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## Model testing – decision-making on capacity expansion in family businesses. Evidence from Portugal

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**Abstract.** This paper aims to test and validate a model of internal factors influencing the capacity expansion decisions of family businesses, thereby helping these organizations better understand their decision-making processes. The identified internal factors include socio-emotional wealth, intergenerational cooperation, and a heterogeneous top management team. The study focuses on family businesses in the Portuguese food industry and employs both qualitative and quantitative methods. A structured online questionnaire, completed by 150 respondents, was analyzed using SPSS. Additionally, in-depth interviews were conducted to confirm the quantitative findings and provide a broader conceptual perspective. The results indicate that both qualitative and quantitative analyses support the proposed model.

**Keywords:** family businesses, decision-making, capacity expansion, Portugal

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## 1. INTRODUCTION

Family businesses have been a major focus of research, as reflected in the 42,187 results found in the Scopus database for the keyword “family business.” This widespread academic interest is due, in part, to the fact that family businesses constitute approximately 60% of all businesses worldwide (European Commission, n.d.), making them a significant force in global economies and employment.

Building on this research, Nemes and Konczos-Szombathelyi (2023a) developed a model that examines the internal factors influencing capacity expansion decisions in family businesses. Initially, this model was constructed through a systematic literature review and later verified through a case study. However, the authors concluded that a larger-scale empirical validation was necessary.

This study seeks to test and validate that model using data from family businesses in the Portuguese food industry, where 99.9% of firms fall under the small and medium enterprise (SME) category (Lisboa et al., 2021). The study employs a three-stage approach:

1. Defining the conceptual framework for family businesses through a comprehensive literature review.
2. Examining international literature on family business decision-making, focusing on capacity expansion in Portugal.
3. Analyzing primary data collected from 150 Portuguese family businesses through online questionnaires supplemented by in-depth interviews to provide additional insights.

The findings of this research indicate that three key internal factors shape decision-making regarding capacity expansion in family businesses:

1. Socio-emotional wealth (SEW)
2. Intergenerational cooperation (GEN)
3. Heterogeneous top management teams (HET)

These factors, whether positive or negative, significantly influence capacity expansion decisions in family businesses.

By focusing on these internal decision-making dynamics, this research explores an underexamined area of family business studies, offering insights into how family firms navigate capacity expansion challenges.

The next section reviews existing literature on family business decision-making and capacity expansion to provide a foundation for this study.

## 2. LITERATURE REVIEW

This literature review consists of three main parts. First, the concept of family business is defined based on recent studies in the Scopus database, followed by an examination of decision-making processes in family businesses. Second, a systematic literature review was conducted using the keywords “family business” and “decision-making,” focusing on English-language, open-access journal articles from the social sciences and business management and accounting fields. The search initially yielded 47 relevant studies, narrowed to 20 papers based on content relevance.

Finally, the authors conducted a second literature search in the Portuguese B-on database, focusing on the keywords for “family business” and “capacity expansion” within studies authored by Portuguese researchers. This search yielded eight relevant articles, providing insights into capacity expansion in family businesses.

## 2.1. Family business: Definitional perspectives

There is no single, universally accepted definition of a family business, as different scholars emphasize various characteristics. However, researchers generally agree that family businesses face unique challenges compared to non-family enterprises (Bite & Konczos-Szombathelyi, 2020). The following perspectives illustrate key definitional variations:

- **Ownership-Based Definitions:**
  - Schell et al. (2023) define a family business as one in which the family owns at least 50% of the company, at least one family member holds a top management position, and leadership is passed from one family member to another, either as a planned, ongoing, or completed process.
  - Espinoza and Arbaiza (2023) consider any business family-owned if the owners are family members.
  - Putritamara et al. (2023) set the threshold lower, defining a family business as one where founding family members own at least 25% of the shares.
  - Bürgel and Hiebl (2023) argue that family businesses are characterized by direct family control over management and decision-making.
- **Governance and Succession-Based Definitions:**
  - Kathuria et al. (2023) suggest that a business qualifies as a family business when multiple family members cooperate in management and in-family succession is ensured.
  - Lee (2023) emphasizes the role of generational continuity, stating that a business remains a family enterprise if in-family succession has taken place, is planned, or is underway.
- **Family and Business as Interwoven Systems:**
  - Hsueh et al. (2023) classify family businesses as hybrid organizations, combining family structure and business operations elements.
  - Brundin and Languilaire (2023) distinguish family businesses by their dual focus on business management and family goals.
  - Arnold et al. (2023) highlight the conflicting social dynamics of family businesses, viewing them as parallel but interacting social systems.
  - Biel and Ślusarczyk (2022) argue that decision-making in family businesses is strongly influenced by intuition, traditions, and upbringing rather than standard management methods.

Table 1 consolidates and summarizes these differences.

Table 1

Conceptual categories of family businesses

<b>Category</b>	<b>Definition</b>
Ownership-Based Family Businesses	Defined by family control over shares and decision-making (Bürgel & Hiebl, 2023; Espinoza & Arbaiza, 2023; Putritamara et al., 2023).
Governance and Succession-Based	Defined by succession planning and multigenerational management (Kathuria et al., 2023; Lee, 2023).
Family as a Social and Business System	Defined by the integration of family values and business operations (Arnold et al., 2023; Brundin & Languilaire, 2023; Hsueh et al., 2023).

*Source:* Compiled by the authors based on the cited literature

## 2.2. Decision-making in family businesses

The literature on decision-making in family businesses is extensive and has been examined from multiple perspectives (Jang et al., 2022). Key research topics over the past three years have included sustainability, generational change, innovation, internationalization, research and development (R&D), and digital transformation (Table 2).

**Table 2**

Recent Publications on Decision-Making in Family Businesses (Last 3 Years)

Subject	Number of Publications
Sustainability	9
Succession	15
Innovation	6
Internationalization	4
Research & Development	5
Digital Transformation	8

*Source:* Compiled by the authors based on the cited literature

Much of the literature compares decision-making processes in family and non-family businesses (Mucci et al., 2021). Studies show that financial security for the family is often a primary concern in family businesses, influencing key decisions. However, research also highlights broader economic, social, and environmental considerations, positioning family businesses as significant contributors to sustainable economic development (Cioca et al., 2020).

During the literature review, the authors identified research suggesting that innovation challenges in family businesses are similar to those faced by small and medium enterprises (SMEs) in general (Civelek et al., 2021). However, within family firms, the pursuit of a circular economic model serves a dual purpose:

- Ensuring the business’s longevity for future generations
- Strengthening its social reputation (Utrilla et al., 2018)

The dual function of family businesses in decision-making has been explored by Kleve et al. (2020), who describe them as operating within a family network or the “Family 3.0” model. Businesses balance traditional family dynamics with formal strategic decision-making processes in this structure. Additionally, efforts toward sustainable development often lead to increased investment in R&D projects (Kotlar et al., 2014).

Several studies also examine the impact of succession planning on higher education choices. Mitrović et al. (2019) found that future successors often select degree programs and specializations based on the needs of their family businesses.

Research on risk preferences suggests that in family firms where a single family or small group of family members holds a large ownership stake, risk-taking behaviors may differ. Herrero (2017) found that small family firms typically have simpler ownership structures, often concentrated within a few individuals, which influences their diversification strategies. Other studies show that early-stage family businesses tend to have few employees, often limited to the founders, and only later develop formal decision-making systems as they grow (Jones & Li, 2017).

Regarding innovation and risk-taking, Wei and Chen (2022) found that while family businesses are generally open to innovation, they tend to exhibit risk-averse behavior in their decision-making—a complex dynamic mirrored in the present research. Similarly, Putritamara et al. (2023) analyzed Indonesian SMEs and highlighted how digital transformation initiatives can help family businesses become more resilient in times of crisis, such as the COVID-19 pandemic.

The internationalization of family businesses is another well-researched topic. Keßler and Zipper-Weber (2023) found that socio-emotional wealth plays a key role in shaping risk-taking attitudes, with some family businesses demonstrating a greater willingness to expand globally.

### 2.3. Capacity expansion

While the literature on decision-making in family businesses is extensive, there is a notable gap in research specifically examining the internal factors that influence capacity expansion decisions. Although the authors identified eight studies related to capacity expansion in family businesses from the Portuguese B-on database, these studies primarily focus on external innovation, financial constraints, and economic impact rather than the internal dynamics shaping decision-making processes.

According to Almeida et al. (2021, 2023), capacity expansion in family businesses can occur through external innovation (sourced from suppliers and industry partners) or internal innovation (developed within the company). Small businesses tend to rely more on external innovations, while larger companies are also open to internally generated innovations. In both cases, knowledge transfer poses a major challenge.

Delgado-García et al. (2023) examined the role of CEOs in family businesses regarding research and development (R&D) investments. Their findings indicate that CEOs actively supporting R&D initiatives often see a reduction in available capital, suggesting that capacity expansion can be financially demanding depending on the firm's resources.

From a broader perspective, Ferreira and Coelho (2020) define capacity expansion as a deliberate effort to create, enhance, or modify a company's resources and capabilities to adapt to environmental changes. Similarly, Guedes et al. (2022) found that socio-emotional wealth (SEW) in Portuguese family businesses positively influences capacity expansion decisions, reinforcing the idea that family values and emotional ties impact business growth strategies.

Several studies highlight the long-term significance of capacity expansion for family businesses. Hernández-Linares and Fernández (2020) and Howorth and Ali (2001) argue that capacity expansion is critical in shaping the future of family enterprises across generations. Da Silva Hounsell et al. (2021) emphasize that family businesses are key drivers of the Portuguese economy, with capacity expansion catalyzing economic growth and job creation.

The role of capacity expansion in times of crisis is also noteworthy. Vieira (2017) evaluated its strategic potential, concluding that family businesses often use capacity expansion as a survival strategy during economic downturns. This strategic resilience is partly attributed to the unique ability of family business owners to mobilize personal financial resources, allowing them to inject private wealth into the business. Such financial flexibility enables family firms to adopt a 'forward-escape' strategy, proactively investing in growth opportunities even amidst economic uncertainty, thereby securing their long-term sustainability.

### 2.4. Research gap and hypothesis

Despite the significance of capacity expansion in family businesses, existing research has primarily focused on broader decision-making processes, with limited attention to the internal factors shaping these expansion decisions. Previous research by Nemes and Konczos-Szombathelyi (2023b) identified a notable gap in studies that examine how internal dynamics—particularly those unique to family businesses— influence capacity expansion choices.

To address this gap, this study investigates three key internal factors that shape capacity expansion decisions in family businesses:

1. Socio-Emotional Wealth (SEW) – Family businesses often prioritize non-financial considerations, such as legacy, reputation, and long-term stability, over immediate profitability. SEW represents the

emotional and psychological investment of the family in the business, influencing risk tolerance and strategic priorities.

2. Intergenerational Cooperation (GEN) – Decision-making in family businesses is often shaped by collaboration between generations. In many cases, actively involved family members work alongside retired predecessors who continue to serve as advisors. These knowledge-sharing dynamics influence the firm's approach to capacity expansion, as generational continuity plays a crucial role in long-term strategic planning.
3. Heterogeneous Top Management Teams (HET) – While family members often retain decision-making authority, many businesses integrate external managers, consultants, and industry specialists into their leadership structures. These non-family professionals contribute diverse perspectives, enhance strategic decision-making, and provide specialized expertise in capacity expansion and internationalization.

### **Hypothesis**

This study hypothesizes that the internal factors influencing capacity expansion decisions in family businesses are:

- Socio-Emotional Wealth (SEW) – The family's emotional attachment and long-term vision shape expansion decisions.
- Intergenerational Cooperation (GEN) – Collaboration between generations strengthens decision-making continuity.
- Heterogeneous Top Management Teams (HET) – Inclusion of external professionals broadens perspectives and reduces decision-making risks.

The possible decision outcomes for capacity expansion are:

- Yes – The family business proceeds with expansion.
- No – The business rejects expansion due to financial, strategic, or cultural concerns.
- Postponement – The expansion is delayed until external conditions improve (e.g., securing funding, overcoming economic downturns, or adjusting to market shifts).

By integrating qualitative and quantitative research methods, this study aims to validate this hypothesis, providing a structured model for understanding how internal family business dynamics influence capacity expansion decisions.

## **3. RESEARCH METHODOLOGY**

The first step in this study was to define the research problem. Based on their previous research and professional experience, the authors recognized that the internal factors influencing capacity expansion decisions in SME family businesses within the food industry were not well understood by decision-makers. Although socio-emotional wealth (SEW), intergenerational cooperation (GEN), and heterogeneous top management teams (HET) have been identified as key internal factors influencing these decisions (as outlined in Section 2.4), business leaders are often unaware of their impact and, therefore, do not systematically consider them in their strategic choices.

After establishing the research focus, the authors formulated their research objectives:

- To analyze the internal factors affecting capacity expansion decisions using a visual flowchart.
- To identify possible decision outcomes (yes, no, postponement).
- To validate the proposed model through statistical analysis.

The next step was a literature review to identify relevant prior studies. However, a combined search using the keywords “family business,” “decision-making,” and “capacity expansion” yielded no direct results. To address this, the authors divided the search into two separate parts:

1. The Scopus database was searched using the keywords “family business” and “decision-making,” yielding 47 relevant articles, which were further refined to 20 based on content relevance.
2. The Portuguese B-on database was searched for “capacity expansion” within studies authored by Portuguese researchers, yielding eight relevant articles.

Following this literature review, the authors confirmed the research gap and framed their core research question as follows:

*To what extent do SEW, GEN, and HET influence capacity expansion decisions in SME food industry family businesses?*

### 3.1. Research method

A mixed-methods approach was used, incorporating both quantitative and qualitative techniques:

- Quantitative research: Online questionnaire survey
- Qualitative research: In-depth interviews

#### Survey design and data collection

The online questionnaire was developed based on prior research by Németh and Németh (2018). The authors employed a group sampling technique and distributed the questionnaire in Portuguese through:

- Social networking platforms
- Facebook groups focused on Portuguese family businesses
- The Portuguese Family Business Association (AFBE)

At the time of distribution, the AFBE had 152 registered members, while the two Facebook groups had a combined 5,642 members. However, not all members were family business owners; some were managers or individuals interested in the field. To ensure targeted responses, participants were asked to complete the survey only if they were actively involved in an SME family business in the food industry. This criterion included not only businesses directly engaged in food production but also those closely related to the sector, such as companies involved in food processing, distribution, and transportation of food products.

To maximize participation, the survey was distributed three times. After data cleaning, 150 fully completed responses remained for analysis. These responses were processed using SPSS version 23 (Statistical Package for the Social Sciences), focusing on correlation analysis. Given that Facebook-based surveys typically achieve a 2-3% response rate (Calpin, 2023), participation aligned with expectations.

#### Interview selection and process

For the qualitative component, a snowball sampling technique was used to select interviewees, resulting in five in-depth interviews arranged with the assistance of the Portuguese-Hungarian trade attaché. While these interviews were not the primary focus of the study, they provided valuable insights that reinforced the findings of the online questionnaire.

### 3.2. Data analysis and validation

The primary objective of data collection was to test and validate the authors' previously developed model by:

- Maximizing the number of valid survey responses
- Selecting high-quality interviewees to ensure meaningful qualitative data
- Drawing conclusions based on the analyzed data and validation of the model

## 4. EMPIRICAL RESULTS AND DISCUSSION

### 4.1. Overview of questionnaire results

Table 3 provides an aggregate analysis of the 150 survey responses, covering various dimensions, including:

- Industry sectors.
- Ownership structures.
- Decision-making processes.
- Internationalization activities.

Table 3

Aggregate Analysis of the Online Questionnaire (N=150)

Category	N	%
<b>Sector</b>		
Agriculture, food, forestry, fishing	132	88%
Manufacturing industries	12	8%
Transport and storage	6	4%
<b>Ownership Type</b>		
Members of one or more families	54	36%
Foreign individuals	36	24%
Portuguese (independent) individuals	30	20%
Foreign investors	18	12%
Portuguese financial investors	12	8%
<b>Family Ownership Level</b>		
26-50%	78	52%
More than 51%	72	48%
<b>Decision-Making Participants</b>		
Family only	6	4%
Family and external consultants	60	40%
Family and non-family managers	12	8%
Family, Non-family managers, and External consultants	12	8%
Family and Owners	48	32%
Family, Owners, and External consultants	6	4%
Owners only	6	4%
<b>Investment in Capacity Expansion (Past 10 Years)</b>		
Yes	144	96%
No	6	4%
<b>Possible Outcomes of a Capacity Expansion Decision</b>		
Yes (Approve expansion)	51	34%
No (Reject expansion)	48	32%
Postponement	51	34%
<b>Internationalization Activities</b>		
<b>Import (purchase)</b>		
Yes	144	96%
No	6	4%
<b>Export (sale)</b>		
Yes	108	72%
No	42	28%

<b>Operation of Foreign Sales Subsidiaries</b>		
Yes	78	52%
No	72	48%
<b>Use of Licensing, Franchising, or Subcontracting</b>		
Yes	96	64%
No	54	36%
<b>Creation of a Foreign Production Subsidiary</b>		
Yes	102	68%
No	48	32%

*Source:* Authors' results

#### 4.2. Model validation and correlation analysis

The authors performed a correlation analysis to validate the model, examining the impact of the three identified internal factors on decision-making related to capacity expansion. Pearson's correlation coefficient was used to measure the strength and direction of these relationships.

The analysis followed these steps:

- Data Collection: Responses were analyzed based on three key factors:
  - Socio-emotional wealth (SEW)
  - Intergenerational cooperation (GEN)
  - Heterogeneous top management team (HET)
  - Each factor was measured on a scale of 1-7, reflecting its influence on capacity expansion decisions.
- Correlation Matrix: The Pearson correlation test was used to determine the extent to which SEW, GEN, and HET influenced decision-making outcomes.

#### 4.3. Interpretation of correlation coefficients

The correlation coefficients indicate the following relationships:

- SEW and Decision-Making (+0.165): The positive correlation indicates that higher levels of socio-emotional wealth (SEW) are modestly associated with an increased likelihood of capacity expansion. This suggests that while family businesses with strong SEW values prioritize legacy preservation and long-term stability, these emotional and relational factors can also support strategic growth decisions, particularly when expansion aligns with the family's vision and values.
- GEN and Decision-Making (+0.185): The positive correlation implies that greater intergenerational cooperation (GEN) is linked to a higher propensity for capacity expansion. This finding highlights that effective collaboration between multiple generations fosters continuity in strategic decision-making, enabling businesses to leverage diverse experiences and perspectives, which can enhance confidence in pursuing growth opportunities.
- HET and Decision-Making (+0.450): The strong positive correlation indicates that businesses with heterogeneous top management teams (HET) are significantly more likely to engage in capacity expansion. The diversity of professional backgrounds, skills, and perspectives within such teams appears to facilitate more dynamic and innovative decision-making processes, promoting a greater openness to growth-oriented initiatives.

#### 4.4. Statistical analysis and hypothesis testing

For the online questionnaire, the accepted margin of error was set at 5% ( $p < 0.05$ ) per standard statistical practices. The dataset was analyzed using descriptive statistics and a one-sample t-test to determine whether the measured factors significantly deviated from predefined reference values (4 or 1, depending on the scale used).

The questionnaire was structured into four main sections, each measuring a key internal factor influencing capacity expansion decisions:

1. SEW (Socio-emotional wealth)
2. SEW2 (A second SEW-related group to ensure response consistency)
3. GEN (Intergenerational cooperation)
4. HET (Heterogeneous top management teams)

Since no comparable external dataset was available, the authors used a one-sample t-test to compare the observed mean values against a predefined mathematical reference point. The results indicate that all four measured factors scored significantly above average, confirming their strong influence on decision-making regarding capacity expansion in family businesses.

The one-sample t-test results are as follows:

- SEW:  $t = 96.06$ ,  $p < 0.001$
- GEN:  $t = 106.08$ ,  $p < 0.001$
- HET:  $t = 17.94$ ,  $p < 0.001$
- SEW2:  $t = 59.2$ ,  $p < 0.001$

These findings provide statistical validation for the proposed model, reinforcing the significance of socio-emotional wealth (SEW), intergenerational cooperation (GEN), and heterogeneous top management teams (HET) as key determinants in capacity expansion decisions.

Table 4 presents the minimum, maximum, mean, and standard deviation (SD) values for each factor.

Table 4

Statistical Analysis of SEW, GEN, and HET (N=150)

Factor	Min	Max	Mean	SD
SEW	5.29	6.86	6.239	0.285
GEN	5.56	6.78	6.26	0.261
HET	0.91	1.64	1.284	0.194
SEW2	4.08	6.58	6.283	0.472

Source: Authors' results

The following section examines the respondent companies' sectoral composition and business characteristics to better contextualize these findings.

## 5. SECTORAL AND BUSINESS CHARACTERISTICS OF RESPONDENTS

### 5.1. Sectoral distribution

The agriculture, food, forestry, and fishing sector dominates the sample, with 88% of respondents engaged in these activities. The manufacturing sector accounts for 8%, while transport and storage businesses represent 4% of the total. Importantly, all these categories are closely related to the food industry, encompassing businesses involved in food production, processing, as well as the transportation and storage

of food products, which are integral parts of the agri-food value chain. This strong concentration in agriculture and food-related sectors reflects the economic composition of the respondent base, particularly in rural or resource-based economies like Portugal. The prevalence of family businesses in these traditional fields aligns with previous research, which indicates that such enterprises often thrive in long-established, generational industries.

## **5.2 Ownership structure**

Ownership structures among respondents are diverse. The largest category, representing 36% of businesses, comprises firms owned by one or more family groups. Foreign individuals account for 24% of the total, while Portuguese independent investors account for 20%. Meanwhile, external investors—both foreign and domestic—together represent another 20%, highlighting a notable presence of non-family capital. This suggests a trend toward external investment in family businesses, potentially signaling a shift toward professionalized management and financial diversification.

## **5.3. Family ownership**

The distribution of family ownership is nearly even. In 52% of the companies, family ownership falls between 26-50%, while in 48%, family control exceeds 51%. These figures highlight the continued significance of family influence, though they also suggest a growing tendency toward shared ownership with external stakeholders. This trend reflects a broader global shift, where family businesses increasingly seek external investment while maintaining majority control to balance strategic growth with legacy preservation.

## **5.4. Decision-making processes**

Decision-making structures within the respondent companies vary. The most common model, found in 40% of cases, involves both family members and external consultants, followed by family members and owners alone (32%). While families remain central to decision-making, the frequent involvement of external advisors highlights the increasing complexity of business operations, particularly in areas such as capacity expansion and internationalization.

Among the key factors influencing capacity expansion decisions is socio-emotional wealth (SEW), a concept referring to the emotional attachment and long-term vision that family businesses prioritize. Figure 1 presents an overview of SEW scores among respondents, demonstrating that most family business owners rate SEW highly, reinforcing its strong influence on decision-making.

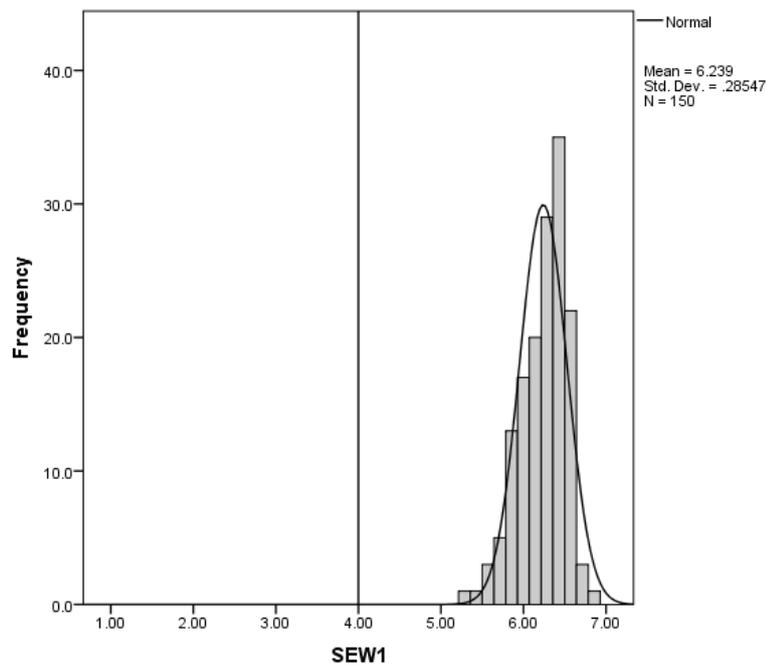


Figure 1. Histogram of SEW

A second set of SEW-related questions (SEW2) was included in the questionnaire to ensure response reliability. Figure 2 presents the results, confirming a high level of consistency between SEW and SEW2 scores. The strong correlation between these two measures reinforces the robustness of SEW as an internal factor influencing decision-making in family businesses.

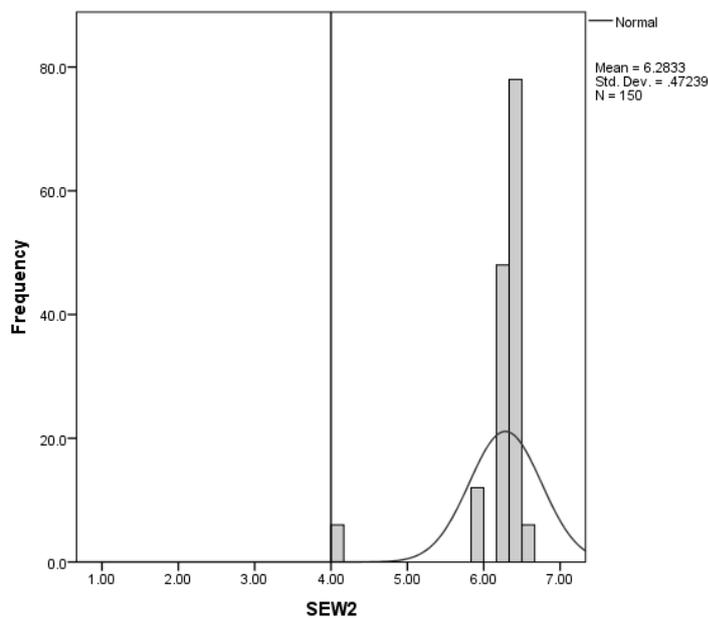


Figure 2. Histogram of SEW2

### 5.5. Investment in capacity expansion

A significant 96% of respondents reported having invested in capacity expansion over the past ten years, demonstrating a strong commitment to business growth. This high level of investment suggests that most businesses in the sample have previously pursued expansion strategies, focusing on increasing production capacity, infrastructure, or market reach.

The emphasis on capacity expansion aligns with global trends in family businesses, where firms prioritize long-term sustainability and competitiveness through strategic investments. Expanding capacity allows family businesses to adapt to market demands, strengthen their competitive position, and secure generational continuity.

Among the internal factors influencing past expansion decisions, intergenerational cooperation (GEN) plays a crucial role. Figure 3 illustrates the distribution of GEN scores, showing that higher levels of cooperation between family generations positively correlate with capacity expansion decisions. Businesses with stronger intergenerational collaboration tend to make more proactive, long-term investment choices.

However, despite this strong history of expansion, current attitudes toward future capacity expansion reveal a more cautious approach, as discussed in the following section.

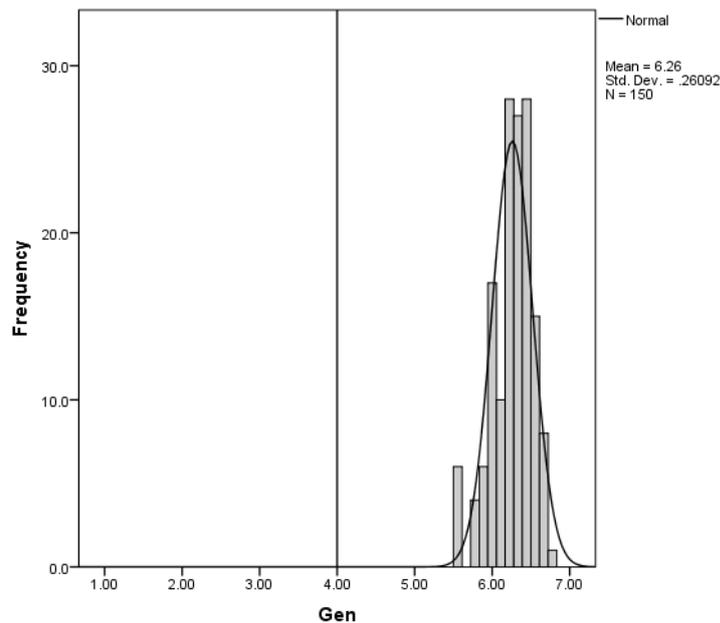


Figure 3. Histogram of GEN

### 5.6. Decision outcomes for capacity expansion

When asked about their current and future decision-making approach to capacity expansion, respondents were nearly evenly divided:

- 34% would approve expansion
- 34% would postpone expansion
- 32% would reject expansion

This shift suggests that while most businesses have expanded in the past, many are hesitant to commit to further expansion at present. Several factors may contribute to this cautious stance:

- Many firms may feel they have already expanded sufficiently.
- Economic uncertainty or financial constraints may make further investment risky.

- Family businesses often prioritize stability and control, leading to delayed or postponed decisions rather than immediate action.

The reluctance to expand outright reflects a common pattern in family businesses, where decision-making balances financial security, generational stability, and strategic growth. Expanding capacity can strengthen competitive positioning, but it also introduces risk, particularly for firms prioritizing long-term sustainability rather than aggressive expansion.

Another critical factor influencing expansion decisions is the composition of the top management team. A heterogeneous top management team (HET) is often associated with more diverse decision-making approaches. Figure 4 presents the distribution of HET scores, illustrating the varying levels of management diversity across respondent businesses and its potential impact on expansion strategies.

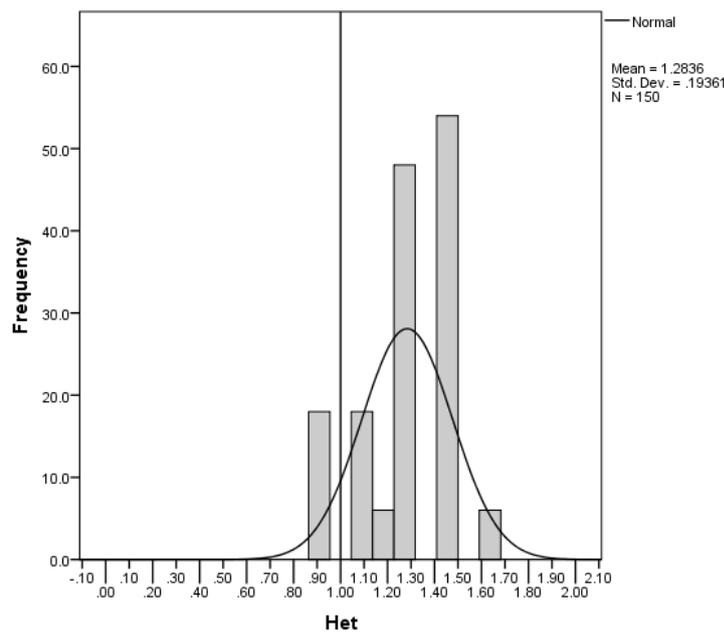


Figure 4. Histogram of HET

### 5.7. Internationalization activities

The survey results reveal strong engagement in international markets among respondent family businesses. An impressive 96% of companies participate in import activities, while 72% are involved in exports, reflecting an active role in global trade.

Beyond direct trade, many businesses have pursued strategic international investments:

- 52% operate foreign sales subsidiaries, showing a commitment to expanding their reach beyond domestic markets.
- 68% have established foreign production subsidiaries, indicating a long-term presence in overseas operations through direct investment.
- 64% engage in franchise systems, subcontracting, or licensing agreements, suggesting that family businesses employ diverse internationalization strategies to scale their operations.

These findings suggest the growing adaptability of family businesses in global markets. While traditionally risk-averse, family enterprises increasingly recognize the necessity of internationalization to maintain competitiveness. The combination of import/export activities, foreign subsidiaries, and franchise-

based models highlights a multi-faceted approach to expansion, balancing conservative decision-making with strategic growth opportunities.

### 5.8. Summary

This study reveals that the respondent family businesses, primarily from the agriculture and food sector, demonstrate strong engagement in capacity expansion and internationalization. While family ownership and control remain dominant, many firms incorporate external consultants into decision-making, reflecting a hybrid approach that blends traditional values with modern strategic planning.

The findings indicate that family businesses balance conservatism with adaptability. While cautious in decision-making, they also show a willingness to expand and adjust to changing economic conditions and market demands. This duality highlights the unique dynamics of family businesses, where legacy preservation, risk management, and growth aspirations intersect.

#### Verification of the Model

To validate the questionnaire findings, in-depth interviews were conducted with five Portuguese family businesses in the food industry. The interview process followed a structured, process-based approach. Initial background information was gathered from company websites and press releases, after which structured interviews explored the three key internal factors—socio-emotional wealth (SEW), intergenerational cooperation (GEN), and heterogeneous top management teams (HET). These interviews provided qualitative insights that reinforced the quantitative results from the survey.

The analysis of the interviews followed a three-step coding procedure:

1. Key terms (SEW, GEN, HET) were defined based on the research question.
2. Responses were categorized according to these classifications.
3. Central themes were identified and structured into dimensions (Table 5).

Table 5 summarizes the categorization of responses into these three internal factors and provides an overview of how these three internal factors were coded during the qualitative analysis.

Table 5

Coding procedure used during in-depth interviews

Tag	Keywords Associated with the Tag
SEW	family council, social judgment, family strength, togetherness
GEN	participation of family members, father-son collaboration, generational change
HET	non-family managers, consultants, external experts, authorized managers

*Source:* Compiled by the authors.

#### Key internal factors influencing decision-making

The three key internal factors identified in this study—socio-emotional wealth (SEW), intergenerational cooperation (GEN), and heterogeneous top management teams (HET)—were selected based on prior literature and qualitative interviews. SEW reflects the significance of socio-emotional wealth in family businesses (Berrone et al., 2012), while GEN examines the impact of intergenerational cooperation (Miller & Le Breton-Miller, 2006). HET emerged repeatedly during the interviews as a factor influencing effective decision-making through the diversity of top management teams. The coding of the interviews revealed three dominant themes, which were subsequently validated through structured analysis.

#### Socio-emotional wealth (SEW)

SEW is a defining characteristic of family businesses, influencing their decision-making priorities and risk tolerance. Three motivational drivers of SEW were identified:

- Family governance and decision-making: Many businesses rely on family council meetings, ensuring that SEW-driven values such as legacy preservation and long-term sustainability remain central to decisions.
- Social perception and reputation: Business founders consider how external stakeholders perceive their decisions, particularly regarding controversial choices, such as environmental trade-offs in capacity expansion.
- Family strength and financial resilience: Family businesses often display a greater commitment to their enterprises, sometimes mobilizing private family assets to sustain operations or invest in growth.

#### **Intergenerational cooperation (GEN)**

GEN significantly influences decision-making, particularly before, during, and after generational transitions. Decision-making often involves both active family members and retired predecessors, who contribute as advisors or consultants. Father-son collaborations are the most common, but trust-based intergenerational partnerships exist across different gender combinations. Knowledge-sharing across generations enhances long-term strategic planning.

#### **Heterogeneous top management teams (HET)**

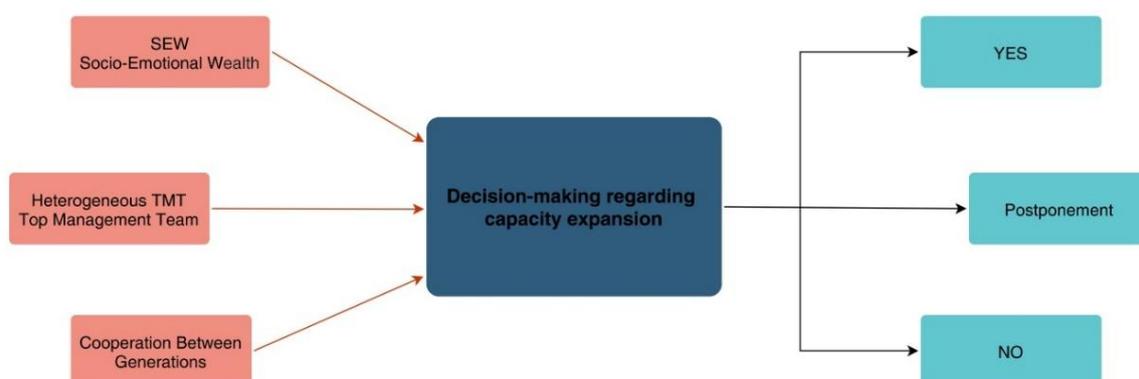
HET refers to the inclusion of non-family managers, external consultants, and specialized experts in decision-making processes. Their involvement broadens perspectives and contributes to the long-term stability of family businesses, particularly in capacity expansion decisions.

#### **Decision outcomes in the model**

Building on previous research, Nemes and Konczos-Szombathelyi (2023a) identified three possible decision outcomes regarding capacity expansion:

1. Yes (Proceed with Expansion) – The business chooses to expand based on strategic and financial feasibility.
2. No (Reject Expansion) – The business decides against expansion due to financial risk, market uncertainty, or other constraints.
3. Postponement (Delayed Expansion) – The decision is deferred until external conditions improve, such as securing funding, overcoming a crisis, or favorable shifts in market conditions.

The questionnaire results (Table 2) confirmed these outcomes, reinforcing the model's validity. Figure 5 visually represents the decision-making framework.



**Figure 5. Model of decision-making regarding capacity expansion in family businesses**

*Source:* Compiled by the authors.

## 6. CONCLUSION

This paper examined the internal factors influencing capacity expansion decisions in family businesses. The research findings confirmed the validity of the previous qualitative model, which had been tested on a much smaller sample. By integrating both quantitative and qualitative methods, this study validated the credibility of the model (Figure 5) and provided a more comprehensive understanding of decision-making in family enterprises.

The literature review did not identify any prior studies addressing capacity expansion decision-making in family businesses using this specific framework, suggesting that this research helps fill an existing gap in the field. The results indicate that capacity expansion decisions can be classified based on three key internal factors—socio-emotional wealth (SEW), intergenerational cooperation (GEN), and heterogeneous top management teams (HET). These factors can exert both positive and negative influences on the decision-making process.

A key limitation of this study is that it was conducted exclusively among Portuguese family businesses. To enhance the generalizability of these findings, the authors plan to extend future research to compare family businesses across different cultural and economic contexts.

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## REFERENCES

- Almeida, F. (2021). Open-innovation practices: Diversity in Portuguese SMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 169. <https://doi.org/10.3390/joitmc7030169>
- Arnold, T., Kleve, H., & Roth, S. (2023). Within a mesh of expectations: Dealing with dilemmas in business families using systemic tools from family coaching. *Systems Research and Behavioral Science*, 40(4), 713–722. <https://doi.org/10.1002/sres.2962>
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279. <https://doi.org/10.1177/0894486511435355>
- Biel, M., & Ślusarczyk, B. (2022). Management methods and tools in family businesses: Impact on the effectiveness of achieving goals. *Journal of International Studies*, 15(4), 180–195. <https://doi.org/10.14254/2071-8330.2022/15-4/11>
- Bite, P., & Konczos-Szombathelyi, M. (2020). Employer branding concept for small- and medium-sized family firms. *Journal of International Studies*, 13(3), 143–160. <https://doi.org/10.14254/2071-8330.2020/13-1/1>
- Brundin, E., & Languilaire, J. E. (2023). When the display of emotion is not enough: An emotion boundary management perspective on the quality of strategic decisions. *Long Range Planning*, 56(5), 102245. <https://doi.org/10.1016/j.lrp.2022.102245>
- Bürgel, T. R., & Hiebl, M. R. W. (2023). Conflict management strategies and the digitalization of family firms: The moderating role of generational ownership dispersion. *IEEE Transactions on Engineering Management*, 1–20. <https://doi.org/10.1109/tem.2023.3293855>
- Calpin, J. (2023, May 2). What is a good survey response rate? *Customer Thermometer*. <https://www.customerthermometer.com/customer-surveys/average-survey-response-rate/>

- Cioca, A., Wehbe, K., Popescu, D., & Popescu, C. (2020). The main drivers for sustainable decisions in a family business that impact the company's performance. *Sustainability*, 12(20), 8659. <https://doi.org/10.3390/su12208659>
- Civelek, M., Ključnikov, A., Fialová, V., Folvarčn, A., & Stoch, M. (2021). Major obstacles in innovative activities of family-owned SMEs: Evidence from Czechia. *Economics & Sociology*, 14(2), 137–149. <https://doi.org/10.14254/2071-789x.2021/14-2/7>
- Da Silva Hounsell, M., Coelho, A., Sousa, N., & Quesado, P. R. (2021). Family business management: A case study in the Portuguese footwear industry. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 55. <https://doi.org/10.3390/joitmc7010055>
- Delgado-Garca, J. B., Mazagatos, V. B., Romero-Merino, M. E., & Dıaz-Portugal, C. (2023). Family CEO affect and R&D investments of family firms: The moderation effect of family ownership structure. *Long Range Planning*, 56(5), 102230. <https://doi.org/10.1016/j.lrp.2022.102230>
- European Commission. (n.d.). Family business. *European Commission*. [https://single-market-economy.ec.europa.eu/smes/supporting-entrepreneurship/family-business\\_en](https://single-market-economy.ec.europa.eu/smes/supporting-entrepreneurship/family-business_en)
- Espinoza, D. W. R., & Arbaiza, L. (2023). Conductas elegidas o forzadas a elegir: Normas y valores asumidos por los ejecutivos [Conducts elected or forced to elect: Norms and values assumed by executives]. *Retos: Revista de Ciencias de la Administracin y Economa*, 13(25), 23–35. <https://doi.org/10.17163/ret.n25.2023.02>
- Ferreira, J., & Coelho, A. (2020). Dynamic capabilities, innovation, and branding capabilities and their impact on competitive advantage and SMEs' performance in Portugal: The moderating effects of entrepreneurial orientation. *International Journal of Innovation Science*, 12(3), 255–286. <https://doi.org/10.1108/ijis-10-2018-0108>
- Guedes, M. J., Patel, P. C., Kowalkowski, C., & Oghazi, P. (2022). Family business, servitization, and performance: Evidence from Portugal. *Technological Forecasting and Social Change*, 185, 122053. <https://doi.org/10.1016/j.techfore.2022.122053>
- Hernandez-Linares, R., & Fernandez, M. C. L. (2020). Entrepreneurial orientation, learning orientation, market orientation, and organizational performance: Family firms versus non-family firms. *European Journal of Family Business*, 10(1), 6–19. <https://doi.org/10.24310/ejfbefjb.v10i1.6780>
- Herrero, I. (2017). Family involvement and sustainable family business: Analyzing their effects on diversification strategies. *Sustainability*, 9(11), 2099. <https://doi.org/10.3390/su9112099>
- Howorth, C., & Ali, Z. A. H. (2001). Family business succession in Portugal: An examination of case studies in the furniture industry. *Family Business Review*, 14(3), 231–244. <https://doi.org/10.1111/j.1741-6248.2001.00231.x>
- Hsueh, J. W., Campopiano, G., Tetzlaff, E., & Jaskiewicz, P. (2023). Managing non-family employees' emotional connection with family firms via shifting, compensating, and leveraging approaches. *Long Range Planning*, 56(5), 102274. <https://doi.org/10.1016/j.lrp.2022.102274>
- Jang, J. A., Lee, E., & Jung, H. (2022). A study of consumers' perceptions of take-out food before and after the COVID-19 outbreak: Applying big data analysis. *Sustainability*, 14(19), 11889. <https://doi.org/10.3390/su141911889>
- Jones, O., & Li, H. (2017). Effectual entrepreneuring: Sensemaking in a family-based start-up. *Entrepreneurship and Regional Development*, 29(5–6), 467–499. <https://doi.org/10.1080/08985626.2017.1297854>
- Kathuria, A., Karhade, P. P., Ning, X., & Konsynski, B. R. (2023). Blood and water: Information technology investment and control in family-owned businesses. *Journal of Management Information Systems*, 40(1), 208–238. <https://doi.org/10.1080/07421222.2023.2172770>
- Keler, A., & Zipper-Weber, V. (2023). Born-again global internationalization in family businesses as a process: A dynamic capabilities perspective in the context of socioemotional wealth. *Journal of Family Business Management*, 13(4), 1366–1391. <https://doi.org/10.1108/jfbm-01-2023-0005>
- Kleve, H., Koellner, T., Von Schlippe, A., & Rusen, T. A. (2020). The business family 3.0: Dynastic business families as families, organizations, and networks—Outline of a theory extension. *Systems Research and Behavioral Science*, 37(3), 516–526. <https://doi.org/10.1002/sres.2684>
- Kotlar, J., Fang, H., De Massis, A. V., & Frattini, F. (2014). Profitability goals, control goals, and the R&D investment decisions of family and nonfamily firms. *Journal of Product Innovation Management*, 31(6), 1128–1145. <https://doi.org/10.1111/jpim.12165>

- Lee, C., Chen, H. C., Peng, C. L., & Chen, S. H. (2023). Sustainability of Taiwanese SME family businesses in the succession decision-making agenda. *Sustainability*, *15*(2), 1237. <https://doi.org/10.3390/su15021237>
- Liu, T., & Yu, X. (2023). Micro-foundations of strategic decision-making in family business organisations: A cognitive neuroscience perspective. *Long Range Planning*, *56*(5), 102198. <https://doi.org/10.1016/j.lrp.2022.102198>
- Miller, D., & Le Breton-Miller, I. (2006). Family governance and firm performance: Agency, stewardship, and capabilities. *Family Business Review*, *19*(1), 73–87. <https://doi.org/10.1111/j.1741-6248.2006.00063.x>
- Mitrović, S., Marić, M., Subotić, M., Dudić, B., & Greguš, M. (2019). Family entrepreneurship and personal career preferences as factors of differences in the development of entrepreneurial potential of students. *Sustainability*, *11*(20), 5693. <https://doi.org/10.3390/su11205693>
- Mucci, D. M., Jorissen, A., Frezatti, F., & De Souza Bido, D. (2021). Managerial controls in private family firms: The influence of a family's decision premises. *Sustainability*, *13*(4), 2158. <https://doi.org/10.3390/su13042158>
- Nemes, K., & Konczos-Szombathelyi, M. (2023a). On the way to a new model for decision-making regarding capacity expansion in small and medium-sized family businesses: A systematic literature review. In E. Pinto da Costa, M. do Rosario Anjos, & L. Lovrencic Butkovic (Eds.), *98th International Scientific Conference on Economic and Social Development: Book of Proceedings* (pp. 304–311). Varazdin Development and Entrepreneurship Agency.
- Nemes, K., & Konczos-Szombathelyi, M. (2023b). Capacity expansion for sustainable development in family businesses: Recyclable packaging materials in the food industry. *Chemical Engineering Transactions*, *107*, 181–186. <https://doi.org/10.3303/CET23107031>
- Németh, K., & Németh, S. (2018). Professzionizálódó családi vállalkozások Magyarországon [Professionalizing family businesses in Hungary]. *Prosperitas*, *5*(3), 24–47. [https://doi.org/10.31570/prosp\\_2018\\_03\\_2](https://doi.org/10.31570/prosp_2018_03_2)
- Putritamara, J. A., Hartono, B., Toiba, H., Utami, H. N., Rahman, M. S., & Masyithoh, D. (2023). Do dynamic capabilities and digital transformation improve business resilience during the COVID-19 pandemic? Insights from beekeeping MSMEs in Indonesia. *Sustainability*, *15*(3), 1760. <https://doi.org/10.3390/su15031760>
- Schell, S., De Groote, J. K., Richard, S., Hack, A., & Kellermanns, F. W. (2023). The role of affect in the selection of nonfamily top management team members in family businesses. *Long Range Planning*, *56*(5), 102288. <https://doi.org/10.1016/j.lrp.2022.102288>
- Utrilla, P. N., Moreno, V. M., Corpas-Iglesias, F. A., & Cortés-García, F. J. (2018). Family businesses transitioning to a circular economy model: The case of “Mercadona.” *Sustainability*, *10*(2), 538. <https://doi.org/10.3390/su10020538>
- Van, H. T., Huu, A. T., & Ushakov, D. (2017). Liberal reforms and economic growth: Current issues and interrelations. *Journal of International Studies*, *10*(4), 109–118. <https://doi.org/10.14254/2071-8330.2017/10-4/8>
- Vieira, E. (2017). Board of directors' characteristics and performance in family firms and under the crisis. *Corporate Governance*, *18*(1), 119–142. <https://doi.org/10.1108/cg-01-2017-0010>
- Wei, X., & Chen, L. (2022). Dispersion of family ownership and innovation input in family firms. *Sustainability*, *14*(14), 8418. <https://doi.org/10.3390/su14148418>