</b> | 0.589        | 0.864        |
| Actividad formativa                          | 0.389        | 0.378        | <b>0.890</b> | 0.837        | 0.438        |
| Permanencia del personal                     | 0.290        | 0.456        | <b>0.930</b> | 0.836        | 0.378        |
| Resumen                                      |              |              |              |              |              |
| Índex de confiabilidad<br>(Coeficiente alfa) | <b>0.390</b> | <b>0.280</b> | <b>0.927</b> | <b>0.838</b> | <b>0.759</b> |

Finally, Table 4 shows the results of the linear regression analysis, which was integrated from the research by Troise et al. (2022), through which it was possible to design a methodology in which, based on the analysis carried out in Tables 1, 2 and 3, the best causal relationship between the variables could be identified in order to carry out the regression analysis. and determine to what extent financial strategies impact competitiveness and innovation through the X models, finding that financial strategies have a correlation level of 0.948 with competitiveness and 0.927 with innovation.

Specifically, when analyzing the hypotheses raised in the research:

H1. Financial strategies have a positive effect on competitiveness.

Tabla 4. Resultados del análisis de regresión lineal (Autor, 2022)

|                         | Estrategias Financieras    |                         | Competitividad             |                            | Innovación                  |                            |
|-------------------------|----------------------------|-------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|
| Competitividad          | 0.378<br>[0.142,<br>1.187] | 0.758 [0.098,<br>2.004] | /                          | /                          | /                           | /                          |
| Innovación              | 0.740<br>[0.289,<br>.021]  | 0.850 [0.218,<br>0.002] | /                          | /                          | /                           | /                          |
| Control financiero      | /                          | /                       | 0.578<br>[0.290,<br>1.289] | 0.467<br>[0.289,<br>2.983] | 0.689<br>[0.132,<br>2.2783] | 0.739<br>[0.216,<br>1.287] |
| Control de riesgo       | /                          | /                       | 0.746<br>[0.378,<br>2.189] | 0.649<br>[1.293,<br>2.386] | 0.596<br>[1.283,<br>2.384]  | 0.857<br>[1.384,<br>3.938] |
| Planeación de inversión | /                          | /                       | 0.837<br>[1.283,<br>0.303] | 0.948<br>[0.463,<br>1.938] | .704 [1.293,<br>2.394]      | 0.847<br>[3.394,<br>1.293] |
| Ajuste r cuadrado       | 0.495<br>[1.293,<br>3.405] | 0.574 [0.371,<br>3.495] | 0.584<br>[0.495,<br>2.394] | 0.857<br>[3.495,<br>2.394] | 0.948<br>[2.394,<br>1.293]  | 0.768<br>[1.293,<br>2.948] |
| Índice de confiabilidad | /                          | /                       | /                          | 0.948                      | /                           | 0.927                      |

H2. Financial strategies have a positive effect on innovation.

It can be determined through the results of the analysis that both H1 and H2 are accepted, that is, financial strategies have a positive effect on both the competitiveness and innovation of a company.

## Discussion

Specifically, it has been argued in the literature that there is a relationship between financial incentives and financial strategic planning with competitiveness (Momaya, 2019) and innovation (Papazoglou, 2023); however, the constituents of this financial aspect had never been delved into. Therefore, in this investigation financial control, risk control and investment planning were integrated as main components of financial strategic planning. It was found that, indeed, financial strategies have a positive impact on competitiveness and innovation, but in an even more concrete way, providing a contribution on how punctual financial control, punctual risk control and correct investment planning promote that an organization can develop a capacity for competitiveness that makes it stand out and remain in a certain market, as well as contribute to the development of its innovation processes.

Likewise, the findings of ElNaggar and Farrag (2023) can be argued, having found that competitive and innovative companies tend to have business models with reliable and solid financial strategies. In addition, the way in which the capacities of intangible resources are promoted is through the introduction of innovation processes, as well as with the promotion of competitiveness through investments in assets and by driving the company towards new markets (Gao et al. ., 2023). Thus, it is understood from the findings and from the literature that companies tend to be competitive and innovative when they have financial and risk control, as well as concrete investment planning (Papazoglou, 2023).

Through the correlation analysis between the hypotheses, it was found that financial control, risk control and investment planning positively impact competitiveness and innovation in 0.948 and 0.927 respectively, which, according to Papazoglou (2023), reflects a high correlation. Likewise, when evaluating this relationship in detail, it can be interpreted that companies in the analyzed sector tend to integrate these financial strategies into their business models, which makes it easier for them to be competitive and innovative. On the other hand, these results can be generalized to more companies, since, according to ElNaggar and Farrag (2023) and Momaya (2019), both competitiveness and innovation tend to be a capacity and skill of a company adopted at from the



internal strengthening of your organization that enables you to have outstanding learning flexibility.

However, the limitations of this study do not allow us to determine other factors that could influence the correlation between these variables, such as the age and maturity of the company (Gürtler and Zöllner, 2022), as well as the strength of its business model (ElNaggar and Farrag, 2023). Even so, it is possible to provide a contribution to address this question by determining the nature of the relationship between competitiveness and innovation in the integration of business models based on sound financial strategies (Prabhu and Srivastava, 2022). This is important because the demands of emerging economies mean that companies have to be financially viable, as well as be competitive and innovative in order to be sustainable and adaptable in the market in which they operate. (Gao et al., 2023).

## Conclusions

The research deepened the knowledge of financial strategies, defined as financial control, risk control and investment planning, to determine their impact on the competitiveness and innovation of a company. Currently, the changes and demands of emerging economies have created a constant need to formulate financially viable, competitive and innovative business models (Gao et al., 2023; ElNaggar and Farrag, 2023; Mulgan, 2007). A correlation of 0.948 and 0.927 was found between financial strategies and competitiveness and innovation, respectively, indicating that financially viable companies use financial control and planning incentives as a mechanism to integrate and develop competitiveness and innovation.

Research presents advantages in terms of opportunities. In the first place, the way in which companies formulate financial strategies based on the available information could be compared, since this study started from the conception that companies already had them well defined. It is important to investigate how financial strategies are incorporated into the business models of companies, which will allow us to understand how the characteristics of the firms influence their financial planning. Second, it would be interesting to investigate how financial and government institutions influence and regulate the financial strategies of companies in emerging economies, which could have a moderating effect. Third, a larger sample would provide a better overview of these companies at the national level and, therefore, would deepen the characteristics of the financial strategies adopted in Mexico.

Finally, this study found sufficient evidence to conclude that financial strategies have a positive effect on both competitiveness and innovation, understood on the basis that they are used as an integrated mechanism in the business models of companies to excel. , adapt and remain in the emerging economy in which they operate, this is in line with what was proposed by Prabhu and Srivastava (2022). Likewise, it has been made clear that there is an important demand to deepen the study of the finances of a company and the way in which these affect their business models, as well as their abilities and skills (Gürtler and Zöllner, 2022). , such as competitiveness and innovation, so that it can be accurately understood how companies can be strengthened in highly dynamic and demanding markets.

## References

- Altay, N., Heaslip, G., Kovács, G., Spens, K., Tatham, P. y Vaillancourt, A. (2023) Innovation in humanitarian logistics and supply chain management: a systematic review. *Annals of Operations Research*, 2(3), 326-339. <https://doi.org/10.1007/s10479-023-05208-6>
- Aparicio, G., Iturralde, T. y Rodriguez, A.V. (2023) Developments in the knowledge-based economy research field: a bibliometrics literature review. *Management Review Quarterly*, 73, 317-352. <https://doi.org/10.1007/s11301-021-00241-w>
- Bagis, M., Altınay, L., Kryeziu, L., Kurutkan, M.N. y Karaca, V. (2023) Institutional and individual determinants of entrepreneurial intentions: evidence from developing and transition economies. *Review of Managerial Science*, <https://doi.org/10.107/s11846-023-00626-z>
- Belling, M., Pidgin, U. y Knyphausen-Aufseb. (2021) Unbundling Strategic Change in Family Firms: the Influence of Families on the Strategic Change Process. *Schmalenbach Journal of Business Research*, 73, 381-411. <https://doi.org/10.1007/s41471-021-00117-5>
- Bonanno, G., Ferrando, A. y Rossi, S.P.S. (2023) Do innovation and financial constraints affect the profit efficiency of European enterprises? *Eurasian Business Review*, 12:57-86. <https://doi.org/10.1007/s40831-022-00226-z>
- Carayannis, E. y Grigoroudis, E. (2014) Linking innovation, productivity and competitiveness: implications for policy and practice. *J Technol Transf*, 39, 199-218.
- Certo, S.T. (2003) Influencing initial public offering ion esters with prestige: signaling with broad structures. *Academy of Management Review*, 28(3), 432-446.
- Coad, A., Amaral-Garcia, S., Bauer, P., Domnick, C., Harasztosi, P., Pál, R. y Teruel, M. (2022) Investment expectations by vulnerable European firms in times of COVID. *Eurasian*

- Business Review*, 13:193-220. <https://doi.org/10.1007/s40821-022-00218-z>
- Coverly, A. y Zanfei, A. (2022) Who wins the race for knowledge-based competitiveness? Comparing European and North American FDI patterns. *The Journal of Technology Transfer*, 48, 292-330. <https://doi.org/10.1007/s10961-021-09911-z>
- ElNaggar, R. y Farrag, M. (2023) Drivers of business model innovation in micro and small enterprises: evidence from Egypt as an emerging economy. *Future business Journal*, 9:4. <https://doi.org/10.1186/s43093-022-00180-2>
- Gao, Y. (2006) Corporate political action in China and America: a comparative perspective. *Journal of Public Affairs*, 6(2), 111-121.
- Gao, J., Feng, Y., Xu, Z. y Luo, Q. (2023) Analysis of strategic deviance decisions considering investors risk aversion and the industrial earning forecast errors. *International Entrepreneurship and Management Journal*, 329-402. <https://doi.org.dibpxy.uaa.mx/10.1007/s11365-022-00827-0>
- Guevara, H. (2020) En un entorno de crisis ¿Cuáles son los desafíos tecnológicos de las empresas manufactureras en México? Forbes. <https://www.forbes.com.mx/red-forbes-en-un-entorno-de-crisis-cuales-son-los-desafios-tecnologicos-de-las-empresas-manufactureras-en-mexico/>
- Gürtler, M. y Zöllner, M. (2022) Heterogeneities among credit risk parameter distributions: the modality define the nest estimation method. *OR Spectrum*, 45(1): 251-287. <https://doi.org/10.1007/s00291-022-00689-6>
- Momaya, K.S. (2019) The past and the future of competitiveness research: a review in an emerging context of innovation and EMNEs. *International Journal of Global Business and Competitiveness*, 14(1), 1-10. <https://doi.org/10.1007/s42943-019-00002-3>
- Papazoglou, M. (2023) Favorable strategies for the success of entry into new technological areas: an entrepreneurial perspective. *International Entrepreneurship and Management Journal*, 19: 403-426. <https://doi.org/10.1007/s11365-022-00828-z>
- Pinto, H., Guerreiro, J.A. y Fernández, M. (2023) Sources of knowledge in the firm: a review on influential, internal and contextual factors in innovation dynamics. *SN Bus Econ*, 3(1), 57-89. <https://doi.org/10.1007/s43546-023-00430-7>
- Prabhu, H. y Srivastava, A. (2023) CEO Transformational leadership, supply chain agility and firm performance: a TISM modeling among SMEs. *Global Journal of Flexible Systems Management*, 51-65. <https://doi.org/10.1007/s40171-022-00323-y>

- Rådberg, K.K. y Löfsten, H. (2022) Developing a knowledge ecosystem for large-scale research infrastructure. *The Journal of Technology Transfer*, 3(4), 441-467. <https://doi.org/10.1007/s10961-022-09945-x>
- Radic, M., Herrmann, R., Haberland, P. y Riese, C. (2022) Development of a Business Model Resilience Framework for Managers and Strategic Decision-makers. *Schmalenbach Journal of Business Research*, 2(4), 72-89. <https://doi.org/10.1007/s41471-022-00135-x>
- Ragazou. K., Passas, I., Garefalakis, A. y Zopounidis, C. (2022)business intelligence model empowering SMEs to make better decisions and enhance their competitive advantage. *Discover Analytics*. <https://doi.org/10.1007/s44257-022-00002-3>.
- Troise, C., Battisti, E., Christofi, M., van Vulpen, N.J. y Tarba, S. (2022) How can SMEs use crowdfunding platforms to internationalize? The role of equity and reward crowdfunding. *Management International Review*, 63(1), 117-159.
- Satyanarayana, K., Chandrashekar, D. y Subrahmanya, B. (2021) An assessment of competitiveness of technology-based startups in India. *International Journal of Global Business and Competitiveness*, 16(1), 28-38. <https://doi.org/10.1007/s42943-021-00023-x>
- Schwab, K. (2019) The global competitiveness report 2019. World Economic Forum.
- Singh, S.K. y Gaur, S.S. (2018) Entrepreneurship and innovation management in emerging economies. *Management Decision*, 56(1), 9-29.
- Ugur, M. y Vivarelli, M. (2021) Innovation, firm survival and productivity: the state of the art. *Economics of Innovation and New Technology*, 30(1), 433-467.
- Ward, L. (2016) *Keeping the family business healthy: how to plan for continuing growth, profitability, and family leadership*. New York: Palgrave Macmillan.

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