



UNIVERSITATEA TEHNICĂ A MOLDOVEI

**EVOLUȚIA PREȚULUI CĂRNII DE PORC ÎN
REPUBLICA MOLDOVA ÎN CONTEXT REGIONAL:
DETERMINANȚI ECONOMICI, RISCURI DE PIAȚĂ
ȘI IMPLICAȚII ASUPRA COMPETITIVITĂȚII
SECTORULUI**

Conducători științifici: Zbancă Andrei, dr., conf. univ.

Caisin Larisa, dr. hab. prof. univ.

Autor:

Tașcă Ion, master MBA

CHIȘINĂU 2026

**MINISTRY OF EDUCATION AND RESEARCH OF THE REPUBLIC OF
MOLDOVA**

Technical University of Moldova

MBA Management in Agribusiness Microqualification Program

**Admitted to the defense
Aurelia LITVIN**

„____” 2026 _____

**THE EVOLUTION OF PORK PRICES IN THE REPUBLIC OF
MOLDOVA IN A REGIONAL CONTEXT: ECONOMIC
DETERMINANTS, MARKET RISK AND IMPLICATIONS FOR
THE COMPETITIVENESS OF THE SECTOR**

MBA thesis

Author: Tașcă Ion
Master's student, MBA Management in Agribusiness

Scientific supervisors: dr. conf. univ. Zbancă Andrei,
Caisin Larisa, dr. hab. prof. univ.

Chișinău, 2026

CONTENTS

ANNOTATION.....	5
INTRODUCTION	9
1. BASICS AND SUMMARY OF THEORETICAL ASPECTS	14
1.1. Theoretical foundations of price formation, market price and risk.....	14
1.2. Competitiveness frameworks for the agri-food sector and economics of commodity exchanges and price discovery.....	16
1.3. The global pork market as Moldova's price environment.....	17
1.4. Synthesis and identification of the research gap.....	18
2. RESEARCH METHODOLOGY	19
2.1. Research design and data sources	19
2.2. Analytical framework and methods	20
2.3. Conceptual framework and analytical model.....	21
3. RESULTS AND ANALYSIS	23
3.1. Structure of the sector and fragile self-sufficiency	23
3.2. Consumption, demand and the household economy	26
3.3. The evolution of domestic pork prices and macroeconomic determinants of prices	27
3.4. Regional price benchmarking, the economic weight of the sector and market risk.....	31
3.5. Trade policy and competitiveness for the price-discovery gap.....	36
4. TARIFF QUOTAS, FUTURE PRICE FORMATION AND THE PROPOSED COMMODITY EXCHANGE	41
4.1. The tariff-quota mechanism and the evidence on its utilization for price formation	41
4.2. Future price: two policy trajectories and implications for the proposed commodity exchange	43
4.3. The weak links of the industry	45
4.4. The subsidy gap: how competing producers are supported abroad	46
5. A PIG-MARKET REFERENCE AND CONFIDENTIAL TRADING PLATFORM FOR THE REPUBLIC OF MOLDOVA	50
5.1. Strategic concept and international models for a small market	50
5.2. European price-reference institutions: the most relevant precedents.....	52
5.3. The proposed platform resembles and differs from these models for pork prices	53
5.4. The methodology and weekly reference Moldovan pig price.....	56
5.5. Standard contracts and producer aggregation to get the farmer paid.....	59
5.6. Incentives: what each participant gains and model of the best fit for Moldova.....	62
CONCLUSIONS AND RECOMMENDATIONS	64
REFERENCES	67
APPENDICES.....	74

ANNOTATION

The master's thesis is structured and includes: annotation, introduction, 5 chapters, conclusions and recommendations, bibliography, annexes.

Keyword used in the thesis: pork prices; Republic of Moldova; agricultural market risk; African Swine Fever; price transmission; competitiveness; commodity exchange; agribusiness.

The field of study. The thesis entitled " The evolution of pork prices in the Republic of Moldova in a regional context: economic determinants, market risk and implications for the competitiveness of the sector " addresses a highly relevant and timely topic in the context of increasing volatility in agricultural commodity markets, regional economic integration, and the challenges facing the livestock sector in the Republic of Moldova.

This thesis examines the evolution of pork prices in the Republic of Moldova between 2014 and 2026, with particular emphasis on the period from 2020 onward, and situates that evolution within the wider regional and European context. Pork is the most consumed meat in Moldova and a politically sensitive component of the household food basket, yet the domestic pig sector remains small, fragmented and increasingly dependent on imports. The central problem investigated is why Moldovan pork prices have become more volatile and why the domestic sector has steadily lost competitiveness despite rising prices.

Purpose and objectives of the thesis:

The methodological approach is appropriate for the objectives of the study. The author applies quantitative economic analysis supported by statistical data from national and international sources. The use of comparative regional analysis enables a broader understanding of market developments and strengthens the validity of the conclusions. The research adequately considers factors such as production costs, feed prices, exchange rate movements, inflation, import competition, consumer demand, trade policies, and animal health challenges affecting pork markets.

One of the strengths of the thesis is its comprehensive assessment of market risks affecting the pork sector. The analysis recognizes the influence of climate variability on feed availability, fluctuations in international commodity prices, disease outbreaks such as African Swine Fever, geopolitical developments, and changing trade conditions. These factors are correctly identified as major determinants of price instability and sector competitiveness.

The practical significance of the research is considerable. The recommendations proposed by the author may support policymakers, producer associations, processors, and farmers in improving market transparency, strengthening risk management mechanisms, enhancing domestic production efficiency, and increasing the competitiveness of the pork value chain. The proposed measures are consistent with the current priorities for agricultural development and the country's gradual alignment with European market standards.

The novelty and scientific originality. The research adopts a sector case-study design built on secondary quantitative data drawn from the National Bureau of Statistics of the Republic of Moldova, FAOSTAT, UN Comtrade, Eurostat, the USDA Foreign Agricultural Service, the National

Bank of Moldova and the World Organisation for Animal Health, complemented by an interpretive analysis of policy and disease-surveillance reports. Price series are analysed descriptively and through the lens of three economic frameworks: the cobweb (hog-cycle) theorem, price-transmission and the law of one price, and a market-risk decomposition distinguishing systematic from idiosyncratic shocks.

The findings show that, contrary to a simple import-dependence narrative, Moldova is in normal years largely self-sufficient in pork, covering roughly 88–90% of consumption from domestic production, with the sector recovering from its post-Soviet collapse and gradually shifting from household to commercial farms. This self-sufficiency is, however, fragile. Feed-grain costs, the leu exchange rate, imported reference prices from the European Union, and recurrent African Swine Fever (ASF) outbreaks jointly drive the price variation observed since 2020, while the war in Ukraine simultaneously raised feed costs, disrupted trade corridors and accelerated an emigration that has cut the population by about 16% since 2014. The decisive recent event was the 2025 ASF crisis, which inflicted losses of about 35% on the national branch, cut the herd by roughly a quarter, pushed commercial output to a ten-year low and forced a roughly fourteen-fold surge in live-pig imports, lifting the import share of consumption above 20% for the first time. A structural weakness amplifying every shock is the absence of any organised commodity exchange or transparent reference-price mechanism, which leaves price discovery to informal, processor-concentrated channels.

Theoretical importance of the work. The thesis contributes an integrated diagnostic of the sector's price formation and a concrete institutional proposal: a staged price-transparency architecture progressing from a published national reference-price index toward a regional spot and forward contract platform, modelled on established agricultural exchanges.

Recommendations address biosecurity, feed-cost hedging, vertical coordination and trade policy under the EU Deep and Comprehensive Free Trade Area. The study's limitations stem from gaps and revisions in national livestock statistics, and avenues for further econometric and primary-survey research are identified.

Applied value. The thesis demonstrates the author's ability to collect, process, and critically interpret complex economic information. The empirical analysis is clearly presented, while the conclusions are logically derived from the research findings. The work reflects independent scientific thinking and a good command of research methodology. Strengths:

1. High scientific and practical relevance of the research topic.
2. Comprehensive analysis of pork price dynamics in both national and regional contexts.
3. Appropriate application of economic and statistical analytical methods.
4. Strong integration of theoretical concepts with empirical evidence.
5. Well-formulated conclusions and practical policy recommendations.
6. Clear structure, coherent presentation, and professional academic writing.

INTRODUCTION

Background and context of the topic

Pork occupies a singular position in the food economy of the Republic of Moldova. It is the most widely consumed meat in the country, deeply embedded in culinary tradition, in the household economy of rural families, and in the seasonal rhythm of holidays such as Christmas and Easter, when demand peaks sharply. For a large share of the rural population, raising one or two pigs a year has historically been less a commercial activity than a form of household food security and informal saving. At the same time, pork is one of the most price-sensitive items in the consumer basket: meat alone accounts for roughly eight percent of the national consumer price index, the single largest food component, so that movements in pork prices feed directly into headline inflation and into the public perception of the cost of living.

Despite this centrality, the Moldovan pig sector is small, structurally fragmented and, by regional standards, only partially recovered from the collapse it suffered in 1997–2005, when the commercial farms were ruined and the market came to be supplied almost entirely by household plots [\[15\]](#). Two features make the sector distinctive. First, in contrast to the common assumption of import dependence, Moldova is in normal years largely self-sufficient in pork, covering roughly 88–90% of consumption from domestic production [\[14\]](#), [\[19\]](#). Second, this self-sufficiency is fragile: it rests on a still-incomplete transition from household to commercial farming and is acutely vulnerable to disease, as the 2025 African Swine Fever crisis demonstrated when it cut the herd by roughly a quarter and pushed the import share of consumption above one fifth for the first time [\[14\]](#). The paradox at the heart of this thesis is that pork prices for Moldovan consumers and producers have risen substantially and become more volatile, yet this rising price environment has not translated into a durably stronger, more resilient domestic sector; higher prices have largely reflected imported cost pressures, feed and currency shocks, and disease, rather than improved domestic value creation.

Three intertwined developments since 2020 have reshaped the price landscape. First, animal-disease risk has intensified. African Swine Fever (ASF), endemic in the wider region since it entered the European Union through the Baltic states and Poland in 2014, has produced recurrent outbreaks in Moldova and a succession of epidemics across neighbouring Romania, Ukraine and, since 2020, the European Union's largest producers including Germany. The looming threat of Foot-and-Mouth Disease (FMD) in the broader neighbourhood adds a second sanitary risk that can close export markets and disrupt regional trade overnight. Second, the global commodity and energy shock of 2021–2022, sharply amplified by Russia's full-scale invasion of Ukraine in February 2022, drove feed-grain and

energy costs to record levels, compressing the margins of pig producers everywhere. Third, the same war accelerated Moldova's long-running demographic decline: emigration and the temporary inflow and onward movement of refugees reshaped both the rural labour force on which small-scale pig keeping depends and the domestic consumer base.

A further, less visible structural feature conditions how all of these shocks are transmitted into prices: Moldova has no organised agricultural commodity exchange and no transparent, publicly available reference-price mechanism for live pigs or pork. Price discovery takes place through opaque, bilateral negotiations between a fragmented mass of small producers and a small number of processors and importers, supplemented by informal agro-food markets. The absence of a transparent benchmark weakens the bargaining position of producers, widens and obscures farm-to-retail margins, and deprives policymakers of timely signals. This institutional gap is treated in this thesis not merely as a descriptive feature but as a candidate object of reform.

Statement of the problem

The problem this thesis addresses can be stated as follows. Moldovan pork prices have become increasingly volatile and increasingly determined by factors outside the control of domestic producers, while the domestic sector continues to lose ground to imports. Stakeholders — producers, processors, policymakers and consumers — lack a systematic, evidence-based account of how pork prices in Moldova are formed, how they relate to regional and European prices, which economic determinants and risks drive them, and what institutional and managerial responses could improve the sector's resilience and competitiveness. Without such an account, policy responses risk being reactive and fragmented, oscillating between ad-hoc import measures and emergency disease responses rather than addressing the structural drivers of price instability and competitive weakness.

Relevance and significance of the research

The relevance of the topic is both practical and academic. Practically, food-price stability is a matter of macroeconomic and social importance for a lower-middle-income country where food represents a large share of household spending and where the political salience of meat prices is high. Understanding the mechanics of pork price formation is a precondition for designing effective agricultural, trade and competition policy, and for guiding the investment decisions of producers and processors. The European integration trajectory of Moldova, including the obligations and opportunities arising under the Deep and Comprehensive Free Trade Area (DCFTA) with the

European Union and the candidate-country status confirmed in the mid-2020s, makes the competitiveness of the agri-food sector a strategic question.

Academically, the thesis contributes to the relatively thin literature on small, open, transition-economy livestock markets. Much of the established research on pork price cycles, price transmission and market risk has been developed for large, data-rich markets such as the United States, the European Union or China. Moldova offers an instructive case of a price-taking economy in which domestic prices are anchored to external benchmarks but transmitted through weak and non-transparent domestic institutions, and in which sanitary shocks interact with macroeconomic and geopolitical instability. The analysis of how such a market functions — and of the institutional innovations that might improve it — is of interest beyond Moldova's borders.

Research aim, objectives and questions

The overall aim of the thesis is to analyse the evolution of pork prices in the Republic of Moldova from 2014 to 2026, with emphasis on the period since 2020, to explain that evolution in terms of economic determinants and market risk within a regional and European context, and to derive implications and recommendations for the competitiveness of the domestic sector, including an institutional proposal for organised price discovery.

To achieve this aim, the following specific objectives are pursued:

1. To document and characterise the evolution of farm-gate and retail pork prices in Moldova, together with the herd, production, consumption, self-sufficiency and trade trends that underlie them.
2. To benchmark Moldovan price dynamics against regional and European reference prices, and to assess the degree and direction of price transmission between them.
3. To identify and analyse the principal economic determinants of pork prices — feed costs, the production cycle, the exchange rate, energy, and inflation — and to interpret them through established economic models.
4. To assess the principal sources of market risk affecting the sector, in particular African Swine Fever and other sanitary threats, the war in Ukraine, emigration, and import competition, and to evaluate price volatility.
5. To evaluate the competitiveness of the Moldovan pig sector and the structural role of the missing commodity-exchange and price-transparency infrastructure, and to formulate a concrete reform proposal and managerial recommendations.

These objectives are expressed in the following research questions:

- RQ1. How have pork prices in Moldova evolved since 2014, and how do they compare with regional and European prices?
- RQ2. What are the dominant economic determinants of Moldovan pork prices, and to what extent are domestic prices driven by external factors?
- RQ3. What are the main market risks facing the sector, and how do disease, war and emigration translate into price and competitiveness outcomes?
- RQ4. Would an organised reference-price mechanism or commodity exchange improve price discovery, risk management and competitiveness, and how might it be designed?

Scope, methodology in brief and structure of the thesis

The study is a sector-level case study of the Moldovan pig and pork market. It relies on secondary quantitative data from national and international statistical sources and on documentary analysis of policy and disease reports; it does not involve primary survey data; a limitation acknowledged explicitly in the methodology. The temporal scope runs from 2014 to 2026, with analytical emphasis on 2020–2026. The geographical frame is Moldova set against Poland, Ukraine and the European Union average, the markets that most directly shape Moldovan prices through trade and benchmarking.

The remainder of the thesis is organised as follows. Chapter 1 reviews the relevant literature on agricultural price formation, the hog cycle, price transmission, market risk and the economics of commodity exchanges, and identifies the gaps the thesis addresses. Chapter 2 sets out the research methodology, data sources and analytical framework, including the role of the cobweb model, price-transmission analysis and risk decomposition, and explains the design of the proposed price-discovery mechanism. Chapter 3 presents the results and analysis: the evolution of prices and the sector, the regional benchmarking, the determinants and risks, the competitiveness assessment, and the modelling of a commodity-exchange solution. Chapter 4 analyses the tariff quotas, future price formation and their implications for the proposed commodity exchange. The Conclusions and Recommendations then draw together the findings, state the theoretical and practical contributions, set out recommendations, acknowledge limitations and propose directions for future research. References and appendices follow.

Key concepts and definitions

To avoid ambiguity, several terms recur throughout the thesis with specific meanings. The farm-gate price is the price received by the producer for live animals, normally quoted per kilogram of live weight; the wholesale price refers to carcass-weight transactions between processors and the trade; and the retail price is the price paid by the final consumer in shops and markets. Conversion between live weight and carcass weight uses a dressing percentage of roughly seventy to seventy-eight percent [28], which must be borne in mind when comparing series quoted on different bases. The European Union reference price, used here as the regional benchmark, is a carcass-weight quotation for a standard grade, published by the European Commission and Eurostat.

Apparent consumption is defined as domestic production plus imports minus exports, ignoring stock changes, and is used as a proxy for domestic demand. The self-sufficiency ratio is domestic production divided by apparent consumption, expressed as a percentage; a value below one hundred percent indicates net import dependence. Price volatility is measured by the coefficient of variation, the ratio of the standard deviation to the mean of a price series, which allows comparison across markets with different price levels. Market risk denotes the uncertainty of prices faced by participants, distinguished, following the finance literature, into systematic risk common to all participants and idiosyncratic risk specific to an individual operator. Finally, competitiveness is understood in the sectoral sense as the ability of domestic producers to supply the market profitably in the face of competition from imports, proxied by self-sufficiency, the trade balance, unit costs and technical efficiency.

A note on data vintage and provenance is also warranted in the introduction. The figures presented in this thesis are compiled from official statistical and sanitary sources and, for the most recent years, from provisional releases that are subject to revision. Where a precise value is stated in the text, figures or tables, it represents the best available estimate at the time of writing and is intended to convey magnitude, direction and proportion rather than audited precision. The analytical conclusions are constructed to be robust to reasonable revisions in the underlying data, resting as they do on the convergent testimony of several independent sources rather than on any single number.

REFERENCES

1. Acordul de Asociere între Republica Moldova și Uniunea Europeană (DCFTA), Anexa XV-E — contingente tarifare deschise de Republica Moldova. 2014. Available at: <https://mfa.gov.md/ro/content/zona-de-liber-schimb-aprofundat-si-cuprinzator-zlsacdcfta>
2. AgroBiznes. Cum va fi liberalizat importul de carne în Moldova. 14 October 2019. Available at: <https://agrobiznes.md/cum-va-fi-liberalizat-importul-de-carne-in-moldova.html>
3. AgroExpert. Infografic: producția, importurile și exporturile de carne în R. Moldova (expert Iurie Rija; based on BNS external-trade data). 14 December 2023. Available at: <https://agroexpert.md/rom/novosti/infografic-productia-importurile-si-exporturile-de-carne-in-r-moldova>
4. Asociația Producătorilor de Carne de Porc din Moldova. Statement: raising duty-free import quotas would destroy the local sector. 11 March 2025 (reported by AgroBiznes). Available at: <https://agrobiznes.md/producatorii-de-carne-de-porc-cer-anularea-majorarii-importurilor-de-carne-de-porc-fara-taxe-riscam-faliment.html>
5. Barrett, C. B., & Li, J. R. Distinguishing between equilibrium and integration in spatial price analysis. *American Journal of Agricultural Economics*, 84(2), 292–307, 2002.
6. Biroul Național de Statistică al Republicii Moldova (BNS). Statistical databank: agriculture, livestock, consumer price index and producer prices; monthly pork prices (carcass and live), 2015–2026. Chișinău: BNS. Available at: <https://statistica.gov.md> (accessed 24 June 2026).
7. European Commission, DG Agriculture and Rural Development. Meat Market Observatory – Pig: EU weekly and monthly pig carcass reference prices (classes S, E, R), EUR/100 kg. Available at: https://agriculture.ec.europa.eu/data-and-analysis/markets/overviews/market-observatories/meat/pigmeat-statistics_en (accessed 28 June 2026).
8. European Union. Regulation (EU) 2022/1279 on temporary trade-liberalisation measures (Autonomous Trade Measures) for the Republic of Moldova. *Official Journal of the European Union*, 2022. Available at: <https://eur-lex.europa.eu>.
9. Ezekiel, M. The cobweb theorem. *Quarterly Journal of Economics*, 52(2), 255–280, 1938.
10. FAO. FAO Food Price Index and Meat Price Index, monthly release (May 2026). Rome: Food and Agriculture Organization. Available at: <https://www.fao.org/worldfoodsituation/foodpricesindex>
11. FAOSTAT. Production and trade of livestock primary products (database), Republic of Moldova. Rome: FAO. Available at: <https://www.fao.org/faostat>

12. Goodwin, B. K., & Holt, M. T. Price transmission and asymmetric adjustment in the U.S. beef sector. *American Journal of Agricultural Economics*, 81(3), 630–637, 1999.
13. Government of the Republic of Moldova. Decisions on the suspension / zero-rating of customs duties and tariff quotas for pork imports, 2022–2025. *Monitorul Oficial al Republicii Moldova*, Chișinău. Available in the official legislation database (legis.md) and in *Monitorul Oficial al Republicii Moldova*; the concrete measures are documented in the secondary sources [2] (the 2019 quota-administration mechanism) and [16] (the 2025 emergency duty-free window).
14. Ioniță, V. Producția și consumul cărnii de porc în Republica Moldova. *Analize Economice* #244. Chișinău: IDIS „Viitorul”, 28 February 2026. Available at: <https://viitorul.org>
15. Ioniță, V. Industria cărnii din Republica Moldova: situația actuală, tendințe și implicații economice. Notă informativă, February 2026. Chișinău: IDIS „Viitorul”. Available at: <https://viitorul.org>
16. Logos Press. “Emergency” pork import quota to close, meat problem to remain. 2 August 2025. Available at: <https://logos-pres.md/en/article/emergency-pork-import-quota-to-close-meat-problem-to-remain/>
17. Meuwissen, M. P. M., Huirne, R. B. M., & Hardaker, J. B. Risk and risk management in agriculture: an empirical analysis. *Livestock Production Science*, 69(1), 43–53, 2001.
18. Mold-street. Focar de pestă porcină la ferma celui mai mare producător de carne de porc din Moldova. 2025. Available at: <https://www.mold-street.com>
19. Moldova-Agroindbank (MAIB). Sectorul de creștere porci, mezeluri și carne proaspătă în Moldova, 2025. Chișinău: BC „MAIB” S.A. (sector report). Limited-distribution bank sector report; no public URL (available on request).
20. National Bank of Moldova (NBM). Official exchange rates and monetary policy reports, 2026. Chișinău: NBM. Available at: <https://www.bnm.md>
21. OECD/FAO. *OECD-FAO Agricultural Outlook 2025–2034*. Paris/Rome: OECD Publishing, 2025.
22. Porter, M. E. *The Competitive Advantage of Nations*. New York: Free Press, 1990.
23. Serviciul Vamal al Republicii Moldova. Aplicarea contingentelor tarifare în anii 2021–2022. 21 December 2021. Available at: <https://customs.gov.md/ro/articles/aplicarea-contingentelor-tarifare-in-anii-2021-2022>

24. Serviciul Vamal al Republicii Moldova. Aplicarea contingentelor tarifaré în anul 2023. 4 January 2023. Available at: <https://customs.gov.md/ro/articles/aplicarea-contingentelor-tarifare-in-anul-2023-1217-ro> (data table in attached .xlsx).
25. Portalul Contingente Tarifaré al Republicii Moldova. Available at: <https://contingente.trade.gov.md/> (accessed 24 June 2026).
26. Tomek, W. G., & Kaiser, H. M. Agricultural Product Prices, 5th ed. Ithaca, NY: Cornell University Press, 2014.
27. UN Comtrade. International trade statistics database, HS 0203 (pig meat). New York: United Nations, 2025. Available at: <https://comtradeplus.un.org>
28. USDA Foreign Agricultural Service. Livestock and Products Annual — regional reports. Washington, DC: USDA FAS, 2025. Available at: <https://fas.usda.gov>
29. World Organisation for Animal Health (WOAH). World Animal Health Information System (WAHIS): African Swine Fever and Foot-and-Mouth Disease events, 2026. Paris: WOA. Available at: <https://wahis.woah.org>
30. World Bank. World Development Indicators (inflation FP.CPI.TOTL.ZG; exchange rate PA.NUS.FCRF; population SP.POP.TOTL; agriculture value added NV.AGR.TOTL.ZS), Republic of Moldova; and "Is the DCFTA Good for Moldova?" Trade Study Note 2. Washington, DC: World Bank, 2026. Available at: <https://data.worldbank.org/country/moldova> (accessed 24 June 2026).
31. Kortleve, A. J., et al. (research published in Nature Food). Over 80% of the EU's farming subsidies support emissions-intensive animal products. Summarised in The Conversation, 2024. Available at: <https://theconversation.com/over-80-of-the-eus-farming-subsidies-support-emissions-intensive-animal-products-new-study-226853>
32. European Commission. State aid: Commission approves €1 billion German schemes to improve animal welfare in livestock breeding. Press release IP/24/468, 2024. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_24_468
33. Initiative Tierwohl / Thünen Institute. Sustainability certification of meat: the Animal Welfare Initiative (per-pig welfare premium €1.00 in 2025, €1.50 in 2026). 2024–2025. Available at: <https://www.thuenen.de/en/themenfelder/maerkte-handel-zertifizierung/nachhaltigkeitsstandards-und-zertifizierungssysteme/sustainability-certification-of-meat-the-animal-welfare-initiative>

34. European Court of Auditors. Animal welfare in the EU. Special Report 31/2018. Luxembourg: ECA. Available at: <https://op.europa.eu/webpub/eca/special-reports/animal-welfare-31-2018/en/>
35. Agenția de Intervenție și Plăți pentru Agricultură (AIPA). Subsidies in the livestock sector, Republic of Moldova, 2024. Chișinău: AIPA. Available at: <https://aipa.gov.md>
36. Eurogroup for Animals. Hungarian farmers to get animal welfare payments. 2023. Available at: <https://www.eurogroupforanimals.org/news/hungarian-farmers-get-animal-welfare-payments-next-week>
37. Hungary Today. Development programmes ensure a secure future for the pork industry. Available at: <https://hungarytoday.hu/development-programs-ensure-a-secure-future-for-the-pork-industry/>
38. European Parliament / European Commission. Romania — Measure 215 of the Rural Development Programme: animal-welfare payments for pigs and poultry ($\approx$ €320 million allocated). Answer to Question E-000188/2014. Available at: <https://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2014-000188&language=EN>
39. Pig World. How other parts of the UK and various EU countries are financially supporting their pig producers. Available at: <https://www.pig-world.co.uk/uncategorized/how-other-parts-of-the-uk-and-various-eu-countries-are-financially-supporting-their-pig-producers.html>
40. National Hog Farmer / European Commission. EU Commission approves €20M in Danish state aid for higher pig welfare. Available at: <https://www.nationalhogfarmer.com/livestock-management/eu-commission-approves-20m-in-danish-state-aid-for-higher-pig-welfare>
41. Farm Europe. State aid to the agricultural sector: more than €18 billion since 2021. Available at: <https://www.farm-europe.eu/travaux/state-aid-to-the-agricultural-sector-more-than-e18-billion-since-2021/>
42. Lexology / European Commission. Dutch plans to buy out pig farmers are in accordance with EU state-aid rules. Available at: <https://www.lexology.com/library/detail.aspx?g=72cd0d80-b336-427f-b802-b746af58b5cb>
43. BRM — Bursa Română de Mărfuri (Romanian Commodities Exchange). <https://brm.ro/en/>
44. MOLDPRES. Romanian Commodity Exchange to open trading platform for agri-food products in Chișinău. 16 May 2023. <https://www.moldpres.md/en/news/2023/05/16/23003880>
45. MOLDPRES. Moldova to have functional representation of the Romanian Commodities Exchange. 11 July 2024. <https://www.moldpres.md/en/news/2024/07/11/24005304>

46. Asian Development Bank. Commodities Exchange: options for addressing market development. ADB Working Paper No. 25. <https://www.adb.org/sites/default/files/publication/29972/adb-wp-25-commodities-exchange.pdf>
47. FAO. The use of warehouse receipt finance in agriculture. Rome: FAO. <https://openknowledge.fao.org/>
48. World Bank. Can warehouse receipts unlock farmer finance? World Bank Blogs. <https://blogs.worldbank.org/en/psd/can-warehouse-receipts-unlock-farmer-finance->
49. CME Group. Lean Hog futures — overview and contract specifications. <https://www.cmegroup.com/markets/agriculture/livestock/lean-hogs.html>
50. The Pig Site / China Daily. China's Dalian exchange launches live-hog futures, January 2021. <https://www.thepigsite.com/news/2021/01/chinas-dalian-exchange-prepares-to-launch-live-hogs-futures-contracts>
51. B3 (Brasil, Bolsa, Balcão). Live cattle futures — product specifications. https://www.b3.com.br/en_us/products-and-services/trading/commodities/
52. Global Trade Review. Adding value through the ECX (Ethiopia Commodity Exchange). <https://www.gtreview.com/magazine/volume-14issue-6/adding-value-through-the-ecx/>
53. AHDB / European Commission. EU deadweight pig reference prices (grade E/S). <https://ahdb.org.uk/pork/eu-deadweight-pig-prices>
54. Marché du Porc Breton (MPB), Plérin — twice-weekly electronic pig auction setting the French reference quotation. <http://www.marche-porc-breton.com/>
55. Mercolleida (Lonja de Lleida) — Spanish reference pig market and weekly price-setting table. <https://www.mercolleida.com/>; pig333, “Merceleida, the reference market for pigs in Spain.”
56. VEZG — Vereinigung der Erzeugergemeinschaften für Vieh und Fleisch: weekly German pig price recommendation (Notierung). https://www.pig333.com/markets_and_prices/germany_3/
57. Danish Crown — weekly Danish pig quotation (notering). https://www.pig333.com/markets_and_prices/denmark_56/
58. Poland, Ministry of Agriculture and Rural Development — Integrated Agricultural Market Information System (ZSRIR), pig EUROP-class prices. https://www.pig333.com/markets_and_prices/poland_107/
59. Ministry of Agriculture and Food Industry of the Republic of Moldova (MAIA) and AIPA — pork-sector statistics and policy presentation, 2024–2025: pig herd, pork production (live weight), consumption, self-sufficiency, and imports/exports by tariff position (HS 0103, 0203, 1601,

- 1602), and the EU pork-import tariff-rate quota (TRQ) schedule (5,500 t base; +500 t in 2026, +650 t in 2027, +800 t in 2028, +1,000 t from 2029; full liberalisation upon EU accession). Complemented by EU–Moldova DCFTA, Access2Markets: <https://trade.ec.europa.eu/access-to-markets/en/content/eu-moldova-deep-and-comprehensive-free-trade-area>
60. Moldova-Agroindbank (MAIB). Sectorul zootehnic în Republica Moldova: creștere porci și producere mezeluri. Raport sectorial 1 din 3, Ediția 2026. Chișinău: BC „MAIB” S.A. (updated sector report, data through the first quarter of 2026). Limited-distribution bank report; no public URL (available on request).
 61. LITVIN, A. Mecanismul managementului de produse agroalimentare al Republicii Moldova. Monografie, UASM, Chișinău: Centrul editorial al UASM, 2015, 256 p. 11.6 c.a. ISBN 978-9975-56-258-4.
 62. LITVIN, A., TURCAN, R., STRATILA, A., TURCAN, I. Agricultural trade: Impacts on market stability and integration with developing countries, Reference Module in Food Science, Elsevier, 2025, ISBN 9780081005965, <https://doi.org/10.1016/B978-0-443-15976-3.00140-9>. (<https://www.sciencedirect.com/science/article/pii/B9780443159763001409>)
 63. LITVIN, A.. State of Art of Agriculture in Moldova in the process of EU integration. Agricultural Policy Monitoring: Country report – Republic of Moldova. The Regional Rural Development Standing Working Group in South East Europe (SWG) Blvd. Goce Delcev 18, MRTV Building, 12th floor, 1000 Skopje, North Macedonia. 2025. 30 pag. ISBN 978-608-4760-54-2. <https://seerural.org/wp-content/uploads/2025/01/State-of-Art-of-Agriculture-in-Moldova-in-the-process-of-EUintegration.pdf>
 64. LITVIN, A.; CILOCI, R.; ȚURCANU, T. Managementul general: note de curs. Tehnica-UTM: Chișinău, Republica Moldova, 2024. ISBN 978-9975-64-397-9. Disponibil online: <http://repository.utm.md/handle/5014/26617>.
 65. LITVIN, Aurelia; Maria GHEORGHÎȚA; Rina ȚURCAN; Daniela POJAR; Ala OBERȘȚ; Alina STRATILA; Alina POLCANOVA și Andrei ZBANCĂ. Managementul investițiilor: manual. Universitatea Tehnică a Moldovei, Facultatea Inginerie Economică și Business, Departamentul Economie și Management. Chișinău: Tehnica-UTM, 2026, 262 p. ISBN 978-9975-64-617-8.
 66. ȚAPU, Tatiana, TODOROVA, Ludmila. Contabilitatea pe fluxuri de numerar și digitalizarea evidenței fiscale în cadrul noului regim de antreprenoriat independent. In: Marketingul și logistica în era digitală: seminar științific național din 26 martie 2026, culegere de lucrări. Chișinău: UTM, 2026.

67. ТОДОРОВА, Л.; ЦАПУ, Т. Фриланс как форма независимой экономической деятельности: налоговый и правовой аспект. In: Marketingul și logistica în era digitală: seminar științific național din 26 martie 2026, culegere de lucrări. Chișinău: UTM, 2026.
68. ȚAPU, T., MOROI, E. Economie și contabilitate în unitățile agricole. Partea 2: Contabilitate în unitățile agricole: Îndrumar metodic pentru lucrările practice. Chișinău: Tehnica-UTM, 2025. 124 p. ISBN 978-9975-64-516-4 (Partea II). Disponibil: <https://library.utm.md/items/?biblionumber=2631743>
69. ZBANCĂ Andrei, Negritu Ghenadie, Șcerbacov Elena . Conferința UTM "Competitiveness and sustainable development " 5, Chișinău, Moldova, 2-3 noiembrie 2023, Analysis of the competitiveness of the cereals sector in the context of organizational and legal forms of farm management for the 2023-2024 season,
70. ZBANCĂ , Andrei , Ghenadie NEGRITU , Dorin BADIU Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 15, Issue 1, 2015 PRINT ISSN 2284-7995, E-ISSN 2285-3952 545, FEASIBILITY OF INVESTMENT IN CHERRY ORCHARD
71. ZBANCĂ, Andrei; GUMENIUC, Ina; NEGRITU, Ghenadie,. Ghid practic cu privire la elaborarea planurilor de afacere pentru gestiunea operațională și durabilă a afacerilor Chisinău, UTM, 2024.