Cross-Border Corporate Integration and Economic Resilience: The Romania – Moldova Case

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Abstract
Economic resilience in Eastern Europe increasingly hinges on how cross-border corporate structures and capital markets allocate risk across national borders. Focusing on Romania and the Republic of Moldova, this paper analyses in what sense Romania functions as a financial and infrastructural "anchor" for Moldova, and to what extent Romanian institutional capital actually internalizes Moldovan risks. We concentrate exclusively on Romanian listed companies to trace the financial exposure of domestic institutional investors, especially pension funds, to Moldova's banking and energy systems. Conceptually, we distinguish between operational anchoring—who operates Moldova's critical infrastructures—and capital anchoring—who ultimately bears the associated risks through ownership and governance rights. Empirically, using corporate disclosures and sectoral data for BSE-listed issuers such as Banca Transilvania (indirectly via Victoriabank), Transgaz/Vestmoldtransgaz and Premier Energy, we construct two composite measures: an Operational Critical Infrastructure Anchor Index ($CLAI^{op}$) and a Romanian-Capital Anchor Index ($CLAI^{R}$). For 2023, $CLAI^{op}$ indicates that roughly 53% of Moldova's banking, electricity and gas "system mass" is operated by Romania-linked entities, while $CLAI^{R}$ shows that only about 34% of that mass is actually financed and controlled by Romanian capital, with a particularly large gap in the electricity sector. The findings suggest that cross-border corporate ownership and pension-fund participation create powerful but asymmetric channels of resilience, with Romania acting as a dominant operational anchor but a more partial capital anchor in the Romania–Moldova corridor. We have concentrated our research exclusively to the Bucharest Stock Exchange listed entities as we consider them impactful in context

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1. Introduction

The Republic of Moldova has undergone a profound reorientation of its external economic relations over the last decade. Historically, Moldova depended heavily on Russian markets and Russian gas, both for exports—in particular agri-food products, wines and light manufactures—and for energy supplies. Since the entry into force of the EU–Moldova Association Agreement and the Deep and Comprehensive Free Trade Area (DCFTA) in 2014, Moldova's trade has progressively shifted towards the European Union (European Commission, 2025). Recent European Commission and European Parliament data show that the EU now accounts for over half of Moldova's total trade, with roughly two-thirds of exports destined for the EU; Romania alone has emerged as Moldova's largest individual trading partner, absorbing around one-third of Moldovan exports and supplying roughly 15-17 percent of imports (European Commission, 2025; European Parliament, 2025).

This trade reorientation has been accompanied by a gradual rewiring of Moldova's energy and financial systems. On the energy side, the Iasi–Ungheni–Chisinau gas pipeline connects Moldova to Romania's gas transmission network and, indirectly, to the EU's gas market (IEA, 2020; Nuţu et al., 2019). Electricity imports from Romania have helped to reduce dependence on generation located in the separatist region of Transnistria, which historically relied on subsidized Russian gas (IEA, 2020). On the financial side, the acquisition of Victoriabank by Banca Transilvania (BT) and the European Bank for Reconstruction and Development (EBRD) has imported Romanian and EU-style governance standards into one of Moldova's systemically important lenders (Victoriabank, 2024; National Bank of Moldova, 2025).

At first sight, these developments suggest that Romania has become Moldova's principal financial and infrastructural anchor within the EU. Yet the structure of this anchoring is complex. Romanian-linked entities operate crucial pieces of Moldovan infrastructure: Victoriabank in banking, Vestmoldtransgaz (controlled by Transgaz) in gas transmission, and Premier Energy in electricity distribution and supply. However, the ownership of these operators is often multi-layered and only partially Romanian. Premier Energy, for instance, is majority-owned by the Czech investment holding Emma Capital, with only a minority free float listed on the Bucharest Stock Exchange (BSE) (Premier Energy Group, 2024; Reuters, 2024). As a result, Romanian firms and regulators play outsized roles in running critical infrastructures, while a significant share of the underlying capital risk is borne by non-Romanian investors.

This article advances three main claims. First, to understand the Romania–Moldova corridor, it is crucial to distinguish operational anchoring—who runs critical infrastructures and under which regulatory framework—from capital anchoring—who ultimately bears the financial risk and exercises ownership rights. Literature on foreign banks and cross-border infrastructure often analyzes individually these dimensions, focusing either on foreign ownership or on operational presence, but rarely on their interaction. Second, when we explicitly separate these dimensions and construct simple, transparent indicators of Romania's operational and capital anchoring in Moldova, we observe a systematic asymmetry: Moldova is more tightly anchored to Romania operationally than financially. Third, this asymmetry has implications for small-state resilience and EU neighborhood policy: it enhances Moldova's capacity to absorb external shocks, particularly in energy, but also creates new channels of dependence on the health of a small set of cross-border corporate groups.

The remainder of the article proceeds as follows. Section 2 reviews the relevant literature on cross-border banking, financial stress indices, institutional investors in emerging Europe and energy security in small states. Section 3 situates the Romania–Moldova relationship in its broader trade and institutional context. Section 4 examines the main corporate channels of Romanian influence in Moldova's banking and energy sectors. Section 5 constructs and interprets the Operational Critical Infrastructure Anchor Index ($CIAI^{op}$) and the Romanian-Capital Anchor Index ($CIAI^{R}$), discussing their methodological underpinnings and limitations. Section 6 discusses implications for supervision, energy policy and EU neighborhood strategy and outlines an agenda for further research. Section 7 concludes.

2. Conceptual and theoretical background

2.1 Cross-border banking and foreign bank ownership

The role of foreign banks in emerging markets has been one of the most intensively studied aspects of financial globalization. Early contributions emphasized the potential benefits of foreign bank entry for host-country efficiency, competition and intermediation capacity. Subsequent work, especially after the 2007–09 global financial crisis, highlighted that foreign banks can also serve as transmission channels for external shocks.

De Haas and Van Lelyveld's (2006) panel study of banks in Central and Eastern Europe (CEE) is a key reference. Analyzing more than 250 banks between 1993 and 2000, they show that greenfield foreign banks tend to maintain or even expand lending during host-country crises, whereas former domestic banks (privatized to foreign owners) behave more cyclically. This suggests that foreign banks can stabilize credit supply in periods of local stress, drawing on internal capital markets within multinational banking groups. At the same time, the same internal capital markets can transmit stress in the parent bank to their subsidiaries, potentially amplifying the impact of global or home-country crises.

Popov and Udell (2012) use firm-level survey data to show that during the global financial crisis, access to credit by firms in emerging Europe became highly sensitive to the financial condition of foreign parent banks, with significant spillovers from the home to the host country. Claessens and Van Horen (2014) find that the effect of foreign bank presence on credit growth and stability depends critically on host-country institutions, foreign banks' market share and the severity of home-country shocks. In low-income and institutionally weak environments, foreign bank presence may even correlate with lower domestic credit, particularly when foreign banks focus on high-quality borrowers and withdraw in times of stress.

Schoenmaker (2011) formalizes this trade-off in the notion of a financial trilemma: it is impossible to simultaneously achieve full financial integration, purely national financial policies and complete financial stability. Under deep cross-border integration, national supervisors alone are ill-equipped to manage bank crises; conversely, strong national control over banks tends to restrict cross-border integration. This insight underlies the EU's move towards cross-border supervisory colleges and, within the euro area, the Banking Union.

For Moldova, the entry of BT and the EBRD into Victoriabank corresponds to the "foreign bank" pattern observed elsewhere in CEE. Victoriabank's governance and risk management have improved since the acquisition, with stronger asset quality and capital ratios reported in its 2023 annual report (Victoriabank, 2024; National Bank of Moldova, 2025). However, the bank is now embedded in BT's group-wide capital and liquidity framework, creating the potential for shocks originating in Romania or in BT's broader portfolio to affect Moldovan credit supply. Victoriabank thus exemplifies the foreign bank "double-edged sword" that motivates our anchoring distinction.

2.2 Financial stress indices as tools for systemic-risk analysis

The second strand of literature concerns financial stress indices (FSIs), which aim to capture episodes of systemic tension in a single, continuous variable. Illing and

Liu (2006) develop a financial stress index for Canada that aggregates indicators from money, bond, equity and foreign-exchange markets. Their methodology—selecting relevant indicators, standardizing them, and combining them into a composite index—has inspired numerous applications in advanced and emerging economies.

For Romania, Albulescu (2010) proposes an Aggregate Financial Stability Index that incorporates indicators of financial development, vulnerability, soundness and external conditions. His index is explicitly designed to help Romanian authorities monitor the build-up of systemic risks and to assess the overall stability of the financial system. Although the construction details differ from Illing and Liu (2006), the underlying logic is similar: synthetic indices allow policymakers to integrate heterogeneous signals from different market segments into a tractable time series.

From the perspective of this article, the relevance of FSIs is conceptual rather than econometric. They provide a framework for thinking about external financial shocks—for example, a sudden spike in Romanian financial stress—as exogenous drivers of small-state vulnerabilities. Moldova is too small to influence systemic conditions in Romania, but it is sufficiently integrated through trade and cross-border banking to be affected by turbulence in the Romanian financial system. Distinguishing the channels through which such shocks could propagate—operational vs. capital anchoring—requires going beyond aggregate contagion models and examining the corporate structures underlying bilateral interdependence.

2.3 Institutional investors, pension funds and capital-market integration

A third body of literature examines the role of institutional investors, particularly pension funds, in capital-market development and corporate ownership. Fischer and Reisen (1994), in an early OECD Policy Brief, argued that population ageing in advanced economies would generate large pools of pension assets, some of which would be invested in emerging-market securities, providing diversification benefits for pension schemes and growth capital for emerging markets. Impavido, Musalem and Tressel (2003) find that the expansion of contractual savings institutions—pension funds and life insurers—tends to deepen domestic bond markets and, in more financially advanced economies, stock markets as well.

Meng and Pfau (2010) provide cross-country evidence that pension-fund assets are positively associated with stock-market depth and liquidity, particularly where financial markets are relatively developed. Gashi (2022), focusing on new EU member states, shows that pension-fund development is positively correlated with capital-market growth but that the impact is heterogeneous and mediated by the quality of institutions and regulation.

Romania fits this pattern. Since the introduction of the mandatory second pension pillar in 2008, Romanian Pillar II pension funds have become the dominant institutional investors on the BSE. By the mid-2025 they held significant stakes in major listed companies including Transgaz, Banca Transilvania, OMV Petrom and Romgaz (OECD, 2022; ASF, 2025). Through these portfolios, Romanian households obtain indirect exposure to the performance of these firms, including any risks or opportunities capitalized linked to their Moldovan operations.

This institutional background has two implications for our analysis. First, Romanian-capital anchoring is not reducible to the holdings of the Romanian state; domestic pension funds and other institutional investors also matter. Second, as Romanian regulators gradually expand investment horizons of pension funds (such as the extension of the mandate to OECD countries in 2025) which might encourage broader geographic diversification, the relative weight of Moldova-related exposures in Romanian portfolios may change over time.

2.4 Energy security, critical infrastructure and small-state resilience

The final strand of literature relates to energy security and small-state resilience. The IEA's Moldova Energy Profile underscores Moldova's extremely low energy self-sufficiency and heavy reliance on imported gas, historically supplied almost exclusively by Gazprom through Ukraine and Transnistria (IEA, 2020). Nutu, Tofilat and Cenusa (2019) argue that the Romania–Moldova gas interconnector is a necessary condition for reducing this dependence and enabling genuine competition in gas and electricity markets. Russia's use of energy as a tool of political pressure in Eastern Europe has made diversification of suppliers and routes a core objective of EU energy policy and its neighborhood instruments.

Recent EU–Moldova agreements on energy security, including dedicated financial support to help Moldova cope with the suspension of Russian gas deliveries and the decoupling from Russian-linked electricity generation, must be seen in this broader context (Reuters, 2025). For small states like Moldova, infrastructural integration with a larger, diversified energy market—here, the EU via Romania—can significantly enhance resilience. However, the benefits depend on who owns and operates the relevant infrastructure and on the regulatory frameworks that govern them. Private, foreign-owned operators can be sources of efficiency and investment, but they can also create new forms of dependence.

In what follows, Romania is analyzed not merely as a trade partner, but as an infrastructural and financial hub through which Moldova is linked to the EU's wider economic and regulatory space.

3. Romania–Moldova economic reorientation and institutional context

3.1 Trade reorientation and EU integration

Moldova's trade statistics vividly reflect its geopolitical realignment. Until the late 2000s, Russia and other CIS countries absorbed the bulk of Moldovan exports, especially in agriculture and light industry. Following the DCFTA's entry into force in 2014, Moldovan exports to the EU increased both in absolute and relative terms, while exports to Russia declined sharply. By 2023, the EU accounted for over 60 percent of Moldovan exports and around 50 percent of total trade; Romania alone absorbed roughly 35 percent of exports and supplied an estimated 15-17 percent of imports (European Commission, 2025; European Parliament, 2025).

This trade reorientation is closely intertwined with Moldova's EU accession trajectory. Moldova obtained EU candidate status in 2022 and opened accession negotiations in 2024. In this context, Romania has been a key political advocate and practical facilitator of Moldova's European integration, providing technical assistance, supporting cross-border projects and acting as a "translator" of EU norms into the Moldovan context.

From an economic-geography perspective, Romania functions as a gateway through which Moldovan firms access EU markets, infrastructure and regulatory frameworks. This role is analogous to that played by Austria for the Western Balkans or the Nordic countries for the Baltic states. As the next section shows, it is increasingly replicated in the domains of infrastructure and finance.

3.2 Regulatory and institutional convergence

Regulatory convergence between Moldova and the EU is most visible in the financial and energy sectors. In banking, the National Bank of Moldova (NBM) has progressively adopted Basel-aligned prudential standards and supervisory practices, often in collaboration with the National Bank of Romania (NBR) and with technical assistance from the IMF and the World Bank. Furthermore since March 2025, Moldova has been accepted in the geographical scope of SEPA (Single Euro Payments Area). This means that financial institutions in Moldova are now eligible to join the SEPA schemes (such as SEPA Credit Transfer, SEPA Instant Credit Transfer, SEPA Direct Debit) under the same framework used by other SEPA-countries. The entry of BT and the EBRD into Victoriabank has acted as a vehicle for importing Romanian/EU norms of corporate governance and risk management into the Moldovan banking system (Victoriabank, 2024; National Bank of Moldova, 2025).

In energy, Moldova's participation in the Energy Community since 2010 has committed it to the gradual transposition of EU energy acquis, including unbundling, third-party access, and the establishment of independent regulators. These legislative reforms have proceeded in parallel with physical interconnection projects between Romania and Moldova (IEA, 2020; Nutu et al., 2019). Regulatory convergence thus provides the institutional foundation for the corporate configurations analysed in the following sections.

In short, the Romania–Moldova corridor is not merely a bilateral relationship; it is a segment of the EU's regulatory and infrastructural frontier, whose properties are shaped jointly by EU law, Romanian institutions, Moldovan reforms and the strategies of cross-border firms.

4. Corporate channels of Romanian influence in Moldova

We now examine the concrete corporate channels through which Romania exerts financial and infrastructural influence in Moldova, focusing on banking, gas and electricity.

4.1 Banking: Banca Transilvania and Victoriabank

Victoriabank is one of Moldova's most systemically important banks. According to its 2023 annual report, it accounted for 14.12 percent of total banking system assets and ranked third by market share (Victoriabank, 2024). Following significant governance problems and the "bank fraud" crisis of the mid-2010s, the Moldovan authorities actively sought strategic investors for key banks. In 2018, Banca Transilvania and the EBRD jointly acquired a controlling stake in Victoriabank through a Dutch vehicle, VB Investment Holding B.V. BT's effective stake is around 44.6 percent, with the remainder held primarily by the EBRD and minority shareholders.

This acquisition fundamentally changed Victoriabank's governance and risk profile. The bank reports the adoption of BT-style credit risk procedures, enhanced compliance and anti-money laundering (AML) controls, and closer alignment with EU prudential norms (Victoriabank, 2024; National Bank of Moldova, 2025). These developments have contributed to the stabilization of a previously fragile banking system and to the restoration of depositor confidence.

From an anchoring perspective, the key implications are:

- Operational control is effectively anchored in a Romanian-led banking group, subject to NBR supervision and EU-level regulatory developments;
- Capital risk is shared between Romanian shareholders (including BT's Romanian investors and domestic pension funds) and the EBRD, with Moldovan minority shareholders playing a limited role.

Victoriabank therefore contributes both to operational anchoring—by making the Moldovan banking system reliant on Romanian managerial expertise and business models—and to capital anchoring, although the latter is shared with a multilateral institution.

4.2 Gas infrastructure: Transgaz and Vestmoldtransgaz

Gas infrastructure is central to Moldova's energy security. Historically, Moldova relied almost entirely on gas supplied by Gazprom, transmitted through Ukraine and into Transnistria, where the Kuciurgan power plant converts gas into electricity, much of which is exported back to right-bank Moldova (IEA, 2020). This arrangement left the Moldovan government extremely vulnerable to Russian pricing and volume decisions and to disruptions in transit countries.

The construction of the Iasi–Ungheni pipeline, later extended to Chisinau, was intended to create a credible alternative route and supplier base. On the Moldovan side, this pipeline is operated by Vestmoldtransgaz, which was privatized in 2018 and acquired by Eurotransgaz, a subsidiary of the Romanian gas transmission system operator Transgaz, with minority support from the EBRD (Nutu et al., 2019; Transgaz, 2024).

Transgaz is the sole shareholder of Eurotransgaz and thus the ultimate owner of Vestmoldtransgaz (Transgaz, 2024). The Romanian state holds a controlling stake of roughly 58.5 percent in Transgaz, with the remainder of the free float widely held by institutional and retail investors, including Romanian pension funds (Transgaz, 2024; ASF, 2025).

The Iasi–Ungheni–Chisinau pipeline's technical capacity is generally quoted in the range of 1.5–1.8 billion cubic meters per year, a volume sufficient to cover most of Moldova's gas demand under current consumption patterns (IEA, 2020; Nutu et al., 2019). Even if actual utilization has at times been constrained by market and contractual factors, this capacity has fundamentally altered Moldova's bargaining position vis-à-vis Gazprom.

From an anchoring perspective, gas infrastructure represents a high-anchoring sector on both dimensions:

- *Operational anchoring*: a Romanian-controlled operator runs a core segment of Moldova's gas transmission system;
- *Capital anchoring*: Transgaz's ownership structure ensures that Romanian public and private investors bear the bulk of the pipeline's risk, alongside the EBRD.

4.3 Electricity: Premier Energy's dominance and ownership nuance

The electricity sector presents a more nuanced pattern. Premier Energy has emerged as Moldova's dominant integrated utility on the distribution and supply side, serving around 70 percent of electricity consumers and playing a central role in balancing Moldova's internal market with imports from Romania and other sources (IEA, 2020; Premier Energy Group, 2024).

Premier Energy is part of a broader group with operations in Romania and Moldova. The group is owned by the Czech investment holding Emma Capital and has grown rapidly through acquisitions, with revenues approaching €1 billion in recent years (Reuters, 2024). In 2024, Premier Energy PLC completed an initial public offering on the Bucharest Stock Exchange, listing a minority free float of its shares and attracting, among others, the EBRD as an anchor investor (Premier Energy Group, 2024). However, Emma Capital remains the controlling shareholder, with a stake of roughly 70 percent.

For our purposes, three points are relevant:

1. **Operational dependence**. Moldova's electricity system is heavily dependent on a single integrated operator whose corporate center and ultimate controlling ownership are outside both Moldova and Romania, even though its main listing venue and part of its investor base are Romanian.
2. **Partial Romanian capital exposure.** Romanian investors participate in Premier Energy primarily through the BSE free float. While this exposure may grow over time, particularly via domestic institutional investors, it currently constitutes a minority share of total equity.

3. **EUisation through listing and regulation**. Listing on the BSE subjects Premier Energy to EU-style disclosure standards, corporate-governance codes and market discipline. At the same time, its operations in Moldova are governed by Moldovan regulation and by network codes aligned with the Energy Community and EU acquis.

From the standpoint of anchoring, Premier Energy contributes strongly to operational anchoring but only partially to Romanian-capital anchoring.

5. Measuring operational and capital anchoring

5.1 Conceptualising anchoring

Drawing on the preceding analysis, we define two dimensions of anchoring:
Operational anchoring: the extent to which key infrastructures in the host country (Moldova) are operated by firms functionally integrated into the home country (Romania) through ownership, management, regulation or listing.

Capital anchoring: the extent to which the risk-bearing capital (equity) of those operators is ultimately held by investors from the home country, including the state, domestic institutional investors and households.

In principle, one could further distinguish debt anchoring and regulatory anchoring. For expositional clarity, we focus on equity and treat regulatory anchoring as part of the operational dimension.

The goal is not to create a definitive index but to show that explicitly separating these dimensions yields analytically useful insights into the Romania–Moldova relationship.

5.2 The Operational Critical Infrastructure Anchor Index ($CIAI^{op}$)

We first define an Operational Critical Infrastructure Anchor Index ($CIAI^{op}$) for Romania in Moldova. We focus on three sectors that are both critical for the Moldovan economy and characterized by significant Romanian involvement:
1. Banking (Victoriabank);
2. Electricity distribution and supply (Premier Energy);
3. Gas transmission (Vestmoldtransgaz and the Iasi–Ungheni–Chisinău pipeline).

For each sector $j \in \{banking, electricity, gas\}$ let s_j denote the share of the Moldovan system operated by a Romanian-linked entity. Based on the sources discussed above, we approximate for 2023:

Banking: $s_{bank} = 0.1412$ (Victoriabank's 14.12 percent asset share);

Electricity: $s_{elec} \approx 0.70$ (Premier Energy's coverage of approximately 70 percent of consumers);

Gas: $s_{gas} \approx 0.75$ (pipeline capacity sufficient to cover around three-quarters of demand under plausible scenarios).

We then define:

$$CIAI^{op}_{2023} = \frac{1}{3}(s_{bank} + s_{elec} + s_{gas}) = \frac{1}{3}(0.1412 + 0.70 + 0.75) \approx 0.53.$$

Interpreted literally, this suggests that on average, around 53 percent of Moldova's banking, electricity and gas "system mass" is operated by Romanian-linked entities. While stylised and dependent on the choice of sectors and equal weighting, this figure conveys that Romania's operational footprint in Moldova's critical infrastructures is substantial and, in two of the three sectors, dominant.

5.3 The Romanian-Capital Anchor Index (CIAI^R)

To capture the extent to which Romanian capital bears the risks associated with these infrastructures, we define a second index, the Romanian-Capital Anchor Index (CIAI^R). For each sector j, we compute a Romanian-capital-weighted share:

$$s_{j,R} = s_j \times \theta_{j,R} \ ,$$

Where $\theta_{j,R}$ is the share of the operator's equity ultimately controlled by Romanian capital.

Based on the evidence presented earlier, we approximate for 2024:

1. Banking (Victoriabank)
BT's effective stake is approximately 44.6 percent. We thus set

$$\theta_{bank,R} \approx 0.4463, s_{bank,R} = 0.1412 \times 0.4463 \approx 0.063.$$

2. Electricity (Premier Energy)

The free float listed on the BSE represents roughly 28–30 percent of total equity; the remainder is held by Emma Capital and other non-Romanian investors. As an upper bound, we treat the free-float portion (here, 28.75 percent) as Romanian-anchored:

$$\theta_{\text{elec,R}} \approx 0.2875, s_{\text{elec,R}} = 0.70 \times 0.2875 \approx 0.201 \,.$$

3. Gas (Vestmoldtransgaz / Transgaz)

Transgaz is majority-owned by the Romanian state and otherwise by a diversified investor base in which Romanian institutional investors play a significant role. To capture Romanian risk internalization, it is reasonable to treat the gas operator as fully Romanian-capital anchored:

$$\theta_{gas,R} \approx 1.0, s_{gas,R} = 0.75.$$

The Romanian-Capital Anchor Index is then:

$$CIAI^{R}_{2023} = \frac{1}{3}(s_{bank,R} + s_{elec,R} + s_{gas,R}) \approx \frac{1}{3}(0.063 + 0.201 + 0.75) \approx 0.34.$$

Thus, Romanian capital accounts for roughly 34 percent of the critical infrastructure "mass" on which Moldova depends, according to our three-sector composite.

5.4 Methodological caveats and possible extensions

The $CIAI^{op}$ and $CIAI^{R}$ indices are intentionally stylized. Several caveats merit emphasis.

First, they cover only three sectors and a single year. A fuller assessment of Romanian anchoring would extend the sectoral coverage to telecommunications, rail and digital infrastructure and construct a time series capturing the evolution of anchoring since at least 2010.

Second, the estimates of the Romanian capital share $\theta_{j,R}$ are approximate, especially for Premier Energy, where detailed shareholder data are not fully transparent and we used as anchor the Romanian Pension funds holdings and retail extrapolation. Treating the BSE free float as Romanian-anchored is an upper bound; in reality, some free-float shares are held by foreign investors. A more refined analysis would use investor-registry and fund-portfolio data to identify ultimate beneficial ownership.

Third, the indices treat Romanian capital as homogeneous, although it includes the state, domestic institutional investors, banks and households. For the purposes of small-state resilience, it is relevant whether risk is borne primarily by the Romanian state, which may be willing to provide policy support in crises, or by diversified global investors, whose behavior may be more sensitive to market signals.

Fourth, we stress that higher anchoring is not inherently “better” or “worse”. A situation in which Romanian operators maintain critical infrastructures while global capital shares risk may be stabilizing, particularly if diversification reduces the likelihood that a single national crisis undermines the infrastructure.

Finally, while this article does not estimate formal econometric models, the indices provide building blocks for future research that could combine time-varying anchoring measures with financial stress indices and macro-financial indicators to study the stabilizing or destabilizing effects of cross-border anchoring.

6. Discussion: Asymmetry, risk-sharing and EU neighborhood policy

6.1 Structural asymmetry and its implications

The central empirical observation is the structural asymmetry between operational and capital anchoring: $CIAI^{op}$ (≈0.53) substantially exceeds $CIAI^{R}$ (≈0.34). Moldova is more strongly anchored to Romania in terms of who runs its critical infrastructures than in terms of who owns and finances them.

For **Moldova**, this configuration implies:

1. Enhanced resilience to non-Romanian shocks. Integration with Romanian-operated gas and electricity infrastructure, supported by EU financial assistance, has significantly reduced Moldova’s vulnerability to Russian energy coercion. Given the predicted gas availability once the Neptune Deep project starts operating in 2027, this increases the availability and resilience of the Moldovan ecosystem. The association with BT and the EBRD has likewise helped stabilize the banking sector.

2. Exposure to foreign corporate health and strategy. Moldova’s reliance on a small number of cross-border operators means that the financial health and strategic decisions of BT, Transgaz and Premier Energy matter for the continuity and pricing of essential services. While these firms are generally well-capitalized and regulated, they remain exposed to broader regional shocks.

3. Limited direct leverage over capital providers. Because a substantial part of the risk-bearing capital in Premier Energy and Victoriabank is held outside Romania (and, in Premier Energy's case, outside both Romania and Moldova), neither Moldovan nor Romanian authorities fully control the ultimate owners. This diffuses risk but may also complicate crisis management if shareholder incentives diverge from host-country policy objectives.

For **Romania**, the asymmetry implies that:
1. Systemic exposure to Moldova is concentrated and manageable. Romanian exposure is significant in Transgaz/ Vestmoldtransgaz and, to a lesser extent, in Victoriabank via BT and the portfolios of Romanian institutional investors. However, these exposures are rather small relative to Romania's GDP and financial system; even severe stress in Moldovan operations would be unlikely to be macro-critical.

2. Romania's role is more about facilitating outside engagement than unilaterally directing it. Particularly in electricity, where Premier Energy is majority-owned by a Czech holding, Romania's role is that of a platform - providing market infrastructure, listing venue and regulatory framework - rather than that of a dominant capital provider.

From an EU perspective, the Romania - Moldova corridor exemplifies a hybrid model of neighborhood anchoring in which an EU member state supplies operational capacity and regulatory alignment, while private and multilateral investors share the underlying financial risk.

6.2 Supervisory and regulatory coordination

The asymmetry highlighted by $CIAI^{op}$ and $CIAI^{R}$ underscores the importance of cross-border supervision and regulatory coordination.

In banking, Schoenmaker's (2011) financial trilemma suggests that deep cross-border integration via foreign banks requires shared supervisory frameworks to avoid gaps in crisis management. For Victoriabank, this implies that the NBM, the NBR and, indirectly, EU supervisory bodies should coordinate through supervisory colleges and information-sharing arrangements. The EBRD's role as a co-owner adds an additional layer of governance that may help align the interests of home and host authorities.

In the energy sector, regulatory coordination between Moldovan and Romanian energy regulators, as well as with EU entities such as ACER and ENTSO-E, is crucial for ensuring that cross-border gas and electricity flows are governed by predictable, non-discriminatory rules. The ownership structure of Transgaz and its subsidiaries, including Vestmoldtransgaz, places these operators at the intersection of national and EU-level regulation. Similarly, Premier Energy's dual position as a key Moldovan distributor and a Romanian-listed company requires consistency between Moldovan tariff regulation, EU state-aid rules and investor-protection standards.

Anchoring structures thus create shared supervisory responsibilities. Where operational anchoring is elevated but capital anchoring is partial, the question of who ultimately bears responsibility for backstopping critical infrastructures in a crisis—home state, host state, EU institutions or multilateral banks—needs to be addressed explicitly.

6.3 Energy security, geopolitics and EU economic statecraft

The Russian invasion of Ukraine and the weaponization of energy supplies have highlighted the strategic dimension of energy infrastructure. Moldova's accelerated decoupling from Russian gas and electricity since 2022 has been supported by EU financial assistance and by the rapid scaling-up of interconnections with Romania (IEA, 2020; Reuters, 2025). Within this context, Romania's role can be understood as a case of EU economic statecraft implemented through critical infrastructure.

By extending its gas and electricity networks eastwards and by hosting regional energy companies, Romania helps translate EU norms and market structures into concrete resilience gains for Moldova. The $CIAI^{op}$ and $CIAI^{R}$ indices show that this is not solely a public-sector exercise: private capital, and multilateral institutions such as the EBRD are integral parts of the anchoring configuration.

This hybrid structure has several noteworthy features:

1. **Redundancy and diversification.** By diversifying gas and electricity routes, Moldova reduces its dependence on a single supplier or transit corridor. The Romania–Moldova interconnections, combined with EU-level tools such as joint gas purchasing, exemplify this strategy.

2. **Shared ownership and governance**. The presence of multilateral development banks and non-Romanian private capital introduces checks and balances that can enhance transparency and reduce the risk of politicization, though it may also dilute the capacity of any single national government to impose its preferences.

3. **Path dependence in accession**. As Moldova's energy and financial infrastructures become physically and operationally integrated with Romania and, by extension, with the EU, the costs of reversing course increase. Infrastructural anchoring thus helps lock in Moldova's European trajectory, independently of short-term political fluctuations.

In comparative perspective, the Romania–Moldova corridor resembles other regional anchoring settings, such as Austria's role in the Western Balkans' banking systems or the Nordic countries' roles in Baltic energy and telecom networks. What distinguishes the Moldova case is the combination of geopolitical salience and the speed with which anchoring has intensified.

6.4 Limitations and research agenda

The analysis is subject to several limitations that suggest directions for further research.

Empirically, the $CIAI^{op}$ and $CIAI^{R}$ indices are partial (three sectors) and static (one year). Future work could:

- Extend sectoral coverage to telecommunications, rail and digital infrastructure.
- Construct a time series of CIAI measures to examine how anchoring has evolved since at least 2010;
- Combine CIAI series with financial stress indices and macro-financial variables in formal models assessing the stabilising or destabilising impact of anchoring.

Conceptually, further work could disaggregate capital anchoring into state, institutional and household components, and explore how different mixes affect both countries' policy preferences in crises. For example, higher exposure of Romanian pension funds to Moldovan infrastructure might increase Romanian interest in Moldovan stability and influence voting patterns on EU-level support.

A comparative research program could apply the anchoring framework to other EU neighborhood relationships—Poland–Ukraine, Italy–Western Balkans, Germany–Central Europe—to identify common patterns and derive design principles for EU neighborhood policy in an era of heightened geopolitical competition.

7. Conclusion

This article has argued that Romania has become a multi-layered financial and infrastructural anchor for the Republic of Moldova, but that this anchoring is structurally asymmetric. Drawing on literature on foreign banks, financial stress indices, institutional investors and energy security, and using corporate and sectoral data for Victoriabank, Transgaz/Vestmoldtransgaz and Premier Energy, it introduced a distinction between operational anchoring and capital anchoring and constructed two corresponding indices.

The Operational Critical Infrastructure Anchor Index ($CIAI^{op}$) suggests that Romanian-linked entities operate roughly half of an aggregate of Moldova's banking, electricity and gas "system mass". The Romanian-Capital Anchor Index ($CIAI^{R}$), by contrast, indicates that roughly one-third of this system mass is financed and controlled by Romanian capital, with substantial roles for non-Romanian private investors and multilateral institutions. This asymmetry is particularly pronounced in electricity, where Premier Energy is majority-owned by a Czech holding company but listed in Bucharest, and more muted in gas, where Transgaz and its Romanian investors play a dominant role.

For Moldova, this configuration implies a significant increase in resilience to Russian energy coercion and domestic banking fragility, along with deeper embedding in EU-style regulatory regimes. At the same time, it creates new dependencies on the financial health and strategic decisions of a limited number of cross-border operators. For Romania, the anchoring role involves manageable systemic exposure and an opportunity to leverage its capital markets and infrastructure to advance EU neighborhood objectives.

By making the dual nature of anchoring explicit and operationalizing it through simple indices, the article provides a starting point for more systematic analyses of how infrastructure, ownership structures and regulation interact to shape small-state resilience on the EU's frontier. As Moldova advances toward EU membership, the key policy challenge will be to consolidate the benefits of operational anchoring while ensuring transparent, balanced and politically sustainable patterns of risk-sharing between Moldova, Romania, the EU and global investors.

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