WHY CORPORATE GOVERNANCE IN CROATIAN SOEs MIGHT NOT REACH HIGH-PERFORMANCE EQUILIBRIUM DESPITE THE INSTITUTIONAL REFORM EFFORTS: THE CASE STUDY OF THE ENERGY SECTOR

Davorin Pavelić*, Valentina Vučković**

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Abstract

Croatia has substantially reformed the governance framework for its state-owned enterprises (SOEs), through the 2021 Government Action Plan and through the 2025 Law on Legal Entities Owned by the Republic of Croatia. The goal of this paper is twofold. The first goal is to show that, while these reforms address procedural and internal governance aspects, the structural drivers of agency loss remain only partially addressed. Drawing on agency theory, transaction cost economics, multi-principal political economy, and the logic of institutional complementarity, we show that the current framework is missing four key conditions, i.e., hard budget constraints, clear mandates, coordination across government levels, and market-based financing. As a result, the level of public ownership remains high compared to the OECD countries. The second objective is to show that the most likely long-term outcome is a stable but politically mediated equilibrium of moderate compliance, inefficiency, and recurring fiscal exposure. This is discussed in a case study of five SOEs in the Croatian energy sector over 2018–2024. In doing so, we combine an institutional assessment of the reforms with a structured analysis of the selected firm-level financial performance.

Keywords: corporate governance, SOEs, Croatia, OECD, institutional reform

JEL: G3, P2, D2

1. Introduction

State-owned enterprises (SOEs) in Croatia have economic weight that goes well beyond their individual balance sheets. As of 31 December 2024, the consolidated state portfolio encompassed 46 legal entities under central government ownership. The total assets were 45.4 billion EUR, and the number of employees was approximately 51,900 (MFIN, 2025). However, most of their profits come from the energy sector, which accounts for around 58% of net profits and 60% of revenue. Since government budgets usually absorb the consequences of governance failures through guarantees, recapitalisations, and implicit backing arrangements, SOE corporate governance is not merely a corporate but also a fiscal and political economy issue.

The governance challenge is further complicated by the fact that Croatian SOEs do not operate under a single objective function, unlike private corporations, which primarily maximise shareholder value. Instead, they pursue hybrid goals that combine financial sustainability with incumbents' political objectives, including high employment levels, public service provision, and strategic national interests. Trying to replicate private-sector governance structures in this multi-objective context remains an issue because the incentive systems differ. The principals (incumbent political actors) often prioritise electoral advantages or distributive objectives over efficiency. At the same time, agents (managers), are often exposed to ambiguous and sometimes conflicting signals. As a result, any assessment of governance effectiveness in Croatian SOEs should account for the broader political economy of the entire process.

Croatia's reform efforts in this area have been shaped by various external pressures, such as the commitment to Eurozone accession (2020–2023), the National Recovery and Resilience Plan, and the ongoing EU country-specific recommendations. Across all of these, weaknesses in SOE governance have been repeatedly highlighted by the European

* Benchmark Ltd., Croatia, benchmark.davorin@gmail.com
** Faculty of Economics and Business, University of Zagreb, Croatia, vvuckovic@net.efzg.hr

Commission (2023, 2024, 2025). More recently, the OECD accession process has become the main external anchor for reforms, with Croatia expected to achieve full membership in the first half of 2026 (OECD, 2026). Within the OECD umbrella, the 2021 Action Plan for the Implementation of OECD Recommendations introduced reforms aimed at improving ownership coordination, strengthening professionalisation of supervisory boards, and enhancing internal control and transparency mechanisms (OECD, 2021; OECD & Government of Croatia, 2021). Further, in 2025, the Croatian Parliament adopted the *Law on Legal Entities Owned by the Republic of Croatia*. This law replaced the previous State Asset Management Act and aims to align governance practices with the 2024 OECD Guidelines on Corporate Governance of SOEs (MFIN, 2025; OECD, 2024). In addition, the 2025 Law brought several key innovations which address many procedural issues highlighted by the OECD (2021) and mark a significant improvement in the formal governance structure. These will also be evaluated in the paper.

This paper argues that simply strengthening institutions does not inherently improve their efficiency, as governance is influenced by various political and fiscal factors. For example, when external oversight is weak, budget constraints are not credible, and objectives remain unclear. Thus, the stricter rules on paper do not necessarily translate into better performance in practice. The OECD (2026) highlights that SOEs continue to lag behind private firms, and that Croatia has one of the highest levels of public ownership in the OECD, with SOE assets amounting to around 45% of GDP.

The main research question is whether Croatia's corporate governance reforms for SOEs are structurally sufficient to produce a high-performance equilibrium. A high-performance equilibrium can be seen as a stable governance framework in which incentives, institutional constraints, and objectives are aligned. In such a framework, the enterprise can consistently minimise production and transaction costs while fulfilling its public mandate, without relying on repeated fiscal support or being distorted by political interventions.

We form two hypotheses:
H1: While the reform framework outlined in the 2021 Action Plan and the 2025 Law fixes procedural governance issues, it only partially addresses the structural deficiencies that result in agency loss in Croatian SOEs.
H2: The fundamental causes of SOEs' underperformance in Croatia include soft budget constraints, hybrid and unclear objective functions, fragmented ownership across government levels, and weak external discipline mechanisms.

The contribution of the paper is threefold. First, we discuss the corporate governance reform pattern observed in Croatia as a small Central and Eastern European (CEE) economy in the process of the OECD accession. Second, we apply political economy analysis of the 2021 Action Plan and the 2025 Law, showing that many structural issues remain unaddressed. Finally, we conduct an analysis on a case study of the energy sector and discuss that procedural reforms did not change the underlying intervention patterns. Such approach demonstrates that systematically linking theory, observable trends, and causal processes, provides a rigorous framework for analysing complex governance systems.

The paper is structured as follows. Section 2 brings the theoretical framework, combining agency theory, transaction cost economics, soft budget constraints, and hybrid objective functions. Section 3 presents an analysis of the Croatian SOE system, focusing on the institutional framework governing SOEs. Section 4 offers a case study of energy-sector SOEs in Croatia and discusses why procedural reform is necessary but insufficient to achieve a high-performance equilibrium in this sector. Section 5 concludes.

2. Theoretical framework

Addressing the above-formed research question and the hypotheses requires a theoretical framework that captures several interconnected dimensions, i.e., agency relationship between the state (owner) and enterprise managers; transaction costs embedded in political ownership structures, the multi-principal nature inherent to fragmented state ownership, and the system-level complementarities that determine whether procedural reform translates into substantial performance improvement.

The discussion on SOE governance mainly relies on agency theory, public choice theory, and institutional economics (see e.g., Stanila et al., 2025; Curi et al., 2025; Turnbull, 2000; Jensen & Meckling, 1976; Berle & Means, 1932). Jensen and Meckling (1976) conceptualise the firm as a network of contracts where the separation between ownership and control leads to agency costs. These include monitoring expenses by the principal, bonding costs incurred by the agent, and residual losses that remain even with optimal contracting. This residual loss is the analytical foundation of the agency loss in the context of SOEs, i.e., the welfare or efficiency gap between socially optimal performance and the outcomes achieved under politically mediated ownership. In the Croatian legal framework, which mandates a two-tier system, its effectiveness depends on the independence and competence of supervisory board members (e.g., one of the targeted reforms). Nonetheless, as Hopt and Leyens (2004) state, this is less important than the actual distribution of information and decision-making power, which in SOEs is conditioned by political appointment practices and fragmented ownership. These observations connect to the political-allocation channel through which supervisory and management board members in Croatian SOEs have historically been appointed (see e.g., Kotarski & Petak, 2019; World Bank, 2021). The 33% independent board member requirement introduced by the 2025 Law is a procedural safeguard, strengthened by the OECD (2026) recommendation to limit undue political influence.

A dominant shareholder such as the state does not remove agency problems but transforms them. Burkart and Panunzi (2006) argue that formal shareholder protection and concentrated ownership may act either as substitutes or as complements. Paradoxically, they also point that stronger protection can sometimes deepen conflicts between majority and minority shareholders. This has implications for Croatia, where the state is simultaneously the dominant shareholder and the regulator, creating a self-referential monitoring loop.

Bebchuk (2002) extends the agency framework by analysing how information asymmetries distort the choice of governance arrangements at the point of firm formation. When higher-value assets create opportunities for greater private benefits of control, firms may rationally adopt governance structures that are known to be inefficient. Although the author focuses on IPO-stage charter design, this logic could be applied to SOE governance, as the state, i.e., the entity that takes the firm public in a regulatory sense, faces analogous incentive distortions. Political actors who benefit from weak governance may have no interest in designing robust monitoring structures, even when the costs of weak governance are fully understood. This helps explain the pattern identified in Croatia, i.e., the reforms that are institutionally significant in their formal landscape but structurally weak in enforcement mechanisms.

The application of agency theory to SOEs also requires the understanding that the state is not a unitary actor. While in private firms the core agency problem involves ensuring that managers (agents) act in the best interests of dispersed shareholders (principals), with clear objectives that enable measurable performance standards and enforceable incentives, in SOEs, the agency chain is considerably more complex. Citizens delegate authority to elected officials, who in turn delegate it to the government, then to ministries or centralised ownership entities, responsible for appointing boards and managers. Each step creates information asymmetries and the risk of conflicts of interest. The longer this chain, the more likely agency problems become. Politicians have a dual role. On the one hand, they are agents of citizens (voters), and on the other hand, they are principals to SOE managers. In the latter case, short-term priorities often follow election cycles, and different political preferences can result in shaping enterprises' goals in a way that moves them away from a clear focus on economic performance. Public choice theory helps explain this dynamic by showing how political incentives influence state ownership and why many reform efforts aim to shield supervisory boards from direct political pressure.

As Stanila et al. (2025) highlight, the relationship between the state as owner and executive management is unique. In SOEs, authority is delegated through multiple layers: from citizens as ultimate principals to elected politicians, line ministries, ownership coordination bodies, supervisory boards, and finally to the executive management. Each step increases information loss and results in the misalignment of incentives. For example, Račić et al. (2008) show that transition economies such as Croatia exhibit institutional weaknesses that exacerbate the agency problems, particularly when ownership rights lack a clear structure. Early post transition governance reforms in Croatia failed to fully shield enterprise management from political pressures. Instead, they ended up reinforcing existing agency costs. While agency theory is still the most commonly used framework for analysing SOE governance, it needs to be applied with the understanding that these firms operate under dual objective, i.e., balancing commercial performance with broader public mandate (Thompson et al., 2019; Stanila et al., 2025). This duality primarily changes the structure of the agency problem by making it impossible to specify a single performance metric against which managerial behaviour can be assessed. The OECD (2024) explicitly highlights this challenge for Croatia and calls for a clear mandate specification. However, the extent to which the Croatian legal framework will achieve this remains insufficient.

Transaction cost economics, building on Coase's theory of the firm, offers a complementary theoretical lens to agency theory, as it states that a firm's governance structure must minimise the total production and transaction costs, which stem from opportunism, bounded rationality, and incomplete contracts (Coase, 1993; Williamson, 1985, 2010). Moreover, strong performance depends not only on capable managers but also on an institutional framework that aligns decision-making, oversight, financing, and exit options in a way that keeps both production and transaction costs low. In private markets, discipline comes from mechanisms such as takeovers, bankruptcy procedures, and creditor enforcement, which penalise poor performance by shifting control and reallocating assets to more efficient uses (see Jensen, 1988; Hart, 1995). In the case of SOEs, this helps explain why certain governance arrangements can persist even when they appear clearly inefficient. In addition, internal governance becomes more costly and vulnerable. In general, SOEs become protected governance structures that encourage opportunistic behaviour, as penalties are often delayed and negotiated politically (EBRD, 2020).

The aspect of ownership concentration also has direct implications for the SOEs context. Using German manufacturing firms as an example, Köke (2001) finds that concentrated ownership and creditor pressure boost productivity growth, especially for financially distressed firms. Moreover, he also finds that ownership concentration and product market competition are complementary, implying that tight owner control is most effective when combined with strong market discipline. If the state has concentrated control and firms operate under soft-budget constraints with little or no competitive pressures, this complementarity fails. In that case, the costs of maintaining the governance hierarchy outweigh any efficiency gains from coordinated ownership. The EBRD (2020) provides evidence of this in Croatia, which, with around 260 SOEs per million inhabitants, has one of the highest SOE densities among central and south-east European countries. Coordinating such a portfolio increases transaction costs related to tracking performance, making sure mandates are followed, preventing cross-subsidies, and handling board appointments across several layers of government. The reform framework's emphasis on standardised key performance indicators (KPIs) reporting can be understood as an attempt to reduce these costs. However, KPIs will only be effective as governance instruments when they are embedded in credible enforcement structures.

The literature on SOEs' governance also identifies the fragmentation of state ownership across multiple political principals as a fundamental source of governance failure (e.g., Grossman et al., 2019). Apriliyanti et al. (2024) highlight four categories of SOE principals, i.e., direct government, indirect government, elected politicians, and interest groups. They are associated with different sources of power regarding the appointment, dismissal, and accountability of SOEs' CEOs. Crnković et al. (2014) analyse the historical evolution of state ownership in Croatia, and observe that the transition environment, characterised by war, political instability, and institutional weakness, resulted in ownership structures that remain imperfectly rationalised. Large-scale state ownership persists not only for economic reasons but also because of its political functions. SOEs often provide employment, support regional development, and can be used for patronage. The World Bank (2021) highlights weaknesses in the institutional structure of state ownership, particularly regarding the ownership coordination, mandate specification, and performance. Similarly, the OECD (2021) argues for clearer separation between state ownership and its regulatory and policy functions. In response to these assessments, the Croatian Government adopted an Action Plan but it is uncertain whether better administrative coordination can substitute for deeper structural reforms of ownership incentives.

The single concept that does most of the explanatory work for SOE underperformance is Kornai's (1980, 1986, 1998) soft budget constraint. Its operative content is not the definition (losses will be absorbed) but the equilibrium it sustains: once the absorption is expected, KPIs become a reporting layer rather than a binding constraint, supervisory monitoring converges on procedural compliance, and underperformance is renegotiated rather than enforced. This is why procedural reforms, even the well-designed ones, can leave firm behaviour unchanged. Simply professionalising boards does not do much, since even competent managers are still operating in a system that does not punish poor performance. Kornai et al. (2003) link this pattern to a paternalistic state, information asymmetry between the state and the firm, and political interference in day-to-day business decisions. The results encompass weaker cost control, distorted financing, and excessive risk-taking, so inefficiencies persist and restructuring is repeatedly delayed. Wu et al. (2026) show that tighter profit remittance rules did strengthen the economic role of Chinese SOEs, but subsidies went up rather than down, deepening precisely the mutual dependence between state and enterprise that defines a soft budget constraint.

The EBRD's (2020) Croatia diagnosis identifies soft budget constraints as the binding constraint on SOE performance, observing that the network and natural-resource sectors in which Croatian SOEs concentrate (transport, energy, construction, forestry, utilities) combine genuine market-failure justifications for public ownership with a chronic absence of competitive discipline. Together, these two conditions, i.e. public-ownership rationale and weak competition, create the conditions under which agency loss compounds. Collin and Cesljas (2002) argue that business groups emerged partly as governance mechanisms to solve problems of capital and managerial capacity in the absence of functioning markets. Thus, the Croatian SOE system emerged under specific transitional conditions and persists because the institutional complementarities that sustain it have not been disrupted.

The hybrid objective function, i.e., the commercial returns and policy mandates, compounds the soft budget constraint problem. Okhmatovskiy et al. (2022) point out that the governance of SOEs is hybrid, combining mechanisms of public administration, informal political interference, and standard corporate governance. Two implications follow for the Croatian case. First, governance institutions are complementary. In terms of the varieties-of-capitalism literature (Hall & Soskice, 2001), an upgrade to one element (e.g., board professionalisation, KPI reporting) yields little if the surrounding elements (e.g., hard budget constraints, mandate clarity, competitive discipline) remain unreformed. Second, where governance culture is compliance-oriented rather than performance-oriented, even well-designed reporting requirements degrade into procedural disclosure. Dragija Kostić et al.

(2022) document precisely this pattern in Croatian, Slovenian, and Hungarian SOEs, where state ownership reduces the substantive informational content of non-financial reports. Finally, the IMF (2021) offers a fiscal risk assessment framework for SOEs, showing how their liabilities can spill over onto the public balance sheet through guarantees, debt-service pressures, and other contingent liabilities. In Croatia, for example, SOE debt has historically accounted for around 12% of GDP and is concentrated among a small number of large enterprises (World Bank, 2021). This represents significant fiscal risks. Moreover, Croatian SOEs follow financial sustainability alongside high and stable employment, the provision of public goods and services, and the advancement of strategic objectives that often reflect the priorities of the incumbent government. When these goals overlap, they can shape operating decisions, such as postponing restructuring to avoid job losses, making politically motivated investments, or favouring regional development projects over financial performance. However, the issue occurs when they are not clearly ranked and when compensation for public service obligations is non-transparent or politically negotiated. In multi-task agency models, with unclear priorities, managers (agents) tend to focus on tasks that are politically visible, instead of pushing for productivity improvements (see, e.g., Shleifer & Vishny, 1994; Holmstrom & Milgrom, 1991). Mixed or hybrid objectives under which SOEs operate must be clearly defined, measurable, and supported by a transparent system that divides economic performance from compensation linked to policy goals (OECD, 2024).

Pulling the presented theoretical strands of literature together, we can draw some conclusions on which we build the following sections. First, the agency loss in SOEs is structural, because principal-agent chain has more layers and softer incentives than in private firms (Jensen & Meckling, 1976; Stanila et al., 2025). Second, soft budget constraints are the single most powerful explanatory variable for SOEs underperfomance (Kornai, 1986; Kornai et al., 2003; Wu et al., 2026). Third, governance institutions are complementary and individual reforms can fail if institutions remain unreformed (Hall & Soskice, 2001; Podrug et al., 2016; Turnbull, 2000). We contribute to the existing research by analysing small CEE economies in the OECD accession, where the procedural side of governance (board independence rules, KPI reporting, ownership-policy documents) is substantially upgraded while the structural side (hard budget constraints, mandate hierarchy, cross-tier scope, market discipline) is left largely untouched.

3. Institutional assessment of the Croatian SOEs system

Since our main goal is to analyse whether the formal reforms adopted in Croatia between 2021 and 2025 are structurally sufficient to produce a high-performance equilibrium, the paper follows a qualitative institutional analysis combined with a structured case study. We thus follow the combination of process tracing, structured focused comparison, and pattern matching (see George & Bennett, 2005; Gerring, 2007; Beach & Pedersen, 2019; Collier, 2011). This approach is appropriate for analysing complex institutional settings in which causal mechanisms are not directly observable and in which the small number of cases makes econometric identification of average effects infeasible. Rather than estimating effect sizes, the methodology assesses whether the observed empirical processes align with the causal mechanisms specified in the theoretical framework. Three considerations motivate this choice. First, the research question on whether the 2021–2025 reforms are structurally sufficient to produce a high-performance equilibrium is configurational, and second, the population of central-government SOEs is small and dominated by sector-specific business models. In addition, the most recent reform (NN 102/2025) entered into force during the period of the analysis, leaving no post-treatment data window long enough for a credible event study.

3.1 Overview of the existing framework and trends

The institutional framework for SOEs is shaped by the 2025 Law (NN 102/2025) and 2021 Action Plan (OECD & Government of Croatia, 2021). The 2021 Action targets the procedural side of governance, i.e., ownership coordination, audit independence, board professionalisation, and procurement controls. It, thus, improves cross-tier coordination at the central level, contributes marginally to market-based discipline, and leaves hard budget constraints and mandate clarity untouched (OECD, 2021). Such measures can help reduce information asymmetry and curb opportunistic behaviour in procurement, consistent with agency theory's focus on monitoring mechanisms (Jensen & Meckling, 1976).

Ministry of Finance (MFIN) (2025) data show that the SOEs portfolio contracted. The number of SOEs fell from 59 (2013) to 36, and the CERPs majority-owned companies fell from 40 to 10. The 2025 Law extends this contraction as it institutionalises a written ownership policy, imposes KPI-based monitoring with disclosure of public-policy objectives, requires merit-based selection with one-third independent supervisory members, prohibits accounting cross-subsidisation between commercial and public mandates, and consolidates reporting to Parliament through the MFIN (MFIN, 2025; NN 102/2025). However, it neither imposes a hard-budget-constraint trigger nor establishes a hierarchy among the disclosed objectives, nor does it institutionalise a mechanism that links board replacement to performance which are major structural channels through which agency losses in Croatian SOEs have historically operated, as discussed in the following subsection.

The most recent OECD assessment (2026) places Croatian SOE assets at roughly 45% of GDP and SOE employment at about 4% centrally and 7% including subnational entities, with the central portfolio concentrated in network sectors (transportation, electricity and gas, telecommunications, construction, and finance). The economic weight is therefore not marginal and any structural weakness in SOE governance is transmitted to the macro-fiscal balance and to the labour market, which is why the diagnostic developed in this paper is calibrated to structural rather than purely procedural reforms. Nonetheless, these trends are in line with the experiences of most EU member states from the CEE (Böwer, 2017; Pula, 2017). For example, Böwer (2017: 22) highlights that SOEs play an important role in the economies of emerging Europe, especially in network sectors, and that, compared with private firms, SOEs' profitability and efficiency of resource allocation lag substantially behind those of private firms. Figure 1 shows that Croatia and Poland record the highest public-ownership scores in the OECD Product Market Regulation (PMR) database (where higher values indicate stronger state distortion of competition). This is informative because the public-ownership pillar is the PMR component most directly associated with the structural drivers of agency loss in our framework, and Croatia's score is largely unchanged.

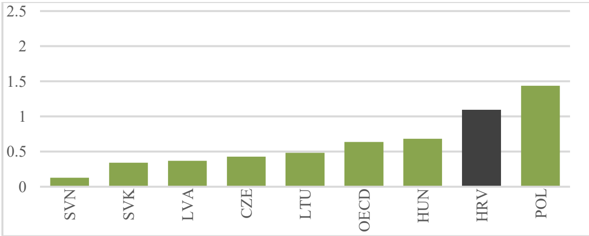

Figure 1. Public ownership of firms in CEECs
Note: index scale of 0-6 from least to most restrictive, 2023.
Source: The OECD 2023-2024 PMR database.

The 2024 portfolio (MFIN, 2025) shows the structural concentration that motivates a sectoral case-study approach: the total assets of 45.4 billion EUR; business revenues of 11.1 billion EUR (down 5% relative to 2023); net profit of 726.6 million EUR (up by 47%); and 78% of revenues generated by just seven enterprises. The report also points out that, despite recent centralisation efforts, the ownership model remained fragmented. For the 36 enterprises of special interest, line ministries exercise state-ownership functions, while MFIN plays a coordinating role focused on performance and management monitoring.

Ownership rights for the other enterprises (mostly minority-owned by state) are allocated to the Centre for Restructuring and Sale (CERP). At the end of 2025, the CERP held a portfolio of 125 enterprises, of which 13 were fully or majority state-owned (OECD, 2026).

Existing empirical research on state ownership in Croatia confirms its underperformance (see, e.g., Kotarski & Petak, 2019; Šonje, 2019; Bajo et al., 2018; EC, 2016; Iootty et al., 2014). Most recent analysis of the OECD (2026) highlights that SOE performance, measured by return on equity, is below of that of other firms in the same industry and of SOEs in comparable countries. In addition, it also finds that SOEs without public policy objectives tend to perform relatively poorly. The World Bank (2021) further describes the state as a relatively passive owner operating within a fragmented framework, and with ownership competences spread across several ministries and coordinating bodies. Many SOEs unilaterally defined their own mandates and financial targets without the systematic prior approval from line ministries, indicating weak ex ante mandate control.

The multi-tier governance aspect is particularly important. County and city-level governments hold majority shares in around 500 enterprises, mostly in utilities. These enterprises can effectively circumvent borrowing limits by raising debt through local public enterprises and by backing utility loans with guarantees (OECD, 2021). This spreads soft budget constraints across different levels of government, making them much harder to control through central rules alone.

3.2 Political economy aspects

Even though Croatia's overall PMR score fell from 1.59 to 1.36, bringing the country to the OECD average of 1.35 (OECD, 2025), this overall convergence masks heterogeneity across individual indicators and pillars, as well as the gap relative to the OECD average (and even more so, relative to the best 5 performers) (Figure 2-3). Precisely, the most significant improvement is in the administrative and regulatory burden (from 2.11 to 1.41), indicating progress in regulatory simplification. However, several indicators directly related to the governance of SOEs remain relatively high. In particular, these are the scope of public ownership (3.08), governance of SOEs (2.13), and involvement in business operations in the service sectors (2.43). Also, barriers to entry in the services sector increased slightly. This suggests that the structural role of the state as an economic actor and owner of firms remains comparatively strong relative to the OECD average.

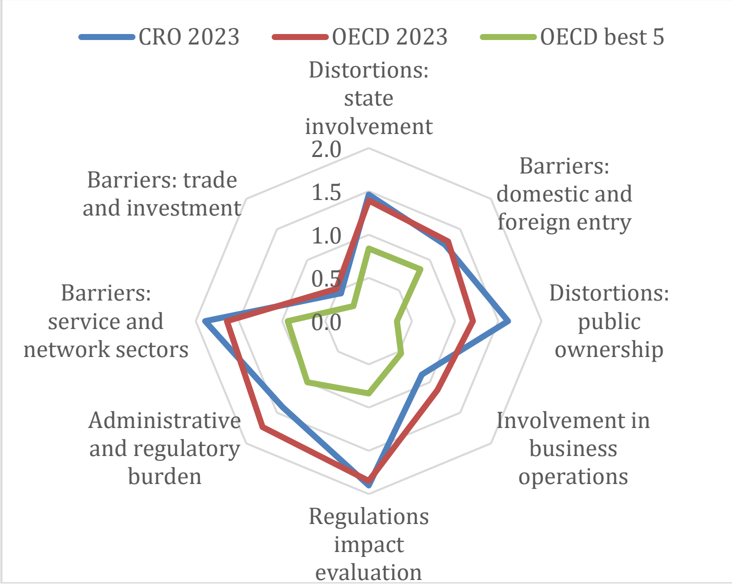

Figure 2. Croatia relative to the OECD average, and OECD's best 5 countries

Source: Author based on OECD 2023-2024 PMR database.

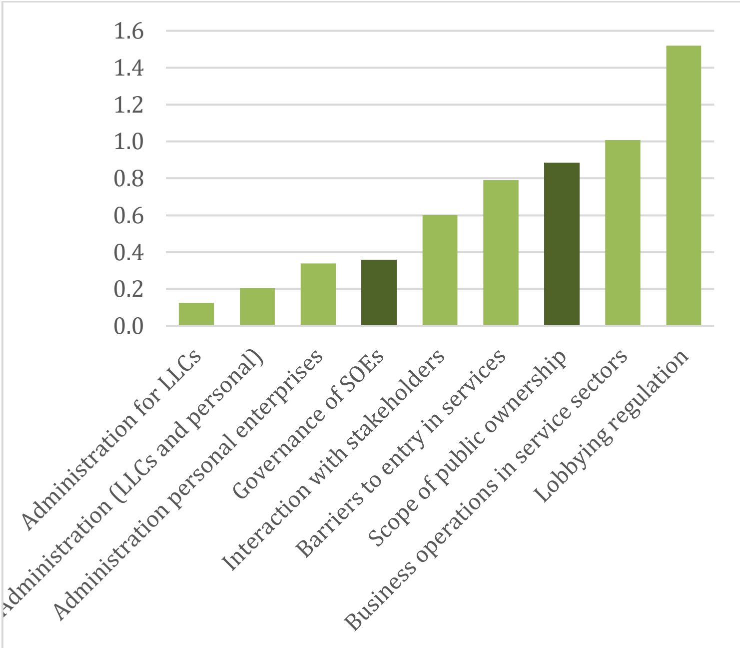

Figure 3. Gap with the OECD average, selected individual indicators with the worst position of Croatia relative to the OECD

Note: the gap is calculated as the difference between the Croatian score and the OECD average score
Source: Author based on the OECD 2023-2024 PMR database.

The presented data provide a useful way to interpret SOE governance through the lenses of agency theory, soft budget constraints, and multi-tier governance. First, the PMR indicators on SOEs governance, stakeholder interaction, and scope of public ownership are especially relevant from an agency theory perspective. The more complex the chain of delegation, the harder it becomes to monitor performance, as incentives weaken and information asymmetry increases. The data also fit well with the idea of a soft budget constraint, especially regarding the distortions created by state ownership, and the ways the government is involved in running businesses. However, neither the 2021 Action Plan (OECD & Government of Croatia, 2021) nor the 2025 Law (NN 102/2025) introduce hard budget constraints. There are still no credible exit mechanisms, substantial changes to bankruptcy procedures, limited restrictions on state guarantees, or automatic restructuring once critical financial thresholds are crossed. Internal governance reforms can curb some opportunistic behaviour, but as long as bailouts are widely expected, both managers and creditors continue to face skewed incentives (see, for example, Kornai, 1986; Kornai et al., 2003; EBRD, 2020). When sanctions themselves are shaped by political bargaining, increased monitoring often leads to more activity focused on formal compliance, without substantially changing the expected payoff from inefficient behaviour (OECD, 2021). Finally, the importance of multi-level governance is reflected in how different stakeholders interact and in a range of administrative indicators. Even the 2025 Law ban on cross-subsidisation will face serious enforcement problems without hard budget constraints, and as long as the state can step in through guarantees and recapitalisations outside the formal ban on cross-subsidies, the Law may address the legal form of subsidisation but not its economic substance. Reflecting this concern, the OECD (2026) recommended that Croatia continue to divest SOEs, define the rationale for state ownership of companies, limit undue political influence, and ensure that the state's roles as owner of SOEs and regulator of the markets in which they operate are institutionally separated.

Another major structural gap is the exclusion of subnational SOEs from the scope of reform. Around 500 county and city-owned enterprises fall outside the 2025 Law, yet they make up a substantial share of the overall SOEs.

This multi-tier governance heterogeneity means that reforms focusing only on SOEs owned by the central government leave many of the system’s main fiscal risk channels and governance weaknesses unaddressed. As a result,when large contingent liabilities from subnational SOEs materialise, they can quickly speed up financial instability and transmit low productivity to firms further down the value chain. In this way, weak SOE performance becomes a broader macroeconomic risk (Böwer, 2017, p. 22).

Mapped against the theoretical assumptions, the institutional evidence yields a clear pattern. Hard budget constraints are not introduced, either by 2021 Action Plan or with the 2025 Law. Next, mandate clarity is only formally introduced by the 2025 Law requiring disclosure of public-policy objectives but not establishing a hierarchy among them or requiring line ministries to provide ex ante mandate approval. Cross-tier coordination is substantially improved at the central level (e.g., centralisation under the MFIN, dual authority with line ministries narrowed) but the approximately 500 county- and city-owned SOEs remain entirely outside the 2025 Law's scope. Finally, market-based discipline is largely absent and the 33% board-independence requirement is procedural and there is no documented case of board replacement triggered by financial underperformance. The case study in Section 4 tests this expectation against the 2018–2024 intervention record.

4. Case study of the Croatian energy sector

The energy sector was selected because it accounts for more than 60% of SOEs’ revenues and the largest share of assets, making it an interesting case study for governance reforms. Also, it exhibits a full range of governance configurations relevant for the diagnostic, i.e., natural monopoly infrastructure and regulated downstream provision under hybrid mandates. In the first step, we analyse the financial performance of enterprises, while in the second step, the focus is on state interventions affecting the broader SOE portfolio. With five companies observed over seven years, all operating in the same macroeconomic environment and facing the same major external shocks (such as the COVID-19 pandemic, the 2022–2023 European energy crisis, and Croatia's accession to the eurozone), it is not possible to statistically identify precise causal effects. Instead, the approach used is the structured qualitative analysis based on the MFIN reports (2018-2024).

4.1 Financial performance of energy sector SOEs

The energy sector comprises five SOEs with fundamentally different business models, ownership structures, and various degrees of exposure to state intervention. The sector is dominated by two firms, which account for around 96% of the total sector revenue, i.e., INA d.d. and HEP d.d. The other three firms, JANAf, Plinacro, and HROTE, contribute 3-4%, but control strategically critical infrastructure. The data analysed cover the 2018-2024 period and are obtained from annual reports for legal entities of special interest, published by the MFIN (MFIN, 2019, 2020, 2021, 2022, 2023, 2024, 2025).

Labour productivity, measured as revenue per employee, is a standard indicator for analysing firm performance, but in the SOEs context, it needs to be interpreted with caution, as for firms where revenue is policy-determined or structurally defined by monopoly tariffs, changes in this indicator reflect price movements rather than operational improvements. If we decompose changes in operating profit into two elements, i.e., a revenue effect capturing how much of the profit change is explained by revenue growth at the previous margin, and a margin effect (how much is explained by a change in operating efficiency at the current revenue level), we could proxy price/quantity driven changes and cost-efficiency driven changes. Such exercise would provide an insight into whether changes in profit reflect autonomous management or external interventions, and it is used as a diagnostic tool, and not as a performance evaluation. We do this for the three largest energy SOEs, to illustrate that firms are not a homogeneous portfolio and therefore cannot be governed under a single template.

Table 1. Revenue and margin effect (mil EUR)

	HEP		INA		JANAF	
	Rev	Marg	Rev	Marg	Rev	Marg
2017-2018	2.2	-4.9	42.8	-89	-0.2	-2.1
2018-2019	1.1	54.6	0.1	-77	-3.4	-2
2019-2020	-7	65.2	-36	-215	4.8	2.1
2020-2021	9.9	-133	-85	421	0	-5.2
2021-2022	6	-947	109	110	5.5	1.1
2022-2023	-499	1452	-68	-45	13	-1.4
2023-2024	-4.8	203	-5.2	-95	-8.3	-1.1

Source: Author calculation based on the MFIN (2019, 2020, 2021, 2022, 2023, 2024, 2025)

The data show that during 2021–2022, the margin effect was –947 million EUR in HEP, caused by cost increases outpacing revenue gains, because HEP bought electricity and gas at market prices while selling at regulated prices. This is an example of a firm whose cost structure was decoupled from its revenue structure by government decree. The 2022–2023 reversal is equally revealing, with 1,452 million EUR positive margin effect partially offset by –499 million EUR revenue effect (as regulated prices were partially unwound, reducing revenues).

Next, INA's case presents a qualitatively different pattern. The 2019–2020 fall (-251 million EUR) was driven by declines in both revenue (36 million EUR) and margins (215 million EUR), as oil prices crashed during the COVID-19 pandemic. The 2020–2021 profit recovery was margin-driven, reflecting INA's ability to cut costs and benefit from the recovering commodity prices. This is market-driven volatility as opposed to HEP's policy-driven volatility. The distinction is analytically crucial. While INA's board can be evaluated on how it managed the COVID shock, HEP's board cannot be evaluated on how it managed the energy price regulation, because it was imposed on HEP by HEP's own shareholder. Finally, JANAF's decomposition is rather flat, with small margin effects and revenue effects that closely track profit changes. This confirms that JANAF's profit is essentially a fixed proportion of throughput volume, determined by long-term transport contracts. This is the financial pattern of a natural monopoly with long-term capacity contracts, exactly the type of business where, as the OECD (2015) notes, performance benchmarks should focus on efficiency and service quality rather than profitability.

Based on the observed, Croatia's energy SOEs do not form a coherent sector portfolio operated under a unified governance approach. Instead, they reflect three different competitiveness regimes, each with unique implications for the state intervention analysis that follows.

4.2 State interventions analysis

We proceed with a comprehensive examination of the annual reports of the MFIN (2019, 2020, 2021, 2022, 2023, 2024, 2025)[1] to analyse the occurrence of state intervention. The comparison is structured by applying the same set of theoretical questions to each case and focused by concentrating on the mechanisms specified in Section 2 (the intensity of soft budget constraints, the clarity or ambiguity of objective functions, the degree of ownership fragmentation, and the strength of external discipline). The five energy SOEs (HEP, INA, JANAF, Plinacro, HROTE) are particularly suitable because they share a macroeconomic and institutional environment but differ in exposure to market forces, ownership structures, and state intervention. The firms operating under strong policy mandates and weak market discipline (HEP, HROTE) are compared with the firms more exposed to market forces (INA, JANAF), allowing the analysis to isolate the role of political versus market-driven mechanisms.

Some intervention episodes involve more than one of intervention types at the same time and are classified accordingly. The raw intervention count resulted in 23 interventionist episodes. We considered only the interventions documented in official reports, but state influence over SOE decision-making likely extends beyond these, encompassing unrecorded informal communications, political signals through board appointments, and SOE managers' anticipatory actions to avoid political friction. These are usually undocumented.

Table 2. Type of interventions

Mechanism	Intervention pattern	Examples	N	Reform addressed?
Soft budget constraint	State both extracts capital (60% dividend rule applied since 2020) and absorbs losses; SOEs function as bidirectional fiscal instruments.	HROTE, HEP	11	Partially. 2025 law introduces KPIs but does not restrict dividend extraction or establish hard bankruptcy constraints.
Hybrid, unclear objectives	HEP mandated to sell at below-market prices, manage strategic gas reserves, and deliver dividends. INA managed to sell gas at administered prices; P&L swing (2020–2022) driven by policy	HEP, INA	9	No. 2025 law requires disclosure of public policy objectives but does not create compensation mechanisms or clarify objective-function clarity.
Fragmented ownership	Ownership function split across the MFIN, line ministries, and CERP. Partial centralisation in 2023 (transfer to the MFIN).	All	4	Substantially. 2025 law centralises ownership under the MFIN and establishes the coordination unit. Dual authority with line ministries persists.

Weak external discipline	No documented board replacement or management consequence for explicitly poor financial performance; JANAF's customer concentration risk tolerated; HERA tariff-setting driven by political factors	JANAF, Plinacro	3	Partially. 33% board independence requirement is procedural. No mechanism for performance-triggered board accountability

Source: Author's compilation from Annual SOE Reports, Ministry of Finance (2018–2024). N = count of documented episodes illustrating each mechanism; if episode involves more than one mechanism, it is counted under each.

Table 3. Distribution of interventions by primary driver

Primary driver	%	Interpretation
Politically driven	48%	Electoral timing, fiscal pressure, public opinion
Policy-driven	17%	Legitimate energy security or transition objectives but implemented through SOE balance sheets rather than direct fiscal channels.
Reform-driven	13%	OECD-aligned governance improvements; 3 out of 23 episodes linked to the reform agenda (reforms are legislative, not behavioural).
Structural	9%	Legacy institutional design (e.g., HROTE entity structure, Plinacro portfolio classification); persists regardless of reform.
Mixed/ external	13%	Multiple drivers or externally imposed (e.g., US sanctions on NIS/JANAF).

Source: Author's classification.

The five Croatian energy SOEs operate under distinct governance regimes. HEP represents the highest-intensity configuration of structural agency loss; INA exemplifies a mixed market–policy governance model; JANAF constitutes a strategic-infrastructure case with external geopolitical discipline; Plinacro operates as a regulated-monopoly; and HROTE functions as an administrative market-operator. Across these regimes, procedural reforms are necessary but insufficient because the underlying mechanisms of political intervention, unclear objectives, and weak discipline remain active.

Moreover, this analysis also reveals an overlap between governance reforms and the period of most intense state intervention. Although this coincides with exogenous crises, it also reveals deeper structural features of the governance system where reforms operate at the level of formal rules, while interventions occur at the level of political practice. And as already stated throughout the paper, the formal rules can change while political practice remains unchanged due to the rooted incentive structures.

Further, intervention counts show that different mechanisms are separated as interconnected features of a single system that mutually reinforce one another. For example, in the case of HEP, the hybrid-objective problem (selling electricity at below-market prices) generates operating losses, which are tolerated because of the soft budget constraint, and the state implicitly guarantees its solvency. The decision to impose price caps is made through fragmented ownership channels, The energy policy directive originates from the Ministry of Economy, while the MFIN manages the ownership function and simultaneously extracts dividends. At the same time, no external discipline mechanism constrains political intervention. This interaction effect is theoretically significant because it implies that addressing any single mechanism in isolation will be insufficient to break the cycle. Shleifer and Vishny's (1994) model of bargaining between politicians and managers in SOEs captures this dynamic well. Politicians use subsidies and directives to pursue political goals, while managers go along with it because it protects them from being held accountable for performance. The Croatian case reflects this pattern quite clearly, showing how political use of firms and managerial insulation from accountability reinforce each other as part of the same system.

5. Conclusion

The main goal of this paper was to examine why corporate governance reforms in Croatian SOEs, despite recent institutional reforms and alignment with international standards, may still fail to produce a sustained high-performance equilibrium. The analysis focuses on the energy sector, which carries high economic and strategic weight within Croatia's SOEs portfolio. By examining changes in the governance framework, from the 2021 Government Action Plan to the 2025 Law on legal entities owned by the Republic of Croatia, the paper assessed whether these formal reforms address the long-standing inefficiencies linked to public ownership.

The paper combines several complementary theoretical perspectives. First, agency theory was used to analyse the relationship between the state as owner and enterprise management. In the context of Croatian SOEs, the principal–agent problem is especially complex because the state has multiple roles at once, i.e., it is the owner, regulator, and policymaker.

The analysis shows that recent governance reforms have helped reduce agency problems to some extent, mainly through the professionalisation of supervisory boards, clearer reporting requirements, and the use of KPI-based monitoring. These reforms have improved accountability and transparency across the sector. Nonetheless, agency problems persist due to hybrid objective functions and weak enforcement mechanisms. Next, transaction cost economics provided another angle for analysing the governance of Croatian SOEs. From this perspective, the recent reforms to internal governance are meant to reduce coordination costs, improve oversight, and strengthen control over managerial decisions. Clearer coordination of ownership and stronger reporting can help reduce transaction costs linked to information asymmetries and monitoring. However, the findings suggest that these internal improvements are not enough to ensure efficient outcomes when the broader institutional environment remains weak. In particular, persistent soft budget constraints reduce the disciplinary role of financial markets and reduce incentives for cost efficiency. The analysis also draws on insights from multi-principal political economy models. In Croatia, state ownership is split across multiple institutional layers, which creates a multi-principal setting in which enterprises receive signals from multiple political actors whose goals may not align. The paper shows that this type of governance structure blurs ownership mandates and increases the risk of political interference in operational decisions. Taken together, these findings support both hypotheses formed, i.e., that procedural reforms partially (not structurally) address agency loss (H1), and that soft budget constraints, hybrid objectives, fragmented ownership, and weak external discipline remain fundamental drivers of underperformance in the energy sector (H2).

The methodological approach was based on qualitative institutional analysis combined with a case study of the energy sector. It is based on an analysis of legislative reforms, policy documents, and international assessments. This makes it possible to follow how governance structures have evolved over time and to evaluate whether recent reforms address the structural sources of inefficiency. The case study is especially useful for capturing how formal governance reforms interact with the broader political and economic context in which SOEs operate.

The findings bring some policy implications. Addressing the challenges of corporate governance of SOEs requires a more comprehensive reform strategy that extends beyond procedural governance improvements. First, this requires establishing credible hard budget constraints and strengthening financial discipline, limiting state guarantees, improving the transparency of state support mechanisms, and ensuring that enterprises operate under market-consistent financing conditions. This could be achieved through, for example, a quantitative threshold for negative financial performance above which a restructuring procedure would be initiated, and which would be included in KPIs. Second, the objectives of SOEs should be clearly defined and prioritised. When public service obligations exist, they should be explicitly specified and transparently compensated through contractual arrangements rather than embedded within general corporate mandates. Third, ownership functions should be further centralised or coordinated through a professionalised ownership entity capable of exercising strategic oversight across the entire SOE portfolio. Fourth, governance standards should be harmonised across national and subnational levels of government to reduce institutional fragmentation and improve accountability. In addition, strengthening the external environment in which SOEs operate is crucial, and financial markets and supervisory institutions should also contribute to performance monitoring by enhancing disclosure requirements and market-based evaluation mechanisms.

There are several limitations of the research. First, the analysis relied primarily on qualitative institutional assessment and a sector-specific case study. While this approach is adequate for exploring complex governance arrangements, it does not provide a comprehensive quantitative evaluation of performance outcomes across the entire SOE sector. Furthermore, the focus on the energy sector may limit the application of some findings to other sectors with different market structures or regulations. Another limitation is related to the dynamic nature of the ongoing reforms. Since the legal framework was recently introduced, its full impact on enterprise behaviour and performance cannot yet be empirically evaluated.

These limitations suggest several directions for future research avenues. First, empirical analyses using firm-level data could examine whether recent governance reforms have improved productivity, profitability, investment efficiency, or innovation within the Croatian SOEs. Also, comparing SOEs with private-sector firms could offer valuable evidence on the effectiveness of these reforms. Third, comparative research across the CEE countries could identify which institutional arrangements work best to reduce agency loss in SOEs. Fourth, another research path is to analyse the interaction between SOE governance and broader macroeconomic outcomes, such as fiscal risks, the efficiency of public investment, and energy transition policies. Finally, combining political economy analysis with quantitative indicators can offer a more comprehensive picture of how governance and political incentives interact to shape SOE outcomes.

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