ECONOMICUS
Journal of Business and Economics Insights

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Editorial

Economicus: A new horizon in economic research
Economicus: Un nuevo horizonte en la investigación económica

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Con gran entusiasmo, presentamos el primer volumen y número inaugural de *Economicus Journal of Business and Economics Insights (JBEI)*, la primera revista científica de la Facultad de Economía Internacional (FEI), que ve la luz en un momento muy significativo: el 35 aniversario de nuestra Facultad y el 70 aniversario de la Universidad Autónoma de Chihuahua (UACH). Este lanzamiento marca un hito histórico en el desarrollo de nuestra institución, al ser la primera revista científica de la Facultad en sus 35 años de existencia.

Economicus JBEI es una publicación arbitrada, que utiliza el sistema de evaluación externa por expertos (peer-review), bajo metodología de pares ciegos (double-blind review), conforme a las normas de publicación de la American Psychological Association, respondiendo a estándares científicos y académicos internacionales. *Economicus JBEI* tiene una periodicidad semestral con publicación contínua y acepta trabajos en temas relacionados con los negocios y la economía, economía internacional, gestión de tecnología, estrategia e innovación, emprendimiento, sostenibilidad e impacto social, estudios de mercado laboral, econometría, así como economía pública, además de valorar positivamente la adopción de enfoques inter, multi o transdisciplinarios que integren otras áreas del conocimiento.

De esta manera, nos adentramos en el intrincado mundo del análisis económico y empresarial, explorando los caminos que delinean las decisiones sabias y racionales del Homo Economicus. Nuestro propósito va más allá de la mera observación; aspiramos a ser impulsores del cambio, expandiendo los límites del conocimiento y fomentando la aplicación práctica de las investigaciones. En nuestra travesía, nos sumergimos en la búsqueda de una comprensión más profunda del comportamiento humano en situaciones de intercambio económico y toma de decisiones, sin limitaciones cognitivas. Forjamos conexiones entre las esferas corporativas, industriales y económicas, explorando sus vínculos con la educación, el mercado laboral, las políticas públicas y las innovaciones tecnológicas.

El Consejo Editorial de *Economicus JBEI* está compuesto por más del 80% de investigadores de instituciones de educación superior y centros de investigación tanto a nivel nacional como internacional. Por lo anterior, la revista acepta artículos en inglés y en español, permitiendo así que un público más

amplio tenga acceso a las discusiones contemporáneas en diversas áreas de la economía. En este primer número, se publican tres artículos en inglés y cuatro en español, incluida una reseña de libro.

Los artículos seleccionados abordan temas actuales de gran relevancia, desde la economía digital y la innovación empresarial hasta el comportamiento electoral y el gasto en los hogares mexicanos. En el primer artículo, "Valoración de criptoactivos: El caso de los fan tokens en equipos de fútbol europeos", los autores Raúl Gómez Martínez, María Luisa Delgado García, y Laura Pascual Nebreda, todos ellos de la Universidad Rey Juan Carlos de Madrid en España, exploran cómo la tecnología blockchain está transformando los modelos de negocio y las transacciones financieras. El estudio se enfoca en los fan tokens, un criptoactivo que ofrece a los seguidores de los equipos de fútbol la posibilidad de participar en eventos y promociones exclusivas. Utilizando un modelo de regresión lineal, los autores demuestran que el valor de mercado de estos tokens está estrechamente relacionado con el número de seguidores en redes sociales como Twitter, mostrando que el vínculo emocional entre los aficionados y los equipos influye significativamente en la capitalización de estos activos digitales (Gómez-Martínez et al., 2024).

En un contexto diferente, pero igualmente relevante para las economías latinoamericanas, el segundo artículo, en "Innovación a través de la tradición en empresas familiares: Evidencia de estudios de caso en Chile", por Ismael Barros Contreras, Andrés Aragón Villarroel, Javier Solís Sorhaburu, y Ailyn Vera Rodríguez, de la Universidad Austral de Chile, investigan la paradoja entre la innovación y la tradición en las empresas familiares. A través de un enfoque cualitativo basado en estudios de caso en la región de Los Lagos, Chile, el estudio revela que la tradición no solo es compatible con la innovación, sino que puede actuar como un recurso distintivo que impulsa el crecimiento y la sostenibilidad a largo plazo de estas organizaciones. Este hallazgo es particularmente relevante en el contexto latinoamericano, donde las empresas familiares juegan un papel fundamental en las economías locales (Barros-Contreras et al., 2024).

El tercer artículo, "Determinantes de la intención de crecimiento en PYMEs: Análisis desde la perspectiva de los propietarios y gerentes", por Moises Carbajal Marrón del Tecnológico de Monterrey Campus Querétaro, Ángel Herrero Crespo, y Jesús Collado-Agudo de la Universidad de Cantabria en España, utiliza la Teoría del Comportamiento Planeado para analizar los factores que determinan la intención de crecimiento de las PYMEs mexicanas. Con una muestra de 254 empresas, los resultados confirman que la actitud hacia el crecimiento y el control percibido influyen positivamente en la intención de los propietarios o gerentes de expandir sus negocios. Este estudio ofrece una valiosa herramienta para comprender cómo las PYMEs pueden planificar su crecimiento en entornos económicos desafiantes (Carbajal-Marrón et al., 2024).

En el ámbito de la política pública, el artículo "Incentivando la participación electoral a través de regalos y promociones: Análisis del programa 'El Gordo Cívico' en Chihuahua, México", por Juan David Irigoyen Borunda de la Universidad Estatal de Florida en los Estados Unidos de América, evalúa los efectos de este innovador programa diseñado para aumentar la participación electoral. Usando un enfoque de Diferencia-en-Diferencia, el estudio concluye que el programa no logró incrementar significativamente la participación, ni siquiera en municipios urbanos donde se esperaba que tuviera un mayor impacto (Irigoyen-Borunda, 2024).

El artículo "Cambios en la estructura del gasto en vivienda y transporte de los hogares de Chihuahua de 2018 a 2022", por los autores Héctor Alonso Barajas Bustillos y Maryann Fernanda García De la Torre de la Universidad Autónoma de Ciudad Juárez, ofrece un análisis detallado de cómo la pandemia de COVID-19 afectó los patrones de gasto en los hogares de Chihuahua, particularmente en vivienda y transporte. Los resultados muestran que las restricciones de movilidad y el teletrabajo modificaron las prioridades de los hogares, con un aumento en los gastos relacionados con la adaptación de las viviendas para nuevas funciones y una reducción significativa en los gastos de transporte (Barajas-Bustillos y García-De la Torre, 2024).

Por último, en "La economía social en México: Análisis de las cooperativas en el estado de Chihuahua", Luis Felipe Zepeda Burciaga de la Secretaría de Hacienda del Estado de Chihuahua,

presenta un análisis de las cooperativas como parte fundamental de la economía social en la región. El estudio identifica y clasifica las cooperativas del estado, destacando su predominancia en el sector secundario de la economía. El artículo concluye con recomendaciones para promover la economía social mediante el fortalecimiento de capacidades empresariales y la formalización de estas organizaciones, subrayando la importancia de políticas públicas que apoyen su desarrollo (Zepeda Burciaga, 2024).

Este número inaugural también incluye la reseña del libro "Las Fintech desde la perspectiva del emprendimiento" de autor Raúl Gómez Martínez, realizada por Verónica Villegas Garza de la Universidad Autónoma de Chihuahua, presentando un análisis sobre la relación entre tecnología financiera y emprendimiento, que destaca el papel de las Fintech en la transformación del sector financiero y su impacto en el ecosistema emprendedor (Villegas Garza, 2024).

Con esta selección de seis artículos y una reseña de libro se conforma el volumen 1, número 1 de *Economicus JBEI* iniciando así su trayectoria como un nuevo horizonte en la investigación económica, brindando un espacio para el diálogo y la reflexión académica, y acentuando su compromiso con la investigación de calidad.

Agradecemos profundamente a los autores y a todos los colaboradores por su esfuerzo y dedicación, así como a los miembros del Consejo Editorial por su liderazgo, compromiso e invaluable contribución, confiando que nuestros lectores encuentren en estas páginas inspiración para sus propias investigaciones y proyectos.

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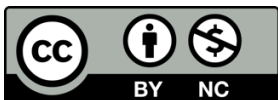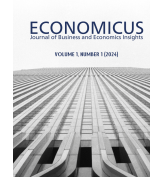
Article

Valuation of cryptoassets: The case of fan tokens in european soccer teams

Valoración de criptoactivos: El caso de los fan token en equipos de fútbol europeos

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Abstract: Blockchain technology has arrived to transform the business models of companies and financial transactions. In addition to the irruption of cryptocurrencies that has been observed since the birth of Bitcoin in 2008, it is observed that the use of this technology is beginning to be applied in use cases of the real economy. In this study we focus on fan tokens, a cryptoactive that provides its holder with a utility, in this case the emotional bond with the entity that launches the token and the possibility of participating in voting, promotions or events related to the entity. Due to the emotional force that football has, fan tokens have become a trend in recent years. The question that arises is how we should value a crypto asset that does not have a financial asset or a monetary flow behind it, and that simply has that emotional bond with the club. In this study we propose a simple linear regression model in which the market value of the fan token (measured by its market capitalization) is a function of the number of followers the club has (measured by the number of followers of the club on Twitter). Using data from the main European football clubs that have issued fan tokens to date, the regression of the model shows that the parameter that relates followers to fan token market capitalization is 95% significant, and the R^2 of the model shows that this A single parameter can explain almost half of the value of the fan token.

Keywords: Cryptoassets, fan tokens, investor sentiment, behavioral finance.

JEL Classification: G0; G12; G4.

Resumen: La tecnología *blockchain* ha llegado para transformar los modelos de negocio de las empresas y las transacciones financieras. Además de la irrupción de las criptodivisas que se ha observado desde el nacimiento del Bitcoin en 2008, se observa que el uso de esta tecnología está comenzando a aplicarse en casos de uso de la economía real. En este estudio nos enfocamos en los *fan token*, un criptoactivo que aporta a su tenedor una utilidad, en este caso el vínculo emocional con la entidad que lanza el token y la posibilidad de participar en votaciones, promociones o eventos relacionados con la entidad. Por la fuerza emocional que tiene el fútbol los *fan token* se han convertido en tendencia en los últimos años. La duda que surge es cómo debemos valorar un criptoactivo que detrás no tiene un activo financiero o un flujo monetario, y que simplemente tiene ese vínculo emocional con el club. En este estudio proponemos un sencillo modelo de regresión lineal en el que el valor de mercado del *fan token* (medido por su capitalización de mercado) es función del número de seguidores que el club tiene (medido por el número de seguidores del club en Twitter). Utilizando datos de los principales clubes de fútbol europeos que hasta la fecha han emitido fan token, la regresión del modelo muestra que el parámetro que relaciona los seguidores con capitalización de mercado del *fan token* es significativo al 95%, y el R^2 del modelo muestra que este único parámetro es capaz de explicar casi la mitad del valor del *fan token.*

Palabras clave: Criptoactivos, fan tokens, sentimiento del inversor, finanzas conductuales.

Clasificación JEL: G0; G12; G4.

1. Introducción

Desde que Bitcoin fue creado por Nakamoto (2008), la cadena de bloques ha abierto un abanico de nuevas posibilidades de negocio, sentando las bases para el desarrollo de plataformas *peer-to-peer* o entre particulares para intercambiar información, activos y bienes digitalizados sin ningún tipo de intermediación (Aste et al., 2017). En consecuencia, académicos, empresas y responsables políticos han examinado su aplicación potencial en sectores y campos muy diferentes, como el agroalimentario (Antonucci et al., 2019), el cuidado de la salud (Angraal et al., 2017), la logística (Pournader et al., 2020), educación (Chen et al., 2018), economía colaborativa (Fiorentino y Bartolucci, 2021) y cumplimiento normativo (Gozman et al., 2020). En este artículo, nos centramos en la aplicación de *blockchain* en la industria del deporte basándonos en los *Fan Tokens* o tokens de fanáticos.

Según define el diario deportivo Marca (2022) un *Fan Token* es un activo digital que se registra en una red *blockchain* o cadena de bloques (habitualmente una red pública como las de Ethereum o Poligon) que otorga a su propietario derechos a disfrutar de ciertas utilidades de interés para el aficionado. Para entenderlo mejor, el *Fan Token* es una versión moderna de los tradicionales carnés de socio o programas de simpatizantes que ofrece a los hinchas la posibilidad de participar en decisiones del equipo votando en encuestas, participar en sorteos, acceder a la compra de autógrafos o prendas exclusivas del club, etc.

Siguiendo la definición anterior, el *fan token* es un claro ejemplo de un *utility token*, o token de utilidad. Se trata de un tipo especial de token que sirve de ayuda en la capitalización o financiación de proyectos para cualquier tipo de empresas, en este caso clubes de fútbol, pero también se vinculan habitualmente a startups, empresas o grupos de desarrollo de proyectos. Los *utility tokens* no son considerados como inversiones y salen de la regulación propia de los activos financieros, todo esto en un marco de ´alegalidad´ ya que muchos países no cuentan con un marco regulatorio específico, ni para los *utility tokens*, *security tokens* o criptoactivos en general.

El *utility token* como cualquier criptoactivo puede ser comprado y vendido a través de la red *blockchain* en la que está registrado, ya sea de forma bilateral, directamente o en cualquier swap, o a través de un Exchange que centraliza órdenes de compra y venta sobre dicho fan token. Por ejemplo, en la Figura 1, se observa la cotización en Binance del *fan token* del Atlético de Madrid.

Es fácil observar en la Figura 1 que la cotización del *fan token* es volátil y que sus máximos coinciden con logros importantes del club, por ejemplo, se observan el máximo en mayo de 2021 (mes en el que el Atlético de Madrid ganó la liga) o en agosto de 2021 coincidiendo con el fichaje del delantero Antoine Griezman. Se podría deducir que la cotización del *fan token* obedece exclusivamente al sentimiento del aficionado sobre el club, de tal manera que los éxitos deportivos y sociales del club se asocian a un mayor apetito por la inversión de este criptoactivo. Sin embargo, cuando el equipo no va bien observamos que la cotización cae en paralelo al desapego al equipo.

Figura 1. Serie temporal cotización del fan token ATM. Fuente: Binance.

Dado que existen escasos estudios previos que hayan investigado empíricamente los tokens de fanáticos, contribuimos a varias corrientes dentro de la literatura.

En primer lugar, nos relacionamos con la literatura sobre riesgos y rendimientos de los criptoactivos. Numerosos estudios han documentado altos niveles de volatilidad en una amplia gama de criptomonedas y activos relacionados. Liu y Tsyvinski (2021) encuentran que la volatilidad en el mercado de criptomonedas es mucho mayor que la de los activos tradicionales como las acciones. Además, los riesgos de cola y, por lo tanto, las probabilidades de ganancias y pérdidas extremas son relativamente altas (Ahelegbey et al., 2021). Empleando el valor en riesgo condicional, Borri (2019) concluye que las criptomonedas están expuestas al riesgo de cola dentro del mercado de criptomonedas pero no al de otros activos.

Zhang et al. (2021) muestran que las criptomonedas con mayores niveles de riesgo a la baja obtienen mayores rendimientos en el futuro. Si bien el debate sobre el valor fundamental de las criptomonedas aún continúa, existe evidencia de un comportamiento de burbuja incluso entre las criptomonedas establecidas (Corbet et al., 2018). Agregamos a esta parte de la literatura mostrando los perfiles de riesgo de los tokens de fans, que también entran en la categoría de criptoactivos.

En segundo lugar, contribuimos a la literatura sobre cómo se pueden usar tokens criptográficos como una forma de financiación alternativa y como medio de construcción de plataformas. Los tokens emitidos a menudo tienen un propósito dentro de los servicios proporcionados por la empresa, por ejemplo, en forma de tokens de utilidad que pueden intercambiarse por bienes o servicios en un momento posterior o en forma de tokens de pago para usar en el ecosistema del emprendimiento. Los clubes que emiten tokens para fanáticos persiguen estos mismos objetivos: por un lado, los tokens brindan un flujo adicional de ingresos, especialmente durante tiempos de asistencia reducida al estadio como durante la pandemia de COVID-19. Por otro lado, los tokens son parte de una plataforma que también tiene como objetivo fortalecer el compromiso y la identificación de los fanáticos.

Si bien los tokens de fanáticos son fungibles, es posible que aún se recolecten y se guarden no solo para invertir, sino también por razones sentimentales. Los *fan tokens* comparten similitudes con otros artículos coleccionables, especialmente con respecto a su suministro limitado y atractivo emocional para los fans, lo que los convierte en ´inversiones de pasión´ (Dimson y Spaenjers, 2014). Por lo tanto, también contribuimos a la literatura sobre coleccionables, donde distinguimos entre coleccionables. La literatura sobre coleccionables basados en *blockchain* todavía es escasa y se refiere principalmente a tokens no fungibles (*non-fungible token* o *NFT*).

Finalmente, añadimos a la literatura sobre la reacción de los mercados financieros a los eventos deportivos. Brown y Hartzell (2001) consideran a los Boston Celtics, un equipo de baloncesto, y encuentran que el volumen y la volatilidad de las acciones correspondientes son mayores durante la temporada y que los rendimientos se ven afectados por los resultados de los partidos. Sin embargo, durante la temporada regular el efecto sobre los retornos es asimétrico con un efecto significativo para las pérdidas, pero no para las victorias. En cuanto a los clubes que cotizan en bolsa de la Premier League inglesa, Zuber et al. (2005) concluyen que los inversionistas en estas acciones (acertadamente llamados ´fan-inversionistas´) obtienen alguna forma de utilidad de la mera propiedad. No parecen reaccionar a la nueva información fundamental ya que las acciones son en su mayoría insensibles a los resultados de los partidos.

Por el contrario, Palomino et al. (2009) encuentran un efecto positivo y negativo de los resultados de los partidos de fútbol en las acciones de los clubes de fútbol británicos en cuanto a victorias y derrotas, respectivamente. Scholtens y Peenstra (2009) consideran una lista más amplia de clubes cotizados en Europa y muestran que los rendimientos de las acciones son positivos después de las victorias, pero negativos después de pérdidas, aunque el efecto es asimétrico en el sentido de que el precio de la acción reacciona con más fuerza a las pérdidas que a las victorias y al torneo europeo que a los partidos de la liga nacional. Bell et al. (2012) documentan asimetrías similares en cuanto a la importancia de los partidos.

2. Metodología

La hipótesis que este estudio pretende resolver se centra en cómo se puede hacer una valoración del *fan token.* Mientras que las acciones de los clubes de fútbol cotizados en bolsa reflejan la valoración económica del club como empresa, y por tanto el precio de la acción refleja las perspectivas sobre la futura facturación de la empresa y la evolución de los beneficios, los *fan tokens* representan la valoración emocional que los aficionados tienen sobre el club. En esta valoración emocional, por supuesto que los resultados del principal equipo del club son determinantes, pero además se observa que, ante grandes fichajes o noticias relevantes para el club, fuera del ámbito económico o deportivo, la cotización del *fan token* se ve afectada. Por lo tanto, por un lado, tenemos que la cotización de las acciones debería converger al precio teórico de la acción que se podría calcular utilizando los métodos convencionales de valoración de empresas, como los métodos dinámicos (descuento de flujos de caja o descuento de dividendos) o la valoración por múltiplos de empresas comparables. Por otro lado, tenemos que los *fan token* siguen las expectativas de los aficionados sobre la evolución de los resultados del club, lo que podría interpretarse como que en el *fan token* cotiza la afición al club. Así el número de seguidores del club debe ser un factor determinante a la hora de valorar cómo podrá evolucionar la cotización del *fan token.*

Teniendo esto en cuenta, proponemos validar en este estudio la siguiente hipótesis:

H_0: La capitalización de mercado del fan token de un club de fútbol depende directamente de forma significativa del número de seguidores que tiene el club.

Para validar la hipótesis anterior proponemos un modelo de regresión lineal que obedece a la siguiente función:

$$Market\_Cap_i = \alpha + \beta\, Followers_i + u_i \qquad\qquad (1)$$

Donde:
- Market_Cap$_i$ es la capitalización de mercado del fan token.
- Followers$_i$ es el número de seguidores de un club de fútbol.

Validaremos H$_0$ si el parámetro β estimado es significativo en un intervalo de confianza del 95% y es positivo.

Para medir el número de seguidores, teniendo en cuenta que el fútbol es un fenómeno global, vamos a utilizar la cifra de seguidores en Twitter de la cuanta oficial del club:

Figura 2. Atlético de Madrid en Twitter.

Los datos de seguidores los recogemos a fecha 31 de diciembre de 2021, siendo contabilizados en millones de seguidores.

Los datos de capitalización de mercado los tomamos de CoinmarketCap que se según se definen *"CoinMarketCap es el sitio web de seguimiento de precios más reconocido del mundo para criptoactivos en el creciente espacio de las criptomonedas. Su misión es hacer que las criptomonedas sean eficientes y fáciles de descubrir a nivel mundial mediante el empoderamiento de los usuarios minoristas, brindándoles información imparcial, precisa y de alta calidad para que puedan elaborar sus propias conclusiones bien informadas."*

Por ejemplo, entrando en CoinmarketCap accedemos a toda la información sobre el *fan token* del Atlético de Madrid y a su historial de precios.
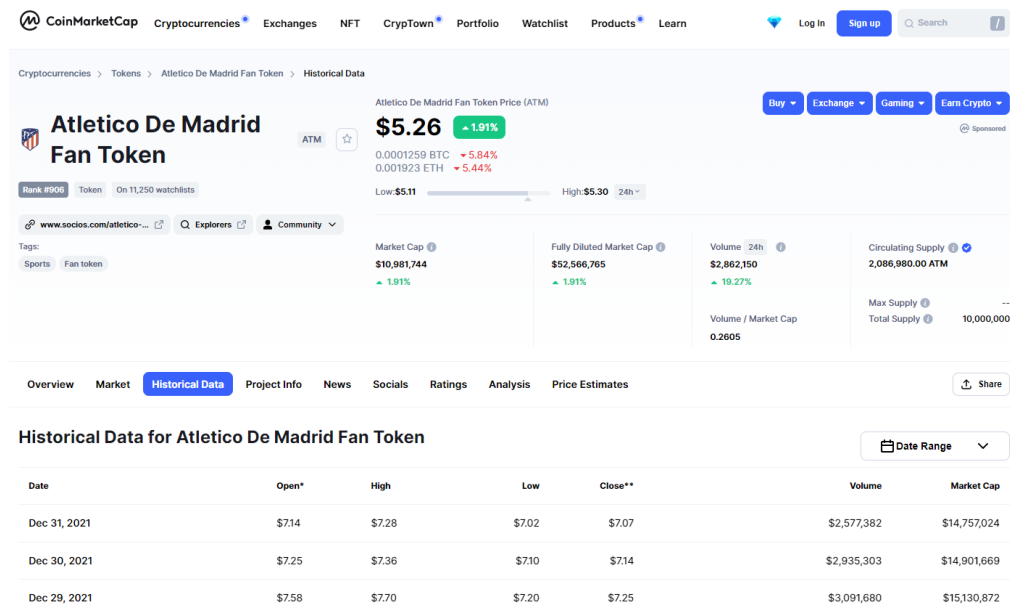
Figura 3. Atlético de Madrid en CoinmarketCap. Fuente: CoinmarketCap.

3. Resultados

La información que se ha recopilado de las fuentes previamente mencionadas conforman el conjunto de datos para este estudio, tal y como se muestran en la Tabla 1.

Tabla 1. Serie Seguidores *(Followers)* en Twitter y capitalización de mercado *(Market Cap.)* del *fan token* por club.

Club	País	*Fan token*	*Followers*	*Market Cap.*
Atlético de Madrid	España	ATM	5.2	14.8
Juventus	Italia	JUV	9.6	11.1
París Saint Germain	Francia	PSG	11.2	47.0
Manchester City	Inglaterra	CITY	11.3	35.7
Barcelona FC	España	BAR	18.0	31.4
AC Milán	Italia	ACM	8.1	15.8
Inter de Milán	Italia	INTER	2.5	20.7
AS Roma	Italia	ASR	2.0	8.6
Valencia Club de Fútbol	España	VCF	1.3	3.5
Trabzosport	Turquía	TRA	1.8	10.0
Galtasaray	Turquía	GAL	10.5	14.9
Leeds United	Inglaterra	LUFC	0.9	5.4

Fuente: Twitter y CoinmarketCap.

Utilizando estos datos la regresión lineal calculada en la herramienta econométrica GRETL ofrece los siguientes parámetros estimados.

Tabla 2. Regresión lineal Modelo 1.

```
Modelo 1: MCO, usando las observaciones 1-12
Variable dependiente: Market_Cap

              coeficiente   Desv. típica   Estadístico t   valor p
  ---------------------------------------------------------------
  const          6.39402       4.73001         1.352        0.2062
  Followers      1.72539       0.549797        3.138        0.0105   **

Media de la vble. dep.   18.24167   D.T. de la vble. dep.   13.26002
Suma de cuad. residuos   974.4384   D.T. de la regresión    9.871365
R-cuadrado               0.496182   R-cuadrado corregido    0.445801
F(1, 10)                 9.848449   Valor p (de F)          0.010542
Log-verosimilitud       -43.40899   Criterio de Akaike      90.81798
Criterio de Schwarz      91.78779   Crit. de Hannan-Quinn   90.45892
```

Fuente: GRETL.
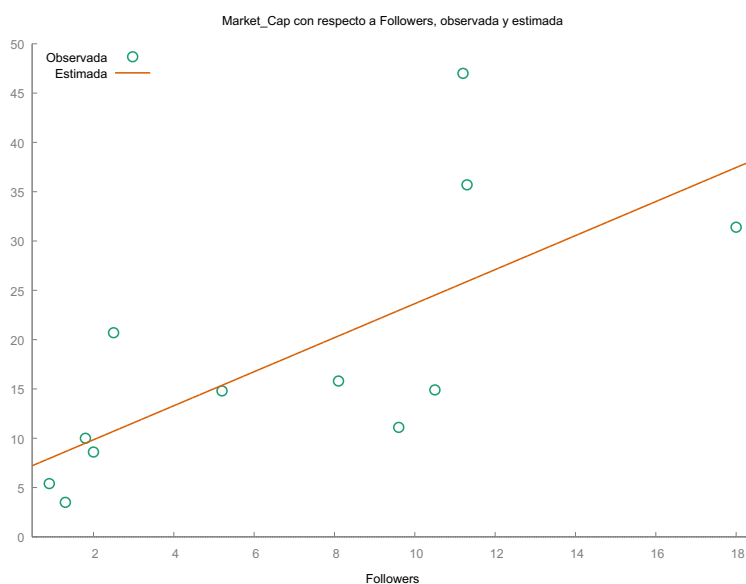
Figura 4. Fan token market Cap vs Followers.

Observamos que el estadístico R^2 del modelo y el R^2 corregido es del 49% y 45% respectivamente, una capacidad explicativa bastante buena tratándose de un modelo tan sencillo.

La representación gráfica de la recta de regresión anterior es la que se observa en la figura 4. Teniendo en cuenta que el parámetro β es positivo en una intervalo de confianza del 95% podemos validar la hipótesis H_0 de este estudio.

4. Conclusiones, Limitaciones y Recomendaciones

En este artículo hemos profundizado en un nuevo criptoactivo como es el *fan token*. Se trata de un activo digital que se registra en una red *blockchain* cuyo propietario recibe ciertas utilidades de interés para un aficionado que muestra un evidente vínculo emocional con la entidad emisora del token, siendo una versión moderna de los tradicionales carnés de socio o programas de simpatizantes. Este nuevo activo digital le permite al emisor crear valor por dos vías:

- Por un lado, es una fuente de ingresos adicional a las fuentes de ingresos habituales, por la emisión y venta de tokens.
- Por otro lado, *el fan token* es una nueva herramienta para lanzar actividades que desarrollen la conexión con los aficionados de la entidad.

La utilidad que reciben como recompensa lo poseedores de los tokens presenta dos características fundamentales:

1. La primera es que el *fan token* no implica una recompensa cierta o esperable, lo que implica que este activo no puede ser valorado como ocurre con los bonos (que ofrecen una rentabilidad cierta a través del pago de cupones) o como las acciones (sobre las que se puede estimar una corriente de flujos en forma de dividendos).

2. Los equipos de marketing del emisor tratan de vincular al fan ofreciendo a los poseedores de los tokens la posibilidad de participar en decisiones del equipo votando en encuestas, participar en sorteos, acceder a la compra de autógrafos o prendas exclusivas del club, etc. Esto hace que la valoración de las recompensas sea compleja, ya que para un aficionado tendrá un importante valor sentimental mientras que para un no aficionado podrían tener un valor despreciable.

Vemos por lo tanto que las características intrínsecas de este activo hacen que la valoración de este y el reto de estimar su precio teórico sea sumamente complejo. Sin embargo, con un simple vistazo del gráfico de cotización de los *fan token* que cotizan en plataformas de intercambios de criptomonedas como Binance vemos que este precio de mercado es muy volátil y que muestra evidentes correlaciones con los resultados deportivos del club, o con hechos relevantes para la entidad como ocurre con los fichajes de jugadores relevantes.

En un primer intento de encontrar variables que nos permitan valorar el precio del *fan token* y su capitalización de mercado nos hemos centrado en el número de seguidores, eligiendo el número de ´followers´ de Twitter, ya que el fútbol es un fenómeno global, como indicador de la masa de aficionados de un club. Los parámetros del modelo econométrico estimado se muestran significativos en un intervalo de confianza del 95% y sorprende el elevado estadístico R^2 del modelo, cercano al 50%, es decir que, a pesar de la volatilidad que se observa en la cotización de los *fan token*, solamente a través del número de seguidores podemos explicar la mitad del precio del activo.

No obstante, el estudio presenta limitaciones que podrán ser cubiertas en futuras investigaciones. La principal es el reducido número de observaciones que tenemos en la muestra. En este estudio nos hemos centrado en los equipos de fútbol europeos que han lanzado su *fan token*, pero no todos los clubes tienen su fan token, de hecho, lo clubes emisores de tokens ni siquiera son los más relevantes o los más grandes (tal vez sí se podría decir que los más valientes y pioneros). Por ejemplo, el Real Madrid, el equipo que más ingresos tiene, todavía no ha lanzado su fan token. A medida que este activo siga aportando valor a los clubes emisores, más clubes lanzarán su token y tendremos más datos para estudiar este nuevo activo.

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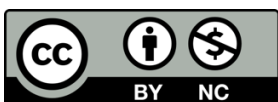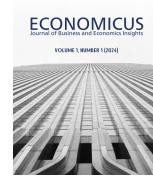
Article

Innovation through tradition in family firms: Evidence from case studies in Chile

Innovación a través de la tradición en empresas familiares: evidencia de estudios de caso en Chile

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Abstract: Innovation has become a vital element for the growth and projection of organizations. The literature on family businesses presents mixed evidence regarding the orientation of this type of companies towards innovation. Normally, this type of organization is rooted in its history and tradition, conditioning innovation. However, tradition can provide unique distinctive resources to leverage innovation in the family business. In this way, this study is dedicated to the search for evidence that allows advancing in the analysis of the innovation through tradition paradox. To carry out this research, it is qualitative in nature and will use the case study as a methodological tool, family businesses from the Los Lagos region in Chile will be analyzed. The results showed that tradition (legacy knowledge and deep-rooted values and principles) is related to and can drive innovation in the family business.

Keywords: Family businesses, innovation, tradition, legacy knowledge, values, principles.

JEL Classification: M1, M2, O32.

Resumen: La innovación se ha convertido en un elemento vital para el crecimiento y proyección de las organizaciones. La literatura sobre empresas familiares presenta evidencia mixta respecto de la orientación de este tipo de empresas hacia la innovación. Normalmente, este tipo de organizaciones

Citation

hunde sus raíces en su historia y tradición, condicionando la innovación. Sin embargo, la tradición puede proporcionar recursos distintivos únicos para aprovechar la innovación en la empresa familiar. De esta manera, este estudio está dedicado a la búsqueda de evidencia que permita avanzar en el análisis de la paradoja de la innovación a través de la tradición. Esta investigación es de carácter cualitativo y utilizó como herramienta metodológica el estudio de caso. Se analizaron empresas familiares de la región de Los Lagos en Chile. Los resultados demuestran que la tradición (conocimientos heredados y valores y principios profundamente arraigados) está relacionada con la innovación en la empresa familiar y puede impulsarla.

Palabras clave: Empresas familiares, innovación, tradición, conocimiento heredado, valores, principios.

Clasificación JEL: M1, M2, O32.

1. Introduction

The family business is characterized by having a deep-rooted set of beliefs and practices that make up its tradition that makes it special (Erdogan et al., 2020). Tradition understood as "consciously transmitted beliefs and practices that express identification with a shared past" (Dacin et al., 2019, p. 356), are part of the idiosyncratic features of this group of organizations, since they reinforce their collective identity, and they provide them with a sense of continuity and belonging. Hibbert and Huxham (2010) indicated that tradition could then be seen as a key resource for organizations because it is a unique, singular and inimitable resource.

Scholars researching family businesses find both theoretical and empirical support for arguing that family involvement influences inputs, outputs, and innovation-related activities (De Massis et al., 2015). The literature on family businesses and innovation presents different perspectives. Some studies suggest that they are more conservative and less innovative due to concerns about tradition and generational continuity (Dunn, 1995), however others argue that family businesses can be more innovative (Craig & Dibrell, 2006).

Naldi et al. (2007) highlighted the importance of innovation in companies and focused specifically on innovative behavior in family businesses. These companies are characterized by having a unique set of norms, culture and processes that distinguish them from non-family businesses. It is vitally important to understand how family influence can enhance or hinder a family business's ability to innovate, because innovation plays a fundamental role in "renewing businesses, improving their competitive advantage, stimulating growth, creating new employment opportunities and generating wealth" (Hayton & Kelley, 2006, p. 407).

The tensions between the preservation of family tradition and the need to innovate can generate unique challenges in the field of family businesses, since the coexistence of these two concepts: tradition and innovation, would seem paradoxical. This is evident in the lack of consensus among academics and professionals regarding the relationship between tradition and its influence on business innovation caused by the existence of different interpretations and perspectives on the subject. Shoham (2011) maintained that tradition and innovation are often seen as two paradoxical concepts, however, De Massis et al. (2016) stated that they can generate and cultivate a competitive advantage by using their tradition as the basis for a new product innovation strategy called "Innovation through Tradition" (De Massis et al., 2016). Some argued that tradition can be an obstacle to business innovation, arguing that adhering to entrenched practices limits the ability to adapt and explore new opportunities. "Resistance to change, very often present in both families and workers in family businesses, is a factor that influences innovative capacity" (Arzubiaga et al., 2019b). On the other hand, there are those who maintained that tradition can be a source of strength and competitive advantage, being based on knowledge, values and beliefs accumulated over time. It is common for companies with strong connections in their community and a

long history of innovation to take advantage of the knowledge accumulated in the past, as it is increasingly recognized as a valuable source of inspiration for innovation (Messeni-Petruzzelli & Albino, 2012; Barros-Contreras et al., 2021, 2022).

Family businesses are then faced with the need to adapt and evolve without losing sight of their elemental traits that have been fundamental to their success. Therefore, it is crucial that they can adapt, change and innovate to remain competitive (Adner & Snow, 2010). Harnessing tradition to drive innovation is presented as a possible answer to this challenge, allowing family businesses to take advantage of their inherited resources and knowledge, while opening to new ideas, technologies and opportunities. Although some researchers and practitioners see that tradition has great potential for innovation, current research is insufficient to understand the importance of tradition for companies and how they can take advantage of it to innovate. Limited research sheds light on how innovation is produced and developed through tradition (Arzubiaga et al., 2019a).

Therefore, it is crucial to conduct comprehensive research to address this ambiguity and provide a consistent basis to assist in making informed decisions to promote greater business innovation. In this way, the rigorous analysis of this problem aims to provide a solid foundation for innovation and adaptation in a dynamic business environment. It will explore how family businesses can use their tradition as a resource to promote innovation and how this can be transferred to similar contexts, because if the problem is not adequately addressed, there is a risk that companies will ignore the opportunities that may arise. by challenging traditional practices, such as valuable knowledge that can be extracted from tradition to drive innovation. Therefore, in this research, an analysis of the tradition and innovation variables will be carried out, examining different aspects associated with each of them. In the case of tradition, knowledge inherited from generation to generation will be considered, as well as deep-rooted values and principles. On the other hand, regarding innovation, the innovation of new products and/or processes will be specifically studied. The research model will be aimed at answering: How does tradition, measured through legacy knowledge and deep-rooted values and principles, influence innovation for the generation of new products and/or processes in the family business?

To test the research model, the study will use a qualitative methodology with a case study according to Eisenhardt (1989) and Yin (2003). A case study methodology is an appropriate way to investigate a topic in which few studies have been developed previously (Cepeda, 2006). The case study gives us the opportunity to investigate and understand various processes in depth, allowing us to analyze and examine specific situations in detail. By doing so, we can consider and use different methods to collect relevant data and obtain a more complete and holistic view of the phenomenon under study (Van Maanen, 1983). In this sense, this study will be carried out in three family businesses in the Los Lagos region in Chile. Businesses must have at least two generations of family involved in ownership and management. In-depth interviews will be applied to family members, as well as non-family employees working in the companies.

The results propose a positive relationship between legacy knowledge and deep-rooted values and principles with business innovation. The deep connection and commitment of family members to the legacy of the companies contribute significantly to their development, facilitating the balanced management of the paradox between tradition and innovation.

After this introduction, the literature review will be presented, then the methodology, the results and their discussion will be presented, and finally the conclusions, limitations and future lines of research.

2. Literature review

2.1. Family business and innovation

The literature on family businesses has attracted the attention of many academics for its unique culture, objectives to be achieved and resources used (Zellweger et al., 2010). Likewise, due to its

economic and social importance, which makes it the most dominant organizational and business structure globally. The family business can be understood as whose ownership resides in the hands of two or more members of the same family, in which there is active participation of the family in management and a perspective of long-term generational continuity (Astrachan et al., 2002).

Family businesses have certain characteristics and traits that make them distinctive and interesting. Some of these characteristics and traits are shared values, a sense of belonging and an entrepreneurial spirit.

Shared values are an element of great importance in this type of company, if managed properly, it can favor the performance of the organization, since teamwork is strengthened, which leads to greater efficiency and cohesion among employees, who feel integrated into the company and develop greater loyalty towards it, therefore, these fundamental values of family businesses can be summarized in two key concepts: identification and commitment (De Clercq & Belausteguigoitia, 2015).

Sense of belonging, the idea of being part of a legacy and contributing to the future. This emotional approach strengthens the commitment to build something that benefits both the family and society at large, creating wealth and generating significant impact (Craig et al., 2008).

The entrepreneurial spirit is fundamental in family businesses, and although it is not hereditary, its maintenance ensures the survival of the organization. The most successful family businesses, as well as those with the greatest longevity, embody this entrepreneurial spirit at its finest, which contributes to their continued success (Boling et al., 2016).

Long-established family businesses have a deep-rooted set of beliefs and practices that make up their tradition. According to Hibbert and Huxham (2010), tradition refers to the accumulation of knowledge, cultural symbols and micro-institutional practices that are transmitted from generation to generation. This accumulation contributes to shaping the identity of individuals, organizations and territories. Tradition refers to the belonging of a family, the legitimacy of a belief and practice transmitted or inherited over time. Tradition is considered a legacy of past generations that must be protected and passed on to future generations (Erdogan et al., 2020).

According to De Massis et al. (2016) family businesses may have an advantage in successful innovation due to their idiosyncrasy. Based on the Innovation through Innovation (ITT) model, which states that family businesses can successfully innovate by taking advantage of the knowledge and resources coming from their own business tradition and the tradition of the territory where they are located. This model distinguishes two main sources of knowledge relevant to innovation: knowledge transmitted throughout the history of the company (such as raw materials, production processes, designs, etc.) and knowledge linked to local tradition (such as typical ingredients, artisanal techniques of the area, cultural values, etc.). Likewise, it differentiates two types of innovation: in the functionalities/characteristics of the product (through technical improvements) and in the meaning of the product (by incorporating cultural and symbolic aspects). In this way, family businesses can successfully innovate by creatively drawing on their legacy and tradition.

Innovation encompasses both the creation of new products or services and the development of new production systems. The first implies a form of innovation focused on technological aspects or the improvement of products, while the second refers to an innovation in the organization of processes or management systems (Crossan & Apaydin, 2010).

Innovation involves adopting new ideas and behaviors, but to do so, groups need to be willing to be alert and open to information and knowledge. Furthermore, they must work constantly and be prepared to find creative solutions to problems that arise (Açikgöz et al., 2016). Innovation becomes the fundamental tool of entrepreneurs, who see change as an opportunity to take advantage of. It is important that the members of the organization constantly analyze their environment, searching for new ideas and solutions that allow them to satisfy the demands of a market characterized by short product life cycles and intense competition (Açikgöz et al., 2016).

Family businesses can show resistance to change (Vago, 2004), as family members establish emotional ties with the company's original strategies. When innovative ideas are not explored and leveraged, family businesses run the risk of becoming stagnant and experiencing a decline in market share (Arzubiaga et al., 2019a). Despite the challenges that may arise in the context of the family business, innovation becomes essential to ensure its survival. It is crucial that these companies continually strive to identify and capitalize on new opportunities, as well as optimize their resources to achieve successful growth and competitiveness (Zahra, 2005).

2.2. Tradition and innovation paradox

Family businesses are faced with the need to adapt and evolve without losing sight of the values and principles that have been fundamental to their success. These challenges occur, as tradition is related and intertwined with the roots of the past, deep-rooted commitment and the firmness of stability (Jaskiewicz et al., 2015), innovation is associated with transformation and change by feeding a bold and renewing spirit and whose capacity involves breaking with continuity and developing new competencies and skills (Adner & Snow, 2010), so the coexistence of these two concepts would seem paradoxical or contradictory (Lattuch, 2019).

On the other hand, according to conventional innovative thinking, traditional knowledge is considered a threat to innovation effectiveness as it can lead to path dependence, inflexibility, conservatism, inertia and core rigidity (Sørensen & Stuart, 2000). The assumption mentioned above sees the past as an obstacle or barrier that limits the potential for innovation and hinders the ability to satisfy current environmental needs. Shared beliefs, rituals and legacy have been key to survival over time, but they can also become a barrier to change, especially if the company holds firmly to its traditions (Lumpkin et al., 2008; Rondi et al., 2019).

2.3. Innovation through tradition

Several recent studies have explored how family businesses can generate and cultivate a competitive advantage by utilizing their tradition, giving shape to a new product innovation strategy called ITT, which was presented previously based on the model developed by De Massis et al. (2016). This model suggests that family businesses can successfully innovate by taking advantage of the knowledge and resources that come from their own tradition. Likewise, the resource of tradition allows capturing value from innovation (Arzubiaga et al., 2019b). Although more and more academics and professionals recognize that knowledge of the past lies a great potential to drive innovation, there is still a lack of literature on how innovation is specifically produced and developed through tradition according to the ITT approach.

ITT theory identifies two main sources of knowledge (De Massis et al., 2016). Firstly, we find knowledge linked to business tradition, while, secondly, we find knowledge rooted in the territorial tradition where the company is established (Messeni-Petruzzeli & Albino, 2012). Therefore, these two sources of knowledge are often closely interrelated in the context of family businesses that have ensured their sustainability over time. This model distinguishes between the source and type of innovation and describes two types of innovation: innovation in product features and innovation in product meaning. Furthermore, the model also highlights the importance of internalizing knowledge about materials and manufacturing processes, as well as reinterpreting product beliefs to bring new meanings to innovative product functionalities.

Several studies have been based on the ITT (De Massis et al., 2016), as is the case of the study by Vallone & Iannone (2020), which was based on the previous research by De Massis et al. (2016) but expanded the model by including process innovation. This new addition involved significant changes in product processes, manufacturing, packaging and commercial aspects. The results of the study pointed out that process innovation could be a crucial strategy to improve production efficiency and

manufacturing capacity. It was observed that mechanization could be a way to achieve these objectives and, at the same time, maintain authenticity and family traditions in Hungarian wine production. With this extension of the original model, it was highlighted how the reinterpretation of beliefs and knowledge about materials and manufacturing processes, as well as innovation in processes, could contribute to providing new meanings and innovative functionalities to the products of these family wineries.

The authors Vallone and Iannone (2020) used a structured questionnaire divided into four different themes: governance, innovation, tradition and value creation and competitiveness, the objective of applying the questionnaire was to obtain deeper information about the family's wishes, the reputation, innovation and family tradition.

The study discovered important value creation factors such as: brand, family commitment, knowledge, product quality. These factors were considered important for value creation in family businesses and were discovered through direct interviews with the family, surveys, literature review, archives, observation of the life of the company, website, etc. Furthermore, it is mentioned that these factors can be influenced by the traditions of family businesses and their relationship with innovation. The study identified a series of factors important for value creation in these organizations. The variables chosen in this study (legacy knowledge and deep-rooted values and principles) are related to these factors and are relevant to understanding how family tradition influences innovation and value creation in this type of companies. By considering these variables, a more complete and in-depth view can be obtained of how family businesses manage to remain competitive and relevant in the market through generating value through innovation and preserving their identity and legacy.

Therefore, according to De Massis et al. (2016) tradition variables, legacy knowledge, inherited values, and principles, are chosen because they are key components of tradition and can influence a company's ability to innovate. Legacy knowledge can provide a solid foundation for innovation, as it is based on knowledge and resources that are reliable and validated over time. Inherited values and principles can guide decision-making and company culture, which can be beneficial for innovation. Deep-rooted beliefs can also influence the way innovation is approached, and new ideas adopted, which can be both a help and a hindrance to innovation.

2.4. Legacy knowledge

Legacy knowledge refers to knowledge accumulated and transmitted through generations, which can be used by companies to innovate and improve their performance. Legacy knowledge provides a base of unique wisdom and experience that can be a source of new ideas and inspiration for innovation in family businesses. By reinterpreting and recombining this knowledge, family businesses can generate valuable product and process innovations. It has an advantage in ancient knowledge management due to its conservative nature and its ability to establish close and lasting links with tradition, allowing them to store, retrieve and exploit past knowledge resources (Magistretti et al., 2020). Legacy knowledge refers to past knowledge transmitted orally from generation to generation within a family business, which can come from both the tradition of the company and the tradition of the territory where the company is established. This knowledge can be both codified and tacit and can be an important source of competitive advantage for the family business (Arzubiaga et al., 2022).

2.5. The impact of legacy knowledge on innovation through new products or processes

According to a recent study of Magistretti et al. (2020), the impact of legacy knowledge on new product and process innovation was examined during periods in which the firm had a majority stake. At this time, companies launched products with a design more rooted in tradition, reviving historical elements. This study makes valuable contributions to the knowledge management literature by revealing how companies can measure and leverage the management and exploitation of ancient and traditional knowledge, thereby generating innovative business offerings. Regarding the impact of legacy

knowledge, the long-standing accumulated experience that these companies have, preserved and transmitted between generations, constitutes an invaluable asset to promote their innovation. This legacy knowledge, both explicit and tacit, provides a deep understanding of your business, markets and production processes. By creatively applying and reinterpreting this knowledge in the creation of new products and techniques, family businesses can produce genuine and distinctive innovations, reflecting the best of their tradition while integrating with the modern.

The fundamental route to achieving this innovation advantage lies in how a company capitalizes on its prior knowledge base. This implies their ability to access, use (through a knowledge search process), internalize, reinterpret (through a recombination of processes) and transfer knowledge that may be temporally distant (Swan et al., 1999). In this way, it is proposed:

H1: Legacy knowledge can positively impact innovation through the generation of new products and/or processes in the family business.

2.6. Deep-rooted values and principles

Deep-rooted values and principles refer to the fundamental and ethical beliefs that are important to a person, family, or community and that have been maintained over time. These values and principles can be transmitted from generation to generation and can influence the way decisions are made and actions are carried out (Erdogan et al., 2020) they provide an identity and purpose that guides innovation in family businesses. By combining traditional aspects with new approaches, these companies can achieve meaningful innovation in both goods and production methods. Evidence has been found in other contexts that positively links tradition and deep-rooted culture with higher levels of innovation in family businesses. They are those that are fundamental to the identity and culture of a person or a community. These values and principles are deeply ingrained in the way people think, feel and act, and are considered unquestionable truths (Feranita et al., 2017).

2.7. The impact of deep-rooted values and principles on innovation through new products

The values and principles embedded in family businesses, such as tradition, history, and family control, have a direct relationship with innovation in these companies. Understanding traditional values can contribute to the development of new products or services, and combining tradition with technology can achieve successful innovation (Heidrich et al., 2022).

In the same context, deep-rooted values and principles can influence product innovation in several ways. For example, cultural values and ethical principles can inspire new ideas for products or production processes. Furthermore, long-held values and principles can influence how consumers perceive and accept new products. Therefore, companies can leverage long-held values and principles to innovate products and production processes, if they are willing to challenge existing values and principles and seek new combinations of knowledge (De Massis et al., 2016). Therefore, it is proposed:

H2: Deep-rooted values and principles can be used to favorably influence innovation through the creation of new products and/or processes in the family business.
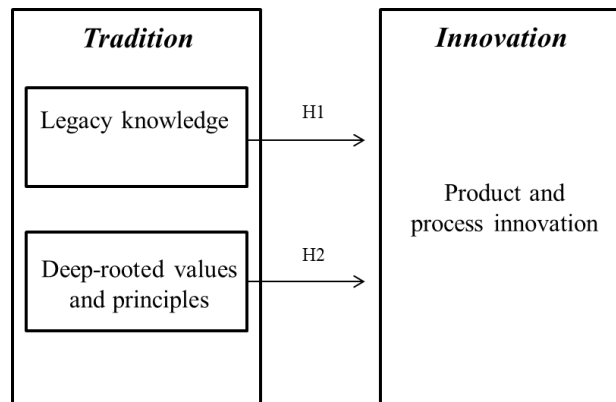
Figure 1. The research model.

3. Methodology

A qualitative methodology was chosen in this study because it allows for an in-depth analysis of the complex social and human factors involved in the management of family businesses, including dynamic variables such as traditions, values and beliefs. Through a flexible and interpretive approach, this methodology makes it possible to understand the perspectives and meanings that actors in these organizations give to various organizational processes. Furthermore, the exploratory nature of the research makes a qualitative approach especially appropriate. Thus, the use of strategies as case studies is relevant, facilitating a detailed examination of the phenomenon in its own natural context. Family businesses have been recognized as a favorable field for qualitative analysis (De Massis & Kotlar, 2014) and, as suggested by Hernández-Sampieri et al. (2010), for whom: "qualitative research is based on an interpretive perspective focused on understanding the meaning of the actions of living beings, especially humans and their institutions (it seeks to interpret what it actively captures)" (p. 9). Furthermore, and according to Yin (2003), the qualitative approach is particularly appropriate given the question "how", qualitative allows us to encompass the complexity of the variables and capture deep interpretations of the participants about how tradition and innovation are managed in its reality. organizational.

For the purposes of understanding the impact, incidence or influence of the variables in the generation of new products and/or services, observation of these in natural contexts for the participants is required, for which direct observation will be carried out. allows a more subjective immersion with the phenomenon, from the first source, through in-depth interviews, which will also make it possible to observe and record behaviors, gestures and other elements such as cohesion and the sense of belonging or teamwork, among others, such as norms, cultures and institutional processes. Thus, through an interview script based on the operational variables of the study, a set of predefined questions or topics allow greater flexibility for participants to expand, deepen, and share their experiences and perspectives more openly. Although Hernández-Sampieri et al. (2010) pointed out that in the case of studies in which "data are collected about a new area without predetermined ideas and with openness, they are rather exploratory" (p. 165), they maintain a theoretical perspective that guides the researcher to focus in your problem and avoid deviations from the original approach, which also allows you to measure the constructs more carefully (Eisenhardt, 1989).

The study will be applied to three family businesses to which in-depth interviews will be conducted and will be visited at a single time of data collection. Once the data has been collected, patterns and propositions will be sought that must be related to the theoretical variables (mutually exclusive) present in the question script extracted from the operationalization of the study variables to explore their relationships and correspondences. to better understand the phenomenon and its elements. In this sense,

3 companies were examined with a total of 12 participants, where in each company 4 members were interviewed (2 family members and 2 non-family members).

Following the methodology proposed by Miles et al. (2014) and Yin (2014), data collection will be carried out through semi-structured in-depth interviews with participants from family businesses in accordance with the research model. Then, transcription and organization will be carried out, where the interviews are transcribed to facilitate the management of the collected information, which is organized according to the variables to be examined. With the information obtained, a content analysis will be carried out to identify patterns, themes and emerging relationships in the data, which, when identified, will be grouped into the corresponding category. The procedure continues with data coding, in which codes are assigned to specific segments of data that represent the variables and their relationships. This coding will be carried out systematically, allowing efficient classification of the data according to the variables of interest. The results will be emptied into tables, where tools such as Excel will be used to organize and summarize the coded data. The analysis of organized data allows for triangulation, comparing the information collected from the different participants in each company and with the corresponding literature, which gives validity and reliability to the results and their implications. In this sense, it will include a documentary review, a review for which an exhaustive analysis of information related to aspects associated with tradition and innovation of products and processes adopted by the family businesses participating in the study will be carried out. This analysis includes secondary sources such as institutional documents, protocols and standards that reflect its organizational culture, such as its website, among others. Finally, the results are interpreted and discussed in the context of the research objectives.

3.1. Variables

Below, the variables and their items to be measured are presented. The variables and their measurements were adapted according to De Massis et al. (2016).

Tradition

Legacy knowledge

Raw materials: The influence of tradition on the choice of raw materials for production will be measured, evaluating the extent to which decisions are based on knowledge transmitted over generations.

Graphic elements: It will be analyzed how traditional elements, such as logos, labels or designs and graphic elements in general influence the visual identity of the products and how this can be a manifestation of tradition.

Production processes: It will be investigated how production methods and processes have been inherited and to what extent tradition influences.

Deep-rooted values and principles

Beliefs and brand identity: It will be measured how brand identity reflects values and principles that contribute to positioning in the market, considering beliefs and assumptions rooted in the company's culture.

Innovation

Product innovation

Add New Features: The company's ability to introduce new functions or features into its products or services will be measured, and how these innovations can be related to tradition.

Creation of a New Product Line: It will be investigated whether the company has developed new product lines that, in some way, are connected to its heritage and tradition.

New Meanings: It will be analyzed how the company has reinterpreted or redefined traditional aspects to adapt to changing market demands and how this has contributed to innovation.

Process innovation

New processes: It will be analyzed how the company can use its heritage and experience as inspiration to develop new processes. This could involve incorporating traditional elements into new methods or reinterpreting old practices in a more up-to-date and efficient way.

Process improvement: It will investigate how the company reviews and optimizes its processes, taking its heritage and experience as inspiration. It analyzes how the organization incorporates traditional elements into new methods or how it reinterprets old practices in a more updated and efficient way.

3.2. Sample

The sample for in-depth interviews is non-probabilistic because in this type of sample the choice of elements does not depend on probability, but on causes related to the characteristics of the research or who makes the sample and for convenience and accessibility. two very important dimensions to consider of the environment according to Mertens (2005). On the other hand, two family members and two non-family employees per organization will be interviewed, who must have knowledge and experience in the company regarding the resources, scope and limitations of the research.

In this study, three companies will be analyzed: Cecinas Ancud, Cecinas Llanquihue and Cecinas Braunau.

Cecinas Llanquihue, a Chilean company founded in 1914 in Puerto Montt, Chile, is dedicated to the production and marketing of meat products, especially cured meats and sausages. It is a family business that has maintained a strong connection with its traditional values throughout generations, which is reflected in the quality and authenticity of its products. The company has managed to stand out in the national and international market thanks to its focus on family heritage and its commitment to excellence in the meat industry.

Cecinas Ancud is a Chilean company dedicated to the production and marketing of meat products, especially cured meats and sausages. Founded in 1977 in Ancud, Chiloé, the company has stood out for its focus on tradition and the quality of its products. Cecinas Ancud has achieved a significant presence in the Chilean market and has maintained a solid reputation in the food industry.

Cecinas Braunau is a family business founded on May 22, 1992, with the idea of recovering those old German recipes, which were somehow being lost. In this way the motto "It is the tradition of the German Colonists" was born.

Cecinas Braunau has always been concerned about the environment, complying with all current environmental regulations, receiving an award, given by the Superintendency of Sanitary Services (S.I.S.S.), for the continuous treatment of its liquid industrial waste.

The selection of the three companies under study is based on their suitability to provide a comprehensive perspective with respect to the objectives established in this research. The investigation into how family businesses in the Los Lagos region can capitalize on tradition as a resource for innovation. The chosen companies not only exhibit solid permanence in a highly competitive market, but also stand out for their ability to evolve and adapt over time.

4. Results

To identify the members of the three companies, a unique code system has been established. In the first company, Cecinas Braunau, identified as E1, the codes E1F1 and E1F2 are assigned to refer to the first and second family member, respectively, and E1NF1 and E1NF2 are used for the two non-family members of the company. The identification codes are distributed as follows: E1F1 for the owner and commercial manager with 32 years of experience, E1F2 for the commercial manager with 22 years of experience, E1NF1 for the production operator with 7 years of experience, and E1NF2 for the manager of the crude oil line with 32 years of experience.

For the second company, Cecinas Llanquihue, identified as E2, 2 family members and 2 non-family members were interviewed. The codes E2F1 and E2F2 are used for the two family members, as well as E2NF1 and E2NF2 for the two non-family members. The identification codes are distributed as follows: E2F1 for the owner and commercial manager with 45 years of experience, E2F2 for the treasury manager with 23 years of experience, E2NF1 for the support manager with 22 years of experience, and E2NF2 for the sales administrator with 33 years of experience.

Finally, in the third company, Cecinas Ancud, designated as E3, 2 family members and 2 non-family members were interviewed. The assigned codes are E3F1, E3F2, ENF1 and E3NF2 to refer to specific members of this company. The identification codes are distributed as follows: E3F1 for the human resources manager with 15 years of experience, E3F2 for the logistics manager with 21 years of experience, E3NF1 for the production subject with 10 years of experience, and E3NF2 for the sales manager with 13 years of experience.

This coding approach will facilitate the organization and analysis of the interviews, providing a clear way to refer to each family and non-family member in the context of each company. Below are the main quotes from those interviewed for the 3 companies.

Cecinas Braunau: Tradition and innovation relationship

Table 1. Impact of legacy knowledge on innovation.

Items	Quotes from interviewees
Raw Materials – Product Innovation In creating new product lines, has the company drawn on legacy knowledge about raw materials as a source of inspiration or as a distinctive element of family tradition?	E1F1: "Yes, but the recipe is kept because, furthermore, I don't know how to do it any other way, people are not stupid. So, if I give you a sausage to try, I'll make this one. And you say, 'now'. And then I'll give you another one. What changed? It baffles you. "We cannot lose that tradition and that flavor, that is our hallmark." E1F2: "The recipe is the essence, the heart of what we do. We stick to those ingredients and the choice of live animals; they are our ace up our sleeve. We are inspired by what has worked and that foundation is what allows us to create new things." E1NF1: "The company always starts from the traditional recipe and ingredients when it ventures to create new products. "It's like going back to your German roots." E1NF2: "For the company, when creating new products, they always start from the basis of respecting quality, flavor and the German essence that has earned them an important place in the hearts of customers."
Raw Materials - Process Innovation Has continuous improvement of production processes involved the application of legacy knowledge about raw materials?	E1F1: "What happens is that, of course, before things were done manually or with very basic machines. And over time, those manual machines have improved. Today, many of the tasks are carried out by a machine, but I don't want you to think that we have lost that homemade touch, the same processes and each treatment according to the raw material are still respected, but as I told you, increasing efficiency, being faster. E1F2: "The processes are greatly influenced by the choice of raw materials and our beliefs. "Each process is based on characteristics of those ingredients that have always been that way, such as the choice of live animals and traditional spices." E1NF1: "They have incorporated new technology to improve, but always related to those characteristics of the raw materials that have been part of the tradition." E1NF2: "The continuous improvement of processes has been like fine-tuning a recipe that is already classic. "It's like looking for ways to do things better without changing what has already worked for a long time."
Graphic Elements - Product Innovation	E1F1: "I don't know, we must comply with the demands of what he says and has to say, even when it is a simple sausage that seems to be nothing more than a little

Has the knowledge passed down from generation to generation about graphic elements been used to add new visual features to existing products?	piece of paper. Even though regulations push us to adjust, we try to hold firm to that identity rooted in the tradition of the German settlers." E1F2: "We face regulations and standards that force us to innovate in this sense. "It's quite a juggling act, but we try to balance what they ask of us with keeping our identity strong." E1NF1: "No big changes have been made in the visual aspect of things, rather they have had to make adjustments due to the law." E1NF2: "It seems that the company has not made so many changes to the graphics."
Graphic Elements - Process Innovation Considering the importance of graphic elements in the visual identity of products, in what way has the company used these symbols of its heritage as inspiration to develop new, more efficient production processes?	E1F1: "From my point of view, the graphic elements are not what really change the production processes." E1F2: "Look, processes are fundamental, there is no doubt about that. But honestly, I don't know how the logo or the graphic elements directly influence those processes." E1NF1: "I don't know if it influences, maybe they don't have much relationship, it doesn't occur to me." E1NF2: "The logo and that, surely have their importance in the image, but in the production line, I don't know."
Production Processes - Product Innovation Has the company turned to legacy production processes as a resource for creating new products?	E1F1: "It is crucial to highlight that we keep intact all the legacy processes that have been fundamental to the success and identity of our company. The selection of the live animal, for example, is a vital belief embedded in our production practices." E1F2: "We believe that the authenticity of our traditional processes is reflected in the quality of the products we offer." E1NF1: "Still the same steps, but now faster to catch up with demand. "It's like adding turbo to production, but the steps are the same as always." E1NF2: "So, yes, they have used those legacy processes to continue to innovate and bring new things to market. It's like the formula that continues to bear fruit."
Production Processes - Process Innovation In relation to the inheritance of production methods and processes influenced by tradition, how is this influence related to the company's ability to successfully introduce new processes?	E1F1: "We have undoubtedly experienced adaptations in our production processes due to improving efficiency and productivity. However, it is crucial to highlight that we keep all legacy processes intact." E1F2: "When it is time to get our hands on new processes, we do it with complete confidence that we do not lose our essence that has brought us to a successful conclusion. We maintain those lifelong methods. "We introduce them to the latest technology, so as not to be left too far behind" E1NF1: "Obviously, the processes have been maintained because I believe it is fundamental. and what makes this cecineria so special. But, as I said, we have also added some machinery to give it more speed." E1NF2: "It's like having a solid foundation and then building on it. So, for them, that influence of tradition is not a burden, but rather a guide to continue evolving."

Regarding raw materials, the importance of maintaining the traditional recipe as the heart and essence of the company's products is highlighted. In the words of E1F1, *"People are not stupid. So, if I give you a sausage to try, I will make this one. And you say, 'now'. And then I give you another one. What changed? It baffles you. We can't lose that tradition and that flavor, that is our hallmark."* This underlines the need to preserve the recipe as a distinctive feature that creates a unique connection with customers. E1F2 reinforces this point by stating that the recipe is the essence and heart of what they do, allowing them to

be inspired by what has worked to create new proposals without losing authenticity. According to E1F2, *"The recipe is the essence, the heart of what we do. We hold on to those ingredients and the choice of live animals, they are our ace up our sleeve. We are inspired by what has worked and that base is what gives us allows us to create new things."* In general, they highlight that, when venturing into new products, the company always starts from the basis of respecting quality, flavor and the German essence that has earned them an important place in the hearts of customers and a large part of these dynamics is based in the use of traditional raw materials.

In the innovation in production processes, the quotes indicate a technological evolution without losing the traditional touch. E1F1 mentions: *"Today, many tasks are done by a machine, but I don't want you to think that we have lost that homemade touch."* This emphasizes the importance of maintaining efficiency without sacrificing authenticity. On the other hand, E1NF2 comments *"The continuous improvement of processes has been like fine-tuning a recipe that is already classic. It is like looking for ways to do things better without changing what has already worked for a long time."* This statement highlights that improvement continuous is aimed at fine-tuning an already classic recipe, looking for ways to do things better without changing what has worked for a long time.

Regarding graphic elements, it is important to note that, according to E1NF2, innovation in these visual elements is mainly driven by external regulations: *"We are faced with regulations and standards that force us to innovate in that sense. It is quite a juggling act, but we try to balance what they ask of us with keeping our identity firm."* This highlights that innovation arises primarily in response to external regulations rather than as an internal initiative, underscoring the significant influence of regulatory requirements on the direction of product innovation. Although innovation responds to external regulations, the company prioritizes maintaining its identity rooted in these elements. E1F1 points out *"Although regulations push us to adjust, we try to hold firm to that identity rooted in the tradition of German settlers."* As noted, even though existing regulations exert some pressure for the company to adjust and adapt, it seeks to maintain firmly the identity that is rooted in the tradition of the German settlers who established these productive practices in the area. There is an effort to preserve that legacy and those distinctive features originating in its historical and cultural roots. E1F1 emphasizes the need to maintain intact inherited processes, fundamental to the company's identity and success, by highlighting that *"The selection of live animals, for example, is a vital belief rooted in our production practices."* This quote highlights the essential connection between deep-rooted traditions and the productive identity of the company. E1NF2, by describing that *"They are still the same steps, but now faster to catch up with demand"*, highlights the company's ability to adapt agilely to market demands without compromising the fundamental steps. The metaphor of "turboing production" suggests that if you are committed to innovating without losing the essence. E1F2 also mentions that "*When it is time to get our hands on new processes, we do so with complete confidence that we do not lose our essence*." This quote reflects the conscious strategy of technological innovation, carefully implemented to improve efficiency and productivity without giving up the traditional and German essence that characterizes the company. Therefore, the company innovates in its production processes by incorporating technologies to adapt agilely to market demands, but this innovation is carried out consciously and carefully, firmly maintaining the connection with the German tradition that has been essential for the identity and company success. For greater detail, review quotes from the interviewees in Table 2.

Table 2. Impact of deep-root values and principles on innovation.

Items	Quotes from interviewees
Brand Beliefs and Identity - Product Innovation	E1F1: "The idea is that each new line of products reflects the essence of our brand, maintaining the quality standards that have characterized us over time. "The authenticity and purity of the ingredients are valued, aligning us with the German tradition that has been the basis of our success."

How has brand identity influenced the creation of a new product line, ensuring that the new products reflect the essence and values of the family brand?	E1F2: "At work, we are all clear that when we get our hands on a new line of products, it must have a taste of us, with those values and principles that run in our blood. "It is not a matter of launching something on the market for the sake of launching it." E1NF1: "They want people, when trying something different, to feel that they are still in tune with what has always characterized the company. For one, the identity of the company is summed up in keeping the German tradition alive in every sausage that leaves here." E1NF2: "The idea is that each new product is not just something to sell, but an extension of identity and tradition. "Everyone agrees that quality and German essence must continue to be the pillars of any new product they launch on the market."
Beliefs and Brand Identity - Process Innovation How has the brand identity inspired and guided the creation of new production processes, ensuring that they are aligned with the image and values of the family brand?	E1F1: "The important thing is that, when introducing new production processes, we strive to maintain the essence of our tradition. Modernization may involve the incorporation of more advanced machinery, but always ensuring that fundamental steps, such as the selection of live animals, are maintained. It is not just innovating for the sake of innovating." E1F2: "Of course, for us it is super key to maintain that essence and flavor that identifies us. Yes, obviously, we want to improve productivity and modernize, but without breaking away from what has made us unique. We cannot risk industrializing everything and losing what it has taken us years to build. Innovation has to be as precise, taking care of every detail, because the client will know if we go out of style. It is a complicated balance, but you have to know well what to innovate." E1NF1: "In short, new processes are designed with the idea of evolving, but without losing the authenticity that distinguishes us." E1NF2: "For example, improvements were implemented in the selection of raw materials, more advanced smoking processes and more efficient packaging methods, but all respecting the flavors and processes that have always characterized us."

The company emphasizes the importance of each new product line reflecting the essence of the brand and maintaining the quality standards that have characterized it over time. According to E1F1, "*The idea is that each new line of products reflects the essence of our brand, maintaining the quality standards that have characterized us over time. The authenticity and purity of the ingredients are valued, aligning us with tradition German that has been the basis of our success.*" Here, the direct connection between the quality of the products and the German tradition that has been fundamental to the success of the company is highlighted. E1F2 complements this approach by noting that when introducing a new product line, everyone in the company is clear that it must reflect the unique flavor of the brand, aligned with the values and principles embedded in its identity: "*At work, everyone We are clear that when we get our hands on a new line of products, it has to have a flavor of ours, with those values and principles that run in our blood. It is not a matter of launching something on the market for the sake of launching it.*" Here the importance of authenticity and emotional connection with each product launched on the market is highlighted. Each new product seeks not only to be something to sell, but an authentic extension of the company's identity and tradition. Quality and German essence are considered the fundamental pillars in any innovation that the company launches on the market. For greater detail, review quotes from the interviewees in Table 2.

Cecinas Llanquihue: Tradition and innovation relationship

Table 3 collects the main quotes from the interviewees of the Cecinas Llanquihue company regarding the tradition – innovation relationship.

Table 3. Impact of legacy knowledge on innovation

Items	Quotes from interviewees
Raw Materials – Product Innovation In creating new product lines, has the company drawn on legacy knowledge about raw materials as a source of inspiration or as a distinctive element of family tradition?	E2F1: "Yes, we have innovated, we have released new products, but what we have not changed, and we are not going to change is our raw materials. Our raw materials are 100% animal protein, whether it be pork or beef, and that is what is defined as jerky, because that is also how our ancestors began to make it." E2F2: "Yes, the wealth of experience and knowledge accumulated over generations has been a valuable source of ideas to develop products that not only respect the essence of tradition, but also take advantage of the authenticity and quality of raw materials." E2NF1: "If, for example, the person who was head of production, Víctor Mödinger, studied in Germany, he studied how to make jerky, he came and made a recipe there that he then made here and he said that this is maintained over time and That has been happening and that has not changed over time." E2NF2: "Inherited raw material knowledge has been leveraged to add new meanings to our existing products. "Beyond simply being ingredients, these raw materials are carriers of stories, traditions and a legacy."
Raw Materials - Process Innovation Has continuous improvement of production processes involved the application of legacy knowledge about raw materials?	E2F1: "Yes, continuous improvement of production processes has involved the application of inherited knowledge about raw materials. "The company has taken advantage of, and applied knowledge transmitted over time." E2F2: "Yes, the continuous improvement of production processes has involved the application of inherited knowledge about raw materials." E2NF1: "Operational efficiency and consistent product quality. I believe that the deep understanding of raw materials has not only influenced the selection and acquisition of inputs but has also had a positive impact on the production of the cured meat itself." E2NF2: "This integration of the traditional with the innovative has been crucial to maintaining our unique identity, while allowing us to adapt and thrive in an ever-changing business environment."
Graphic Elements - Product Innovation Has the knowledge passed down from generation to generation about graphic elements been used to add new visual features to existing products?	E2F1: "Yes, the importance of maintaining the authenticity and representativeness of the southern area of Chile in the graphic elements has been recognized, which not only contributes to the cultural identity, but also adds a distinctive value to the products." E2F2: "The elements, rooted in family tradition, have not only served as visual inspiration, but have also contributed to maintaining an authentic connection with the company's identity and values over time." E2NF1: "Yes, I believe that it has been possible to integrate graphic elements that not only respect the family heritage, but also make consumers feel identified." E2NF2: "I think rescuing the old vibe in the designs. "With traditional graphic elements, we ensure that the new products maintain that familiar vibe, but with a modern touch that everyone likes."
Graphic Elements - Process Innovation	E2F1: "It is very important to keep in mind that in my opinion the graphic elements do not really change the processes. Well, based on the production processes, which may be an element of tradition, as it is normally done, or on the processes that they have always had."

Considering the importance of graphic elements in the visual identity of products, in what way has the company used these symbols of its heritage as inspiration to develop new, more efficient production processes?	E2F2: "On the subject of graphic elements, I think I am not sure if they have been used to develop improvements in any process." E2NF1: "The technology and sustainable practices implemented reflect the company's commitment to consistent quality, while respecting the authenticity and tradition represented in its graphic symbols." E2NF2: "The thing is, symbols and efficiency are not incompatible. "They have realized how they have always done it and have improved the processes so that everything is faster, but without losing the essence that makes them unique."
Production Processes - Product Innovation Has the company turned to legacy production processes as a resource for creating new products?	E2F1: "I could tell you that the experience accumulated over time has provided a solid base of practical knowledge about manufacturing, allowing the company to identify opportunities to improve and diversify its products." E2F2: "Of course, for the creation of new products our values and knowledge from our ancestors will always be present in order to reflect the essence of the company." E2NF1: "Ancestral experience in production processes is not only a legacy, but a tool that is used to give a special twist to what we already know." E2NF2: "When you launch products, you always build on what you already know. The processes of yesteryear are not just history, they are valuable resources. They adapt to new products, and thus the essence of always in innovative things is maintained."
Production Processes - Process Innovation In relation to the inheritance of production methods and processes influenced by tradition, how is this influence related to the company's ability to successfully introduce new processes?	E2F1: "The German heritage in the methods and processes of our cured meat company is key to its success, new functions for our products. Being connected to those traditions not only gives us identity, but also serves as a basis for innovating and trying new things." E2F2: "Yes, the company has capitalized on inherited knowledge about production processes as a resource to innovate in the creation of new manufacturing methods." E2NF1: "The company takes advantage of inherited knowledge in production processes to innovate in the creation of new methods. It's not just following the beaten path; it's taking what has always worked and adapting it to create something fresh." E2NF2: "When the production line is modernized, heritage is used. The methods that have always been taught are like the base of the pyramid. "They give us the direction to innovate in manufacturing processes and be more efficient."

In the impact of legacy knowledge on product innovation, Cecinas Llanquihue's commitment to the quality and authenticity of its products is evident, using exclusively animal protein raw materials according to tradition. The experience accumulated in these raw materials is considered a valuable source for developing products that respect this tradition. A relevant example is the contribution of the recipe by production manager Víctor Mödinger, which has endured over time. As expressed, E2F1: *"Yes, we have innovated, we have released new products, but what we have not changed, and we are not going to change is our raw materials. Our raw materials are 100% animal protein, whether it be pork or beef, and that is what is defined as jerky, because that is also how our ancestors began to make it."*

In relation to innovation in processes, continuous improvement stands out through the application of inherited knowledge about raw materials, increasing the efficiency and quality of products by impacting the acquisition of inputs and production methods. The integration of traditional and innovative aspects is highlighted to maintain the unique identity while adapting to new conditions. As noted by: E2F1: *"Yes, the continuous improvement of production processes has involved the application of inherited knowledge about raw materials. The company has taken advantage of, and applied knowledge transmitted*

over time." E2NF2: *"This integration of the traditional with the innovative has been crucial to maintaining our unique identity, while allowing us to adapt and thrive in an ever-changing business environment."*

Regarding the effect of the values and principles rooted in product innovation, the presence in new products of values and knowledge transmitted between generations stands out, thus reflecting the essence of the company. As E2F2 states: *"Of course, for the creation of new products our values and knowledge from our ancestors will always be present in order to reflect the essence of the company."*

About innovation in production processes, the German heritage in methods and procedures is highlighted as a fundamental pillar, serving as a basis for improvements and innovations by providing identity and tradition on which to build: E2F1: *"The German heritage in methods and processes of our cured meat company is key to their success, new functions for our products. Being connected to those traditions not only gives us identity, but also serves as a basis for innovating and trying new things."* E2NF2: *"When the production line is modernized, heritage is used. The methods that have always been taught are like the base of the pyramid. They give us the direction to innovate in manufacturing processes and be more efficient."*

Regarding brand identity and product innovation, the company believes that brand identity has played a fundamental role in adding new values. In addition, it has always sought to maintain visual and conceptual coherence to ensure that the incorporations respect the aesthetics and values rooted in the brand. E2F1: "*Brand identity has been a fundamental tool to add new meanings and values to our products. It's not just a pretty logo; It is the essence of who we are and what we represent.*"

Table 4. Impact of Values and Principles on Innovation.

Items	Quotes from interviewees
Brand Beliefs and Identity - Product Innovation How has brand identity influenced the creation of a new product line, ensuring that the new products reflect the essence and values of the family brand?	E2F1: "Brand identity has been a fundamental tool to add new meanings and values to our products. It's not just a pretty logo; It is the essence of who we are and what we represent." E2F2: "We have sought to maintain visual and conceptual coherence with the family tradition, ensuring that the additions respect the aesthetics and values rooted in the brand. This has contributed to strengthening the recognition of our products in the market." E2NF1: "I believe that brand identity is not only a visual distinctive, but a strategic vehicle to add meaning and values to each of our products." E2NF2: "The brand identity has been like a compass when creating new things. When a different line is launched, they always make sure that it breathes the same air of the familiar brand."
Beliefs and Brand Identity - Process Innovation How has the brand identity inspired and guided the creation of new production processes, ensuring that they are aligned with the image and values of the family brand?	E2F1: "The brand identity has been a constant source of inspiration and guidance in the creation of new production processes, ensuring that they are aligned with the image and values of the family brand." E2F2: "We have ensured that these processes are aligned with the image and values of the family brand, maintaining the quality and authenticity that the brand represents." E2NF1: "From my perspective as a worker with 20 years of experience at Cecinas Llanquihue, each new approach we have adopted over the two decades has been designed with the clear purpose of reflecting and highlighting the visual essence and values rooted in the company. identity of our family brand." E2NF2: "In the worker experience, the brand acts as a trusted guide when introducing changes to processes. The intention is to improve without losing the connection with the essence of the brand, using history as a lighthouse that ensures that each innovation is aligned with the tradition of Llanquihue."

Regarding brand identity and process innovation, the company believes that the intention to improve is always without losing the essence and ensuring that they are aligned with the image and values of the family brand. E2F1: "*The brand identity has been a constant source of inspiration and guidance in the creation of new production processes, ensuring that they are aligned with the image and values of the family brand.*" E2NF1: "*From my perspective as a worker with 20 years of experience at Cecinas Llanquihue, each new approach we have adopted over the two decades has been designed with the clear purpose of reflecting and highlighting the visual essence and values rooted in the company. identity of our family brand.*" For greater detail, review quotes from the interviewees in Table 4.

Cecinas Ancud: Tradition and innovation relationship

Table 5. Impact of legacy knowledge on innovation.

Items	Quotes from interviewees
Raw Materials – Product Innovation In creating new product lines, has the company drawn on legacy knowledge about raw materials as a source of inspiration or as a distinctive element of family tradition?	E3F1: "Yes. To create new products, or to create new processes, or improve processes, or improve products. Something that, as has always been done before, is used for the creation of new products." E3F2: "Creating innovative procedures both in existing processes and products is necessary but tradition always has to be there, it cannot not be there." E3NF1: "Whether for product innovation, the creation of new processes or to improve both processes and products. It is something that is traditional, it is used for new creations." E3NF2: "To generate new products, the tradition and knowledge that is passed on to us is essential, since it is the way in which people recognize us."
Raw Materials - Process Innovation Has continuous improvement of production processes involved the application of legacy knowledge about raw materials?	E3F1: "Obviously over the years the tradition has had to be adapted." E3F2: "Tradition, as expected, has had to adapt to changing dynamics." E3NF1: "Of course, over the years, it has been necessary to adjust the tradition. It is something that, naturally, has been adapted to the circumstances." E3NF2: "Undoubtedly, as the years have passed, tradition has had to adapt to circumstances, in this case to new processes."
Graphic Elements - Product Innovation Has the knowledge passed down from generation to generation about graphic elements been used to add new visual features to existing products?	E3F1: "Well our logo is quite unique, so it has to be reflected in each of our products, you immediately recognize our brand with our logo." E3F2: "We strive to reflect this seal in any new article, to enhance recall and the emotional bond with the brand." E3NF1: "Absolutely, our logo has its own unique style, which is why we incorporate it on all our products. It's like our visual form, something that stands out immediately." E3NF2: "It's something that stands out instantly, a kind of hallmark that clearly identifies our brand."
Graphic Elements - Process Innovation Considering the importance of graphic	E3F1: "Of course, that's a bit out of character. So, this condition of our products, here the company wants to keep it very rooted and does not want to compromise that. Although for us it would be much more comfortable to have products that will last a long time."

elements in the visual identity of products, in what way has the company used these symbols of its heritage as inspiration to develop new, more efficient production processes?	E3F2: "The company really values keeping that feature ingrained in our products, it's something they are not willing to negotiate." E3NF1: "That essence rooted in our products is something they are not willing to compromise, although of course the processes must maintain an evolution." E3NF2: "The company really insists on preserving that characteristic, the owners transmit that to us."
Production Processes - Product Innovation Has the company turned to legacy production processes as a resource for creating new products?	E3F1: "Yes, here at Cecinas Ancud we have taken inherited production processes as a valuable resource in the creation of new products." E3F2: "The company has used the usual production processes as a strong card when creating new products." E3NF1: "Making sure each release has the authenticity and quality that comes with those same old processes." E3NF2: "The company has opted for the usual production methods to launch new products, of course it has innovated in some things, but the recipe is there"
Production Processes - Process Innovation In relation to the inheritance of production methods and processes influenced by tradition, how is this influence related to the company's ability to successfully introduce new processes?	E3F1: "The tradition is the same. It is about respecting the recipe as it was done then. With that difference, until today, 55 years later because that has been evolving." E3F2: "The essence is maintaining tradition, making sure that the recipe is respected." E3NF1: "Of course, for us it is essential to preserve tradition, ensuring that the recipe remains faithful to its origins." E3NF2: "Of course, the basis is preserving the tradition, making sure that the recipe remains the same as it was in the beginning."

Regarding tradition and innovation at Cecinas Ancud, from the management of raw materials and product innovation, the company reflects its constant concern for tradition, without wanting to lose the thread that makes them so characteristic. Although they recognize the importance of innovation, they consider it essential to maintain their values. When it comes to innovating, they use all legacy knowledge. E3F2: "*Creating innovative procedures both in processes and in existing products is necessary, but tradition always has to be there, it cannot not be there.*"

The adaptation of raw materials over time has been a necessity, but it is the recipe applied to the products that distinguishes them and makes them special. The company has sought to innovate existing products, introducing new features. From a process innovation perspective, the company has adopted new practices to adapt to changing market demands. E3NF2: "*Undoubtedly, as the years have passed, tradition has had to adapt to circumstances, in this case to new processes.*"

About graphic elements and product innovation, the company maintains its logo as an essential part of its identity. They have innovated in new product lines, maintaining the traditional essence that has contributed to their success. People identify the brand immediately by its distinctive logo. E3NF1: "*Our logo is truly distinctive, so we incorporate it on all our products. It is something that immediately identifies our brand.*"

In relation to graphic elements and process innovation, the company seeks to reflect its heritage and values in its logo. Although they seek to innovate in processes, they do not want to deviate from their deep-rooted principles. E3F1: "*Although for us it would be much more comfortable to have products that will last a long time. The company wants to keep the condition of our products deeply rooted and does not want to compromise that.*"

From the perspective of production processes and the relationship with product innovation, the company uses legacy knowledge to create new products, especially in the production of condiments, maintaining the original recipe with no intention of changing it. E3NF1: *"Making sure each release has the authenticity and quality that comes with those same old processes."*

In relation to production processes and process innovation, the company insists that tradition must be respected as it was in the beginning, although it recognizes the evolution over the years. E3F1: *"The tradition in it. It is about respecting the recipe as it was done then. With that difference, until today, 55 years later because that has been evolving."* For greater detail, review quotes from the interviewees in Table 5.

Table 6 shows the results of Cecinas Ancud in the analysis of the relationship between deep-rooted values and principles and innovation.

Table 6. Impact of Values and Principles on Innovation.

Items	Quotes from interviewees
Brand Beliefs and Identity - Product Innovation How has brand identity influenced the creation of a new product line, ensuring that the new products reflect the essence and values of the family brand?	E3F1: "Well, the brand identity is tradition, it is the character of craftsmanship, of what was created a long time ago. And that's how we want the company to perceive it." E3F2: "Well, I firmly believe that the identity of our brand is found in tradition, in that artisanal touch that brings us." E3NF1: "The essence of our identity lies in the richness of tradition, in the artisanal imprint that lasts over time." E3NF2: "I think the identity of our brand is rooted in tradition, in that artisanal touch."
Beliefs and Brand Identity - Process Innovation How has the brand identity inspired and guided the creation of new production processes, ensuring that they are aligned with the image and values of the family brand?	E3F1: "We want it to last forever, because we firmly believe that that distinguishes us. We are convinced that this will be the case. That is why we strive to work in a way that reflects our identity. "We want each new process to not only be efficient, but also a testament to our values and what we stand for as a family brand." E3F2: "We want this to last forever, because we truly believe that makes us stand out." E3NF1: "We are completely convinced that this is how it will be, and that is why we have a chance working in this way that really represents us." E3NF2: "We want this to go on forever, because that's where our true essence is. We are super confident that this will be the case, and that is why we put everything into it, working in this way that completely reflects who we are."

Related to deep-root values and principles, the company considers it essential to remain in the market as a traditional brand, transmitting an image of artisanal and quality products. The brand's identity is rooted in tradition and that artisanal touch. E3NF2: *"I think the identity of our brand is rooted in tradition, in that artisanal touch."* The relationship between brand identity and process innovation is clear for the company. They want every process innovation to be efficient but also reflect their deep-rooted values. E3F1: *"We want each new process to not only be efficient, but also a testament to our values and what we stand for as a family brand. E3F2: "We want it to last forever, because we firmly believe that that distinguishes us."* The company strives to work in a way that reflects its identity, ensuring that innovation does not compromise its style and deep-rooted values.

5. Discussion

The case study was applied to 3 family businesses in the Los Lagos region. The companies analyzed correspond to the field of cured meat production and are recognized both locally and nationally.

The results obtained suggest that inherited knowledge involves deep knowledge especially in recipes, according to E1F2: *"Quality meat, old school spices and those small details that make us unique. The thing is to continue sticking to the German wave."* E1F2 also indicates: *"The recipe is the essence, the heart of what we do. We stick to those ingredients and the choice of live animals; they are our ace up our sleeve. We are inspired by what has worked and that foundation is what allows us to create new things."* Similarly, E3NF2 states: *"We look closely, we look for the best touch, but we always use the same suppliers. It's like our trademark in terms of flavors, always the same."* Companies agree that the use of raw materials must be inherited and legitimized as a transmitted practice since it is based on the idea of respecting the original recipe of the legacy of past generations that must be protected (Erdogan et al., 2020). In this sense, companies agree that their success with the final consumer and the loyalty of their customers has to do with respecting the traditional recipe, the origin and tradition of the German settlers, as E1F1 points out: *"You have to be consistent between what do you think, say and do, look, I want the company to be perceived as a company that follows the German tradition. It must be that way, we have to be consistent, because if the word says it is tradition, then we are in the right place."* Which would apply both to the raw materials and to the graphic elements that accompany the brands, which manifest their tradition and influence the visual identity of their products by being conceived as key, according to what E2F2 mentions: *"I would define them as elements graphics that adjust to what we want to convey that we are a company that was born in the south, is family-owned and that we deliver premium products,"* and this is also pointed out by E2NF2: *"I would define it as characteristic of the area, representing the essence of the company,"* identity that the 3 companies share, considering them as details that make the products have their own story, according to E3NF2: *"They are those little details that make our products have their own story. And the logo is a little gem that never goes out of style."* In this case, companies maintain that the roots in traditional visual elements have contributed to maintaining an authentic connection with the company's identity and values, as well as cultural identity, also adding distinctive value to the products.

Family businesses have an invaluable asset: the accumulated knowledge and traditions inherited over generations. Far from hindering innovation, several authors have found that this legacy can catalyze adaptation to market dynamism. Swan et al. (1999) highlighted the importance of companies knowing how to access, use, recombine and transfer their prior knowledge to achieve valuable innovations. Magistretti et al. (2020), examined how inherited knowledge drives product innovation with designs more rooted in tradition.

Furthermore, it is observed that the legacy knowledge from tradition influences production methods and processes, according to E1F2: *"From the careful selection of live animals, through smoking and sealing with that traditional touch, to the cooking that bears the signature of the German tradition,"* is also indicated by E3F1: *"They have always been related to tradition, as was done in the past, the past knowledge was passed on to the production people and they lead the way and teach the younger ones."* Therefore, although they are susceptible to continuous improvements, these would be based on automation with the incorporation and implementation of new technologies, preserving the methods, recipes, procedures, making the processes more efficient, we see this in Table 3 as E2NF2 points out: *"When the production line is modernized, heritage is used. The methods that have always been taught are like the base of the pyramid. They give us the direction to innovate in manufacturing processes and be more efficient"*, also as seen in Table 1, according to E1F1: *"We have undoubtedly experienced adaptations in our production processes due to improving efficiency and productivity. However, it is crucial to highlight that we keep all inherited processes intact"* in this sense E1F1 indicates that: *"What happens is that, of course, before things were done manually or with very basic machines. And over time, those manual machines have improved. Today, many of the tasks are carried out by a machine, but I don't want you to think that we have lost that homemade touch, the same processes and each treatment depending*

on the raw material are still respected, but as I told you, increasing efficiency, being faster" (Table 1). This could be due to the importance that the interviewees attribute to the importance of not varying the flavor or the recipe, an issue that they say has worked from generation to generation and has proven to be successful. The findings on the integration between traditional production processes and improvements in efficiency through innovations. Specifically, Vallone and Iannone (2020) expanded the Innovation Through Tradition model by incorporating innovation in processes, concluding that changes such as mechanization can increase productivity while maintaining essence. This dynamic vision of tradition allows us to understand that inherited practices can be complemented with adaptations and innovations, enhancing it instead of weakening it. The companies studied exemplify this by automating previously manual tasks, but without altering recipes or flavor, which they attribute to their transgenerational success.

The results also agree that the management of preserving artisanal methods anchored to traditional practices would be fundamental, as seen in Table 3, as indicated by E2NF1: *"Ancestral experience in production processes is not only a legacy, but a tool that is used to give a special twist to what we already know,"* as well as the transmission of the values that they attribute to each of the raw material treatment processes they use since they maintain that the methods they follow are a legacy which is transmitted from generation to generation as E3NF1 points out: *"In our company, we are proud of the tradition in our production processes and it is reflected in our products. The methods we follow are a legacy passed down from generation to generation. The veterans share their knowledge with the new members."* Veterans share their knowledge for both products and processes, which for them is a legacy that must be preserved between generations, as E3F2 points out: *"We like to follow the traditional vibe. Production processes are like a kind of inheritance that is passed from hand to hand. The masters of the hit are like the stars who share their tricks with the youngest ones."* The results of the study agree with the literature in that inherited artisanal production processes constitute a crucial source of tradition from which to drive innovation, as indicated by E3NF1 (Table 5) *"Of course, for us it is essential to preserve tradition, ensuring that the recipe remains faithful to its origins."* Specifically, De Massis et al. (2016) proposed as one of the sources of knowledge relevant to innovation, the knowledge linked to artisanal techniques and traditional manufacturing processes of the territory where the family business is located.

The perspective of Messeni-Petruzzelli and Albino (2012) also emphasized how the local cultural and historical heritage, of which the inherited production procedures are part, nourishes the capacity for adaptation and distinguished innovation of these companies. Therefore, the importance given by the companies analyzed to preserving their artisanal methods as an intergenerational legacy is fully consistent with the vision of tradition and innovation presented in the reference literature. Its enhancement represents a lever for change based on what is known.

When it comes to deep-rooted values and principles, companies demonstrate that their brand identity, with its deep-rooted beliefs and assumptions, influences their market positioning. The results suggest that companies seek to be recognized for their authenticity, which is reflected in each new product line, in their production processes and in their organizational culture. The latter is also associated with the visual and conceptual coherence of the family tradition that the three companies agree on, E2NF2: *"I believe that it aspires to be recognized as a company with centuries-old flavors and bearer of a heritage that lasts".* In fact, the company E3 points out that it was their own ancestors, the first owners, who went to look for the raw materials themselves, according to E3F1: *"Yes, the first owners went directly to look for the raw materials and processed it themselves, now we use suppliers who bring the processed product, but our recipe and ingredients are the same."* In Table 3 for E2NF2: *"When you launch products, you always build on what you already know. The processes of yesteryear are not just history, they are valuable resources. They adapt to new products, and thus the essence of always in innovative things is maintained."* The accumulation of experiences and knowledge over generations has proven to be a precious resource for generating ideas that shape products. These not only maintain the essence rooted in tradition, but also ensure the authenticity and quality of the raw materials. This combination offers a unique fusion between ancestral heritage and

modern demands, as reflected in Table 2, according to E1F1: *"The idea is that each new product line reflects the essence of our brand, maintaining the quality standards that they have characterized us over time. The authenticity and purity of the ingredients are valued, aligning us with the German tradition that has been the basis of our success."*

Under this logic, regarding the Innovation variable, the three companies explored have developed new products or production lines during the last five years, always demonstrating a strong connection with their heritage and tradition, as pointed out by E1NF1: *"Yes, in the company they have launched new products in the last five years. It is not an easy task, but they always add that German flavor,"* and as E3NF2 also indicates: *"We have introduced some new features to our products, now we opt for suppliers that provide us with already processed products. The recipe and ingredients remain the same as always."* Regarding product innovation, two of the three companies indicate that they are strongly attached to their ingredients and raw materials for the manufacture of their products; however, E2 has carried out other innovative practices from a proactive approach and continued, adjusting and perfecting its ingredients with the knowledge of expert cured meats brought directly from Germany who would rectify certain recipes and, subsequently, the company carries out market analysis strategies to evaluate the acceptance of its products and gather opinions from consumers, always maintaining the same component. of value: the traditional German flavor through its raw materials, as E2F1 points out: *"Yes, we are constantly trying to innovate. In fact, as I told you before, last week, we had two German technicians who were making new products."*

On the other hand, companies agree that, although they are not willing to innovate in raw materials, they are willing to innovate with respect to its processing and the management of the production chain, by turning to suppliers who bring raw materials already processed, maintaining the recipe, E3F1 indicates: *"Yes, the first owners went directly to look for the raw materials and processed it themselves, now we turn to suppliers who bring the processed product but our recipe and ingredients are the same."* It is observed from the innovation of characteristics, that the companies explored demonstrate reluctance to change their image, which would put their identity at risk, which is why the innovation of their characteristics has to do in some cases with modifying the ingredients without altering the recipe, as well as the image of the product, removing symbolic seals in response to the new animal market on the scene, and with this, also redefining its products by demonstrating responsibility for the management of raw materials and respect for its production process, local culture and its values, in addition to modernize the packaging, without altering the colors and brand identity. The above is observed in Table 1, as E1F1 points out: *"I don't know, we have to comply with the demands of what it says and has to say, even when it is a simple sausage that seems to be nothing more than a little piece of paper. Even though regulations push us to adjust, we try to hold firm to that identity rooted in the tradition of the German settlers."* Furthermore, as E2NF1 points out: *"It is very particular because until a while ago and because of everything that the issue implies today, animalistic and all, animals were removed from all brands, the traditional pig was asked to come out,"* and as also indicated by E2F1 in Table 3: *"Yes, the importance of maintaining the authenticity and representativeness of the southern area of Chile in the graphic elements has been recognized, which not only contributes to cultural identity, but also adds a distinctive value to the products."* In this regard, E2F1 indicates *"The brand identity has been a constant source of inspiration and guidance in the creation of new production processes, ensuring that they are aligned with the image and values of the family brand"* (Table 4).

Undoubtedly, tradition has experienced challenges for these companies, however, the results on process innovation demonstrate that it is the element that has emerged most naturally when making processes more efficient, which has involved the use of knowledge. inherited from generation to generation. In this sense, in response to modernization, the family employees of the companies interviewed demonstrate that they have complemented this knowledge with formal knowledge in careers related to the value chain of the companies to which they belong, demonstrating commitment to the optimization of modern processes. to keep the original recipes consistent with the values and principles embedded in the organizations. Similarly, Boling et al. (2016), for their part, suggested that the entrepreneurial spirit present in these generations is characteristic of the continued success of this type

of companies, as well as those with greater longevity, which, although it would not be hereditary, assures the survival of organizations.

This, through the implementation of technologies, software and processes that, from the perspective of process innovation, has responded to the need to evolve and adapt the factory, innovating in specialized machinery, for example, to meet market demands to satisfy customers. Under this logic, the companies explored would rather represent an innovation model focused on the organization of processes or management systems, beyond embodying a model of product improvement.

With the above, it can be concluded that the family businesses explored in the Los Lagos region demonstrate a high sense of belonging by feeling that they contribute to the social, local and organization's future, creating wealth and generating a significant impact (Craig et al., 2008) as indicated in E2F1: *"The company is perceived as a family business, rooted in the south and that has been consolidated over the years and the consumer perceives this, values it and that is why they continue to consume the product."* That the set of beliefs and practices that make up their tradition can be summarized in remaining strictly attached to the original flavors and raw materials, by updating production methods related to the authenticity of their recipes, according to E1F2: *"We want people to see it as the very essence of German tradition, with a familiar touch and top quality products"* and as E1NF2 indicates: *"They want to be loyal to their customers, maintain that consistency that makes each product unmistakable. Imagine, if one day it came out sweet, another salty, another black, people wouldn't know what to expect. For the company, being faithful to the flavor is being faithful to its roots and to the people who choose us again and again."* Both their family and non-family employees refer in their quotes to what, for De Clercq and Belausteguigoitia (2015), would be two key concepts, such as identification and commitment, which would influence the management of shared value to the performance of the organization, such as indicates E3NF1: *"We are modernizing our way of operating, but always with the commitment to preserve the authenticity that characterizes us"* and as E3F1 points out in Table 6: *"We want it to last forever, because we firmly believe that that distinguishes us. We are convinced that this will be the case. That is why we strive to work in a way that reflects our identity. "We want each new process to not only be efficient, but also a testament to our values and what we stand for as a family brand."* Thus, these key traits make these companies, all successful and distinctive.

Furthermore, they are firmly customer-oriented, giving them an important role in their innovations as they are the ones to whom they respond in terms of preserving the traditional elements that have led them to success and to whom they limit themselves to taking advantage of this inherited knowledge. the production processes, their efficiency and productivity since the brand identity to which their raw materials and flavors respond represent "non-negotiable" and "non-tradeable" elements of their tradition which, for Erdogan et al. (2020), is considered a legacy of past generations that must be protected and passed on. The above, according to E1NF2: *"They want to be loyal to their customers, maintain that consistency that makes each product unmistakable. Imagine, if one day it came out sweet, another salty, another black, people wouldn't know what to expect. For the company, being faithful to the flavor is being faithful to its roots and to the people who choose us again and again"* and also in Table 2, as E1NF1 points out: *"They want people, when trying something different, to feel that they are still in harmony with what has always characterized the company. For one, the identity of the company is summed up in keeping the German tradition alive in every sausage that leaves here."* E1F2 points out: *"Of course, for us it is super key to maintain that essence and flavor that identifies us. Yes, obviously, we want to improve productivity and modernize, but without breaking away from what has made us unique. We cannot risk industrializing everything and losing what it has taken us years to build. Innovation has to be as precise, taking care of every detail, because the client will know if we go out of style. It is a complicated balance, but you have to know well what to innovate"* (Table 2). E1F2 also indicates in Table 1: *"We face regulations and standards that force us to innovate in that sense. It's quite a juggling act, but we try to balance what they ask of us with keeping our identity strong."* Furthermore, E2NF2 points out (Table 3): *"I think it is worth rescuing the old vibe in the designs. With traditional graphic elements, we ensure that the new products maintain that familiar vibe, but with a modern touch that everyone likes."* It can be concluded that the presence of different family generations in the company influences its governance and administration by

coexisting conventional, more traditionalist innovative thoughts of older generations with the new trends of entrepreneurial innovative thinking, which sees not tradition, but resistance as a threat, thereby providing a fresh look at the inflexibility, conservatism, inertia and rigidity of the core, as well as the development of new competencies and skills through the visualization of change and innovation as a fundamental tool and characteristic of the entrepreneurial spirit of the new generations (Boiling et al., 2016; Sørensen & Stuart, 2000; Lumpkin et al., 2008; Rondi et al., 2019). These characteristics, added to the sense of belonging and the sense of contribution to the area and the future, typical of family members, would represent essential elements to manage the paradox.

Finally, this study shows notable affinities in terms of the way of managing the paradox with the ITT proposed by De Massis et al. (2016), which has been fundamental in family business research. The observations made in this work align with the key variables of the ITT: legacy knowledge, deep-rooted values and principles, and their impact on innovation. Thus, the results suggest that inherited knowledge, in accordance with De Massis et al. (2016), have a positive impact on innovation since the management and exploitation of ancient and traditional knowledge generates innovative commercial offers. These findings support both hypothesis H1, indicating that inherited knowledge can be a key catalyst for innovation in family businesses in the Los Lagos region of Chile allowing the capitalization of the knowledge stock, as well as hypothesis H2, which suggests that deep-rooted values and principles can be used to favorably influence innovation through the creation of new products and/or processes in family businesses in the region.

6. Conclusion

In this study, we investigate the tradition-innovation paradox with the aim of providing evidence to the debate. To carry out this, a qualitative study was carried out through a case study of family businesses in the Los Lagos region in Chile. The evidence obtained indicates a strong root in the elements that make up the tradition (legacy knowledge and deep-rooted values and principles), especially about ancestral recipes, distinctive flavors, raw materials of local origin and visual identity representative of its legacy. These elements are considered the heart of the business and fundamental pillars that strengthen the positioning and prestige achieved by the companies analyzed.

Although companies are cautious and reluctant to introduce changes in those factors that constitute their traditional core, they do demonstrate openness to innovate in terms of production processes, implementing new technologies and seeking efficiency gains, as long as this does not alter the distinctive quality, nor the authenticity that characterizes its products.

Likewise, an alignment is seen between the results of the study and the main factors considered in the Tradition-Innovation Paradox Model (ITT) developed by De Massis et al. (2016), which reinforces the importance of elements such as legacy knowledge and deep-rooted values and principles to understand the way in which these companies manage the permanent tension between tradition and innovation.

The findings support the hypotheses about the positive impact of legacy knowledge, deep-rooted values and principles on business innovation. The deep connection and commitment of family members to the legacy of the companies contribute significantly to local development, facilitating the balanced management of the paradox between tradition and innovation.

This study makes contributions to the literature by providing empirical background on how these types of companies capitalize on their legacy and cultural roots to promote innovations, manage the tradition-innovation paradox and ensure their durability over time (De Massis et al., 2016) and differentiate themselves from their non-familial peers (Gusenbauer et al., 2023). This study also contributes to expanding research on family businesses in Chile.

It also provides important contributions to the management of family businesses. The consideration by those who lead this type of company of aspects linked to the history and traditions of the family and

the company seems to be a key aspect for innovation. The family business is rich in idiosyncratic components, many of them rooted in traditions and strongly supported by emotional components.

This research has not been free of limitations; conducting qualitative studies based on case studies may limit the generalization of the contributions. However, given the nature of the study, this type of methodology is appropriate to analyze in depth the sources of the relationships that are the subjects of the research. Future studies may expand the base of companies or carry out surveys that allow greater coverage of companies and support quantitative studies. On the other hand, considering companies only in the field of jerky production could be a limitation. In this sense, the area of the country under analysis is rich in traditions, some of them coming from the German immigration of the mid-19th century that has allowed the appropriation of a multiplicity of products, tastes and customs that have been taking root and adopted in the area and which was considered an interesting area for the application of this study. Future research may expand the productive areas and sectors of family businesses to test the study of the tradition – innovation paradox. The resources and capabilities coming from tradition can become a source of competitive advantage and leverage the continuity of the family business.

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Article

Determinants of growth intention in SMEs: Analysis from the perspective of owners or managers

Determinantes de la intención de crecimiento en PYMEs: Análisis desde la perspectiva de los propietarios y gerentes

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Abstract: This paper proposes a model of growth intention of SMEs based on an entrepreneurial approach. In particular, the general objective of this work was to analyze the factors that determine the business growth intention of SMEs from the perspective of the individual decision-maker (owner or manager), utilizing the Theory of Planned Behavior as a theoretical framework. The paper analyzed the information obtained from a sample of 254 Mexican SMEs that were at least two years old. The PLS analyses confirmed that the business growth intention was positively influenced by the attitude towards growth and the perceived control. In contrast, the subjective norm did not directly influence the growth intention, although the empirical evidence confirmed an indirect effect of this variable on the growth intention by way of both variables: attitude and perceived control (0.54; p<0.01). For its part, entrepreneurial orientation had a positive influence on perceived control, although there was no significant impact on attitude towards growth. Accordingly, there was also empirical evidence to support the indirect effect of entrepreneurial orientation on growth intention, in this case through the perceived control over business growth.

Keywords: Growth intention, entrepreneurial orientation, attitudes, subjective norms, perceived control, SMEs.

JEL Classification: L26; D9.

Citation

Resumen: Este artículo propone un modelo de intención de crecimiento de las PYMEs basado en un enfoque emprendedor. El objetivo general de este trabajo fue analizar los factores que determinan la intención de crecimiento empresarial de las PYMEs desde la perspectiva del tomador de decisiones individual (propietario o gerente), utilizando la Teoría del Comportamiento Planeado como marco teórico. Este artículo analizó la información obtenida de una muestra de 254 PYMEs mexicanas que tienen al menos dos años de antigüedad. Los resultados PLS confirmaron que la intención de crecimiento empresarial está influenciada positivamente por la actitud hacia el crecimiento y el control percibido. En contraste, la norma subjetiva no influyó directamente en la intención de crecimiento, aunque la evidencia empírica confirma un efecto indirecto de esta variable en la intención de crecimiento a través de ambas variables: actitud y control percibido (0.54; p<0.01). Por su parte, la orientación emprendedora tuvo una influencia positiva en el control percibido, aunque no tiene un impacto significativo en la actitud hacia el crecimiento. En consecuencia, también hay evidencia empírica que respalda el efecto indirecto de la orientación emprendedora en la intención de crecimiento, en este caso a través del control percibido sobre el crecimiento empresarial.

Palabras clave: Intención de crecimiento, orientación emprendedora, actitudes, norma subjetiva, control percibido, PYMEs.

Clasificación JEL: L26; D9.

1. Introduction

Business growth and its determinants are one of the most relevant topics on economic and management research, due to its impact on economic development, employment, and firm's competitiveness (Penrose, 1959; Storey, 1994). However, Achtenhagen et al. (2010) point out that the business growth literature is too fragmented to build a comprehensive theory of growth and highlight the need to deepen in the research on this topic, integrating the perspective of both scholars and practitioners. In this sense, the academic field of entrepreneurship has been the most prolific one in the effort to scientifically measure and analyze the phenomenon of business growth.

Thus, business growth has been interpreted almost implicitly as a condition or as part of the concept of entrepreneurship (Gundry & Welsch, 2001). Stevenson and Jarillo (1990) explicitly include growth in the concept of entrepreneurship when they mention "entrepreneurship is the way in which growth can be achieved, not just the act of creating a business." However, the exact association between the entrepreneurship and growth has been unclear (Davidsson et al., 2002), largely because of definitional problems with the concept of entrepreneurial activities (Achtenhagen et al., 2010). At the most basic level, the process of entrepreneurship is manifested as growth when a business expands as a consequence of adding new activities. Consequently, organic growth can also be referred to as entrepreneurship, whereas growth by acquisition is not interpreted in the same way. This is the sense in which Venkataraman (1997) emphasizes that the discovery and exploitation of opportunities in some way justifies organic growth as a reflection of entrepreneurship, including when the growth is only in terms of volume. Accordingly, entrepreneurship is a complex phenomenon that includes the growth of businesses together with other factors related to business creation and development, while not every business growth is the result of an entrepreneurial process.

Some empirical studies posit that organic growth is primarily a phenomenon of young SMEs, while larger and more mature enterprises grow almost exclusively through acquisition (Davidsson & Delmar, 1998). These results suggest that the "growth is entrepreneurship" theory is more applicable in the case

of young enterprises and SMEs (Davidsson et al., 2002). These types of businesses are characterized by their small number of employees and by centralized decision-making, usually by the owner or manager, which range from decisions about operation to administration of the business (Delmar & Wiklund, 2008). Specifically, Rasmussen et al. (2018) highlight that further growth of small firms is not simply an evolutionary process, and a firm's growth intention constitutes an essential predictor of its growth together with market opportunities and access to resources and capabilities. Therefore, the focus on the individual is fundamental to understand and explain business growth in SMEs as a manifestation of business expansion. However, the research on the factors that determine the strategic decision of pursuing the business growth in SMEs is very limited, especially from the perspective of the owners and managers as the main decision-makers in this kind of companies (Delmar & Wiklund, 2008; Wiklund et al., 2009; Rasmussen et al., 2018).

In this way entrepreneurial behavior, and specifically business growth (Douglas, 2013), can be analyzed through theories of individual behavior such as the Theory of Planned Behavior - TPB (Ajzen, 1991), the Entrepreneurial Event Model (Shapero & Sokol, 1982) and the Potential Entrepreneur Model, which allow a deeper understanding of the characteristics and factors that influence the entrepreneur. According to these theories, a greater intention implies a greater probability of entrepreneurship on the part of the individual (Degeorge & Fayolle, 2008; Finisterra do Paco et al., 2011; Gird & Bagraim, 2008; Liñan et al., 2011; Sommer, 2010). Nevertheless, and despite the widespread use of these theories to study entrepreneurial intention, the research on business growth based on the Theory of Planned Behavior is limited. Therefore, the knowledge about how business growth is influenced by the decision-maker's (owner or manager) attitudes, subjective norm and perceived control on the achievement of business growth is clearly insufficient (Barros-Contreras et al., 2022).

To cover this gap in the literature, the general objective of this work is to analyze the factors that determine the business growth intention of SMEs from the perspective of the individual decision-maker (owner or manager), utilizing the Theory of Planned Behavior as a theoretical framework. Moreover, given the entrepreneurial nature of business growth in SMEs, this research also considers the role of entrepreneurial orientation on growth intention. In this sense, while the influence of entrepreneurial orientation on business performance of SMEs is well-supported in the literature (Solano et al., 2018; Arzubiaga et al., 2019; 2022), its effect on the business growth is less studied (Wiklund et al., 2009), particularly from the perspective of the individual decision-maker. Moreover, as far as we know, there is not research integrating the theories of entrepreneurial orientation and the TPB to analyze the strategic decision to pursue the business growth in SMEs.

Accordingly, this research provides two main contributions regarding previous literature. First, we study the factors that determine decision-makers' (owner or manager) intention to pursue the business growth in SMEs using the Theory of Planned Behavior as a theoretical framework. This provides new knowledge on the role of individual attitudes, subjective norm and perceived control on the strategic decision to foster the growth of the business, an issue scarcely studied in the literature on entrepreneurship. Second, this research examines the relationship between these variables and entrepreneurial orientation, providing a new perspective of how this last construct influence business growth intention, as part of the entrepreneurial process of SMEs. We consider that the explanatory variables included in the Theory of Planned Behavior act as mediators of the influence of entrepreneurial orientation on growth intention when the decision depends on the owner or manager of the firm (as is the case in SMEs).

The following outlines the theoretical justification of the work, placing especial attention to the influence of the explanatory variables included in the Theory of Planned Behavior on the growth intention of owners and managers of SMEs, and on the relationship between them and entrepreneurial orientation. We subsequently describe the methodology utilized to develop the empirical study, undertaken in the context of the Mexican SME, and present the results obtained from a Structural

Equation Models approach using PLS-SEM. Finally, we draw principal conclusions, outline limitations and suggest areas of future research.

2. Theoretical Framework

2.1. Growth determinants of SMEs outlined by owners or managers

Business growth is a complex phenomenon that has been conceptualized from different perspectives and measured in diverse ways (Davidsson & Wiklund, 2000). In her seminal theory, Penrose (1959, p. 1) support a dual nature of business growth by stating that (1959, p. 1): "The term 'growth' is used in ordinary discourse with two different connotations. It sometimes denotes merely increase in amount, e.g., when one speaks of 'growth' in output, export, sales. At other times, however, it is used in its primary meaning implying an increase in size or improvement in quality because of a process of development … in which an interacting series of internal changes leads to increase in size accompanied by changes in the characteristics of the growing object." According to Whetten (1987) this implies the distinction between size (an absolute measure) and growth (a relative measure of size over time). However, this controversy is still unsolved in the entrepreneurship field, as many studies still conceive and measure business growth as "increase in amount", while only a few focus on subjective measures, such as the manager's satisfaction with the business growth, or her/his willingness or intention towards growth (Achtenhagen et al., 2010). Therefore, the conceptualization and measurement of growth is still a controversial issue in the entrepreneurship and management theory.

Given the focus of this research on the strategic decision of the owner or manager to foster the growth of the business and following the approach of Douglas (2013) and Rasmussen et al. (2018), we use growth intention as the main dependent variable. According to the Theory of Planned Behavior (Ajzen, 1991), intentions address the motivational factors which serve as indicators of the level to which people are disposed to develop a behavior or how much effort they are disposed to make to achieve a desired outcome. In this sense, in the most current models, attitude is commonly used to explain the intention towards a behavior, such as in the Theory of Reasoned Action (Ajzen & Fishbein, 1980), the Theory of Planned Behavior (Ajzen, 1991) and Theory of Trying (Bagozzi & Warshaw, 1990). According to the Theory of Planned Behavior (Ajzen, 1991), the beliefs regarding the possible consequences of a given behavior produce a favorable or unfavorable attitude towards the behavior which, in turn, affects positively or negatively the intention to carry it out.

In previous literature relating to business growth, there is the underlying belief that people act in different ways with the main objective of maximizing profits (Wiklund et al., 2009). Nevertheless, psychologists involved in studying aspects of human behavior have a wider understanding of the motives and attitudes underlying economic conduct. This is the argument behind the criticism of Sexton and Bowman-Upton (1991) to the models of growth that do not consider the role of SME manager or owner attitudes, as they consider that the attitudes towards growth held by these individuals will establish the limits of development that the business will reach. Furthermore, diverse authors (Davidsson, 1989; Storey, 1994; Wiklund et al., 2003) argue that those who start and operate their own businesses are motivated by a variety of different reasons rather than the simple maximization of economic benefit. More recently, Wiklund et al. (2009) and Douglas (2013) support that growth intention is determined by the decision-maker's attitude towards growth or its consequences. That is to say, the owners and managers' strategic decision to pursue the business growth will depend on the degree to which they consider that this outcome (or its consequences) is positive or desirable, and therefore have a positive predisposition toward it. Accordingly, we propose the following research hypothesis:

H1: The attitude of owners or managers of SMEs towards business growth positively influences the business growth intention.

Secondly, and following the Theory of Planned Behavior (Ajzen, 1991), this research addresses the positive effect of subjective norms on growth intention of the business. In this sense, there is a consensus with regard that social environment can exert a strong influence on both intention and behavior (Fishbein & Ajzen, 2010). Reference groups have been recognized as crucial links between individuals, behavior and social systems (Merton, 1968) as they are where individuals orient themselves, regardless of whether they belong to these groups (Singer, 1981). Previous research has studied many kinds of reference groups, including those to which individuals aspire, those to which they belong, and those to which they are only loosely linked (Siegel & Siegel, 1971).

In the field of entrepreneurship, diverse authors have highlighted the effect of the subjective norms of reference groups on entrepreneurial intention (Krueger et al., 2000). In a meta-analysis of entrepreneurial intention, Schlaegel and Koenig (2014) confirmed that the empirical evidence available support the influence of social norms on the intention to create and develop a new venture (Basu, 2010; Carr & Sequeira, 2007; Chowdhury et al., 2012). Whereas the research on the effect of subjective norm on growth intention is very scarce, it is reasonable to assume that the decision of owners and managers to pursue the business growth is also influenced by social norms from reference groups. Accordingly, managers and owners of SMEs have a stronger intention to grow the business if they consider that they have the backing of social groups relevant to them, which gives rise to the following research hypothesis:

H2: The subjective norm of owners and managers of SMEs concerning business growth positively influences the business growth intention.

Thirdly, and consistent with the Theory of Planned Behavior (1991), this research examines the effect of perceived behavioral control of decision-makers (owners and managers) on growth intention of the business. Perceived control is defined as "the degree to which the person believes they are capable of carrying out a determined behavior" (Fishbein & Ajzen, 2010). It is expected that those with a heightened perception of behavioral control are motivated to carry out the specific behavior and will persevere in their intention to do so. In contrast, those individuals with a lower awareness of behavioral control will be less motivated to carry out a given behavior and their efforts will be of lesser duration (Yzer, 2012). Believing that a behavior can be carried out motivates people to try to develop it and increases the probability that they will make the effort and persevere in their attempts (Ajzen, 1991; Ajzen, 2002). In this sense, Ajzen and Fishbein (2005) highlighted that perceived control is related to the perception of both internal and external factors which condition the possibility of a behavior being developed.

The literature on entrepreneurship based on the Theory of Planned Behavior has confirmed empirically the relationship between perceived control and entrepreneurial intention (Gird & Bagraim, 2008; Rueda et al., 2014; Miralles et al., 2016; Al-Jubari et al., 2018). Moreover, previous research has supported the significant effect on entrepreneurial intention of perceived feasibility (Krueger et al., 2000; Veciana et al., 2005; Giordano et al., 2017, 2018), a variable that have been identified as being similar or even identical to perceived behavioral control (Finisterra do Paco et al., 2011; Singh et al., 2012). As far as we know, there is limited research that have analyzed the influence of perceived behavioral control on growth intentions of owners and managers of SMEs. Nevertheless, it is reasonable to assume that the decision-makers' intend to foster the business growth is conditioned by the degree they consider this process as a volitional decision, controlled by them to some extend (for example, through their own managerial decisions of targeting new clients or markets and employing more people). According to this rationale and based on previous research on entrepreneurial intention, we propose the following hypothesis:

H3: The perceived control of owners or managers of SMEs over business growth positively influences the business growth intention.

In addition to the direct effect of subjective norm on growth intention proposed above, previous research have indicated that this variable can also influence attitudes towards the behavior as well as perceived behavioral control. Thus, although the Theory of Planned Behavior does not consider the direct effect of the subjective norm on attitude, diverse studies have found empirical evidence of this in entrepreneurship (Liñan & Chen, 2009; Finisterra do Paco et al., 2011; Rueda et al., 2014). This phenomenon is consistent with the Social Influence Theory developed by Kelman (1958, 1974) that identifies the internalization stage as the culmination of social influence, in which individuals do not just behave in accordance with other people's opinions, but they accept others' beliefs and attitudes as their own. In accordance with this approach, the beliefs of SMEs owners and managers regarding the opinions received by third parties about business decisions associated with business growth influence not only their intention to grow but are also internalized and can affect attitudes. In other words, if the decision-maker perceive that other people consider business growth as something positive (or negative), they will develop a positive (or negative) attitude towards business growth. As a result, we propose the following research hypothesis:

H4: The subjective norm of SME owners and managers concerning business growth positively influences attitudes towards business growth.

In line with the previous argument, this research also posits a direct and positive effect of the subjective norm on perceived control of business growth. In this sense, reference groups are taken to mean a group of people from whom an individual receives information which they subsequently use to interpret and act in daily life (Kelman, 1958, 1974). These interpretations and actions help individuals connect with social systems and give relevance to reference groups (Lawrence, 2006), enabling reinforcement of perceptions of control over the development of the conduct to take place. Accordingly, when the decision-maker perceives that the subjective norm encourages a behavior from her/his part (e.g., business growth), this will strengthen her/his perception of feasibility, and the control perceived to develop the behavior. In other words, if owners and managers of SMEs consider that social referents positively reinforce business growth, this in turn will reinforce their perceptions in respect of the control that they have over this behavior. The following research hypothesis is therefore proposed:

H5: The subjective norm of SME owners and managers concerning business growth has a positive influence on perceived control over business growth.

2.2. Influence of the entrepreneurial orientation on the part of SME owners and managers on attitude and perceived control of business growth

Since its first conceptualization in the seminal works by Miller (1983) and Covin and Slevin (1989), entrepreneurial orientation has been a key concept in the fields of entrepreneurship and business. According to Miller (1983), an entrepreneurial business is one which "is committed to innovation, is prepared to take risks and is the first to discover proactive innovations, overcoming competitors 'at a blow' (…)". This definition has been widely accepted in the literature (Zahra & Covin, 1995; Rauch et al., 2009), and most researchers has conceptualized and measured entrepreneurial orientation as a second order factor integrated by the three original dimensions (George & Marino, 2011): Innovativeness, Proactiveness, and Risk-Taking. This approach implies that entrepreneurial orientation fosters and leads the development of the business through developing innovative processes and products, proactively taking managerial decisions and taking reasonable risks. Accordingly, the influence of entrepreneurial orientation on SMEs performance has been widely supported in the literature (Rauch et al., 2009; Irwin et al., 2018), while its effect on growth intention has been hardly explored. Previous studies have mainly

focused on the outcome of entrepreneurial orientation (performance or growth) but not on the decision-making that leads to pursue that outcome, reflected by business growth intention.

Moreover, the scarce studies focused on this topic establish a direct and positive effect of entrepreneurial orientation on growth intention (Wiklund et al., 2009). However, this direct link between a wide and abstract strategic orientation, such as entrepreneurial orientation, and the intention to pursue a particular behavior (business growth) is unclear. Ajzen and Fishbein (2002, pp. 200) state that "factors of this kind can further our understanding of the behavior by providing insight into the origins of underlying beliefs, but their effects on intentions and behavior tend to be indirect". Accordingly, more research is needed on the gap between the effect of entrepreneurial orientation and business growth intention.

In this regard, the general framework of the Theory of Planned Behavior establishes that more general and abstract factors, such as culture, values and personality, influence on more concrete or domain-specific factors such as beliefs, perceptions, attitudes and intentions (Ajzen, 2001; Ajzen & Fishbein, 2005). In this sense, entrepreneurial orientation is part of the organizational culture (Kantur & Iseri-Say, 2013), and its dimensions (innovativeness, proactiveness and risk-taking) have individual counterparts, that are traditionally considered personality traits of entrepreneurs (Zhao et al., 2010; Fellnhofer, 2016; Kozubíková et al., 2018). Therefore, we postulate that the effect of entrepreneurial orientation on business growth intention is mediated by the decision-makers' attitudes towards business growth and their perceived control to develop this behavior.

As stated above, entrepreneurial orientation is conceived as a key decision-making strategy of the company which establishes the purpose of the organization (Lumpkin & Dess, 1996; Miller, 1983), based on the identification and exploitation of business opportunities. This process of identifying business opportunities therefore implies a favorable climate for business growth, conceived as a facet of entrepreneurship in SMEs (Gundry & Welsch, 2001; Davidsson et al., 2002). Specifically, the entrepreneurial orientation of the SMEs fosters the development of the business through innovation, proactivity and risk taking, therefore supporting a favorable disposition towards growth within the organization and, particularly, in the main decision-maker (owner or manager). In accordance with this view, entrepreneurial orientation can be considered as a direct antecedent of the attitude of SME owners or managers towards the growth of their business, and the following research hypothesis is therefore proposed:

H6: Business entrepreneurial orientation directly affects the attitude of SME owners or managers towards business growth.

According to the definition proposed by Miller (1983), widely accepted in the literature, SMEs with a high entrepreneurial orientation will be more proactive implementing innovative decisions, assuming a reasonable risk (Casillas et al., 2009; Solano et al., 2018). In this sense, Pehrsson (2016) highlights that by being entrepreneurially orientated the firm improves its capability of identifying and exploiting market opportunities in competitive markets (Hakala, 2011). Therefore, it is reasonable to assume that entrepreneurial orientation contributes to improve the capacity of SMEs to develop the business, which would lead managers and owners to perceive fewer obstacles to growth. This rationale is coherent with the Theory of Planned Behavior (Ajzen, 2001; Ajzen & Fishbein, 2005), as it implies that a general factor such as entrepreneurial orientation (a strategic organizational variable) influences the decision-makers' perceptions about their control to pursue a specific behavior, such as business growth. Accordingly, in SMEs with higher entrepreneurial orientation the managers will perceive a greater control over the process that leads to the business growth. We therefore propose the following research hypothesis:

H7: Business entrepreneurial orientation positively influences perceived control over business growth.

Figure 1 shows the theoretical model of our paper, including all research hypotheses.
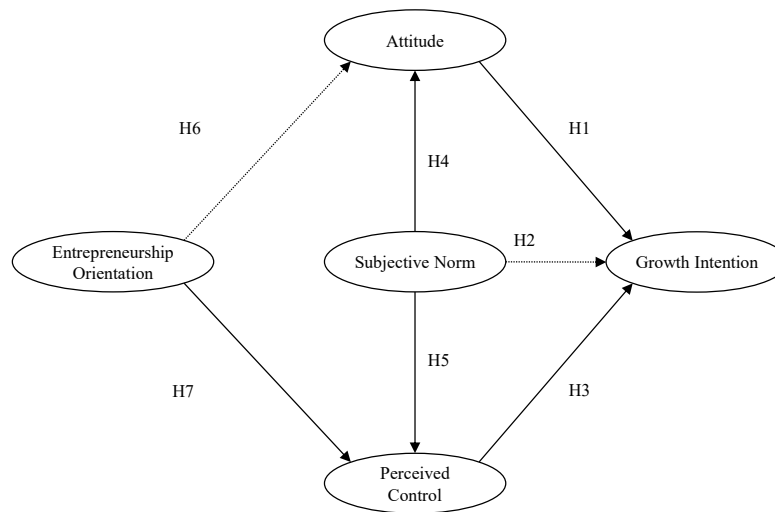
Figure 1. Theoretical model.

3. Method

With the intention of addressing the objectives and research hypotheses, a quantitative study was undertaken focusing on the perceptions and variables that influence business growth intention of managers and owners of Mexican SMEs with over two years of operation. We subsequently describe the methods used to evaluate the concepts of the study, the sample and the fieldwork.

3.1. Measuring instruments

The method utilized for the collection of information was online interviews with SME owners and managers. These interviews included a set of multi-item scales to measure the variables proposed in the model (Appendix A). Five-stage Likert scales were used (1-completely disagree; 5- completely agree).

In accordance with the recommendations of Fishbein and Ajzen (2010), before beginning a research work studying behavioral intention, the conduct object of interest should be clearly defined in terms of the objective, the action, the context and the period. The behavior object of study must be defined precisely prior to the development of the measurement instrument. According to the dimensions suggested by Fishbein and Ajzen (2010), the behavior under research is defined as the "growth of Mexican SMEs by owners and managers over the coming 12 months". Considering this, multi-attribute scales are used to measure intention, attitude, subjective norm and perceived control over conduct. In particular, the scales used are based on the instruments applied by Finisterra do Paco et al. (2011) and Rueda et al. (2014).

Entrepreneurial orientation is conceived as a second-order factor, reflective in nature, comprised of three dimensions: innovativeness, proactiveness and risk-taking. The scale utilized is that proposed by Miller (1983), and Covin and Slevin (1989), which is the most common in the field of research on entrepreneurial orientation (Rauch et al., 2009).

Before fieldwork was undertaken, and with the objective of ensuring the quality of both information and answers, a "pre-test" was applied to 15 managers of SMEs. This allowed the questions to be analyzed and modified for the benefit of both researchers and research subjects.

3.2. Sample and fieldwork

As has been previously stated, the aim of this research is the analysis of the factors that determine the intention of SME´s owners and managers to foster business growth. We do not examine the intentions and attitudes during business set-up, as the strategic focus during this period is growth as survival (Nunes et al., 2013). As a result, for the analysis of business growth intention, we define as target population the owners and managers of Mexican SMEs working in enterprises with over two years of operation. The sampling procedure used was non-probabilistic because there is no definitive list of SMEs in Mexico that includes reliable contact data. To obtain contact data, we used the database of businesses involved in the Business Start-up and Incubator Network of the Tecnológico de Monterrey, a higher-education institution ranked as the 10th entrepreneurial university worldwide. The survey was carried out using the "Survey Monkey" online software. The questionnaire was sent by email to a database comprised of 3,152 SMEs which had completed the Business Incubator Network program. Finally, 254 valid questionnaires were obtained.

The sample obtained for this study is primarily composed of micro-businesses (63.7%) belonging to the service sector (58% of the total), as shown in Table 1. In terms of the composition of SME´s owners and managers surveyed, 72.7% were male and 59.6% were between 30 and 40 years of age, with 95.9% having been educated to university level. This last factor can be explained by the characteristics of the sample, which is derived from an entrepreneurial university background.

Table 1. Characteristics of the SME sample.

Variable (Personal)	Sample (%) (n=254)	Variable (Entrepreneurial)	Sample (%) (n=254)
Sex		Age of the business	
Male	72.7	From 2 to 5 years	43.0
Female	27.3	From 6 to 10 years	31.5
Educational level		Greater than 10 years	22.4
High school	3.2	Unknown/no response	3.5
Bachelor's degree	59.5	Sector	
Master's	33.2	Service	58.4
Doctorate	3.2	Commercial	19.6
None of the above	0.8	Industrial	22.0
Age		Business size (in sales)	
Less than 20 years	0.8	Micro	63.7
Between 20 and 29 years	17.	Small	32.9
Between 30 and 39 years	31.5	Medium	3.4
Between 40 and 49 years	28.1		
Over 50	18.7		
Unknown/no response	3.0		

4. Results

In order to validate the hypotheses proposed in this research, a causal analysis was carried out using PLS-SEM, which allows statistical estimation for small research samples, as is the case in this study. In the following sections, we explain the results obtained for the validation of the measurement scales used in the model and the estimation of the structural model.

4.1. Estimation of the Measurement Model

The results of the confirmatory factorial analysis (CFA) of the model are shown in Table 2. First, these confirm the reliability of the measurement scales due to the fact that for all the scales Cronbach

Alpha and composite reliability coefficients are higher than the minimum required value of 0.7 (Hair et al., 2010). Second, convergent validity is supported through the analysis of the AVE coefficients (in all cases greater than 0.50) and of the weights of the items (values higher than 0.7 and significant to a level of 0.01).

Table 2. Confirmatory Factor Analysis.

Construct	Items	Weights	Cronbach Alpha	Composite reliability Index	AVE
Growth Intention (GI)	GI1	0.91	0.94	0.96	0.85
	GI2	0.92			
	GI3	0.94			
	GI4	0.92			
Attitude (ATT)	ATT1	0.96	0.97	0.98	0.91
	ATT2	0.97			
	ATT3	0.94			
	ATT4	0.95			
Subjective Norm (SN)	SN1	0.86	0.92	0.94	0.80
	SN2	0.87			
	SN3	0.93			
	SN4	0.92			
Perceived Control (PC)	PC1	0.92	0.88	0.93	0.81
	PC2	0.90			
	PC4	0.87			
Innovativeness (INN)	INN1	0.80	0.75	0.85	0.66
	INN2	0.84			
	INN3	0.80			
Proactivity (PRO)	PRO1	0.84	0.85	0.91	0.77
	PRO2	0.90			
	PRO3	0.89			
Risk-taking (RIS)	RIS1	0.78	0.75	0.86	0.66
	RIS2	0.83			
	RIS3	0.83			

Finally, in order to test the discriminant validity of the measurement scales the Fornell and Larcker (1981) criterion and the heterotrait-monotrait ratio analysis (HT-MT) are used (Tables 3 and 4). According to the first of these procedures, all the factors fulfil the criterion proposed by Fornell and Larcker (1981), as the square roots of the corresponding AVE coefficients are greater than the correlations between each pair of factors. Likewise, the Heterotrait-Monotrait (HT-MT) values are above the threshold of 0.90 (Henseler et al., 2015). Accordingly, both procedure confirm the discriminant validity of the measuring scales proposed in this research.

Table 3. Results of the Fornell and Larcker criterion for discriminant validity

	GI	ATT	SN	PC	INN	PRO	RIS
GI	0.92[a]						
ATT	0.72	0.95[a]					
SN	0.65	0.75	0.89[a]				
PC	0.70	0.71	0.75	0.90[a]			

INN	0.27	0.13	0.20	0.24	0.81[a]		
PRO	0.47	0.26	0.31	0.40	0.65	0.88[a]	
RIS	0.51	0.40	0.33	0.43	0.52	0.51	0.82[a]

[a] Square root of the AVE coefficient. The elements below the diagonal show the correlations between the constructs.

Table 4. Results of the heterotrait-monotrait ratio analysis (HT-MT)

	GI	ATT	SN	PC	INN	PRO
ATT	0.75					
SN	0.70	0.80				
PC	0.77	0.77	0.83			
INN	0.31	0.15	0.24	0.29		
PRO	0.53	0.29	0.36	0.47	0.80	
RIS	0.61	0.47	0.40	0.53	0.70	0.64

4.2. Estimation of the Hypothesized Structural Model

This research follows the three-stage approach proposed by Aldás (2016) for analyzing the structural model: (1) coefficient of determination (value R^2) for latent variables; (2) predictive relevance Q^2 (blindfolding), and (3) significance of the structural model path coefficients and effect size (bootstrapping).

Figure 2 summarizes the results of the structural model using a bootstrap method with 5,000 samples. Each sample contains the same number of observations as the original sample in order to calculate standard deviations and T values (Chin, 1998; Hair et al., 2013). The R^2 statistics in all cases show coefficients above the minimum reference value of 0.40 (Chin, 1998), thus confirming that the theoretical model proposed adequately explains the variance in the dependent variables (attitude, perceived control and growth intention). Additionally, all the Q^2 coefficients, calculated using the blindfolding method, are considerably larger than zero, thus supporting the predictive relevance of the model in relation to the dependent variables.
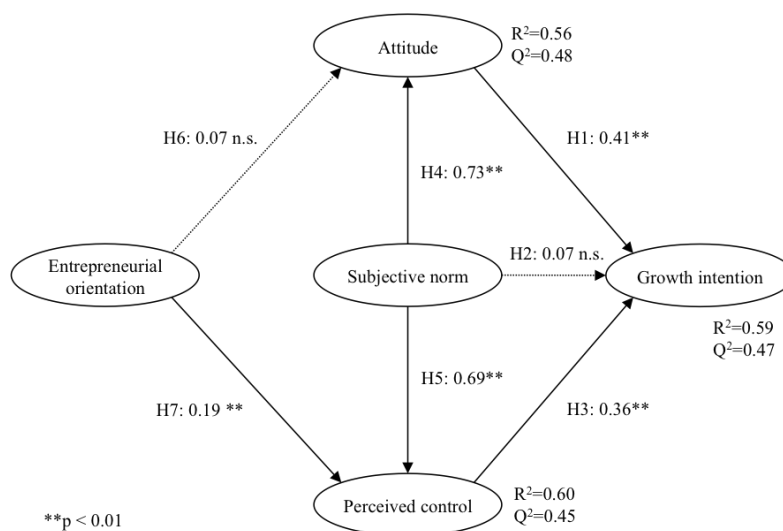
Figure 2. Estimation of the structural model.

The results of the estimation of the proposed causal relationships are shown in figure 2 and in Table 5. Firstly, the empirical evidence obtained confirm the second-order factorial structure proposed for entrepreneurial orientation, which is integrated by innovativeness (0.85; p<0.01), proactivity (0.88; p<0.01) and risk-taking (0.79; p<0.01). With regard to the research hypotheses, the results obtained confirm that the business growth intention is positively influenced by the attitude towards growth (0.41; p<0.01) and the perceived control (0.36; p<0.01), thus supporting hypotheses H1 and H3. In contrast, the subjective norm does not directly influence the growth intention (0.07; p>0.10), a result which leads to the rejection of hypothesis H2. In relation to the influence of the subjective norm on other explanatory variables of the research model, the empirical evidence confirms a positive effect on attitude (0.73; p<0.01) and perceived control (0.69; p<0.01), supporting hypothesis H4 and hypothesis H5. Moreover, these results show that there is an indirect effect of the subjective norm on the growth intention by way of both variables: attitude and perceived control (0.54; p<0.01). For its part, entrepreneurial orientation has a positive influence on perceived control (0.19; p<0.01), although there is no significant impact on attitude towards growth (0.07; p>0.10), results which lead us to accept hypothesis H7 and reject hypothesis H6. There is also empirical evidence to support the indirect effect of entrepreneurial orientation on growth intention (0.10; p<0.05), in this case through the perceived control over business growth. Finally, Cohen's f2 for the significant paths in the inner model take values above 0.02, which suggest satisfactory effects for all endogenous latent factors (Henseler et al., 2009).

Table 5. Estimation of the structural model.

	Coefficient	Effect Size (f^2)	T value
Second order factors			
Entrepreneurial orientation > Innovativeness	0.85**	2.62	42.96
Entrepreneurial orientation > Proactivity	0.88**	3.33	44.33
Entrepreneurial orientation > Risk-taking	0.79**	1.68	22.68
Direct effects			
H1: Attitude > Growth intention	0.41**	0.16	4.25
H2: Subjective norm > Growth intention	0.07	0.00	0.07
H3: Perceived control > Growth intention	0.36**	0.12	4.06
H4: Subjective norm > Attitude	0.73**	1.08	14.30
H5: Subjective norm > Perceived control	0.69**	1.06	15.32
H6: Entrepreneurial orientation > Attitude	0.07	0.01	1.20
H7: Entrepreneurial orientation > Perceived control	0.19**	0.08	4.00
Indirect effects			
Entrepreneurial orientation > Growth intention	0.10*	-	2.22
Subjective norm > Growth intention	0.54**	-	7.01

**p < 0.01; *p<0.05.

5. DISCUSSION

5.1. Theoretical implications

Given the nature of SMEs and the fundamental role of owners and managers in the decision-making of this kind of organizations (Delmar & Wiklund, 2008), this study examines the determinants of business growth intention using the Theory of Planned Behavior and entrepreneurial orientation as the main theoretical frameworks. Therefore, this research covers a relevant gap on previous literature by focusing on a topic scarcely studied (Wiklund et al., 2009; Rasmussen et al., 2018) and by taking into consideration

both individual (perceptions, attitudes and intentions) and organizational factors (entrepreneurial orientation).

Thus, the results obtained in this study provide two main contributions with regard to previous literature on entrepreneurship and the management of SMEs. First, our empirical evidence confirm that the Theory of Planned Behavior (Ajzen, 1991) is a valid conceptual framework to study business growth, a field in which it have not been used in previous literature. This allows examining the influence of decision-makers (owners and managers) attitudes, subjective norm and perceived behavior control on business growth intention in the context of SMEs. In particular, the empirical evidence obtained shows that the attitudes of decision-makers towards business growth and their perceived control over this process have a positive influence on the decision to pursue the growth of the business. This results confirm the findings of Wiklund et al. (2009) with regard to the effect of decision-makers' attitudes on growth intention, which to our knowledge is among the very few studies that have adopted this approach. On the contrary, as far as we know, and despite this relationship is quite intuitive from the perspective of the Theory of Planned Behavior, no previous research on business growth had analyzed the influence of the perceived control of owners and managers. Regarding subjective norm, the empirical evidence obtained indicates that this variable only influences growth intention indirectly, through its effects on attitudes and perceived behavioral control. Accordingly, the social norm regarding the business growth will affect the owners and managers through an internalization process (Kelman, 1958, 1974), so that the perception of others opinion with regard to the business growth will affect the predisposition of decision makers towards growth (attitudes) and the control perceived in this process.

The second theoretical contribution of this research relates to the effect of entrepreneurial orientation on business growth intention, an issue scarcely studied in the literature. More specifically, the results obtained show that entrepreneurial orientation exerts an indirect influence on the business growth intention of decision-makers through its effect on perceived control. Thus, the proactivity, innovativeness and risk-taking that characterizes entrepreneurially oriented SMEs implies a context that increases their perceived control to pursue and achieve the growth of the business. This result is contradictory with the approach of Wiklund et al. (2009), who establish a direct effect of entrepreneurial orientation on business growth intention. However, this direct relationship is unclear according to the models of behavioral intentions given the abstract and more general nature of entrepreneurial orientation in contrast with the specificity of perceptions, attitudes and intentions towards a particular behavior (Ajzen, 2001; Ajzen & Fishbein, 2005). Therefore, our results contribute to the literature by evidencing the mediating role of individual variables of the owners and managers (such as control perceptions), on the relationship between entrepreneurial orientation and business growth intention.

5.2. Implications for management of SMEs

The results obtained in this research have interesting implications for the management of SMEs, both in the area of promoting growth in companies and from the perspective of support programs for entrepreneurs and boosting SMEs.

Firstly, it is important to foster the decision-makers attitudes towards the business growth and the perceived control in this process. In this sense, growth implies a series of benefits for SMEs, mainly related to accessing relevant resources, acquiring new capabilities and increasing the firm's competitive advantage (Wiklund et al., 2009; Arzubiaga et al., 2022). On the contrary, the business growth also implies some disadvantages for the management of the firm. Therefore, it is important to show the owners and managers that growth have positive impacts for the company, and how the potential negative outcomes of business growth can be faced or managed. Besides, business growth intentions are determined by the decision-makers perception about their capacity to control this process, which should be strengthened trough experience and training, and also by providing owners and managers with relevant information on the external variables that may condition business growth. Similarly, the subjective norm, evaluated

in terms of the support obtained by the owners or managers for the implementation of strategies directed towards growth, is also a key variable to foster growth of SMEs. Specifically, it is important to create a positive social context towards business growth, so that the owners and managers perceive that the reference groups support its decision to pursue the development of the firm. In the end, this social influence will lead to a more positive attitude of the decision-makers towards growth and will reinforce their confidence on their capability to manage (i.e. control) this process and achieve the desired outcome.

Secondly, the model of growth intention put forward in this research suggests that entrepreneurial orientation is a direct antecedent of the perceived control and indirect of growth intention. This demonstrates the importance of introducing elements that allow for the development of a culture of proactivity, innovativeness and controlled risk in the SME, not only on the part of the business owner but also throughout the entire organization. This being the case, it seems reasonable to encourage support programs for SMEs focused on growth strategies and which support the entrepreneurial culture not only in managers and owners of SMEs but in other key staff linked to the strategic and operating management in the company.

5.3. Limitations and Further Research

The following explains the principal limitations of the investigation, from which future areas of research can be obtained. Firstly, it is worth highlighting the limitations of the information-gathering process, which was based on self-administered questionnaires as is common in studies of intention, although evidence suggests possible vulnerability to information bias (Armitage & Conner, 2001). As a result, in order to avoid bias, it would be valuable to employ longitudinal studies or to focus on the effective behavior of the decision maker and the company.

Additionally, the sample used in the empirical investigation was obtained from the database of the Business Incubator and Accelerator Network of the Tecnologico de Monterrey in Mexico. This being the case, although the institution is considered one of the most important private universities in Latin America and it has been ranked as the tenth entrepreneurial university worldwide, it could be argued that there is a specific bias in the characteristics of the sample. Future research could widen the scope of the study to include the entire entrepreneurial ecosystem in Mexico, and the model could also be replicated in other countries, contexts and cultures.

Finally, this study uses as dependent variable the growth intention of the business on the part of SME owners and managers, but it does not analyze the actual conduct of those interviewed. As a result, it does not confirm whether the intentions of the decision-makers correspond to the development of effective behaviors and, if so, whether the variables identified as antecedents of the behavior do influence business growth. Although this is normal procedure in studies based on models of intention, a future area of research would be to undertake a longitudinal study with a focus on effective conduct, where the degree in which intention converts into actual behavior by SME owners and managers can be measured.

Appendix A – Measurement Scales

Business growth intention - Adapted from Rasmussen et al. (2018), and Rueda et al. (2014)
GI1. I have the firm intention that my company grows as much as possible in the next 12 months.
GI2. My goal as director/CEO is that my company grow as much as possible in the next 12 months.
GI3. I am determined to make my business grow as much as possible in the next 12 months.
GI4. I will do everything I can for my business to grow as much as possible in the next 12 months.

Attitude towards business growth - Adapted from Finisterra do Paco et al. (2011)
ATT1. I find it very attractive the idea that my company grow as much as possible in the next 12 months.
ATT2. I am excited about the idea that my company grow as much as possible in the next 12 months.
ATT3. Would be a great satisfaction to me that my business grows as much as possible in the next 12 months
ATT4. I think it is a good idea to grow my business as much as possible in the next 12 months.

Subjective norm concerning business growth - Adapted from Finisterra do Paco et al. (2011)
SN1. My family agrees to do everything necessary for my business to grow as much as possible in the next 12 months.
SN2. My colleagues agree to do everything necessary for my business to grow as much as possible in the next 12 months.
SN3. The people next to me approve of the fact that I do everything for my business to grow as much as possible in the next 12 months.
SN4. The people whose opinions I value see positive that I do everything for my business to grow as much as possible in the next 12 months.

Perceived control over business growth - Adapted from Finisterra do Paco et al. (2011)
PC1. If we try, there is a high probability that my company grow as much as possible in the next 12 months.
PC2. It is very possible that my company grow as much as possible in the next 12 months.
PC3. It will be easy to grow my business as much as possible in the next 12 months.
PC4. We are in readiness for my business to grow as much as possible in the next 12 months.

Business entrepreneurial orientation – Adapted from Miller (1983), and Covin and Slevin (1989)
PRO1. My company is proactive in making decisions to get ahead of the competence.
PRO2. My company is often the first to introduce innovations in product, processes, operations, technologies, etc.
PRO3. In general, my company tends to stay ahead of competitors in the introduction of new ideas or products/services.
INN1. My company makes a strong emphasis on R&D, technology leadership and innovation.
INN2. My company has introduced many new products/services.
INN3. The changes in the products/services have been quite radical.
RIS1. My company favors high-risk projects (with the possibility of high profitability).
RIS2. My company believes that, due to the environment, it is necessary to take bold measures to achieve the company objectives.
RIS3. In situations of uncertainty, it is usually taken aggressive measures to maximize the chance to exploit potential opportunities.

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Article

Incentivizing Voting Turnout through Gifts and Promotions: An Analysis of 'The Civic Thumb' Program in Chihuahua, Mexico

Incentivando la Participación Electoral a través de Regalos y Promociones: Análisis del Programa 'El Gordo Cívico' en Chihuahua, México

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Abstract: This study evaluates the effect of the get-out-the-vote program ´el Gordo Cívico´ which translates to ´The Civic Thumb´ implemented in the state of Chihuahua in Mexico on electoral participation. Using a Difference-in-Difference design, with the states of Sinaloa and Zacatecas as control cases, evidence was found that suggests that this program has not met its goal of incentivizing participation. A triple Difference-in-Difference design was used to explore if the program may have only had an effect on urban municipalities. The results of these additional estimations confirmed that, at least at the municipality level, the program did not increased turnout.

Resumen: Este estudio evalúa el efecto que ha tenido sobre la participación electoral el programa ´el Gordo Cívico´ de incentivación de participación implementada en el estado de Chihuahua en México. Usando un diseño de Diferencia-en-Diferencia, con los estados de Sinaloa y Zacatecas como casos de control, se encontró evidencia que sugiere que este programa no ha cumplido su meta de incrementar la participación. Adicionalmente, se usó un diseño de triple Diferencia-en-Diferencia para explorar si el programa pudiera haber tenido únicamente un efecto en municipios urbanos. Los resultados de estas

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estimaciones adicionales confirmaron que, al menos a nivel municipal, el programa no incrementó la participación.

Palabras clave: Comportamiento del Votante, compra de participación, elecciones mexicanas, incentivos de participación.

Clasificación JEL: D720.

1. Introduction

In the run-off stage of the 1993 Los Angeles mayoral election, Democratic candidate Michael Woo decided that it would be a good idea to mobilize voters by offering six free donuts to those who could provide proof that they had voted, regardless of for whom they voted. While the goal of the strategy was to mobilize voters who were more likely to vote for the Democratic party, Republican voters reportedly claimed their share of donuts as well (Fiore, 1993). Anecdotal evidence suggests that the "donut strategy" did affect turnout, but not in the way Democrats were expecting. It is possible that this bribe attracted a disproportionate number of Republicans to the polls; so, if the anecdotes do mirror reality, the Democrats' plan—which cost around USD 100,000 at the time—backfired (Fiore, 1993; Heckelman, 1995).

The apparent failure of the Los Angeles Democratic Party plan notwithstanding, it is noteworthy to consider the logic behind it. Michael Woo's strategy was an effort to mobilize the vote of potential Democratic supporters by countering the cost of voting with a material incentive. After all, empirical evidence suggests that Democratic voters seem to face higher relative costs of voting—in part because they tend to have fewer resources available—which in turn means that these voters are more likely to be deterred from turning out on election day by said costs (e.g., Gomez et al., 2007; Verba et al., 1995). As trivial as it may sound, the offer of half a dozen donuts in exchange for providing evidence of having voted in the mayoral election could have been attractive enough to some voters who would not have voted otherwise. Of course, it is safe to assume that there were voters for whom the donut offer was not appealing enough to make them show up to the polls.

Further, considering that empirical research shows that when voters perceive that democracy is flawed, levels of turnout could decrease (Gerber et al., 2013), it could have been the case that a fraction of voters were deterred from voting due to perceiving that this was an undemocratic action. These voters could have expressed disappointment in the overall electoral process by abstaining from participating in the election. Now, whatever the real effect might have been, it is clear that the Democratic Party intended to buy turnout, as they aimed at directly increasing the payoffs from voting in the mayoral election. Panagopoulos illustrates how these strategies have been used in other elections in the late 1990s and early 2000s, especially in the state of California, where these campaign practices are not illegal (2013). Panagopoulos himself took advantage of the Californian legal framework to perform a couple of experiments that measured the effect of turnout-buying strategies as the size of the offered incentives varies.

Panagopoulos´ study is substantially important as it shows that extrinsic incentives may indeed be effective in mobilizing voters without necessarily crowding out intrinsic motivations, as has been argued by Gerber et al. (2013). Yet again, the subject warrants further investigation as it is not clear if voters in his study took the offers seriously or if they were aware that they would not be breaking any laws if they had accepted the incentive. However, what if this turnout-buying was an official policy to boost voter turnout? How would voters respond if a vote-buying program was implemented by an official authority?

Well, just south of the US border, there is a case that does offer the opportunity to study the effects of turnout-buying when it is implemented as an official strategy to promote voter participation. In the year of 2016, the electoral authority of the state of Chihuahua, in Mexico, launched the program "El Gordo

Cívico"—which translates to "The Civic Thumb"—with the goal of incentivizing turnout[1]. This initiative could act as a turnout-buying program as it consists of offering discounts at different local businesses to those citizens who show their marked thumb at these businesses as proof that they have voted[2]. Thus, the "El Gordo Cívico" program offers the opportunity to investigate if an official agency, through incentives offered by private businesses, can influence the payoffs of citizens from participating in an election to increase turnout.

In this study, I aim to answer the question posited above by empirically analyzing the effects of the turnout-buying program "El Gordo Cívico" implemented in the state of Chihuahua in Mexico. First, I briefly discuss the relevant theoretical framework of voting behavior necessary to address this research question. Then, I describe the Difference-in-Difference designs implemented to estimate the effect of the program, along with the data used for these estimations, which includes electoral data from the states of Chihuahua, Sinaloa, and Zacatecas. I also discuss both the strengths and limitations of using this estimation strategy to address this research question. Next, I discuss the results of each of the estimations. Finally, I discuss the implications of the results, as well as potential future avenues of research regarding this get-out-the-vote program.

1.1. When do people vote?

In According to the rational choice theory of voting proposed by Downs (1957), and refined by Riker and Ordeshook (1968), voting should be motivated by reasons other than the actual benefit the voter would derive from her preferred candidate winning the election. The inequality, given by the calculus of voting that this theory proposes, shows a clear explanation of the logic of the statement above:

$$pB + D > C, \tag{1}$$

In this inequality, the parameter p is the probability that the vote of the individual who is deciding whether or not to cast a vote is the decisive one in the election. Meanwhile, *B* is the benefit that the voter gets from her preferred candidate winning the election. Note that as the size of the electorate grows, the value p will tend to zero, which means that the product *pB* will also tend to zero. It is clear that if a voter is aware that their vote has a minuscule probability of being decisive in the election, whatever benefit they associate with a particular candidate winning the election will, in all likelihood, not be their motivation for showing up to the polls on election day. Only if the cost associated with turning out to vote, C, is smaller than the product pB will a voter cast a vote moved by the utility derived from their preferred candidate winning the election. This cost of voting can be defined as the resources that a voter has to expend to cast a vote; these resources include—but are not limited to—time, physical effort, mental effort, or money. Every voter will face different costs; however, it is safe to assume that all voters have to pay a cost for voting, as minimal as it might be.

Considering that the costs of voting are non-zero and that the probability of casting a decisive vote tends to zero, it is evident that most citizens who vote do so because they derive a positive payoff from the act of voting itself, and this payoff outweighs their costs of voting. This is represented by the parameter D in the inequality above. This term is usually referred to as the satisfaction a voter gets from performing her civic duty. Note that this is an abstract concept that is not clearly defined, yet it is the parameter that drives individuals' decisions to cast a vote. It could be argued that, beyond civic duty, this term represents the different non-consequentialist motivations of voting, which could be divided

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[1] The program was rebranded "El Pulgar Cívico" in the 2024 election, but it still translates to "The Civic Thumb."

[2] In Mexican elections, voters' thumbs are marked with a special indelible ink as a proof that they have voted. The national electoral authority provides this ink, and it is used to prevent voters from trying to vote twice.

into (1) expressive voting, (2) moral reasons and duties, and (3) self-image concerns (Shayo & Harel, 2012). Scholars have focused on studying these motivations for voting because, as mentioned above, they can explain why people decide to go to the polls even when their vote is practically inconsequential. In doing so, they have found that these non-consequentialist motivations do explain—at least in part—individuals' decision to cast a vote.

For instance, researchers have argued that peer pressure and, somewhat related, social desirability are both manifestations of the *D* parameter. Since the act of voting is interpreted as a duty that citizens should perform, whenever a potential voter perceives that her peers can observe her actions, the probability that said voter would cast a vote will tend to increase (Funk, 2010; Dellavigna et al., 2016). This is because voters derive a positive payoff from signaling to their peers that they are good citizens. This positive utility, in turn, can be high enough to offset the costs associated with voting. Additionally, the *D* term could also represent how some voters may want to express their support for a particular candidate, even if they know that their single vote will not matter in deciding the election. In some sense, it is the same satisfaction a sports fan derives from attending the stadium to cheer their favorite team (Brennan & Buchanan, 1984; Green et al., 2002). While scholars have found that these non-consequentialist reasons for voting have an impact on an individual's decision to cast a vote, it is clear that the *D* term in the calculus of voting has been used as an all-encompassing parameter that seems to represent any immaterial incentives that affect a person's utility when deciding whether or not to vote. Thus, policymakers who try to use the insight of these turnout studies to develop programs that aim to increase voter participation might have a hard time trying to translate whatever the *D* parameter represents. This term is highly individual and context-dependent, as it is an abstraction of intrinsic or cultural motivations. It is a fact that these motivations matter; nevertheless, it is not always clear how they will present themselves in different contexts.

If policymakers want to increase turnout, knowing that *pB* tends to zero, they could either attempt to diminish the value of *C* or increase the value of *D*. In other words, policymakers could enact a policy that reduces the costs related to casting a vote (e.g., implementing voting centers, easier voter registration procedures, minimizing voters' distance to their poll) to incentivize turnout. This has been a common strategy for trying to increase voter participation, and there is evidence that suggests that these programs have successfully increased turnout (Knack, 1995; Jackson, 1996; Haspel & Knotts, 2005; Stein & Vonnahme, 2008). Alternatively, policymakers could figure out the non-consequentialist motives for voting in their context and create a program that increases the payoffs associated with them. For example, face-to-face canvassing campaigns have successfully increased turnout since they constitute a form of peer pressure (Gerber & Green, 2000), which has been related to the *D* term. Nevertheless, as I have mentioned above, this parameter depends on social and cultural factors that might not be easy to identify and exploit by policymakers to increase turnout rates. That said, what if policymakers introduced an additional material payoff to the calculus of voting instead as a way to counter the costs associated with voting?

1.2. Rewarding voter participation

Consider again the inequality given by the calculus of voting. Given that the *D* term can represent different forms of incentives, Gerber et al. (2008) propose breaking it down into two component parameters that represent intrinsic motivations and extrinsic incentives (2008), such that:

$$D = U (D_I, D_E). \tag{2}$$

Further, Panagopoulos extends this theoretical framework in his study about monetary rewards in California so that the calculus of voting is given by the inequality (2013: 270)

$$pB + \beta_1 D_I + \beta_2 D_E + \beta_3 D_I D_E > C; \qquad (3)$$

this means that, according to Panagopoulos, the marginal effect of extrinsic incentives over the decision of turning out is:

$$\beta_2 + \beta_3 D_I. \qquad (4)$$

This functional form considers the possibility that intrinsic motivations may interact with extrinsic incentives, and Panagopoulos´ results show that, at the very least, if there is indeed an interaction between these two types of incentives, it is not a negative one (2013). Thus, this evidence suggests that an attempt to incentivize turnout by appealing to extrinsic motivations–D_E in equations 3 and 4–is not likely to backfire and may indeed meet its goal.

Now, in an ideal democracy, the effect of parameter D_E would be zero, as there would be no extrinsic reward or punishment associated with the act of voting. Further, such payoffs are usually related to vices of democracy–like vote-buying or clientelism–as they are used by party machines to mobilize a specific set of voters (Hicken, 2011; Nichter, 2008; Cantú, 2019; Gans-Morse et al., 2014). However, extrinsic incentives can also be associated with fines for not voting, which are used in several countries. These negative extrinsic incentives are not targeted to specific voters, and instead of being a vice of democracy, they could be interpreted as an effort to correct a lack of participation. Moreover, Kaplan (1994) argues that positive extrinsic incentives distributed among all voters could be a valid and helpful strategy to promote participation and educate voters on how valuable their vote is. Hence, even if appealing to extrinsic incentives does not align with the concept of an ideal democracy, it can be argued that it is not always a sign of a flawed electoral democracy.

Taking this into consideration, policymakers have an additional strategy at hand to increase voter turnout. Instead of reducing the costs of voting—or on top of it—they could devise a program that offers a material positive reward to those citizens who participate in the election. In some sense, this program could be thought of as a turnout-buying strategy. Such a program could be effective in mobilizing those citizens for whom the motivations captured by the term D_I are not enough to offset the costs of voting. The question then is, how would a program like this look in reality? Fortunately, there is no need to imagine such hypothetical programs, as one already exists in the state of Chihuahua in Mexico[3].

1.3. *"El Gordo Cívico" a turnout-buying policy*

The program "El Gordo Cívico" or "The Civic Thumb" in English, was first implemented in the 2016 election as an innovative strategy to incentivize turnout. The name of the program is a reference to the way citizens would offer proof of having voted to receive a discount–or some other benefit–from participant vendors. In Mexican elections, voters' thumbs are marked with a special ink so that it is clear that they have voted[4]. This is done to prevent voter fraud since if any voter tries to cheat the system and attempts to vote twice, the marked thumb serves as a safeguard as those voters with a marked thumb will not be allowed in the voting booth again. Thus, having a marked thumb has become a symbol of

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[3] While the state of Chihuahua is not the only one that has implemented a program such as "El Gordo Cívico," this specific program was one of the first ones that were both implemented and institutionalized by the local electoral authority. From 2016 onward, the program has become a staple of all state and federal elections.

[4] It is important to note that this special ink has been developed by the National Polytechnic Institute of Mexico (IPN), and it has special pigmentation that differentiates it from other commercial inks and, while it disappears in a matter of days, itis not washable (Instituto Politécnico Nacional, 2018).

electoral participation in Mexico. The "El Gordo Cívico" program appeals to this civic symbol, and so voters who showed their marked thumbs at participating vendors would be entitled to the discounts offered through "El Gordo Cívico."

The electoral authority claimed that the program was successful in 2016 and applied it in the subsequent federal and state elections (Instituto Estatal Electoral Chihuahua, 2018, 2019). The process by which this program operated–before it was recently refurbished in 2024[5]–was quite simple. The electoral authority openly invited any business interested in participating in the program to download the official imagery of the program to display at their locations and social media platforms. Additionally, the electoral authority created social media accounts dedicated to this program, and they were available for participating venues to promote the sales and discounts they offered in relation to this get-out-the-vote campaign. Note that participating businesses included restaurants, convenience stores, jewelry stores, health services, private schools, coffee shops, and clothing stores, among others. Thus, there was a wide variety of venues, which suggests that the campaign could reach voters from diverse demographic backgrounds. Finally, on election day, and in some cases on the following days, businesses made valid the promotions they publicized to those individuals who showed their marked thumb as proof that they did indeed vote.

Now, before proceeding to the description of the methodology for this study, it is necessary to give a final note about the program "El Gordo Cívico." This is not a policy that was enacted by legislators or by any other elected official. The state electoral authority, the State Electoral Institute of Chihuahua, devised and implemented this program. This is an autonomous agency that includes citizens unaffiliated with any political parties among its decision-making body. Political parties have representation in this agency, but they do not control the decision-making process, and all parties have equal representation within the agency. Thus, even if not impossible, it is unlikely that any political party in this agency conceived the program to gain a political advantage.

2. Methodology

To estimate if the "El Gordo Cívico" program has indeed increased electoral participation since it was implemented, it is necessary to disentangle its potential effects on turnout from those caused by other variables. This is especially tricky because the period in which this program was implemented included electoral reforms and political events that could have also increased the rate of voter participation. First, in the 2016 state election, independent candidates were allowed to participate in the election for the first time in the state of Chihuahua. This novelty might have motivated citizens to become more engaged in that year's electoral process.

Further, since independent candidates were seen as outsiders who were challenging the political establishment, this might have produced an underdog effect (Levine & Palfrey, 2007) as voters were eager to support the newcomers even if their chances of winning were slim. At the same time, major parties perceived a competitive environment since the two major parties in the state, PRI and PAN, were battling each other, the former to retain power, the latter to capture it. Hence, this perceived competitive environment might have also increased turnout due to a competition effect (Levine & Palfrey, 2007).

Next, the 2016 election was different from other state elections in that the term for which elected candidates would remain in office was extraordinary. Typically, a municipal president would be elected for a term of three years and the state governor for a term of six years. However, for the 2016 election, the state legislature passed a bill to synchronize future state elections with federal elections. Thus, those candidates elected in the 2016 election would be in office for one year less than usual. Additionally, municipal presidents elected in 2016 would have the option of running for reelection in the 2018 election for an additional three-year term. Finally, the 2018 election not only included state and federal elections,

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[5] The potential effects of this refurbishment do warrant a separate study.

but the federal presidential race involved one of the most popular—and yet divisive—candidates in several years. These features of the 2018 federal and local elections might have resulted in downstream effects on turnout. Hence, taking all these factors into consideration, I use a difference-in-difference (DiD) design to control for these and other confounders that might cloud the real effect of the turnout-buying program implemented by the electoral authority in Chihuahua. As discussed in the previous section, for this design, I use two other states that experienced similar conditions during the period studied as control cases: Sinaloa and Zacatecas.

Specifically, I resort to the classic two-way fixed effects model (TWFE) to estimate the average treatment on the treated effect (ATT). The TWFE estimator allows me to introduce time-variant controls and fixed effects at the municipality level, which, due to the nature of the analyzed elections, is necessary to suggest the conditional parallel trends assumption holds for these cases. Now, as Sant'Anna and Zhao explained, a TWFE model with time-variant controls introduces three additional assumptions to the classical parallel-trends assumption of DiD estimation (2020). These assumptions can be summarized as the treatment not affecting the controls and the controls not having specific trends. In other words, not using bad controls with respect to treatment and a parallel-trends assumption for the controls as well. Considering this, it is necessary to address what makes the TWFE model the preferred option in this case.

While DiD estimators like outcome regression (Heckman et al., 1997), inverse probability weighting (Abadie, 2005), or the doubly robust (Sant'Anna & Zhao, 2020) do not rely on additional assumptions, they are implemented using pre-treatment time invariant controls. This means that, for this study, they are not the most appropriate tool. As discussed above, there were a couple of important changes regarding the electoral calendar and the participation of independent candidates implemented along the turnout-buying program; therefore, using pre-treatment variables would miss some of these changes that may have also affected turnout. Additionally, each election in the periods analyzed has features that may affect the outcome variable; thus, an estimator that allows me to control for time-varying covariates is better for this case, even considering its limitations and underlying assumptions.

Now, in the DiD design I use, the turnout rates at the municipal level before and after the implementation of the "El Gordo Cívico" program give the first difference. I include five elections before the implementation of the policy: the federal midterm elections of 2009 and 2015, the state election of 2010, the federal election of 2012, and the midterm state election of 2013. After the implementation of the policy, I include the 2016 local election and the federal and local elections of 2018 and 2021. It should be mentioned that turnout levels are based on the number of registered voters per section and not the total number of citizens eligible to vote. This is because this campaign focused on incentivizing turnout on election day, which is far removed in time from the date on which the national electoral authority closes registration of new voters for the upcoming election.

Further, since most official paperwork and some bank transactions require federal identification, citizens often have an incentive to register to vote, as the voter ID card is the most common form of identification in Mexico. While passports are also accepted as official federal identification, they are expensive, and it is easier for citizens to obtain a voter ID card, which is issued at no cost to the person who registers to vote. Therefore, using turnout levels based on the number of registered voters instead of on the number of eligible citizens should not affect the results of this study. These turnout rates are publicly available from the websites of the State Electoral Institutes of Chihuahua, Sinaloa, Zacatecas, and the National Electoral Institute.

For the second difference, I will compare turnout rates in the municipalities of the state of Chihuahua, where the "El Gordo Cívico" program was implemented from the 2016 election onwards, with turnout rates in the municipalities of the states of Sinaloa and Zacatecas. These offer a good case for comparison as they experienced similar electoral reforms to those that took place in Chihuahua. Both states used to hold federal and state elections in different years, and they both implemented an electoral reform to synchronize state elections with federal elections after 2016. Further, all three states have local elections spaced out by three years, during which all municipalities renew their administrations, and the

state Congress is also voted. Additionally, gubernatorial elections are held every six years on the same date as the rest of the local elections. Finally, when it comes to the electoral calendar, the legislation implemented to synchronize electoral calendars was similar for all these states. Those municipal authorities elected in 2016 would have the possibility of being reelected in the election of 2018 since their terms would be a year shorter than usual. Meanwhile, the governor elected in 2016 would have a five-year term, as opposed to the usual six-year term.

Other states, like Aguascalientes, Puebla, or Tamaulipas, also enacted similar electoral reforms to those in Chihuahua, Zacatecas, and Sinaloa; however, the conditions for the synchronization of the elections and the rules regarding reelection were not the same. Additionally, Chihuahua and Sinaloa share a border and have had similar political landscapes for many years. The PRI was the dominant party in both states from the 1990s up to the mid-2010s, and this dominance has waned, first in favor of the PAN and, more recently, MORENA[6]. Moreover, according to the Mexican Association of Market Research Agencies (AMAI), the population in Sinaloa and Chihuahua are distributed similarly among socioeconomic levels (2017), and their Human Development index has been similar over the last decade. In the case of Chihuahua, this indicator oscillated between 0.772 and 0.782 during the period of study, while for Sinaloa, it remained between 0.781 and 0.802[7] (Global Data Lab, 2023).

Finally, both states have experienced a rise in drug cartel violence in the last couple of decades, which has caused politicians and citizens alike in both cities to focus on the same social and economic problems. For these reasons, Sinaloa offers a good control case to measure the effect of the turnout-buying program that has been implemented in Chihuahua. Nevertheless, the number of municipalities in each state is one important aspect in which they differ. While Chihuahua has sixty-seven municipalities, Sinaloa only has eighteen. This difference is relevant because small municipalities might be more engaged in local elections due to phenomena like clientelism (Stokes, 2005), the competitiveness of elections (Edlin et al., 2007), peer pressure (Funk, 2010; Gerber et al., 2013), and potentially lower costs of mobilization through canvassing (Gerber & Green, 2000). Hence, the inclusion of Zacatecas as a control state attempts to remedy this lack of balance between the number of municipalities of Sinaloa and Chihuahua.

The socio-political landscapes of Chihuahua and Zacatecas are not as similar as those of Chihuahua and Sinaloa. For instance, according to the AMAI (2017), the socioeconomic distribution in Zacatecas is made up of a larger share of lower-income households. Furthermore, the PRD was the governing party in the state from 1998 to 2010, while the PRI was the second political force in the state. The PAN eventually joined forces with the PRD after the PRI won the gubernatorial election of 2010, and this coalition became the major opposition block in the state until 2021 when MORENA almost completely swept the state elections. Now, these differences with the political structure of Chihuahua are not stark, as up to 2021, there were two major political blocks that included the PRI and the PAN, and both were challenged recently by MORENA. Additionally, the differences in the distribution of socioeconomic levels in the state are, in part, a consequence of the reason for including Zacatecas as an additional control. This state is divided into fifty-eight municipalities, and–according to census data–none of them surpass a population of two hundred and fifty thousand people. In fact, most of these municipalities have populations below thirty thousand people (Instituto Nacional de Geografía y Estadística, 2021). The prevalence of low-population municipalities in this state seems to be related to the distribution of socioeconomic levels in the state, and it might explain why the PAN has not been as strong in this state. The PAN is a right-wing party that has been more successful in urban rather than rural regions.

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[6] After the 2021 election, MORENA won the Governor's race and most municipal races in Sinaloa, while in Chihuahua, it became the second political force in the local Congress.

[7] This is an index that ranges from 0 to 1. The larger the value of the index, the higher the level of human development.

Together, Sinaloa and Zacatecas seem to constitute a fitting control case for studying the effects of the "El Gordo Cívico" program in Chihuahua. Zacatecas offers balance in the number of small municipalities, while Sinaloa provides relevant urban comparisons. All three states have experienced similar electoral legislations and share electoral calendars. Moreover, while the political dynamics of Zacatecas vary a little, they are in line with what would be expected in a state with mostly small municipalities. Finally, while it is impossible to prove that the conditional parallel trends assumption holds, prior to presenting the results of the analysis, I use event studies to provide evidence that offers some reassurance that it is reasonable to expect that parallel trends hold for these cases. But first, I discuss the model specification along with the hypotheses of this analysis.

2.1. Model specification and hypotheses

The TWFE model specification for this study is as follows:

$$Turnout\ Rate_{it} = \alpha_1 + \alpha_2 Treated_i + \alpha_3 PostTreatment_t + \eth Treated_i \times PostTreatment_t + \theta Controls_{it} + \gamma Municipality\ Fixed\ Effects_i + \varepsilon, \tag{5}$$

the variable *Treated_i* is a dummy variable that indicates if municipality *i* is in the state of Chihuahua. Similarly, *PostTreatment_t* is a dummy variable that has a value of one for all the elections that took place after the turnout-buying program was implemented. In other words, this dummy variable divides observations into two periods, one before the program was implemented and one after its application. I include five elections from the period before the implementation of the "El Gordo Cívico" program: the midterm federal elections of 2009 and 2015, the federal presidential election of 2012, the local midterm election of 2013, and the local gubernatorial election of 2010. Meanwhile, the three elections that have been held after the implementation of the program are included: the local gubernatorial election of 2016, the local midterm concurrent with the 2018 presidential election, and the local gubernatorial concurrent with the 2021 federal midterm. This means that the turnout rates are averaged across each period[8]. Next, the interaction between *Treated_i* and *PostTreatment_t* yields the estimated ATT, and its value is given by coefficient ð. In other words, the estimate for this coefficient will reveal whether the implemented program has an effect on turnout rates.

Controls_{it} refers to a vector of time-variant control variables relevant to this study. Specifically, I first include the log of the number of registered voters in the electoral section. This is an important variable to consider since mobilization and canvassing efforts may be more successful when the size of the electorate is small. Now, it could be argued that another reason to include this control is that a small increase (or decrease) in the raw number of voters in a small municipality would have a higher impact on the turnout rate than the same raw increase in a large municipality. However, this issue is addressed by weighting observations by the total number of registered voters in all three states in each of the elections included.

Next, I include two variables that the Mexican National Electoral Institute has consistently identified as being associated with turnout rates: the proportion of female registered voters in a municipality and the proportion of registered voters between twenty and thirty-nine years old and those older than eighty (Instituto Federal Electoral, 2011, 2013; Instituto Nacional Electoral, 2016, 2019, 2022). The National Electoral Institute reports that, at least in federal elections, women and those younger than twenty years old or between the ages of forty and seventy-nine years tend to vote at higher rates; thus, it is important to control for these variables. Unfortunately, these data are only available for federal elections; those for

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[8] Given that each type of election may have unique dynamics, this approach does a better job of capturing the difference between the averages among all types of elections in each period than a TWFE model with multiple time periods where election years are included as part of the fixed effects specification. Further, it allows me to include dummy variables to indicate the type of election without creating perfect collinearity.

the local elections of 2010, 2013, and 2016. Thus, I have imputed values by interpolating using the federal elections that surround each local election. For instance, for the local election of 2010, I took the difference between the values of these variables in the years 2009 and 2012, divided the result by three, and added it to the value reported in 2009.

Given that resources available and the quality of infrastructure in a community may influence the cost of voting and, consequently, electoral participation, I include the marginalization index calculated at the municipal level and normalized as reported by Mexico's Secretariat of Government. The National Population Council calculates this index every five years using Census and mid-census population count data (Consejo Nacional de Población, 2021). Therefore, this index is available for the years 2010, 2015, and 2020. In this case, I have populated the values for the years 2009, 2012, 2013, 2016, and 2018 with the value of this index that is closest to each of these years. In other words, the value of this index imputed for a municipality in 2009 and 2012 corresponds to the value of the index in 2010. Meanwhile, for the year 2013, the value would be the same as the one reported for 2015.

Additionally, I include the margin of difference between the top two parties in the most important election held in each year included in the study, calculated at the municipal level. This variable aims to control for the competitiveness of the most important election held. The importance of an election, along with its perceived competitiveness, are important determinants of voter participation (Edlin et al., 2007). Next, I also include dummies to indicate the party in power at the municipal level and a dummy that takes the value of one when the incumbent municipal party is the same as the incumbent party at the state level. In a clientelist setting like Mexico (Beltrán & Castro-Cornejo, 2019; Cantú, 2019; Greene & Simpser, 2020), having control of the municipal and state purses can be an element that contributes to mobilization through clientelist incentives (Calvo & Murillo, 2004).

The next set of controls corresponds to dummies that identify the type of election held each year. The baseline category is federal midterm elections, that is, only when the federal Congress is voted. These are the elections with the lowest turnout rates in the data for all states. Thus, the dummy variables included indicate the following types of elections: federal-only presidential, local-only gubernatorial, local-only midterm, federal presidential and local midterm, and federal midterm and local gubernatorial.

Finally, the last two controls are also dummies that specify the first election in which independent candidates were allowed to participate and if the election resulted in a change of power at the state level after the incumbent party had been in office for twelve years or more. Both events might be related to a surge in participation. In the case of independent candidates, their novelty, in addition to potentially being perceived as anti-establishment politicians, may mobilize some voters. Similarly, a change of party in power after a long period of time could be related to a surge in participation as voters might have been motivated due to the potential alternation of power. The final term of the specification, γ, corresponds to municipality-fixed effects. This term is included to control for any unaccounted variations that are related to the characteristics of the municipalities.

Before presenting the hypotheses of this study, consider Panagopoulos' revised calculus of voting equality presented in equations 2, 3, and 4. The turnout-buying program should increase the value of parameter D_E for all voters in Chihuahua. Now, Panagopoulos argues that assuming the functional form is correct, the marginal effect of D_E always seems to be positive. At the very least, there is no evidence that suggests that D_E has a crowding-out effect on D_I (Panagopoulos, 2013). Thus, Hypothesis 1 states:

H1. Holding everything else constant, the implementation of the turnout-buying program in Chihuahua has a positive effect on the level of turnout in electoral sections in Chihuahua. Hence δ > 0.

Now, one essential thing to consider is that, as reported in the social media pages that promoted the "El Gordo Cívico" program, most promotions offered were concentrated in urban municipalities. Hence, if the program had an effect on these municipalities, but none on rural municipalities, and the effect was not large, it is possible that the estimate of the coefficient δ is not significantly different from zero as rural municipalities would bring the value of the estimate down. Considering this, I extend the original TWFE

estimator to a difference-in-difference-difference (DDD) model as follows:

$$
\begin{aligned}
\textit{Turnout Rate}_{it} = \alpha_1 + \alpha_2 \textit{Treated}_i + \alpha_3 \textit{PostTreatment}_t + \alpha_4 \textit{Urban Municipality}_i + \delta_1 \textit{Treated}_i \times \\
\textit{PostTreatment}_t + \delta_2 \textit{Treated}_i \times \textit{Urban Municipality}_i + \delta_3 \textit{PostTreatment}_t \times \textit{Urban Municipality}_i + \\
\delta_4 \textit{Treated}_i \times \textit{PostTreatment}_t \times \textit{Urban Municipality}_i + \theta \textit{Controls}_{it} + \gamma \textit{Municipality Fixed Effects}_i + \\
\varepsilon.
\end{aligned}
$$

(6)

I created the urban municipality variable using Pérez-Rasgado's Mexican municipalities typology (Pérez-Rasgado, 2014). This variable is a dummy that indicates if the municipality is classified as metropolitan or urban according to this typology. Next, the coefficient of interest from this specification is δ_4, as it represents the ATT, considering that treated units might only be the urban municipalities and not the rural ones. Therefore, Hypothesis 2 can be described as follows:

H2. *Holding everything else constant, the implementation of the turnout-buying program in Chihuahua has a positive effect on the turnout rates of urban municipalities in Chihuahua. Hence $\delta_4 > 0$.*

2.2 Event studies and the parallel trends assumption

Before discussing the results of this study, I present the results of event studies (ES) made only with election data prior to 2016. An essential condition for giving credence to the results obtained from the estimators discussed above is that the conditional parallel trends assumption holds for the cases used in this analysis. Further, as I mentioned earlier, the use of time-variant controls in the TWFE specification means that parallel trends should also hold for these controls. Now, while it is not possible to prove that the assumptions hold (after all, they are assumptions), at least ES can offer some reassurance about the reasonability of these assumptions.

I used the specifications described in the previous section to compare two periods before the implementation of the program in Chihuahua. The first period includes the federal midterm election of 2009 and the gubernatorial election of 2010. Meanwhile, the second period consists of the federal presidential election of 2012, the local midterm of 2013, and the federal midterm of 2015. This split manages to include one federal midterm and one major election—a gubernatorial and a presidential—in each period; hence, it seems to be the most balanced way to split the elections to perform the ES. Additionally, I subsetted the data to run ES estimations with only the data from Zacatecas and Chihuahua and then only with the observations from Sinaloa and Chihuahua. Thus, I made six different ES estimations, using these three sets of data and calculating a coefficient where all observations from Chihuahua are considered as equally treated and another one where urban municipalities are considered the treated units within Chihuahua, as shown in Table 1.

If the coefficients from these calculations are not statistically different from zero, this will offer reassurance that the conditional parallel trends assumption is reasonable for these cases. It is crucial to reiterate that this is in no way conclusive evidence of parallel trends since this is, to reiterate, an assumption. But at least these calculations suggested that up to the year of the treatment, there is evidence of parallel trends. With this in mind, it is possible to interpret the results of the ES as they relate to this research. Table 1 presents the results of the ES estimations; the ES column presents the estimated ES coefficient, while the SE column displays the estimated standard errors clustered by municipality. Note that in all but one of the ES estimations, the standard error is larger than the absolute values of the estimated coefficients; thus, it is clear that none of these coefficients are significantly different from zero. As for the one in which the absolute value is larger than the standard error, this latter estimated parameter is still large enough so that the coefficient is not significantly different from zero (ES -2.2092, SE 2.1810).

Model	ES	SE
2009-2010 and 2012-2015 ES with controls Zacatecas and Sinaloa	0.8338	1.6093
2009-2010 and 2012-2015 ES, Urban Chihuahua with controls Zacatecas and Sinaloa	0.7616	2.0962
2009-2010 and 2012-2015 ES with control Zacatecas	0..0382	1.6847
2009-2010 and 2012-2015 ES, Urban Chihuahua with control Zacatecas	1.0849	1.6341
2009-2010 and 2012-2015 ES with control Sinaloa	1.0374	1.8474
2009-2010 and 2012-2015 ES, Urban Chihuahua with control Sinaloa	-0.1499	2.1130

Table 1. Event studies results using periods of 2009-2010 and 2012-2015.
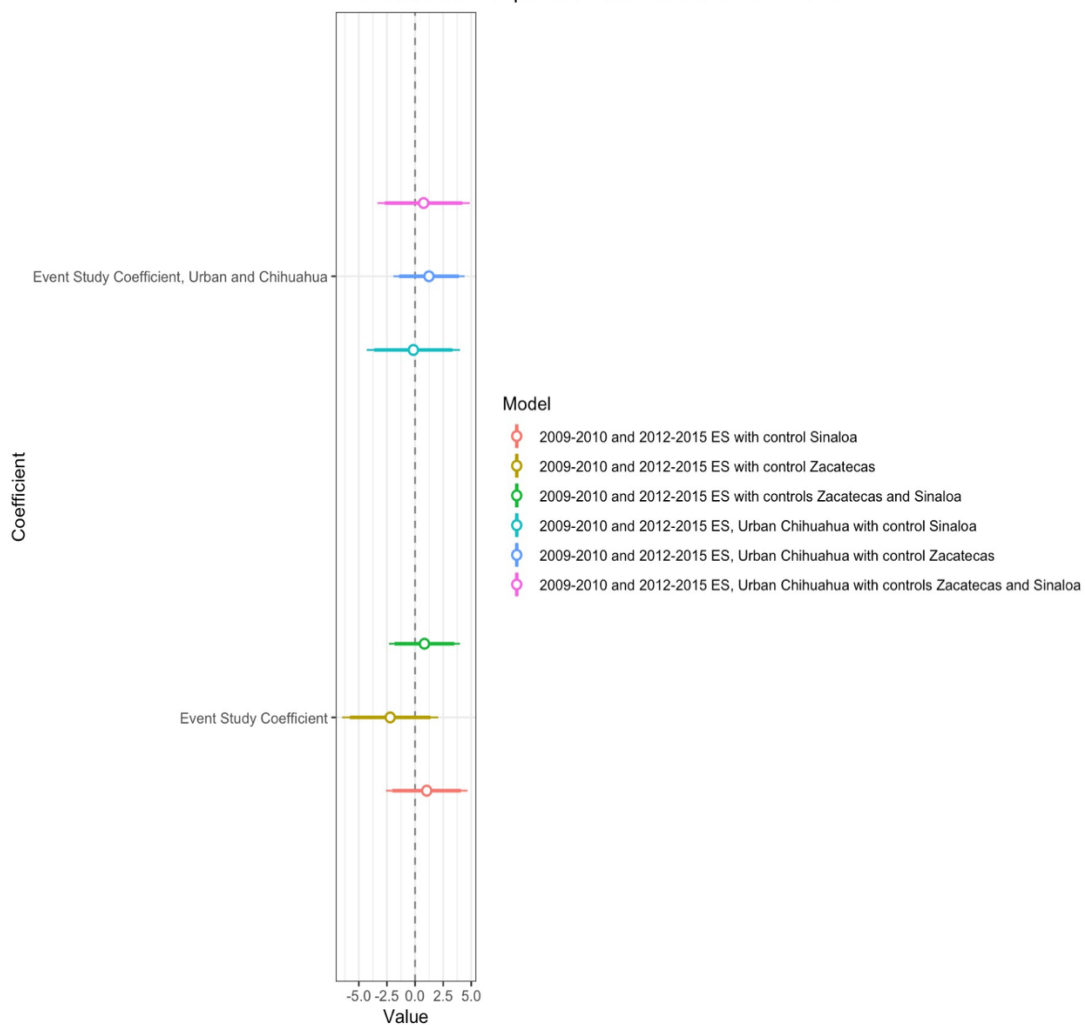
Figure 1. Event studies with periods 2009-2010 and 2012-2015. The three upper coefficients represent the ES coefficients when urban units are considered the treated units within Chihuahua. The bottom ES coefficients are from the estimations where all municipalities in Chihuahua are considered equally treated.

Figure 1 offers a visual summary of these estimates through a coefficients plot, and through it, it is easy to observe that the whiskers of all the estimated ES coefficients cross the vertical line, indicating a

value not statistically different from zero. As discussed above, the main takeaway from these results is that the assumption of parallel trends is reasonable in this study. Thus, these results offer some reassurance that the results presented below are reliable.

3. Results

Table 2 summarizes the results of all the models I estimated for this analysis. The column labeled ATT includes the estimated average treatment on the treated, which corresponds to coefficients ∂ and ∂₄ of the TWFE DiD and DDD models described above. The SE column includes the standard error clustered by municipality. The main specifications are those found in the first two rows, as they include all three states and all election data available for this study. It is evident that the estimated ATT is not statistically significant–at 0.05 and 0.10 significance levels– in either the DiD (ATT -0.1407, SE 2.1347) or the DDD (ATT -1.0708, SE 2.0962) models. Not only are the standard errors clearly larger than the estimated coefficients, but these coefficients have the opposite sign to the one hypothesized. In other words, in both models, there is no evidence to claim that the ATT is different from zero and positive. Hence, when the elections of 2016 through 2021 are averaged together, "El Gordo Cívico" program did not affect turnout rates when compared to the average turnout rate in Chihuahua from 2009 through 2015.

	Model	ATT	SE
1	2009-2021 DiD with controls Zacatecas and Sinaloa	-0.1407	2.1347
2	2009-2021 DDD with controls Zacatecas and Sinaloa	-1.0708	2.0962
3	2009-2018 DiD with controls Zacatecas and Sinaloa	-3.0118	2.4872
4	2009-2018 DDD with controls Zacatecas and Sinaloa	-2.1338	1.9338
5	2009-2016 DiD with controls Zacatecas and Sinaloa	-4.6620	4.3758
6	2009-2016 DDD with controls Zacatecas and Sinaloa	4.5348	2.6242
7	2009-2021 DiD with control Zacatecas	-1.0690	1.8214
8	2009-2021 DDD with control Zacatecas	0.8440	2.4734
9	2009-2018 DiD with control Zacatecas	-4.0466	2.4727
10	2009-2018 DDD with control Zacatecas	0.0109	2.6953
11	2009-2016 DiD with control Zacatecas	-13.5903	6.4524
12	2009-2016 DDD with control Zacatecas	2.7606	2.4433
13	2009-2021 DiD with control Sinaloa	-1.1868	2.7141
14	2009-2021 DDD with control Sinaloa	-4.5126	2.2504
15	2009-2018 DiD with control Sinaloa	-4.0452	2.8150
16	2009-2018 DDD with control Sinaloa	-2.1338	1.9338
17	2009-2016 DiD with control Sinaloa	-4.0182	4.5691
18	2009-2016 DDD with control Sinaloa	-0.8681	2.4193

Table 2. DiD and DDD results.

Now, there is a possibility that the year 2021 bias the results since the Business Coordinating Council of the state of Durango–an organization that promotes the interests of private businesses in this state– along with the National Electoral Institute, launched a program similar to "El Gordo Cívico" called "Mi Voto Vale" or, in English, "My Vote Is Worthy." While the program was mainly implemented in Durango, businesses in other states also participated. At least one business in Sinaloa and three in Zacatecas were part of this initiative. While these numbers might not be much, it can still be argued that just like in Chihuahua with "El Gordo Cívico," an electoral authority–even if it was not the state electoral authority–also implemented a turnout-buying program in Sinaloa and Zacatecas. With this in mind, I

dropped the 2021 election and estimated the ATT again. Just as with the original estimations, the estimates of the ATT have a negative sign and are not significantly different from zero, -3.0118 (SE 2.4872) for the DiD model and -2.1338 (SE 1.9338) for the DDD model.

I performed an additional estimation, dropping both the elections of 2018 and 2021. Given that the election of 2018 was the first one where federal and local elections were held at the same time, it could be the case that the effect on the turnout rates in each state was different, which would bias the ATT estimate. Nevertheless, it should be noted that this estimator compares the average turnout rates of the elections of 2009 through 2015 with the turnout rate of a single election after the implementation of the program. However, since there are no other elections after the implementation of the program, this is a limitation that cannot be circumvented. As for the results of these estimations, the ATT from the DiD model is even more negative than the previous ones (-4.6620), and it is still not different from zero at traditional levels of significance (SE 4.3758). Meanwhile, the estimate from the DDD model has the expected sign (4.5348), and it is statistically different from zero, but only at the 0.10 significance level (SE 2.2642). Considering the results from the previous estimators, this is only weak evidence in favor of *H2*.
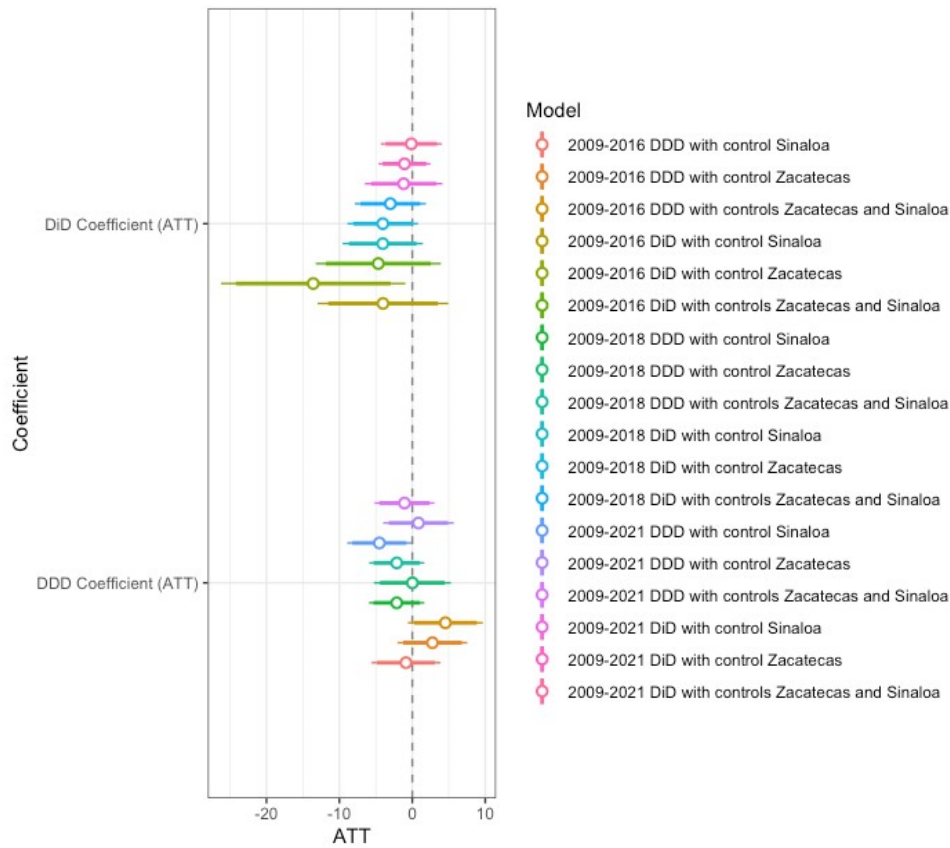
Figure 2. DiD and DDD coefficients of all estimated model specifications. The nine upper coefficients are the DiD coefficients, which indicate that all municipalities in Chihuahua are considered equally treated. The nine bottom coefficients are the DDD coefficients, which indicate that urban units are considered the treated units within Chihuahua.

Finally, I also performed the analyses again, dropping one of the control states each time. If one of these states is a bad control, then it would bias the ATT estimates. Rows seventh through eighteenth of Table 2 display the calculated ATT from these models. There is not much to discuss from these quantities as they confirm the conclusions from the first five models; none of these estimations are significantly

different from zero, and most of them are negative. Further, the estimated ATT that is larger in magnitude is also one of those that have the wrong sign. All these results, including those discussed above, can be visualized in the coefficient plot presented in Figure 2[9]. With this cumulative evidence and the limitations of the data for the estimator that do not include the elections of 2018 and 2019, it is not possible to conclude that the turnout-buying program implemented by the electoral authority of the state of Chihuahua, "El Gordo Cívico," has had any effect on turnout rates.

4. Discussion and conclusions

From the election of 2016 onwards, the electoral authority of the state of Chihuahua, along with local businesses, has implemented the "El Gordo Cívico" program in hopes of increasing turnout by rewarding voters with special sales and discounts at several venues across the state. This program can be described as a form of turnout-buying since it aims to counteract the costs of voting by offering material rewards to voters in exchange for their participation. Nevertheless, the results from this study strongly suggest that the program has not accomplished its objective. Even when voter participation in Chihuahua increased in the 2016, 2018, and 2021 elections compared to that of previous years (Instituto Federal Electoral, 2011, 2013; Instituto Nacional Electoral, 2016, 2019, 2022), it cannot be said that this increase was due to the "El Gordo Cívico" program. When considering other changes in the electoral environment that occurred during these years, the turnout-buying program did not contribute to the observed increase in turnout in Chihuahua.

Now, given that the program does not seem to affect turnout, are the results from this study just an interesting curiosity but nothing to explore any further? I would argue that this is not the case. Beyond its effectiveness, the setup of the program may raise some concerns. The first question that might come to mind is, what do businesses get for participating in the program? As has already been mentioned, at least up to the 2021 election, all businesses could freely partake in this program. Further, the electoral authority promotes those venues that want to publicize their offers on the campaign's social media accounts. This means that election day is potentially a special sales day for local businesses that participate in the program. Thus, what these local businesses expect is that their sales will increase because of taking part in this program. It is also possible that some of the participants in the program simply derive satisfaction from knowing they are doing something to promote democracy in their community. These business owners might be motivated to participate in the turnout promotion program even if the influx of customers in their business does not increase significantly because of the program.

Nevertheless, the one worrying concern–at least from a normative perspective– comes when considering the possibility that participant businesses could take advantage of the program to promote a particular candidate. In such a case, the program could quickly turn into a form of clientelism funded with private resources. Participating businesses may act strategically and attempt to exploit the program to benefit their preferred candidate by mobilizing a particular sector of the population that may find the offered promotions more appealing. Unfortunately, these concerns cannot be addressed with the data presented in this work. Thus, further research is warranted so that these questions can be addressed. The good news is that starting in the 2024 election, the Chihuahua electoral authority refurbished this get-out-the-vote program, rebranding it as "El Pulgar Cívico." With this refurbishment, participant businesses now must register to be part of the program. Hence, obtaining specific data about participant vendors and the special sales they offer will be possible. These data, along with geospatial data regarding both businesses' locations and poll stations, could shed light on potential differential effects of the program based on location and type of promotion offered. Further, having a set list of participant businesses is an essential step for surveying these businesses so that we can understand their motivations

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[9] This paper's online appendix contains detailed tables with all variables in each model specification:
https://www.jd-irigoyen-borunda.com/_files/ugd/eb96bb_29ea3883ed0b4bf1b905def70d086737.pdf

for participating in this program. It is possible that business owners, through the local chamber of commerce, attempt to coordinate to exploit the program by targeting only that segment of voters that would vote in line with the interest of these business owners. Alternatively, they might perceive this day as a special sales holiday. Hence, they mainly participate to increase their sales. Finally, it might be the case that business owners have the sole intention of promoting participation, and this is why they participate in the program. Of course, these scenarios are not mutually exclusive, and this is another reason for studying the different caveats of the "El Gordo Cívico" program beyond its effects on turnout.

Additionally, given that the available data are at the municipality level and voting is an individual behavior, is that this study is not exempt from the ecological fallacy. Hence, there exists the possibility that the program is indeed affecting the behavior of some individuals; nevertheless, on the aggregate, this is not perceivable. For instance, the program could affect different groups of people differently. Some would be incentivized to participate by the program, while for others, it could have a crowd-out effect, meaning that the extrinsic reward ends up decreasing intrinsic motivation (Deci et al., 1999). These differential effects cannot be inferred from municipality-level data. Thus, an extension of this study using individual-level data is necessary to safely conclude that the program has not had any effects on turnout.

Further, even if the results hold after looking at individual-level data, a study with this level of disaggregation can help us understand why voters are not mobilized by this program. It could be that the program does not have much penetration among voters; thus, they are not aware of the rewards available to them. On the other hand, they could perceive the program as an illegitimate strategy to incentivize participation; this could also decrease turnout. Finally, it could also be the case that those voters who take advantage of the program are those who already participated regularly. Even if the program can be labeled as turnout-buying, offering sales and discounts implies that voters are going to spend money after voting. Therefore, it could be possible that voters do not perceive these sales as rewards, or at least not as something that is reducing the cost of voting. For voters, this could be an incentive to spend more and not vote; hence, voters with more available resources will be the ones likelier to take advantage of the program. In general, these voters tend to be the ones that already participate in elections (Carlin et al., 2015).

In conclusion, this study is only a first step in understanding how turnout-buying programs implemented by official electoral authorities can affect the electoral environment. This is particularly important given that the electoral authority of the state of Baja California has also implemented a similar program to that in Chihuahua, and in 2021, the Business Coordinating Council of the state of Durango, with the sponsorship of the National Electoral Institute, has promoted another program like the "El Gordo Cívico" in Durango and some other states. We still need to understand how the public perceives these programs, whether they are legitimized by the sponsorship of electoral authorities, and if they could be exploited to mobilize some voters over others. Thus, even if this research suggests that these programs do not increase overall turnout, this is only a piece of a larger puzzle regarding turnout-rewarding programs.

Supplementary Materials: The online appendix is available online at https://www.jd-irigoyen-borunda.com/_files/ugd/eb96bb_29ea3883ed0b4bf1b905def70d086737.pdf.

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Article

Changes in the structure of household expenditure on housing and transportation in Chihuahua from 2018 to 2022

Cambios en la estructura del gasto en vivienda y transporte de los hogares de Chihuahua de 2018 a 2022

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Abstract: This document provides an exploratory analysis of household expenses in Chihuahua before, during, and after the COVID-19 lockdown. The public policy of 'Stay at Home' modified housing usage due to online education and telecommuting, resulting in adaptations and increased expenses. Reduced mobility led to a decrease in available public transportation units, prompting households to adjust their transportation expenses. A household database was built, and changes in household spending categories were tracked to address the aforementioned disruptions.

Resumen: Este documento hace un análisis exploratorio de los gastos de los hogares de Chihuahua antes, durante y después del confinamiento del COVID 19. La política pública "Quédate en Casa" modificó el uso de las viviendas debido a la educación en línea y al teletrabajo lo cual generó adaptaciones e incrementos en gastos para éstas. La disminución de la movilidad trajo una reducción en las unidades de transporte público circulante obligando a los hogares a modificar sus gastos de transporte. Se construyó una base de datos por hogar y se rastreó en qué clases del gasto de los hogares hubo cambios para afrontar las alteraciones antes mencionadas.

Citation

Palabras clave: Gasto de transporte, gasto de vivienda, gasto substituto, gasto complementario, gasto de los hogares.

Clasificación JEL: D12; E21; R21.

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1. Introducción

La llegada del COVID-19 a México en febrero de 2020 trajo con la cuarentena y la campaña "Quédate en Casa" un cambio radical en los patrones de consumo de los individuos. El trabajo a distancia, la educación en línea y las medidas de distanciamiento social modificaron los gastos de las familias en los rubros de salud, transporte, equipos de comunicación y gastos del hogar y con ello la disminución de otros rubros.

En el tercer semestre del 2020 en México se perdieron más de 4 millones de empleos, paradójicamente, esto no incrementó el número de desempleados sino de personas desanimadas (personas que tenían un empleo y al perderlo ya no buscaron otro), los individuos entre 25 y 44 años fueron los más perjudicados, disminuyeron los salarios y los efectos de lo anterior repercutieron mayormente en las personas de menores recursos incrementando así la pobreza y la desigualdad de ingresos (Ortiz y Rodríguez, 2023; Razafindrakoto et al., 2023). Los cambios en la estructura del empleo favorecieron el teletrabajo lo cual aumento la desigualdad entre trabajadores que no contaban con las habilidades digitales necesarias para la rápida adaptación, asimismo, genero una carga extra diferenciada pues las mujeres se enfrentaron a una sobrecarga con el cuidado familiar, el trabajo doméstico y el teletrabajo (Weller, 2020).

Lo anterior también tuvo consecuencias en la estructura de la familia, la pandemia obligó a los estudiantes a tomar clases en casa, atribuyendo nuevas obligaciones a los padres de familia con nuevas ocupaciones y una reducción en los tiempos de ocio y diversión. La educación también trajo efectos diferenciados entre los hogares de menores recursos respecto al resto, dada la precaria adaptación digital y menor posesión de dispositivos que facilitaran la enseñanza en línea (González et al., 2013). Aunado a esto, los hogares mexicanos de menores ingresos presentaron una reducción en el consumo de frutas, verduras y proteínas de origen animal que junto con la limitación a la actividad física al exterior llevó a un deterioro físico, mental y nutricional que tuvo repercusiones en el aprendizaje y es un problema de salud pública (Rodríguez-Ramírez et al., 2021).

Los efectos de la pandemia no fueron homogéneos en el territorio nacional, en el año de 2020 con la política del confinamiento "Quédate en casa" el producto interno bruto, según el Instituto Nacional de Estadística y Geografía (INEGI), tuvo una caída del 8.62 por ciento. A nivel entidad federativa los estados de Baja California Sur y Quintana Roo tuvieron caídas superiores al 15 por ciento de su producción, los estados con fuerte presencia de industria automotriz tuvieron caídas de alrededor de 10 por ciento. Destaca el estado de Chihuahua con una de las caídas menos pronunciadas, siendo esta de 6 por ciento, fue la cuarta entidad con menor tasa, y es la entidad que en el periodo de 2018 a 2022 tuvo mayor crecimiento, solo después de tabasco, cabe destacar que 17 de las entidades de la república mexicana en el periodo de estudio no recuperaron el nivel de producción que tenían en 2018.

Chihuahua es el estado de la República Mexicana con mayor extensión territorial, su población se concentra en dos municipios de los 67 que existen, los municipios de Juárez y Chihuahua concentraron en el año 2020 el 65 por ciento de la población, concentración que se ha ido incrementando con el tiempo a un ritmo promedio de 2.78 por ciento por periodo censal. En la producción concentraron el 79.5 por ciento. Tiene frontera con Texas y Nuevo México, lo que favorece las exportaciones, en promedio entre 2018 y 2022 las exportaciones representaron el 26 por ciento del producto interno bruto estatal. La producción creció a un ritmo promedio de 3.19 entre el año 2003 y 2017 y 3.18 por ciento promedio anual en el periodo de estudio.

Los patrones de consumo analizan como la clase social, la edad, el género, la religión, el ingreso, etc., afectan las preferencias del consumidor dependiendo de las aspiraciones e interacciones sociales de estos (Singh, 2010). Basados principalmente en la teoría neoclásica del consumidor de la maximización de la utilidad, los gastos en transporte, vivienda y alimentación son considerados de primera necesidad y tienen menos variaciones que el cuidado personal, vacaciones, bienes durables y alimentación fuera del hogar que son considerados como bienes de lujo (Galindo et al., 2021; Gómez et al., 2015).

El confinamiento disminuyó el gasto de los individuos en transporte público un 43 por ciento en promedio para los estados de la república, el estado de Chihuahua fue de los más perjudicados en este rubro al tener una disminución del 51.77 por ciento, esto ocasionó que circularan menos unidades de transporte público y obligó a las familias a modificar la forma de transportarse, aumentando el gasto en adquirir vehículos y los gastos asociados a éstos en un 39 por ciento según datos de la Encuesta Nacional de Ingreso Gasto de los Hogares (ENIGH).

La vivienda pasó de ser un hogar para la familia a una extensión del lugar de trabajo, de la escuela, de los cuidados médicos, de sitio de esparcimiento y zona de actividad física con todos los gastos y adecuaciones que ello signifique, la vivienda paso a ser una unidad de producción.
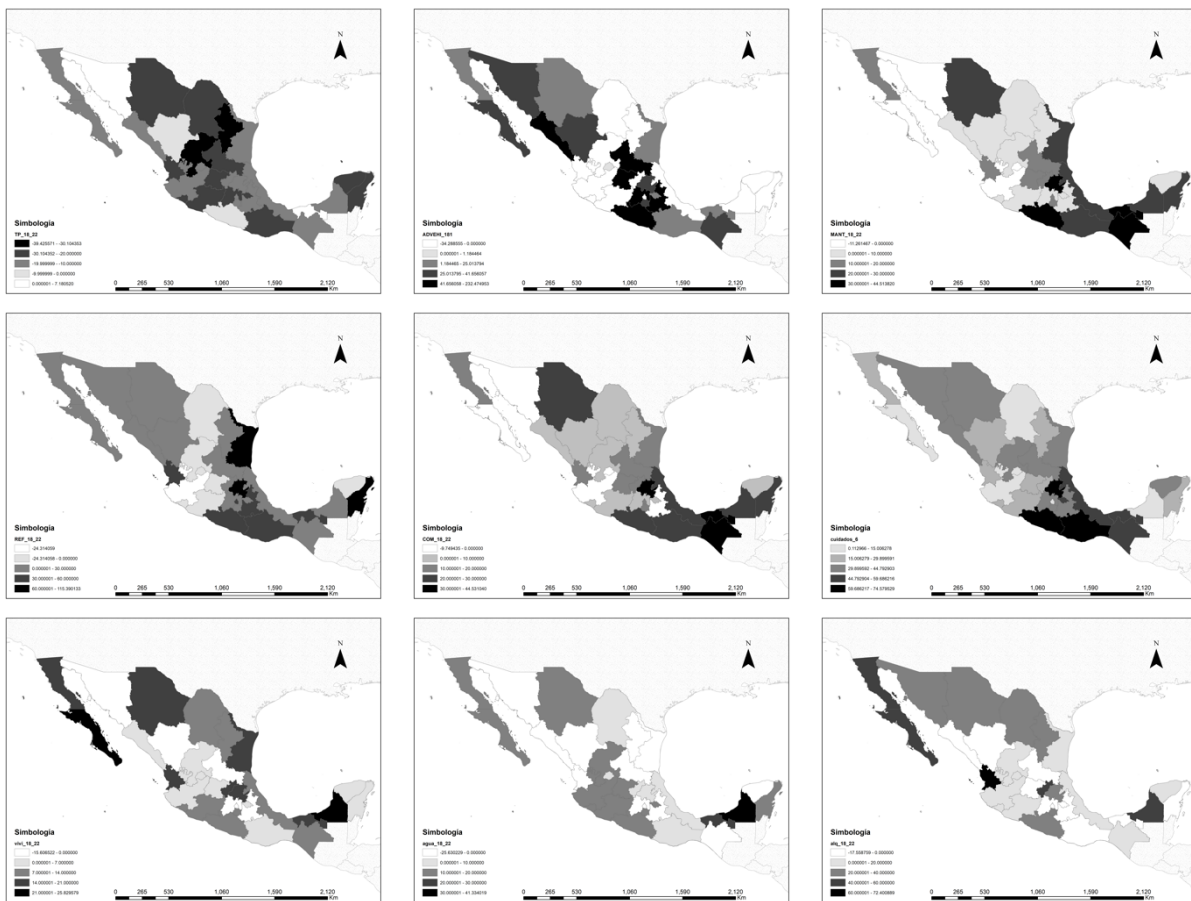
Figura 1. Incremento de gasto en adquisición de vehículos. Fuente: Cálculos propios de la ENIGH (2018, 2020 y 2022) en el marco geoestadístico de INEGI.

Los efectos de la caída del gasto de transporte público (TP) por hogar se dieron en todo el país, no así las variables relacionadas con el uso del automóvil, se puede ver en la Figura 1 que el incremento del gasto en adquirir vehículos (ADVEHI) se concentró en el noreste y el sureste del país, el mantenimiento (MANT), Refacciones (REF) y Combustible (COM) el estado de Chihuahua aparece en los de mayor

incremento, contrario a la variable cuidado personal que donde aparece en los de menor aumento. En las variables de vivienda (VIVI), agua (AGUA) y alquiler (ALQ), relacionadas con los gastos de vivienda también fueron en Chihuahua donde mayor incremento hubo en el periodo de estudio. Son visibles los cambios en las variables relacionadas con el transporte y la vivienda derivados del confinamiento a causa del COVID-19 en Chihuahua, este documento busca describir que efectos tuvieron estos incrementos sobre el gasto en alimentación, en el vestido, en la salud, en el cuidado personal y en el esparcimiento en los años de 2018, 2020 y 2022.

2. Metodología

Para profundizar en los efectos que tuvo el incremento del gasto en transporte y vivienda sobre los gastos de la familia se utilizó a los hogares del estado de Chihuahua como la unidad de análisis, la base de datos se construyó a partir del concentrado hogar de la Encuesta Nacional de Ingreso Gasto de los Hogares de los años 2018, 2020 y 2022 que realiza el Instituto Nacional de Estadística y Geografía.

Dado que los datos son monetarios, para que puedan ser comparados a través del tiempo fueron deflactados, teniendo así a todos hogares de los tres años como miles de pesos de 2018. Los cálculos se realizaron con el factor de expansión que incluye el propio instrumento.

La variación en el gasto de transporte no fue homogénea entre los hogares, en la Tabla 1 se presenta las primeras diferencias entre los periodos consecuentes y acumulado, se puede apreciar la disminución en el gasto en transporte público en el periodo 2018-2020 para todos los deciles, sin embargo es mayor en los deciles del 4 al 9, en el acumulado se observa como del decil 4 al 7 la disminución del gasto en transporte público fue mayor, esto se puede explicar con los resultados de la columna de adquirir vehículos, donde los mismo deciles son los que mayor incremento del gasto dedicaron, al cambiar el transporte público por vehículos particulares estos mismos deciles tuvieron incrementos en el gasto de mantenimiento, refacciones y combustible.

Tabla 1. Variación del gasto por decil en gastos de transporte.

Decil	Transporte publico			Adquirir vehículos			Mantenimiento			Refacciones			Combustible		
	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20
1	-3.3	14.1	10.8	13.7	16.2	29.9	154.1	124.2	278.3	21.5	-32.9	-11.4	132.6	157.1	289.7
2	-117.0	5.7	-111.2	68.8	49.1	118.0	-40.6	361.1	320.5	-26.5	33.5	6.9	-14.1	327.7	313.6
3	-129.5	34.5	-95.0	138.0	-120.7	17.3	334.6	490.4	824.9	18.0	29.5	47.6	316.5	460.8	777.3
4	-255.4	80.2	-175.2	159.7	205.4	365.1	374.7	418.5	793.2	35.4	-8.6	26.8	339.3	427.1	766.4
5	-324.6	221.0	-103.5	436.5	-405.2	31.3	176.9	122.3	299.1	41.5	-3.9	37.6	135.4	126.2	261.6
6	-285.8	71.1	-214.7	-188.1	455.9	267.8	64.8	505.5	570.3	-22.7	-17.6	-40.3	87.5	523.1	610.6
7	-296.5	88.4	-208.1	-113.4	601.0	487.6	-667.7	811.0	143.3	-87.0	37.6	-49.3	-580.7	773.3	192.6
8	-368.5	272.9	-95.7	-209.6	128.0	-81.6	-853.1	936.6	83.5	-102.4	3.8	-98.6	-750.8	932.9	182.1
9	-329.2	242.7	-86.6	338.3	-897.7	-559.4	-896.0	1268.3	372.3	-0.8	160.7	159.8	-895.2	1107.6	212.5
10	-106.4	129.0	22.6	-4579.3	2460.7	-2118.7	-2658.2	1720.8	-937.3	-303.1	247.7	-55.4	-2355.1	1473.2	-882.0

Fuente: Cálculos propios con ENIGH.

Respecto a los gastos de los hogares en Vivienda, el incremento se dio solo entre los primeros seis deciles en el periodo 2018-2020, siendo los primeros deciles los más afectados en el acumulado. El mismo efecto se repite en la variable de alquiler, como se muestra en la Tabla 2, los gastos en sostenimiento de la vivienda aumentaron esto debido al cambio de vivienda familiar a vivienda productiva.

Tabla 2. Variación del gasto por decil en gastos de vivienda.

Decil	Vivienda			Alquiler			Agua			Energía			Cuidados		
	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20	18-20	20-22	18-20
1	330.2	-57	273.2	162	11.68	173.68	40.937	-6.067	34.87	139.2	-64.1	75	36.968	-69.88	-32.9
2	186.7	129	315.9	104.11	-11.45	92.657	42.552	6.979	49.53	86.21	125	211	58.889	-36.14	22.75
3	250.9	257	508	117.66	120.5	238.14	107.14	-56.28	50.86	43.9	180	224	61.104	28.12	89.23
4	124.5	231	355.7	63.104	164.5	227.62	21.828	3.042	24.87	49.18	57.7	107	26.644	120.1	146.7
5	251	-65.1	185.9	19.265	41.89	61.155	115.94	-41.91	74.03	109.1	-80.1	29	68.36	2.407	70.77
6	219.6	-119	101	186.58	-145.8	40.806	44.939	-47.69	-2.75	14.7	83.4	98.1	36.748	-63.32	-26.6
7	-47.6	223	175.6	-24.95	81.53	56.579	-15.7	4.956	-10.7	-32.8	151	119	-35.56	12.67	-22.9
8	-27.6	407	379.1	-18.22	223.5	205.31	27.31	63.69	91	16.7	92.9	110	-38.37	37.42	-0.95
9	-317	391	73.78	-346.5	210.4	-136.1	26.799	96.75	123.6	-14.6	37.8	23.2	-39.69	100.7	61.02
10	-266	497	231.1	-296.8	462.5	165.71	2.725	-37.06	-34.3	141.6	127	268	-483.9	636.3	152.4

Fuente: Cálculos propios con ENIGH.

Dados los cambios descritos anteriormente, para evaluar los efectos que estos tuvieron se utiliza la regresión lineal múltiple para cada uno de los años, se agregan como variables de control al número de integrantes del hogar (tot_integ), la variable binaria sexo del jefe (sexo_jefe) donde 1 es mujer, a los miembros del hogar mayores de 65 años (p65mas), el ingreso corriente el hogar (ing_cor), a los niños menores de 6 años (menores), el gasto en bebidas (bebidas), el gasto en tabaco (tabaco), el gasto en medicinas (medicinas), el gasto en comunicación (comunica) y pago a tarjetas (pago tarje). Como variables explicativas de transporte se utilizó transporte público (publico), adquirir vehículos (adqui_vehi), mantenimiento (mantenim), refacciones (refaccion) y combustible (combus), como variables explicativas de vivienda se utilizó alquiler (alquiler), energía (energía), agua (agua), Cuidados del hogar (cuidado), impuestos del hogar (pred_cons). Por último, como variables dependientes se utilizó alimentos (alimentos), alimentos dentro del hogar (ali_dentro), alimentos fuera del hogar (ali_fuera), vestido y calzado (vesti_calz), salud (salud), cuidado personal (personales) y esparcimiento (esparci).

Las ecuaciones que se estimaron quedan de la siguiente forma:

$$Y = \beta_0 + \beta_{et}X_{et} + \beta_{ev}X_{ev} + \beta_c X_c + u$$

Donde Y toma el valor de una de las variables dependientes, X_{et} toma el valor de las variables explicativas de transporte, cada una con su respectivo estimador, X_{ev} toma el valor de las variables explicativas de vivienda y X_c el valor de las variables de control teniendo así siete distintas variables dependientes para cara uno de los tres periodos.

3. Resultados y discusión

La estimación inicial es con la variable de gasto en alimentación, la necesidad más básica del ser humano, los signos son los esperados para las variables de total de integrantes e ingreso corriente, una relación directa. Para la población vulnerable por edad, los menores de edad y mayores de 65 años, los resultados muestran una relación indirecta, los gastos en vivienda son significativos, pero no tienen efectos negativos sobre el gasto en alimentación, no así las variables relacionadas al gasto en transporte, las variables de adquirir vehículo tuvieron un efecto negativo en el primer periodo y el mantenimiento en el segundo y tercer periodo como se aprecia en la Tabla 3.

Tabla 3. Efectos del gasto de transporte y vivienda sobre el gasto en alimentación.

	2018	2020	2022
tot_integ	642.2062***	676.2956***	1198.669***
	(77.75368)	(70.69664)	(100.3147)
p65mas	-572.2532***	-413.361***	
	(158.5436)	(145.8267)	
ing_cor	0.007268***	0.0024713***	0.0079062***
	(0.001728)	(0.0004508)	(0.000857)
menores	-396.2404***	-282.8146***	-874.9237***
	(133.8081)	(122.5508)	(179.1942)
bebidas	2.157322***	2.049293***	2.130054***
	(0.0922001)	(0.0656441)	(0.0810004)
tabaco	1.154155***	1.096266***	0.6864478***
	(0.2098936)	(0.1620046)	(0.2428678)
medicinas	1.106337***	0.4637339***	0.3292898***
	(0.1759447)	(0.1525818)	(0.079974)
comunica	0.3494871***	0.6121541***	0.2584755***
	(0.0536024)	(0.0572626)	(0.0490158)
esparci	0.5271845***		0.3533775***
	(0.0617835)		(0.0620776)
publico	0.335755***	0.2601421***	0.2078054***
	(0.0879111)	(0.1024093)	(0.0891845)
adqui_vehi	-0.0387275***		
	(0.0109621)		
mantenim	0.7824663***	-0.2450082***	-0.242765***
	(0.1118384)	(0.0247656)	(0.1148797)
combus	-0.6191002***		0.5617904***
	(0.118026)		(0.1222113)
alquiler	0.2133713***	0.1458809***	0.1940574***
	(0.0384857)	(0.0322014)	(0.0336314)
pred_cons	0.6680769***		0.6674724***
	(0.1186261)		(0.152586)
energia	0.2296799***		0.1253093***
	(0.0683143)		(0.0513138)
cuidados	0.5913204***	0.2130076***	0.3587907***
	(0.0658415)	(0.0562156)	(0.0566577)
_cons	2247.705***	2673.792***	2171.3***
	(234.7142)	(218.3087)	(284.1212)
R2	0.4335	0.4447	0.4717

El error estándar aparece entre paréntesis.
* Significancia estadística al 10%
** Significancia estadística al 5%
***Significancia estadística al 1%

Para ver mejor los efectos de sobre el gasto en alimentación, la variable se separó en gastos dentro del hogar, Tabla 4 y gastos fuera del hogar, Tabla 5, en estos se aprecian diferencias notables, en el caso de la variable sexo del jefe, los hogares con jefatura femenina gastan más en alimentación fuera del hogar, el total de integrantes tiene una relación directa con alimentación dentro del hogar, pero inversa con alimentación fuera del hogar, en la población vulnerable persiste la relación inversa en ambas estimaciones.

Tabla 4. Efectos del gasto de transporte y vivienda sobre el gasto en alimentación dentro del hogar.

	2018	2020	2022
sexo_jefe		-338.0683**	
		(170.234)	
tot_integ	741.4279***	697.3348*	1093.005***
	(61.61628)	(63.8128)	(79.44314)
p65mas	-221.547***		
	(126.2494)		
menores	-366.2108***	-205.52**	-558.3336***
	(106.3334)	(108.2162)	(142.6439)
bebidas	2.120805***	1.985229*	1.918143***
	(0.0729944)	(0.0586478)	(0.0635662)
medicinas	0.9565545***	0.306571**	0.4622056***
	(0.1403257)	(0.1370313)	(0.0641013)
comunica	0.1163318***	0.4664932***	0.1555519***
	(0.0427549)	(0.0519369)	(0.0389289)
esparci	0.1101312***	0.2078077**	
	(0.0491509)	(0.1024179)	
pago_tarje		0.0341542**	-0.0104862***
		(0.0197816)	(0.0038457)
publico	0.1748289***		0.2269374***
	(0.0701229)		(0.0712254)
adqui_vehi	-0.0300769***		
	(0.0070637)		
mantenim	0.3233775***	0.2615122***	
	(0.0891705)	(0.0920572)	
combus	-0.2810805***	-0.1644224*	0.2042718***
	(0.0941304)	(0.0983595)	(0.0209898)
alquiler	0.1062424***	0.0912308***	
	(0.0306762)	(0.0287754)	
pred_cons	0.1835072***		0.3954017***
	(0.0939178)		(0.1225828)
agua		0.5201226***	0.5851719***
		(0.1132152)	(0.1128535)
energia	0.3780556***		
	(0.0510134)		
cuidados	0.216969***	0.1785295***	0.1220767***
	(0.0518829)	(0.0505215)	(0.0436827)
_cons	1874.559***	2249.084***	2082.518***
	(186.4158)	(209.927)	(224.3856)
R2	0.5567	0.5302	0.5219

El error estándar aparece entre paréntesis.
* Significancia estadística al 10%
** Significancia estadística al 5%
***Significancia estadística al 1%

En cuanto a los gastos en transporte, adquirir vehículo y combustible son consistentes en ambas estimaciones, con mayor parámetro para la alimentación fuera del hogar, el mantenimiento solo tiene efectos negativos en la alimentación fuera del hogar. Mientras que los gastos de vivienda solo el gasto en energía tiene efectos negativos sobre la alimentación fuera del hogar.

Tabla 5. Efectos del gasto de transporte y vivienda sobre el gasto en alimentación fuera del hogar.

	2018	2020	2022
sexo_jefe		202.3173**	325.0839**
		(97.86775)	(157.5252)
tot_integ	-110.0652***	-49.40562*	
	(35.02275)	(25.85177)	
p65mas	-356.1899***	-305.5044***	
	(99.50683)	(73.78484)	
ing_cor	0.006635***	0.0031149***	0.0073477***
	(0.0008943)	(0.0002308)	(0.0005574)
menores			-199.3091**
			(79.55955)
bebidas		0.0558485*	0.1787217***
		(0.0337461)	(0.0483375)
medicinas			-0.1349986**
			(0.0486838)
tabaco		0.145059*	
		(0.0833144)	
comunica	0.2341452***	0.0898279**	0.0850944**
	(0.0336384)	(0.0289287)	(0.029439)
esparci	0.4181448***		0.384734***
	(0.0394976)		(0.0377988)
pago_tarje		0.0393449***	-0.0101684***
		(0.0112534)	(0.0031495)
publico	0.1704228***	0.1930531***	
	(0.0557936)	(0.0525633)	
adqui_vehi			-0.0265873***
			(0.0076006)
mantenim	-0.4764648***	-0.1022367***	
	(0.0710502)	(0.0126223)	
combus	-0.3545519***		-0.1025707***
	(0.0750549)		(0.0167167)
alquiler	0.1069551***	0.0519174**	0.1896357***
	(0.0245093)	(0.0164463)	(0.0203096)
pred_cons	0.4932827***		0.2201461**
	(0.0756061)		(0.0934394)
energia	-0.1437799***		0.1285235***
	(0.0435171)		(0.0306691)
cuidados	0.3872694***		0.2097554***
	(0.0415879)		(0.0344677)
_cons	437.971***	344.2019**	-171.0488*
	(142.6182)	(120.9179)	(156.4109)
R2	0.6724	0.6013	0.6221

El error estándar aparece entre paréntesis.
* Significancia estadística al 10%
** Significancia estadística al 5%
***Significancia estadística al 1%

Las Tablas 6 y 7 despliegan información consistente en cuanto a las variables de control con las estimaciones anteriores, sin embargo, son las estimaciones con el menor coeficiente de ajuste, los parámetros son mínimos, esto implica que los gastos en vestido y calzado y salud no están sujetos a externalidades, son consumos independientes que no pueden ser explicados por bienes sustitutos o complementarios. En el caso del vestido y el calzado pudo no verse afectado ya que el confinamiento redujo la necesidad de cambio de prendas de vestir. Respecto al gasto en salud al ser de primera necesidad no puede ser reducido o alterado por el consumo de otros bienes.

Tabla 6. Efectos del gasto de transporte y vivienda sobre el gasto en vestido y calzado.

	2018	**2020**	**2022**
sexo_jefe			-171.3098***
			(0.0006879)
tot_integ	82.93653***	55.3891***	149.457***
	(18.33874)	(12.31202)	(35.02275)
p65mas	-258.5819***	-161.7266***	-232.0074***
	(52.4566)	(35.22923)	(25.85177)
ing_cor		0.000243**	0.0021788***
		(0.0001107)	(0.0038457)
bebidas	0.1539345***	0.0755673***	0.1330109***
	(0.0309226)	(0.0161223)	(0.0126223)
tabaco		0.0851742**	
		(0.0397846)	
medicinas	0.2328417***	0.1375191***	
	(0.0595636)	(0.0375758)	
comunica	0.0770144***	0.1089368***	0.0782866***
	(0.0179758)	(0.014103)	(0.0394976)
esparci	0.3585001***	0.2138554***	0.2069139***
	(0.0208167)	(0.0280024)	(0.0384857)
pago_tarje			-0.0079485***
			(0.0572626)
adqui_vehi	0.0133865***	0.0096109***	-0.0081187***
	(0.0029264)	(0.0030236)	(0.0579163)
refaccion	0.2694838***	0.1733192***	0.3114995***
	(0.0378571)	(0.0252376)	(0.0579163)
combus	0.0575619***	0.0284402***	0.0523128***
	(0.0083657)	(0.0066105)	(0.0142944)
alquiler		0.0339727***	0.0440921***
		(0.0078833)	(0.0035332)
agua		0.0976024***	
		(0.0308842)	
pred_cons	0.1084559***		0.1818148***
	(0.0397211)		(0.0075103)
cuidados	0.1388181***	0.0630722***	0.1209836***
	(0.0218922)	(0.0138835)	(0.0252062)
_cons	42.33672*	-80.36547**	18.57412*
	(75.99231)	(52.16594)	(12.31202)
R2	0.2792	0.2421	0.2521

El error estándar aparece entre paréntesis.

* Significancia estadística al 10%

** Significancia estadística al 5%

***Significancia estadística al 1%

Tabla 7. Efectos del gasto de transporte y vivienda sobre el gasto en salud.

	2018	**2020**	**2022**
tot_integ	-124.8077***	-95.42471*	
	(45.37278)	(51.38359)	
p65mas		273.4854*	250.197*
		(147.2936)	(155.9707)
ing_cor	0.0093643***		0.0040881***
	(0.0010147)		(0.0006879)
menores	144.456*		
	(77.95368)		
medicinas	2.547348***	1.95444***	1.142825***
	(0.105368)	(0.1564398)	(0.0628216)
comunica	-0.1218168***	-0.1405252**	
	(0.0314652)	(0.0593097)	
esparci	0.0901627***		-0.0977874***
	(0.0362406)		(0.0468654)
esparci		0.066233***	-0.0100989***
		(0.0225612)	(0.0040498)
pago_tarje		0.2893442***	
		(0.1048518)	
adqui_vehi	0.0205254***		0.0693279***
	(0.006531)		(0.0097458)
refaccion	-0.1366071**	0.9177278***	1.02767***
	(0.0664209)	(0.1049503)	(0.0868345)
pred_cons			0.4497647***
			(0.1185753)
combus		0.1275592***	
		(0.0280953)	
agua		-0.3090388***	
		(0.1321611)	
energia	0.0680685*	0.1387287***	
	(0.0404344)	(0.0551573)	
cuidados	0.118152***	0.3241536***	
	(0.0386615)	(0.0579163)	
_cons	60.59465*	-148.3482*	50.56876*
	(128.594)	(212.7435)	(119.086)
R2	0.2107	0.2823	0.2131

El error estándar aparece entre paréntesis.

* Significancia estadística al 10%

** Significancia estadística al 5%

***Significancia estadística al 1%

Finalmente, en las Tablas 8 y 9 se manifiestan los mayores efectos del gasto en transporte y gasto en vivienda. Refacciones y combustible tienen relación negativa con el gasto en cuidado personal y esparcimiento tanto durante como después del confinamiento, no siendo así antes, este cambio de signo implica que el confinamiento cambió el patrón de consumo debido al incremento en el uso de vehículos particulares. En el gasto de vivienda, las variables relacionadas con los servicios de las viviendas, la variable de energía y la variable de agua fueron las que disminuyen los gastos en ambas estimaciones,

en el caso de la variable agua también hay un cambio de signo al pasar a negativo durante y después del confinamiento, mientras que la variable energía solo es relevante en su relación con el esparcimiento.

Tabla 8. Efectos del gasto de transporte y vivienda sobre el gasto en cuidado personal.

	2018	2020	2022
sexo_jefe		-193.4775**	
		(84.63949)	
tot_integ	147.7931***	130.3638***	242.9383***
	(21.03787)	(22.49171)	(34.99284)
p65mas	-155.906***	-195.5354***	
	(59.42925)	(63.86443)	
ing_cor	0.0037017***		0.0008063*
	(0.0006578)		(0.0004453)
bebidas	0.1652197***	0.1524223***	0.1189123***
	(0.0348997)	(0.0292192)	(0.0382762)
medicinas	0.4077806***	0.4345532***	0.0789312**
	(0.0671784)	(0.0681006)	(0.0385083)
comunica	0.1165657***	0.207494***	0.1693863***
	(0.020432)	(0.0256749)	(0.0234823)
esparci	0.2760498***	0.4757661***	0.3594011***
	(0.0235538)	(0.0508831)	(0.0299016)
publico	0.0960925***		
	(0.0333584)		
pago_tarje		0.081529***	-0.0085987***
		(0.0099275)	(0.0024907)
adqui_vehi	0.0153267***		0.0200558***
	(0.0041793)		(0.0060027)
refaccion	0.2286818***	-0.2813085***	-0.5195989***
	(0.042714)	(0.0457708)	(0.0544528)
combus	0.0828378***	-0.1334306***	-0.1635003***
	(0.0099056)	(0.0118499)	(0.0130508)
alquiler		0.0575898***	0.0548654***
		(0.0142944)	(0.0160841)
pred_cons	0.1090506***	0.2122587***	0.7066262***
	(0.0452866)	(0.0438078)	(0.0739832)
agua	0.2264834***	-0.1547396***	-0.1344098**
	(0.0413621)	(0.0565612)	(0.0677628)
energia	0.0477964*		
	(0.0262635)		
cuidados	0.3766131***	0.34458***	0.3257394***
	(0.0251256)	(0.0252062)	(0.0271714)
_cons	95.68073*	311.7473***	-56.44479*
	(87.01963)	(106.1391)	(128.3215)
R2	0.4061	0.5881	0.5262

El error estándar aparece entre paréntesis.

* Significancia estadística al 10%

** Significancia estadística al 5%

***Significancia estadística al 1%

Tabla 9. Efectos del gasto de transporte y vivienda sobre el gasto en esparcimiento.

	2018	2020	2022
tot_integ	-46.94586***	-20.21829***	-46.94586***
	(14.30418)	(9.185172)	(14.30418)
p65mas	-111.1091***		-111.1091***
	(40.81542)		(40.81542)
menores		42.44383***	
		(15.59141)	
ing_cor	0.0016243***		0.0016243***
	(0.0003661)		(0.0003661)
bebidas	0.1099189***	0.0286806***	0.1099189***
	(0.0239305)	(0.0084357)	(0.0239305)
medicinas	-0.0924651***	0.0878909***	-0.0924651**
	(0.0461717)	(0.0197543)	(0.0461717)
comunica	0.1029713***	0.0231851***	0.1029713***
	(0.0137159)	(0.0075103)	(0.0137159)
pago_tarje	0.0346014***	0.0152271***	-0.0346014***
	(0.0059118)	(0.0028473)	(0.0059118)
adqui_vehi		0.003509***	
		(0.0015903)	
refaccion	0.2017162***	-0.0683612***	-0.2017162***
	(0.0294285)	(0.0132554)	(0.0294285)
combus	0.0707118***	-0.0099272***	-0.0707118***
	(0.0066355)	(0.0035332)	(0.0066355)
alquiler	0.0370355***		0.0370355***
	(0.0100277)		(0.0100277)
agua		-0.0655344***	
		(0.0166806)	
energia	-0.074194***	0.0222704***	-0.074194***
	(0.0177769)	(0.0069406)	(0.0177769)
cuidados	0.1130697***	0.0266346***	0.1130697***
	(0.0171847)	(0.0073185)	(0.0171847)
_cons	251.7629***	174.4685***	251.7629***
	(59.48047)	(26.88436)	(59.48047)
R2	0.5937	0.5008	0.5937

El error estándar aparece entre paréntesis.

* Significancia estadística al 10%

** Significancia estadística al 5%

***Significancia estadística al 1%

4. Conclusiones y recomendaciones

A raíz del confinamiento del COVID 19 los hogares tuvieron cambios es su estructura de gasto, cambiaron de ser hogares familiares a extensión de las empresas, de las escuelas y del cuidado de salud, generando con esto incrementos en los gastos del hogar, estos incrementos fueron tan marginales que no afectaron el gasto en otros rubros más allá de una disminución de los gastos en alimentación fuera del hogar, salud, cuidado personal y esparcimiento, lo anterior a través de las variables de energía y agua.

Los gastos en transporte publico disminuyeron en los hogares lo que ocasionó un problema de disponibilidad de unidades que brinden el servicio, ante esto, los hogares incrementaron los gastos relacionados con el automóvil, en este caso las variables de adquirir vehículos y combustible si tuvieron efectos negativos en la alimentación en sus tres presentaciones, en esta misma dirección se comportó el combustible, por otro lado, las refacciones y el mantenimiento tuvieron efectos negativos sobre los gastos en vestido y calzado, salud, cuidado personal y esparcimiento.

De las variables de control, las bebidas y tabacos no tuvieron relación con las variables explicativas, esto indica que son inelásticas, los hogares disminuyen los gastos en alimentación fuera del hogar en lugar de disminuir bebidas y tabacos, el incremento en el gasto en medicinas disminuyó en la alimentación fuera del hogar, los incrementos en comunicación disminuyeron los gastos en salud, en las estimaciones de 2022 todos los parámetros de estimación fueron negativos para tarjetas de crédito, lo que sugiere incrementos de deuda posterior al confinamiento.

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Social economy in Mexico: An analysis of cooperatives in the state of Chihuahua

La economía social en México: Análisis de las cooperativas en el estado de Chihuahua

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Abstract: This research presents a review of the literature on the state of the social economy in Mexico, its political framework, and the functioning and legal framework of cooperatives. This theoretical analysis provides the context for an exploratory study focused on cooperatives in the state of Chihuahua. The study identified and classified the economic structure of these cooperatives using data obtained from the Federal Government's digital platforms and the Social Economy Directorate. As a result, a Registry of Cooperatives was formalized, listing 101 groups, of which the majority (78%) are microeconomic units. Additionally, 47% belong to the secondary sector of the economy, with clothing and sewing being the predominant field (n=14). Geographically, the city of Madera has the highest number of cooperatives (n=18), followed by Chihuahua (n=16) and Juarez (n=12). The study concludes by highlighting the importance of promoting the social economy through the development of socially focused entrepreneurial capacities, economic incentives, and the formalization of social organizations, under the guidance of the Secretariat of Innovation and Economic Development of the Chihuahua government.

Keywords: Cooperative societies, social economy, social organizations, government incentives.

JEL Classification: J54; P13; D71.

Resumen: Esta investigación presenta una revisión de la literatura sobre la situación de la economía social en México, su marco político, y el funcionamiento y marco jurídico de las sociedades cooperativas. Este análisis teórico proporciona el contexto para un estudio exploratorio centrado en las sociedades cooperativas del estado de Chihuahua. El estudio identificó y clasificó la estructura económica de estas

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cooperativas, utilizando datos obtenidos de las plataformas digitales del Gobierno Federal y la Dirección de Economía Social. Como resultado, se formalizó un Padrón de Sociedades Cooperativas que incluye 101 agrupaciones, de las cuales la mayoría (78%) son micro unidades económicas. Además, el 47% pertenecen al sector secundario de la economía, con el rubro de confección y costura predominando entre ellas (n=14). Geográficamente, la ciudad de Madera registra el mayor número de cooperativas (n=18), seguida por Chihuahua (n=16) y Ciudad Juárez (n=12). El estudio concluye destacando la importancia de promover la economía social mediante el desarrollo de capacidades empresariales con enfoque social, incentivos económicos y la formalización de las organizaciones sociales, bajo la dirección de la Secretaría de Innovación y Desarrollo Económico del gobierno de Chihuahua.

Palabras clave: Sociedades cooperativas, economía social, organizaciones sociales, incentivos gubernamentales.

Clasificación JEL: J54; P13; D71.

1. Introducción

La economía mexicana está compuesta por una estructura económica fortalecida por el desarrollo y constitución de empresas dentro de distintas actividades económicas que son generadoras de empleos, capital, ingresos y productos o servicios que contribuyen a un progreso en la sociedad aportando bienestar social y económico (Saavedra-García, 2014).

El desarrollo y la constitución de las empresas entorno a los sectores económicos es variado y contempla organizaciones productivas como las de economía social. Dentro de este escenario existen los Organismos del Sector Social de la Economía (OSSE) los cuales participan como agentes en las actividades económicas. Las mismas pueden ser descritas como una estructura social y productiva con actividades de producción, distribución y consumo de bienes y/o servicios entre los integrantes de un organismo que son tomados como factores importantes tanto en la estructura económica como en el bienestar.

La economía social en México ha desempeñado un rol crucial en el desarrollo económico, especialmente en el sector de las sociedades cooperativas, las cuales han emergido como agentes fundamentales en la generación de empleo, la promoción de la inclusión social y el fortalecimiento del tejido productivo regional. Se estima que en México existen alrededor de quince mil cooperativas que involucran a cerca de siete millones de personas (ACI, 2017). Estas cooperativas están regidas por la Ley General de Sociedades Cooperativas, que en su artículo 2 define a una cooperativa como una "organización social conformada por individuos que comparten intereses comunes, basada en los principios de solidaridad, esfuerzo propio y ayuda mutua, con el objetivo de satisfacer necesidades tanto individuales como colectivas mediante la producción, distribución y consumo de bienes y servicios" (Diario Oficial de la Federación, 2018).

Las cooperativas se fundamentan en valores de solidaridad y autogestión, lo que permite a grupos organizados satisfacer necesidades comunes a través de actividades económicas (Montoya-Herrera y Rivera-González, 2023). Un rasgo distintivo de estas organizaciones es su toma de decisiones igualitaria y su compromiso con la democracia interna (Seguí-Mas, 2011). Como indican Jorge-Coto et al. (2021), sus principios fundamentales incluyen la adhesión voluntaria, la gestión democrática, la independencia, la participación económica, la educación continua, la cooperación y el compromiso con la comunidad.

La región Paso del Norte en Chihuahua, debido a su ubicación estratégica en la frontera con los Estados Unidos de América, ha sido testigo del establecimiento de un modelo económico sustentado principalmente en la industria maquiladora de exportación. Esta área ha alcanzado altos niveles de competitividad global, gracias a su diversificación industrial, fabricantes con operaciones de largo plazo,

avanzada infraestructura logística, una eficiente red de transporte y la presencia de activos militares clave en América del Norte (Rosas-Heimpel, 2022). No obstante, a pesar de este auge industrial, amplios sectores de la población siguen afectados por condiciones laborales desfavorables que priorizan la productividad y la reducción de costos sobre el bienestar de los trabajadores. Esto perpetúa un ciclo de pobreza, acentuado por la escasez de inversión pública en infraestructura y servicios sociales, así como por la insuficiente inversión privada que no logra fortalecer el mercado interno de manera sostenida (Rosas-Heimpel, 2022).

La importancia social, política y económica de visibilizar las sociedades cooperativas y su participación en el estado, se exhibe en la naturaleza de los tipos de sociedades cooperativas bajo una organización del sector social agrupada por personas que se unen con la intensión de enfrentar a los fenómenos del desempleo. Al crear una empresa social desarrollarán actividades económicas que les permitirán entrar al mercado formal y ofrecer sus productos o servicios; además, apoyarán la satisfacción de la demanda de consumo de la sociedad en los tres grandes niveles de la economía nacional. Adicionalmente, en el aspecto gubernamental, la continua formación de sociedades sociales fomenta la productividad dentro de la economía social.

Las actividades económicas de las sociedades cooperativas no son limitativas por lo cual tienen objetos sociales dentro del sector primario, secundario y terciario (Diario Oficial de la Federación, 2018). Lo que constituye oportunidades de crecimiento y desarrollo en la participación de la estructura económica de Chihuahua y generar un amplio campo de desarrollo para la competitividad de las empresas y consolidación social para el bienestar e impulso económico en todas las regiones del estado.

Para interpretar el desarrollo económico de un estado, es necesario referirse a indicadores tanto económicos como sociales que sean completos y pertinentes, tales indicadores servirán como dispositivos que guiarán la toma de políticas públicas al evaluar y predecir situaciones, y valorar el desempeño gubernamental en tal región (López y Gentile, 2008).

Considerando que las sociedades cooperativas son una fuente de ingresos para muchos chihuahuenses; se observa entonces la necesidad de detallar mediante un censo actualizado el numero y tipo de cooperativas funcionando en la entidad. Adicionalmente, es importante identificar la participación que estas empresas cooperativas tienen dentro del quehacer económico de Chihuahua, los beneficios sociales y económicos que proveen a los miembros, y finalmente, el fomento que el gobierno estatal ha desarrollado a la economía social.

El informe integrador de este censo y los indicadores económicos y sociales de las sociedades cooperativas en Chihuahua permitirán mejorar los procesos de diseño, evaluación, seguimiento y monitoreo de las políticas públicas en materia económica del estado. Por lo anterior, el objetivo del presente trabajo es describir cuál es la situación de la economía social en México, su marco político y jurídico, además de identificar la estructura económica de las sociedades cooperativas operativas en el estado de Chihuahua.

2. Revisión de literatura

Economía social en México

En México, la economía social tiene su origen práctico en la estructura de los pueblos nativos, en su organización social y actividades económicas en la explotación de la tierra como factor de producción agropecuaria, siendo identificadas como ejemplo el calpulli, una "circunscripción territorial" (Manzanilla Schaffer, 2004) donde se puede referenciar a la división de tierras de cultivos (calpullis) distribuidas entre estratos sociales para su aprovechamiento en el pueblo Azteca (Izquierdo-Muciño, 2012).

Años más tarde, se encuentran algunos informes en la época colonial que mencionan "gremios y cofradías" organizadas por los artesanos de la época; las cuales, de acuerdo con Muñiz-Díaz y Alanís-Tavira (2018), fueron traídas a México como un modelo de organización laboral español. A su vez, las precursoras de las cooperativas, mutualistas y cajas de comunidades los organismos sociales se crearon

como métodos de desarrollo en el trabajo de la población convencionalmente como medio de unión en la búsqueda de cubrir sus necesidades (Huaylupo-Alcázar, 2007); lo que llevó a las organizaciones de gremios de artesanos a las relaciones cooperativistas para realizar actividades en común hasta convenir en sociedades cooperativas.

Después del movimiento independentista de 1821 y hasta 1860, los sectores minero y agrícola crecieron moderadamente en México. Sin embargo, poco a poco empezaron a llegar empresas de Inglaterra, Alemania y Estados Unidos quienes, principalmente, invirtieron en el sector minero y de manufactura; y, en consecuencia, la economía mexicana se empezó a desarrollar de una manera más rápida (Muñiz-Díaz y Alanís-Tavira, 2018).

Ante esa aceleración económica basada en la industria, los campesinos y agricultores empezaron a sufrir; y para contrarrestar esos efectos empezaron a asociarse en los llamados "gremios" (Muñiz-Díaz y Alanís-Tavira, 2018). Además, se encuentran las figuras de ejidos a lo largo de la historia con una organización social básica donde hasta la actualidad se pueden encontrar en operación en propiedad de comunidades o colectivos dentro de la estructura de economía social en México.

De esa manera, el Instituto Nacional de Economía Social (2019) considera que el origen de la economía social en México fue el "asociacionismo obrero del siglo XIX"; movimiento de organización obrera que surgió a partir de las primeras cooperativas y mutualistas presentes. Así como en otros países, estos movimientos emergieron en México como una alternativa frente a las malas condiciones de vida y el desempleo por la que pasaba la sociedad.

Se considera que el desarrollo de la economía social mexicana se debe a la práctica de trabajo asociativo entre grupos de trabajadores en actividades con la finalidad de satisfacer sus necesidades. Las experiencias dentro del ramo de organizaciones sociales en el país también se han visto denominadas como economía social y solidaria, de la mano de la corriente de economía solidaria al dar connotación de acciones colectivas subjetivas de la cultura, trabajo, autogestión y atención al medio ambiente, por lo que en este caso de estudio se toman solo como parte del desarrollo de organizaciones sociales. Esta parte solidaria aplica en sentido referente a un "modo solidario diferente de hacer economía" como menciona el Instituto Nacional de Economía Social (2019).

Marco político de la economía social en México

En México, el reconocimiento legal de las sociedades y gremios arrancó con el Ministro de Relaciones Exteriores Manuel Crescencio Rejón; quien en 1846 estableció el derecho a que los ciudadanos se asociarían. Después, en 1856, se inician los trámites para establecer "colonias agrarias," precursoras éstas de la Sociedad de Artesanos en Guadalajara y la Sociedad Particular de Socorros Mutuos en Ciudad de México (Muñiz-Díaz y Alanís-Tavira, 2018).

El sector social de la economía se conoce también como tercer sector; y fue reconocido formalmente en 1983, bajo una reforma la cual se referencia dentro del artículo 25º de la Constitución Política de los Estados Unidos Mexicanos "Al desarrollo económico nacional concurrirán, con responsabilidad social, el sector público, el sector social y el sector privado, sin menoscabo de otras formas de actividad económica que contribuyan al desarrollo de la Nación", del cual se hace alusión dentro del mismo artículo, en donde se indica que:

La ley establecerá los mecanismos que faciliten la organización y la expansión de la actividad económica del sector social: de los ejidos, organizaciones de trabajadores, cooperativas, comunidades, empresas que pertenezcan mayoritaria o exclusivamente a los trabajadores y, en general, de todas las formas de organización social para la producción, distribución y consumo de bienes y servicios socialmente necesarios (Constitución Política de los Estados Unidos Mexicanos, Art. 25, 2019).

Esa misma ley que dio origen a la denominación de los Organismos del Sector Social de la Economía (OSSE) en la Ley de la Economía Social y Solidaria (LESS). La creación de la LESS en México implantó mecanismos para organizar, promocionar, fomentar y fortalecer las actividades económicas del Sector

Social de la Economía, buscando el desarrollo social y económico. Lo que estableció un marco de identificación, políticas, capacitación técnica y apoyo a los OSSE bajo la creación y gestión del Instituto Nacional de Economía Social (INAES).

Por su parte al INAES se le aprobó el Programa Fomento a la Economía Social 2015-2018, para que creara condiciones favorables para el crecimiento y consolidación del sector social de la economía, mediante la visibilización del sector, el desarrollo de capacidades empresariales de los organismos del sector, el impulso de proyectos de inversión que incrementen las oportunidades de inclusión productiva y laboral del sector, el fortalecimiento de las capacidades de operación de la banca social y de sus actividades de ahorro y financiamiento empresarial (Diario Oficial de la Federación, 2014; 2015a).

Instituto Nacional de Economía Social

En la administración federal mexicana 2018-2024, y dentro de la Ley de la Economía Social y Solidaria en su Título II "De la Estructura del Sector Social de la Economía", de la Constitución Política de los Estados Unidos Mexicanos (2019), se dispone al Instituto Nacional de Economía Social (INAES) como un instituto desconcentrado de la Secretaría del Bienestar. Se le describe además como un organismo con capacidad técnica, operativa y de gestión de las políticas públicas de fomento y desarrollo del sector social en México; creado con el objeto de fortalecer y mejorar el desarrollo económico y social del país, cumpliendo las disposiciones mencionadas en dicha ley.

Así, el INAES tiene como objeto instrumentar las políticas públicas de fomento y desarrollo del sector social de la economía, con el fin de fortalecer y consolidar el sector como uno de los pilares de desarrollo económico y social del país, a través de la participación, capacitación, investigación, difusión y apoyo a proyectos productivos del sector (Instituto Nacional de Economía Social, 2020).

Es decir, las organizaciones dentro del sector social se encuentran bajo el fomento de las políticas públicas del sector público, para el desarrollo económico y social, dándole una fuerte importancia a este sector dentro de la estructura productiva de la economía (Diario Oficial de la Federación, 2015b).

Organismos del sector social de la economía en México

Los OSSE en México, han sido clasificadas bajo un "Catálogo de Organismos del Sector Social de la Economía" por el INAES; mencionadas específicamente en artículo 4º. de la Ley de la Economía Social y Solidaria donde se fundamentan algunas formas de organización social, que bajo el inciso VI las describen como: "formas de organización social para la producción, distribución y consumo de bienes y servicios socialmente necesarios" (Instituto Nacional de la Economía Social, 2019). En el mencionado catálogo, los diferentes grupos se dividen de la siguiente manera con el objetivo de perfilar los apoyos y estímulos del Programa de Fomento a la Economía Social del INAES:

1. Ejidos.
2. Comunidades.
3. Uniones de Ejidos.
4. Uniones de Comunidades.
5. Asociaciones Rurales de Interés Colectivo integradas por dos o más ejidos, comunidades, uniones de ejidos o comunidades, sociedades de producción rural integradas por ejidatarios y/o comuneros o uniones de sociedades de producción rural integradas por ejidatarios y/o comuneros.
6. Sociedades de Producción Rural integradas por dos o más ejidatarios y/o comuneros.
7. Uniones de Sociedades de Producción Rural que estén integradas por ejidatarios y/o comuneros.
8. Sociedades Mercantiles que cuenten con participación de organismos del sector social de la economía señalados en este Catálogo, con al menos 51% del capital social.
9. Cajas de ahorro de trabajadores.
10. Sociedades Cooperativas de productores de bienes y/o servicios.

11. Sociedades Cooperativas de consumidores de bienes y/o servicios.

12. Sociedades Cooperativas de ahorro y préstamo.

13. Organismos Cooperativos (Uniones, Federaciones de Sociedades Cooperativas de productores de bienes y/o servicios; de consumidores de bienes y/o servicios; de ahorro y préstamo).

14. Sociedades de Solidaridad Social.

15. Sociedades Mutualistas constituidas por cualquier colectivo de individuos, sea gremial o no gremial.

16. Uniones de Crédito integradas por ejidatarios, y/o comuneros u otro organismo del sector social de la economía señalado en este Catálogo.

17. Sociedades Financieras Comunitarias integradas por ejidatarios, y/o comuneros u otro organismo del sector social de la economía señalado en este Catálogo.

18. Sociedades Financieras de Objeto Múltiple No Reguladas, integradas por ejidatarios, y/o comuneros u organismo del sector social de la economía señalado en este Catálogo.

19. OSSE en etapa previa a su constitución legal, integrados de conformidad con lo que señalan las Reglas de Operación del Programa de Fomento a la Economía Social.

La descripción general de los OSSE como formas de organización social en el anterior listado responden al reglamento de lo estipulado en la LESS de acuerdo a su intención, principios, valores, actividades y prácticas dentro de la economía social en México (Diario Oficial de la Federación, 2015b). En este artículo, se estudiaron los grupos clasificados como "Sociedades Cooperativas" (números 10, 11, y 12 del listado) debido a su participación y representación en el sector social de la economía del estado de Chihuahua.

Funcionamiento y marco jurídico de las sociedades cooperativas en México

Dentro de la legislación la Ley General de Sociedades Cooperativas (LGSC), Diario Oficial de la Federación (2018), regula la creación, funcionamiento y extinción de sociedades cooperativas. Dando definición de las mismas en su artículo 2º. como "una forma de organización social integrada por personas físicas con base en intereses comunes y en los principios de solidaridad, esfuerzo propio y ayuda mutua, con el propósito de satisfacer necesidades individuales y colectivas, a través de la realización de actividades económicas de producción, distribución y consumo de bienes y servicios."

Esta definición dentro de la LGSC reconoce a las sociedades cooperativas como organismos del sector social integrada, según la misma ley, por un mínimo de cinco personas físicas que participarán en tal asociación con base en los principios marcados en las disposiciones legales. Además, se marcan las pautas para el funcionamiento de las cooperativas y la estructura como sociedad ante la cual deben apegarse para el buen desarrollo de sus actividades productivas en la relación económica y comercial hacia la comunidad. Siendo de esta manera un marco legal para la práctica en la estructura económica nacional.

Dentro de las Disposiciones Generales, esta ley contempla el seguimiento de principios para su funcionamiento (Ramírez-Díaz et al., 2016):

1. Libertad de asociación y facilidades para que los asociados se retiren;

2. Gestión democrática;

3. En caso de establecerse de esa manera, limitación de intereses a algunas cuotas;

4. Distribución de las utilidades de acuerdo a la participación de los socios;

5. Fomento de la formación cooperativa y de la economía solidaria;

6. Participación en la integración cooperativa;

7. Respeto al libre albedrío de los socios de vincularse a cualquier partido político o asociación religiosa, y

8. Desarrollo contínuo de la cultura ecológica.

Como se observa en el listado anterior, estas acciones dan un sentido de economía social al funcionamiento y objeto de las cooperativas; de la misma manera, tales prácticas definen de manera general la forma en que las cooperativas deben operar. A decir, la asociación de sus integrantes, retiro, administración democrática (misma a la que más delante la ley hace alusión en la denominación de un voto equivalente por cada socio de la cooperativa), aportaciones, distribución de rendimientos (basado en la participación productiva de los socios por delante de la del capital social), el fomento de educación en capacitación y fomento a la economía solidaria, el respeto al derecho individual entre los socios y la promoción de la cultura ecológica.

En los párrafos siguientes se decribirá cada uno de los títulos y capítulos de la LGSC; explicando algunos de los puntos más relevantes. La cooperativa deberá tener bases constitutivas de acuerdo a lo que estipula ley en su Título I, Capítulo I, De la constitución y registro, para acreditar la personalidad juridica, registro legal de la sociedad y desarrollar sus actividades productivas. Además, en el Título I, Capítulo II, de la ley indica la denominación y reconocimiento de tres clases de sociedades cooperativas:

1. Sociedades Cooperativas de Consumo; tienen por objeto la obtención y comercialización de bienes y/o servicios entre los socios.

2. Sociedades Cooperativas de Productores; éstas, a diferencia de las de consumo, tienen por objeto la manufactura de bienes y/o servicios.

3. Sociedades Cooperativas de Ahorro y Préstamo; agrupaciones cuyo objetivo se relaciona con el área financiera.

En este sentido, el DOF indicó que las cooperativas de consumo y productores se definen como "aquellas cuyos miembros se asocien con el objeto de obtener en común artículos, bienes y/o servicios para ellos, sus hogares o sus actividades de producción" (Diario Oficial de la Federación, 2018).

En ese mismo decreto, las sociedades cooperativas enfocadas en la producción, se definen como "aquellas cuyos miembros se asocien para trabajar en común en la producción de bienes y/o servicios, aportando su trabajo personal, físico o intelectual." (Diario Oficial de la Federación, 2018).

Por último, las sociedades cooperativas de ahorro y préstamo se delimitan como aquellos colectivos que realizan actividades de ahorro y préstamo en el sector financiero, remarcando que éstas se realizan por aportaciones de los mismos socios.

Las cooperativas tienen participación en cualquier actividad económica lícita y sin limitación alguna, como algunas otras sociedades mercantiles en el país. Asimismo, poseen una jerarquía que les permite constituirse bajo la denominación de ahorro y préstamo regulada por la Ley General de Sociedades Cooperativas y la Ley para Regular las Actividades de las Sociedades Cooperativas de Ahorro y Préstamo (Diario Oficial de la Federación, 2014). El razonamiento es que estas agrupaciones formarán parte del sistema financiero del país y deben ser supervisadas por la Comisión Nacional Bancaria y de Valores de acuerdo con su nivel de operaciones.

Por otro lado, las sociedades cooperativas de productores y consumidores se categorizan como Ordinarias o de Participación Estatal; las primeras son aquellas que se formalizan bajo constitución legal para funcionar, en cambio, las cooperativas de participación estatal son aquellas que tienen como socio alguna autoridad gubernamental y que integran la administración estatal. Continuando con el análisis de la actual LGSC, se advierte que, en su Título I, Capítulo III se mencionan las condiciones que estos grupos deben seguir en su administración, vigilancia y funcionamiento. En este punto, es importante destacar la función esencial de la denominada "Asamblea General" de las sociedades cooperativas; colectividad fundamental en la toma de decisiones y práctica de los principios, y resoluciones operativas y cooperativistas. El Título I, Capítulo IV la ley hace referencia a las ordenanzas económicas y de capital social de esas agrupaciones; aquí es donde la LGSC contempla lo referente a la distribución, aportaciones, fondos sociales y excedentes de los ejercicios sociales que se realizaran cada año fiscal. En el Capítulo V, se pueden distinguir las cláusulas para definir las bases constitutivas de las sociedades cooperativas para

sus socios, incluyendo requisitos, derechos y deberes. Después, en el Capítulo VI se discuten los formatos a seguir cuando la sociedad se quiera separar.

Continuando con el análisis de la LGSC, se observa que en el Título III en sus Capítulos I, II, III, se define la disposición de grupos cooperativos en: Uniones, Federaciones, Confederaciones, Consejo Directivo de las Federaciones y Confederaciones y otras formas asociativas dentro del movimiento Cooperativo Nacional y su integración. Finalmente, se observa que esta ley concluye con un Capítulo Único que discute los apoyos que estas sociedades podrían recibir de las autoridades gubernamentales de los tres niveles; por ejemplo, asistencia para que las personas se asocien y constituyan una sociedad cooperativa, la registren y reciban incentivos económicos.

Después del estudio detallado de esta ley, se observa cómo en México este tipo de organizaciones está bien regulada; la ley especifica la manera de regular su funcionamiento y actividades conforme a las normas jurídicas, lo que amplían la visión de estas organizaciones en la presente investigación y el desarrollo que han tenido en la estructura económica de México.

3. Metodología

La investigación se llevó a cabo bajo un enfoque cuantitativo con un diseño exploratorio. Se utilizó información recopilada a través de las plataformas digitales del Gobierno Federal y la Dirección de Economía Social del gobierno de Chihuahua. La identificación y clasificación de las cooperativas se realizó con base en datos oficiales y registros públicos, los cuales permitieron conformar un padrón de sociedades cooperativas activas. Estas herramientas de apoyo permitieron una recolección de datos satisfactoria; iniciando con la identificación por medio de llamadas telefónicas de un listado de figuras jurídicas que correspondían a las sociedades cooperativas proporcionado por el Centro de Investigación y Estadística (CIES) de la Secretaría de Innovación y Desarrollo Económico (SIDE). Este listado se encontró en el Directorio Estadístico Nacional de Unidades Económicas (DENUE) e información solicitada por el CIES a la Secretaría de Economía del Gobierno Federal, solicitando a su vez directorios de Fomentos Económicos de administraciones municipales y Cámaras de Comercio en el estado.

Conjuntamente, las llamadas telefónicas realizadas se enfocaban en primera instancia en identificar si correspondían a la unidad económica en cuestión. Durante ese procedimiento, se les invitaba a los respondientes a registrarse en la página web de la SIDE con la finalidad de capturar datos generales de la cooperativa y de mantener un contacto para el fomento de la economía social en su organización[1]. Al hacer el primer contacto con una cooperativa se le daba oportunidad de apoyarla con su registro por medio de llamada o si se haría por cuenta propia de la empresa en la página. Los datos generales recabados en esa base de datos incluían los siguientes criterios.

- Razón social
- Número de empleados (socios)
- Fecha de inicio de operaciones
- Tipo de cooperativa
- Productos y servicios que produce
- Página web de cooperativa
- Domicilio de la cooperativa
- Nombre del representante legal
- Número telefónico
- Correo electrónico

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[1] https://www.economiasocial.mx/Registros/Registro.html#facts

La información recabada se estructuró dentro de un padrón de sociedades cooperativas que permite a la Dirección dirigir sus apoyos de formación capacitación e incentivos económicos a su población objetivo como se muestra en la Figura 1.
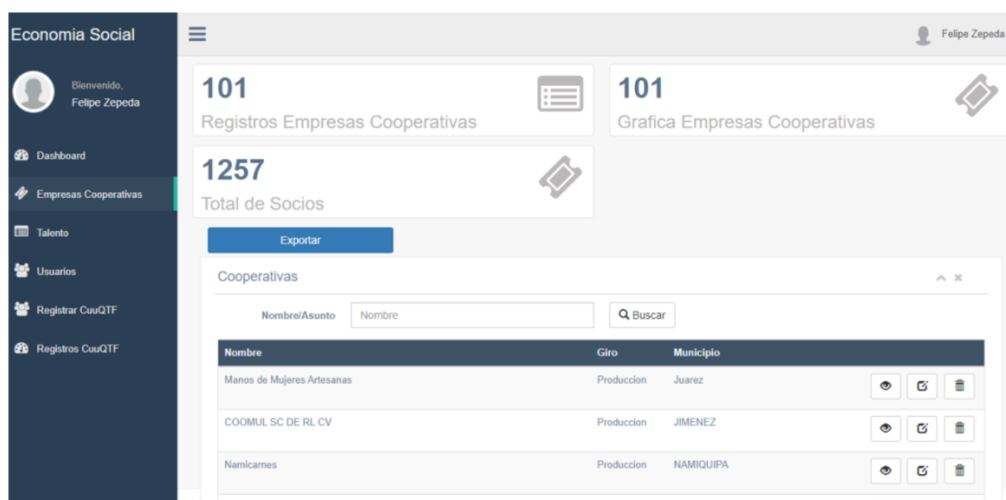
Figura 1. Padrón de Sociedades Cooperativas.

Además de la búsqueda de las cooperativas en listados y bases de datos para su contacto, la SIDE cuenta con el apoyo a grupos productivos para su constitución legal como Sociedades Cooperativas de Responsabilidad Limitida de Capital Variable, siendo tambien incluidas en el registro del padrón de sociedades cooperativas para su posterior seguimiento.

Adicionalmente, se obtuvo acceso al Sistema Integral de Gestión Registral (SIGER) del Gobierno Federal, accediento a la plataforma para realizar una consulta pública dentro de la base de datos del Registro Público de Comercio[2]. En esa base de datos, se pudieron realizar búsquedas de sociedades cooperativas por medio de palabras clave dentro del campo "Razón/Denominación Social". Esta plataforma permite encontrar a cualquier tipo de sociedad mercantil formalmente registrada ante el gobierno federal en México y arrojando una copia de la forma del registro de la Constitución de una Sociedad.

Las exploraciones por medio de Razón/Denominación Social se combinaron con la opción de búsqueda por el criterio de "Oficina Registral" con una Clave/nombre con lo que se filtraron solo oficinas del Registro Público en el estado de Chihuahua como se muestra en la Figura 2, que muestren datos de aquellas sociedades mercantiles que se registraron dependiendo de la Oficina Registral correspondiente al municipio donde establecieron su domicilio fiscal como sociedad.

Los datos encontrados de esta búsqueda se capturaron bajo un listado para buscar por medio de directorios telefónicos, motores de búsqueda web en internet, redes sociales y portales de información de empresas un contacto para su registro en la pagina web de economía social con el objetivo de alimentar el padrón de sociedades cooperativas de la Dirección.

La captura y acceso a la base de datos del padrón de la Dirección permitió la manipulación de los datos para la formulación de una clasificación de las cooperativas como unidades económicas por tamaño por su plantilla de empleados, distribución espacial y estratificación sectorial para la medición de la estructura económica de las sociedades cooperativas en el estado de Chihuahua, y el tipo de cooperativa al que corresponden según la Ley General de Sociedades Cooperativas.
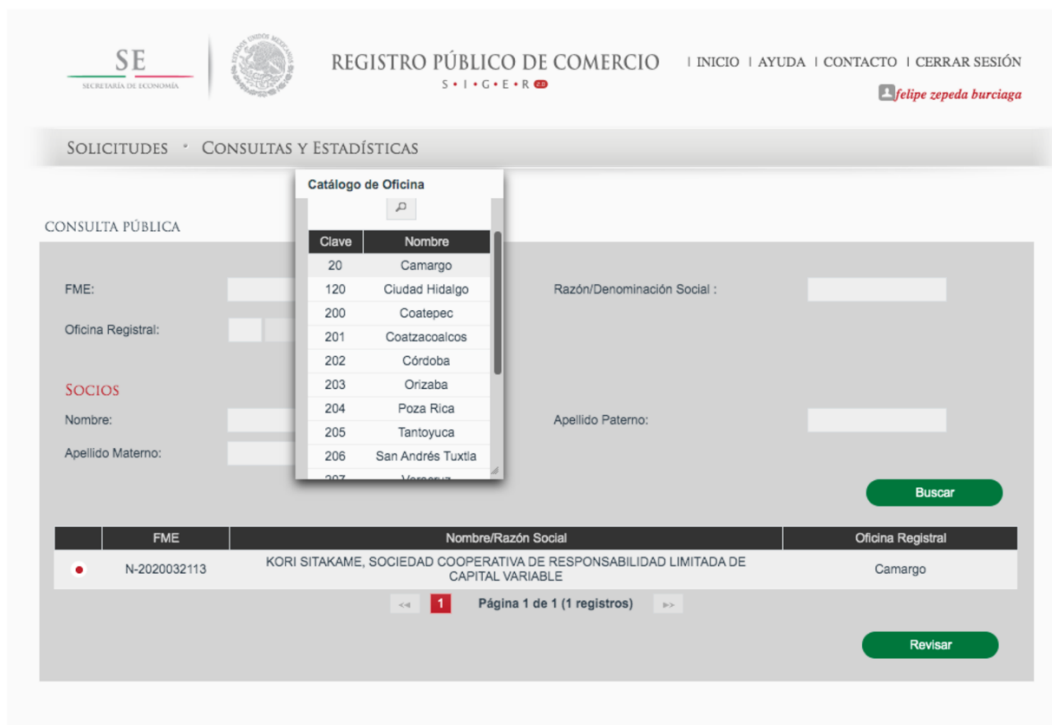
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[2] https://rpc.economia.gob.mx/siger2/xhtml/login/login.xhtml

Figura 2. Consulta pública en SIGER

Así, la clasificación de las empresas puede variar dependiendo de diversos factores, como su tamaño, los procesos productivos o la naturaleza de sus productos y con base en estos criterios, se realizó una clasificación de las empresas, donde se incorporaron esas variables para su medición y análisis. En la Tabla 1 se pueden observar las variables utilizadas y su descripción.

Tabla 1. Variables utilizadas para el análisis de las cooperativas localizadas en el estado de Chihuahua.

Variable	Descripción	Unidad de medida
Tamaño de la unidad económica	El tamaño de la unidad económica en términos del número de integrantes.	Número de socios como parte de la plantilla de trabajadores para la clasificación de unidad.
Sexo	El sexo de los integrantes (socios).	Hombre/mujer
Sector Económico	Primario, Secundario y Terciario para la estratificación por sector.	Por tipo de dato: a) primario b) secundario c) terciario
Actividad Económica	En relación de los productos y servicios que desarrollan con el catalogo del SCIAN.	Clave
Distribución Espacial	Ubicación o localización	Entidad municipal de la ciudad de Chihuahua
Operación	Periodo desde inicio de operaciones	Tiempo en años, meses o días

Los datos obtenidos se analizaron para determinar la distribución geográfica de las cooperativas, su tamaño, y el sector económico al que pertenecen. Para ello, se utilizaron criterios de estratificación

empresarial, como el número de empleados y el tipo de actividad económica. El análisis se enfocó en la participación de estas cooperativas en los sectores primario, secundario y terciario, y en su capacidad para generar empleo y beneficios sociales.

4. Resultados

Los resultados del estudio muestran que las sociedades cooperativas en Chihuahua presentan una estructura económica variada y compleja, con un predominio de microempresas que operan en el sector secundario de la economía. Del total de 101 cooperativas activas en el estado, el 78% corresponden a microempresas, definidas por tener menos de 10 empleados y operar con recursos limitados. Este hecho resalta la importancia de las cooperativas como generadoras de empleo en zonas rurales y semiurbanas, donde la creación de puestos de trabajo por parte del sector privado es más limitada.

En términos sectoriales, se encontró que el 22% de las cooperativas operan en el sector primario, como la agricultura y la transformación de alimentos, lo que refleja la diversidad económica de Chihuahua y su capacidad para adaptarse a distintas actividades productivas. Mientras que el 31% operan en el sector terciario, y el 47% en el sector secundario. Éstas últimas con un enfoque particular en actividades relacionadas con la confección y costura. Esto puede explicarse por la fuerte tradición manufacturera del estado, que ha permitido que las cooperativas encuentren un nicho en la producción de textiles y ropa, tanto para el mercado local como para exportación.

Geográficamente, las cooperativas se concentran en áreas específicas del estado, con Madera, Chihuahua y Ciudad Juárez liderando el número de cooperativas activas. Como se puede observar en la Figura 3, en Madera, se registraron 18 cooperativas, mientras que en Chihuahua y Ciudad Juárez se contabilizaron 16 y 12, respectivamente. En la Figura 4, se aprecia la distribución geográfica, misma que podría estar relacionada con la disponibilidad de recursos naturales y la infraestructura productiva existente en estas áreas, lo que facilita la operación de las cooperativas en dichos municipios.

Figura 3. Distribución de las cooperativas en operación de acuerdo con su municipio. Fuente: Datos de la Secretaría de Innovación y Desarrollo (2022).
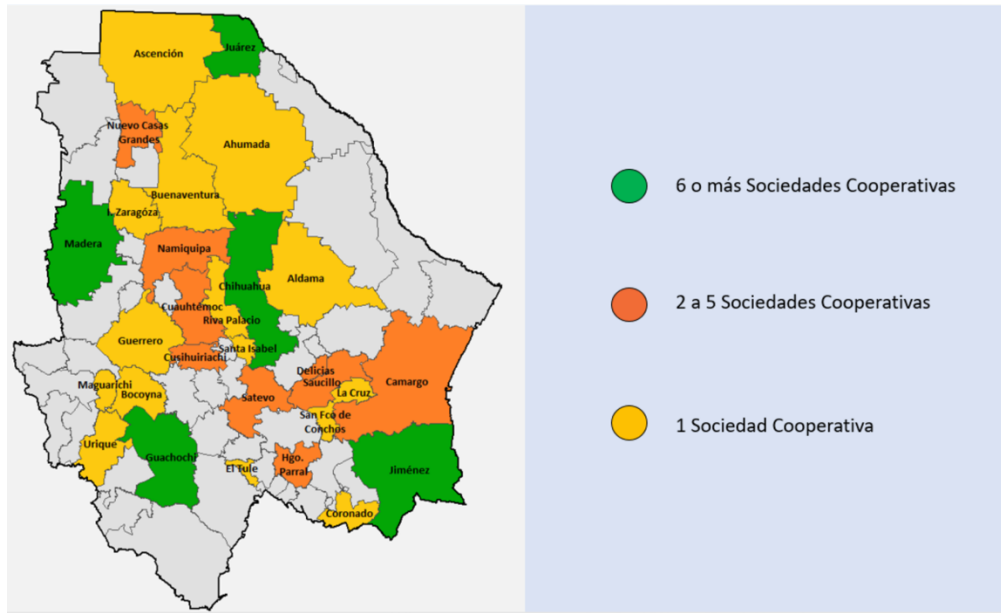
Figura 4. Representación visual de la distribución de las cooperativas en el estado de Chihuahua.

En la Tabla 2 se muestran los 101 registros desagregados, con características de las cooperativas en el Estado que se encuentran en operaciones.

Tabla 2. Estructura de cooperativas operativas en Chihuahua.

Por entidad	Registradas	Primario	Secundario	Terciario	Micro	Pequeña	Mediana
Madera	18	3	6	9	15	3	0
Chihuahua	16	0	4	12	12	4	0
Ciudad Juárez	12	0	8	4	9	3	0
Guachochi	7	2	3	2	7	0	0
Jiménez	7	0	7	0	5	2	0
Cuauhtémoc	5	1	2	2	2	2	1
Nuevo Casas Grandes	5	4	0	1	4	1	0
Hidalgo del Parral	4	0	3	1	4	0	0
Camargo	3	1	1	1	3	0	0
Cusihuiriachi	2	0	0	2	1	0	1
Delicias	2	1	0	1	1	1	0
Namiquipa	2	2	0	0	1	1	0
Satevó	2	2	0	0	2	0	0
Saucillo	2	0	2	0	2	0	0
Ahumada	1	1	0	0	1	0	0

Aldama	1	0	0	1	1	0	0
Ascensión	1	0	1	0	1	0	0
Bocoyna	1	0	1	0	0	0	1
Buenaventura	1	0	0	1	1	0	0
Coronado	1	0	1	0	1	0	0
Guerrero	1	1	0	0	1	0	0
Ignacio Zaragoza	1	0	1	0	1	0	0
La Cruz	1	1	0	0	1	0	0
Maguarichi	1	1	0	0	1	0	0
Riva palacio	1	1	0	0	1	0	0
San Francisco de Conchos	1	1	0	0	0	1	0
Santa Isabel	1	0	1	0	1	0	0
Urique	1	0	0	1	0	1	0
Total	**101**	**22**	**41**	**38**	**79**	**19**	**3**

La información permitió una estratificación por sector económico, de acuerdo a sus actividades económicas y clasificación como unidades económicas en términos de la conformación de los socios.

Continuando con el análisis descriptivo, se comenta que el estado de Chihuahua cuenta con los tres tipos de cooperativas que se describen en la Ley General de Sociedades Cooperativas, en Diario Oficial de la Federación (2018), los cuales son aquellas con actividades de producción de Bienes y/o Servicios, Consumo y Ahorro y Préstamo, las cuales se adaptan a todo tipo de actividades económicas sin alguna limitación.

En ese sentido, la estructura económica mostrada en la Tabla 2 permitió la exploración en la identificación desde una perspectiva de participación de las sociedades cooperativas en la economía social del estado de Chihuahua. En esa tabla, se observa el marco general de las cooperativas constituidas y las que se encuentran en operaciones en contexto económico. Dichos organismos, por naturaleza tienen relevancia social en la contribución de la naturaleza de los OSSE como organizaciones sociales de personas que se unen con la finalidad de desempeñar actividades económicas para su autoempleo y gestión social; todo esto dentro de la formalidad de una sociedad mercantil participativa en la economía de México.

Uno de los objetivos de la Dirección de Economía Social relativo al fomento a las cooperativas, menciona que dicha institución debe aportar un desempeño gubernamental para que los OSSE en el estado incrementen la competitividad empresarial. En la administración que es objeto de esta investigación, dicho apoyo se realiza por medio del "Programa Apoyo para el Fomento a la Economía Social 2021"; el mismo, comprende desde la asesoría para la formalización de organizaciones sociales en sociedades cooperativas y fomento al autoempleo de grupos productivos, hasta capacitaciones e incentivos económicos para el crecimiento y desarrollo de los OSSE.

La información detallada del servicio de este organismo de Gobierno del Estado de Chihuahua y los objetivos mencionados se describen en la Tabla 3 por su tipo de contenido.

Tabla 3. Programas para el fomento de la economía social en Chihuahua.

Tipo de apoyo	Descripción	Beneficio social	Beneficio económico
Gestión para la Constitución de Sociedades cooperativas	Gestión del proceso de constitución legal de la figura jurídica ante la Dirección de Comercio de la SIDE.	Formalización de grupos productivos u organizaciones sociales en sociedades cooperativas sin ningún costo para su constitución legal.	Ingreso económico derivado de la generación de empleos (autoempleo) para los integrantes de la cooperativa. Integración de las cooperativas como unidades económicas en la estructura económica del estado.
Incentivos Económicos	Subsidios en especie para equipamiento, maquinaria e insumos que apoyen a la cooperativa a incrementar su productividad. Garantías líquidas para el acceso de las cooperativas a financiamiento.	Bienestar social dentro de los procesos productivos de la cooperativa. Desarrollo de mejores habilidades técnicas, tecnológicas por medio del equipamiento.	Innovación, tecnificación, renovación de equipamiento, maquinaria, materia prima para una mejor capacidad productiva, gestión y soporte de los productos o servicios.
Asesorías y Capacitación	Capacitación para el desarrollo y mejora continua de las sociedades cooperativas constituidas en capacidades técnicas y empresariales.	Desarrollo de habilidades de los integrantes de la cooperativa en especialización por áreas operacionales. Incentivar la mejora continua en la adquisición de conocimientos para la administración y operación de la cooperativa.	Identificación de áreas de oportunidad y deficiencias en el desarrollo de los procesos productivos de la cooperativa para su atención y resolución con enfoque en impacto productivo de la cooperativa.

Los apoyos descritos se presentan como una oportunidad para el desarrollo, crecimiento y seguimiento de las sociedades cooperativas formalizadas. Estos apoyos tienen un impacto directo en el incremento de habilidades y capacidades empresariales en función de la organización social, incentivos económicos para generar una mayor capacidad productiva, tecnificación y expansión de tal manera que se obtengan más y mejores beneficios sociales y económicos para las cooperativas en el estado de Chihuahua.

5. Conclusiones

Los resultados de este estudio indican que las cooperativas enfrentan diversos desafíos para su sostenibilidad a largo plazo. Entre los principales problemas identificados están la falta de acceso a financiamiento y la limitada capacidad de los miembros para administrar y expandir sus negocios. Aunque el gobierno estatal ha implementado programas de apoyo, como el otorgamiento de incentivos económicos y capacitación técnica, estas medidas aún resultan insuficientes para cubrir las necesidades de todas las cooperativas. Esto limita su crecimiento y su capacidad para competir en el mercado formal.

Otro aspecto relevante es el impacto de las cooperativas en el bienestar social de sus miembros. A través de encuestas y entrevistas, se pudo constatar que los miembros de las cooperativas valoran

altamente la capacidad de las organizaciones para generar ingresos y mejorar su calidad de vida. Sin embargo, también se destacó la necesidad de fortalecer las capacidades empresariales de los socios, a fin de mejorar la gestión interna y aumentar la competitividad de las cooperativas en el mercado.

El análisis de la estructura financiera de las cooperativas muestra que muchas de ellas dependen en gran medida de los subsidios y apoyos gubernamentales para mantenerse operativas. Esto las coloca en una situación de vulnerabilidad frente a cambios en las políticas públicas o recortes presupuestarios. Las cooperativas que han logrado diversificar sus fuentes de ingresos, ya sea a través de la comercialización de productos en mercados externos o la creación de redes de colaboración con otras cooperativas, han demostrado una mayor capacidad para resistir las crisis económicas.

No cabe duda de que las sociedades cooperativas juegan un papel fundamental en la economía social de Chihuahua, particularmente en la generación de empleo y la integración de grupos marginados en el mercado formal. A pesar de los desafíos que enfrentan, estas organizaciones han demostrado ser resilientes y adaptables, logrando operar en sectores clave de la economía regional, como la manufactura y la agricultura.

Sin embargo, es evidente que, para maximizar el potencial de las cooperativas, se requiere un mayor apoyo en términos de políticas públicas. Las cooperativas necesitan acceso a financiamiento flexible, capacitación técnica más especializada, y una mayor integración con las cadenas de valor a nivel local y nacional. El fortalecimiento de estos aspectos no solo beneficiaría a las cooperativas, sino también a las comunidades donde operan, promoviendo un desarrollo económico más equitativo y sostenible.

Las cooperativas de Chihuahua tienen el potencial de convertirse en un modelo exitoso de economía social en México, siempre y cuando se les brinden las herramientas necesarias para crecer y competir en igualdad de condiciones con otros actores del mercado. Además, el desarrollo de redes de cooperación entre las cooperativas y la creación de alianzas estratégicas con empresas privadas podrían ser clave para su expansión.

Finalmente, este estudio recomienda la implementación de políticas que incentiven la formación de nuevas cooperativas, especialmente en sectores con alto potencial de crecimiento, como el turismo, la tecnología y los servicios de salud. También se sugiere realizar estudios adicionales para profundizar en las barreras que enfrentan las cooperativas en términos de acceso a recursos y sostenibilidad a largo plazo, con el fin de proponer soluciones más efectivas para su consolidación.

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**Conflictos de Interés:** "El autor declara que no existen conflictos de interés."

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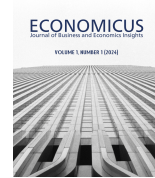
Book Review

Review of "Fintech from an entrepreneurship perspective" by Raúl Gómez Martínez

Reseña "Las Fintech desde la perspectiva del emprendimiento" por Raúl Gómez Martínez

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Abstract: Fintech allows us to save time and costs in financial transactions and faster and more agile operations, credit applications and almost instantaneous transfers, in addition to the fact that their business models are more efficient and less onerous than those carried out by banks and traditional financial institutions. since they offer cheaper and even free services compared to traditional ones.

Keywords: Financial companies, technological companies, incubators.

Resumen: Las Fintech nos permiten ahorrar tiempo y costos en las transacciones financieras y operaciones más rápidas y agiles, solicitudes de crédito y transferencias casi instantáneas además de que sus modelos de negocios son más eficientes y menos onerosas que las que realizan los bancos y las instituciones financieras tradicionales ya que ofrecen servicios más baratos e incluso gratuitos en comparación a las tradicionales.

Palabras clave: Empresas financieras, empresas tecnológicas, incubadoras.

Detalles del Libro

Citation

Introducción

De acuerdo a la biografía publica de Raúl Gómez Martínez, autor del texto analizado, es doctor y profesor en economía de la empresa y finanzas por la Universidad Rey Juan Carlos de Madrid España, profesor desde el año 2007 de las asignaturas de finanzas, valoración y adquisición de empresas, mercados financieros, productos financieros y dirección financiera entre otras, además de elaborar material informativo con diferentes escuelas de negocios y centros formativos y desde 1997 colabora como consultor con las principales instituciones financieras nacionales tanto en España con del extranjero, sobre todo en proyectos relacionados con mercados financieros.

El título del libro que comentamos, Las Fintech desde la perspectiva del emprendimiento, del autor Raúl Gómez Martínez publicado en este 2024 en editorial Dykinson, S.L. es un claro ejemplo de lo que constituye el deber ser de un libro dedicado a la tarea de divulgación, entendida esta característica como la posibilidad de acercar conocimiento de carácter técnico financiero y económico a los estudiosos de ambas disciplina, además del público en general, en esta obra Gómez Martínez explora la digitalización del sector financiero y analiza el surgimiento de las Fintech. Es una lectura relevante para comprender cómo estos startups desafiaron el contexto del sector financiero y utilizaron tecnología para innovar.

A Raúl Gómez Martínez se le puede considerar como un autor prolífico en el área económica ya que además del libro que estamos comentando es autor de obras como: Métodos aplicados de valoración y adquisición de empresas, el cual representa un referente respecto a la valoración y adquisición de empresas ya que describe los métodos de valoración de empresas desde una perspectiva aplicada, además de ser coautor de: Introducción a la Inteligencia Artificial: Sistemas expertos, redes neuronales y computación evolutiva, que aborda temas relacionados con la inteligencia artificial.

La última década ha estado caracterizada por la llegada de las empresas Fintech, cuyo concepto comentaremos más adelante, y de la mano del interés en su estudio, su relativo carácter nuevo y el desconocimiento de su alcance, han hecho que surjan muchas dudas respecto a su impacto en sus diversas variables, como es el caso del emprendimiento, sin embargo, a pesar de tratarse de un tema tan importante, su análisis en detalle todavía muy limitado.

De acuerdo a lo anteriormente expuesto, hemos querido comprobar si existe la posibilidad de relacionar el desarrollo de esta nueva industria con el destacado aumento del emprendimiento que ha experimentado en diversas regiones del mundo y sobre del que apenas se ha investigado la cuestión.

Además de comprobar como la aparición de empresas financiero-tecnológicas ha influido positivamente en el destacado avance de los emprendimientos experimentado en la última década y que, efectivamente, los servicios de financiación por estas ofrecidos son uno de los factores que han dado lugar a esta relación.

¿Por qué Fintech?

Empezando por el significado de la palabra *Fintech,* que proviene de la abreviación de las palabras en inglés: *financial* y *technology* término que engloba toda clase de innovaciones tecnológicas usadas para proveer servicios financieros dirigidos tanto a usuarios privados como a empresas.

El concepto que, aunque parece relativamente nuevo, surge, en palabras del autor, hace más de 25 años a principios de la década de 1990, gracias al apoyo de lo que hoy se conoce como Citigroup (Gómez, 2024). El contexto histórico, político y económico en el cual hacen su aparición las Fintech se podría englobar en la crisis económica del año 2008, la pérdida de confianza en los bancos, y las entidades financieras tradicionales tratando de adaptarse a nuevas regulaciones legales.

También se considera como antecedente de estas empresas la Ley Glass-Steagall que entre sus objetivos era la separación de las actividades bancarias, la prohibición de las activades especulativa y el fomento de la transparencia y la estabilidad financieras y mientras que en Estados Unidos e Inglaterra

los cuerpos legales evolucionaron hacia un modelo de banca especializada, en el resto de Europa el modelo predominante era el de una banca universal.

El autor señala que finalmente la ley Glass-Steagal fue revocada por Bill Clinton en 1999, es decir, 9 años antes de la quiebra de Lehman Brother por la Financial Services Modernization Act, más conocida como Ley Gramm-Leach-Bliley (Gómez, 2024). Esta nueva regulación permitía el acceso a formas de financiación más estables y de ayuda en caso de crisis financiera, pero implicaba estar sometido a una regulación más estricta.

El origen de una startup puede variar ampliamente, pero en general, se trata de la conjunción de una idea innovadora, un equipo de emprendedores apasionados, la determinación para llevar a cabo la visión de la empresa en el mercado (Gómez, 2024).

Empecemos por el modelo de negocios que siguen las empresas Fintech, el que nos permiten ahorrar tiempo y costos en las transacciones financieras y operaciones más rápidas y agiles, solicitudes de crédito y transferencias casi instantáneas además de que son más eficientes y menos costosas que las que realizan los bancos y las instituciones financieras tradicionales ya que ofrecen servicios más baratos e incluso gratuitos en comparación a las tradicionales, además, su infraestructura encuentra su base tecnológica en la nube lo que le permite almacenar grandes cantidades de datos y acceder a recursos informáticos de manera rápida y flexible.

Las Fintech presentan distintas variables, dependiendo de su objetivo principal relacionada con la inversión, en ellas los clientes acceden, gestionan y emprenden las oportunidades de inversión, lo que resulta en una mayor inclusión financiera y una mayor capacidad para tomar decisiones de inversión informadas, otra puede ser en el área de divisas ya que agilizan y acortan los procesos relacionados con transferencias.

Pueden presentar variantes de pagos que simplifican y mejoran la forma en que las personas realizan transacciones financieras diariamente y en relación con los seguros, los consumidores interactúan de manera más amigable con las pólizas y las compañías de seguros que operan en el mercado transformando la experiencia de la industria de seguros

Por lo general el término startup se asocia con empresas que están en sus primeras etapas de desarrollo y que buscan crecer rápidamente y aunque el término está limitado exclusivamente al ámbito tecnológico, muchas pertenecen a este rubro, entonces, una startup es una empresa emergente o de nueva creación que busca desarrollar un modelo de negocio innovador, estas compañías por lo general buscan satisfacer una necesidad específica.

Un factor que marca diferencia entre una startup y un fintech es la forma en como esta capta clientes en relación las empresas de carácter tradicional que cuentan con oficinas a pie de calle y esperan simplemente a que los clientes entren, al contrario, las fintech captan clientes en el mercado digital, lo que les obliga a optimizar el costo de adquisición de clientes.

El fenómeno de las fintech está sustentado en multitud de empresas nuevas que intentan aprovechar el potencial tecnológico que ofrecen los servicios financieros diferenciales, sería imposible llegar a comprender el alcance de este fenómeno sin comprender lo íntimamente ligado a este que se encuentran las llamadas startup y sus características principales.

Para llegar a vislumbrar en su totalidad el alcance de esta revolución tenemos que entender cuales con los principios en los que se sustenta una startup y sus rasgos más habituales que se dan también en las Fintech.

Según el autor, el ciclo de vida de las Fintech se asemeja a las llamadas startup y cada una se caracteriza por distintos atributos dependiendo del recorrido en el que se encuentre y a partir de identificar y valorar la situación de cada una (Gómez, 2024).

Es decir, la mayoría de las Fintech son startup, pero con características específicas tales como, que son empresas que se basan en la confianza de los clientes, debido a lo cual su normativa en materia de

seguridad y garantía es muy rígida, esta confianza se debe ganar ya que se trabaja con el dinero de sus clientes.

Las empresas Fintech cambiaron el modelo de negocio sobre en dos aspectos fundamentales: su base se encuentra en las tecnologías de la información y en dejar de lado el servicio tradicional que se da en las instituciones financieras, permitiendo así una mejor atención al cliente, ahorrar tiempo, costo y en general mejorar la experiencia de los usuarios.

Las Fintech adoptan características de las startups tales como innovación con la incorporación de ideas nuevas y enfoques distintos a los tradicionales en el mercado, además están diseñadas para alcanzar gran número de usuarios en poco tiempo, resolviendo necesidades de mercado o servicios al cliente.

En su nacimiento o etapa semilla, los emprendedores de las Fintech cuentan con prácticamente solo una idea para convencer a posibles clientes e inversionistas para participar en el proyecto, en este momento se forma el equipo inicial de la empresa, se acuerdan las reglas o bases de la misma, incluyendo todos los procedimientos legales que les darán el carácter de socios o accionistas de la empresa y las responsabilidades de cada una de las partes involucradas, además de las reglas en caso de posibles conflictos y como se resolverán.

Los apoyos económicos e inversiones se obtienen por lo general de amigos y familia con los que se puede patrocinar los primeros costos de la empresa, también se puede conseguir patrocinio con las llamadas "aceleradoras o incubadoras" que pueden aportar asesoramiento aparte de financiamiento.

Una vez que se cuenta con estos apoyos la fase más crítica del proyecto es concentrarse en el objetivo fundamental, es decir, desarrollar la idea del negocio y validarla para lo cual se requiere un Producto Mínimo Viable o MVP, el producto mínimo viable es un producto con las características suficientes para dar el servicio a los clientes iniciales, y que estos puedan otorgarnos retroalimentación que guie el desarrollo del producto o servicio (Gómez, 2024).

Posteriormente la empresa comienza a registrar sus primeros clientes o usuarios, a cosechar sus primeras métricas, teniendo en consideración estos datos, será básico para la mejora del producto a través de un proceso de repetición, en el que se toma obligatoriamente la retroalimentación de los primeros usuarios y se corrigen posibles errores.

En esta fase de crecimiento, cuando la Fintech ya es un producto con cierta rentabilidad en el mercado y que cumple con las necesidades de los clientes y usuarios a los que va dirigidos y que la evalúan de forma positiva y el cliente está dispuesto a pagar por el producto o servicio, el costo del producto terminado es menor que lo se factura por el servicio y, además, el mercado está abierto a la idea de negocio que puede ser rentable.

En conclusión, en esta etapa las Fintech han logrado atraer clientes, además de contar con una estrategia de crecimiento concreta y de captación de clientes, es una fase de beneficios en números y en clientes.

Llegada la fase de expansión es normal que se empiecen a observar ciertos límites en su crecimiento, por lo que es el momento de ampliar los mercados hacia donde se pueda dirigir la empresa o hacia nuevos nichos para que al final y llegada la fase de vender la compañía y esto se puede llevar a cabo por medio de la fusión o absorción o de la oferta pública o venta.

El origen del las Fintech

Las startups en general, y las Fintech en particular, siguen un ciclo de vida, que, si bien es verdad que no es del todo riguroso, es muy didáctico para identificar el grado de madurez de cualquier nueva empresa.

Ya comentamos que como en casi todos los inicios de cualquier stratup, el inicio de las Fintech se da en el   momento en que una empresa es ideada y comienza a desarrollarse, el origen varia en el términos de cómo surge la idea y como se va desarrollando, muchas de estas empresas nacen al amparo de una idea innovadora o para solucionar algún problema que aún no se ha visualizado del todo en el mercado,

puede ser que nazcan a partir de experiencias personales de sus fundadores, alguna situación personal y la manera en cómo salieron avante de la misma, todo lo cual es una fuente de motivación y de dirección para el desarrollo de la Startup.

Cuando se habla de las llamadas incubadoras, el autor afirma que estas: brindan apoyo y recursos en sus primeras etapas, lo cual puede incluir financiamiento, mentoría, espacios de trabajo y acceso a redes de contactos.

Además, Gómez afirma que, si esta incubadora se da un ecosistema emprendedor en un entorno o conjunto de elementos interconectados que fomentan y respaldan la creación, desarrollo y el crecimiento de startups y empresas emergentes, estos ecosistemas están diseñados para facilitar la innovación, el intercambio de conocimientos, acceso a recursos, etc.

Un ecosistema emprendedor puede variar el tamaño y alcance, pero generalmente incluye una combinación de elementos como: emprendedores, inversores, instituciones académicas, eventos y conferencias, gobierno y regulación y capital de riesgo.

En relación con las incubadoras de grandes bancos su función es el fomento a la innovación en el sector financiero, buscan nuevas iniciativas, fundadores y lideres para ayudar a montar su proyecto desde cero con asesoría de expertos en distintos tramos de inversión.

Un ecosistema emprendedor, las incubadoras brindan apoyo y recursos a las startups en sus primeras etapas. Las incubadoras Fintech organizadas por bancos grandes buscan nuevas iniciativas, fundadores y lideres para ayudarles a montar su proyecto desde cero con la ayuda de expertos.

También es necesario tocar el tema de la financiación, que por lo general es riesgosa, ya que representa mucha incertidumbre por su propia condición de strartups, por ese motivo se suele recurrir a fuentes de financiación alternativas en la que se pueda vincular al acreedor con la innovadora idea de negocio y sus futuros rendimientos, una de estas fuentes la encontramos en el *Crowdfunding*, donde muchos inversores minoristas aportan sus ahorros para financiar el proyecto de la Fintech y a cambio de su aportación pueden participar de sus beneficios, como ocurre en el *Equity Crowdfundig*, donde el inversor es accionista de la Fintech; o pueden recibir unos intereses en el caso del *Equity Crowdlending*, ya que los inversores son prestamistas de la Fintech.

Reflexiones finales

En resumen, el libro Las Fintech desde la perspectiva del emprendimiento ofrece una visión completa de cómo estas empresas han revolucionado el mundo financiero y cómo los emprendedores pueden aprovechar estas tendencias para crear soluciones innovadoras.

Las Fintech desde la perspectiva del emprendimiento, es un claro ejemplo de lo que constituye el deber ser de un libro dedicado a la tarea de difusión, entendida esta característica como la posibilidad de acercar conocimiento de carácter técnico financiero y económico a los estudiosos de ambas disciplinas, además del público en general, en esta obra Gómez Martínez explora la digitalización del sector financiero y analiza el surgimiento de las Fintech. Es una lectura relevante para comprender cómo estos emprendimientos desafiaron el contexto del sector financiero y utilizaron tecnología para innovar.

Se elabora un repaso un repaso de la situación del sector de este tipo de empresas destacando los retos que deben afrontar, tales como posibles debilidades, viabilidad económica, continuar innovando y con ello crear valor, superar posibles amenazas como contextos económicos volátiles y grandes amenazas desde un punto de vista político y social, la competencia con la banca tradicional, donde las Fintech pueden tomar la oportunidad y establecer acuerdos de colaboración que les permitan aprovechar las capacidades de los grandes bancos.

Por ultimo saber detectar fortalezas y mejorar su capacidad de innovación y flexibilidad, orientando sus estrategias comerciales para lograr modelos de colaboración, incrementar las transacciones online y, por último, alcanzar acuerdos con los bancos tradicionales que aportan valor a ambas partes.

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Referencias

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