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# FIRM PERFORMANCE, INNOVATION AND MARKET DYNAMICS: EVIDENCE FROM TURKISH AND MOLDOVA SMES

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**Abstract:** This study aims to examine the impact of administrative, financial, and fiscal constraints on the ability of Turkish and Moldova firms to innovate, invest, and enhance their productivity in 2024. Within this framework, an analysis was conducted using data from the World Bank's Enterprise Surveys, based on a representative sample of 1,416 firms in Turkey. Building on these results, a comparison was made between the performance of Turkish SMEs and the obstacles they face, relative to those observed in the Europe and Central Asia (ECA) region. Similar, to analyze the performance of Moldova SMEs we used statistical data and the latest data from business surveys to assess challenges that small business sector is facing through the perception of entrepreneurs. In this regard, recommendations for strengthening SMEs economic potential will be drawn up.
**Keywords:** SMEs, Access to Finance, Multilevel modeling, Endogenous innovation, Productivity Gap.
**JEL Classification:** C21, H25, L25, G30, O31.

## Introduction

The SMEs sector remains the backbone of the economy in both Turkey and Moldova, at the same time challenges faced by this entities threaten their performance and long-run development. In this regard, this research examines the impact of administrative, financial, and fiscal constraints on the ability of Turkish and Moldova firms to innovate, invest, and increase their productivity.

The adopted methodology in this study combines a dual approach. On the one hand, a descriptive analysis highlights differences in performance and market structure according to firm size, sector, and region, as well as relative to regional averages. On the other hand, a microeconomic estimation using multilevel models is employed to explain the probability of investing in R&D (binary model) and productivity growth (continuous variable). To strengthen robustness, advanced causal inference methods are applied: instrumental variables and two-stage least squares estimation (IV/2SLS) to correct for financing endogeneity, Propensity Score Matching (PSM) to compare similar firms facing or not facing constraints, and Difference-in-Differences (DiD) to evaluate Turkey's evolution over time relative to a reference group. Complementary analyses include quantile regressions and structural equation models (SEM), allowing the capture of differentiated effects according to productivity levels and indirect relationships between financing, innovation, and performance. The main brief results are presented in this extended abstract and more detailed results of this research will further be published in scientific journals.

**Main results**

The obtained results estimate that Turkey suffers from a pronounced productivity gap: labor productivity declines by 21%, even as employment grows by 12%. Internal innovation appears very limited, with only 6.2% of firms reporting R&D expenditures and 7.5% introducing new products, compared with 21.5% and 29.8% in the ECA region, respectively. Financial constraints are particularly binding: one-third of Turkish firms cite access to finance as the main barrier, three times higher than the regional average. On the fiscal side, the effective tax rate (22.6%) and the weight of social security contributions (25.6%) constitute additional impediments, although the Turkish tax administration benefits from a high degree of digitalization and processing efficiency.

The market structure is characterized by high concentration, with nearly 90% of market shares captured by leading firms, which exacerbates the dualism between large firms and smaller competitors. Finally, judicial institutions appear relatively strong: nearly two-thirds of firms resort to alternative dispute resolution mechanisms, and perceptions of corruption remain low.

Similar with Turkey, SMEs represent the largest share of businesses from the Republic of Moldova. Still, local SMEs prefer to be active in the wholesale and retail trade and agriculture. Specifically, SMEs would perform the function of intermediaries in the market. A reduce number of SMEs are involved in innovation activities; as a result, innovation impact on national economy is reduced as well. Upskilling and reskilling employees from Moldovan SMEs is still at moderate level of development. These outcomes are reflected in 2023, in the European Commission Report on Moldova, as a mismatch between the level of skills of the labor force and those required by employers.

The Moldovan government has put in place several measures to support SMEs. In order to facilitate access to financing for Moldovan entrepreneurs, the government has set up the fund for entrepreneurship and economic growth. This fund offers loans at advantageous rates to SMEs, thus giving them a crucial boost to develop and create jobs. The government also, designed a special Program "373" to give SMEs quick and easy access to finance so they can expand and grow. Under the "373" Program, SMEs from Moldova will be able to receive compensation for investment loans with a maturity of at least 3 years. The interest rate for beneficiaries on loans in national currency will be 7%, while in foreign currency 3%. The "373" program on support of SMEs is a good example of cooperation between the state's institutions, the banking sector and private environment, in order to develop the national economy and ensure the economic growth of small business. (Ozturk & Erhan, 2025)

In continuation of this effort, the government has approved several new programs dedicated to the support of SMEs, covering key areas such as re-technology and energy efficiency, digital transformation and the development of rural tourism. Furthermore, to match the specific needs of SMEs, the government has redesigned several key programs. Among these initiatives are the "Pare 1+1" program aimed at stimulating fund transfers to the local economy, the "start-up for young people: a sustainable business at home" dedicated to young people the entrepreneur, the program "Greening of SMEs" focused on the ecological transition of businesses and the "Women in Business" program favouring the economic empowerment of women.

Despite all these significant efforts, access to finance remains one of the major challenges for SMEs from Moldova. According to the World Bank, more than 80% of firms report financing their working capital from their own sources. In the latest Enterprise Survey in 2023, access to finance was cited as a major constraint by about 30% of businesses. Banks are reluctant to approach SMEs, due to their lack of collateral and their high-risk profile making access to financing difficult for SMEs. There are still many financial barriers for local SMEs to starting up and scaling up, such as insufficient availability of non-bank finance (lack of access to venture capital funds, business angel capital and know-how).

The number, size and sectoral dispersion of SMEs also affect capacities to finance themselves through bank loans, especially investment ones. According to NBS, only about 7 300 SMEs are considered small and medium. The remaining 56 000 SMEs or about 88% are micro-companies, with a turnover of up to 18 million MDL and with a number of employees equal to or less than nine people

Furthermore, gross domestic expenditure on R&D was only 0.23% of GDP in 2022. Small businesses from Moldova also miss new business practices for organizing procedures (supply chain management, business re-engineering, knowledge management, quality management), thus limiting the development of innovative organization enterprises. The development of the SMEs in the Republic of Moldova in terms of innovations will increase the competitiveness of the small business and, consequently, will promote the intensification of growth rates and market expansion.

Discussions and conclusions

In both countries SMEs, point to access to finance as one of the main constraints that limits their development. Even if, the banking sector is stable, it offers insufficient long-term financing options, and financial intermediation is low. Especially in case of Moldova, investment levels are low, with public investment stagnating and foreign investment declining by 33.6% in 2023. (SCR, 2024)

One of the reasons might be that Moldova's economy is vulnerable to external shocks, including geopolitical risks from the war in neighbouring Ukraine, which disrupt trade and increase the level of risk among entrepreneurs. Many investment projects have been put on hold or even cancelled, pending more stable financial and security conditions. Addressing these challenges will require policies to support high-value industries, enhance access to financing, and stimulate sustainable economic growth (SCR, 2024).

Moreover, from a sectoral perspective, the enterprises, especially SMEs, are concentrated in sectors affected by a high volatility and high sensitivity to external shocks. The concentration of SMEs on sectors such as trade reveals its orientation towards a consumption economy. In this regard, it is important to encourage SMEs to invest in new technologies, to create new products and services.

Additionally, the concentration of SMEs near the capital, point the need to intensify the collaboration network within the entire territory of the Republic. Considerable efforts were made to support local SMEs trough target designed programmes, but this financial support instruments should first address to those economic activities that generate added value, such as processing local raw materials, technologizing production processes, implementing innovations at the firm level, and export orientation.

The analysis of the business environment reveals, on the one hand, an improvement in perceptions of entrepreneurs, on the other hand the risks generated by the war waged by Russia in Ukraine, had shaken the perception of foreign investors towards Moldova.

In the light of the above-mentioned, Turkey possesses institutional and administrative strengths, yet SMEs remain constrained by insufficient access to financing, a heavy tax burden, and a lack of endogenous innovation. The study concludes that reducing fiscal and social charges, improving access to productive credit, and implementing public policies promoting domestic R&D are essential to revive productivity and strengthen the competitiveness of Turkish firms in a globalized economic environment.

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**References:**

1. Erhan L., *Fostering small business development in Moldova through innovative policies International Scientific Conference* "Development through research and innovation" IDSC 2025„ pag 543-548, https://scldoct.ase.md/files/conferinte/idsc/Proceedings_IDSC_2025_r2.pdf
2. Ozturk, L., Erhan, L. (2024). *Effects and Impact of COVID-19 on Global Finance and Economies.* In: Ozturk, L., Bayrak, R., Erhan, L. (eds) SMEs in Agriculture and Food Industry During the Health Crises. Studies in Systems, Decision and Control, vol 576. Springer, Cham. https://doi.org/10.1007/978-3-031-77286-3_2
3. European Commission Report on Moldova, 2023/2024, https://enlargement.ec.europa.eu/moldova-report-2024_en
4. National Bureau of Statistics of the Republic of Moldova, https://statistica.gov.md/index.php?l=en. Last accessed 15 September 2025.
5. World Bank Enterprise Surveys, www.enterprisesurveys.org