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# THE INFLUENCES DEGREE OF VARIOUS FACTORS ON THE DEVELOPMENT OF ENTERPRISES IN THE GRAPES AND WINE SECTOR

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#### Abstract

The grapes and wine sector in the Republic of Moldova is a strategic one for the national economy. During the 2020-2021 year, a study was conducted on the factors influencing the development of enterprises in the grapes and wine sector in the Republic of Moldova.

The research was carried out within the project: "Impact of macromedia and geographical factors on bankruptcy and business performance of economic entities in the agri-food sector in the Republic of Moldova", project code 20.80009.0807.26, according to contract between SAUM and NARD. The study was conducted by interviewing companies.

As a result of the study it was established: economic factors/risks obtained an average rating of 4.3 points on the scale of 5 pt.; technical and technological factors/risks obtained an average rating of 4.2 points on the scale of 5 pt.; ecological factors/risks obtained an average rating of 4.2 points on the scale of 5 pt.; legislative-legal factors/risks obtained an average rating of 4.1 points on the scale of 5 pt.; information factors / risks obtained an average rating of 4.2 points on the scale of 5 pt.; moral factors/risks obtained an average rating of 4.3 points on the scale of 5 pt.

Key words: agriculture, development, enterprise, grapes, horticulture, influencing, factors, wine.

#### INTRODUCTION

The agri-food sector in the Republic of Moldova, especially the wine sector is a strategic one. The wines produced, wineries, vineyards and gastronomy, along with other tourist objects in Moldova are the business card of our republic.

Risk management involves the identification and assessment of risks, the identification and establishment of the risk response in order to reduce the possibility of risks, as well as the reduction of the consequences, as a result of the materialization of risks (POCA, 2018).

Risk is the likelihood or threat of damage, injury, loss or any other adverse situation caused by external or internal vulnerabilities and which can be avoided by certain preventive measures (BNM, 2022).

Risks that accompany the entity's activity and that focus on obtaining unfavourable results, in which the entity loses or does not lose part of its income, profit, capital, etc., as a result of a situation of uncertainty regarding its activity are grouped in financial risks (Paladi et al., 2018).

The agri-food sector is exposed to environmental risks, especially in recent years in connection with global climate change (Oprea et al., 2014; Balan et al., 2021).

There are more classifications of risks and business success factors worldwide.

Risk exposure is a probabilistic concept, being directly related to the probability of materialization of the risk. It has significance only before the onset of risk. Risk exposure operates with an implicit hierarchy of identified risks (POCA, 2018).

The aim of the research is to evaluate the wine sector, in terms of different risks / factors.

## MATERIALS AND METHODS

The research was conducted based on the project "Impact of macro-environmental and geographical factors on bankruptcy and business performance of economic entities in the agri-food sector in the Republic of Moldova" under the State Program (2020-2024) with the code 20.80009.0807.26 and is summarized as:

- studying the specialized literature;

- highlighting the entities in the agri-food sector for conducting surveys;

- assessment of risk factors of entities in the agri-food sector;

- analysis of survey results;

- processing survey results.

In the 2020-2021 years, 638 entities from the Republic of Moldova, which carry out one or more activities in the agri-food sector, were interviewed based on the questionnaire developed by the research team. In regional profile, they represented - Northern Region - 220 entities or 34.48%; Central Region - 343 entities or 53.76% and Southern Region - 75 entities, or 11.76%.

The study was attended by 160 entities in the wine sector out of the 638 entities that participated in the survey, for which a survey was conducted on a number of performance or risk factors for the activity.

## **RESULTS AND DISCUSSIONS**

All risks are grouped into several groups:

C. Risk group by origin main factors:

- subgroup C.1. Economic risks - Market, Price of production factors, Financial assets, Exchange rate, Inflation, Subsidies, Tax system, Other risks;

- subgroup C.2. Political risks - Political affiliation, President, Parliament, Government,

Ministry, Local public administration, Food Safety National Agency, Other risks;

- subgroup C.3. Technical-technological risks, -Application of technical progress in the production process, Modernization / Renewal of technique, equipment, apparatus, etc. necessary for the activity, Modernization of the applied technology, Know-how, Land consolidation, Leasing of the goods necessary for the activity, Property in property, Other risks;

- subgroup C.4. Ecological risks - Climate change, Natural disasters (frost, hail, drought, torrential rains, etc.), Landslides, Deforestation, Drainage of water basins (lakes, rivers), Other risks;

- subgroup C.5. Legislative-legal risks -National legislation, International legislation, Codes - land, water, fiscal, etc., Laws, GD, Sector development programs, Technical regulations, Standards, Other risks;

- subgroup C.6. Information Risks - Delayed Information Release, False Information, Disclosure of Production Secrets and Confidential Information, Other Risks;

- subgroup C.7. Moral risks - Sale of expired products, goods and services, which may cause damage to the consumer, Purchase of expired products, goods and services - by false update to the seller, which may cause indirect damage to the consumer, Theft of products, goods, Other risks;

D. The group of risks after their occurrence:

- subgroup D.1. Retrospective risks - Mistakes in the production process, Mistakes in the promotion process, Mistakes in the marketing process, Other risks;

- subgroup D.2. Current risks - Temporary interruption of the production process, Temporary equipment failures, Inability of staff to work, Other risks;

- subgroup D.3. Prospective risks - Business plan, Development strategies and policies, Other risks;

E. The group of risks according to the nature of the record:

- subgroup E.1. External risks - Inflation, Currency, Nature, Other risks;

- subgroup E.2. Internal risks - Partners, Suppliers, Consumers, Marketing strategy, Activity policy, Production potential, Technical endowment, Level of specialization, Workforce qualification, Safety technique, Other risks;

F. The group of risks according to the sphere of appearance on which the fields of entrepreneurial activity are based:

- subgroup F.1. Risks in the field of production - Application of technical progress in the production process, Modernization / Renewal of equipment, machinery, equipment, etc. Needs for business, Modernization of applied technology, Know-how, Land consolidation, leasing of goods needed for business, Property, Marketing strategy, Activity policy, Production potential, Technical endowment, Level of specialization, Qualification of the workforce, Security technology, Other risks;

- subgroup F.2. Risks in financial activity - Banks, Financial institutions, Other risks;

subgroup F.3. Commercial risks - Auction, Wholesale, Retail, Insurance, Other risks;
subgroup F.4. Intermediate risks - Notary,

Broker, Lawyers, Other risks.



Figure 1. Diagram of the economic (a) and the political (b) risks assessment

Analysing the risks group C. The risk group according to the main factors of occurrence we can mention that:

- in subgroup C.1. Economic risks, the market has a contribution as a risk factor between 3 and 5. The average value obtaining 4.14 points. The price of the factors of production has a contribution as a risk factor between 2 and 5. The average value obtaining 3.92 points. The financial assets have a contribution as a risk factor between 3 and 5. The average value is 4.12 points. The exchange rate has a contribution as a risk factor between 3 and 5. The average value is 4.29 points. Inflation has a contribution as a risk factor between 3 and 5. The average value is 3.97 points. Grants have a contribution as a risk factor between 2 and 5. The average value is 4.39 points. The system of taxes and fees has a contribution as a risk factor between 2 and 5. The average value obtaining 4.12 points. Other risks of subgroup C.1. Economic risks have a contribution as a risk factor between 2 and 5. The average value is 3.93 points.

- subgroup C.1. Economic risks obtained an average rating of 4.11 points. This is easy to see from the risk assessment chart (Figure 1 a).

- in subgroup C.2. Political risks, Political affiliation has a contribution as a risk factor between 1 and 5. The average value is 3.88 points. The president has a contribution as a risk factor between 3 and 5. The average value is 3.89 points. Parliament has a contribution as a risk factor between 3 and 5. The average value is 4.03 points. The government has a contribution as a risk factor between 3 and 5. The average value is 4.29 points. The Ministry has a contribution as a risk factor between 3 and 5. The average value is 4.11 points. The local public administration has a contribution as a risk factor between 3 and 5. The average value obtaining 4.28 points. ANSA has a contribution as a risk factor between 3 and 5. The average value obtaining 4.03 points. Other risks of subgroup C.2. Political risks have a contribution as a risk factor between 3 and 5. The average value is 3.88 points.

- subgroup C.2. Political Risk obtained an average rating of 4.05 points. This is easy to see from the risk assessment chart (Figure 1 b).



Figure 2. Diagram of the technic and technological (a) and the ecological (b) risks assessment

- in subgroup C.3. Technical and technological risks, the application of PTS in the production process has a contribution as a risk factor between 3 and 5. The average value obtaining 4.31 points. Modernization / Renewal of equipment, machinery, equipment, etc. required for the activity has a contribution as a risk factor between 2 and 5. The average value obtaining 4.02 points. The modernization of the applied technology has a contribution as a risk factor between 3 and 5. The average value obtaining 4.14 points. The know-how has a contribution as a risk factor between 2 and 5. The average value obtaining 4.05 points. Land consolidation has a contribution as a risk factor between 3 and 5. The average value is 4.09 points. The lease of the goods necessary for the activity has a contribution as a risk factor between 3 and 5. The average value obtaining 4.19 points. The property has a contribution as a risk factor between 3 and 5. The average value is 4.14 points. Other risks of subgroup C.3. Technical-technological risks have a contribution as a risk factor between 3 and 5. The average value obtaining 4.04 points.

- subgroup C.3. Technical and technological risks obtained an average rating of 4.12 points. This is easy to see from the risk assessment chart (Figure 2 a).

- in subgroup C.4. Ecological risks, Climate change has a contribution as a risk factor between 3 and 5. The average value is 4.24 points. Natural disasters (frost, hail, drought, torrential rains, etc.) have a contribution as a risk factor between 3 and 5. The average value is 4.02 points. Landslides have a contribution as a risk factor between 3 and 5. The average value is 3.98 points. Deforestation has a contribution as a risk factor between 3 and 5. The average value is 3.89 points. The drainage of water basins (lakes, rivers) has a contribution as a risk factor between 3 and 5. The average value is 4.11 points. Other risks of subgroup C.4. Ecological risks have a contribution as a risk factor between 1 and 5. The average value is 4.11 points.

- subgroup C.4. Ecological risks obtained an average rating of 4.06 points. This is easy to see from the risk assessment chart (Figure 2 b)



- in subgroup C.5. Legislative-legal risks, the national legislation has a contribution as a risk factor between 3 and 5. The average value obtaining 3.97 points. International law has a contribution as a risk factor between 3 and 5. The average value is 4.02 points. Codes - land, water, tax, etc. has a contribution as a risk factor between 2 and 5. The average value is 4.06 points. Laws have a contribution as a risk factor between 3 and 5. The average value is 4.11 points. GD has a contribution as a risk factor between 3 and 5. The average value is 3.99 points. The development programs of the sector have a contribution as a risk factor between 3 and 5. The average value obtaining 4.2 points. Technical regulations have a contribution as a risk factor between 3 and 5. The average value obtaining 3.98 points. The standards have a contribution as a risk factor between 3 and 5. The average value is 4.26 points. Other risks of subgroup C.5.

Legislative-legal risks have a contribution as a risk factor between 2 and 5. The average value obtaining 3.98 points.

- subgroup C.5. Legislative-legal risks obtained an average rating of 4.06 points. This is easy to see from the risk assessment chart (Figure 3 a).

- in subgroup C.6. Information risks, Delayed information has a contribution as a risk factor between 2 and 5. The average value is 4.08 points. False information has a contribution as a risk factor between 3 and 5. The average value is 4.01 points. Disclosure of production secrets and confidential information has a contribution as a risk factor between 3 and 5. The average value is 4.14 points. Other risks of subgroup C.6. Information risks have a contribution as a risk factor between 3 and 5. The average value is 3.86 points.

- subgroup C.6. Information Risk obtained an average rating of 4.02 points. This is easy to see from the risk assessment chart (Figure 3 b).



Figure 4. Diagram of the moral (a) and the retrospective (b) risks assessment

- in subgroup C.7. Moral risks, The sale of products, goods and services with expired expiration date, which may cause harm to the consumer has a contribution as a risk factor between 3 and 5. The average value is 4.04 points. Procurement of expired products, goods and services - by false update to the seller, which can cause indirect damage to the consumer has a contribution as a risk factor between 3 and 5. The average value is 4.02 points. Theft of products, goods has a contribution as a risk factor between 3 and 5. The average value obtaining 4.24 points. Other risks of subgroup C.7. Moral risks have a contribution as a risk factor between 3 and 5. The average value is 3.88 points.

- subgroup C.7. Moral risks obtained an average rating of 4.05 points. This is easy to see from the risk assessment chart (Figure 4 a). Analyzing the risk group D. The risk group after their occurrence we can mention that:

- in subgroup D.1. Retrospective risks, Mistakes that occurred in the production process - for their analysis has a contribution as a risk factor between 3 and 5. The average value obtaining 4.14 points. Mistakes that occurred in the promotion process - for their analysis has a contribution as a risk factor between 3 and 5. The average value obtaining 4.18 points. Mistakes that occurred in the trading process - for their analysis has a contribution as a risk factor between 3 and 5. The average value obtaining 4.05 points. Other risks of subgroup D.1. Retrospective risks have a contribution as a risk factor between 2 and 5. The average value obtaining 4.11 points.

- subgroup D.1. Retrospective Risks obtained an average rating of 4.12 points. This is easy to see from the risk assessment chart (Figure 4 b).



Figure 5. Diagram of the current (a) and the prospective (b) risks assessment

- in subgroup D.2. Current risks, The temporary interruption of the production process has a contribution as a risk factor between 3 and 5. The average value obtaining 4.25 points. Temporary damage to the machine has a contribution as a risk factor between 3 and 5. The average value is 3.99 points. The incapacity for work of the staff has a contribution as a risk factor between 3 and 5. The average value obtaining 4.09 points. Other risks of subgroup D.2. Current risks have a contribution as a risk factor between 1 and 5. The average value is 4.05 points.

- subgroup D.2. Current Risks scored an average rating of 4.1 points. This is easy to see from the risk assessment chart (Figure 5 a).

- in subgroup D.3. Prospective risks, The business plan has a contribution as a risk factor between 2 and 5. The average value obtaining 4.11 points. Development strategies and policies have a contribution as a risk factor between 3 and 5. The average value obtaining 4.05 points. Other risks of subgroup D.3. Prospective risks have a contribution as a risk factor between 3 and 5. The average value is 3.99 points.

- subgroup D.3. Perspective Risk obtained an average rating of 4.05 points. This is easy to see from the risk assessment chart (Figure 5 b).





Analyzing the risk group E. The risk group according to the nature of the record we can mention that:

- in subgroup E.1. External risks, Inflation has a contribution as a risk factor between 3 and 5. The average value is 4.09 points. The currency has a contribution as a risk factor between 3 and 5. The average value is 4.14 points. Nature has a contribution as a risk factor between 2 and 5. The average value is 4.43 points. Other risks of subgroup E.1. External risks have a contribution as a risk factor between 3 and 5. The average value obtaining 4.09 points.

- subgroup E.1. External risks obtained an average rating of 4.19 points. This is easy to see from the risk assessment chart (Figure 6 a). - in subgroup E.2. Internal risks, The partners have a contribution as a risk factor between 3 and 5. The average value obtaining 4.17 points. The suppliers have a contribution as a risk factor between 1 and 5. The average value is 4.21 points. Consumers have a contribution as a risk factor between 2 and 5. The average value is 4.16 points. The marketing strategy has a contribution as a risk factor between 3 and 5. The average value obtaining 4.04 points. The activity policy has a contribution as a risk factor between 2 and 5. The average value obtaining 4.03 points. The production potential has a contribution as a risk factor between 3 and 5. The average value is 4.23 points. The technical endowment has a contribution as a risk factor between 3 and 5. The average value obtaining 4.31 points. The level of specialization has a contribution as a risk factor between 1 and 5. The average value obtaining 4.1 points. The qualification of the labor force has a contribution as a risk factor between 3 and 5. The average value obtaining 4.38 points. The security technique has a contribution as a risk factor between 2 and 5. The average value obtaining 4.15 points. Other risks of subgroup E.2. Internal risks have a contribution as a risk factor between 3 and 5. The average value is 4.08 points.

- subgroup E.2. Internal Risk obtained an average rating of 4.17 points. This is easy to see from the risk assessment chart (Figure 6 b).



Figure 7. Diagram of the production (a) and the financial activity (b) risks assessment

Analyzing the risk group F. The risk group by the sphere of appearance on which the fields of entrepreneurial activity are based, we can mention that:

a)

- in subgroup F.1. Risks in the field of production, The application of PTŞ in the production process has a contribution as a risk factor between 1 and 5. The average value obtaining 3.94 points. Modernization / Renewal of equipment, machinery, equipment, etc. required for the activity has a contribution as a risk factor between 1 and 5. The average value obtaining 3.62 points. The modernization of the

applied technology has a contribution as a risk factor between 3 and 5. The average value obtaining 4.27 points. The know-how has a contribution as a risk factor between 2 and 5. The average value is 4.15 points. Land consolidation has a contribution as a risk factor between 3 and 5. The average value is 4.08 points. The lease of the necessary assets for the activity has a contribution as a risk factor between 1 and 5. The average value obtaining 4.04 points. The property has a contribution as a risk factor between 2 and 5. The average value obtaining 4.04 points. The property has a contribution as a risk factor between 2 and 5. The average value is 4.06 points. The marketing strategy has

a contribution as a risk factor between 1 and 5. The average value is 3.72 points. The activity policy has a contribution as a risk factor between 3 and 5. The average value obtaining 4.17 points. The production potential has a contribution as a risk factor between 2 and 5. The average value is 3.89 points. The technical endowment has a contribution as a risk factor between 3 and 5. The average value obtaining 3.93 points. The level of specialization has a contribution as a risk factor between 3 and 5. The average value obtaining 4.15 points. The qualification of the labor force has a contribution as a risk factor between 3 and 5. The average value obtaining 4.05 points. The security technique has a contribution as a risk factor between 3 and 5. The average value obtaining 4.12 points. Other risks of the subgroup have a contribution as a risk factor between 3 and 5. The average value is 3.84 points.

- subgroup F.1. Risks in the field of production obtained an average rating of 4 points. This is

easy to see from the risk assessment chart (Figure 7 a).

A special situation is if we compare the above results. Most agri-food entities mention that there are different classification criteria, even if it is the same indicator. Therefore, are different results.

- in subgroup F.2. Risks in financial activity, Banks have a contribution as a risk factor between 2 and 5. The average value obtaining 4.08 points. Financial institutions have a contribution as a risk factor between 1 and 5. The average value is 3.96 points. Other risks of the subgroup have a contribution as a risk factor between 2 and 5. The average value is 4.08 points.

- subgroup F.2. Risks from financial activity obtained an average rating of 4.04 points. This is easy to see from the risk assessment chart (Figure 7 b).



Figure 8. Diagram of the commercial sphere (a) and the intermediate activity (b) risks assessment

- in subgroup F.3. Risks in the commercial sphere. The auction has a contribution as a risk factor between 3 and 5. The average value obtaining 3.97 points. The wholesale trade has a contribution as a risk factor between 2 and 5. The average value is 4.22 points. Retail trade has a contribution as a risk factor between 2 and 5. The average value is 3.96 points. The insurance has a contribution as a risk factor between 2 and 5. The average value is 3.96 points. The insurance has a contribution as a risk factor between 2 and 5. The average value obtaining 4.04 points. Other risks of the subgroup have a contribution as a risk factor between 2 and 5. The average value obtaining 4.04 points. Other risks of the subgroup have a contribution as a risk factor between 2 and 5. The average value is 4.04 points.

- subgroup F.3. Risks in the commercial sphere obtained an average rating of 4.05 points. This is easy to see from the risk assessment chart (Figure 8 a).

- in subgroup F.4. Risks from the intermediate activity, Notary has a contribution as a risk factor between 3 and 5. The average value obtaining 3.83 points. The broker has a contribution as a risk factor between 2 and 5. The average value is 4.24 points. Lawyers have a contribution as a risk factor between 3 and 5. The average value is 3.78 points. Other risks of subgroup F.4. Risks in the intermediate activity

have a contribution as a risk factor between 3 and 5. The average value obtaining 4.14 points. - subgroup F.4. Risks from the intermediate activity obtained an average rating of 4 points. This is easy to see from the risk assessment chart (Figure 8 b).

## CONCLUSIONS

The agri-food sector is a difficult one. Its development has recently been influenced by a number of factors - objective and subjective.

The predominantly foreign agri-food trade is oriented towards Russia, especially grapes and wine production. Since 2006, it has been influenced by global political relations, creating a negative impact through the embargo on Moldovan production.

The COVID-19 pandemic had a particularly negative influence. At the same time, it has favored the food industry and trade in favor of online activities.

The study allowed us to identify the weaknesses and strengths in the activity of entities in the agri-food sector, especially the wine sector.

This study is a pretext to propose some changes in legislation, tax system, subsidies, etc. in order to stimulate the successful activity of the wine-producing entities, and to reduce the risk of bankruptcy.

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