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Financial and Operational Impacts of Regulatory Compliance on the Austrian Securities Industry

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Abstract

Regulatory compliance in the Austrian securities sector imposes fixed costs that affect market participants asymmetrically. Larger firms can absorb these burdens more efficiently through economies of scale, whereas smaller providers operate with tighter margins and face higher relative cost ratios. This study models profit as a function of revenue, operational costs, and regulatory burdens, including mandatory contributions to the Austrian Financial Market Authority and the Austrian Economic Chamber, administrative procedures, information technology systems, external consultancy, and expected sanctions. Empirical support is based on survey data from 53 licensed financial service providers and three expert assessments conducted in 2024 and 2025. Smaller firms report significantly higher compliance burdens in proportion to their revenue and indicate that administrative pressure influences their market participation. Many respondents allocate a substantial share of working time to regulatory tasks, indicating considerable operational strain. The imbalance between regulatory design and firm size contributes to market consolidation and a decline in provider diversity. Feedback highlights excessive documentation, procedural duplication, and limited responsiveness from supervisory institutions. International comparisons demonstrate the feasibility of proportional regulatory models and thresholds for small and medium-sized enterprises. The integration of quantitative modelling and empirical evidence provides a structured basis for assessing compliance costs and supports policy reforms focused on proportionality, administrative simplification, and effective supervision.

Keywords: Regulatory Burden, Supervisory Costs, Austrian Financial Market, SME Compliance, Cost Modelling, Market Exit, Proportionality

1 Introduction

The Austrian securities industry plays a crucial role in the national financial market but faces increasing challenges due to a complex and evolving regulatory framework. European and national regulations, such as the EU Markets in Financial Instruments Directive (MiFID II) and the European Market Infrastructure Regulation (EMIR), aim to enhance transparency, stability, and investor protection. These regulations impose significant administrative and financial burdens on market participants. This is particularly true for small and medium-sized enterprises (SMEs), which may lack the resources to absorb these costs without compromising their competitiveness. In recent years, these challenges have intensified. Historical data indicates that the number of securities service providers in Austria is declining, while the average number of employees has increased. These trends suggest growing consolidation, with small and medium-sized enterprises (SMEs) being particularly affected and increasingly marginalised from the market [15, 20]. Based on the 2023 annual FMA report [16], the FMA oversees a diverse range of financial institutions, including 479 credit and payment institutions, 74 insurance companies, 25 EWR insurers (insurance companies from the European Economic Area operating in Austria), 6 associations for asset management and private foundations, 94 asset managers, and 107 securities service providers. The total number of supervised entities has decreased from 882 in 2019 to 785 in 2023, reflecting an ongoing consolidation trend in the market, representing a decline of approximately 11%, while the overall market volume has remained stable or increased across key sectors. The following list illustrates the extensive regulatory landscape in the EU, which imposes significant costs on companies operating in this jurisdiction. The continuous addition of regulations by various authorities—without coordination or consideration of the cumulative burden—contributes to operational

inefficiencies and economic disincentives. This trend has prompted some companies to reconsider their presence in the EU market. The companies overseen by the FMA have to, depending on their specific focus, follow several fundamental regulations that shape their operations and compliance duties. These include the Austrian Banking Act (Bankwesengesetz, BWG) [49], the Securities Supervision Act (Wertpapieraufsichtsgesetz, WAG 2018) [33], and the Payment Services Act (Zahlungsdienstegesetz, ZaDiG 2018) [59]. Anti-money laundering requirements are governed by the Financial Market Anti-Money Laundering Act (Finanzmarkt-Geldwäschegesetz, FM-GwG) [51]. For insurance providers, the Insurance Supervision Act (Versicherungsaufsichtsgesetz, VAG) implements the Solvency II Directive [57]. Pension funds must comply with the Pension Fund Act (Pensionskassengesetz, PKG) [48], and corporate pension schemes are regulated under the Corporate Provision Fund Act (Betriebliche Vorsorgekassengesetz, BVK-G) [52]. Companies managing investment funds must comply with the Investment Fund Act (Investmentfondsgesetz, InvFG 2011) [53] and the Alternative Investment Fund Manager Act (Alternatives Investmentfonds Manager-Gesetz, AIFMG) [54]. European regulations, such as the EU Markets in Financial Instruments Directive (MiFID II) [8], the European Market Infrastructure Regulation (EMIR) [24], and the General Data Protection Regulation (Datenschutz-Grundverordnung, GDPR) [39], impose additional compliance requirements. Deposit protection and investor compensation are governed by the Deposit Guarantee and Investor Compensation Act (Einlagensicherungs- und Anlegerentschädigungsgesetz, ESAEG) [56]. The Bank Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, BaSAG) [55] specifies recovery and resolution requirements for failing banks. Sustainability-related regulations, such as the Sustainable Finance Disclosure Regulation (SFDR) [25], the EU Taxonomy Regulation [28], and the Climate Benchmarks Regulation (Verordnung zu klimabezogenen Referenzwerten) [27], expand reporting and transparency obligations for financial institutions. The Corporate Sustainability Reporting Directive (CSRD) [29] further requires detailed disclosure on environmental, social, and governance factors. To elucidate the comprehensive regulatory pressure on companies, it is imperative to note that, in addition to financial market-specific regulations, many companies must comply with all or at least with certain fundamental corporate legal frameworks that govern their overall operations. Corporate governance and financial reporting obligations are delineated under the Austrian Commercial Code (UGB) [23], the Stock Corporation Act (AktG) [45], and the Limited Liability Company Act (GmbHG) [43]. Labour and employee-related regulations encompass the Austrian Labour Relations Act (ArbVG) [47], working hour regulations under the Working Time Act (AZG) [46], and occupational health and safety rules stipulated in the Health and Safety at Work Act (ASchG) [50]. Companies must also comply with tax regulations under the Austrian Fiscal Code (BAO) [44] and fulfil internal anti-money laundering (AML) obligations as defined by the Financial Market Anti-Money Laundering Act (FM-GwG) [51]. These internal obligations include the establishment of comprehensive AML policies, employee training, and the appointment of a compliance officer to oversee adherence to AML requirements. In contrast to client-focused obligations—such as customer due diligence, transaction monitoring, and reporting of suspicious activities to authorities—internal AML obligations ensure that the company itself implements robust processes to prevent being exploited as a conduit for illegal activities. Many professions must comply with licensing and conduct regulations under the Trade Regulation Act (Gewerbeordnung, GewO) [32], which establishes the legal framework for professional standards and operational requirements. Consumer and investor protection regulations establish further transparency requirements under the Conduct Rules for Securities Service Providers (WpD-V) [58], while the EU Whistleblower Protection Directive [26] mandates internal reporting mechanisms for regulatory breaches. The Austrian Corporate Governance Code (OCGK) [60] sets additional governance standards for listed companies. These regulations are exemplary rather than exhaustive and illustrate the intensity of legal and procedural obligations imposed on participants in the securities industry. While regulatory objectives—such as market integrity, financial stability, and investor protection—remain central, the operational burden on supervised entities continues to increase due to cumulative and overlapping requirements. New frameworks are often introduced without simplification or withdrawal of previous rules, leading to significant administrative duplication. This legal density imposes high compliance costs and reduces the attractiveness of the European Union as a competitive financial jurisdiction. Smaller and medium-sized companies, in particular, lack the structural and financial buffers necessary to absorb fixed supervisory fees and procedural requirements, resulting in reduced profitability, strategic relocation, or market exit. These developments undermine economic diversity and innovation, and they may ultimately impair the resilience of decentralised market structures. Industry reports identify core cost drivers, such as compulsory contributions to the Austrian Financial Market Authority and the Austrian Economic Chamber, as well as expenses for external consultancy, digital infrastructure, and internal compliance governance. The cumulative nature of these costs justifies an analytical assessment of their impact on profitability. To express this burden in economic terms, the following model calculates profit as a function of regular operational

performance reduced by regulatory and administrative costs, including potential penalty exposure:

$$P = \left[\underbrace{R - (C_v + C_f)}_{\text{Net Margin}}\right] - \left\{\underbrace{\left(C_r + C_{\text{AeW}} + C_a + C_f^{\text{reg}}\right)}_{\text{Regulatory Costs}} + \underbrace{\left(C_{\text{penalty}}\right)}_{\text{Possible Penalty}}\right\}$$
(1)

Here, P represents profit, R (revenue) is the total income from regular business activities, and $(C_v + C_f)$ represents the variable (C_v) and fixed (C_f) costs associated with those activities. The term $(R - (C_v + C_f))$ defines the net margin before regulatory and penalty-related costs. The regulatory cost component $(C_r + C_{AeW} + C_a + C_f^{reg})$ highlights the regulatory contributions C_r , the allocations to the Investor Compensation Scheme C_{AeW} , administrative costs C_a , and fixed regulatory costs C_f^{reg} . These include expenses for compliance personnel, training, and reporting systems. The general penalty-related cost C_{penalty} represents the expected financial impact of penalties. This general term encompasses both the statistical likelihood of potential penalties and the amounts associated with regulatory breaches. Regulatory contributions C_r include fixed and revenue-based levies imposed by national authorities, such as contributions to the Financial Market Authority (Finanzmarktaufsicht, FMA) and allocations for the Investor Compensation Scheme (Anlegerentschädigungseinrichtung, AeW). Administrative costs C_a arise from expenditures on internal compliance departments, IT systems required for regulatory reporting, and external consultancy services for specialised legal and regulatory advice. Fixed regulatory costs C_f^{reg} also encompass personnel expenses associated with hiring, training, and continuous professional development of compliance officers and other qualified staff, whose higher compensation reflects their specialised qualifications and the competitive market for regulatory expertise. The Austrian Commercial Code (Unternehmensgesetzbuch, UGB) [23] specifies that provisions for potential liabilities are recognised when an obligation is probable and the amount can be reliably estimated. In the complex regulatory environment faced by securities service providers, insurance intermediaries, and financial advisers, the risk of fines due to unintentional non-compliance is significant, even in the absence of fraudulent intent. Regulations such as the Financial Market Anti-Money Laundering Act (Finanzmarkt-Geldwäschegesetz, FM-GwG) [51] and the Securities Supervision Act (Wertpapieraufsichtsgesetz, WAG 2018) [33] impose extensive reporting, due diligence, and documentation obligations, increasing the likelihood of procedural errors. As a precaution, companies may set up provisions for regulatory fines as part of their financial planning and risk management strategies. These provisions reduce the profit reported for the period, even though no immediate cash outflow occurs, reflecting an anticipatory approach to regulatory compliance costs. Given the increasing complexity of the regulatory landscape, one could argue that provisions for expected fines due to procedural errors may become mandatory for highrisk financial service sectors. Such a requirement could place an additional financial burden on small and medium-sized enterprises (SMEs), further challenging their profitability and competitiveness. These provisions reduce the profit reported for the period, even though no immediate cash outflow occurs, reflecting an anticipatory approach to regulatory compliance costs. Given the increasing complexity of the regulatory landscape, one could argue that provisions for expected fines due to procedural errors may become mandatory for high-risk financial service sectors. Such a requirement could place an additional financial burden on small and medium-sized enterprises (SMEs), further challenging their profitability and competitiveness.

2 Related Research and Study Objectives

Related Work: Prior research on the financial burden of regulatory requirements has predominantly focused on larger enterprises. The FMA Annual Report (2023) analysed the regulatory landscape for Austrian banks, discussing the overall stability and resilience of the financial sector. The report paid little attention to the specific challenges faced by smaller financial institutions [16]. LexisNexis Risk Solutions (2024) provided general assessments of compliance costs and the impact of penalties but did not address the unique characteristics of Austrian financial market regulation or its effect on market structure [38]. The European Commission (2022) provided an updated assessment of tax compliance costs for SMEs across the EU, noting that smaller enterprises are burdened with relatively larger compliance costs. This analysis does not include cross-country comparisons that consider Austrian financial regulations [4]. The study by Gelter and Pucher (2016) offers a detailed examination of securities litigation and enforcement in Austria, addressing the impact of disclosure obligations and the enforcement role of the FMA [21].

Research Gap: Existing studies have identified the increasing complexity of regulatory requirements and their financial burdens, with overlapping reporting obligations, heightened due diligence, and compliance-related expenses. While these works highlight the cost-effort imbalance for financial service providers, there is limited research examining the direct relationship between regulatory contributions, administrative

expenditures, and potential penalties in the Austrian securities market. This gap is particularly relevant for small and medium-sized enterprises (SMEs), which face a higher relative burden due to limited resources.

Study Objectives and Contribution: This study builds on existing research by offering a detailed analysis of regulatory costs and penalties for securities service providers in Austria. Unlike previous works, it focuses on SMEs, which bear a disproportionate regulatory burden due to limited resources. This study incorporates an international comparison of regulatory models to identify potential optimisation strategies. The primary contribution of this work is a quantitative model of regulatory cost burdens and their impact on market structure, particularly regarding consolidation trends. The study evaluates international best practices and their applicability to Austria, proposing practical solutions for reducing costs while maintaining regulatory compliance.

3 Research

3.1 Regulatory Compliance Cost Composition in Austria

The financial impact experienced by businesses, particularly smaller ones, can be analysed through a systematic examination of profit and cost structures. The core equation, shown in Equation 2, provides a high-level overview of the relationship between revenue, operational expenses, and additional costs:

$$P = \left[R - \left(C_v + C_f\right)\right] - \left[C_{\text{add}}\right]$$
⁽²⁾

Here, P represents profit, R (Revenue) is the total revenue from regular business activities, and $(C_v + C_f)$ accounts for the variable (C_v) and fixed (C_d) costs. The term C_{add} represents the additional costs that go beyond regular operational expenses, encompassing regulatory obligations, administrative costs, and penalties. To further break down C_{add} , the detailed components are outlined in Equation 3:

$$C_{\text{add}} = \left(C_r + C_{\text{AeW}} + C_a + C_f + C_{\text{IT}} + C_{\text{personnel}} + C_{\text{consultancy}}\right) + \left(C_{\text{penalty}}\right)$$
(3)

Here, C_r denotes regulatory contributions, including fixed and revenue-based levies to the Financial Market Authority (Finanzmarktaufsicht, FMA). C_{AeW} captures costs arising from contributions to the Investor Compensation Scheme (Anlegerentschädigungseinrichtung, AeW), which are calculated based on company revenue and the number of relevant business units. C_a refers to administrative costs incurred for compliance systems and processes. C_f represents fixed operational costs such as rents, which are incurred regardless of company size. The term C_{penalty} represents possible penalties that companies may face as a result of regulatory breaches. Personnel expenses $C_{\text{personnel}}$ include costs associated with hiring, salaries, training, and continuous professional development for compliance officers and other qualified staff, reflecting the market's demand for specialised regulatory expertise. IT expenses C_{IT} arise to meet technical requirements for reporting obligations and regulatory updates, while consultancy services $C_{\text{consultancy}}$ provide external expertise for navigating complex compliance challenges. Smaller businesses are disproportionately affected due to constrained contribution margins and higher relative fixed costs, leaving them more vulnerable to financial strain.

FMA Contributions: Regulatory contributions to the Finanzmarktaufsicht (FMA, Financial Market Authority) constitute a central component of the additional costs borne by securities service providers and other affected companies. These contributions consist of fixed fees and revenue-based variable levies, which are collected annually. They are regulated by the Finanzmarktaufsichtsgesetz (FMAG, Financial Market Authority Act) [34]. The formula below summarises the total regulatory contribution costs as the sum of fixed fees and revenue-based variable levies:

$$C_r = C_{\rm fix} + C_{\rm var} \tag{4}$$

Here, C_r represents the total regulatory contribution costs, C_{fix} the fixed fees charged regardless of revenue, and C_{var} the revenue-based variable levies. The variable portion of the contributions is calculated based on the reported annual revenue of the respective company. The exact calculation modalities and contribution rates are defined in the FMAG and are adjusted annually [34]. The amount of regulatory contributions varies depending on company size and revenue. According to the FMA Fee Regulation 2016, the annual fee for securities service providers comprises a fixed amount and a variable portion calculated proportionally to annual revenue [14] and can be expressed as:

$$C_{\rm var} = a \cdot R \tag{5}$$

Here, C_{var} represents the variable fees, a is the contribution rate determined annually, and R represents the reported annual revenue of the company. Smaller companies with lower revenues pay a relatively higher proportion of their revenue as variable fees since the fixed contributions are levied independently of the company's earnings situation. Example: Assuming the contribution rate a is 0.005 (0.5%), as specified in the FMA Fee Regulation [17], a company with an annual revenue of \pounds 1,000,000 pays a variable fee of:

$$C_{\rm var} = 0.005 \cdot 1,000,000 = \pounds 5,000 \tag{6}$$

For a smaller company with an annual revenue of €100,000, the fee is:

$$C_{\rm var} = 0.005 \cdot 100,000 = \text{C}500\tag{7}$$

The fixed costs C_{fix} remain the same for both companies, which results in smaller companies being proportionally more burdened.

Allocations to the Investor Compensation Scheme (AeW): These allocations represent a significant cost component for credit institutions that provide deposit and investment protection services. They are calculated based on the number of members and the revenue of the respective institutions and are used to fund the statutory compensation scheme. The Austrian investor compensation scheme is governed by the Federal Act on Deposit Guarantee Schemes and Investor Compensation in Credit Institutions (Einlagensicherungsund Anlegerentschädigungsgesetz, ESAEG) [56]. Credit institutions are legally obligated to contribute to the scheme as a condition of their licence to operate. The contributions are administered by the Einlagensicherung AUSTRIA Ges.m.b.H. (ESA), the statutory guarantee facility responsible for managing these funds [6]. Wertpapierdienstleistungsunternehmen (WPDLU) are not subject to this obligation and must inform clients accordingly pursuant to §57 ESAEG [56]. For institutions covered by the scheme, the allocation burden can be expressed as:

$$C_{\text{AeW}} = b \cdot R + c \cdot N \tag{8}$$

Here, C_{AeW} represents the total allocation costs. The first term $b \cdot R$ denotes the revenue-based contribution, where b is the contribution rate and R is the reported annual revenue. The second term $c \cdot N$ reflects department-related contributions, where c is a fixed amount per unit and N is the number of employees or relevant business units.

Here, C_{AeW} represents the total allocation costs. The first term $b \cdot R$ represents the revenue-based contribution, where b is the contribution rate and R is the reported annual revenue of the company. The second term $c \cdot N$ represents the department-related contributions, where c is a fixed contribution per unit and N is the number of employees or relevant business units.

Example: Assuming the contribution rate b is 0.01 (1%) and c is \bigcirc 500 per unit, a company with an annual revenue of \bigcirc 2,000,000 and 10 units pays:

$$C_{\text{AeW}} = 0.01 \cdot 2,000,000 + 500 \cdot 10 = 20,000 + 5,000 = \text{C}25,000$$

These allocations can be a significant burden, especially for smaller companies, as the contributions are levied regardless of profitability. The exact contribution rates and regulations are specified in the AeW guidelines [56].

Compliance Costs: These represent a significant burden for securities service providers as they require extensive measures to meet regulatory requirements. These costs include internal expenses for establishing and maintaining compliance systems, regular training, audits, and documentation of processes [33, 51].

$$C_{\text{Compliance}} = C_{\text{System}} + C_{\text{Training}} + C_{\text{Audit}} + C_{\text{Documentation}}$$
(9)

Here, $C_{\text{Compliance}}$ represents the total costs for compliance measures. The first term C_{System} includes costs for setting up and maintaining compliance systems, including IT-based platforms for monitoring transactions and risks. C_{Training} represents expenditures on regular training programs required for staff to understand and implement regulatory changes. The third term C_{Audit} covers expenses for internal and external audits to ensure compliance with regulatory requirements. Finally, $C_{\text{Documentation}}$ accounts for the costs of creating and maintaining extensive documentation as required by supervisory authorities.

Example: A medium-sized company spends €50,000 annually on compliance systems, invests €10,000 in training, €15,000 in audits, and €25,000 in documentation. The total costs amount to:

$$C_{\text{Compliance}} = 50,000 + 10,000 + 15,000 + 25,000 = \pounds 100,000 \tag{10}$$

These compliance costs are regulated under laws such as the Wertpapieraufsichtsgesetz (WAG 2018, Securities Supervision Act) and the Finanzmarkt-Geldwäschegesetz (FM-GwG, Financial Market Anti-Money Laundering Act) [33, 51].

Personnel Costs: These costs constitute a substantial component of regulatory compliance expenses for securities service providers and other financial institutions. Compliance laws, such as the Securities Supervision Act (Wertpapieraufsichtsgesetz, WAG 2018) [33] and the Financial Market Anti-Money Laundering Act (Finanzmarkt-Geldwäschegesetz, FM-GwG) [51], mandate that companies appoint a qualified compliance officer responsible for ensuring adherence to regulatory requirements. This position requires specialised expertise, necessitating a significant investment in recruitment, salaries, training, and ongoing professional development. Personnel costs $C_{\text{personnel}}$ can be expressed as:

$$C_{\text{personnel}} = C_{\text{recruitment}} + C_{\text{brutto}} + \lambda \cdot C_{\text{rehire}}$$
(11)

where $C_{\text{recruitment}}$ represents the costs associated with recruitment, including job advertisements, headhunting fees, and onboarding processes. $C_{\rm brutto}$ denotes the gross monthly salary of the compliance officer, while $\lambda \cdot C_{\text{rehire}}$ accounts for potential re-hiring costs due to turnover or misaligned hires, where λ represents the probability of a re-hiring event and C_{rehire} reflects the expenses incurred during the re-hiring process. Recruitment expenses $C_{\text{recruitment}}$ include costs for publishing job advertisements, using recruitment agencies, and conducting interviews. For high-level compliance roles, companies may engage headhunting firms, which typically charge a percentage of the annual salary. This makes recruitment for such roles significantly more expensive than standard hiring processes. The gross salary C_{brutto} of a compliance officer in Austria typically ranges between \pounds 4,500 and \pounds 6,500 per month, depending on experience, qualifications, and company size [18, 35]. In addition to the gross salary, companies incur additional costs for mandatory social security contributions, insurance payments, and employee benefits. These employer contributions generally range from 21% to 23% of the gross salary, as specified by Austrian regulations |40, 31|. These additional costs include pension insurance at 12.55% of the gross salary, health insurance contributions of 3.78%, unemployment insurance contributions of 3%, and accident insurance costs of approximately 1.1%. Depending on company policy, supplementary benefits such as private pension plans and extended health insurance may further increase personnel expenses. The total additional costs can range from 20% to 30% of the gross salary, depending on benefit structures and legal agreements. The total monthly personnel cost $C_{\text{total monthly}}$ can be calculated as:

$$C_{\text{total_monthly}} = C_{\text{brutto}} + \alpha \cdot C_{\text{brutto}} \tag{12}$$

where $C_{\text{total_monthly}}$ represents the total monthly cost, and α is the overhead rate (typically 0.2 to 0.3). For example, assuming a compliance officer earns a gross monthly salary of $\mathfrak{C}5,500$ and the overhead rate is 25% ($\alpha = 0.25$):

$$C_{\text{total}_\text{monthly}} = 5,500 + 0.25 \cdot 5,500 = \text{€}6,875$$
(13)

This calculation illustrates that the total personnel cost significantly exceeds the gross salary due to mandatory employer obligations. These costs represent a substantial financial burden, particularly for small and medium-sized enterprises (SMEs), where compliance-related personnel expenses account for a larger proportion of operational costs. The risk of hiring an unsuitable candidate necessitates re-hiring, often incurring additional costs equivalent to up to three months' salary when using headhunting services. This cost can be modelled as:

$$C_{\text{rehire}} = \delta \cdot 3 \cdot C_{\text{brutto}} \tag{14}$$

where δ is a binary variable (0 or 1) representing whether headhunting services are used. When $\delta = 0$, rehiring costs are zero, but if external headhunting is needed, the costs increase significantly. The total annual personnel costs can be summarised as:

$$C_{\text{annual}_{\text{personnel}}} = 12 \cdot C_{\text{total}_{\text{monthly}}} + C_{\text{recruitment}} + \lambda \cdot C_{\text{rehire}}$$
(15)

This equation reflects the full annual burden, including recruitment, salaries, overheads, and potential re-hiring expenses. Given the complexity of compliance regulations, companies often face elevated personnel costs due to the need for continuous training, certification updates, and specialised qualifications required to manage regulatory frameworks such as MiFID II [8] and GDPR [39].

IT Costs: IT costs represent a significant burden for securities service providers arising from regulatory requirements. These costs include the acquisition and maintenance of specialised IT systems as well as the adaptation of existing systems to meet new legal requirements. Substantial expenses are incurred for implementation and staff training to ensure effective use of these systems [33, 51].

$$C_{\rm IT} = C_{\rm Acquisition} + C_{\rm Maintenance} + C_{\rm Adaptation} + C_{\rm Training}$$
(16)

Here, C_{IT} represents the total costs arising from regulatory IT requirements. The first term $C_{\text{Acquisition}}$ includes the costs of introducing new software solutions, such as systems for transaction monitoring, compliance management, or reporting. $C_{\text{Maintenance}}$ covers ongoing expenses like license fees and technical support. $C_{\text{Adaptation}}$ represents expenditures for updating existing systems to ensure compatibility with new regulatory requirements. Finally, C_{Training} accounts for the costs of employee training to effectively use the new or updated IT infrastructure.

Example: A company invests $\pounds 100,000$ in acquiring new compliance management software, spends $\pounds 20,000$ annually on its maintenance, and requires $\pounds 15,000$ for adaptations to meet specific requirements of the FMA. Training for staff costs $\pounds 10,000$. The total costs amount to:

$$C_{\rm IT} = 100,000 + 20,000 + 15,000 + 10,000 = \pounds 145,000 \tag{17}$$

These IT costs are directly derived from legal requirements, as specified in the WAG 2018 and FM-GwG, and represent a significant financial burden, particularly for smaller companies [33, 51].

External Consultancy Costs: External consultancy costs arise from engaging professionals to assist companies in implementing and complying with regulatory requirements. These costs encompass advice in both legal and operational areas, such as implementing new regulations or adapting business processes to current legal standards. Particularly in the context of complex regulations like MiFID II or the General Data Protection Regulation (GDPR), companies often rely on external expertise [8, 39]. The need for external consultancy poses a significant challenge, especially for smaller companies. While large companies often have in-house legal departments and compliance teams, smaller businesses usually need to hire external consultants, which increases their operating costs. These additional costs disproportionately burden smaller entities, as their smaller size and limited resources make them more reliant on external support. Compared to larger companies that benefit from economies of scale in consultancy fees, smaller businesses often experience a higher share of consultancy costs relative to revenue.

$$C_{\text{Consultancy}} = C_{\text{Legal}} + C_{\text{IT Consultancy}} + C_{\text{Compliance Consultancy}}$$
(18)

Here, $C_{\text{Consultancy}}$ represents the total external consultancy costs. The first term C_{Legal} includes expenses for legal advice to ensure compliance with statutory regulations. $C_{\text{IT Consultancy}}$ refers to consultancy costs related to IT systems, particularly for implementing compliance software and adapting it to regulatory requirements. The third term $C_{\text{Compliance Consultancy}}$ covers expenditures for external consultants who support companies in developing and implementing internal compliance strategies.

Example: A company requires external legal consultancy costing C30,000, IT consultancy costs of C20,000, and compliance consultancy costs of C15,000. The total costs amount to:

$$C_{\text{Consultancy}} = 30,000 + 20,000 + 15,000 = \text{C}65,000 \tag{19}$$

External consultancy costs are particularly burdensome for smaller companies, as they often rely more heavily on external consultants compared to larger firms with in-house departments for these tasks [8, 39].

Fixed Costs: Fixed costs represent the general, recurring expenses incurred by a company, independent of production or revenue. Regarding regulatory requirements, fixed costs particularly include expenditures associated with compliance with statutory regulations. These encompass costs for implementing and maintaining

internal control systems, ensuring documentation of compliance measures, personnel costs for compliance and risk management departments, and general administrative costs that are elevated due to regulatory adherence [33, 51]. Companies often need to allocate additional resources to meet the legally required compliance standards. These resources include personnel costs for compliance managers, dedicated risk management departments, and general administrative expenses such as IT infrastructure necessary for fulfilling regulatory requirements. Smaller companies, lacking the resources of larger firms, frequently need to seek external support, which further increases fixed costs.

$$C_{\rm Fix} = C_{\rm Compliance} + C_{\rm Risk\ Management} + C_{\rm IT} + C_{\rm Administration}$$
(20)

Here, C_{Fix} represents the total fixed costs arising from regulatory requirements. The first term $C_{\text{Compliance}}$ includes fixed costs for compliance monitoring systems and their ongoing maintenance. C_{Risk} Management covers costs for departments specifically tasked with adhering to risk management standards. The third term C_{IT} encompasses IT infrastructure and systems necessary to ensure compliance and regular reporting. Finally, $C_{\text{Administration}}$ describes general administrative costs arising from the need to document and oversee regulatory compliance.

Example: A company incurs annual fixed costs of C50,000 for compliance systems, C30,000 for risk management departments, C40,000 for IT infrastructure, and C20,000 for general administrative costs. The total costs amount to:

$$C_{\text{Fix}} = 50,000 + 30,000 + 40,000 + 20,000 = \pounds 140,000 \tag{21}$$

These fixed costs pose a significant burden for smaller companies, as they constitute a larger share of total costs relative to their revenue and available resources [33, 51].

Potential Penalties (FMA): Potential penalties arise when companies violate regulatory requirements. These fines may be imposed by the FMA for breaches such as failure to meet reporting obligations, transparency requirements, or other supervisory rules. The amount of the fine varies depending on the severity of the violation and its impact on the market and investors [15]. The FMA enforces penalties for noncompliance with disclosure requirements, such as failing to publish financial reports or providing incomplete or misleading information. The agency also imposes sanctions for market manipulation and insider trading, targeting conduct that undermines market integrity. Violations of prospectus obligations, including omissions or inaccuracies in public offering documents, are another primary reason for fines. The failure to report significant shareholdings or changes in ownership stakes represents a further category of breaches subject to enforcement. Additional penalties result from non-compliance with ad-hoc publicity requirements, where companies delay or fail to disclose relevant insider information. The FMA also takes action against breaches of corporate governance regulations, which may include insufficient internal controls or conflicts of interest within supervisory bodies [21]. Gelter and Pucher (2016) argue that regulatory non-compliance frequently stems from information asymmetry, wherein corporations possess substantially more information than external stakeholders, thus impeding investors' ability to accurately assess compliance and market risks. The intricacy of disclosure obligations, encompassing detailed reporting requirements and ad-hoc publicity regulations, augments the probability of errors or inadequate compliance, particularly in smaller enterprises with constrained resources. Ineffective enforcement mechanisms, such as nominal administrative penalties lacking deterrent efficacy, contribute to recurrent violations. Resource limitations play a crucial role, as certain firms may lack dedicated compliance personnel or legal expertise. Judicial deficiencies, including the absence of pre-trial discovery and effective group litigation mechanisms, intensify the issue by restricting stakeholders' capacity to address and rectify misconduct, thereby reinforcing the existing information disparity [21]. According to the FMA Report 2023, the FMA issued 56 administrative fines in 2023, amounting to a total of $\pounds 2.6$ million. The highest individual fine imposed was $\pounds 367,000$. The authority referred 145 cases to the public prosecutor's office due to potential legal violations [16]. The penalties covered regulatory breaches such as non-disclosure of inside information, market manipulation, violations of reporting obligations related to shareholdings, and prospectus violations. Further breaches included trading rule violations and failures in reporting executive transactions, also known as director dealings. The FMA also conducted 278 investigation procedures related to unauthorised business activities and concluded 280 cases during the year [16]. These investigations often involved unauthorised services, such as financial products offered without proper licensing, and included crypto-related offerings. To address market risks, the FMA issued 106 public warnings in 2023, many targeting unlicensed or fraudulent crypto providers. When determining fines, the FMA considers aggravating and mitigating factors, such as the extent of harm caused, the financial capacity of the company, and compensatory measures taken by the offending firm. Consolidated

penalty decisions were sometimes issued when multiple breaches were identified in related cases, streamlining enforcement while ensuring proportionality [16]. This approach reinforces the FMA's dual mandate of enforcing market integrity and protecting investors from malpractice. A \in 588,000 fine was imposed on BAWAG P.S.K. Bank for Arbeit und Wirtschaft and Österreichische Postsparkasse AG for violations of the Financial Market Anti-Money Laundering Act (Finanzmarkt-Geldwäschegesetz, FM-GwG) [41]. A \notin 2.07 million fine was imposed on Raiffeisen Bank International (RBI) for breaches of anti-money laundering regulations [30]. Smaller companies face particular challenges in complying with regulatory requirements. The costs of implementing and maintaining compliance programs are disproportionately high for smaller companies, increasing the risk of unintentional violations. The introduction of penalties, combined with high relative fixed compliance costs, places additional strain on smaller firms' financial stability. Integrating the general penalty term C_{penalty} into reserve planning ensures a systematic and proactive approach to managing regulatory risks while remaining compliant with the Securities Supervision Act (Wertpapieraufsichtsgesetz, WAG 2018) and related regulations [33, 15]. The financial impact of penalties on a company's reserves can be formalised as follows:

$$C_{\text{penalty}} = \max\left(C_{\text{specific}}, \mathbb{E}[C_{\text{penalty}}]\right) \tag{22}$$

Here, C_{penalty} represents the general penalty term that the company must account for, covering both specific penalties and expected penalties. The expected penalty cost $\mathbb{E}[C_{\text{penalty}}]$ is defined as:

$$\mathbb{E}[C_{\text{penalty}}] = \Pi \cdot C_{\text{penalty}_\text{expected}}$$
(23)

where Π is the probability of a penalty being imposed (depending on the nature of the violation and the company's compliance response), and $C_{\text{penalty-expected}}$ represents the average penalty amount as determined by historical data or regulatory guidelines. The general penalty term C_{penalty} ensures that the company sets aside the higher of the expected or specific penalty amounts, providing a robust financial planning approach to regulatory risk. As an example, consider a company facing a probability of incurring a penalty based on the FMA's 2023 supervision data. For the sake of this example, assuming a simplified scenario based on aggregate data, the probability of receiving a penalty is approximately 7.13% given that 785 companies were overseen and 56 administrative fines were issued in 2023 [16]. The average penalty amount, calculated from a total of €2.6 million in penalties, is approximately €46,429 [16]. The expected penalty cost can be formalised as:

$$\mathbb{E}[C_{\text{penalty}}] = \Pi \cdot C_{\text{penalty_expected}} = 0.0713 \cdot 46, 429 \approx \mathfrak{C}3, 308 \tag{24}$$

This suggests that, based on general oversight data, the company would allocate approximately C3,308 annually to reserves to mitigate the financial risk of penalties over time. These values are illustrative and based on aggregate data. The actual probability and expected penalty amount for an individual company must be determined by its risk management team, incorporating firm-specific factors, historical data, and regulatory context. Alternatively, industry-specific benchmarks or validated recommendations may provide accurate guidance for these calculations. For a more specific scenario, assume the company is under investigation for a reporting violation, with an expected penalty amount of C50,000. The company must allocate the higher value:

$$C_{\text{penalty}} = \max(50, 000, 3, 308) = 50,000 \tag{25}$$

This example demonstrates that firms should plan conservatively for penalties by setting aside sufficient reserves to cover both expected and specific penalties, ensuring resilience against regulatory risks and maintaining compliance within sound financial planning frameworks.

Summary: The regulatory costs imposed by lawmakers and regulations, executed and overseen by the FMA, the Investor Compensation Scheme (AeW), and other regulatory frameworks, represent a considerable challenge for companies. These costs consist of various components, including fixed and variable levies, personnel expenses, IT infrastructure, and external consultancy fees required to comply with statutory regulations. The risk of incurring penalties further increases the financial strain, as even minor violations can lead to substantial financial sanctions. Companies are also mandated by the Austrian Business Code (Unternehmensgesetzbuch, UGB) [23] to establish reserves to safeguard against potential penalties and unforeseen costs. These reserves, calculated as a percentage of revenue, provide a financial buffer to ensure financial stability. The total profit of a company, adjusted for regulatory costs and penalties, is represented

in the following equation:

$$P = \left[R - (C_v + C_f)\right] - \left[(C_r + C_{\text{AeW}} + C_a + C_f^{\text{reg}} + C_{\text{personnel}}) + C_{\text{penalty}}\right]$$
(1)

where P represents the profit, R the revenue, C_v the variable costs, C_f the fixed costs, C_r the regulatory contributions, C_{AeW} the contributions to the Investor Compensation Scheme, C_a the administrative costs, C_f^{reg} the fixed regulatory costs, $C_{\text{personnel}}$ the personnel costs, and C_{penalty} the general penalty term accounting for both expected and specific penalties.

The following examples are based on industry-related scenarios and serve to illustrate the underlying concept and logic of regulatory cost calculations. The numerical values used are assumptions for demonstration purposes rather than exact empirical data.

Example 1: Small Companies: Assume a small company has variable costs $C_v = 15\%$ of revenue, fixed costs $C_f = 25,000$, regulatory contributions $C_r = 2\%$ of revenue, contributions to the AeW scheme $C_{\text{AeW}} = 6,000$, administrative costs $C_a = 5\%$ of revenue, personnel costs $C_{\text{personnel}} = 40,000$, and a penalty amount of C15,000 with a probability of 5% ($\Pi = 0.05$). The additional regulatory costs, including the general penalty term, are calculated as follows:

$$C_{\text{penalty}} = \Pi \cdot C_{\text{penalty_amount}} = 0.05 \cdot 15,000 = 750$$

$$(26)$$

$$C_{\text{add, small}} = C_r + C_{\text{AeW}} + C_a + C_{\text{personnel}} + C_{\text{penalty}}$$
(27)

= 2,000 + 6,000 + 5,000 + 40,000 + 750 (28)

$$=53,750$$
 (29)

In this case, the small company incurs \pounds 53,750 in additional regulatory costs, including personnel expenses, AeW contributions, and an estimated penalty cost. Reassigning employees to compliance tasks instead of hiring dedicated compliance officers can further reduce operational capacity for value-generating activities.

Example 2: Large Companies: For a large company with variable costs $C_v = 5\%$ of revenue, fixed costs $C_f = 150,000$, regulatory contributions $C_r = 0.5\%$ of revenue, contributions to the AeW scheme $C_{\text{AeW}} = 30,000$, administrative costs $C_a = 2\%$ of revenue, personnel costs $C_{\text{personnel}} = 100,000$, and a penalty amount of $\notin 50,000$ with a probability of 2% ($\Pi = 0.02$):

 $C_{\text{penalty}} = \Pi \cdot C_{\text{penalty}_amount} = 0.02 \cdot 50,000 = 1,000$ (30)

 $C_{\text{add, large}} = C_r + C_{\text{AeW}} + C_a + C_{\text{personnel}} + C_{\text{penalty}}$ (31)

$$= 10,000 + 30,000 + 40,000 + 100,000 + 1,000$$
(32)

For large companies, the total additional costs amount to \pounds 181,000. Despite their higher absolute costs, large companies benefit from economies of scale, distributing compliance-related expenses across broader revenue bases.

Comparison of Small and Large Companies: The revenue-to-cost ratios for the small and large companies are calculated as follows: For the small company:

$$\frac{R_{\rm small}}{C_{\rm add, \ small}} = \frac{100,000}{53,750} \approx 1.86 \tag{34}$$

This indicates that for every C1 of additional regulatory costs, the small company earns approximately C1.86 in revenue. For the large company:

$$\frac{R_{\text{large}}}{C_{\text{add, large}}} = \frac{2,000,000}{181,000} \approx 11.05$$
(35)

This indicates that for every C1 of additional regulatory costs, the large company earns approximately C11.05 in revenue. The comparison demonstrates that smaller companies allocate a substantially higher proportion of their revenue to regulatory compliance, resulting in a lower revenue-to-cost ratio. This imbalance underscores the disproportionate financial burden faced by smaller companies, which limits their

ability to remain competitive and may contribute to market exits.

Generalised Relationship of Regulatory Burden: To express the relative burden of regulatory costs, the following equation captures the proportional impact on company revenue:

$$\mathcal{B} = \frac{C_{\text{add}}}{R} = \frac{C_r + C_{\text{AeW}} + C_a + C_f^{\text{reg}} + C_{\text{personnel}} + C_{\text{IT}} + C_{\text{consultancy}} + C_{\text{penalty}}}{R}$$
(36)

where \mathcal{B} represents the relative regulatory burden.

For small companies:

$$\mathcal{B}_{\text{small}} = \frac{C_{\text{add, small}}}{R_{\text{small}}} \approx \frac{53,750}{100,000} \approx 0.5375$$
 (37)

For large companies:

$$\mathcal{B}_{\text{large}} = \frac{C_{\text{add, large}}}{R_{\text{large}}} \approx \frac{181,000}{2,000,000} \approx 0.0905$$
(38)

The difference in the relative burden can be expressed as:

$$\Delta \mathcal{B} = \mathcal{B}_{\text{small}} - \mathcal{B}_{\text{large}} \approx 0.5375 - 0.0905 = 0.447 \tag{39}$$

This indicates that, in our example, the regulatory burden for small companies is approximately 44.7 percentage points higher than for large companies. The equation \mathcal{B} implies that the relative burden \mathcal{B}_{small} increases when the numerator C_{add} rises due to higher fixed and personnel costs, which remain constant irrespective of revenue. Larger companies, due to economies of scale, benefit from a smaller proportional increase in \mathcal{B} . The financial pressure exerted by regulatory costs on small companies is evident. Smaller companies face a disproportionate burden due to the fixed nature of many compliance-related expenses, which cannot be fully offset through operational adjustments or economies of scale. Not all regulatory costs can be passed on to clients or integrated into pricing structures without compromising market competitive-ness. This constraint limits the ability of smaller firms to maintain sustainable profit margins, ultimately threatening their financial viability. Regulatory frameworks that impose substantial fixed costs, combined with market constraints on pricing strategies, create an environment where smaller companies may be unable to compete effectively, leading to potential market exits and increased industry consolidation.

Formalising the Relationship Between Regulatory Burden and Company Size: To represent the relative regulatory burden \mathcal{B} for companies, we introduce the following equation:

$$\mathcal{B} = \frac{C_{\text{fixed}} + C_{\text{variable}} \cdot R}{R} \tag{40}$$

where C_{fixed} represents the total fixed regulatory costs (independent of revenue), C_{variable} represents the variable portion of regulatory costs as a percentage of revenue, and R represents the company's revenue.

Expanding and simplifying the expression, we get:

$$\mathcal{B} = \frac{C_{\text{fixed}}}{R} + \frac{C_{\text{variable}} \cdot R}{R} \tag{41}$$

$$\mathcal{B} = \frac{C_{\text{fixed}}}{R} + C_{\text{variable}} \tag{42}$$

For a small company with revenue R_{small} and a large company with revenue R_{large} , the difference in the relative burden is:

$$\Delta \mathcal{B} = \mathcal{B}_{\text{small}} - \mathcal{B}_{\text{large}} \tag{43}$$

$$= \left(\frac{C_{\text{fixed}}}{R_{\text{small}}} + C_{\text{variable}}\right) - \left(\frac{C_{\text{fixed}}}{R_{\text{large}}} + C_{\text{variable}}\right)$$
(44)

$$= C_{\text{fixed}} \left(\frac{1}{R_{\text{small}}} - \frac{1}{R_{\text{large}}} \right)$$
(45)

Since $R_{\text{small}} < R_{\text{large}}$, the term $\frac{1}{R_{\text{small}}}$ is larger than $\frac{1}{R_{\text{large}}}$, resulting in:

$$\Delta \mathcal{B} > 0 \tag{46}$$

This indicates that the relative regulatory burden \mathcal{B} is higher for smaller companies due to the significant impact of fixed costs relative to their revenue. Conversely, larger companies can distribute these costs over a broader revenue base, thereby reducing their relative burden. This phenomenon is referred to as economies of scale, wherein the per-unit impact of fixed costs decreases as revenue or output increases. Fixed costs do not always increase incrementally but may exhibit step-level fixed costs. For instance, a company may initially require one full-time equivalent (FTE) employee to manage compliance, but once regulatory demands exceed a certain threshold, additional FTEs may become necessary, resulting in an increase in fixed cost levels. These non-linear increases can exacerbate the relative burden on mid-sized companies that are proximate to these thresholds, as they must bear disproportionately higher costs compared to both smaller companies below the threshold and larger firms that can absorb multiple FTE costs due to their larger revenue base.

3.2 Revenue Streams and Profit Generation in the Securities Industry

Companies in the securities industry primarily generate revenue through fees associated with their services. The most common fee categories include management fees, transaction fees, and performance fees. Management fees are typically charged as a percentage of the assets under management (AUM), ranging from 0.5%to 2% annually, reflecting the costs associated with portfolio administration and advisory services [13]. Transaction fees apply to trade execution services and can either be fixed per transaction or percentage-based, depending on the company's pricing strategy [12]. Performance-based fees, often employed by hedge funds and specialised asset managers, are calculated as a percentage of the profits earned beyond a benchmark performance level [3]. These fee structures are influenced by several factors, including regulatory costs, market competition, and client expectations. Firms must balance the need to maintain profitability with the imperative to remain competitive. For example, higher compliance costs—stemming from the need to implement anti-money laundering (AML) measures, reporting systems, and ongoing audits—can erode profit margins if companies cannot adjust their fees accordingly [19]. Pricing strategies are shaped by market benchmarks and investor perceptions of value, as demonstrated by the capital asset pricing model (CAPM), which outlines the relationship between expected returns and risk premiums [5]. Firms that offer bespoke services, such as private wealth management, may also adjust their fee structures to account for client-specific risks, performance goals, and service levels. Companies in the securities industry calculate the total price P_{total} charged to clients based on a combination of fixed and variable components. These include fees proportional to the assets under management (AUM), charges for each executed transaction, and performance-based fees for returns exceeding a predefined benchmark. Additional components include fixed operational costs and compliance-related expenses such as audits, reporting systems, and IT infrastructure. The price structure for services in the securities industry can be analysed through a systematic examination of fees and cost components. To provide a comprehensive view, the overall structure is closely related to the components of profit as detailed in the prior analysis. We begin with the core equation for profit calculation:

$$P = \left[R - \left(C_v + C_f\right)\right] - \left[C_{\text{add}}\right]$$
⁽²⁾

Here, P represents the profit, R denotes the total revenue, C_v corresponds to variable costs, C_f represents fixed costs, and C_{add} encompasses the compliance-related costs, such as system updates, audits, reporting requirements, and external consultancy fees. To break down the total revenue R, we define:

$$R = \alpha \cdot \text{AUM} + \beta \cdot N_{\text{transactions}} + \gamma \cdot \text{performance}_{\text{gain}}$$
(47)

Here, $\alpha \cdot \text{AUM}$ represents the management fee as a percentage of the assets under management (AUM), $\beta \cdot N_{\text{transactions}}$ denotes the revenue from executed transactions, and $\gamma \cdot \text{performance}_{\text{gain}}$ reflects the performancebased fee for exceeding a benchmark. Substituting Equation 47 into Equation 2, we rewrite the profit equation as:

$$P = \left[(\alpha \cdot \text{AUM}) + (\beta \cdot N_{\text{transactions}}) + (\gamma \cdot \text{performance}_{\text{gain}}) - (C_v + C_f) \right] - \left[C_{\text{add}} \right]$$
(48)

This equation shows how the profit P is calculated based on revenue components and the sum of variable, fixed, and compliance-related costs. In the securities industry, the fee structure typically follows established

market standards, with management fees ranging between 0.5% and 2% of the assets under management (AUM) and transaction fees set at predefined rates per executed order. These standardised fee levels leave limited flexibility for increasing prices without risking client attrition. As a result, firms may face constraints in passing on rising compliance costs to clients. Instead, these additional expenses directly reduce profit margins. Since profits are often capped by competitive benchmarks, rising compliance costs disproportion-ately impact smaller firms, which lack the economies of scale enjoyed by larger companies. This dynamic can weaken a firm's operational viability, particularly when fixed costs and regulatory obligations increase in parallel. In such cases, compliance-related expenses become a critical factor in determining long-term sustainability, reinforcing the need for strategic cost management to maintain profitability. To represent the impact of compliance costs on fee adjustments, we can introduce an expression for the adjusted management fee after accounting for compliance-related expenses:

$$\operatorname{Fee}_{\operatorname{new}} = \operatorname{Fee}_{\operatorname{base}} + \frac{C_{\operatorname{add}}}{\operatorname{AUM}}$$
(49)

Here, Fee_{new} is the management fee after the inclusion of compliance costs, Fee_{base} is the baseline management fee (e.g., 1% of AUM), and $\frac{C_{\text{add}}}{\text{AUM}}$ represents the additional cost burden per unit of assets under management. To avoid client attrition, the adjusted fee must remain below a maximum permissible level:

$$\text{Fee}_{\text{new}} \le \text{Fee}_{\text{max}}$$
 (50)

Substituting the expression for Fee_{new} , we obtain:

$$\operatorname{Fee}_{\operatorname{base}} + \frac{C_{\operatorname{add}}}{\operatorname{AUM}} \le \operatorname{Fee}_{\max}$$
 (51)

Rearranging the terms provides a condition for the compliance costs:

$$C_{\text{add}} \le \text{AUM} \cdot (\text{Fee}_{\text{max}} - \text{Fee}_{\text{base}})$$
 (52)

This expression shows that the additional compliance costs C_{add} must not exceed the product of the assets under management and the difference between the maximum permissible fee Fee_{max} and the baseline fee Feebase. If this inequality is not met, the firm may be unable to pass on compliance costs to clients without exceeding competitive fee thresholds, thereby absorbing these costs internally and reducing profitability. It is important to note that regulatory bodies such as the Financial Market Authority (FMA) only charge a percentage of the firm's revenue. The overall costs associated with meeting compliance obligations are significantly higher, as they encompass various expenses, including internal audits, IT systems, reporting obligations, and external consultancy, as previously discussed. This cumulative burden disproportionately affects smaller companies, which may lack the financial resilience to absorb such expenses. The complexity of the regulatory framework further exacerbates this issue, as it increases the likelihood of procedural errors and non-compliance, leading to fines or penalties that can severely undermine profitability. In extreme cases, penalties may exceed the firm's financial capacity, pushing it toward insolvency or even bankruptcy proceedings (e.g., Chapter 7 or Chapter 11 bankruptcy, or, for Austria: Ausgleich or Konkurs). In contrast, larger companies are often better equipped to handle these compliance-related costs due to their economies of scale and broader revenue base. This allows them to allocate resources more effectively and absorb unexpected financial hits, enabling them to remain viable market participants. Smaller firms, by comparison, face a heightened risk of failure due to their limited capacity to cushion the impact of regulatory expenses and penalties. As a result, the increasing regulatory burden may contribute to market consolidation, where only larger firms can sustain operations within the heavily regulated environment. The relationship between rising compliance costs and profitability can be expressed through a general margin equation that illustrates the diminishing profit margin as compliance costs increase. As compliance-related expenses grow, the profit margin decreases, thereby increasing the financial risk for firms. When this margin falls below an acceptable threshold, companies may choose to exit the market due to the disproportionate risk or unprofitability. We define the profit margin \mathcal{M} as the ratio of profit P to revenue R:

$$\mathcal{M} = \frac{P}{R} = \frac{R - (C_v + C_f + C_{\text{add}})}{R}$$
(53)

Rewriting this equation:

$$\mathcal{M} = 1 - \frac{C_v + C_f + C_{\text{add}}}{R} \tag{54}$$

This shows that as compliance costs C_{add} increase, the term $\frac{C_v + C_f + C_{\text{add}}}{R}$ grows larger, thereby reducing the overall margin \mathcal{M} . When \mathcal{M} approaches zero or becomes negative, the firm either faces unsustainable operations or perceives the market as no longer profitable relative to the associated risk. At the critical point where the firm decides to exit the market, the margin \mathcal{M} reaches an unacceptable threshold \mathcal{M}_{\min} :

$$\mathcal{M} \le \mathcal{M}_{\min} \tag{55}$$

This inequality indicates that if the profit margin falls below \mathcal{M}_{\min} , the firm is no longer willing to bear the financial risk and may exit the market entirely.

3.3 Dynamic Pricing Strategy Setup

This study proposes a framework for dynamic pricing adapted to the securities industry. The focus remains on addressing the financial burden imposed by rising compliance costs, proposing adjustments that balance competitiveness with profitability. Revenue streams in the securities industry are predominantly driven by management fees ($\alpha \cdot AUM$), transaction fees ($\beta \cdot N_{\text{transactions}}$), and performance-based fees ($\gamma \cdot \text{performance}_{\text{gain}}$). These income sources face increasing pressure from regulatory demands, necessitating a reevaluation of traditional pricing models. To adapt to these challenges, this research proposes a systematic approach to fee adjustments that incorporates compliance costs directly into pricing formulae. The adjusted management fee, for example, is recalibrated as:

$$Fee_{new} = Fee_{base} + \frac{C_{add}}{AUM}$$
 (56)

This approach ensures that compliance-related expenditures are distributed proportionally, thereby mitigating disproportionate impacts on smaller accounts. Similarly, a tiered performance fee structure facilitates nuanced adjustments, enhancing client alignment whilst maintaining profitability:

$$\gamma = \begin{cases} \gamma_{\text{low}}, & \text{if performance}_{\text{gain}} < b_1 \\ \gamma_{\text{mid}}, & b_1 \le \text{performance}_{\text{gain}} < b_2 \\ \gamma_{\text{high}}, & \text{if performance}_{\text{gain}} \ge b_2 \end{cases}$$
(57)

Real-time cost monitoring further enhances this model, ensuring periodic reassessments of the permissible fee threshold:

$$Fee_{max} = market average \pm competitive buffer$$
 (58)

This approach facilitates timely adjustments, aligning with market benchmarks while preserving client retention. Revenue balancing emerges as a critical component. Allocating compliance costs proportionally across all clients:

$$\frac{C_{\rm add}}{\rm AUM}$$
 for each client account (59)

pricing can be refined without exceeding competitive thresholds:

$$\text{Fee}_{\text{new}} \le \text{Fee}_{\text{max}}$$
 (60)

Continuous optimisation through profit margin monitoring ensures that strategies remain viable. The margin is calculated as:

$$\mathcal{M} = 1 - \frac{C_v + C_f + C_{\text{add}}}{R} \tag{61}$$

Reevaluations are initiated when margins approach the predefined threshold (\mathcal{M}_{\min}), maintaining financial stability while addressing compliance challenges. This structured dynamic pricing strategy is proposed as

a response to the increasing regulatory burden, prioritising adaptability and sustainability within a competitive framework. Tiered fee structures address fixed regulatory costs by correlating fees to portfolio sizes or transaction volumes. For instance, a system might impose a 1.5% charge on assets under management (AUM) for portfolios below &1 million, decreasing to 1.0% for those exceeding &5 million. This approach ensures proportional cost recovery without disproportionately affecting smaller clients [22]. Explicit compliance surcharges, designated as "regulatory cost recovery fees," can provide transparency and align with MiFID II requirements for cost disclosure [7]. Risk-based pricing adjusts fees based on client or transaction risk profiles. High-risk clients, such as those involved in cross-border transactions or sectors with more stringent anti-money laundering (AML) requirements, incur higher fees to reflect their compliance burden. This approach would incentivises lower-risk behaviour and supports regulatory objectives [37]. Dynamic pricing systems can utilise artificial intelligence (AI) and machine learning (ML) to adjust fees in real time, based on compliance costs, client profiles, and market conditions. While initial investments in such technologies are substantial, they enable precise cost allocation and improved regulatory adaptation [42, 36].

Summary: This section examined the revenue streams and profit generation mechanisms in the securities industry, focusing on fee structures and their sensitivity to rising compliance costs. Firms generate revenue through management fees, transaction fees, and performance-based fees, all constrained by market standards and client expectations. The profit equation highlighted the impact of fixed, variable, and compliancerelated costs on the overall margin. Compliance costs reduce profitability, especially for smaller firms that lack economies of scale. The analysis of adjusted management fees showed that as compliance-related expenses increase, firms face limits in passing on these costs to clients due to competitive fee thresholds. When these costs exceed a critical level, firms must absorb them, leading to declining profit margins. The general margin equation demonstrated how elevated compliance costs erode the profit-to-revenue ratio. Once the margin falls below an acceptable threshold, firms may exit the market entirely. The findings suggest that larger firms are more resilient due to their broader revenue base, while smaller firms face a higher risk of failure. This contributes to market consolidation, where only larger participants remain sustainable in heavily regulated environments. An additional observation is that since all firms must comply with the same regulatory requirements, compliance costs accumulate across the market. This creates redundancy, as each firm independently bears the costs of fulfilling identical regulatory obligations. The cumulative effect places an economic strain not only on individual firms but also on the overall market structure, potentially reducing efficiency and competitiveness in the sector.

4 Comparing the Austrian with the German Market

The DACH region (Germany, Austria, and Switzerland) represents a closely interconnected economic area, with Germany and Austria bound by EU regulations, while Switzerland maintains its own regulatory autonomy. Despite Switzerland's non-EU status, its financial market regulations often converge with EU standards due to bilateral agreements and market dependencies. Within the EU, regulations such as the Markets in Financial Instruments Directive II (MiFID II) [8] and the European Market Infrastructure Regulation (EMIR) [24] are enforced uniformly but executed at the national level through transposed legislation. This regulatory alignment between Germany and Austria creates a form of isomorphic structural market pressure, resulting in similar organisational structures within financial markets and supervisory authorities. As a result, institutions like the Austrian FMA and the German Federal Financial Supervisory Authority (BaFin) share comparable mandates, processes, and cost frameworks. These structural similarities form a robust basis for cross-national comparisons of regulatory impact, efficiency, and compliance costs.

Supervised companies: As shown in Table 1, the number of supervised entities declined in both Austria and Germany between 2019 and 2023, indicating a trend of structural consolidation in the financial sector. The FMA recorded a reduction of 11.00%, from 882 to 785 supervised companies, while BaFin reported a smaller decline of 5.37%, from 2,737 to 2,590 entities. The sharper contraction in Austria suggests a more pronounced shift in market composition, possibly reflecting higher regulatory pressure or limited scalability among smaller providers. In contrast, the comparatively moderate decrease in Germany points to a more stable supervisory environment over the same period. These developments underline differences in market dynamics and institutional resilience across jurisdictions.

The 11% reduction in the number of supervised companies in Austria and the 5.37% reduction in Germany from 2019 to 2023 indicate a trend of declining numbers of financial institutions under regulatory oversight in both markets. This suggests a significant structural shift, with Austria experiencing a relatively sharper decline compared to Germany. The larger percentage drop in Austria points to a more dynamic change in the market composition, while Germany's smaller percentage change reflects a more stable

Authority	2019	2020	2021	2022	2023	Change (2019–2023)
FMA Austria [16]	882	857	838	814	785	-11.00%
BaFin Germany [1, 2]	2,737	2,750	2,723	2,660	2,590	-5.37%

Table 1 Supervised Companies by the FMA and BaFin (2019–2023)

supervisory landscape during the same period. These figures highlight differences in the pace and scale of market developments between the two countries, which may be explored further in the discussion.

Financial contributions: The financial contributions made by supervised companies to their respective regulatory authorities provide insights into the funding structures of the FMA and BaFin. These contributions reflect the supervisory authorities' budgets and their reliance on fees from regulated entities. The following table presents a comparison of the contributions collected by the FMA and BaFin from 2019 to 2023, including the percentage change over this period.

Authority (in € Million)	2019	2020	2021	2022	2023	Change (2019–2023)
FMA Austria [16]	62.4	62.8	60.8	65.8	76.2	+22.14%
BaFin Germany $[9, 1, 10, 11, 2]$	382.1	414.5	501.8	541.2	498.3	+30.45%

Table 2 Contributions Made by Supervised Companies (2019–2023)

As shown in Table 2, the contributions from supervised companies increased for both the FMA and BaFin between 2019 and 2023, reflecting an upward trend in regulatory funding. The FMA's contributions rose by 22.14%, indicating a moderate increase over the period, while BaFin's contributions saw a larger rise of 30.45%. This suggests a more pronounced expansion in BaFin's funding requirements or cost recovery structure relative to the FMA during the same period.

Full-time equivalents: The number of full-time equivalents (FTEs) employed by the regulatory authorities reflects the resources allocated to oversight tasks and the relative size of their operations. The following table compares the FTEs at the FMA and BaFin from 2019 to 2023, including the percentage change over this period.

Authority (FTEs)	2019	2020	2021	2022	2023	Change (2019–2023)
FMA Austria [16]	393	398	398	415	424	+7.89%
BaFin Germany $[9, 1, 10, 11, 2]$	2,723	2,776	2,882	2,918	$2,\!890$	+6.14%

Table 3 Full-Time Equivalents (FTEs) at the FMA and BaFin (2019–2023)

As shown in Table 3, the number of full-time equivalents (FTEs) increased for both the FMA and BaFin between 2019 and 2023, indicating a steady expansion of supervisory capacity. The FMA's staffing level rose by 7.89%, while BaFin's increased by 6.14%. This reflects a consistent trend of institutional growth in both authorities, with the FMA showing a slightly higher relative increase in personnel over the observed period.

Contribution-FTE Ratio: To get an idea of the comparative efficiency of the supervisory authorities, we analyse the ratio of contributions made by supervised companies to the number of full-time equivalents (FTEs) employed by each authority. This ratio provides an indicator of how much funding is collected per employee, reflecting the financial contribution per unit of human resource. While this ratio offers insights into the authorities' relative funding efficiency, it is not an absolute measure of performance. Instead, it must be interpreted within the context of differences in national regulatory frameworks, market size, and supervisory mandates. Consequently, this comparison serves only as a relative indicator and does not account for broader factors that may affect overall supervisory efficiency. The contributions per FTE are calculated using the following formula:

Contributions per FTE
$$(\mathfrak{C}) = \frac{\text{Contributions }(\mathfrak{C})}{\text{FTEs}}$$
 (62)

where *Contributions* (\mathfrak{C}) represents the annual contributions collected from supervised entities, and *FTEs* represents the number of full-time equivalents employed by the supervisory authority.

The results in Table 4 show that the contributions per FTE for the FMA and BaFin in 2023 is only marginal. This indicates that both supervisory authorities have a similar ratio of financial contributions relative to their staffing levels. While minor variations may reflect differences in financial structures and



Authority	Contributions (FTEs	Contributions per FTE ($\textcircled{\bullet}$)
FMA Austria [16]	76.2	424	179,717
BaFin Germany [2]	498.3	$2,\!890$	172,400

Table 4 Contributions per FTE for the FMA and BaFin (2023)

resource allocation, these do not significantly affect the overall assessment. This analysis remains relative, as it does not account for external factors such as differences in supervisory responsibilities, market scope, or regulatory mandates.

5 Market Feedback on Regulatory Efficiency and Proportionality

In 2024 and 2025, a two-part empirical survey was used to assess perceived regulatory costs and operational burdens among Austrian securities professionals. The first component was a structured digital questionnaire with ten targeted items, combining single-choice formats and one open comment field. It was conducted in early 2024 by an independent industry association and yielded 53 valid responses from licensed market participants subject to Austrian and EU financial regulation. The second component was carried out in 2025 and consisted of three qualitative assessments provided by senior experts with compliance and supervisory responsibility. The focus was on workload distribution, cost ratios, proportionality, and the effectiveness of national implementation, particularly under MiFID II, AML, and FMA oversight. The data allow identification of key cost drivers, perceived inefficiencies, and structural imbalances between regulatory requirements and operational capacity, especially in the context of small and mid-sized firms. The digital questionnaire covered ten predefined items designed to quantify regulatory pressure and capture practitioner sentiment. Respondents were asked whether additional regulation improves compliance or client understanding, whether regulatory proportionality should be applied to SMEs, and whether national gold-plating—i.e., the imposition of regulatory requirements exceeding the minimum standards of EU directives—should be reduced. The survey also assessed the perceived link between bureaucracy and advisory quality, licence withdrawal considerations, and the estimated proportion of working time dedicated to compliance. One item invited open-ended suggestions for regulatory simplification, revealing recurring themes such as disproportionate documentation, duplicated checks, and the need for differentiated requirements based on company size and service scope. The expert survey followed a structured format with five core items: firm size (staff count and assets under management), compliance personnel (FTEs), estimated compliance cost as a share of revenue, satisfaction with FMA cooperation, and open feedback on regulatory optimisation. The experts highlighted the structural disadvantage of smaller firms facing fixed compliance overhead, the inconsistent application of proportionality, and inefficiencies in supervisory interaction. Emphasis was placed on the need to scale regulatory obligations to business complexity and to avoid compliance duplication already covered by upstream institutions. The aggregated results of the standardised questionnaire confirm a broad rejection of additional regulatory expansion. 84,9% of respondents do not believe that more rules and laws reduce illegal advisory services, and 94,3% reject the notion that further legal obligations improve client education or advisory quality. Regarding behavioural responses to regulatory density, 43,4% estimate that 30% to 50% of market participants deliberately ignore or delay compliance with excessive requirements, while 26,4% believe this applies to more than half the market. Proportionality emerges as a dominant concern: 81,1% support its formal introduction to enable SMEs to comply with rules. 79,2% favour a reduction of national gold-plating practices. 84,9% confirm that reducing bureaucratic requirements and supporting smaller firms enables more independent advisory services and reduces the prevalence of illicit activity. 94,3 % agree that excessive bureaucracy damages small providers, increases implementation costs, and degrades overall service quality. Structural strain is evident in business continuity: 54,7% have considered surrendering their licence due to disproportionate regulatory workload relative to the scale of their advisory activity. In terms of time allocation, 50.9% report that compliance consumes between 30% and 50% of their working time, 11.3% exceed 50%, and 37,7% remain below 30%. The qualitative responses were analysed using Mayring's structured content analysis. Inductive category formation led to five recurring themes. A large number of respondents call for proportionality and regulatory differentiation based on company size, business model, and client structure. UK practices such as exempting firms below certain revenue thresholds from audits or external compliance functions were cited positively. Participants consistently criticise documentation requirements as excessive and often disconnected from practical relevance. Standardised templates, multilayered disclosures, and complex forms are viewed as obstructive, with little benefit to clients or advisory outcomes. Several comments highlight duplication of compliance processes, particularly in anti-money laundering procedures already performed by upstream entities such as banks. Respondents question the rationale of repeated checks by smaller firms that do not hold client funds or perform portfolio management. There is widespread concern about the linguistic and structural complexity of regulatory texts, especially delegated acts such as

DelVO 2017/565. The overuse of non-binding phrasing, dense formulations, and inconsistent terminology is seen as a barrier to legal certainty and effective implementation. A number of responses express fundamental scepticism toward national and EU institutions. These include allegations of politicisation within chambers, ineffective oversight of administrative actors, and perceived regulatory capture. Some participants call for structural downsizing of public institutions, elimination of lobbying channels, and restoration of proportionality as a guiding principle in financial regulation. The expert assessments complemented the practitioner survey by adding deeper contextual insights from three individuals with long-standing responsibility for regulatory compliance and supervision. Each expert responded to five structured questions, covering firm size, number of compliance staff (expressed in full-time equivalents), estimated regulatory cost share, satisfaction with the FMA's supervisory conduct, and open-ended recommendations for regulatory optimisation. The participating firms represented a spectrum of licensed financial service providers with assets under management ranging from €50 million to €500 million and headcounts between five and twenty-five employees. Compliance staffing requirements ranged from 1,0 to 2,6 FTE, regardless of whether the institution performed pure advisory functions or broader portfolio management services. All experts confirmed that fixed compliance costs impose disproportionately high burdens on smaller entities and cannot be absorbed through scaling effects. Estimated compliance costs were reported between 15% and 35% of annual revenues, depending on the extent of outsourced functions, system automation, and whether the institution fell under enhanced scrutiny categories. Cooperation with the Financial Market Authority (FMA) was rated on a scale from 0 (very dissatisfied) to 100 (very satisfied). Ratings ranged between 30 and 55 points. Experts criticised the lack of clarity in supervisory communication, especially regarding interpretation of ambiguous regulatory provisions and delays in case-specific responses. One respondent noted the absence of differentiated supervisory procedures, highlighting that identical audit expectations apply irrespective of the institution's risk profile or client structure. The open-ended feedback confirmed the findings of the broader practitioner survey. All three experts advocated for a more proportionate supervisory architecture, reduced duplication in AML reporting, and greater alignment between regulatory design and operational realities. One expert suggested formally recognising upstream due diligence (e.g., by banks) to eliminate redundant checks by smaller intermediaries. Another proposed clearer definitions of institutional risk categories and exemption thresholds. The responses also pointed to an erosion of trust in supervisory consistency, particularly where inspections resulted in conflicting recommendations from different FMA departments. Overall, the expert interviews substantiate the structural imbalances reported by the broader sample and reinforce the demand for reform in regulatory scope, design, and execution.

Summary and Implications

The overall tendency of the survey results reveals a clear perception among practitioners and experts that the current regulatory framework imposes disproportionate and structurally inefficient burdens on small and mid-sized financial service providers. Respondents reject the assumption that more rules lead to better compliance or client understanding. Instead, they associate the current regime with documentation excess, procedural duplication, and an erosion of advisory capacity. Both quantitative and qualitative data indicate that the regulatory cost structure is largely fixed, rendering it insensitive to the economic scale or risk profile of the institution. The uniform application of rules, irrespective of operational complexity, undermines market access and viability for smaller entities. The findings confirm that regulatory proportionality is not merely a theoretical principle but a necessary corrective to prevent structural exclusion. The combination of high compliance costs, extensive documentation, and inflexible supervisory procedures contributes to a decline in sectoral diversity and fosters consolidation pressure. Over half of the respondents have considered exiting the market, a figure that reflects not only financial strain but a broader disillusionment with institutional oversight practices. The low satisfaction scores assigned to the FMA further suggest that the regulatory interface lacks responsiveness and fails to differentiate between risk categories. The implications are significant for both regulatory policy and market integrity. Without reform, the continuation of uniform, resource-intensive supervision may accelerate the withdrawal of smaller providers, reduce competitive pluralism, and limit consumer access to independent advisory services. A recalibration of the regulatory framework is needed—one that integrates size-based thresholds, acknowledges upstream compliance procedures, and prioritises legal clarity over procedural complexity. The results support the case for a proportionate, risk-sensitive regime that aligns regulatory design with actual market structures and operational capabilities.

6 International Comparisons

Austria's regulatory framework can be contextualised through comparative analysis with Germany, the Netherlands, and the United Kingdom. These jurisdictions offer structurally different approaches to

supervisory funding, compliance implementation, and SME inclusion. In Germany, BaFin applies a mixed funding model with partial cost recovery and a broader contributor base. The BaFin budget exceeds €350 million, supported by over 3000 staff, yet its compliance interface is decentralised and supported by sectoral associations. Unlike Austria's FMAG model, which imposes fixed base fees regardless of institutional scale, Germany has introduced granular billing based on business volume and market activity. This reduces relative burden for smaller entities and aligns supervisory cost exposure with systemic relevance. The Netherlands employs a proportional supervision model with clearly defined regulatory thresholds. Institutions below certain asset or transaction volume levels qualify for simplified reporting and are exempt from full audit requirements. This reflects a practical application of proportionality, where compliance depth is linked to risk exposure and economic footprint. Dutch regulators apply detailed SME impact assessments (MKB-toets) before implementing new rules, reducing unintended entry barriers and ensuring rule applicability across institutional types. The UK offers a more experimental regime through its FCA innovation hub and regulatory sandbox. While the overall supervisory intensity remains high, firms accepted into the sandbox are granted temporary exemptions or tailored reporting requirements, enabling test deployment without full regulatory overhead. The FCA also publishes feedback reports and guidance updates based on sandbox experience, allowing rule refinement based on empirical outcomes. Although not directly transferable, this model illustrates how supervisory flexibility can support innovation without compromising oversight. Penalty structures also vary. In Austria, administrative fines under WAG and FMABG are standardised and not adjusted for revenue. In contrast, both the UK and Germany apply revenue-proportional penalties in serious cases, coupled with formal internal compliance audits that can substitute for external penalties. This introduces both deterrence and rehabilitation mechanisms into the supervisory design. Austria currently lacks formal proportionality thresholds and does not distinguish implementation burdens based on risk classification or firm size. Unlike Germany or the Netherlands, no SME-specific impact assessment is applied in the legislative process, and the uniform fee structure of FMAG imposes identical cost elements on micro-enterprises and multi-billion institutions alike. The absence of audit relief, simplified documentation regimes, or innovation channels places Austria behind comparative benchmarks in aligning investor protection with market accessibility. International practice shows that regulatory efficiency and investor protection are not mutually exclusive. Flexible supervisory models, tiered audit obligations, and scaled compliance interfaces reduce overhead without weakening control. These models offer a blueprint for recalibrating Austria's regime, particularly regarding fixed fee structures, documentation requirements, and the lack of graduated supervisory engagement.

7 Impact Analysis

Small and large companies experience regulatory costs differently. Small companies face higher relative costs due to limited economies of scale. Personnel expenses for compliance officers, mandatory IT infrastructure, administrative duties, and audit obligations represent a significant financial burden. These fixed elements disproportionately reduce margins for smaller entities and increase insolvency risk, as documented in empirical responses and illustrated by the high share of firms considering licence withdrawal. The survey results confirm this asymmetry. 54,7% of respondents have considered surrendering their licence due to the misalignment between regulatory workload and business volume. Time allocation data further supports the claim: more than 62% of participants report that compliance consumes over 30% of their working time, effectively reducing advisory and productive capacity. This cost asymmetry contributes to market consolidation. The number of securities service providers in Austria declined by 11% from 2019 to 2023, while average staff size increased. This indicates the displacement of smaller entities and a shift towards structurally larger actors who can absorb compliance expenses. Regulatory contributions, as defined under FMAG, apply fixed fees irrespective of revenue, thereby worsening the competitive position of SMEs. The mathematical models introduced confirm this relationship. For small firms with low revenue R, the burden ratio $B = \frac{C_{\text{add}}}{R}$ remains substantially higher. The generalised cost function incorporates not only mandatory levies to the FMA and AeW but also anticipatory provisioning for penalties. In the case of smaller firms, even low-probability events such as administrative fines (e.g., $\pounds 15,000$ at a 5% likelihood) produce non-negligible reserve requirements that affect operational liquidity. This imbalance undermines the regulatory objective of preserving a diverse and competitive financial market. While the framework seeks to protect investors, its cumulative execution reduces advisory pluralism and restricts market access for new entrants. Innovation and product diversity suffer when regulatory costs become insurmountable for independent or specialised providers. This outcome is neither economically neutral nor systemically desirable. The implications are clear: investor protection must be reconciled with economic proportionality. Uniform rule application across asymmetrical actors produces de facto discrimination. Policymakers must reassess fixedcost elements within the regulatory structure and explore proportional models, such as graduated audit

obligations or thresholds below which documentation duties are scaled back. Without such correction, the current trajectory reinforces market concentration and decreases systemic resilience. Compliance expenses and penalties disproportionately reduce their margins, leading to market consolidation. Larger firms absorb these costs more effectively, which reinforces their market position. The financial model developed in this study expresses profit as a function of revenue, operational costs, regulatory costs, and penalties:

$$P = [R - (C_v + C_f)] - \left(C_r + C_{AeW} + C_a + C_f^{\text{reg}} + C_{\text{personnel}} + C_{\text{penalty}}\right)$$
(63)

Where R denotes revenue, C_v and C_f are variable and fixed costs, C_r represents regulatory contributions, C_{AeW} are allocations to the investor compensation scheme, C_a are administrative costs, C_f^{reg} fixed regulatory costs, $C_{\text{personnel}}$ personnel expenses, and C_{penalty} the expected value of penalties. Using the survey and model data, the relative regulatory burden B can be expressed as:

$$B = \frac{C_{\text{add}}}{R}$$

= $\frac{C_r + C_{AeW} + C_a + C_f^{\text{reg}} + C_{\text{personnel}} + C_{\text{IT}} + C_{\text{consultancy}} + C_{\text{penalty}}}{R}$ (64)

For small companies, this burden reaches up to 53.75% of revenue in typical scenarios. In contrast, larger firms face a burden of only 9.05%, yielding a differential of 44.7 percentage points. The fundamental disparity can be expressed through:

$$\Delta B = \frac{C_{\text{fixed}}}{R_{\text{small}}} - \frac{C_{\text{fixed}}}{R_{\text{large}}} \tag{65}$$

This formalisation confirms that smaller firms, with lower revenues, experience significantly higher proportional burdens from fixed regulatory costs. Empirical market feedback substantiates these findings. Over half the respondents in the practitioner survey report spending more than 30% of their working time on compliance, with many considering licence surrender due to regulatory overhead. The expert assessments confirm that fixed costs such as compliance personnel, audits, and IT systems impose structural disadvantages that cannot be scaled down easily. For example, the annual cost for a compliance officer including overheads and training is estimated at &82,500–&110,000, regardless of firm size. Smaller firms are less able to absorb unexpected costs such as penalties, where the expected penalty value (based on historical FMA data) is approximately &3,308 annually. This mandatory reserve requirement, when formalised as:

$$C_{\text{penalty}} = \max(C_{\text{specific}}, \mathbb{E}[C_{\text{penalty}}]) = \max(C_{\text{specific}}, \Pi \cdot C_{\text{penalty}}^{\text{expected}})$$
(66)

places a higher risk-adjusted burden on smaller companies with limited capital buffers. Regulatory costs therefore significantly influence market structure. The increased financial burden accelerates the exit of smaller firms, resulting in fewer competitors. This reduces competition, potentially affecting investor choice and pricing. The shrinking number of smaller players could also limit innovation and market diversity. The survey results show that 54.7% of respondents have considered licence surrender, reinforcing this consolidation trend. The balance between investor protection and economic sustainability remains critical. The current regulatory framework aims to protect investors, but the disproportionate impact on SMEs questions the sustainability of uniform application. A more differentiated, risk-based approach could preserve diversity without undermining compliance goals. Empirical indicators such as revenue-to-cost ratios, margin thresholds, and burden differentials should inform this recalibration. In conclusion, the regulatory burden functions not merely as a cost factor but as a structural filter within the market. Without adjustments to fixed cost allocation and supervisory expectations, the Austrian financial sector risks reinforcing oligopolistic tendencies and losing entrepreneurial diversity.

8 Financial Planning for Compliance

Reserves play a central role in mitigating the financial impact of penalties and unforeseen regulatory costs. Using the expected penalty cost $\mathbb{E}[C_{\text{penalty}}]$ as a guideline enables companies to allocate financial buffers effectively. This expectation is calculated as:

$$\mathbb{E}[C_{\text{penalty}}] = \Pi \cdot C_{\text{penalty}}^{\text{expected}} \tag{67}$$



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where Π represents the estimated probability of a regulatory breach and C expected penalty denotes the average penalty value based on historical FMA data. As specified in Equation (43), the reserve requirement becomes:

C_{penalty} = max(C_{specific}, E[C_{penalty}]) (68) This ensures that the reserve reflects either a specific risk profile or the general market average, whichever is higher. Establishing annual reserve contributions proportional to revenue, such as 5%, provides a stable mechanism to absorb non-recurring compliance shocks. This reserve factor can be integrated into the overall cost model to inform financial planning scenarios and liquidity risk management. Budgeting for compliance requires categorising expenses into distinct cost blocks, as outlined in the burden ratio B (Equation 2):

$$B = \frac{C_r + C_{AeW} + C_a + C_f^{\text{reg}} + C_{\text{personnel}} + C_{\text{IT}} + C_{\text{consultancy}} + C_{\text{penalty}}}{R}$$
(69)

Segmenting these categories into dedicated cost centres—e.g. IT, legal consultancy, audit preparation, and training—allows for targeted monitoring and variance analysis. Companies with higher Cconsultancy and CIT should consider internalising selected functions if cost-benefit ratios support in-house capacity. Regular internal audits help forecast compliance cost trajectories and provide data for adjusting reserve allocations. Firms should update their reserve models annually to reflect changes in revenue, regulation, or enforcement trends. Integrating compliance forecasting into medium-term financial planning improves capital allocation, reduces unplanned liquidity drawdowns, and strengthens institutional resilience.

9 Conclusion and Policy Implications

This study provides a structured assessment of the financial and operational impacts of regulatory compliance on Austria's securities sector, integrating quantitative modelling and empirical feedback. The findings demonstrate that small and medium-sized enterprises (SMEs) bear a disproportionately high regulatory burden, driven by fixed supervisory costs, complex documentation duties, and an elevated risk of penalties. While large firms can absorb these costs through economies of scale, smaller providers face declining margins and potential market exit, accelerating consolidation and reducing competition. The analytical framework presented-supported by equations (1), (3), and (48)-formalises the structural disadvantages SMEs face under the current regulatory regime. Empirical data from 53 industry respondents and three expert assessments confirm the²se imbalances, with over half of participants considering surrendering their licence due to compliance burdens. Qualitative feedback further underlines the call for proportional regulation, reduced documentation redundancy, and clearer legal language. International comparison shows that alternative models—such as tiered obligations, revenuelinked exemptions, and risk-based supervision—are already in place in other EU jurisdictions and could be adapted to the Austrian context. The UK's sandbox approach and differentiated audit thresholds in the Netherlands illustrate the feasibility of scaling compliance obligations to business complexity. Policy adjustments should thus prioritise proportionality, predictability, and administrative simplification. This may include: (i) scaling regulatory fees to company size and complexity, (ii) streamlining reporting obligations, and (iii) integrating regulatory overlap reviews. A transition toward differentiated supervisory practices would preserve investor protection while ensuring a level playing field and fostering market diversity. Without such reforms, the long-term viability of smaller market participants remains at risk, with negative implications for innovation, price competition, and client access to independent advice.

References

Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). *BaFin annual report 2020* [Internet]. 2020 [cited 2025 Jan 13]. Available from: https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dljb2020_en.pdf
 Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). *BaFin annual report 2023* [Internet]. 2023 [cited 2025 Jan 13]. Available from: https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dljb2023_en.pdf
 Business Insider. Hedge fund investors push back on fees amid rising costs [Internet]. 2024 [cited 2025 Jan 13]. Available from: https://www.businessinsider.com/hedge-fund-investors-push-back-on-talent-fees-2024-8



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[4] European Commission. *Tax compliance costs for SMEs: An update and a complement* [Internet]. 2022 [cited 2025 Jan 13]. Available from: https://taxation-customs.ec.europa.eu/system/files/2022-

12/221208%20DG%20GROW%20report-%202022%20Tax%20Compliance%20Costs%20SMEs.pdf

[5] Economics Discussion. Valuation of securities: Six pricing models [Internet]. 2024 [cited 2025 Jan 13]. Available from: https://www.economicsdiscussion.net/investment/securities/valuation-of-securities-6-pricing-models-securities-financial-economics/29871

[6] Einlagensicherung AUSTRIA Ges.m.b.H. Einlagensicherung und Anlegerentschädigung in Österreich [Internet]. 2023 [cited 2025 Jan 13]. Available from: https://www.einlagensicherung.at

[7] European Parliament. Directive 2014/65/EU on markets in financial instruments (MiFID II) [Internet]. 2014
[cited 2025 Jan 13]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0065
[8] European Parliament and Council. Directive 2014/65/EU on markets in financial instruments (MiFID II)
[Internet]. 2014 [cited 2024 Dec 30]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0065

[9] Federal Financial Supervisory Authority (BaFin). BaFin annual report 2019 [Internet]. 2019 [cited 2025 Jan

13]. Available from: https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dljb2019_en.pdf

[10] Federal Financial Supervisory Authority (BaFin). BaFin annual report 2021 [Internet]. 2021 [cited 2025 Jan

13]. Available from: https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dljb2021_en.pdf

[11] Federal Financial Supervisory Authority (BaFin). BaFin annual report 2022 [Internet]. 2022 [cited 2025 Jan

13]. Available from: https://www.bafin.de/SharedDocs/Downloads/EN/Jahresbericht/dljb2022_en.pdf

[12] Finance Strategists. Investment management fees: What you need to know [Internet]. 2024 [cited 2025 Jan

13]. Available from: https://www.financestrategists.com/wealth-management/investmentmanagement/investment-management-fees/

[13] Financial Education Training. Understanding investment management fees [Internet]. 2024 [cited 2025 Jan

13]. Available from: https://www.fe.training/free-resources/portfolio-management/investing-fee/

[14] Finanzmarktaufsicht (FMA). *FMA-Kostenverordnung 2016* [Internet]. 2016 [cited 2024 Dec 30]. Available from: https://www.fma.gv.at/fma-kostenverordnung/

[15] Finanzmarktaufsicht (FMA). FMA Marktanalyse: Österreichs beaufsichtigte Wertpapierunternehmen betreuen ein Kundenvermögen von rund €46 Mrd [Internet]. 2016 [cited 2024 Dec 30]. Available from: https://www.fma.gv.at/fma-marktanalyse-oesterreichs-beaufsichtigte-wertpapierunternehmen-betreuenkundenvermoegen-von-rund-e-4

[16] Finanzmarktaufsicht (FMA). *FMA annual report 2023* [Internet]. 2023 [cited 2025 Jan 12]. Available from: https://www.fma.gv.at/annual-report-2023/

[17] Finanzmarktaufsicht Österreich. FMA-Gebührenverordnung (FMA-GebV) [Internet]. 2004 [cited 2024 Dec
 30]. Available from: https://www.ris.bka.gv.at/eli/bgbl/ii/2004/230/ANL1/NOR40251554

[18] Glassdoor. Compliance officer salaries in Austria [Internet]. 2023 [cited 2025 Jan 13]. Available from:

https://www.glassdoor.com/Salaries/austria-compliance-officer-salary-SRCH_IL.0,7_IN18_KO8,26.htm

[19] Investopedia. Capital asset pricing model (CAPM) [Internet]. 2024 [cited 2025 Jan 13]. Available from: https://www.investopedia.com/terms/c/capm.asp

[20] Johannes Kepler Universität Linz. *Unabhängige Wertpapierdienstleister in Österreich: Strukturanalyse und Entwicklungen* [Internet]. 2020 [cited 2024 Dec 30]. Available from:

https://www.jku.at/fileadmin/gruppen/103/Asset_Management/Sonstiges/Kolumnen_Beitraege_und_Artikel/U nabhaengige_Wertpapierdienstleister_in_oesterreich.pdf

[21] Gelter M, Pucher M. Securities litigation and enforcement in Austria [Internet]. 2016 [cited 2025 Jan 13]. Available from: https://ssrn.com/abstract=2726661

[22] Moon S, Jambert E, Childs M, et al. A win-win solution? A critical analysis of tiered pricing to improve access to medicines in developing countries [Internet]. 2011 [cited 2025 Jan 13]. Available from: https://doi.org/10.1186/1744-8603-7-39

[23] Republik Österreich. Unternehmensgesetzbuch (UGB), §229 Abs. 6: Rücklagenbildung [Internet]. 2024 [cited 2025 Jan 12]. Available from: https://www.jusline.at/gesetz/ugb/paragraf/229



Journal of Next-Generation Research 5.0 Website: www.jngr5.com Email: editor@jngr5.com

[24] European Parliament, Council. Regulation (EU) No 648/2012 on over-the-counter derivatives, central counterparties and trade repositories (EMIR) [Internet]. 2012 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0648

[25] European Parliament, Council. Sustainable Finance Disclosure Regulation (SFDR) [Internet]. 2019 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2088

[26] European Parliament, Council. Whistleblower Protection Directive [Internet]. 2019 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L1937

[27] European Parliament, Council. Climate Benchmarks Regulation [Internet]. 2020 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2089

[28] European Parliament, Council. EU Taxonomy Regulation [Internet]. 2020 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852

[29] European Parliament, Council. Corporate Sustainability Reporting Directive (CSRD) [Internet]. 2021 [cited 2025 Jan 12]. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021L2101

[30] Die Presse. Geldstrafe gegen Raiffeisen Bank International wegen Verstößen gegen Geldwäsche-Vorschriften [Internet]. 2024 [cited 2024 Dec 30]. Available from: https://www.diepresse.com/18615434/fmamillionenstrafe-fuer-rbi-wegen-verstoessen-gegen-geldwaesche-regeln

[31] PwC. Austria – Individual other taxes and social security contributions [Internet]. 2025 [cited 2025 Jan 12]. Available from: https://taxsummaries.pwc.com/austria/individual/other-taxes

[32] Republik Österreich. *Gewerbeordnung 1994 (GewO)* [Internet]. 1994 [cited 2024 Dec 30]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10005235

[33] Republik Österreich. *Wertpapieraufsichtsgesetz 2018 (WAG 2018)* [Internet]. 2018 [cited 2024 Dec 30]. Available from:

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20009995

[34] Republik Österreich. FMA-Gebührenverordnung – FMA-GebV, Anlage 1, gültig ab 01.12.2023 [Internet].

2023 [cited 2025 May 30]. Available from: https://www.ris.bka.gv.at/eli/bgbl/II/2004/230/20040608

[35] SalaryExpert. Compliance officer salary in Austria [Internet]. 2023 [cited 2025 Jan 13]. Available from: https://www.salaryexpert.com/salary/job/compliance-officer/austria

[36] Sanchez-Cartas JM, Katsamakas E. AI pricing algorithms under platform competition [Internet]. 2024 [cited 2025 Jan 13]. Available from: https://doi.org/10.1007/s10660-024-09821-w

[37] Shi J. Efficiency in plan choice with risk adjustment and risk-based pricing in health insurance exchanges [Internet]. 2016 [cited 2025 Jan 13]. Available from: https://doi.org/10.1057/s41288-016-0025-0

[38] LexisNexis Risk Solutions. True cost of financial crime compliance study: EMEA region [Internet]. 2024 [cited 2025 Jan 13]. Available from: https://risk.lexisnexis.com/global/de/insights-resources/research/true-costof-financial-crime-compliance-study-emea

[39] Europäische Union. *Datenschutz-Grundverordnung (DSGVO)* [Internet]. 2016 [cited 2024 Dec 30]. Available from: https://gdpr-info.eu/

[40] Unternehmensserviceportal. Employer social security contributions in Austria [Internet]. 2025 [cited 2025 Jan 12]. Available from: https://www.usp.gv.at/en/themen/mitarbeiter-und-gesundheit/einstellung-mitarbeiterund-arten-der-beschaeftigung/weitere-informationen-einstellen-von-personal/zahlung-vonsozialversicherungsbeitraegen.html

[41] Verbraucherschutzforum. Geldstrafe gegen BAWAG P.S.K. wegen Verstößen gegen das FM-GwG [Internet]. 2024 [cited 2024 Dec 30]. Available from: https://verbraucherschutzforum.berlin/2024-12-03/fmaoesterreich-verhaengt-geldstrafe-gegen-bawag-p-s-k-wegen-verstoessen-gegen-geldwaeschevorschriften-3373

[42] Zatta D. Die Preismodell-Revolution. Weinheim: Wiley-VCH; 2023. ISBN: 978-3-527-50862-7

[43] Republik Österreich. *Gesetz über Gesellschaften mit beschränkter Haftung (GmbHG)* [Internet]. 1906 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/Dokumente/BgblPdf/1906_58_0/1906_58_0.pdf

[44] Republik Österreich. *Bundesabgabenordnung (BAO)* [Internet]. 1961 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/Dokumente/BgblPdf/1961_194_0/1961_194_0.pdf



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[45] Republik Österreich. *Aktiengesetz (AktG)* [Internet]. 1965 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/Dokumente/BgblPdf/1965_98_0/1965_98_0.pdf

[46] Republik Österreich. *Arbeitszeitgesetz (AZG)* [Internet]. 1969 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10008000
[47] Republik Österreich. *Arbeitsverfassungsgesetz (ArbVG)* [Internet]. 1974 [cited 2025 Jan 12]. Available

from: https://www.ris.bka.gv.at/Dokumente/BgblPdf/1974_22_0/1974_22_0.pdf

[48] Republik Österreich. *Pensionskassengesetz (PKG)* [Internet]. 1990 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/

[49] Republik Österreich. *Bankwesengesetz (BWG)* [Internet]. 1993 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10004874
[50] Republik Österreich. *ArbeitnehmerInnenschutzgesetz (ASchG)* [Internet]. 1994 [cited 2025 Jan 12].
Available from: https://www.ris.bka.gv.at/Dokumente/BgblPdf/1994 450 0/1994 450 0.pdf

[51] Republik Österreich. *Finanzmarkt-Geldwäschegesetz (FM-GwG)* [Internet]. 1996 [cited 2024 Dec 30]. Available from:

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10005827
[52] Republik Österreich. *Betriebliche Vorsorgekassengesetz (BVK-G)* [Internet]. 2002 [cited 2025 Jan 12].
Available from: https://www.ris.bka.gv.at/

[53] Republik Österreich. *Investmentfondsgesetz (InvFG 2011)* [Internet]. 2011 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20007351
[54] Republik Österreich. *Alternatives Investmentfonds Manager-Gesetz (AIFMG)* [Internet]. 2013 [cited 2024 Dec 30]. Available from:

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20008291 [55] Republik Österreich. *Bankenabwicklungs- und Sanierungsgesetz (BaSAG)* [Internet]. 2014 [cited 2025 Jan

12]. Available from: https://www.ris.bka.gv.at/

[56] Republik Österreich. *Einlagensicherungs- und Anlegerentschädigungsgesetz (ESAEG)* [Internet]. 2015 [cited 2025 Jan 12]. Available from: https://www.ris.bka.gv.at/geltendefassung/bundesnormen/20009251/

[57] Republik Österreich. Versicherungsaufsichtsgesetz (VAG) [Internet]. 2016 [cited 2025 Jan 12]. Available

from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20008814 [58] Republik Österreich. *Wertpapierdienstleistungs-Verhaltensverordnung (WPD-V)* [Internet]. 2018 [cited

2025 Jan 12]. Available from: https://www.ris.bka.gv.at/eli/bgbl/II/2018/289

[59] Republik Österreich. *Zahlungsdienstegesetz 2018 (ZaDiG 2018)* [Internet]. 2018 [cited 2024 Dec 30]. Available from:

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20010015

[60] Republik Österreich. *Austrian Corporate Governance Code (ÖCGK)* [Internet]. 2023 [cited 2025 Jan 12]. Available from: https://www.corporate-governance.at/