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Predicting the sustainability of family business in the rice milling industry: A multiple case study

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Abstract

The rice milling industry (RMI) is one of the oldest industries in the world and is dominated by small-scale family businesses. After decades, the RMI in Indonesia has experienced a cycle of stagnation and has struggled to develop due to various internal and external factors. This paper attempts to predict the sustainability of family businesses in the RMI. This study uses a multiple case study approach and involves 9 family businesses located in Central Lampung, Lampung Province, Indonesia. The nine family businesses are grouped into three categories: 3 small-scale rice mills (SRM), 3 medium-scale rice mills (MRM), and 3 large-scale rice mills (LRM). Data collection was conducted with in-depth interviews and supported by the McKinsey/General Electric (GE) matrix as an analytical tool to assess business strength and industry attractiveness. The results show that SRM has a low GE matrix value in terms of both its business strength and industry attractiveness. As a consequence, they have switched to other businesses and do not expect the next generation to continue the business. MRM generally has medium GE matrix values on both sides. They are trying to survive while waiting for the industry environment to become more conducive. Only LRM has a high value on both sides. They try to modernize the technology and involve the next generation to continue the business. The results of this study illustrate the possibility of a shift in the scale of RMI in the future, where SRM's family business is expected to withdraw from the industry, and what remains are MRM and LRM.

Introduction

The rice milling industry (RMI) is one of the oldest industries in Indonesia and has existed since the days of the Dutch East Indies Government. The number of rice mills in Indonesia in 2012 was around 182,199 units, consisting of 167,840 small-scale rice mills (SRM), 8,624 medium-scale rice mills (MRM), 2,117 large-scale rice mills (LRM), and the remaining 3,618 units were categorized as Mobile rice mills. Most, if not all, of the above rice mills are operated by family businesses (Udomkit et al., 2021; Sobirin & Rosid, 2016; 2017). Assuming that some family businesses operate only one milling unit and others operate more than one rice milling unit, the number of rice milling entrepreneurs in Indonesia ranges from 100.000 to 161.000. With a number this large, it can be roughly seen that the magnitude of the role of rice milling family businesses for the economy and employment in Indonesia, given that this industry is a labor-intensive industry.

Recently, the number of rice mills has decreased significantly. Based on data released by BPS 2021, there has been a decline in the number of players in the RMI. In 2012, the number was 182,199 units, and in 2020, it fell to 169,789 units. According to BPS 2021 data, of the 169,789 rice

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milling units, 95.06% or 161,401 business units are SRM, 7,332 business units or around 4.32% are MRM, and the remaining 1,056 businesses or 0.62% are LRM (BPS, 2021).

From a competitive strategy perspective, the lack additional number of players or even the decrease in the number of players, shrinking margins, and focused competition at the price level, are some of the signs that the industry is heading toward the saturation point of maturity and towards aging (Porter, 1980: p.238; Lumpkin & Dess, 2001; Shahzad et al., 2020). In addition, recently the technology demanded in the industry made the industry's entry barrier much higher, and eventually forced other industry players to exit the "game" (Agarwal et al., 2002; Karniouchina et al., 2013; Horváth & Szabó, 2019).

In addition to the context within the industry, the macro environment also takes a key position in influencing the rice industry environment in Indonesia. In the context of the RMI, all of this is a result of the liberalization of the rice trade system implemented by the government, where import taps are opened too wide, pricing in the upstream and downstream are increasingly strangling margins, causing industry competition to sharpen (Sugiyanto & Nugroho, 2008; Hardono et al., 2004; BPS, 2021). The same pricing policy and intensity of competition also occur in the RMI in Thailand (Udomkit et al., 2021). Therefore, the RMI is considered unattractive even though business opportunities in this industry are still open, considering that the demand for rice in Indonesia has never decreased, 111.59 kg/capita - the highest in Asia (BPS, 2021; Kementerian Pertanian RI, 2024). However, with all their limitations, not many family businesses in rice milling have been able to take advantage of this opportunity. It is the newcomers, non-family businesses with strong capital, that are capitalizing on this opportunity. For example, before he was appointed Minister of Trade, Rahmat Gobel established an integrated rice milling business in Sidoarjo, East Java, with a scale of 30 tons of rice per hour (Sulaiman et al., 2018).

It is suspected that rice milling companies like the one established by Rahmat Gobel are the beginning of the inflow of non-family businesses in the RMI. Although the number is only around 1% the production capacity is gigantic, and the number of companies will increase given the increasing potential of the rice market in Indonesia. The increased number of non-family businesses will certainly push out family rice milling businesses. Under population ecology theory (Salimath & Jones III, 2011), family rice milling businesses will be eliminated one by one due to natural selection. To find out more about these allegations, this study investigates whether family businesses engaged in the RMI can still survive and whether the next generation plans to continue the business. This question is relevant to the nature of family businesses that want the company that has been established with great difficulty not to fall into the hands of other parties but to the next generation (Liu et al., 2024; Harveston et al., 1997; Davis & Harveston, 1998; Miller & Le Breton-Miller, 2003).

This exploratory research is important to do because, first, from the perspective of industrial strategy, in each country, even though the same industry has different key business success factors. Second, there is limited previous research that analyzed the attractiveness of RMI in Indonesia. The results of research by Ritthaisong et al. (2014) on LRM owners in Thailand who export stated that organizational reputation, some HRM practices, and networks are determining factors for company performance. Meanwhile, exploratory research on SRM cluster companies conducted by Singh and Shrivastava (2013) stated that the proximity of interconnected companies, social capital, business environment, knowledge resources, and trust building are key factors determining the success of SRM in India. Third, RMI is an important factor for food security in Indonesia, where government policies are constantly changing and affecting the performance and sustainability of companies, specifically family businesses.

From the perspective of family business studies, in the context of RMI's attractiveness, it is also very limited. However, one thing is certain in the study of family business strategy: government policies in an industry or market (policies, procedures, and processes) have a significant impact on industry conditions and ultimately the sustainability of family businesses (Abdelaziz, 2021). A systematic literature review specifically on the study of industrial strategy and family business sustainability states that social inclusion, economic development, and environmental protection influence the sustainability of small and medium family businesses in Italy and Spain (Curado & Mota, 2021).

Literature Review

Family Business Sustainability

Family businesses have unique characteristics compared to non-family businesses. First, there is the involvement of family members in the life of the business, directly or indirectly, for a company to be called a family business (Combs et al., 2020; Konopaski et al., 2015; Shanker & Astrachan, 1996; Sharma et al., 1997). Family involvement has an important role and is a determining factor concerning business decision-making, operationalization, strategic planning, and ultimately its continuity to the next generation (Ward, 1988; Lansberg & Astrachan, 1994; Sharma et al., 1997; Carlock & Ward, 2001; Mokhber et al., 2017; Salloum et al., 2021). Therefore, families are considered a "unique resource" that non-family businesses do not possess (Herrera & de las Heras-Rosas, 2020; Habbershon et al., 2003; Olson et al., 2003; Lumpkin et al., 2011).

Second, if family involvement is conceived in the language of systems, then the family business consists of at least two interacting systems - the family system and the business system. Although the two systems have opposing orientations and interests, the integration of the two systems into the family business is what distinguishes the family business from non-family businesses (Sirmon & Hitt, 2003; Olson et al., 2003). Therefore, anyone who manages a family business is required to pay balanced attention to family and business interests if they want the business to grow sustainably, and at the same time, there is no conflict between family members (Stewart & Hitt, 2012; Glover & Reay, 2015; Caputo et al., 2018).

Third, almost certainly, every founder of a family firm wants the firm he or she has worked so hard to establish to pass not to someone else but to the next generation (Liu et al., 2024; Harveston et al., 1997; Davis & Harveston, 1998; Miller & Le Breton-Miller, 2003). Therefore, in determining the future and sustainability of the business, succession has always dominated the important issues in the family firm literature (Davis & Harveston, 1998; Cabrera-Suárez et al., 2001; Baek & Cho, 2017; Baltazar et al., 2023). In this case, succession extends beyond business planning to include family planning for the future of the business (Ferrari, 2023; Carlock & Ward, 2001; Mazzola et al., 2008; Ward, 2011).

Several factors influence succession success, including the readiness of the incumbent to relinquish power, the party that will accept the responsibility, and the process of succession stages (Bozer et al., 2017; Boyd, 2014; Handler & Kram, 1988; Morris et al., 1996; Sharma et al., 2003). However, no matter how complex the succession process, if no effort is taken (unplanned succession), family businesses often end up in failure (Daspit et al., 2016; Leach, 2011; Lumpkin & Brigham, 2011). This is in line with Beckhard and Dyer's (1983) phenomenal statement that only 30% of first-generation family firms can be continued by the second generation.

From the three characteristics of family businesses, as described earlier, it can be said that the sustainability of family businesses as part of building a "family monument" is a dream for every founder of a family business. Therefore, in addition to succession planning, strategic planning is also an important issue. The goal is none other than to maintain the sustainability of the family business from generation to generation (Gersick et al., 1997; Konopaski et al., 2015; Neubauer & Lank, 2016; Merchant et al., 2018).

The strategic planning of family companies is not much different from that of non-family businesses. However, the implementation is different due to family factors in the business (Habberson et al., 2003; Salloum et al., 2021; Zajkowski et al., 2022). For example, family businesses tend to be more long-term oriented so that they seem less aggressive, less innovative, and tend to be conservative (Lumpkin et al., 2010; Zellweger & Sieger, 2012), although some others consider the opposite, namely long-term orientation provides a guarantee of long-term security, moreover, the family business is usually supported by the owner's commitment to keeping the family business continued by their successors (Lumpkin, et al., 2011; Gentry et al., 2016; De Massis et al., 2015). That is why the performance of family companies is maintained or even superior and long-lived compared to non-family businesses (Habberson & William, 1999; Habberson et al., 2003; F. Simões Vieira, 2014; Soler et al., 2017).

Research Methods

This is exploratory multiple case study research using a qualitative-descriptive approach. Exploratory studies are commonly used when the goal is to understand how a new phenomenon occurs. Exploratory case studies are typically used to gain an understanding of how organizational dynamics or social processes work. To this end, we conducted theory-building qualitative research to understand better the unexplored dynamics of goal-setting in family firms (De Massis & Kotlar, 2014).

Case studies are a specialized strategy for qualitative empirical research that enables in-depth investigation of contemporary phenomena in real-life contexts. This feature of case studies can be particularly relevant for family business research because family businesses are at the intersection of two systems - family and business (De Massis & Kotlar, 2014; Kotlar & De Massis, 2013). Common examples of research questions that are well-suited to be answered with this type of case study include: *How is succession planning in your family business? How do you view the RMI, and does it influence succession planning? What external and internal factors influence the attractiveness of the RMI?* Descriptive case studies are appropriate when the research aims to demonstrate the relevance of a phenomenon. For example, this type of case study can be used to provide a statement rich in supporting evidence, such as, "Family businesses are highly likely to fail when industries experience high uncertainty" (De Massis & Kotlar, 2014).

The unit of analysis in this study focuses on the context of analyzing the attractiveness of the industry and the description of family business succession in the RMI in Central Lampung. The information consists of 3 small rice mills, 3 medium rice mills, and 3 large rice mills. This unit of analysis is expected to provide an overview of the distribution of the attractiveness of the RMI in Lampung based on business scale.

The data collection process was carried out through an in-depth interview process related to informants' perceptions of industry attractiveness and the succession process. The assessment and scoring of the informants' industrial attractiveness was carried out through the GE Portfolio Matrix scoring sheet and was directed to provide a priority scale for each of the identified factors. The results of the GE Portfolio Matrix analysis assessment were carried out on the spot, checked, and validated by the informants.

Industry Attractiveness Analysis - GE Portfolio Matrix

One of the analytical tools to help develop strategic planning for companies in an industry is the General Electric (GE) Portfolio Matrix. This analytical tool, developed by the consulting firm McKinsey & Co., is also known as the GE Nine-Cell Matrix because GE was the first company to use this tool (Mikkola, 2001; Mohammad, 2013). Initially, GE utilized this analytical tool as a basis for decision-making in developing business portfolio planning by determining which business units need to be developed, which ones need to be maintained, and which ones need to be divested. For this purpose, McKinsey designed this analytical tool as shown in Figure 1.

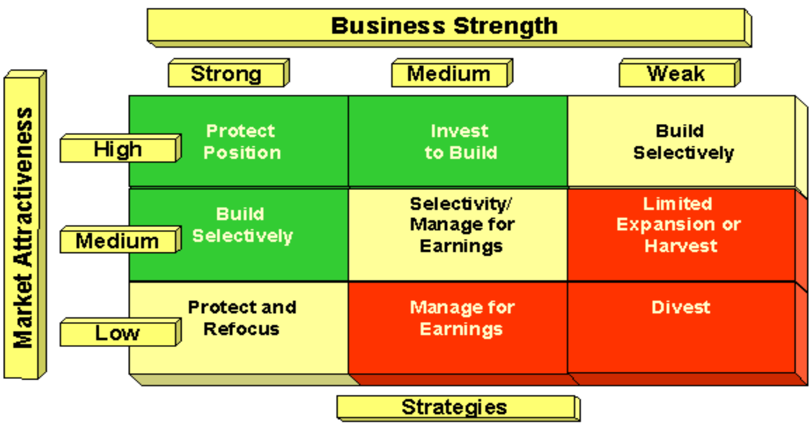

Figure 1. GE Multifactor Portfolio Matrix

Figure 1 explains that the GE Portfolio Matrix is a 9-cell matrix using the dimensions of business strength on one side and industry attractiveness on the other. If a business unit is in the green box, the decision is that the business should be developed through investment. Conversely, if a business unit is in a red color city, it should not expand, and it is better to focus on harvesting business results. Meanwhile, business units that are in yellow are still possible to invest in but must be done selectively (Jang et al., 2012; Han et al., 2015).

The determinants of industry attractiveness include market, competition, financial and economic, technological, socio-political, and environmental factors. The determinants of business strength include raw materials, turnover, innovation capability, business experience, product quality, etc. The next step in developing this matrix is to weigh each variable based on its importance relative to other factors (hence, the total weight should be 1.0). Managers should then indicate, on a scale of 1 to 5, how low or high they rate their industry or business advantage on that factor. Depending on where the businesses are placed on this attractiveness matrix, Several alternative strategies starting from the strongest to the weakest position in sequence are: Protect position, Invest to build, Build selectively, Selective earning, Protect and refocused, Limited expansion, Harvest, Manage for earning, and Divest (Mohammad, 2013).

Results and Discussion

This research is an integral part of a larger study with the theme "Orientation and Entrepreneurial Strategies of Family Businesses in the RMI". The results of previous research (Sobirin & Rosid, 2014, 2016, 2017) show that the RMI is currently approaching saturation, making it difficult for the industry to grow. This research is an integral part of a larger study with the theme "Orientation and Entrepreneurial Strategies of Family Firms in the RMI". The results show that the RMI is currently heading towards a saturation point, so the industry is challenging to develop. This is due to various problems that occur in the upstream and downstream sectors of the RMI, making industry competition increasingly fierce. Industry profitability (margin) has also decreased compared to previous eras. This has made some rice milling companies increasingly squeezed, reducing turnover, and most of them only effectively operate during the harvest season.

Historically run by wealthy landowning farmers, rice milling began as a service to help others process their harvests, but over time, it has shifted into a full-fledged trading and processing business no longer dominated by farmers. This transformation, driven by government-led food sector liberalization, introduced stronger market competition and economic principles into the industry. As a result, LRMs backed by capital and technology are now in a dominant position due to their efficiency, supply networks, and ability to produce high-quality rice for a growing premium market. Meanwhile, MRMs and SRMs struggle to compete, limited to producing only medium- or low-grade rice (Sobirin & Rosid, 2014).

The results of the industrial attractiveness matrix analysis in this study reinforce the findings of the above research results. The results of the GE Portfolio Matrix on each company can be seen in Table 1 and Figure 2.

Table 1. Results of GE Portfolio Matrix Analysis on RMI in Lampung

No	Company Name	Year Established/Family Business Generation	Owner Name	Rice Mill Scale	Industry Attractiveness Score	Business Strength Score
1	PP. Abdul Rohim	2007/1	Abdul Rohim	Small	2.55	2.35
2	PP. Didi	1980/2	Didi Junaidi	Small	3.05	2.55
3	PP. Timbul	1980/2	H. Timbul	Small	2.45	2.05
4	PP. Anugrah	1996/1	Haris Dianto	Medium	3.3	3.25
5	PP. Berkah	2004/1	H. Marsito	Medium	3.45	2.8
6	PP. 4 Putra	1980/2	H. Anwar	Medium	3.1	3.6
7	PP. Pujodadi Jaya	1984/2	Koh Ntong	Large	3.85	3.9
8	PP. Lanang Prayogi	1999/1	Wartono	Large	2.9	3.3
9	PP. Barokah Jaya	2010/1	Dyah U., S.Tp.	Large	3.45	3.6

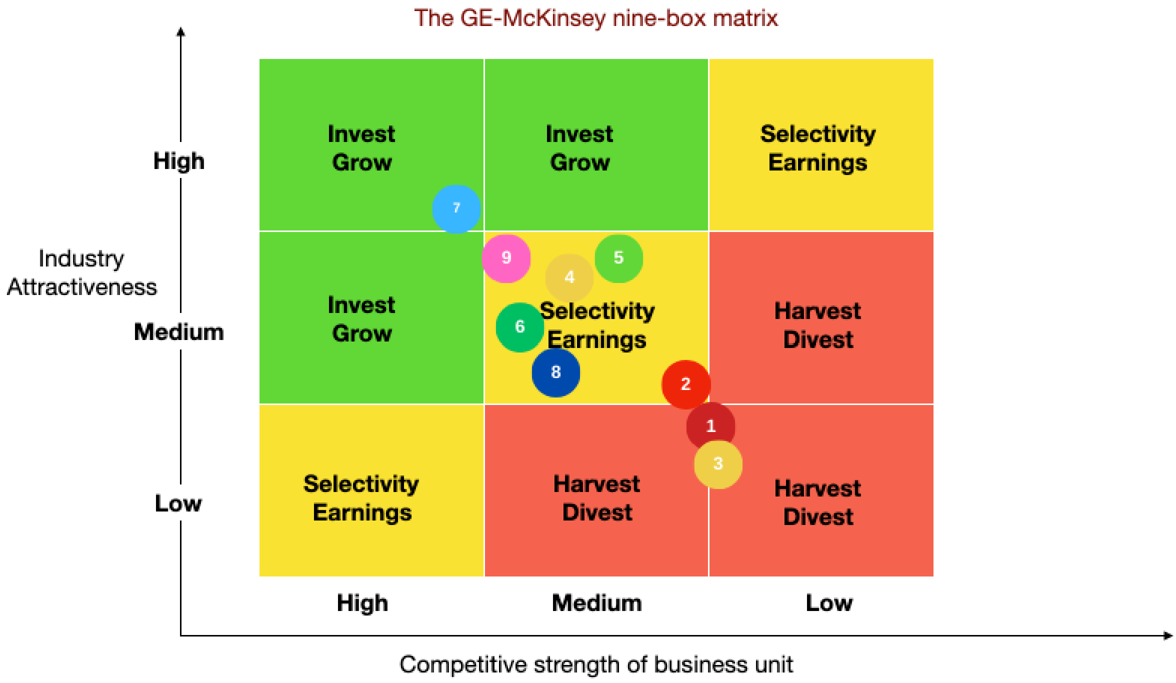

Figure 2. Business Position in the RMI Matrix

As shown in Table 1 and Figure 2, according to the strength score of each business and their views on the attractiveness of the RMI, the results show that the majority of businesses can be placed in the middle position, and have the option of a selective growth strategy. Companies in this category are PP Barokah Jaya, PP Anugerah, PP 4 Putra, PP Lanang Prayogi, PP Berkah, and PP Didi. The six rice milling companies, two of which are categorized as LRM (PP Barokah Jaya, PP Anugerah), 3 MRM (PP 4 Putra, PP Lanang Prayogi, PP Berkah), and one SRM (PP Didi). Meanwhile, the company in the upper left (the company that chooses the investment and growth strategy) is PP Pujodadi Jaya, and the company in the middle right position (tends to divest) is PP Abdul Rohim and PP H. Timbul.

The results of the placement in each position, as mentioned above, are based on the scoring results obtained through in-depth interviews with each company (see Appendix 3). According to the results of this study, the determining factors of business strength at RMI in sequence are: the supply of raw materials (grain) with an average weight of 0.16; second, technological support (0.11); and third, raw material network (0.10). The first and second factors are closely related to financial support (capital). This is because the RMI does require strong capital support to purchase raw materials and technology. Moreover, in the current condition, raw materials are decreasing, thus increasing competition in the RMI. While the third factor is a supporting factor of the first factor, capital is needed not only to obtain raw materials but also to build the loyalty and trust of the farmers and suppliers' network.

Meanwhile, the interview results related to their views on the attractiveness of the RMI, the research subjects stated that the profitability of the industry was considered the most important factor (see Appendix 1). The average importance weight of 0.611 is much greater than the second factor - competitive structure (0.116), third - technological influence (0.111), and fourth - customer purchasing power (0.1). Industry profitability is a key reason why companies are established in an industry, which is related to the profitability and margins earned in that industry. The second factor, competitive structure, is considered important because when the industry provides a healthy competitive atmosphere, industry players will be more comfortable running their businesses. The third factor relates to the operational requirements of the RMI, which requires the latest technology to improve competitiveness. Moreover, the fourth factor is considered important, especially at this time, when the invasion of imported rice products at lower prices is a threat to local rice products from rice mills.

Discussion

The Correlation between Industry Attractiveness and Family Business Sustainability

In general, the assessment of the attractiveness of the RMI is moderate. However, it tends to decrease compared to previous periods, as indicated by research by Sobirin and Rosid (2014, 2016). The competitive advantage of rice milling business actors, based on the scale, can be distinguished as strong, medium, or weak. We then examine these findings in depth concerning the competitive position of the company and its correlation with the sustainability of family businesses.

The SRM industry players, in general, appear to have weak competitiveness. However, the level of competitive position in this weak category varies from one small company to another. The research found that 2 SRM players have a "very weak" competitive position, namely PP Timbul and PP Abdul Rohim, so that a slow strategy to withdraw (divest) from the industry becomes very logical to do (Mohammad, 2013). This very weak competitive position prevents entrepreneurs from focusing on just one business field.

The results of the study found that PP Abdul Rohim started the welding workshop business, which was initially a side business, but now it is the main business. This is because his competitive position in the RMI is very weak and to grow requires considerable investment. Due to his pessimism about the attractiveness of the RMI, Abdul Rohim is currently in the process of applying for substantial financing not to increase his rice milling business, but to try another business, namely the rental of rice harvesting machines. Based on observations and interviews, it was also found that he has begun to "prepare" for divestment. The same thing is experienced by PP Timbul, where, since its establishment in 1980, it has remained on a small scale. For the last five years, Mr. Timbul has had another business, namely fattening and buying and selling cattle, which he believes is less risky and offers more certain and stable profits. Both SRMs stated that their competitive position and attractiveness to the industry are declining, so it is certain that these two companies may continue to fight until "death" or divest soon. The choice of strategy in this position is following what is depicted in the red cell matrix, where the worst position is divestment (Mohammad, 2013).

In terms of family business sustainability, with the company's competitive position and view of the industry so weak, it is rational to explain the future of a family business through succession planning. Based on the interviews, it was also found that these two companies do not have a clear succession plan related to the rice milling business. It may be premature to ask about PP Abdul Rohim's succession plan because the next generation is still children. However, when asked whether he would educate his children to be involved in the RMI, his answer was "no". According to him, this industry is too risky and less profitable if not well-capitalized, so it would be better if they were entrepreneurs to pursue other businesses than rice milling.

Likewise, PP H. Timbul is currently run by the second generation, who knows the RMI from his father, Mr. Timbul. However, PP Timbul did not give a firm statement regarding the succession of his rice milling company. He only said that if his son wants to continue the business, he is welcome to; if not, that is fine too. In practice, his son (the 3rd generation) is more engaged in the cattle farming business than the rice milling business. It can be concluded that among SRM entrepreneurs, successors are less likely to continue the rice milling business.

The owners of MRM in the previous discussion show medium attractiveness and a competitive position. Although each MRM company has different levels related to its attractiveness and competitive position, the overall position is almost the same. Based on the research findings, the business advantage of MRM industry players tends to be "medium-strong." However, perceived industry attractiveness tends to be "medium" or decreasing compared to previous times. Strategically, MRM tends to be more selective and cautious in investing in the RMI while waiting for industry conditions to improve. As regards the sustainability of the family business, succession planning implies the early involvement of potential successors so that the process of interest formation and ultimately the transition of business leadership can go smoothly and ensure the sustainability of the family business in the future. It is not easy to be in this position, as the stakes are pretty high. This finding follows that stated by Abdelaziz (2021) that industry conditions have an impact on the succession planning and sustainability of family businesses, especially small-scale ones (Curado & Mota, 2021).

In terms of long-term strategy, MRM tends to adopt a "wait and see" strategy depending on the signs of industry change. They generally make selective investments even though it requires high risks and costs, but it is worth doing. On the other hand, if industry conditions do not show signs of improvement, the investments made will end up in vain as they lose out to competition from LRM and struggle to recover their investments (Mohammad, 2013). While related to the sustainability of family firms, succession planning implies the early involvement of potential successors so that the process of interest formation and ultimately the transition of business leadership can run well and ensure the sustainability of the family business in the future (Ferrari, 2023; Ward, 2011). It is not easy to be in this position, as the stakes are pretty high. Furthermore, the correlation between family business sustainability and succession planning is that although the industry is still producing, if the future of the RMI does not improve or even worsen due to regulations that do not support the industry, then succession planning carried out early on tends to be an act that "plunges the successor into the abyss of failure". Again, the results of Abdelaziz's research (2021) also support this finding that government policies in an industry or market (policies, procedures, and processes) have a significant impact on industry conditions and ultimately the sustainability of family businesses (Abdelaziz, 2021).

Even so, most MRM players (PP. Anugrah, PP. Berkah, and PP. 4 Putera) feel that their company's competitive advantage is sufficient to survive in the industry and is worth fighting for until at least one successive generation. The only obstacle that makes this decision relatively risky is the industry attractiveness, which continues to decline due to changing regulations or increased industry competition. The positive side is that the selective and partial investment strategy is expected to slowly help MRM to increase the company's advantage and minimize the existing industry threats (Mohammad, 2013). It is in positions and conditions like this that potential successors should learn more about the opportunities and threats that exist in the RMI.

Finally, the most favorable competitive position to be called a "winner" is the matrix assessment of LRM actors. Two LRMs are generally in a winning position or close to a winning position. They are PP Pujodadi Jaya and PP Barokah Jaya, which have the advantage of production scale (>3 tons of rice/hour) and more efficient technological support, and can produce rice up to premium quality, resulting in a greater margin than producing medium rice. In this position, technically, the strategy should be to continue to grow or continue to invest (Martin & Subley, 2011; Mohammad, 2013). There are almost no obstacles faced by these LRM owners related to the company's advantages, except for the influence of the macro environment that is beyond the company's control.

In terms of industry attractiveness, there is one factor that gets the lowest rating by LRM owners. This factor is the laws and regulations that apply to the RMI, specifically the tax of 1% of sales revenue. According to them, this is very disruptive to their business growth because the margins generated in this industry fluctuate considerably, resulting in a significant gap. This is related to the harvest season, for example, in season A, the margin received is 7% and in season B, it is 4%. It is not uncommon for companies to have to "return capital" when there are changes in market prices, and not only do they often sell at a loss to keep the money flowing and avoid damage to products and raw materials. Thus, if the tax is levied equally, this can make business actors even more pressured and tend to make industry conditions even more uncomfortable.

However, based on observations in the field with the advantages possessed (technology, industrial scale, and efficiency), to deal with these regulatory issues, a strategy that can be tried is to increase margins, primarily by increasing sales of premium rice by adding technology and carrying out a good marketing strategy to build a product image, increase market share until finally a larger margin is obtained. This is important to do considering that marketing factors in the RMI get low points, or marketing factors are considered not to have a significant effect on the company's advantage.

Concerning the succession of family businesses, in this winning position, the owners should carry out succession planning and processes as early as possible to ensure the interests of potential successors in the RMI. This step is also expected to maintain the competitiveness or advantage of the business in the future (Allio, 2006; Ferrari, 2023; Ward, 2011). As in the case of PP Pujodadi

Jaya, where the founder is in his late 70s and his health condition continues to decline, recruiting a successor in 2012 for a short study (no more than 3 years), and is currently in a leadership transition period. The succession process tended to be unplanned and sudden, as the owner did not have a son who was considered capable of continuing the company in this masculine industry. Therefore, in his later years, the founder appointed his son-in-law to gain experience in the rice milling business. Because the competitive position was so superior, the founder also recruited another son-in-law in 2014, who he thought had expertise in marketing.

After being perceived to understand the business, the successor (son-in-law) was authorized to lead in one or two sectors under the leadership of the founder. Furthermore, the successor, who had a management background, saw that the competitiveness of the family business could still be improved. Based on the founder's statement, in the last three years, the successor has (requested and fulfilled by the founder) invested in various supporting technologies to achieve efficiency and superior quality in the rice production process.

Implication and Conclusion

Based on the results of research conducted on nine family businesses in RMI in Central Lampung Regency, it can be concluded that this industry is currently in a mature stagnant phase toward a decline in the industry life cycle. The appeal of RMI in general has decreased significantly, with profitability, tight competition, regulatory influence, and price fluctuations being the main factors in the decline.

The research findings also show significant differences in competitiveness, industry attractiveness, and strategy across firm scales. SRM is generally in a weak competitive position and has low industry attractiveness. They choose a divestment strategy and do not have a clear succession plan. MRM is in a moderately competitive position and industry attractiveness, with a tendency towards a defensive strategy and selective investment. The implication for the sustainability of family businesses is that they keep options open for the next generation to continue the business, while still considering future industry conditions. Meanwhile, LRM is in a superior competitive position with an aggressive growth strategy, technology investment, and modernization of production systems. In this group, succession planning is attempted early on to ensure the sustainability of family businesses in the future.

In addition, the results of this study also found an indication of an initial correlation between the competitive position of family business in the Industry Attractiveness Matrix and the tendency of succession planning for the sustainability of family business. Family businesses with weak competitive positions often lack targeted succession planning, while companies with strong competitive positions are actively preparing potential successors and making sustainable investments.

The strategic implications of this study indicate that the sustainability of family businesses in RMI is determined mainly by the ability to adapt to changes in the business environment, financial strength, technological mastery, and the quality of business networks. In the context of succession planning, a strategic and planned approach is needed so that family businesses can survive and transform amidst increasingly competitive industry dynamics and complex industry regulations.

Thus, the sustainability of family businesses in RMI is greatly influenced by the attractiveness of the industry, the competitive position of the family business, and the readiness of succession planning. This industry is predicted to be dominated by medium and large-scale companies in the future, and may also see the entry of non-family businesses with large capital that have the potential to replace the role of family businesses that are unable to adapt.

Research Limitations and Recommendations

This study has several limitations. First, the study was only conducted in the Central Lampung Regency area, so the results may not fully represent the RMI conditions in Lampung Province or other regions in Indonesia that have different socio-economic characteristics and industrial environments. Second, this study uses a qualitative approach with a multiple case study method, which is exploratory, so that it cannot be statistically generalized to the entire population of family businesses in RMI in Indonesia. Third, the industry attractiveness and business strength factors measured through the GE Industry Portfolio Matrix are compiled based on the subjective perceptions of informants, which, although validated collectively in interviews, still contain elements of personal bias.

Further researchers are advised to conduct similar studies in other rice production centers in Indonesia, such as Lampung Province as a whole, East Java, West Java, South Sumatra, and South Sulawesi, in order to compare the characteristics of the competitiveness and sustainability of family businesses in various geographic and cultural business contexts. In addition, future research can use a mixed-method approach so that the research results are more objective, measurable, and at the same time able to capture phenomenological aspects in the dynamics of family businesses in the RMI.

Based on the findings of this study, several policy recommendations can be considered by the government and related regulators, i.e, Reformulation of RMI Policy, Increasing Access to Financing and Technology for SME Family Businesses, and Preparation of a Roadmap for Revitalizing RMI Based on SME Family Businesses.

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Appendix 1. RMI Attractiveness Weight

No	RMI Attractiveness Criteria	Industry Attractiveness Weight per Company									Average
		SRM			MRM			LRM			
		A. Rohim	Didi	Timbul	Anugrah	Berkah	4 Putra	Pujodadi	Lanang	Barokah	
1	Industry size	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2	Industry growth	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.06
3	Pricing (grain & rice)	0.1	0.05	0.1	0.1	0.05	0.1	0.05	0.05	0.05	0.07
4	Market diversity (rice consumers)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
5	Industry competition structure	0.05	0.1	0.15	0.1	0.15	0.1	0.15	0.15	0.1	0.12
6	Industry profitability	0.2	0.2	0.15	0.15	0.1	0.15	0.2	0.15	0.15	0.16
7	Industry technical rules	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
8	Inflation vulnerability	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
9	Industry cycle	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
10	Purchasing power of customers	0.05	0.1	0.05	0.1	0.15	0.1	0.05	0.15	0.15	0.10
11	Technology influence	0.1	0.1	0.1	0.15	0.1	0.1	0.15	0.1	0.1	0.11
12	Energy impact (fuel/electricity)	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.05	0.1	0.09

Appendix 2. RMI Attractiveness Rating

No	RMI Attractiveness Criteria	Industry Attractiveness Rating									Average
		SRM			MRM			LRM			
		A. Rohim	Didi	Timbul	Anugrah	Berkah	4 Putra	Pujodadi	Lanang	Barokah	
1	Industry size	3	3	3	4	3	3	5	3	4	3.44
2	Industry growth	3	3	3	4	3	3	5	2	3	3.22
3	Pricing (grain & rice)	3	3	2	3	3	3	4	3	3	3.00
4	Market diversity (rice consumers)	3	4	3	4	3	4	3	4	3	3.44
5	Industry competition structure	2	2	2	2	3	3	2	1	3	2.22
6	Industry profitability	2	3	2	3	3	2	4	2	3	2.67
7	Industry technical rules	2	4	3	3	3	3	4	4	4	3.33
8	Inflation vulnerability	3	4	3	3	4	3	4	3	3	3.33
9	Industry cycle	2	2	2	3	3	3	4	2	3	2.67
10	Purchasing power of customers	3	3	3	4	4	4	3	5	4	3.67
11	Technology influence	3	3	3	4	3	5	5	3	4	3.67
12	Energy impact (fuel/electricity)	2	3	2	3	3	2	3	2	4	2.67
13	Social/community impact	3	2	3	4	3	3	3	3	3	3.00
14	Environmental impact (pollution)	3	3	3	3	3	3	3	3	3	3.00
15	Influence of law & regulation	2	2	1	1	1	1	2	1	4	1.67
16	Human influence (labor)	3	4	3	5	4	3	4	5	3	3.78

Appendix 3. RMI Business Strength Weight

No	Determinants of Business Strength	Business Strength Weight									Average
		SRM			MRM			LRM			
		A. Rohim	Didi	Timbul	Anugrah	Berkah	4 Putra	Pujodadi	Lanang	Barokah	
1	Market share	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.15	0.067
2	Product line size	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.050
3	Production capacity	0.1	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.1	0.067
4	Production cost efficiency	0.05	0.05	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.056
5	Sales distribution effectiveness	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.050
6	Advertising and promotion effectiveness	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.050
7	Location facilities	0.05	0.05	0.05	0.1	0.05	0.05	0.05	0.05	0.05	0.056
8	Experience curve effect	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.050
9	Grain raw material network	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.1	0.106
10	Raw material inventory (grain)	0.2	0.15	0.2	0.15	0.2	0.15	0.15	0.15	0.15	0.167
11	Product quality	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.05	0.1	0.083
12	Technology advantage	0.1	0.1	0.1	0.15	0.1	0.1	0.1	0.15	0.1	0.111
13	Cash turnover	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.050
14	Company and product image	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.050

Appendix 4. RMI Business Strength Rating

No	Determinants of Business Strength	Business Strength Rating									Average
		SRM			MRM			LRM			
		A. Rohim	Didi	Timbul	Anugrah	Berkah	4 Putra	Pujodadi	Lanang	Barokah	
1	Market share	2	2	2	3	2	3	3	3	3	2.56
2	Product line size	1	2	2	3	2	3	4	3	3	2.56
3	Production capacity	2	2	2	3	3	3	4	3	4	2.89
4	Production cost efficiency	2	2	2	2	2	4	4	3	3	2.67
5	Sales distribution effectiveness	2	3	1	3	3	4	3	2	4	2.78
6	Advertising and promotion	1	1	1	2	1	3	1	1	1	1.33
7	Location facilities	3	4	4	4	4	4	4	3	4	3.78
8	Experience curve effect	4	4	4	3	5	5	4	3	3	3.89
9	Grain raw material network	3	3	4	5	4	5	5	4	3	4.00
10	Raw material inventory (grain)	2	2	1	3	2	3	4	4	4	2.78
11	Product quality	3	3	1	3	3	3	4	3	4	3.00
12	Technology advantage	2	2	2	3	3	3	4	4	4	3.00
13	Cash turnover	3	3	2	3	3	3	3	3	4	3.00
14	Company and product image	4	4	3	4	3	5	4	3	3	3.67