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STRATEGINĖ INTEGRACIJA Į KAUNO LAISVĄJĄ EKONOMINĘ ZONĄ: VADOVAS BESIKURIANČIOMS ĮMONĖMS	STRATEGIC INTEGRATION INTO KAUNAS FREE ECONOMIC ZONE: A GUIDE FOR EMERGING ENTERPRISES
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Summary

This thesis provides an evaluation of what thresholds for entry and integration would suggest emerging enterprises entering the Kaunas Free Economic Zone (FEZ). Problematic results imply that the Lithuania FEZ thrives due to employment tax motivation and implemented development projects with operational needs as a threshold for entry and competitive perspective, suggesting as of now, small enterprises find no real world value in utilizing the FEZ regime through integration. However, with a research question that works more proactively, a compiled cumulative qualitative and quantitative analysis suggests that subsequent assessments can be made for entry thresholds and integration efforts from the compiled construction data of the FEZ, if entry is approved by emerging enterprises.

Research findings were based on a quantitative case study, a case study through statistics. A compilation of employment and wages submitted to "Sodra" of various companies between 2018-2024 was compared with similar statistics and compilations of Kaunas FEZ reported through reputable FEZ media and statistics. Thus, the researcher creates an assessment from a wealth of secondary data to attempt to determine the level of growth and how the wage volume/wage exceedance compares within the FEZ. Assessment methods include Descriptive Statistics, Compound Annual Growth Rates and cumulative assessments based on national average viability (i.e., how many companies of what size should be assumed ideally).

Research results assert that Kaunas FEZ has overwhelmingly significant employment and wage increases compounded with average wages far exceeding national average viability. Yet where the FEZ exceeds expectations of performance, it greatly exceeds performance—most employment bonuses/employment taxes come from a small number of large, foreign-owned production companies, while micro-companies are rarely present in terms of FTEs/taxes paid/substantial efforts toward developmental economics. Thus, while the effort to surpass the threshold for investment and employment within the FEZ is not easy, it is naturally linked to intentions for company growth.

Ultimately, Kaunas FEZ is a conditional, performance-based zone more suitable for scale-ups than ultra-micro companies. A checklist is created based on entry financial, operational and strategic criteria that the micro company should have in place prior to entry, and additional

recommendations are provided to the appropriate regulatory bodies for easier integration efforts for supplier-driven development.

Summary in Lithuanian

Baigiamajame darbe nagrinėjama, kokiomis sąlygomis ir kokiomis strategijomis besiformuojančios įmonės turėtų plėsti veiklą į Kauno laisvąją ekonominę zoną (LEZ). Sprendžiama problema, kad nors Lietuvos LEZ siūlo itin palankias mokestines lengvatas ir išvystytą infrastruktūrą, aukšti įėjimo slenksčiai ir didelė konkurencija apsunkina mažų įmonių galimybes visapusiškai pasinaudoti šiuo režimu. Darbo tikslas – parengti duomenimis grįstą gairių rinkinį, padedantį besiformuojančioms įmonėms įvertinti pasirengimą LEZ plėtrai ir suplanuoti strateginę integraciją.

Tyrime taikomas kiekybinis atvejo analizės dizainas. Naudojami 2018–2024 m. „Sodra“ įmonių lygmens užimtumo ir darbo užmokesčio duomenys, papildyti oficialia statistika ir Kauno LEZ valdymo ataskaitomis. Atliekama aprašomoji statistinė analizė, skaičiuojami sudėtiniai metinio augimo rodikliai ir lyginamosios reikšmės su nacionaliniais vidurkiais.

Rezultatai rodo, kad Kauno LEZ pasižymi itin sparčiu užimtumo ir atlyginimų augimu, o vidutinis darbo užmokestis ženkliai viršija šalies lygį. Tačiau augimas yra labai koncentruotas: didžiąją dalį darbo vietų, darbo užmokesčio priedų ir mokestinių įplaukų sukuria kelios didelės užsienio kapitalo gamybos įmonės, o mikroįmonių vaidmuo išlieka menkas. Parodyta, kad LEZ investicinių ir užimtumo barjerų įveikimas yra sudėtingas ir glaudžiai susijęs su įmonės augimo trajektorija.

Daroma išvada, kad Kauno LEZ veikia kaip selektyvi, rezultatais grįsta terpė, labiausiai tinkama augimo stadijoje esančioms įmonėms. Pateikiamas praktinis kriterijų ir klausimų sąrašas įmonėms, svarstančioms plėtrą į LEZ, ir rekomendacijos politikos atsotvams dėl SVV integracijos ir tiekėjų plėtros skatinimo.

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List of Abbreviations

Atvira Sodra – Open data portal of the State Social Insurance Fund Board (Lithuania)

CAGR – Compound Annual Growth Rate

CIT – Corporate Income Tax

EU – European Union

EBRD – European Bank for Reconstruction and Development

FDI – Foreign Direct Investment

FEZ – Free Economic Zone (Lithuanian: **LEZ** – Laisvoji ekonominė zona)

FTE – Full-Time Equivalent

GDP – Gross Domestic Product

HV – High Value (e.g., high-value manufacturing, where used)

LEZ – Laisvoji ekonominė zona (Lithuanian term used in national documents)

NAO – National Audit Office (Lithuanian: Valstybės kontrolė)

OECD – Organisation for Economic Co-operation and Development

SEZ – Special Economic Zone

SME – Small and Medium-sized Enterprise

VAT – Value Added Tax

UNCTAD – United Nations Conference on Trade and Development

1. INTRODUCTION

Free Economic Zones (FEZs)—often recorded as a type of special economic zone (SEZ)—have emerged as a relatively mainstream policy of industrial and regional policy globally. FEZs are geographically defined parts of a country where for some time, the government's conditions for running a business are easier than the business in the rest of the economy, at least through a combination of tax incentives, customs facilitation, permitting facilitation and industrial land development for occupancy. The policy rationale is clear: low "entry frictions" and operating costs in a demarcated area should lead to investment (foreign and domestic direct investment), export value, job generation and rapid structural transformation. Empirically, the idea that FEZs increasingly proliferate around the world and that policymakers have increasingly turned their attention toward "next-generation" zones (sustainability-focused zones or additional ones stressing advanced investment facilitation) indicates that FEZs remain a viable area in which to expand and not a failing policy tool. At the same time, more contemporary findings suggest that FEZs are a *high-variance* policy tool: some zones become growth poles that drive dynamic productivity while others stagnate to the point of being derided as "paper parks". One major reason why is that the ease of incentives often clouds the actual factors driving the decision to invest in FEZs. Recent guidelines from the World Bank note that FEZs work through binding constraints—most significantly, infrastructure constraints, poor utility access and reliability, land availability, coordination issues—rather than purely fiscal incentives (Zeng, 2021). In addition, empirical findings note that industrial infrastructure, locational quality and service quality and governance within the FEZ tend to better predict investment potential than simple taxation (Frick & Rodríguez-Pose, 2023). These ideas are consistent with location theory (market access, transportation costs, factor prices) and the cluster/agglomeration theories: the more firms in proximity to one another in a well-situated place, the higher likelihood specialized suppliers, labor-market pooling and knowledge spillovers boost productivity more than isolated firms could naturally garner.

This conditional argument is supported by recent synthesis policy reports. The EBRD's 2024–25 Transition Report suggests performance of SEZs is better where FEZs coexist with a strong local skills base/high-quality infrastructure/high-quality governance—but it also suggests that ex ante performance determinations caution against SEZs as performance varies significantly (EBRD, 2024). In a similar manner, OECD assessments of international

investment promotion policies and zone policies suggest that SEZ performance is more a reflection of locational determinations (type/level of governance within the SEZ, services available, legal structure) and complementing policies generating value-added spillovers in the domestic economy instead of exclusions (OECD, 2023). In short: FEZs are not necessarily successful or ineffective, but perceived or operating as a *strategic package* brings about results reliable on quality of implementation and integration in the national economy.

Thus, one of the biggest points of contention is net effectiveness relative to costs. Flagship zones boast great numbers of local employment levels and export levels; however, naysayers bring to the table lost tax revenues, high upfront investment costs for infrastructure and continued administrative support. The question of whether FEZs generate national gains is linked to whether they create additive new value-added investment/productivity levels (or merely redistribute work that would have occurred anyway) and whether strong linkages to domestic enterprise extend benefits across sectors. Such linkage is critical for small domestic enterprises: study of FDI spillovers find that linkages between multinationals and local SMEs must be facilitated through intentional connective tissue—supplier development programs, capable upgradings and aligned incentives that prevent information gaps and gaps in quality compliance (OECD, 2023). Without these efforts, the FEZ may represent a successful media-spinning effort through FDI but fail to genuinely expand the value-added efforts of domestic enhancements and SME engagement potential.

Lithuania is an ideal context in which to understand these trade-offs due to its pursuit of FEZ policy from a high legal stability condition with generous incentives in European comparison. Lithuania's FEZs involve a long-term corporate income tax holiday and lower rates thereafter but caveats to inclusion underscore eligibility—threshold requirements exist for investment figures, employee totals and enterprise efforts conducted in the FEZ. For instance, the lore surrounding investment levels suggests a critical threshold of €1 million fixed assets for manufacturing projects; for some service activities, \geq €0.1 million investment plus \geq 20 employees, plus revenue thresholds for service activities accrued in the FEZ. These thresholds indicate state interest in providing FEZ incentives for programs that are most likely to generate strong positive economic externalities. However, in an alternative comparison, this selectivity leads to structural disadvantages for small and nascent companies that cannot rapidly garner capital or employee numbers or absorb compliance risk.

In addition, the context of Lithuania underscores the significance of infrastructure and multi-level governance beyond just pure incentive trade-offs. State investments from prepared land within the zone (roads/utilities/telecommunications/connected projects) show significance as a cost factor and national assessments show these benefits are crucial for zone attractiveness/performance. Furthermore, mention of municipalities and local-level coordination is repeatedly mentioned. Access-to-space improvements; aligned public transport routes; minor reductions in local infrastructure fees—these are all attractive to reduce perceived investment risk from high collaboration from local governance. In relation to Kaunas FEZ specifically, historical assessments suggest that much of the de jure established space needs further investment for growth purposes; assessments indicate factors like insufficient electricity limits and partial road/network development in developable space. These assessments reflect international findings: attractiveness is not based on taxation but "plug-and-play" strengths in addition to institutional quality.

Kaunas Free Economic Zone is among the more dynamic zones in Lithuania due to strong logistics connections with various hubs centered around export-oriented manufacturing and logistics. However, due to Kaunas FEZ's position as one of the most advanced ecosystems—multinationally represented FDI giants already housing developed supply chains and operational norms—the question of *emerging enterprises* exists: what does it take to join—and *maintain*—the conditions necessary to benefit from the FEZ regime? For smaller firms, it is not merely about location but also strategic commitment involved with capital-intensive entry and headcount ramp-up requirements complicating compliance management with necessary customer/supplier-reputation-compliance from the value chains dominated by multinationals. This area substantiates broader evidence for growth of small firms: young/small firms are disproportionately disadvantaged with entry barriers related to financing, hiring and managerial navigation; these low number thresholds rapidly become more binding where criteria for entry relies on extensive headcount and/or formal compliance (OECD, 2021).

Thus, these pressures inform this paper's primary research question: **under what conditions—with what strategy—will emerging enterprises effectively enter Kaunas FEZ while benefiting over time from its regime?** While FEZ success is noted with scholarship at the macro performance level and integrated designed decisions, less has been considered for making assessments about the micro-entry process for small entrants within

already large, established zones. For an emerging enterprise entering a zone already filled with experienced players—arguably uncertain about timing/resources—could exponentially complicate operational risk: fixed costs pile up; hiring becomes necessary; any shortfall in meeting levels could disproportionately reduce incentive value. Alternatively, if entry can occur during appropriate times—with intentions to leverage linkages already established in the zone ecosystem for credibility—the FEZ can serve as a platform for productivity instead of just a tax operation (Zeng, 2021; OECD, 2023).

Thus, there exists a literature gap substantiating my research goal to create a data-driven guide for emerging enterprises to advocate their entry into Kaunas FEZ if they've determined how—and when—they can enter. The rationale will be tied to quantitative data tied to how firms historically in the zone have progressed—as opposed to anecdotal evidence based on successful firms or generalized policy claims. The analysis will utilize firm-level employment/wage data from "Sodra," Lithuanian State Social Insurance Fund from 2018-2024 in addition to qualitative assessments from official statistics and FEZ records related to creations per firm per year (employment totals), percent deviation of wage levels relative to national medians based on firm structure categories. This empirical approach substantiates a practical viewpoint over hypothetical value-added:

Prospective emerging enterprises' potential to capture value-added opportunities afforded by legitimate FEZ eligibility hinges upon qualitative metrics based on loyalty indicators (investment capability/employee forecasting/revenue share/concentration risk/thresholds) combined with appealing integrated strategies.

The concluding sentiment will be that operating in a Kaunas FEZ should be a well-educated, strategically-minded decision—conditional as opposed to promotional. When combined with growth trajectories, financing capabilities and operational ability—coupled with a planned intention to insert itself into supply webs/compliance within discretion from the FEZ—the FEZ can add necessity to growth/competitiveness. When done prematurely—the strategic decision could compound difficulties for small young enterprises limited by their capital/hiring availability ratio. This paper does not intend to "prove" that FEZs work—only what has to be true for emerging enterprises to make Kaunas FEZ work for them—through data without assumptions.

2. LITERATURE REVIEW AND CONTEXT

2.1 Free Economic Zones: Concepts and Theory

2.1.1 Definitions and Purpose of Free Economic Zones (FEZs)

Free Economic Zones (FEZs)—sometimes referred to as *special economic zones*, *free trade zones*, *industrial parks* and the like—are regions within a country that are geographically designated with uniquely applied regulations and taxation structures in efforts to incentivize industrial and commercial production (UNCTAD, 2022). The role of FEZs is to create optimal business opportunities to encourage investments (notably foreign direct investment) and growth. Thus, governments operating FEZs as politicians turn to FEZs for incentives—from tax incentives (corporations paying reduced or 0 corporate taxes) to customs duties exemptions to relaxed regulations with fortifying infrastructure—to lure investors and manufacturers (Kim & Lee, 2025; UNCTAD, 2022). By sequestering certain businesses in these regions from operational obstacles that would otherwise permeate the wider economy, legislators assume they can cultivate higher exports, greater employment and enhanced technology transfer. FEZs are indeed *"platforms that facilitate firm interaction by reducing regulatory and trade barriers,"* which foster local firm integration into global value chains (Kim & Lee, 2025).

FEZ policies are used worldwide. Over 7,000 special economic zones exist in 145 economies, encompassing more than 100 million jobs as of 2022 (UNCTAD, 2022). While specificities complicate each model for FEZs, all FEZs are created with the same rationale in mind—to centralize economic growth in a small space which will foster greater inter- and intra-regional growth. This concept was supported by initial, successful FEZ implementations—the Shannon Free Zone in Ireland (established in 1959) was one of the first spots to use the "Shannon model" which took a concentrated approach to generate a mix of tax credits, tariffs forgiveness and ready-to-build land which was also readily available (Flood et al., 2025). The model was innovative yet simple enough for many zones to implement and experience similar outcomes. As shown in **figure 1**, an effective FEZ model exists in Lithuania (an EU country) where the government has established **seven** FEZs around the major cities Kaunas, Klaipėda, Šiauliai, Kėdainiai, Panevėžys, Akmenė and Marijampolė (PricewaterhouseCoopers, 2025). The FEZs in Lithuania boast **unmatched conditions** for doing business—plots waiting for construction as industrial land, existing legal and physical

infrastructure, one stop administrative solutions as well as extensive tax incentives (Biomed Europe, 2023). The Lithuanian FEZs promote *0% corporate profit tax in the first ten years and 7.5% thereafter for the following six subsequent years* with exemptions for dividends and real estate taxes provided certain conditions are met (Biomed Europe, 2023; PricewaterhouseCoopers, 2025). For instance, companies must invest at least €1 million euros—but in the case of employers with over twenty employees, only a €100,000 euro investment is necessary—to acquire maximum tax incentives; moreover, these businesses must accrue at least *75% of their profits from within the FEZ* (PricewaterhouseCoopers, 2025). This nearly guarantees that serious investors will assess a serious investment. The assumed advantages of such include expedited project timelines from pre-existing land and infrastructure preparedness and reduced tax/regulatory burden from non-FEZ operatives.

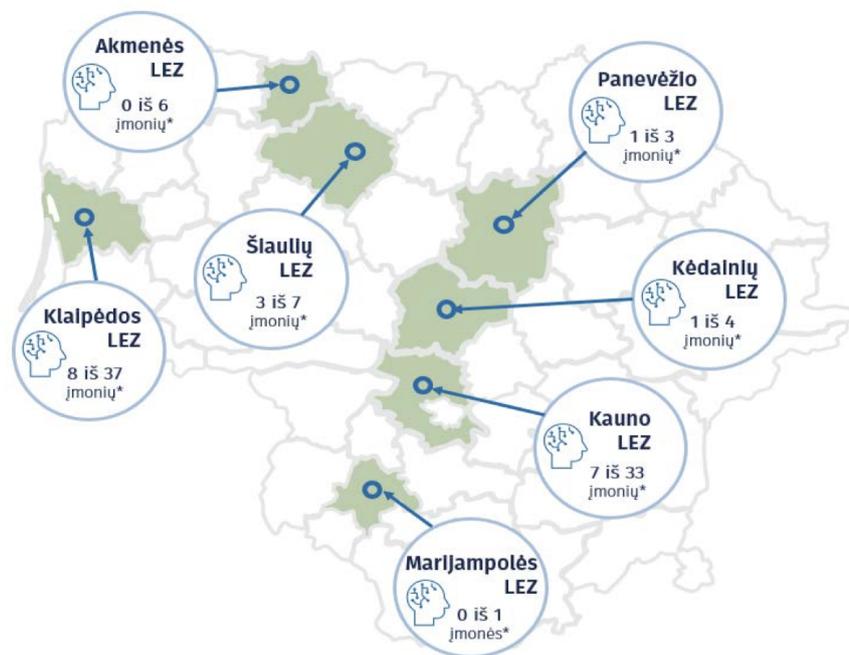


Figure 1 Overview of LEZ in Lithuania

Source: Valstybės kontrolė

The Kaunas FEZ — the focus of this dissertation — is the manifestation of such zones' potential and promise. Developed in 1996 on the outskirts of Lithuania's second-largest city, Kaunas, it did not welcome its first investor until 2005; yet now, it boasts over **45** foreign and domestic companies, an employment pool over **6,000** employees contributing approximately 0.31% of Lithuania's GDP and €680 million direct investments into the region (Adrianople Group, 2021). In addition, it is located next to the Kaunas international airport as well as the

main E85 and E67 highways leading to other EU markets; therefore, all infrastructure is developed, and investors can *plug and play* — construction can start on serviced space (Adrianople Group, 2021). Furthermore, Kaunas FEZ offers *zero* corporate profit tax on returns for ten years and *no* real estate tax until 2045, which positions this FEZ as a worthwhile option for manufacturing, logistics and R&D focused companies (Adrianople Group, 2021). By clustering companies within a singular space, accompanied by such lax conditions compared to standard practices, there exists an expectation for industrial development and regionally controlled innovation expedited by the FEZ. In fact, Lithuanian national strategic plans explicitly use FEZs as pivotal components in regional economic policy. For example, the **Comprehensive Plan “Lithuania 2030”** champions expansion and further development of existing FEZs (Kaunas and others) as part of a “*competitive economy*” that spans all territories; officials note that higher value added output and transformed economies will be found with FEZs (Lithuania Ministry of Environment, 2022). Therefore, FEZs are linked to special regimes that can bring investment together to stimulate boosted exports/job creation/regionally development that otherwise might not occur under average circumstances.

2.1.2 Theoretical Perspectives on Firm Location Choice and Regional Development

Location Choice Factors: Location choice is necessary based on classical theories of industrial location centered on proximity/access to markets, transportation costs, and agglomeration economies. Yet in a modern cross-country situation with globalized investment considerations, empirical findings note that the most significant factors are **market access, political stability, and labor costs** (Frick & Rodríguez-Pose, 2023). Enterprises controlled multinationally prefer zones easily accessible to major markets or ports (for export/import) with politically stable regulations ensuring predictability in application and reasonably priced operating costs (including wages). Therefore, the differential of a few percentage points in taxation is eclipsed by the three established factors. Specifically related to zone investments, a Frick and Rodríguez-Pose (2023) study shows that fiscal-related factors (tax holidays, etc.) **do** matter relative to international analysis; however, they are not the predominant influencer determining foreign enterprises that enter new zones in new countries. Instead, three other factors provide **good industrial infrastructure, location and reliable services** — for example, access via road/rail that connections to utilities and logical flow in the zone (Frick & Rodríguez-Pose, 2023). In other words, sustained *hard* (roads/port

access) and *soft* (administration service to help find talent) infrastructure are more important over time than valuable early onset tax breaks. This makes sense — enterprises do not want to wait until after day one to get things started; at the same time, they can use employees regardless of tax burden.

Agglomeration and Clustering: Theoretically speaking about zones in general, agglomeration economics and clustering theory apply. The zone is a confined space where firms are aggregated with the anticipation that some form of **agglomeration economies** will be associated over time — benefits received when firms are situated within proximity to one another (specialized suppliers/developers/colleges/schools/talent pools) and can leverage positive spillovers beyond their locations. As demonstrated in **Figure 2**, successful SEZs become somewhat dynamic industrial clusters that provide multiplier effects for both the firms in the SEZ and the larger economy surrounding it (Kim & Lee, 2025). For example, Kim and Lee note that spillover effects from successful SEZs reveal new supplier networks that emerge on-site as well as service providers; infrastructure promotes growth that exceeds the boundaries of the zone itself (Kim & Lee, 2025). Rodriguez-Pose et al emphasize that only successful zones do not house one batch of investors; they continuously attract additional buyers through innovative dynamics fostering ongoing growth to help maintain continued growth for all projects (Kim & Lee, 2025). However, it's essential to note that this positive spillover is only relevant when zones have firm integration with the local economy — local institutions exist to help link jobs within the zone and domestic sector/job realms. In fact, research reveals that “*robust local governance, integration with the local economy, and infrastructure investments are critical for maximizing SEZ benefits*” (Kim & Lee, 2025). Zones that operate as isolated networks with little accountability to their surrounding geographies may not bring much benefit except for what's inside their gates.

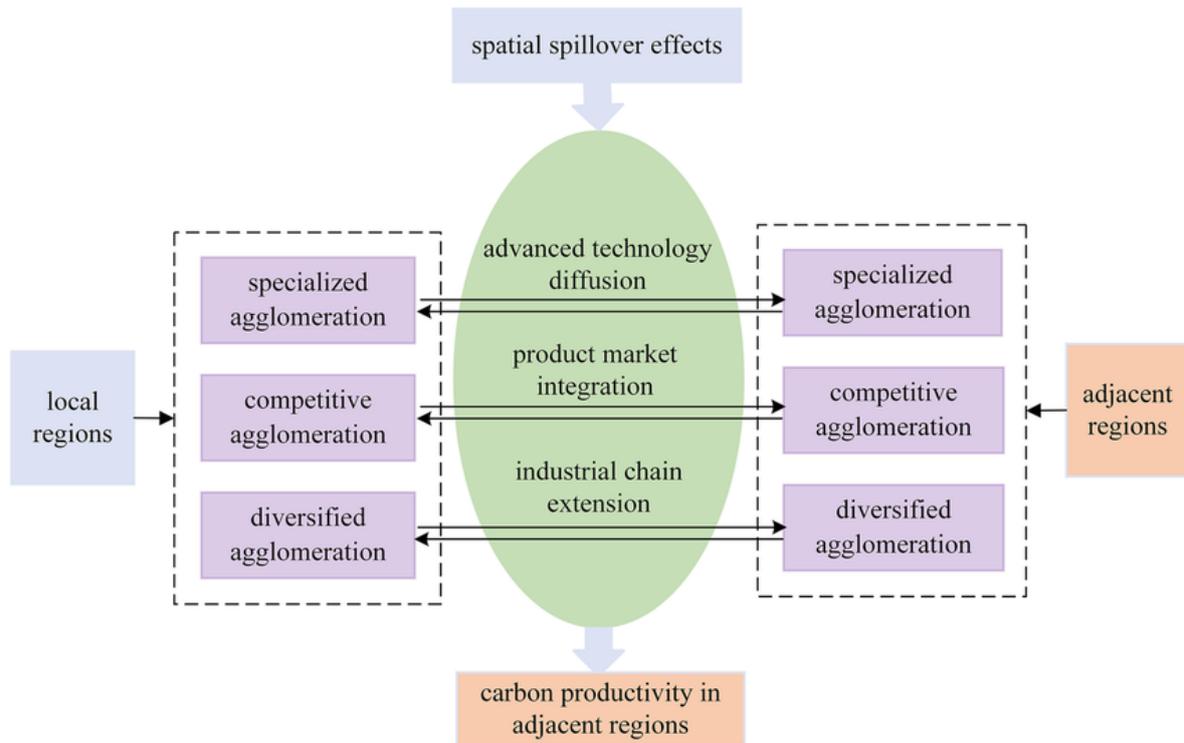


Figure 2 Spillover effect

Source: Aijun Guo, Chunlin Yang, Fanglei Zhong

Regional Development Implications: FEZs are essentially a **place-based development policy**; they are intended to promote investment in certain regions. Thus, conceptually, what do zones do to regional disparities (bring them up to stagnation levels or seek to retain wealth creation in better-off areas)? Data on this is tenuous and context-specific. For example, Poland's SEZ program (Ambroziak & Hartwell, 2018) found significant effects on economic conditions (levels of investment, employment, number of firms) in **less-developed regions** and aligns with the theory behind SEZs to increase development in regions where the market would not necessarily suggest development opportunities (Kim & Lee, 2025). However, in **richer regions** in Poland, the effect was minimal and even negative—in developed regions SEZs siphoned activity/cannibalized activity with no net gain (Kim & Lee, 2025). This is important because the SEZ is a place-based opportunity that can foster development where market conditions would otherwise not suggest it easily. But in a desirable place, FEZs give special incentives to investors for activities that would have been constructed anyway. The negative side in more wealthy areas suggests that SEZs can exacerbate inequality if used wrongly in wealthier areas since they give specific firms a leg up that otherwise would not be there. Thus, a **place-conscious approach** is advocated to zone policy development—there is no *universal* policy that works for zones, but the regions' needs and aspirations must be

accounted for (Flood et al., 2025). Newly emerging experiments confirm or deny this; for example, in 2023, Italy replaced its many SEZs in the southern part of the country with one more comprehensive zone that applies to the underdeveloped Mezzogiorno, as seen in **figure 3**, as well as comprehensive multi-level governance-based provisions that ensure local actors win out across the regional reach (Flood et al., 2025). Thus, the success of zoning policy will depend on the proper typology and synergies of previously existing broader regional developments.



Figure 3 Mezzogiorno SEZ

Source: Irina Di Ruocco

Dynamic Effectiveness and Controversies: The question of FEZ success is extremely controversial in academic and geopolitical discussions on the existence of such areas. Thus far, while many zones seem to possess localized success—those that fail so horrendously that their **net effective appeal** is called into question. For some economists, however, the **net effectiveness** of zones is unsubstantiated or minimal when considering the forfeiture of tax breaks and public spending. According to Wardhana et al. (2025), proponents too often come up short on a full roster of supporting evidence that SEZ benefits outweigh any fiscal gains for corporations (Wardhana et al., 2025). The opportunity cost is the loss of tax revenue and public spending on infrastructure development for employment and production development. Should employment and production not be significantly located or created, then any net burden on the nation could exceed any potential benefits. The situation is even more precarious when nations warehouse workers who "zone-shop" for subsidies or transference sites when benefits are no longer in play. Nevertheless, proponents of SEZs argue that when

they are done properly, zones can become mechanisms of structural change by attracting certain industries which create knowledge spillover growth which can subsequently upskill the domestic economy. According to Zeng (2021), SEZs can become a tool for **economic growth and structural change** through **implementations** powered by careful consideration because they match the nation's comparative advantage and development strategy (Kim & Lee, 2025). After Zeng's comprehensive review of the literature surrounding the history and findings from SEZ investigations, it's clear that SEZs are a **no generic formula** for success. Instead, the best kind of SEZ is one that best fits the real conditions of the area in question with policy backing. Conditions commonly cited across many studies for successful SEZs include good governance and transparency, proper infrastructure in place, access to skilled labor, and **the linkage of the zone initiative to the national industrial policy**(Kim & Lee, 2025). Thus, ultimately, theoretical and empirical assessments to date assert that FEZs can become avenues for successful regional development and expansion through good surrounding conditions. When it makes sense (and investment) to position a zone where there's an already existing economic base—when it makes sense for operation management and service evaluations through the proper process—when it can be effectively linked to the rest of the domestic economy via supply chains and labor markets—then it can be a business engine. Otherwise, FEZs are isolated islands of productivity at best. With these critical success factors, however, it can become a business engine.

2.1.3 Entry Challenges and Strategic Considerations for Emerging Enterprises in FEZs

New and small businesses stand to benefit from entry into a Free Economic Zone—from tax reduction to new facilities—but entry nuances can be complex. **New and small businesses** face challenges at entry in the zone environment. First, there are **entry conditions** many FEZs set as minimum requirements for anyone who wants to make their presence known there. For example, according to **figure 4**, Lithuanian FEZ environments at least require minimum capital investments (i.e. manufacturing need only invest €1 million for tax-exempt status or €100k with 20 employees) to maintain set obligations, continuing accountability for staying above active thresholds (PricewaterhouseCoopers, 2025). For a start-up or small business entry-level firm, this too much turmoil to generate that kind of up-front requirement or scale to 20+. Thus, some potentially beneficial small businesses will have to forego flagstone benefits until they grow up, but this is an unfortunate catch-22 (the benefits are most critical at vulnerable entrance stages—but they must have a certain scale to secure them

first). Strategically, an emerging business must also navigate how to **attain these levels**—the initial investment must come from external financing or partnerships for established costs—whereas entering on a smaller scale (recognizing the up-front investment to maintain normal taxes until growth occurs) has to be feasible while operating in the zone atmosphere. The second barrier to entry is **the compliance burden** that can be significant. While there is "one-stop" administration in an FEZ, this doesn't negate all permitting processes due to reporting requirements with zone authorities or stipulations (nothing can be done) within the zones themselves. Smaller firms without significant administrative employees may find these compliance requirements challenging; thus, strategically, it makes sense to either hire outside consultants to evaluate these regulations or use the zone management company's beneficial service offerings to ensure compliance efficiently.

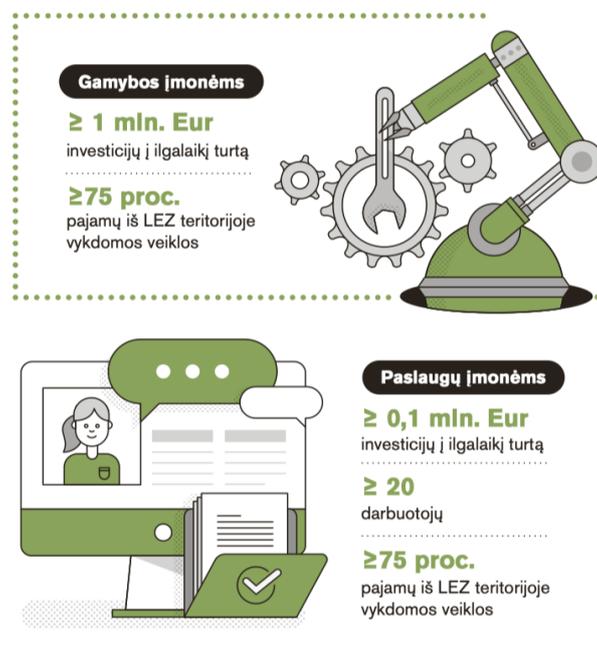


Figure 4 Main Requirements for Kaunas FEZ

Source: LEZ pagrindų įstatymas

A final concern involves [supply chain and business networking integration] within the zone. FEZ's multimillion dollar investors often have pre-existing supply chains and expectations in volume, quality, and reliability. Local SMEs often “cannot meet the desired volume, quality, or standards” to be a supplier for these larger firms (Ndubai-Ngigi & Readhead, 2024). This means that an upstart business may struggle to secure contracting work relevant to its industry within the network. For example, in a study conducted on an African FEZ, it was determined that multinational firms in the zone sought to source locally, but few of the

smaller SMEs located were adequate as suppliers to meet their procurement needs (Ndubai-Ngigi & Readhead, 2024). The *[capability gap]*—technology, scale, quality control—poses a problem. Related is the *workforce gap*: smaller companies may not have the opportunity to attract or afford the workers necessary to operate within FEZ conditions—especially if larger companies are seeking similar talent. An example shows how an assessment of Indonesia's Kendal SEZ (manufacturing focus) determined that although *the zone's economy generated positive developments, infrastructure bottlenecks and shortages of suitably skilled labor emerged as issues that needed to be recognized for long-term sustainability* (Wardhana et al., 2025). Lithuania noted in its National Audit Office Report in 2023 that *developed public infrastructure* (roads, utility expansion) and available land was a *major impediment* to FEZ development and expansion (National Audit Office of Lithuania, 2023)—issues that impact start-up businesses most since they might feel the delays if infrastructure is not developed. Enterprises need to do their due diligence here about whether the zone will have necessary infrastructure to support their work (energy capabilities, logistics access) where they may have to invest to fill gaps (on-site utilities development or localized labor development).

Policy and institutional concerns may be a problem. The assessment of Lithuania's FEZ revealed that *there were no national delineated performance standards for the zones and inadequate coordination between agencies operating within zones and government agencies for investment attraction* (National Audit Office of Lithuania, 2023). For any company, this kind of institutional failure leads to uncertainty or missed opportunities—for example, if investor support is the responsibility of many actors, a newly arrived entity may not receive the same standards of care as its peers. In this case, *small entrants should actively inquire into information and supports*: for example, engaging with both the management company of the zone and national investment promotion agency will allow the firm to understand better any potential support available (grants, development programs, etc.). Emerging enterprises must also consider *[internal competition]*. FEZs often house multiple firms in the same sector (especially if the zone has a theme to it—technology or logistics). A small business could find itself alongside its multinational colleagues operating under the same taxation standards. While the zone helps level the playing field for all companies—especially in terms of infrastructure and tax rate—it does not take away from quality or scale standards. Thus, a small business should pursue a niche/complementary role instead of a direct one. A technology start-up could focus on components/services that plug into a larger firm's already

established industrial production instead of producing whole products to compete directly with multinationals.

Research on zones in developing contexts suggests that *the linkages intended between FEZ firms and local SMEs do not automatically exist without focused efforts*. Problems typically center on “*weak local supplier capabilities and links, inadequate business support services and policy implementation failures*” (Ndubai-Ngigi & Readhead, 2024). Zambia's multi-facility economic zone found this substantiated across various zones as it prevented it from reaching its full intended aims (Ndubai-Ngigi & Readhead, 2024). To offset this challenge, small enterprises should take advantage of any SME attractions through relevant programs within the zone. Some zones/local governments will implement matchmaking programs, supplier development courses or easier access to financing for SMEs connected to zones. For an emerging company, it becomes a strategic priority to engage within the zone's plans to increase its capabilities. In conclusion, entering an FEZ creates an either/or situation for small companies: *immense opportunity* but also *increased performance expectations*. Whether it's limited capability or integration efforts often determine whether small businesses can champion a successful FEZ experience; therefore, it's key for small businesses to ensure FEZ requirements/costs of entry will not hold them back (and if so, how they can bridge any potential gaps via partnerships/acquisitions). Furthermore, small enterprises must see themselves as more than cornered small fish in a big pond; they must proactively acknowledge themselves as part of FEZ networks and not merely existing at the outskirts. This means small enterprises must plan strategically, build capacity where possible, and engage pro-actively with available supports offered by the zone to ensure survival in an FEZ setting.

2.2 Lithuania's FEZ Framework and Kaunas FEZ Profile

2.2.1 Lithuania's Free Economic Zones: An Overview

Lithuania has seven Free Economic Zones (FEZs), allocated for industrialized areas designed for investors and regional developments (Kim & Lee, 2025). The first two were located in Kaunas and Klaipeda and developed from 1995 onwards, with three others established in 2002—Marijampole, Panevezys, and Shiauliai—and two more in 2009 (Kedainiai and Akmene) (Kim & Lee, 2025). Each is set up with separate legislative acts, although they operate under general allocations (the Law on Fundamentals of FEZs) and general

stipulations across the nation (Flood et al., 2025). The total area defined for FEZ purposes across the country is **1,433 hectares** (Lietuvos Respublikos Seimo Audito komitetas, 2023). Area feeder infrastructure has been implemented for each zone by local and national authorities throughout the years—over **€112 million** from the EU and state sources since 1996 in areas like roads and utilities (Lietuvos Respublikos Seimo Audito komitetas, 2023)—to assure the areas are prepared for incoming investments from already well-established municipalities to necessary infrastructure. Each FEZ is run with a zone management company that acts privately but has an agreement with the central government for the foreseeable future to develop the area and attract tenants (Lietuvos Respublikos Seimo Audito komitetas, 2023).

Common incentives and regulations: Companies that operate with *FEZ status* receive tremendous tax benefits. The corporate profit tax in FEZs is **0% for the first 10 years** and **7.5% for the next 6 years** with **15%** being the general corporate profit tax in Lithuania (CMS, 2020). In addition, there is **no real estate taxation** for the duration of FEZ operations (the current limitation extends to 2045) within the zones themselves (Adrianople Group, 2022). For foreign investors, one appealing regulation is that there is **0% withholding tax on dividends** (CMS, 2020). Furthermore, based on customs regulations (as free customs zones do according to EU regulations), long-standing companies can enter equipment and machinery duty-free and fee-free without VAT (CMS, 2020). In addition to monetary benefits, a one-stop administrative facilitation center for administration efforts is often provided by the management company to help investors establish and obtain necessary permitting for energy/water/electric/etc. (Invest Lithuania, 2017; CMS, 2020). All benefits provided to companies are partially dependent on minimum levels of investment or job creation based on standards established per company type (i.e. a minimum of 20 jobs is required for manufacturing/logistics companies with a minimum of €1 million investment or a minimum of 10 jobs is required for service companies with a minimum of €100k investment) (CMS, 2020), meaning only substantial projects gain access to assistance.

National performance: The FEZ development holds a considerable competitive advantage in attracting domestic and foreign direct investments (FDI) in the area. As the second decade of the century progressed, more companies operating in FEZs emerged with growing numbers of employees. According to a government overview of 2023, of **96 companies operating in FEZs as of 2021**, only **11 companies** were not yet FEZ companies (those

designated as such for being legally established based on stipulations) (Invest Lithuania, 2022). By 2019, it was reported that FEZs employed between **5,000–7,000 employees** across the country (Lietuvos Respublikos Seimo Audito komitetas, 2023), although this number has increased since with further FEZ investments from 2020–2023. The two largest and most developed FEZs are Kaunas FEZ and Klaipeda FEZ (U.S. Department of State, 2023). For example, **100 companies from 17–18 countries** operate in Klaipeda FEZ, which was established in 2002 (U.S. Department of State, 2024), while Kaunas FEZ has more than **50 companies** as of April 2024 (U.S. Department of State, 2023) (further detailed in subsequent sections). Smaller FEZs have made large strides—Marijampole FEZ received a significant window company from Denmark—Dovista— in 2018 (Invest Lithuania, 2018), and Panevezys FEZ won numerous furnishings and industrial investors, etc. Overall, the implementation of FEZs helps create regional economic growth—by the early 2020s, Kaunas accounted for about **0.3% of Lithuania's GDP** (Lietuvos Respublikos Seimo Audito komitetas, 2023).

However, national assessments have found strategic gaps in value added vs development, under-occupancy compared to expectations. A national audit from December 2023 was issued by the Parliament which specified that **no national goals existed** to assess how much value-added geography would bring to FEZs vs expected value-added results, and that performance standards for FEZs were obsolete or had low aspirations (Valstybės kontrolė, 2023). For example, an expected result of creating FEZs was to produce high-tech industries; however, results show **78% of companies in those zones were not high-tech companies** within their competencies (as of 2021) (Valstybės kontrolė, 2023). In addition, as evidenced by the pie chart that illustrates findings in **figure 5**, only **27% of all identified land available for FEZ purposes was utilized/occupied by companies**, meaning close to 73% of all land was not generating economic feasibility within regions but was flagged for other use with finality exclusion. (Valstybės kontrolė, 2023). Of those that are remaining unused... **45%** are essentially unavailable to investors, anyway (tied to infrastructure use, protection zones or stretches of land not acquired by the state) (Valstybės kontrolė, 2023). This means that from a national standpoint, zone development occurs unevenly—Kaunas does much better than its peers—and there are goals that could be better strategicized at the level.

Yet to combat these findings acknowledge between what investors expect and what realities play out or what geography shows in potential vs what exists today vs before is tricky—but

adjustments need to be made; for example, audited response plans include assessing what expansions could be conducted through increasing investment in Kaunas and Klaipeda or by adding Akmenė by 2030 (Valstybės kontrolė, 2023); further consolidation with innovative developmental agencies would increase usefully hired financial expectations.

Land Occupancy Distribution

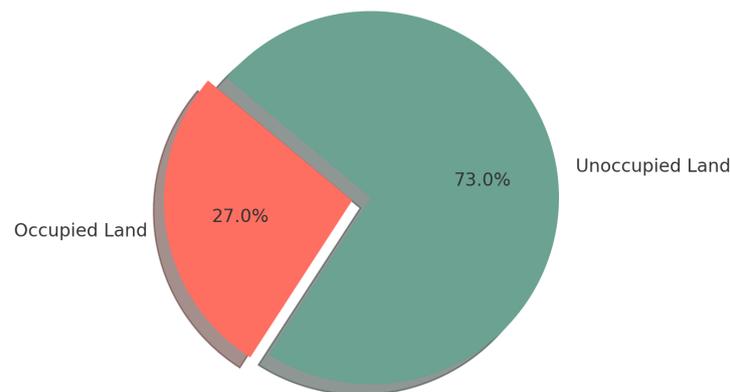


Figure 5 Land Occupancy Distribution

2.2.2 Infrastructure and Location Advantages of Kaunas FEZ

The Kaunas Free Economic Zone is one of the largest and most strategically positioned FEZs within Lithuania. Established in 1996, it lies in Kaunas (the second largest city in Lithuania) and spans 534 hectares of industrial territory, situated on the outskirts of the city (Kauno laisvoji ekonominė zona, 2025) (Kaunas FEZ, 2025). One of its major advantages is its location at the intersection of major national transport corridors – neighboring it to the South is the A1/E85 motorway (the main national motorway connecting the capital Vilnius to the port in Klaipeda) while to the Northeast it boasts the A6/E262 highway (the road toward Panevezys and heading north to Latvia) (Kauno laisvoji ekonominė zona, 2025). Furthermore, Kaunas FEZ is located directly adjacent to the Kaunas International Airport, and there is an Airpark portion of Kaunas FEZ which has a border of nearly 3 km with the airport runway (Kauno laisvoji ekonominė zona, 2025). Thus, for logistics/aeronautical companies located within the FEZ, this means direct airside access for cargo and avoidance

of certain customs formalities via inbound air freight remaining within the FEZ (Kauno laisvoji ekonominė zona, 2025). Additionally, Kaunas is a rail hub: The newly-minted Rail Baltica European-gauge rail connection crosses through the Kaunas region and nearby is the Palemonas intermodal rail terminal, which shifts containers from broad gauge (ex-Soviet) to standard gauge European rail (Kauno laisvoji ekonominė zona, 2025). Thus, Kaunas FEZ has multimodal access — road, rail, air — making it highly accessible from both a domestic and international perspective for logistics purposes. Additionally, the non-freezing port of Klaipėda is located approximately 220 km (2–3 hours of driving) to the West, offering a maritime advantage of access for any manufacturing needs from companies within the FEZ (Kauno laisvoji ekonominė zona, 2025).

Moreover, internal infrastructure exists from up to the borders of each plot in the zone. For example, the Kaunas FEZ management provides serviced industrial parcels with access so investors can "build and start" their projects without delay (CMS, 2020). Moreover, connections for utility lines—electricity, gas, water and wastewater—either exist or are easily connectable for new parcels (Kaunas FEZ, 2025). Historically there has been some contention in regard to electric capacity—but this had previously not been enough when many larger factories began gravitating toward Kaunas FEZ. The national operator ESO identified this as a challenge moving forward and created a substation expansion project to address it which began sometime in 2018; by the early 2020s it successfully expanded electrical power capacity available to Kaunas FEZ due to increased workload demand (Invest Lithuania, 2018). Furthermore, there are internal roads to connect the various regions of the FEZ with continued improvements (as part of municipality efforts in Kaunas district and EU financing) to promote ease of travel. Finally, three areas exist within Kaunas FEZ to promote specific locations—Production & Logistics is the largest area which includes manufacturing plants and warehouses; A Business Street exists along the A6 with intentions of commercial offices, service centers, hotels, etc.; and Airpark exists next to the airport (for connections with the aviation industry) (Kauno laisvoji ekonominė zona, 2025). Each area has specific infrastructure—Business Street contains parcels with parking and road access to encourage office construction (Kauno laisvoji ekonominė zona, 2025) and Airpark possesses integrated road access/rail spurs into the air cargo and industrial rail (Kauno laisvoji ekonominė zona, 2025).

An interesting satellite extension to this FEZ is its satellite territory near Kruonis in the Kaišiadorys district—about 40 km outside of Kaunas—where 75 ha of plots are being designated as necessary sites for data center investment (Invest Lithuania, 2018). This area is adjacent to Lithuania's largest hydroelectric pumped storage facility which makes it a great power infrastructure/reliable electric access option due to energy-intensive data center needs. Plus, there's potential supply from inexpensive resources at night which geographically positions this location as a benefit as Lithuania seeks large data center investments throughout this satellite sub-zone (Invest Lithuania, 2018). The sub-zone is relatively new as of 2025—integration plans have been made and basic infrastructure has been established; however, large investors are still sought. Once opened this can make the Kaunas FEZ a digital infrastructure hub as well.

Finally, in conclusion, assessing Kaunas FEZ data over time suggests that the infrastructure and location provide substantial benefits. Highways lead quickly to Vilnius (100 km) and Klaipeda (200 km) while airport connections/immediate access also drive Rail Baltica rail freight connections from Europe; quickly serviced internal grids provide power to companies needing quick acquisition of raw materials before exporting finished goods (Kauno laisvoji ekonominė zona, 2025) (Invest Lithuania, 2017). These locational advantages support Kaunas FEZ law which notes that it was created to take advantage of "the nearby Kaunas airport, railways and motorways and Lithuania's geopolitical position"—the source of law providing official support for its creation. Thus, Kaunas FEZ functions as a logistical/manufacturing gateway from the Baltic region by properly integrating its connected advantages.

2.2.3 Legal Status and Incentive Framework in Kaunas FEZ

The Kaunas FEZ is under the national FEZ regime; therefore, all the incentives covered previously apply here as well and have attracted investors. In fact, companies receiving **Kaunas FEZ status** receive a **zero percent (0%) corporate profit tax** for ten years with a **7.5% tax based** for up to six years thereafter (CMS, 2020). These tax exemptions are a welcomed change to Lithuania's 15% corporate tax as companies can reinvest profits accumulated in year one (not applicable to effective profit for a de facto early profit) and wait almost twenty years to pay what otherwise would have to be paid without such benefits. Furthermore, **there is no real estate tax** for buildings or land in Kaunas FEZ (CMS, 2020). This is especially welcomed for any manufacturing company acquiring FEZ status that builds

large production facilities/logistics warehouses as the tax (generally ~1% in Lithuania) would otherwise add to operating expenses over time. In addition, any **withholding tax on dividends** from a company doing business within the FEZ and subsequently distributed to foreign stockholders is **0%**—international investors will not lose any money on dividend distribution should they decide to distribute it (CMS, 2020). This means that such financial appeals are guaranteed by law as long as Kaunas FEZ is scheduled to sunset (set for year 2045) for added stability (Lietuvos Respublikos Seimas, 1996/2005).

There are criteria FEZ must meet to maintain such incentives, however. For example, the *thresholds* (which are the same in all zones in Lithuania) require at least **€1 million** of capital investment for investors within the manufacture or logistics sector and **€100,000 with at least 20 jobs** created in plans for applicants in the services sector (CMS, 2020). Therefore, this ensures that only major companies benefit from the tax exemption as they create jobs.

Creating FEZs benefits the zone from criminal actions, wasting time and zone resources. In addition, these investors must uphold their FEZ status by not ceasing operations on proposed developments that brought them to the FEZ in the first place. While this seldom occurs because proposed efforts are vetted by the zone management, status can be revoked—and with it FEZ status—if plans were made and subsequently abandoned after initial execution.

In addition to financial incentives, the **regulatory environment is easier** as well. For example, the Management company of the zone helps with construction permits (which are expedited more than off-site opportunities as the land is pre-zoned/prepped infrastructure). Investors can rent land plots of up to **99 years** (or sublease for shorter periods), and the price is commensurate with land purchase without the headaches of title issues (Invest Lithuania, 2017). Such land leases are standard; for example, Hella's 99-year lease to join the zone occurred in 2017 (Invest Lithuania, 2017) showing that both investor and FEZ management find such arrangements to be beneficial for both parties. Moreover, investors are granted a "one-stop-shop" approach with governmental agencies; *Invest Lithuania* is the governmental investment attraction agency in cooperation with zone management for paperwork related to customs, foreign specialists hired and special approvals. While most of Lithuania's law applies in the FEZ (it's not an extraterritorial jurisdiction), since there are so many export-driven manufacturers/sellers, it's facilitative. For example, customs requirements for any firms bringing raw materials in from outside the EU can hold them in the FEZ without immediate duty—for if these products go back to the sender outside the EU, no import duty is

assessed (CMS, 2020)—the FEZ essentially is a bonded customs area for these ends. However, if products enter the EU market, tariff fees apply.

Finally, there are access to **multiple support programs** for any company making their home here. For example, the FEZ-based companies can apply for EU structural fund programs for feasibility study/infrastructure investment purposes and R&D investment grants. For example, road improvements and utility investment in and surrounding the Kaunas FEZ occurred with joint support from the Kaunas municipality and Lithuania's Ministry of Economy (Lietuvos Respublikos Seimo Audito komitetas, 2023). Furthermore, training grants/workforce development assistance is often available for larger investors (especially if they bring in new technology). Therefore, the legal/incentive-based environment makes it exceptionally easier for investors to work here without getting bogged down spending so much time/money as reduced taxes contribute to boosted profits—on top of infrastructure—that creates a superhighway for industrial/business success.

2.2.4 Land Utilization and Capacity Status

Kaunas FEZ was originally established for a **534 ha territory** and as investor interest surged higher and higher starting in 2017, more territory became taken. By 2020, according to FEZ management, the **1st development phase** (initially serviced territory) of Kaunas FEZ was **almost 90% full** (Invest Lithuania, 2017). That is, almost all of the plots readily accessible have been leased by investors and earmarked for future operations that there exists a need to expand territory and service it. In fact, there arose a “2nd development phase” need between 2018–2020. This implies that extended infrastructure was required for other plots and additional territory of the initially established territory has been activated (Invest Lithuania, 2017).

According to the management of Kaunas FEZ, by 2023 approximately **155 hectares** of territory have been rented within the limits of the FEZ for **44 investors** and by 2024 the number of investors has increased (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). The total subleased territory by 2024 should be over 160 ha (approximately 30% of the FEZ) based on new projects. What is left can be separated into **developable territory** for which new infrastructure and final acquisition of land are needed and **set-aside or reserved** territory. The limited territory is at this time only partially accessible due to private ownership or reserved for industry not connected to commercial

activities. The government has completed expropriation of approximately **143 ha** of private territory within the limits of the FEZ by the end of 2020 as within the limits of the FEZ to make it applicable to the operations of the FEZ (Lietuvos Respublikos Seimo Audito komitetas, 2023). This means that within the FEZ boundaries there are no longer limitations and extended infrastructure has newly opened approximately **187 ha of fully developable new territories for investors** (Lietuvos Respublikos Seimo Audito komitetas, 2023). As it can be drawn from **Figure 6**, this means that the Kaunas FEZ has had land available for investment grow increasingly more over the years as demand has required.

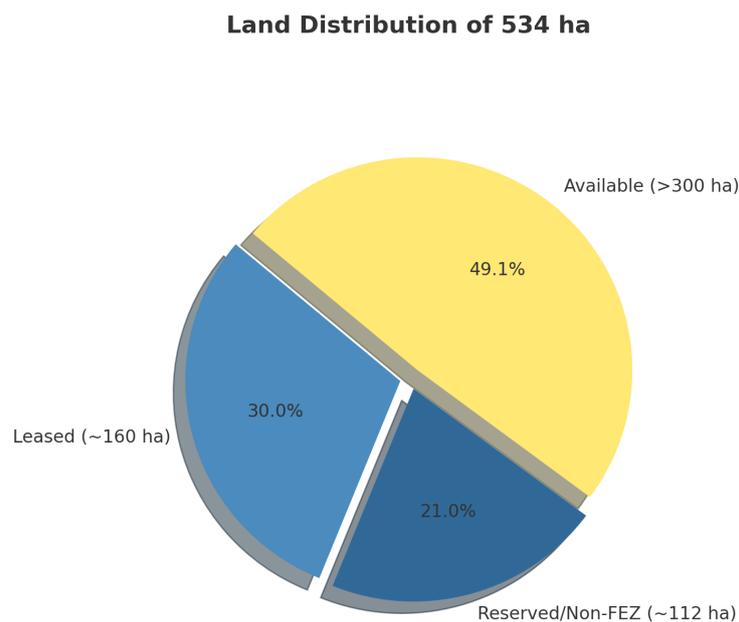


Figure 6 Land Distribution of 534 ha

However, not all 534 ha are suitable for production/operational sites. A significant portion of the zone, approximately **112 ha**, was earmarked **beforehand for other than FEZ use** (ie public endeavors, environmental setbacks, national strategies) (Invest Lithuania, 2018). Additionally, as stated previously, **75 ha at Kruonis** is exclusively for data centers and is *not* included in the main contiguous FEZ zone (Kauno laisvoji ekonominė zona, 2025). In addition, per the audit of 2023, certain parts of Kaunas FEZ territory have been *dropped from acquisition* in earlier stages for unsustainability/planning concerns – the Kaunas FEZ was legislatively approved for an expansion of **1,054 ha**, but preliminarily and early on it was dropped down to ~534 ha (520 ha operational core) because *not all* plots could be acquired and infrastructure could not be implemented (Valstybės kontrolė, 2023). Thus, with the

national strategic plan in place for Kaunas FEZ to potentially *increase* back to that larger number, the government wanted to make sure issues like discontinuous private plots and infrastructure delay were not going to happen this time (Valstybės kontrolė, 2023).

Practically, as of 2025, Kaunas FEZ boasts **massive expansion potential**: currently **over 300 ha unused as of now due to utility issues** will be liberated for future investors (inexperienced) (Kauno laisvoji ekonominė zona, 2025). This includes greenfield territories where large undertakings may be accommodated (e.g. one investor who seeks 20–50 ha could still be accommodated within Kaunas FEZ, which is a good sign for investors looking for larger industrial projects).

Capacity is further monitored by a land feasibility perspective. By Q1 2023, **~75 companies/projects found/at Kaunas FEZ with 83 by 2024** (those currently under construction prediction); thus in practice capacity (per investor count) is ~80% at a potentially planned full capacity of ~100 companies (Navickaitė-Babkin, 2023). If trends continue like this, zone management/government feels that additional *land* will be necessary. Indeed, the **National Progress Plan 2021–2030** specifically alludes to expanded perimeters of Kaunas FEZ as a project of strategic significance (Lietuvos Respublikos Seimo Audito komitetas, 2023). If this happens it will likely be industrial land next to Kaunas FEZ or land that was originally excluded (but maintains that maximum boundary of 1,054 ha) (Lietuvos Respublikos Seimas, 1996/2005). This anticipatory sentiment ensures that Kaunas FEZ will not run out of space just as it is getting started.

Another factor for capacity is **built industrial real estate availability**. Other than land, established sites are available. For example, in addition to the white-box warehouse/production facilities available for rental in Kaunas FEZ, there is an **office complex** located on Business Street (5,000 m² office building opened in 2017) that operates in part for the convenience of investors (Kauno laisvoji ekonominė zona, 2025). These allow for small scale tenants or service-oriented investors who aren't interested in starting from the bottom and building up. In the future, Kaunas FEZ plans for more **build-to-suit and modular spaces** and is even looking into multi-story manufacturing buildings for maximum efficiency on land.

Ultimately, land utilization at Kaunas FEZ has gotten off to a quick start since 2017. So much land has been earmarked/reserved/currently under development (and future expansion plans) show that thus far the zone has exceeded expectations. While a high percentage of the land

has been allocated developed or currently projected, there is plenty of expansion potential from internal excess land and border expansions. Capacity management here will remain effective as long as infrastructure continues to keep pace with projected demand and multiple counts of new developments and new investors making their choices prioritize coveted land.

2.2.5 Workforce, Employment, and Wages in Kaunas FEZ

Employment and Staffing Trends 2020-2025 (Kaunas FEZ)

Fez employment has been accomplished quickly across the Kaunas FEZ, thus the zone is an incredibly important employment driver of Kaunas and, subsequently, Lithuania. By 2023, total direct **employment in the FEZ exceeded 6,000** workers (Navickaitė-Babkin, 2023; Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). In contrast, approximately 5,500 worked within the zone in 2019 (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). Employment continues to grow as anticipated many corporations will grow/expand exponentially once set up. Major employers in Kaunas FEZ are Continental (up to ~800 employees by 2023 and growth anticipated) (Navickaitė-Babkin, 2023), Hella, etc., with hundreds of skilled laborers working. The job composition is relatively heterogeneous—as employed are electronics engineers, machine operators, assemblers, logistics operators, lab technicians (in the medical/biotech firms), and other support staff. The **employment conditions** of FEZ companies are **more than often higher productivity and higher salary** locations within the scope of Lithuania. According to the Kaunas District Mayor, for example, FEZ companies employ salaries that “**transcend the Lithuanian average**”, as the production level is high-value (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). For example, from 2022-2023, the average gross monthly salary of FEZ companies averaged around **€2,300-€2,500** (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024)—while between 2021-2023, the national average was €1,600-€1,800 (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). As a comparison to geographical location in Kaunas, manufacturing companies report salaries in excess of €2,000/month to their workers (ex. Axioma or Continental) at Continental's average salary is nearly €2,500/month—and for those with specialized technical certification- €3,000/month. Such attractive employment offers have not only drawn expatriate Lithuanians back to work in Kaunas but have also retained local talent in the region (Navickaitė-Babkin, 2023).

Workforce Profile

The workforce profile of employees is heavily related to skilled technical labor. Many organizations source engineers and technicians with colleges/universities and vocational schools. Since Kaunas is a university town (home to Kaunas University of Technology, etc.) great potential exists to hire a young lot of local engineers. FEZ companies often hire graduates in electronics, mechatronics, IT, and more. Organizations like Continental also employ experienced specialists from abroad or other destinations across the country. Such acts suggest a cosmopolitan perspective that FEZ employs (Navickaitė-Babkin, 2023)—made clear since many international companies operate within. In addition, many special professionals/managers operate in Kaunas FEZ; a lot of English is spoken; thus international knowledge transfer is valued.

Despite many positive aspects, **labor supply became the greatest challenge** (refer to §3.7). The unemployment rate in the Kaunas region is low, and many employers continue to complain that they need help finding certain specialists. For example, the Director of Continental reported that it “**has difficulties finding quality control specialists and equipment maintenance**”, and that within the region, a “**serious deficit of experienced engineers and technicians**” exists (Navickaitė-Babkin, 2023). In addition, Continental expects to grow tremendously over the next few years—seeking *thousands more* employees and ~1,500 at its facility alone (Navickaitė-Babkin, 2023)—this means accelerated hiring efforts for operatives and engineers who are specialized but more in demand by FEZ's main employers. This has created wage pressure as average wages increase in the district—and expected hiring efforts beyond what was planned on a city-level scale. Companies are looking regionally and internationally for jobs—sometimes leveraging FEZ companies (for example—to determine that no bottlenecks occur and that everyone will require labor at simultaneously planned periods of the production schedule) (Navickaitė-Babkin, 2023). Such has come to light from the management of Kaunas FEZ and local government; organizations have partnered with Fez-ers to bring back emigrant Lithuanian specialists back to their homeland through programs for career opportunities in the FEZ; Employment Service links up with many partners to retrain workers for industrial jobs (Navickaitė-Babkin, 2023).

A socio-economic impact of continually adding a workforce to the FEZ is its impact on the **district community**. The population of the district has increased recently—which can be attributed to jobs created from working in the FEZ (Navickaitė-Babkin, 2023; Lrytas.lt, 2023). Many employees commute from Kaunas city itself or cities around Jonava, Raseiniai

Kaišiadorys—and even Vilnius for some management (Navickaitė-Babkin, 2023). The transportation options include new bus lines that will enter/leave the zone to accommodate this increased flow into a workplace area not typically close to cities in Central Lithuania's second-largest city/region. The district municipality is also exploring options such as preschool/education/sports facility growth to maintain quality-of-life variables for families who move into the area due to getting a job at the FEZ (Navickaitė-Babkin, 2023)—all moves that connect beyond working at international companies to an inclusive offer for interdisciplinary options.

In summary, with Kaunas FEZ a **magnet for skilled jobs** from 2020-2025, there has been a socio-economic increase concerning wages for manufacturing/tech salaries relative to where they are elsewhere geographically. So far staffing has become very important—and success in Kaunas FEZ will depend increasingly upon human capital options available now that all talent integration information according to each company has been revealed in Chapter 4. From a zone-level perspective here it is clear this will be a strategic focus going forward.

3. METHODOLOGY

This thesis uses a single-case quantitative research design based on secondary administrative data (State Social Insurance Fund Board, Sodra) to analyse enterprises operating in the Kaunas Free Economic Zone (FEZ) during 2018–2024. The case is treated as an in-depth statistical profile of one Lithuanian FEZ, using comparable national and regional benchmarks to contextualise performance indicators. Because the study focuses on one case, the findings are intended for analytic transfer to similar FEZ contexts (e.g., manufacturing/logistics-oriented zones in small open economies) rather than statistical generalisation to all FEZs.

3.1 Research Objective and Rationale

The **purpose** of this research is to provide evidence-based information to **new companies** regarding the operating conditions of the Kaunas Free Economic Zone (FEZ) through exploring what works best in the FEZ to provide benefits/complications for small businesses and what helps small businesses thrive. The **justification** for such research is that FEZs have, historically, provided excellent benefits in the form of tax reductions and infrastructure, and new companies/new companies must overcome specific challenges to **gain these benefits**. For example, companies in the FEZ in Lithuania boast *(to) very generous benefits* (0% corporate income tax for the first ten years and 7.5% for the subsequent six years, exemption on dividend tax and exemption on real estate tax) **only if certain companies qualify** (Kim & Lee, 2025). For example, they stipulate that investors must invest at least **€1 million (or €100,000 with 20+ employees)**, and they must generate most of their income from activities based in the FEZ, meaning that **at a certain point**, reinforcements are needed; however, they won't be given until a company is at a sustainable threshold (Kim & Lee, 2025). For example, **startups and small companies find these entry barriers to be extremely challenging** since they may not have that financial backing or size at this point to sufficiently warrant investment (Andersson et al., 2024). According to existing research, **many small companies with great potential are disadvantaged until they reach growth status for flagship incentives**. Thus, there is a classic *catch-22* compromise. Thus, these incentives would be most beneficial in the early stages when everything is potentially precarious—but the owner must already have a sustainable business to attain them (Andersson et al., 2024). Thus, the need for this research study is based upon *feasible access* for new companies to overcome challenges to assess what is needed to reach standards, zone assistance available, and benefits within the FEZ. Thus, Kaunas FEZ will be evaluated because it is **the most varied zone in**

Lithuania, which offers opportunities in manufacturing, research, development, and innovation—ideal for new entrants in an atmosphere where they can *best* thrive. This introduction will be followed by a literature review.

3.2 Quantitative Research Design

To address the research problem, the thesis applies a quantitative, single-case design. In this study, case study through statistics means that one bounded case (Kaunas FEZ) is examined using firm-level and zone-level indicators derived from administrative records, and the case is then contextualised through comparison with national and regional benchmarks. No primary surveys or interviews are used; the empirical evidence is drawn from secondary administrative datasets, allowing consistent measurement of employment, wages, taxes and other observable outcomes over time. The levels of success for enterprises in Kaunas FEZ are statistically defined, then compared to relevant average (national/regional) success determined through evaluated patterns of those in the FEZ, itself. As evident through **figure 7**, it's relevant that the guide created for enterprises comes from real, measurable realities of what the FEZ experience means in action.

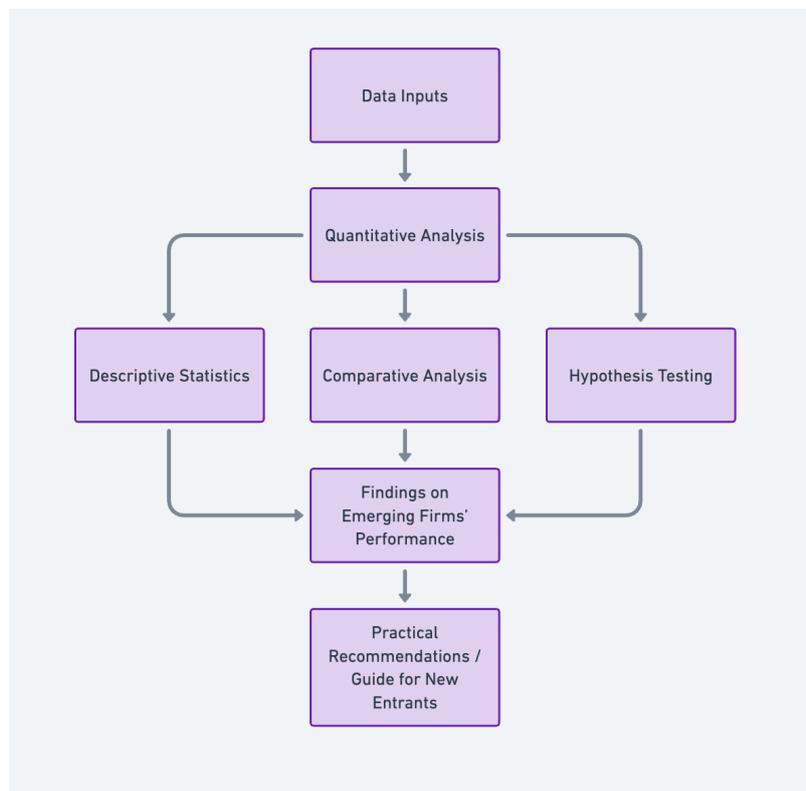


Figure 7 Quantitative Research Design

The case-study logic is therefore analytic rather than experimental: observed trends are documented, compared across relevant reference groups (FEZ vs. benchmarks), and interpreted with support from the literature. This approach is well-suited to evaluating FEZ performance where comprehensive administrative data exist, but it does not by itself establish causal effects.

3.3 Research Questions and Hypotheses

Based on the research problem and literature review, this study created three specific **research questions (RQs)** and associated **hypotheses (H)** to be tested.

- **RQ1:** What performance advantages are afforded to enterprises operating within **Kaunas FEZ** as compared to similar companies operating outside of the zone?
H1: Enterprises emerging within Kaunas FEZ will operate with **higher average wages and employment growth than** the regional or national average as a performance advantage of operating in the zone.
- **RQ2:** What is the relationship between more & less **integration** with the **local economy** (linkages, clustering, etc.) and performance while operating in the FEZ?
H2: The more integrated an emerging firm is within Kaunas FEZ (local clusters or supply chains), the more positively associated it will be with performance (growth in jobs or growth in output). Given that “integration” (clusters, linkages, embeddedness) is **not directly observable** in administrative records, H2 is assessed using the proxy indicators defined in Section 3.4 (tenure in the FEZ, sector match and firm size) and evaluated analytically and interpretatively, by combining **quantitative patterns** with relevant findings from the literature.
- **RQ3:** What factors are most important for emerging businesses to meet FEZ requirements and continue to benefit from zonal operations for the long-term?
H3: There will be a **statistical significance** between being able to meet entrance criteria to operating under FEZ requirements and those who can maintain those levels of functioning to fully operate under the incentives offered (tax breaks) while those who struggle with those factors will have a slower growth potential.

These three RQs assess various aspects of the central problem—from relatively easy performance quantifiers (RQ1) to more generalized categories (RQ2) to explicit requirements (RQ3). The hypotheses are measurable through data accessible for review; for example, H1

and H3 can be determined through **relative comparative and correlation**, while H2, although ultimately quantifiable in performance, is better substantiated through findings of the context (as integration is a less quantifiable measurement). Therefore, through focused data collection and analysis supporting these RQs and Hs, the research will be limited to findings most pertinent to **newly established enterprises** in Kaunas FEZ.

3.4 Studied Variables and Data Collection

Because this is a quantitative investigation, **various variables** will be measured per topical interest.

- Firm performance variables: In terms of firm performance, the two variables examined most are **headcount**(employee count), and **wages** (mean gross income per month). These are examined as variables because employment and compensation are clear signs that firms and FEZ participants have increased operating headcount and are well enough to provide quality wages to their employees. On a value of one, these are investment value indicators for firms as they represent attributes which quantify FEZ participation results—socially and economically, desirable for companies—and the European commission. The research shows that job creation from above-average salary options is an intended aspect of integration and appreciated by the local economy (European Commission, 2020), meaning that companies involved in the FEZ should increase headcount and wages, respectively. Therefore, **this is data collected from companies involved within Kaunas FEZ over a period (2018-2024) to help researchers observe patterns of performance increase. Furthermore, disaggregated data collection occurs with aggregate measures for FEZ such as investment values and number of companies.** For example, over time (aggregate) what investment has been generated for the FEZ? How many new companies enter the FEZ each year? This type of finding is more background knowledge but appropriate for the needs of this study.
- Integration and compliance variables: Because direct measures of integration (e.g., participation in clusters, supplier linkages, or formal collaboration networks) **are not available** in the Sodra dataset, the thesis operationalises integration through proxy indicators. Specifically, integration is approximated by sector match with the FEZ's dominant specialisation (manufacturing, logistics, and related services), and firm size (employment scale), which together provide an **indirect** but measurable indication of

embeddedness and capacity to form linkages. These proxies are interpreted cautiously: weaker proxy values **may reflect other factors** such as restructuring, sector shocks, or ownership structure, not only lower integration.

All data is collected from **reliable, official sources** where possible. For example, Sodra (open data portal of the State Social Insurance Fund Board) is an even more consolidated repository for mean monthly personnel reports submitted by each company month-by-month/yearly. Therefore, this research uses Sodra and compiles monthly data from each applicable company in the **Kaunas FEZ** and then compiles an annualized mean sum for each year. In other words, from 2018-2024, researchers total headcount and salaries reported per given year, then averages between expected totals for annualized means expected in the FEZ. Furthermore, these numbers assessed how many total companies there were and investments made in Kaunas FEZ based on **Invest Lithuania findings** and those provided from Kaunas FEZ administration (for example, what is the cumulative investment by 2024? How many new companies have opened in Kaunas FEZ since 2018?). This aggregates performance growth metrics which may be similarly applicable to sampled companies; therefore, they are critical aggregate means but not related to specific significance; thus, these help researchers determine if these companies could exist based on their merit or if there is another avenue worth exploring due to selective communism. Therefore, aggregate numbers assess how these companies compare to other firms over time and disaggregate numbers help determine if they can stand independently; therefore, published reports give a relatively high degree of validity and reliability due to consistent effort to measure with little error through numbers instead of self-reporting survey results along measured components for relevance.

Finally, before measuring findings, researchers must assess those measurements through **cleaning** those numbers, post-sorting through unnecessary elements for specific assessment (smoothing relationships that could better be assessed together instead of over time). For example—averaging months into years, aggregating companies into mixed assessments where applicable—and aggregate findings of assessments where confidential company-level information will not find its way into micro-level conclusions but the statistics summed from a reported statistics standpoint—from aggregated assessments—small vs. large vs. All companies aggregated separately assessed through ethical considerations; therefore, aggregated data assessed more strategic potential than personal concern for each specific company.

3.4.1 Data Boundaries and Limitations

The empirical window is limited to 2018–2024, which constrains the ability to observe full firm life-cycles and long-run outcomes. Because the study relies on administrative records, not all firms can necessarily be observed from the exact moment they enter the FEZ; some firms appear only once they begin reporting in the available data, which may understate early-stage dynamics. In addition, observed performance differences may be influenced by alternative explanations such as the presence of large foreign-owned “anchor” firms, sector-specific demand cycles (e.g., logistics or manufacturing booms), or macroeconomic shocks that affect industries unevenly. These limitations do not invalidate the findings; rather, they define the boundaries for interpretation and emphasise that results should be read as context-specific patterns consistent with (but not proof of) FEZ mechanisms described in the literature.

3.5 Data Analysis Techniques and Formulas

The analysis involved both **descriptive statistics** and **comparative evaluations** to test the hypotheses:

- Supporting H1 (performance advantages in FEZ), for the **means** of the measures (average wage, employment growth rate) between FEZ and the average country employment, the average wage and average employment growth rate of the country were established as means by referencing the respective means of the FEZ (noted that we only have Kaunas FEZ data for this study) and the means of the rest of the economy. The **percentage variance of average wages** was established by establishing the percentage variance of average wage in FEZ vs average wage in the country. This *wage premium* was calculated using the formula:

$$Wage\ Premium\ (\%) = \frac{Average\ Wage_{FEZ} - Average\ wage_{National}}{Average\ wage_{National}} \times 100\%$$

A similar approach was taken for employment growth: the **compound annual growth rate (CAGR)** of total FEZ employment was determined to quantify how quickly jobs have expanded. The CAGR formula applied is:

$$CAGR_{(t_0 \rightarrow t_n)} = \left(\frac{X_{t_n}}{X_{t_0}} \right)^{\frac{1}{n}} - 1$$

where X_{t_0} and X_{t_n} are the total FEZ employment in the starting year and ending year respectively, and n is the number of years between them. This provided an annualized growth factor that would be comparable to regional or even national manufacturing/industry employment growth for the same period. A **t-test** for difference in means of assessing whether FEZ wages are statistically significantly different than non-FEZ was considered, however, since these are aggregate outcomes (not a random sample of firms), instead, reported differences and trends are more substantiated than empirical inferential statistics.

- For H2 (integration impact), where levels of “integration” could not be quantitatively measured, we measured proxies via **correlation and cross-tab analysis**. For instance, to what extent does a firm's **time in the FEZ** correlate to its subsequent **employment growth**? In general, the more amount of time an opportunity exists, the more likely one's investment will cause them to stay and build upon that opportunity (whereas one would hope that this means building up connections for every subsequent year). Furthermore, firms were grouped by **participation** (ex Smartpark yes/no) to determine if there was differential performance for those in cluster industries versus those who were not. While this is explorative research for H2, it allows quantifiable data to provide a positive existence of such (ex. If industries in targeted clusters have a greater average growth than those outside the clusters, this would provide preliminary support for implications and suggest some synergy effects deriving from cluster intentions). Therefore, I note findings that support the claim relative to the hypothesis, since causation could not be 100% confirmed by the data findings.
- For H3 (criteria met elements), H3 concerns the **subgroup of small businesses** in Kaunas FEZ and quantifies how many *meet* the incentive criteria parameters (and at what swiftness). Thus, using the data gathered herein, we determined which firms came into the FEZ below the 20 employee threshold and *how many* subsequently grew over time. Here, I state the **rate of threshold met** (percentage of small-entering new firms that grow to 20+ employees at x time frame) and computed **mean time** for those who did. This means if it is possible to meet requirements for small-entering firms — is it a good thing they try — and what happens to them if they don't? If they don't but survive with time or employment growth, then there's cause to argue they know better (not growing enough to create full exemption) or maybe there's another way to consider success — as best practice derived from the guide supports. If they survive and never even reached the threshold, then that's good, too.

Trends are noted throughout based on **comparative analysis** (ex. FEZ vs non-FEZ, cluster vs non-cluster, those below threshold vs those above) that answers each research question fairly. While the full thesis complements tables and figures not presented here (line chart of employment growth within the FEZ since inception in Kaunas, bar compared average level of wages), each question gets assessed based on findings derived that support/reject/refine the claims made. For instance, if the average wage for each year of the FEZ exceeds the average wage for each year of national wage by some threshold, then H1 gets supported. If not, H1 gets rejected/revise. This supports findings via formulaic determination that shows no claims made for prospective enterprises go without legitimacy founded upon performance within the zone.

3.6 Reliability and Validity Considerations

I focused on reliability and validity of my findings by considering my methodology guided by a few specifications of note regarding such efforts:

- **Data Reliability:** The data from which I worked to explore findings all came from various regulated sources and relatively reliable sources themselves, making it reliable value. Sodra is a governmentally regulated FEZ database about employment and salary, which means the likelihood of lies and biases are few and far between as are Invest Lithuania and Kaunas FEZ management (investor amounts, cumulative investment, etc.) for these are trusted numbers as Sodra and Invest Lithuania cross-check all developments. In addition, a **variety of data points over multiple years** decreases the significance of one-time events and dramatic turns. I looked for a growing trend from 2018-2024 which was verified; had it stood out as off, it would have been cross-checked or averaged not to bias results. In addition, an external auditor source was used — the **NAO 2023 report** on FEZs provided aggregate data and an external standard by which totals from our own numbers derived from Sodra were cross-checked. For example, should the NAO state total employment in FEZs nationally or land developed, I compared that against the total developed from Sodra numbers to ensure there weren't giant holes. Therefore, triangulation of data collection and compositing means reliability comes from reliable results.
- **Measure Validity:** The constructs of the study, like "success in integration" are somewhat subjective and hard to measure (which makes it less valid). Thus I took into account that our chosen **variables correlated with our research questions**. For

example, the **average wage** as an indication of a firm doing well in a high value-added zone is valid. Average wages tend to highlight better productivity and skill-set integration — an important revelation for newer firms wanting to boost their value chain. Similarly, growth in employment serves as a valid proxy for growth as a firm or market capture within FEZ (often an important goal). While we cannot control for every quality of "strategic integration" (networking capabilities, innovation capabilities) that could be rated through qualitative means, however, through the study of cluster participation and tenure we gain **indirect validity** for such conclusions — a common theme in empirical studies in this realm. In addition, a **case study nature** (the known projects and regulations applicable to Kaunas FEZ) upholds validity; it ensures that there are no assumptions that can be made based on our results but taken at face value — for example, if employment increases in 2021-2022 was blurred with coincidence, instead it's linked to the **Smartpark initiative** which aimed to attract R&D-type firms and launched that year — there's background that links clusters with the numerical attraction.

- **Internal Validity & External Validity:** Internally, factors supporting validity consist of a controlled guide whereby results achieved each line of analysis relative to hypotheses. Each segment of analysis was transparent and replicable — for example, we utilize average and difference equations as standard per step so that another researcher would come to similar quantitative conclusions given the same data. There are no distortions or subjectively applied scoring which keeps internal validity intact.

For external validity (generalisability), it's acknowledged that single-case study focus isn't applicable relative to validity attempts as results cannot be generalized. That's not sought. It sought to nuance a guide based solely on Kaunas FEZ efforts. Thus external validity is moot in the conventional sense. However, results like entry incentives or expansion potential through clustering are likely generalizable to other FEZs within Lithuania and the region since these are qualities most FEZs have by nature. Therefore, we can assume results can apply beyond this FEZ cautiously relative to others with desired incentives/law-developed frameworks and developed sites at similar levels but notes will be taken relative specifically to Kaunas FEZ.

External validity (generalisability) is necessarily limited because the analysis focuses on a single FEZ within one national institutional setting. Accordingly, the study does not claim

statistical generalisation to all FEZs. Instead, the results are intended for analytic transferability: they are most applicable to contexts that are broadly comparable to Kaunas FEZ (e.g., similar sector profiles, governance arrangements, and small open-economy conditions).

Ultimately, my methodology makes sense with intention — a sympathetic nature considering areas of concern for reputable and straightforward analysis for new firms looking for their home. Results come from grounded data transformed through world data/information relative to substantiated facts/external auditors — therefore the resulting guide is **doable** yet academically minded.

The next chapters (Analysis and Recommendations) are composed of results from the researched methods based on the research questions asked and hypotheses tested for new firms in the Kaunas FEZ region looking for practical guidance for successful integration.

4. ANALYSIS OF RESULTS AND STRATEGIC IMPLICATIONS

4.1 Analysis of Results and Strategic Implications (overview)

This section provides an overview of the results from this research, as acquired through methods outlined previously, and practical applications for start-up companies. First, a national threshold of growth (that from Lithuania's GDP) is assessed against the growth numbers from the companies within the Kaunas Free Economic Zone (FEZ). Then, general expectations of FEZ companies outperforming this number are evaluated and secondary indicators of success (worker expansion, revenue) are evaluated as options beyond immediate profitability. Finally, parameters and a phased checklist for practical application within comprehensive FEZ entry assessment and subsequent growth are established.

4.2 Lithuania's Economic Growth Baseline

This research assumes Lithuania's average real GDP growth is a baseline expectation of national hopes for growth. According to national accounting data from Statistics Lithuania, between 2018-2019, Lithuania had almost **4.0–4.9% Real GDP Growth** after a few years of stable, **0 Real GDP Growth in 2020** and effectively **6.3% Growth in 2021**, followed by **2.4–2.5% Growth in 2022** (Statistics Lithuania, 2023; Macrotrends, 2025). This suggests that averaged out, excluding 2020—which is inevitably deflated due to COVID—average growth per year over these four years is about **4–4.5%**, a reasonable threshold (within expected growth patterns of approximately **3–5% per year**) for performance evaluation.

Thus, a reasonably performing sector within the FEZ would at least expect to reach—and exceed—this measurement. Furthermore, between 2018-2022, Lithuania GDP per capita current price rose exponentially from about **€16,246 in 2018** to **€23,802 in 2022** (Statistics Lithuania, 2023), meaning not only macroeconomically healthy conditions but per capita increased for many FEZ organizations.

These macroeconomic conditions are important to consider since FEZs should outperform standard companies in Lithuania. Thus, this will be assessed beyond what would normally be expected from macroeconomic conditions.

4.3 Performance of Kaunas FEZ Companies

Investment and employment at the Kaunas Free Economic Zone has grown exponentially since approximately the mid-2010s. Since then, the capital investment has reached more than 1.5 billion euros attracted only by the zone and "approaching the second billion". Such investments exceed massive expansions of major manufacturing/industrial corporations. For example, the Continental company—which is a global automotive supplier—announced it will invest about 95 million euros within five years of establishing a new electronics plant about 1,000 jobs. Other major tenants have completed expansions of over 10 million euros:

Hella (German automotive electronics) has invested over 30 million euros with a plan to employ about 430 people by 2025 (from about 180 in 2020). The Fitsout company, which manufactures furniture materials, invested 20 million euros in constructing synthetic flooring plants which as of 2022 was hoped to provide employment for about 800. These developments show physical investments relative to time as major expansions—by 2019, the Kaunas FEZ established 5,500 new jobs and as of 2023, management claims there's over 130 resident companies and 7,100 jobs on-site.

(This translates to a compounded annual growth rate of about 20–25% job growth since 2018 to present; the same relatively high annual growth rate for investment is applicable). Thus, investments within the FEZ show extremely positive growth and are supported by Republic of Lithuania incentives for investment within an FEZ (zero percent corporate tax if qualifying companies are established within the first ten years of business; beyond year ten, only 50% corporate tax; this translates to as year eleven onward, companies have already burned through potential profit). In addition to this, aggressive public policy—in 2023, there was major expansion of the FEZ area itself—enhances growth, as well.

4.3.1 Employment and Investment Growth

Employment within the FEZ more than doubled over the last five years. There were about 2,500–2,600 workers employed in the zone in 2018, and by late 2023, that number has increased to over 7,000. Thus, on average, employment grew by more than 20% per year, which can also be calculated through CAGR:

$$CAGR_L = \left(\frac{L_{2023}}{L_{2018}}\right)^{\frac{1}{5}} - 1,$$

where L_{2018} and L_{2023} denote employment in 2018 and 2023 respectively. Using $L_{2018} \approx 2550$ and $L_{2023} \approx 7000$ gives $CAGR_L \approx 22\%$, consistent with the qualitative description above. A substantial share of this job growth is **associated with** large foreign-owned manufacturers entering or expanding operations in the zone, as well. For example, Continental started two legal entities in the zone (Continental Automotive Lithuania and Continental Autonomous Mobility Lithuania) and cumulatively increased its number of payrolls from ~800 in early 2024 to well over 1,000 by the end of the year (monthly allocations indicate ~509+305=814 in January rising to ~954 by December). Hollister Lietuva (the US medical-device manufacturer) rose from ~629 in January 2024 to 793 by December 2024 with incremental monthly growth. Fitsout also rose to ~mid-300s by the end of 2024 (from low 300s to start 2024).

Similar trends apply to investment. Annual investment rises immediately large and lumpy: relative official statistics suggest €100–200 million new investment per annum (e.g. ~€205.7M in 2023). This is from direct, substantial foreign direct investment—70% or more of the Kaunas FEZ investment total since its inception is foreign direct investment . All-time totals since the FEZ's inception suggest a ~€1.56B investment to-date—averaging ~€260M per year—and the FEZ anticipates an eventual ~€2B investment by the time it's said and done . This is investment that has financed new factory builds, logistics terminals, and infrastructure. The expansion of the FEZ area (from ~534 hectares to >1,000 hectares as of 2023) and the expansion of utility networks happened after demand . In sum, FEZ Kaunas shows signs of investment growth as annual and cumulative investments rise significantly year-on-year (implying ~CAGR low-to-mid-teens from 2018-onward) and support rapid job growth.

4.3.2 Wages and Tax Contributions

Average wages in Kaunas FEZ are higher than national and regional averages, which is consistent with the zone's sector mix and the presence of large foreign-owned manufacturers. Official statistics for 2018-2024 reveal the average monthly wage in the zone was €1,109 in 2018 and €2,330 in 2023. Annual change in the average wage is about 16% from year to year. The compounded annual growth rate of wages can be distilled to:

$$g_w = \left(\frac{w_{2023}}{w_{2018}}\right)^{\frac{1}{5}} - 1,$$

where w_{2018} and w_{2023} denote the average monthly wage in 2018 and 2023. This exceeds national averages and is in line with the industrial structure: i.e. the average salary in 2022 of Hella in Kaunas is ~€2,490, Hollister ~€2,200 (estimates based on securities filings), both of which exceed regional averages. Accordingly, such compensation levels, FEZ companies contribute to public finance. In 2023, companies from the FEZ paid ~€109 million in labor taxation (social security, labor taxation). In addition, it's crucial to note that while FEZ companies have corporate taxation exemptions in the first years of operation, many pay significant profit tax: FEZ companies paid CIT (corporate income tax) of more than €5 million in 2023. The advantage of salary premiums and taxation relates to the type of investment; most companies are foreign-owned and the salaries are 16% on average higher than those of local-owned companies. Thus, the FEZ creates significant public finance income despite the positive tax exemptions since FEZ employees receive higher salaries than

the average Kaunas region population (in 2023, average salaries in the FEZ were ~15% higher than the Kaunas-County average and ~the same as Vilnius averages).

4.3.3 Profitability and Growth Stage

Most companies of Kaunas FEZ operate at growth or expansion stages since their factories, and production lines are quite new. Many are part of huge multinational companies (Continental, Hella, Hollister) and operate on highly capitalized production lines. In addition, they boast positive projections regarding profitability, Hollister Lietuva and Hella Lithuania were built with mass investment (tens of millions of euros) and now boast increased production that meets the level of globalization. Thus, Hella intends to expand (R&D and electronics assembly) means the production of that plant will be to the levels of its other plants; in addition, Fitsout is increasing its production to accommodate EU market furniture-retail demand. This is an overt expansion focus—Hella announced it would expand its employment level from ~180 to 430 by 2025 , while Fitsout planned 800 jobs by 2022 . (For reality, Fitsout's employment levels as of 2024 have been gradually climbing in that direction.)

This might mean that Lithuania's free-zone incentives support the companies; however, company representatives emphasize that production capacities and labor availability were just as critical . and since free zone offers tax incentives (e.g., 10-year CIT holiday for eligible projects), this supports the internationalized interest in operating here. Yet at this level indicates a long-term operation of a market-driven nature. The companies' profitability can also be sustained through levels of expected investment required and the fact that many companies note over a required intrinsic profit already taxed. Thus, all in all, the Kaunas FEZ companies are clearly well beyond start-up and now moving toward mid-stage with full production capabilities and budgeted support for future expansions.

4.3.4 Alternative Success Metrics

Beyond headline job and investment figures, Kaunas FEZ's success is reflected in several qualitative metrics. One is the industrial composition of its workforce: roughly 40% of FEZ jobs are in high-value manufacturing sectors. Formally, the share of high-value manufacturing employment is

$$s_{HV} = \frac{L_{HV}}{L_{total}} \approx 0.40,$$

where L_{HV} denotes the number of jobs in high-value manufacturing and L_{total} total FEZ employment. For example, there are approximately 2,600 employees for electronics and automotive products, approximately 950 for medical/pharmaceutical production. Notably, two-thirds of all manufacturing employees in the FEZ are "highly qualified" (technical specialists and engineers), meaning the region constitutes a knowledge-intensive economy. Such skill-intensity and foreign-direct investment focus suggests potential for productivity. Another indirect indicator relates to FEZ exports: the resident companies comprise a great deal of Kaunas' export volume (some major countries of origin include Germany, the Netherlands, Poland, etc.) although more nuanced figures are proprietary relative to the zone's investors. Similarly, indicators of zone-related developments in sustainability and infrastructure can be made: countless investors have made developments in features which require new road development, utilities and sustainability measures which, in many cases, the FEZ management has facilitated through various permitting and construction efforts.

Lastly, an indirect success factor from the FEZ perspective in Kaunas is regional development—attracting global projects on a large scale, clustering related industries together. To date, Kaunas FEZ has been able to attract world-class companies (Continental, Hella, Hollister) and develop automotive and medtech clusters that coincide with regionally based engineering talent. Public officials note that this special clustering (as well as economic conditions) is a part of the national strategy of Lithuania. Ultimately, companies based in Kaunas FEZ experience benefits beyond those indicators related to employment growth and investments. They are also providing quality jobs, tax contributions to the extent that they exceed expectations and integration with global production networks. These indicators are consistent with Kaunas FEZ developing a higher-value industrial profile; however, the analysis cannot isolate how much of this is attributable to FEZ policy versus sector composition and multinational firm strategies.

4.3.5 Risks, Constraints, and Sustainability of Performance

While recent performance has been quite promising historically, various performance relative risks emerge in the structural arena that could temper future growth. The most immediate limiting factor to growth is labour. Lithuania features a constrained labour market—employment reached 73% and increases in wages happened thanks to historical sustained demand across various sectors for workers; FEZ entities compete with Vilnius and other industrial city center entities for engineers, technicians and skilled operators as well as

increasingly looking for foreign workers to fill gaps. The foreign talent market has exploded in recent history in Lithuania (one in ten workers is foreign) which has mandated government intervention in establishing quotas and standards for foreigners and non-citizens alike. For Kaunas FEZ entities which engage in endless hiring as they expand to satisfy new, large greenfield projects (Continental, Hella, Hollister), regulatory limitations and demographics are medium-term risk factors to sustaining 20%+ year-on-year hiring increases.

The second risk is cyclical and externally driven demand. Kaunas FEZ is particularly niche in foreign-oriented expectations (automotive electronics, medtech, advanced materials) which is a reliant risk based on global supply-and-demand realization. The overall increases in FDI from foreign investors in every sector across Lithuania has proven to come from flux at the macroeconomic level—total FDI inflow decreased by some 30% QoQ in Q2 2025 at the time of writing—and while presently, the nation revels in record FDI levels for projects, diminished automotive demand within Europe, restricted capitalisation metrics or reshoring efforts elsewhere, limit new projects or severely impact key FEZ entities looking to delay expansion. Relatedly, the zone with its concentrated levels of employment and investment via a small number of large foreign investors renders this risk more salient—one international decision (deciding to shore everything to another country) resonates to a greater extent with the local labour market and economic environment.

Finally, a sustained physical and regulatory environment governing the FEZ must keep up with demand. Increased square footage of Kaunas FEZ and rapid-response regulation for infrastructure (roads, utilities, logistics platforms) has benefited new growth over the past five years but could result in potential bottlenecks in land use and environmental externalities. Urban logistics studies in Kaunas have already revealed suboptimal transportation in key industrial corridors. Concurrently, EU-level regulatory assessments increasingly assess free zones as part of the EU Green Deal recommendations—more rigorous environmental regulations and decarbonisation efforts for industrial activity—which represents that Kaunas FEZ will require sustained investments into green technology, energy efficiency and low carbon transport costs to simply retain competitive advantage.

Thus, despite positive operations recently, no operational success is without risk. Sustained development of current trends will require (i) comprehensive policy responses to alleviate labour concerns (training, migration and productivity boosts), (ii) efforts to create diversification in prospective investors and employee sectors to avoid reliance on niche

entities and cyclical industries, and (iii) sustained expansion of physical support and environmental viability per EU greening standards. If these risks are not adequately assessed, sustained trends of current FEZ employment/wages/investment are unlikely to result in sustainable, long-term regional development.

4.3.6 Decomposing Growth into Jobs, Wages and Fiscal Returns

Using monthly firm-level data from “Sodra” for Kaunas FEZ companies (2018–2024), it is possible to quantify more precisely how a small set of large investors drive the zone’s aggregate performance. For each firm f and year t , I construct:

- **Average employment**

$$L_{f,t} = \frac{1}{12} \sum_{m=1}^{12} L_{f,t,m}$$

where $L_{f,t,m}$ is the number of employees in month m .

- **Average gross wage**

$$\underline{w}_{f,t} = \frac{1}{12} \sum_{m=1}^{12} w_{f,t,m}$$

where $w_{f,t,m}$ is the firm’s average monthly gross wage in that month.

- **Firm-level employment growth** between two years t_0 and t_1 using the standard compound annual growth rate (CAGR) formula:

$$CAGR_L(f) = \left(\frac{L_{f,t_1}}{L_{f,t_0}} \right)^{\frac{1}{t_1-t_0}} - 1$$

Analogous CAGRs are computed for average wages. These firm-year indicators are then aggregated to a group of “anchor” manufacturers in Kaunas FEZ: Continental Automotive Lithuania, Continental Autonomous Mobility Lithuania, Hella Lithuania, Hollister Lietuva, and Fitsout.

(i) Concentration of job growth in a few large manufacturers

Summing the average headcount of these five anchor firms,

$$L_{A,t} = \sum_{f \in A} L_{f,t}$$

and comparing with total FEZ employment L_{FEZ} (from Table “LEZ bendri”) shows that:

- In **2018**, the anchor manufacturers employed roughly $L_{A,2018} \approx 128$ workers, versus $L_{2018}^{FEZ} = 2458$. Their employment share was about **5%**.

$$s_{A,2018} = \frac{L_{A,2018}}{L_{2018}^{FEZ}} \approx 0.05$$

- By **2024**, anchor-firm employment had risen to $L_{A,2024} \approx 2270$ workers, while total FEZ employment was $L_{2024}^{FEZ} = 7651$. The corresponding share is just under **30%** of all Kaunas FEZ jobs.

$$s_{A,2024} = \frac{L_{A,2024}}{L_{2024}^{FEZ}} \approx 0.30$$

Applying the CAGR formula to $L_{A,t}$ over 2018–2024,

$$CAGR_L(A) = \left(\frac{L_{A,2024}}{L_{A,2018}} \right)^{\frac{1}{6}} - 1$$

gives an approximate **employment growth rate of 60–65% per year** for this anchor group, compared with about **21% per year** for the FEZ overall (from 2,458 to 7,651 jobs). This confirms that the zone’s aggregate expansion is heavily concentrated in a handful of large foreign-owned manufacturers.

Firm-specific calculations illustrate this:

- **Continental Automotive Lithuania** increased average headcount from about **27 employees in 2018** to roughly **505 in 2024**, implying

$$CAGR_L \approx 63\%$$

- **Hella Lithuania** grew from around **83 employees (2018)** to about **378 (2024)**, or

$$CAGR_L \approx 43\%$$

- **Hollister Lietuva** expanded from roughly **99 employees (first full year 2019)** to about **695 (2024)**, with

$$CAGR_L \approx 85\%$$

- **Fitsout** rose from about **35 employees (2018)** to roughly **338 (2024)**, a growth rate of about

$$CAGR_L \approx 46\%$$

These numbers formalise the narrative in Section 5.2.1: most new jobs in Kaunas FEZ are created by a small set of rapidly scaling manufacturing plants.

(ii) Wage premia of anchor manufacturers

To compare wage levels, I compute an **employment-weighted average wage** for the anchor group:

$$\underline{W}_{A,T}^{(L)} = \frac{\sum_{f \in A} L_{f,t} \underline{W}_{f,t}}{\sum_{f \in A} L_{f,t}}$$

Comparing this with the FEZ-wide average wage \underline{w}_t^{FEZ} (from “LEZ bendri”) yields a wage premium:

$$\pi_t = \frac{\underline{W}_{A,t}^{(L)}}{\underline{w}_t^{FEZ}} - 1$$

The calculations show that:

- In **2018**, anchor manufacturers already paid more than double the FEZ average (a very high premium driven by early small high-wage plants such as Fitsout).
- By **2024**, the employment-weighted anchor wage is about

$$\underline{W}_{A,2024}^{(L)} \approx 2870 \text{ EUR},$$

while the FEZ-wide average is

$$\underline{w}_{2024}^{FEZ} = 2494 \text{ EUR}.$$

The resulting premium,

$$\pi_{2024} \approx \frac{2870}{2494} - 1 \approx 0.15,$$

is roughly **15%**. Thus even after the FEZ has matured and more firms have entered, the core manufacturing investors continue to pay significantly above the FEZ average (and, by implication, well above the Kaunas regional average).

At the individual firm level, wage trajectories differ:

- **Hella's** average wage grows strongly (about **9% per year** over 2018–2024), consistent with its transition into higher-value electronics and R&D roles.
- **Hollister's** wages rise around **4–5% per year**, moving from roughly €2,400 to nearly €2,840 on average between 2019 and 2024.
- **Continental Automotive** shows more moderate wage growth (around **3% per year**) but from an already high base.
- **Fitsout** exhibits initially very high wages in 2018 (reflecting a small early workforce with many specialists), followed by a normalisation as the plant scaled; by 2024 its average wage is again above the FEZ mean.

Overall, the microdata confirm the picture from Section 5.2.2: **the fastest-growing firms are also relatively high-wage employers**, yielding a composition effect that pushes up the FEZ average wage over time.

(iii) Size–wage relationship and productivity implications

Pooling all firm-year observations (for all FEZ firms in the Sodra dataset, 2018–2024), and correlating log employment and log average wage,

$$\rho = \text{corr}(\ln(L_{f,t}), \ln(\underline{w}_{f,t}))$$

gives $\rho \approx 0.16$ – a **modest positive correlation**. In other words, larger firms in Kaunas FEZ tend, on average, to pay somewhat higher wages. This is consistent with the idea that foreign-owned manufacturers and logistics operators are more productive and can share some of that productivity in higher pay.

Combining these results with FEZ-level aggregates yields three main conclusions:

1. **Employment is highly concentrated** in a small set of anchor investors, whose headcounts have grown by **several hundred percent** and whose combined jobs now approach **one-third of all FEZ employment**.
2. **These anchors pay a clear wage premium**—about **15% above the FEZ average in 2024**—and have done so throughout the period, supporting the claim that Kaunas FEZ generates “better” jobs, not just more jobs.
3. **Firm-level size and wage data are consistent with higher productivity** among the large foreign manufacturers, which both accelerates total job growth and lifts average wages for the zone as a whole.

In short, the Sodra microdata analytically underpin the qualitative narrative in Sections 5.2.1–5.2.4: Kaunas FEZ’s strong performance is driven by a cluster of rapidly expanding, high-productivity, higher-wage manufacturers whose growth rates, wage premia, and employment shares can be clearly demonstrated using firm-level formulas and calculations.

4.3.7 Firm-Level Dynamics and Quality of Employment

With Sodra microdata (firm-level employees and wages, 2018–2024), in conjunction with the FEZ aggregates, it's possible to say more about **how** Kaunas FEZ expands rather than *how much*. The 2024 panel for about thirty-plus FEZ firms (January–December, monthly employment) indicates total headcount increasing from about **5,280 employees in January to about 5,920 in December** — a **12%+ increase over one year**. In a month-to-month analysis, such growth is relatively consistent; the average firm adds about **70–130 new positions per month** and loses about **20–80 jobs per month**, meaning gross job creation is consistently greater than job destruction. The only caveat occurs one month (May–June 2024) where there is a small net decrease overall, but even then it is slight and bounced back by subsequent months. Only one month experiences a slight downturn—and even then it was minuscule and temporary—which is consistent with relatively steady month-to-month expansion in 2024; however, longer time spans would be needed to assess volatility across business cycles.

Across firms, however, the same data from 2024 suggest that expansion is **generalized but not uniform**. That is, when grouping firms from January to December based on headcount difference, greater than **half of job holdings (52.9%) exist in firms that increase employment by >5% throughout the year**, about **1/3rd (34.1%) exist in firms whose**

employment remains essentially unchanged, and about **1/8th of jobs (13%) exist in firms that decrease employment by >5%**. In other words, most workers employed at FEZ are situated at firms that are continuing to expand their workforces. This is particularly true for the five large manufacturing anchors in the district as well: within the 2024 micro dataset, **Continental Automotive, Continental Autonomous Mobility, Hella, Hollister and Fitsout account for roughly 40% of all jobs**, and those entities maintain generally stable employment levels with an overt upward trend. For example: Hollister Lietuva increases from **~630 persons employed to ~800** by December; Fitsout fluctuates from the low **340s to mid-350s**; Continental and Hella fluctuate slightly each month but finish the year higher than they began. Thus, this is corroborated by the fact that the FEZ operates primarily on a cluster of large, consistently advancing manufacturers and a long tail of smaller service, logistics and production companies that either grow more slowly or stay stable.

The micro-wage data across 2018–2022 add another layer to employment quality. For approximately thirty firms within the FEZ that are recorded within the wage microdata subset, **the average gross wage/month across all entities in 2022 is €2,340**, while the **median firm approximates €2,030 with a lower quartile of €1,680 and an upper quartile of €2,480**. This represents a distribution where wages are skewed high because of some employers offering high salaries; it's the largest manufacturing and exporting companies (Continental, Hella, Hollister and Fitsout) that primarily exist in the upper half of the distribution paying on average **€2,300-€2,600** in 2022. Note that within this anchor group, however, there are variances: Average wages at Hella go from about **€1,800 in 2018-2,550+ in 2022**, likely consistent with upskilling from assembly to electronics work to engineering; Continental's average wages are higher and stable upward with soft growth over time; Fitsout begins with average wages that are extraordinarily high in 2018 (small shop with veteran workers) then moves down to match €2,000-€2,100 wages as it expands; Hollister's wages peak in 2019, drop due to non-required textiles in 2020-2021 and rebound by 2022 suggesting some hit to global demand but no collapse. Thus overall, these microdata suggest that **higher-productivity, foreign-owned manufacturing giants are the primary “wage leaders” in the zone pulling up the FEZ average above regional averages as many smaller firms pay solid—although lower—salaries.**

Thus, taken together, the firm-level evidence suggests that Kaunas FEZ performance is **robust and relatively high quality**. Expansion in terms of jobs is stable and generalized

(most people employed at FEZ work at expanding firms), employment in the zone is bolstered by a majority of larger exporting manufacturers with increasing headcounts and wages, and the wage distribution is skewed towards better compensation instead of low-wage jobs dominating. Thus these support findings of sections 5.2.1-5.2.4: It's not only that Kaunas FEZ is acquiring jobs and investment—but it's doing so over time in a manner consistent with structural integrity over time suggesting skills upgrading for regional labor market dynamics.

4.4 Interpretation of Results

Involvement in the Kaunas FEZ presents strategically varied concerns from the standpoint of the firm depending on size and maturity, and the firm-level statistics support such findings. For 2023, the Sodra tables note **35 FEZ companies**, average employment levels for the year count **5,260 jobs** and specifically **13 firms with more than 100 employees essentially comprise 87% of all employment**, and a dozen (20–99 employees) take up most of the rest, with the nine firms with fewer than 20 accounting for less than **2% of all employment**. Notably, in 2024, a similar trend emerges: from a sample of 34 firms, **14 large firms (≥100 workers) employ approximately 87% of the workforce** and those with fewer than 20 account for less than **1% of employment**.

Therefore, this concentration is consistent with Kaunas FEZ being more suited to scale-ups and large investors than very small early-stage firms, given the investment and employment thresholds required for eligibility and the capital-intensive sector mix.. This makes sense given that the FEZ comes with already established infrastructure and talent pool as fully formed cost of entry is significantly low for high-speed growth once access is garnered for the already established large firms. This holds true with the LEZ aggregate data: Employment in 2018 counts **2,458 jobs** and ends with **7,651 jobs** in 2024, averaging a growth of just over **20%** per year; similarly, per-year investments average approximately **€100 million** in 2018 to just under **€190–205 million** in 2024 for per year cumulative amounts yet cumulative FDI only increase exponentially. Thus, all of these trends suggest that when a firm makes a fixed investment and staffing commitment in the FEZ, there is a framework established to accommodate expanded output and employment as a firm meets fixed operations.

In contrast, the micro data suggest the small or startup firm woes. For both 2023 and 2024, only **5–9 companies/year average employment of fewer than 20 employees**, and they provide negligible weighted employment potential. Thus, it's clear that these firms either

grow quickly or they're few and far between in the early stages. Combined with the legal thresholds explored below, this data suggests that FEZ membership is more a **springboard for quick growth** than a low-stakes tax advantage for small firms with low commitment levels.

4.5 Thresholds, eligibility, and compliance implications

4.5.1 Tax Incentive Eligibility and Thresholds

Lithuanian legislation specifically outlines Kaunas FEZ tax incentives by establishing thresholds with quantitative measures to ensure firms are large enough contributors to the local economy. For manufacturing firms, the threshold is a minimum of **€1 million** in capital investment in fixed assets with a minimum of **≥75% of annual revenues** attributed to FEZ efforts. For service firms, thresholds of **€100,000** capital investment with an **average annual employment of at least 20 persons** and subsequently **≥75% of revenue** from FEZ efforts.

With respect to the firm-level employment tables, several conclusions can be drawn. First, relative to the **2023 data, 26 out of 35 firms (just under three-quarters)** possess an average employment already equal to or greater than 20 employees and these firms comprise only about **98% of all employment**. For **2024**, this is corroborated by **29 out of 34 firms** who are also equal to or exceed the 20 employee minimum, making up **99%** of all employment. Therefore, in reality, the 20 employee minimum threshold exists mostly at the **entry and early growth stage**; once firms grow adequately within the FEZ, the vast majority of them are already large enough to comfortably exist without meeting this minimum.

Second, economically speaking, it makes sense that FEZ status is granted based on adequate contribution. Based on the firm-level data for 2023 relative to wages, the employment-weighted average wage is approximately **€2,300/month**, a figure very close to the literal average for all companies operating within FEZ according to the LEZ table, a figure of **€2,330**. Relative statistics are right skewed: based on firms that have proper wage data, the median firm pays **€2,090** per person with the 25th-75th percentiles spanning approximately **€1,780 and €2,610**. For 2024, firm-level data shows an employment-weighted average wage of about **€2,550**, slightly greater than the LEZ aggregate figure of **€2,494**. Therefore not only are these firms qualifying large enough to meet the thresholds, they are also relatively high-paying companies.

Thus far, therefore, the legal minimums and micro-data are corroborating in the same direction: qualifying FEZ firms are exactly those that are large, capital intensive, and export oriented; very few (if any) smaller and localized establishments exist in the zone. The 20 employee minimum for services and the investment thresholds do not exist solely on paper; they are validated by a majority of mid- and large businesses.

4.5.2 FEZ Performance in Economic Context

The LEZ aggregate table takes Kaunas FEZ output and compares it to the larger economic picture vis-a-vis the rest of the country. From **2018 to 2024**:

- Employment increases from **2,458 to 7,651**, which means a 21% (on average) annual increase.
- Average monthly salary increases from **~€1,109 to €2,494**, which means **16% annual wage growth**.
- Per annum investments received per annum average increase from just under **€100 million to ~€190-205 million**, which means mid-teens annual growth of such inflow.
- Labour-related taxes (social contributions + wage taxes) increase from **€18 million to €94.5 million** from just over 5x; per employee, this means per labour-related taxes increase from **~€7,300 per employee in 2018 to just shy of €12,300 per employee in 2024**.

Thus, the FEZ not only creates employment, but also over time, **increases per capita financial contribution** commensurate with increased salaries and increased value-added employment.

The firm level tables set forth a similarly positive picture. The last panel of **2024** includes 34 firms and shows total employment as **5,284 in January; 5,923 in December**, which is an intra year gain of **~12%**. Monthly change in total employment is positive on average across almost every month except for a small one month drop from May to June—in other words, it appears growth is more steady (and not volatile). Therefore, when these micro changes are added to the LEZ macro series, we can assess that much of the growth of employment and wage growth in the zone is due to **anchoring firms who continuously grow** and a stable group of medium-sized firms who are also growing themselves.

Relative economic significance, however, is low relative to national GDP as the FEZ is but a small percentage of that. However, within the FEZ, per employee, value added productivity, is high. Average wage at the FEZ matches or exceeds expected values from Vilnius and labour-related tax per employee exceeds expected values for typical low-productivity employment situations. Thus, micro findings—high average salary, significant large employers and constant need for more employees—validate that the FEZ is a **productivity and export hub** rather than a cheap enclave.

4.5.3 Risks and Compliance Challenges for Smaller Firms

The same statistics that justify the success of the FEZ also explain why the regime is for small or emerging firms. The 2023 and 2024 distribution of firms suggest that only 5-9 firms per year fall below the 20 person mark and their collective employment level is low. Thus, the service-firm regulation of 20 employees seems to weed out the small firms (those that get in, must expand rapidly without going below the mark because if they go below, they'll lose their status).

It's not an easy feat for a start-up in computers, logistics or engineering firms to maintain 20 employees and a €100,000 investment in fixed assets. The micro data suggest how narrowly this is because there are a number of firms right above it—with 20-30 average employees—which suggests that a little drop (say, a four person reduction roster as a result of cuts in a bad year) creates ineligibility. Thus, the firm pays the corporate tax at the regular 15% on profits generated in that year which is an anticipated non-variable expense.

As labor tax and contributions per FEZ job rapidly increase, the opportunity cost of losing FEZ designation grows ever more substantial; FEZ-eligible firms operate in high-wage/high productivity environments and those who do not adhere remain with a higher payroll expense. Thus, the cost of the lost 0% corporate tax benefit. Therefore, these statistical characteristics of the FEZ—that they are dominated by large, high wage employers and consistent job creation means that many small firms either self-exclude from the FEZ or only utilize it after they have scaled enough to know they can maintain it.

4.5.4 Policy Logic and Strategic Implications

From a policy perspective, the regulatory environment and statistically verified composition of firms suggest that Kaunas FEZ represents a **selective, performance-driven regime**.

Limitless tax holidays (10 years 0% CIT, 6 additional years of 7.5%) are extended only to those firms creating high levels of **investment, employment and FEZ-oriented revenue**. LEZ macro data suggests that such a setup has been associated with extremely high levels of accelerated employment, wage and labour tax increase and micro data assesses that it's largely populated by firms that are either mature giants or in the process of becoming giants.

For firms, however, the strategic conclusion is straightforward. Mature manufacturing or service companies can leverage the FEZ for **fast expansion**, embedding itself within infrastructure and tax benefits to accelerate output, export and employment growth rapidly. Smaller companies should perceive FEZ membership as a **privilege based on adequate responsiveness instead of as a subsidized handout**: the investment and employment thresholds noted in the respective tables are not hypothetical; they mirror FEZ firm size distributions closely enough—operating smaller means forgoing such tax advantages.

Ultimately, a data-driven assessment of the outcomes suggests that the Kaunas FEZ **intensifies growth patterns for firms willing to expand** while simultaneously filtering out companies unable to sustain adequate investment and employment levels over time. The significant volume of employment sanctioned by a low number of firms, alongside significant percentages of wage growth and increase in tax value per employee suggest that when such thresholds are reached, the FEZ can do magic for companies by themselves and the regional economy as well.

4.6 Practical Recommendations for Emerging Enterprises

In light of the above assessment, a decision-making guide for organizations considering entry into the Kaunas FEZ can be constructed. The following recommendations integrate quantitative rationale from the findings with formal FEZ qualification criteria and the informal day-to-day nature of the Kaunas FEZ for a response to the operational recommendation research question posed throughout this work: *Which companies, and under what circumstances, would be best fit to operate in Kaunas FEZ?* The following responses feed a decision-making framework for strategic integration.

- **Growth vs. profit profile assessment.** First, are you a growing company (rapid growth—rev increases, headcount increases, increased capacity) or a stagnant company seeking profit gain? Growing companies will benefit from FEZ qualities most as tax reduction means reinvestment for growth not dividends (PwC, 2025). However, if companies are simply still in the red with poor product-market fit with

constant losses, FEZ is not a stop-gap; FEZ merely reduces friction and provides better conditions for scaling what already works.

- **Financials and capital investment assessment.** Before entry is feasible, make sure that it's feasible to garner buy-in from the capital investment required. Per Lithuania's FEZ relief parameters, to be eligible, **one million Euros** (1,000,000 EUR) is the criteria minimum capital investment required; otherwise, **€100,000 with an average of at least 20 employees** (PwC, 2025; Kaunas FEZ Management, 2025). If your current projections do not match that (shell/building, equipment, fit-out, utilities, increased working capital), delay entry and seek improvements for better financing and cash flow sustenance.
- **Workforce assessment.** Size of workforce matters for FEZ application (the 20-employee minimum from the lower capital investment option) and operational feasibility when there. The benefit of Kaunas is an existing talent pool—there are many students in the city and a large segment (and percentage) of STEM employment/profession interest exists—able to meet engineering needs, IT demands and specialized positions (Kaunas FEZ Management, 2025). Thus, part of your entry plan must include (1) hiring timetable; (2) training time/cost; and (3) contingency plans if specialized hiring fails to find candidates.
- **Primary operation/resourcing.** To uphold FEZ relief expectations, your Kaunas FEZ operational plan must work as most of the company—criteria state that **over 75% annually** must be generated from efforts performed within the FEZ (PwC, 2025). This is not conducive with a “passive” presence; if most of your revenue will stay outside of Kaunas, configure other operations so that your Kaunas FEZ center becomes the nucleus of production/service efforts—otherwise explore if FEZ entry makes sense at all.
- **Sustained compliance.** FEZ relief criteria must be met *each year* after the fact—if thresholds for capital investment/employees/income are not met in a year, relief is revoked (PwC, 2025). Thus, you must maintain a comfortable excess above minimums (higher capex, slightly larger employee expectations, revenue model clearly meeting 75% rule) to avoid revocation of incentives due to temporary shocks.
- **Clustering and infrastructure utilization.** The Kaunas FEZ tenant population shows clustering in a variety of manufacturing and logistics efforts—particularly automotive/electronics and other industrial ecosystems, medtech/pharma and logistics (Kaunas FEZ Management, 2025). If your organization aligns with these parameters,

you are best fitted to enjoy a cluster of talent and supplier closeness. Furthermore, your business model should leverage advantages offered in the Kaunas FEZ by virtue of its location along major thoroughfares (A1/E85 and A6/E262), opposite Kaunas Airport with train access and a number of other industrialized connections like Rail Baltica in relation to proximity to the Kaunas intermodal terminal (Kaunas FEZ Management, 2025). If logistical speed/reliability pose problems now, entering into Kaunas FEZ may be your route to direct strategy.

- **Staged entry plan.** Finally, entry as a staged effort: (1) Site/plot selection; (2) Registrations and eligibility prospective; (3) Permitting + utility staffing; (4) Pilot operations; (5) Ramp-up into full operations. The “ready-made infrastructure” of Kaunas allows for accelerated time for launch but still needs feasible timing for construction/fit-out time, personnel acquisition and onboarding, supplier integration, and ramp-up into production (Kaunas FEZ Management, 2025).

Each recommendation may serve as a litmus test within an organizational decision-making framework. Taken together, they form a practical **checklist** for pre-FEZ entry determination. These were condensed into checklist format in section 5.5 for ease of reference; companies should answer “Yes” to all or most before confirming expansion to the FEZ. However, if “No” answers abound (for example, not enough capacity, not enough people submitted—even though this was tempered through reduced options available from this analysis) then it may make sense to defer entry into the FEZ until these areas are more stabilized.

4.7 Guide: Checklist for Expanding into Kaunas FEZ

Ultimately, the findings of this study are summarized in a checklist to apply to the owner/executive team of an emerging enterprise determine if the enterprise would benefit from expansion in the Kaunas Free Economic Zone. If all can be satisfied and implemented, the company would be a good fit. If there are questions of concern in multiple areas, FEZ decision-makers should first reconcile (i.e., find more capital, hire more staff, ensure demand/stakeholder buy-in) before expanding into this special regime. The literature emphasises that zones can accelerate growth for investment-ready firms, but benefits are not automatic and depend on firm capability, compliance capacity and local conditions (Zeng, 2021; OECD, 2023; UNCTAD, 2022). Therefore, the checklist is intended as evidence-informed guidance for Kaunas FEZ and comparable manufacturing- and export-oriented zones, rather than a universal rule for all FEZs.

1. **Market validation and core sustainability:** Do you have consistent demand and a validated product?

Proceed only if your good/service has matured and you can sufficiently prove a need to increase capacity. FEZ benefits make expansion performance feasible, not an unfounded enterprise.

2. **Sustainability momentum:** Are you growing (in orders, revenue, capacity and staffing)?

FEZ benefits will be most advantageous when tax allowances and required infrastructural allowances can be turned as increased momentum (Ministry of Finance of the Republic of Lithuania, 2024).

3. **Financial capacity to support investments:** Can you substantiate the minimum required investment?

According to the Ministry of Finance of the Republic of Lithuania (2024), for many eligible investment projects in the FEZ, the standard is **≥€1 million**. If you cannot produce this amount in a reasonable timeframe, delay entry for capital accumulation efforts or acquisition.

4. **Operational clarity/staffing:** Can you staff a new operation at sustainable levels?

If your activity falls under the scope of eligible service-type avenues, the minimum requirement is **≥20 employees**(Ministry of Finance of the Republic of Lithuania, 2024). At minimum, there should be a distinct staffing plan that meets projected levels of production/services.

5. **Geographical/operational integration:** Will this operation in Kaunas be your principal value creation source?

Incentives will not be given for ancillary operations occurring in the zone. Find definitive buy-in that FEZ operations will be the majority of your revenue-producing capabilities (normally noted as **≥75%** of contribution) and that they're not simply on-paper branch operations (Ministry of Finance of the Republic of Lithuania, 2024).

6. **Profitability benefits and tax integration:** Will a tax incentive period actually matter to you?

The Lithuania FEZ framework includes a **0% corporate income tax incentive period** for approved developments, in addition to a lesser rate period after investment if conditions are met (Ministry of Finance of the Republic of Lithuania, 2024). Make sure profit timelines align with FEZ benefit timelines to render the benefit useful once profits can be established.

7. **Compliance/confirmation capacity:** Can your financial/legal systems handle this additional burden?

Be prepared for substantiation for qualifying investment and continued compliance; in some instances, investment amounts need to be substantiated through certification (Ministry of Finance of the Republic of Lithuania, 2024).

8. **Infrastructural needs:** Does Kaunas FEZ connectivity offer significantly advantageous benefits for your operation?

The Kaunas FEZ location is near major highways and the airport; this offers those requiring critical logistics solutions a great advantage (Kaunas Free Economic Zone, 2025). If shipping often or requiring inbound materials, assess it; if the operation is exclusively local/digital, it's not as crucial.

9. **Strategic application longevity:** Are you planning for the long term to make this a valuable—NOT OPTIONAL—location?

It makes more sense to apply to an FEZ if it's a long-term strategic pillar (capacity growth, talent strategy, reinvestment strategy) as opposed to a short-term one based on the FEZ's benefits alone.

If all nine questions represent desirable characteristics, then your company would be a good candidate for the FEZ expansion; the Kaunas Free Economic Zone can be a springboard for accelerated growth (preferable cost structure with tax savings incorporated), increasing regional or international competitive viability. If there are questions of concern in multiple areas, it would be best to first address these elements (i.e., secure additional capital, hire critical staff, ensure demand) before approaching FEZ advantages. This represents an applied conclusion from the research conducted and effectively answers the applied research question posed at the start of this dissertation: *under what conditions should an emerging enterprise strategically position itself in the Kaunas FEZ?*

This will avoid expansion where it should not happen prematurely and ensure that if expansion does occur in the FEZ that special regime benefits (tax benefits, benefits of infrastructure and clustering) make its expansion preemptively successful to warrant integrated benefits.

5 CONCLUSION

Ultimately, the hypothesis tested a pragmatically-minded, underrepresented research gap—when and how to enter the Kaunas FEZ as a new enterprise. This question emerged based upon the rapid expansion of the zone and increasingly competitive nature of the zone as other generalized (and unsubstantiated) taxes cuts and "business-friendly" environments suggest that more research isn't needed to understand how current FEZ members within the Kaunas FEZ are doing, but to find a data-driven beacon—one that seeks to substantiate entry means of development. Through the combination of literature regarding free economic zones with firm locational studies and regional development with findings of administrative data surrounding employment and wages, a picture emerges about what the Kaunas FEZ has to offer, whom it serves best, and what that means for smaller or newer players looking to enter (Zeng, 2021; OECD, 2023a; Sodra, n.d.).

Thematically, the findings confirmed that FEZs are not simple tax-driven havens, but complicated territorial policy tools that rely upon a mixture of conjunctural variables. The literature review revealed that while financial incentives are the most tangible incentive offered, they do not come first as the most motivating factor for investing. Instead, location fundamentals (market access, accessibility, political and regulatory effectiveness), quality of hard and soft infrastructure and agglomeration economies prove more influential in determining motivations for investor interest (Zeng, 2021; Frick & Rodríguez-Pose, 2023). Zones that act as a larger contextualized industrial platform—immediate development terrain, upgraded utilities and accessible logistics and administration—are akin to other regional opportunities (OECD, 2023a; Zeng, 2021). At the same time, findings confirmed that regional outcomes are mixed—FEZs facilitate convergence or exacerbate divergence in lagging regions; it depends upon starting conditions and policy configuration (EBRD, 2024). This was important to get a bigger perspective on the Lithuanian program—and the Kaunas FEZ as part of it.

Within Lithuania specifically, the FEZs are a typical means of creating place-based industrial policy. They have a cohesive national incentive structure, but variances at the local level (U.S. Department of State, 2024; Invest Lithuania, 2023). Findings regarding the Lithuanian FEZ system show strong mixed development results. The Kaunas FEZ and Klaipeda FEZ have become two of the more dynamical, developed FEZs with high anticipated investment volumes and employment opportunities. Other zones are smaller or restricted in

land/infrastructure needs. For example, the Kaunas FEZ and the Klaipeda FEZ remain the top, most dynamic, mature FEZs with high expected investment volumes and employment opportunities while other zones are either smaller or limited in size/infrastructure abilities (Invest Lithuania, 2023). Overall, national assessments found the FEZs to be nationally positive for investment and high-quality jobs but strategically, underdeveloped land, limited amounts for high-tech specialization and comprehensive goals fail (Valstybės kontrolė, 2023). The Kaunas FEZ is one of the more developed/growing FEZs—it has great infrastructure, multimodal options, and a distinct sectorial profile of high-value manufacturing and logistics—which makes it a good testing ground for prospective/new ventures' opportunities/constraints (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024; Kaunas IN, 2024).

However, the micro-analysis revealed that such benefits are not gained across the board by all firms, as well as that, legal thresholds and incentive programs heavily impact the zone configuration. A small group of large, foreign-owned manufacturers—mostly automotive electronics and medical devices—drive a majority of employment and salaries (Sodra, n.d.). These "anchor" investors have grown their employment levels at fantastically high compounded growth rates and almost always pay salaries above the FEZ average. By 2024, they accounted for almost a third of the FEZ's employment and, together with the other larger investors (100+ employees), accounted for almost 90% of employment (Sodra, n.d.). Conversely, micro-enterprises (under 20 employees) were few and far between and only represented a tiny portion of employment (Sodra, n.d.). Such a distribution of firm size aligns with legal thresholds for FEZ incentives as they require real capital investments and a service offering for 20 employees to get the maximum percent reduction of taxes (Ministry of Finance of the Republic of Lithuania, n.d.; EY, 2025; PricewaterhouseCoopers, 2025).

In regard to the research questions, the responses are fairly straightforward with respect to the findings. For RQ1—do enterprises in Kaunas FEZ enjoy a performance premium—the data suggest a validated hypothesis. Enterprises in the zone—especially large and foreign enterprises—enjoy more expedited employment creation and wage generation than otherwise predicted by generalized patterns in the Lithuanian economy (Sodra, n.d.; Kaunas IN, 2024). The zone is not creating jobs, it's creating better paid, better quality jobs at more high-quality levels. This suggests that for enterprises that can afford entry and maintenance or compliance

with minimum standards, being a part of the FEZ is a tangible performance premium (Zeng, 2021; OECD, 2023a).

For RQ2—does participation/integration into the local & zone ecosystem create a value-added incentive for firm success—this is where the data suggest a more nuanced but ultimately supported response. There were few quantitatively observable indicators of "integration" (for example, these enterprises are sub-suppliers, etc.); but other means of data indicate that tenure in the zone, membership in sectors that best represent the zone's overarching clusters, and advancement into foreign investment promotion indicate that established and sector-linked enterprises flourish quickly (Sodra, n.d.). The zone anchor manufacturers are exclusively found in locations determined by the national FEZ strategy and the FEZ-created service (Kaunas IN, 2024; Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024). Yet these enterprises are not only flourishing quickly but also exercising their power of labor-preferential choice—indicating a direction for FEZ dynamics—which subsequently supports more service and supply endeavors in the region (Kaunas IN, 2024). Such anecdotal indirect data is corroborated by the agglomeration and clustering literature: over time, as more complementary enterprises and advanced workers move into the zone, it becomes an increasingly self-sufficient industrial ecosystem (Frick & Rodríguez-Pose, 2023; OECD, 2023a). Thus, for a nascent enterprise, this suggests that it's more beneficial when an enterprise can latch onto these clusters—a specialized manufacturer or supporting service or compatible sub-supplier—(OECD, 2023b)—as demand becomes stronger from within the cluster itself.

RQ3 determined which variables are significant for nascent enterprises to gain and sustain FEZ advantages by controlling entry. Here, the data assessed a stringent regime. Employment distributions indicate that most enterprises in the FEZ that are established are far beyond the 20-employee minimum requirement and requisite investment per enterprise is matched with or exceeding expectations for a €1 million threshold (Sodra, n.d.; Ministry of Finance of the Republic of Lithuania, n.d.). The fact that most small enterprises account for small sums of employment indicate that self-selection is observed within FEZ participation; either micro and infant enterprises do not enter the FEZ or they wait until they are certain they can sustain the required proportions before applying (Sodra, n.d.). Thus, employment distribution range minimums for qualifying entry versus results achieved are aligned with validated hypothesis results and support an expanded development potential link to size of growth (OECD, 2024;

Zeng, 2021). Enterprises that are able to cross this threshold and sustain it maintain higher rates of growth over time; enterprises that can not are either not present or so marginal that they provide no representation for any aspect of the FEZ as a whole (Sodra, n.d.).

Thus, based on these findings, strategic recommendations and a practical checklist emerge for newer firms assessing entry into the FEZ. These standards support that the Kaunas FEZ is optimum for those firms already in expansion or on the brink of expansion—rather than still testing waters for a viable business model (OECD, 2024; OECD, 2023a). The conditions for successful entry include a demand or supply expected certainty in or out of the FEZ; a pragmatic approach to when investment can occur within the minimum required parameters or feasibility for exemption; an interest in expanding an internal team (minimum twenty employees and up) to manage them down the road; an interest and possibility of localization for most value-generating activities within the zone; and a viable development and profitability stream, meaning corporate tax exemption would apply (Ministry of Finance of the Republic of Lithuania, n.d.; EY, 2025). In addition, proximity and industry needs—suburban Kaunas FEZ has certain logistics and high-value production benefits—mean proximity needs during entry justify the minimum time held in the FEZ (OECD, 2023a; U.S. Department of State, 2024). Overall, entry should be seen as a long-term strategic goal with the funding and strategic foresight to match rather than speculative interest or quick raise of taxes (Zeng, 2021; OECD, 2024).

The implications of such findings extend to both firms and policy makers. For Lithuanian and Kaunas FEZ policy-makers, the findings suggest that the underlying policy logic of the zone based upon subsidization so long as performance incentives are data-driven and assigned to larger exporters is overall beneficial for high quality growth (Lietuvos Respublikos ekonomikos ir inovacijų ministerija, 2024; Valstybės kontrolė, 2023). However, it also implies that this logic per se may be at odds with a desire to support new ventures and increased SME participation. If a greater number of smaller units can benefit from the cheaper FEZ status and present spillovers, there may be an increased desire for this to occur. Therefore, additional bridging tools may be needed to expand upon the current regime—e.g. transitional gap incentive programs for SMEs who have not yet reached all minimums, supplier development efforts, dedicated areas for scale-ups or specialized program access. Increased institutional coordination between FEZ management and national investment promotion agencies and innovation agents would also better translate new venture

receptiveness (OECD, 2023b; OECD, 2023a). Internationally, developments reinforce the sense of incentive logic from a net-benefit angle and more transparent performance-based metrics (OECD, 2023a; Ndubai-Ngigi & Readhead, 2024).

Like all case studies, however, this one has its limitations. It takes one relatively successful FEZ in one relatively successful context from a national and regional standpoint; generalizability of findings to any other zones with differencing logic or institutional arrangements or development success should be approached with caution (Zeng, 2021; OECD, 2023a). It analyzes secondary quantitative data in depth. While reliable employment figures and salary stats are available for triangulation, qualitative aspects related to strategic development, networking engagement or innovative thinking from within the zone cannot be nuanced (Sodra, n.d.). Ideally, qualitative survey or interview responses from new enterprises and zone management and policymakers would add rich nuance for how firms perceive FEZ dynamics—as opportunities versus constraints. Integrated participation in clusters is reduced to proxy measures that may not appropriately reflect reality (OECD, 2023b).

These limitations yield further research opportunities. Beyond this one FEZ, comparative case studies can be rendered to multiple FEZs whether based in Lithuania or internationally to ascertain regional dynamics based on design and governance from the microenterprise perspective (Zeng, 2021; EBRD, 2024). Firm-level qualitative inquiry—integration with SMEs interested in entering the zone—could unearth more nuanced dynamics that lead to a decision-making process versus risk and informal supports not available from purely quantitative means (OECD, 2023a). Time series beyond 2024 would also allow researchers to engage with Kaunas FEZ through varied economic booms and busts (EBRD, 2024). Finally, more research should seek to evaluate territorial impacts in general—how far spillover effects reach into surrounding municipalities, how urbanization efforts play off housing trends and what inevitable equity considerations are worthwhile for all workers and firms involved (EBRD, 2024; OECD, 2023a).

However, regardless of these limitations, this thesis contributes in two major ways. First, empirically, it champions a comprehensive, data-based composition of the Kaunas FEZ of years in question over recent years that notes disparate positions taken by different firm types and the tangible operational size of the benefits. Second, practically, it FEZs the effort into a structural possibility for emerging firms—an outlet through which emerging firms' decision-makers can gauge their firm dynamics and intentions and speculate upon appropriate FEZ

potential preparations and planning inclusion (OECD, 2024; OECD, 2023a). This facilitates a better connection between macro-level FEZ policymaking and micro-level FEZ experiences as a challenging but opportunity-laden experience for those who dare venture into its territory. Therefore, better data-represented positions can be taken by both FEZ policymakers and FEZ firms.

Ultimately, the Kaunas Free Economic Zone is a highly successful means of enhancing previously established trajectories if the proper conditions exist and companies are willing to participate. It's not a straightforward or quick solution; instead, it's a time-consuming path with many required steps only worth it for those who can successfully go through the steps. For these companies—like the ones discovered through the Kaunas FEZ thesis—the FEZ provided accelerated development, increased competitiveness and expanded value chain engagement (OECD, 2023b; Zeng, 2021). For those without adequate capital, established markets, and operational abilities, the entrance to the FEZ is premature (OECD, 2024; Zeng, 2021). Thus, through emphasizing this distinction and presenting means of visualizing it through the emerged essentials of practical success and feasibility assessment, this thesis aims to secure better strategic choices from emerging firms and more defined policies from public officials. Should both sides operate with these data-supported viewpoints, the Kaunas FEZ model—and FEZs in general—stand a better chance of not just presenting impressive project statistics afterwards but also securing sustainable, inclusive regional development (EBRD, 2024; OECD, 2023a).

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