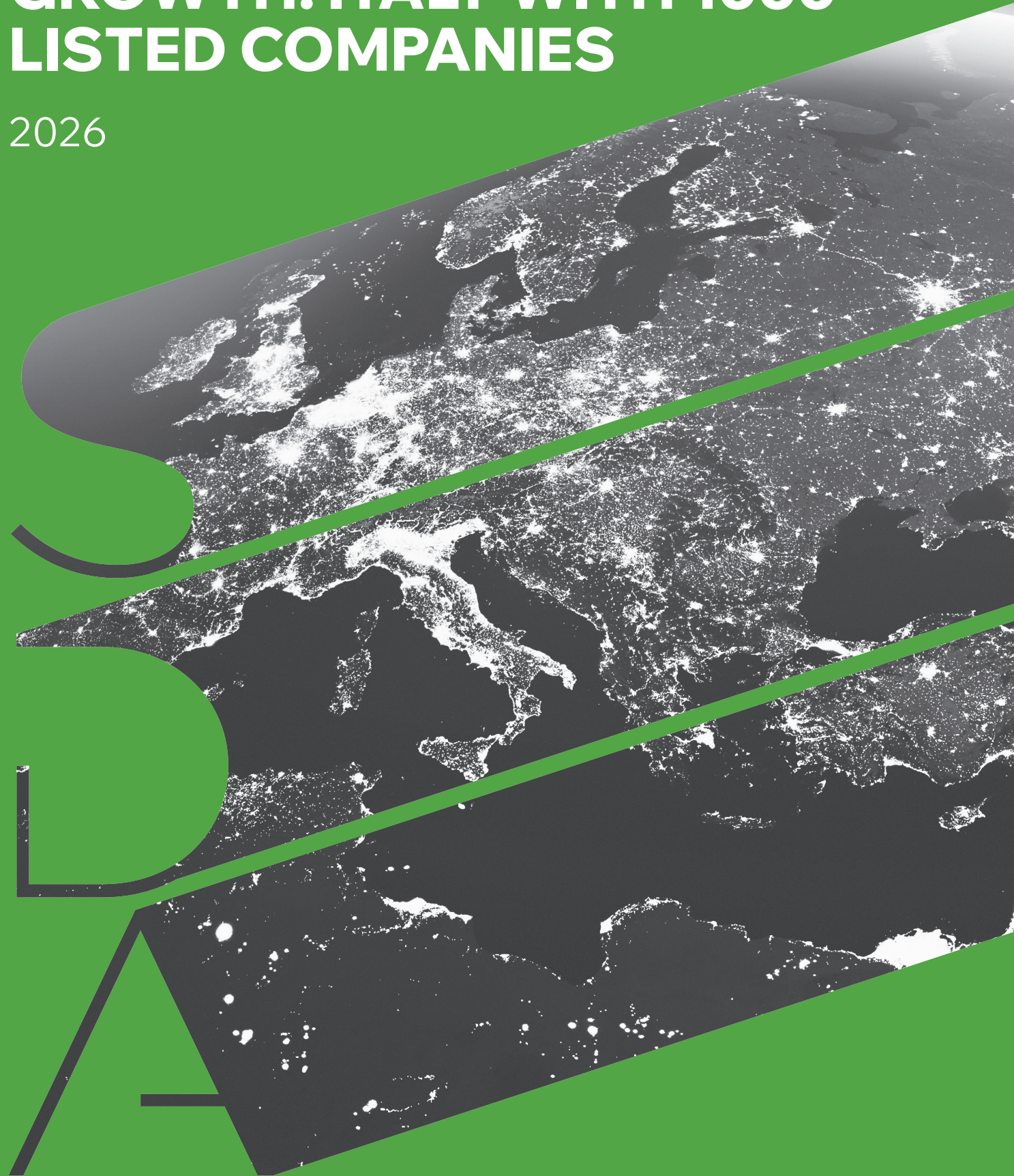


MORE LISTINGS, MORE GROWTH: ITALY WITH 1000 LISTED COMPANIES

2026



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PREFACE

By FABRIZIO TESTA (CEO Borsa Italiana, Euronext Group)

Growth is not an option. It is essential in order to preserve Italy's competitiveness, support employment and continue to generate prosperity over the long term. And for companies to grow, they need capital.

This is the starting point for understanding the role of the stock exchange. The stock exchange is a strategic infrastructure integral to Italy's competitiveness. It connects savings with businesses, finances investment and innovation, helps companies scale and pursue consolidation, and enables citizens to participate in the value created by the real economy.

This study asks a deliberately ambitious question: what would Italy look like with 1000 listed companies?

That number is a target, but more importantly, it proposes a different perspective on public markets. The research shows that broader and deeper public equity markets can generate benefits that go far beyond individual companies: stronger growth, higher productivity, greater investment, more employment and higher tax revenues - all contributing to a stronger and more competitive real economy with greater strategic autonomy.

More exchange means more growth. It also means more transparency of the economy and more people sharing the wealth and prosperity it creates.

This is why the stock market should also be seen as an instrument of industrial policy. If we want to create more national champions, foster innovation and enable Italian companies to compete successfully on the global stage, we must create the conditions for equity capital to become a structural part of their growth journey.

This is an Italian challenge, but first and foremost a European one. In a global environment where scale, technology and access to capital are critical drivers of competitiveness, Europe needs strong, integrated and competitive capital markets to finance its growth and strengthen its strategic autonomy. Euronext, the pan-European market infrastructure that includes Borsa Italiana, plays a fundamental role in this regard: as an integrated European market, it gives Italian and international companies access to a global investor base and Europe's largest pool of liquidity.

Integrating market infrastructures is necessary, but it is not enough. We need a coherent, long-term strategy that enables public equity markets to fulfil their potential. In Italy, this means combining broad structural reforms with concrete initiatives capable of delivering a more immediate impact.

I hope this study will contribute to the debate on the reforms and initiatives needed to put the stock market at the service of Italy's competitiveness. Its recommendations point in a clear direction: increasing the participation of households and institutional investors in public markets, creating structural conditions that encourage more companies to go public, strengthening the financial ecosystem, and continuing to make the regulatory environment simpler, more proportionate and more competitive. Above all, however, we need to build a stronger equity culture.

A country with ambitions for growth needs a strong equity culture. For entrepreneurs, this means seeing a stock market listing not as a loss of autonomy, but as a tool for growth – one that enables them to raise capital while preserving their identity and maintaining a meaningful role in the governance of their companies. For savers, it means having the opportunity to turn part of their wealth into an investment in the growth of Italy's and Europe's best companies.

Ultimately, this is the real challenge of the 1000 listed companies: not to simply have more companies on our markets, but to build a country that is able to channel savings into productive investments and help its businesses grow while generating broader, more widely shared prosperity within the framework of transparency and investor protection that public markets provide.

It is a challenge for the whole country, and one that concerns us all: companies, investors, institutions and the market itself. It is an ambition we must have the courage to embrace and the determination to turn into reality.

By **STEFANO CASELLI** (Dean, SDA Bocconi School of Management)

Firm size, growth, innovation, and employment are concepts that are closely interconnected and increasingly recurrent in public debate, including at the political level. The sudden acceleration of US policy choices and Europe's sense of isolation encourage reflection on issues that were already well known to us, but which we had long been able to defer, if not avoid altogether. Pursuing business growth and a significant increase in firm size requires not only a collective attitude and acceptance, consider, for instance, our country's idiosyncratic aversion to companies that are not small or medium-sized, but also entails specific economic and industrial policy choices. It is therefore timelier than ever to ask what Italy would look like with 1000 listed companies, and to commit ourselves to moving in that direction.

In this regard, one possible path is to use the financial market as an instrument serving industrial policy and the objectives of growth, innovation, and employment. This is especially pertinent in the current historical context, marked by an exceptional stock of available financial wealth: it must be recalled

that the financial assets held by Italian households have exceeded €6.300 billion, more than twice the size of our public debt. How to use these resources without embarking on hazardous ventures, while connecting them to the real economy and to businesses, is the challenge that can be addressed not only to generate growth, but also to provide an effective welfare perspective for an increasingly ageing population. Financial markets and the stock exchange provide the institutional setting in which this connection can be established and thus become central instruments of a national strategy.

Without a stock exchange, and without its continuous use by companies and the wider economic system, it becomes impossible, first and foremost, to channel the strength of savings and available liquidity towards economic development and employment. This is occurring at a historical juncture in which the need for firms to scale up and for investments along certain strategic trajectories, artificial intelligence, health, infrastructure, defense, and renewable energy, is essential to the survival and competitiveness of the European Union.

This centrality is both a political and a narrative choice. It is political because financial markets must be placed at the heart of the action of the European Commission and national governments, as an instrument of development serving not one sector, but society as a whole. It is narrative because broad-based financial education initiatives must be seriously activated, fostering both an understanding of investment and the civic duty to invest, together with all the pension, insurance, and welfare-related benefits that this generates for each individual. Yet it is also a choice concerning the critical issues that must be addressed in order to give the stock exchange and listed markets the role of central pillars within a broader ecosystem comprising companies, private equity and venture capital funds, insurance companies, and pension funds. It is no coincidence that the extraordinary growth of private equity and venture capital now requires, more than ever, a strong and vibrant stock market, both to enable exits and, prospectively, to provide liquidity to smaller investors wishing to include this asset class in their portfolios. The full use of the market undoubtedly depends on good and improved regulations.

The new framework of the Italian Consolidated Law on Finance (TUF) can only strengthen the path already undertaken with the Capital Markets Law, together with European directives. The reform of the TUF is essential less as a means of radically reshaping the existing framework than as an opportunity to simplify it and to clarify, both domestically and especially internationally, the key features that make the Italian market attractive and can support the development of an Italian asset management industry. Taxation, too, if used structurally rather than sporadically or on a one-off basis, can contribute with equal force. For instance, the introduction of incentives in favour of listing has historically generated an immediate and positive impact; however, as soon as the incentive ceases to exist, the momentum also comes to an end. If, instead, a permanent and structural tax choice were introduced that granted an advantage to equity over debt and rewarded investors holding listed securities over the medium term, this would definitively guide certain systemic choices and behaviours. In this regard, it is essential to open a new chapter that builds on and goes beyond the experience of Individual Savings Plans (PIRs), creating a structural bridge between retail savings and the stock market. Also fundamental in this framework is the role that may be played by the new Fondo Nazionale Strategico Indiretto (FNSI), managed by CDP, which will act as an anchor investor in support of the Italian equity market, with particular attention to small and medium-sized enterprises.

A discussion must also be initiated on the asset management industry, which performs the function of driving transactions. Our country possesses very substantial savings as a natural resource. We have a responsibility to use this natural resource ourselves, rather than allowing others to use it on our behalf: this also requires the presence of large-scale champions in asset management, especially in liquid investments, but also in illiquid ones. Reflection should therefore begin with the country's leading banks and insurance companies, in order to encourage the creation of such scale. This is precisely the central issue and the challenge, both for Italy and for Europe: to recognise that savings are a fundamental and primary natural resource; that stock markets are not a distant and technical element, relevant only to some, or an object of superficial attention when delistings occur, but rather a basic instrument of social functioning. They are linked to employment, sustainability, and a welfare system capable of improving to ensure a more dignified life. All these issues, today more than ever, depend on investment choices. They require a country that enhances the strength of its companies through listing.

HIGHLIGHTS

ITALY'S STOCK MARKET: THE CASE FOR 1000 LISTED COMPANIES

Italy's stock market is structurally undersized relative to the national economy, with approximately 400 listed companies and a market capitalization equal to 47% of GDP, well below comparable European peers such as France (107%), the United Kingdom (130%), and Sweden (185%). Closing this gap is not merely a capital market objective; it is a strategic economic policy choice with measurable, cumulative benefits for growth, employment, and fiscal sustainability.

THE MACROECONOMIC OPPORTUNITY

- Expanding the market to 1000 listed companies and a capitalization equal to 100% of GDP is estimated to deliver a GDP growth increase of +0.95%, a tax revenue increase of +2.09%, and an unemployment reduction of 1.93%.
- Even at 80% of GDP, benefits remain economically significant, suggesting gains begin to materialize well before the full target is reached.
- The opportunity cost of maintaining the status quo is substantial and accumulates over time.

THE MICROECONOMIC CASE

- Italian listed companies grew revenues at an average annual rate of 8.2% over 2015 to 2024, approximately 3.5 percentage points above unlisted peers.
- Productivity is 24% higher per employee; investment propensity averages 6.8% of revenues versus 4.2% for private firms.
- EBITDA margins average 14.8% versus 11.2% for private companies; median ROE stands at 11.2% versus 9.8%.
- Employment grew at 3.8% per year among listed companies, more than double the 1.2% observed among private firms, with higher wages and more structured corporate welfare.
- Listed companies represent 0.01% of Italian businesses yet account for 20% of M&A transactions and 28% of total transaction value.

THE PIPELINE: 602 NET NEW LISTINGS

- A ten-year pipeline of approximately 602 net new listings has been identified, cross-referencing size class and sector across Italy's current universe of private companies.
- The strategic focus falls on 313 large and very large companies with revenues above €250 million, representing 52% of projected new listings and 88% of new market capitalization.
- The initiative also targets the "missing middle," increasing the presence of companies with revenues between €100 million and €250 million by approximately 4,5 times.
- New listings are projected to generate approximately €489 billion additional capitalization; organic growth of existing listed companies contributes a further €564 billion; incremental appreciation of new entrants adds €151 billion, collectively closing the gap to 100% of GDP over the decade.

SIX POLICY LEVERS

- **Channeling retail savings:** introduce simple, transparent, and tax-efficient investment instruments aligned with the European Commission's Saving and Investment Accounts recommendation to structurally shift Italian household portfolios toward equities.
- **Mobilizing institutional investors:** expand the funded pension component, promote automatic enrolment in supplementary pension funds, and gradually relax equity allocation constraints for pension funds and insurance companies.
- **Incentivizing listings:** establish a structural fiscal framework, a transparency premium, covering listing and ongoing compliance costs; make the IPO bonus permanent and replicate regional initiatives such as Quota Lombardia and Quota Liguria at the national level.
- **Deepening the market ecosystem:** strengthen the network of investment banks, brokers, analysts, asset managers, and market makers, with targeted public-private support for financial research on small and mid-cap companies.
- **Proportionate regulation:** build on the Capital Markets Law (2024), the TUF reform, the EU Listing Act (2026), and CONSOB and Borsa Italiana simplifications, applying proportionality principles to SME disclosure and governance requirements.
- **Cultural transformation:** promote financial education, showcase listed family-company success stories, and reposition listing as an instrument of long-term growth and wealth preservation rather than a loss of control.

Italy's path to a deeper, more inclusive capital market requires coordinated action across fiscal, regulatory, institutional, and cultural dimensions. With the right policy architecture in place, the Italian stock market can evolve into a stable platform for long-term investment and national competitiveness, transforming the country's considerable private wealth into a genuine productive engine for the real economy.

EXECUTIVE SUMMARY

The Italian stock market has significant growth potential, particularly when measured against the relevance of the national economy. With approximately 400 listed companies and a market capitalization equal to 47% of GDP*, the Italian stock market is structurally under-representing the real economy relative to the major European economies, such as France, the United Kingdom, and Sweden, where this ratio reaches 107%, 130%, and 185% respectively.

This structural gap limits the efficient allocation of capital, reduces the financing options available to companies, and generates significant costs for the economic growth of the country as a whole.

WHAT WOULD ITALY LOOK LIKE WITH 1000 LISTED COMPANIES?

The research highlights how expanding the Italian stock market to 1000 listed companies and reaching a market capitalization equal to 100% of GDP would produce significant macroeconomic benefits. In particular, the estimates indicate an increase in GDP growth of +0.95%, an increase in tax revenues of +2.09%, and a reduction in the unemployment rate of 1.93% (Table 1).

TABLE 1: SENSITIVITY ANALYSIS ON THE MACROECONOMIC IMPACT OF LISTING

Italy 2025 baseline: 47% of GDP			
	Conservative	Target	Best Case
	80%	100%	125%
	Δ +33 pp	Δ +53 pp	Δ +78 pp
GDP growth	+ 0.60 pp	+ 0.95 pp	+ 1.40 pp
Tax-revenue growth	+ 1.30 pp	+ 2.09 pp	+ 3.07 pp
Unemployment growth	- 1.20 pp	- 1.93 pp	- 2.85 pp

Source: Authors' projections

*2025 data

These effects derive from a virtuous cycle involving the factors analyzed in the research: improved capital allocation, greater investment capacity of companies, and the development of a deeper, more structured market ecosystem capable of connecting companies with long-term investors.

Even in a more conservative scenario, in which Italy reaches a market capitalization-to-GDP ratio of 80%, the estimated effects would remain economically significant. This suggests that the benefits of a strengthened stock market begin to materialize gradually, before the full achievement of the 1000 listed companies target.

These findings should not, however, be read as evidence of an automatic link between an increase in the number of listed companies and national economic growth. Rather, they highlight the potential economic benefit deriving from the development of a structurally broader, more efficient, and more accessible capital ecosystem that encourages sustainable, transparent, and shared growth.

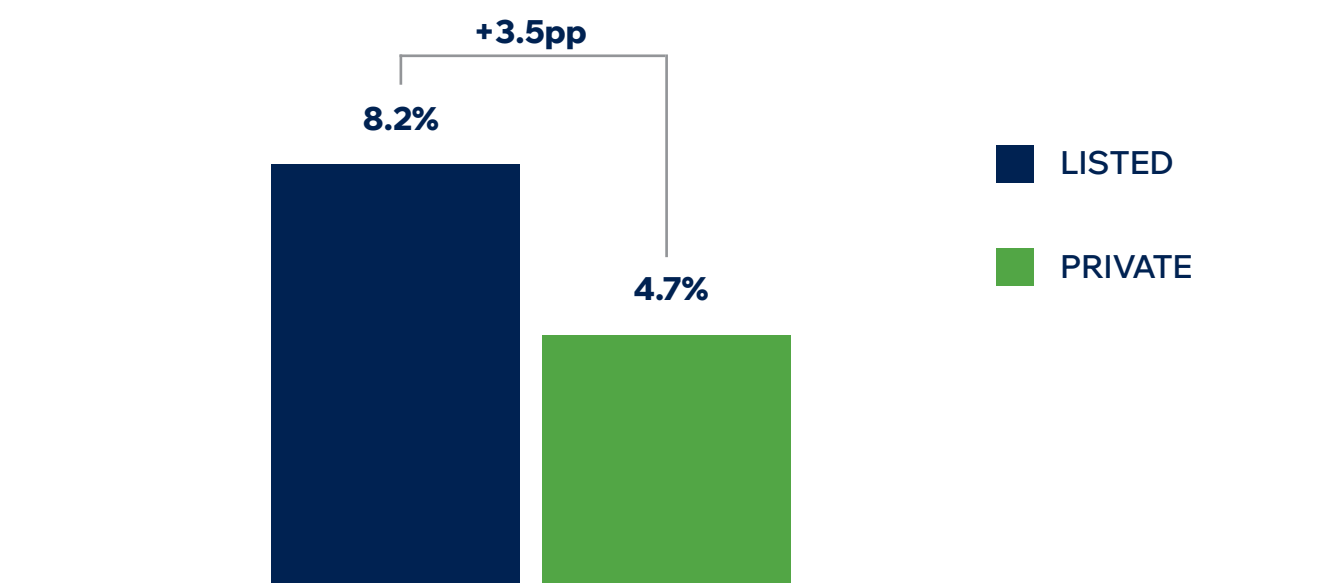
In this perspective, the estimated benefits can be read as a quantification of the opportunity cost associated with maintaining the current use of the Italian stock market, relative to the achievement of its full potential.

The Italian capital market today exhibits limited depth and low capitalization, which translate into the systematic under-representation of certain sectors, including industrials, technology, consumer goods, and healthcare.

Today, hundreds of profitable Italian companies remain private, despite being able potentially to use public markets as a strategic lever to support and accelerate growth: a step that is often indispensable to compete effectively within their sector, while at the same time preserving identity and governance.

The research estimates the macroeconomic effects of listing and examines the underlying microeconomic drivers, namely the firm-level mechanisms through which access to the capital market can contribute to the growth of the national economy. In particular, the analysis examines how listing can activate, also at the microeconomic level, a virtuous cycle, translating into stronger revenue growth, improved profitability, more efficient use of labor and capital, and, more generally, into a strengthening of the competitiveness of the productive system.

FIGURE 1: AVERAGE ANNUAL REVENUE GROWTH, 2015 -2024 (%)

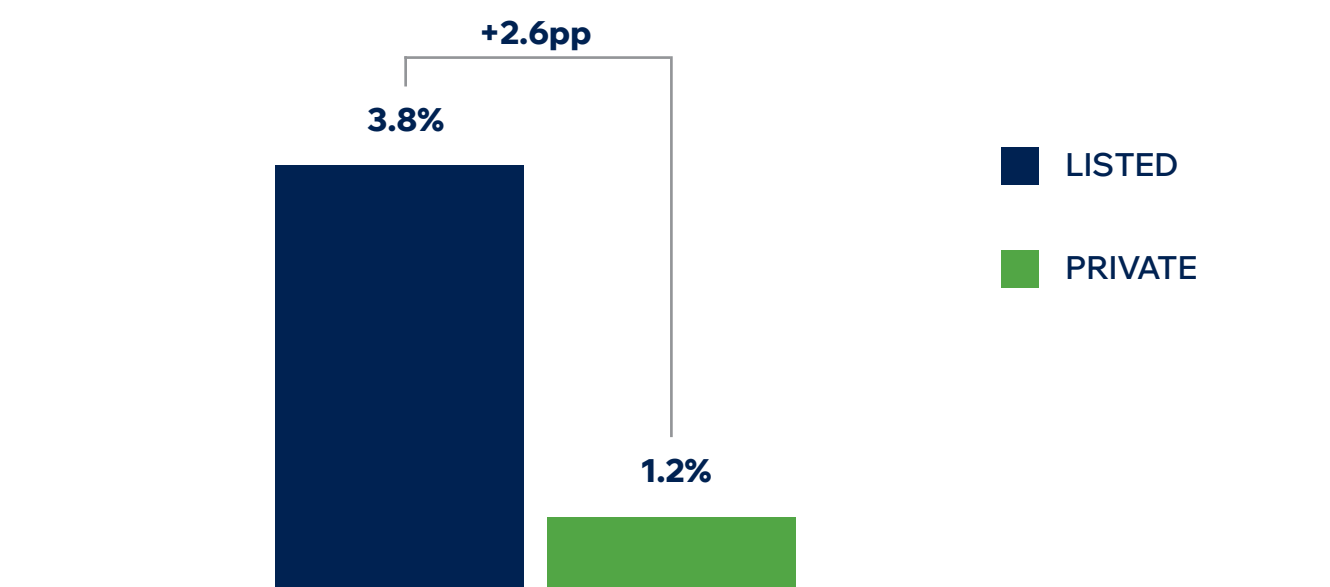


Source: Orbis Database, authors' calculations

Over the past ten years, listed companies in Italy have recorded an average annual revenue growth of 8.2%, approximately 3.5 percentage points higher than that of unlisted companies. This differential reflects several factors, including better access to capital to finance expansion, greater economies of scale, higher operational efficiency, more structured managerial practices, and, in part, a selection effect linked to the greater propensity to list among companies already characterized by more sustained growth rates.

In terms of productivity as well, listed companies show significantly superior performance, generating on average 24% more revenue per employee than private companies. This advantage appears attributable to more highly qualified professional skills, better management practices, and in general a greater availability of capital that enables investment in technology, machinery, and infrastructure, and therefore greater innovation. Listed Italian companies have indeed historically shown a greater propensity for investment, equal on average to 6.8% of revenues, compared to 4.2% for unlisted companies. Furthermore, the analysis also reveals systematic differences in capital structure: in Italy, listed companies exhibit financial leverage approximately 23 percentage points higher than that of unlisted companies, confirming their greater capacity to access and manage sources of financing.

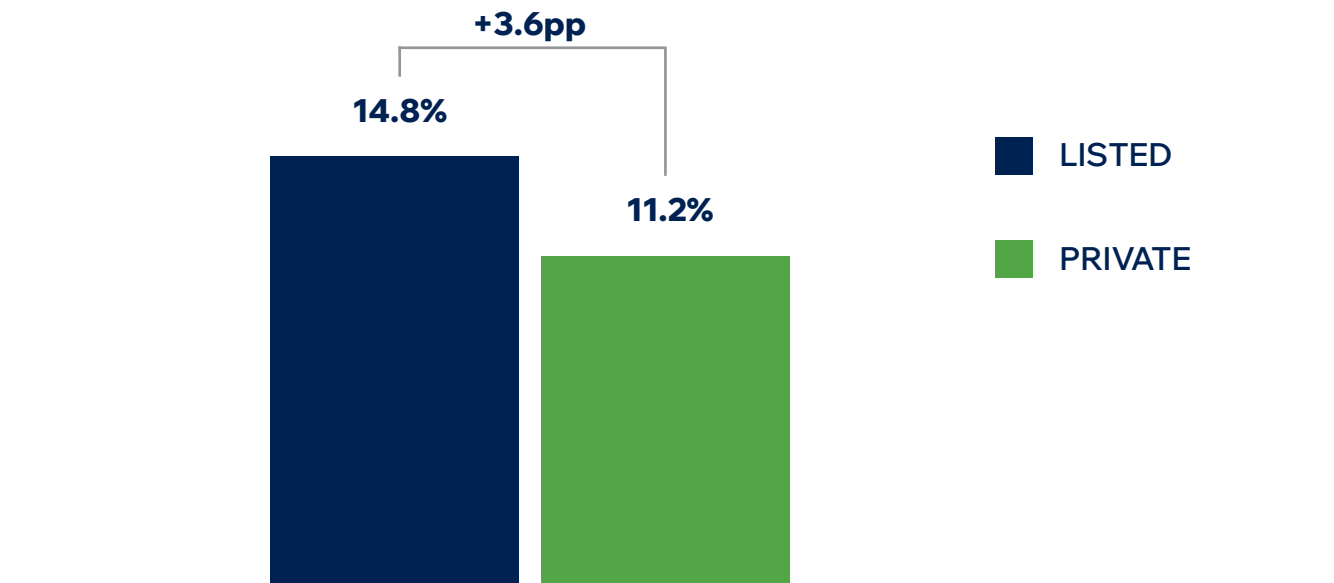
FIGURE 2: AVERAGE ANNUAL WORKFORCE GROWTH, 2015 - 2024 (%)



Source: Orbis Database, authors' calculations

The data show that listing generates a positive impact in terms of employment. In particular, from 2015 to 2024 listed companies recorded an employment premium with average annual growth in the number of employees of 3.8%, more than twice the 1.2% observed among private companies. These findings are of particular relevance for labor policy and economic development strategies, since listed companies not only contribute to job creation at a more sustained pace, but also tend to offer higher average wages, more comprehensive corporate welfare systems, and greater training and development opportunities, with a cost per employee equal to 1.3 times that of unlisted companies. This contributes to fueling a virtuous mechanism of talent selection and development: thanks to more competitive remuneration, better career prospects, and greater development opportunities, listed companies are more effective at attracting and retaining qualified resources within the country.

FIGURE 3: AVERAGE EBITDA MARGIN, 2015 -2024 (%)



Source: Orbis Database, authors' calculations

In Italy, listed companies show on average superior financial and economic performance compared to unlisted ones. The average EBITDA margin stands at 14.8%, compared to 11.2% for private companies, signaling greater operational efficiency. This finding is confirmed by net profitability indicators as well: the median historical ROE of listed companies reaches 11.2%, compared to 9.8% for unlisted companies, while ROA shows a positive differential of approximately 1.7%. Taken together, the data suggest that the typical listed company exhibits higher levels of profitability and financial efficiency, notwithstanding the presence among private companies of a significant component of highly profitable firms. Overall, listing generates a systematic and pervasive advantage, supported by greater operational scale, better access to capital, and more structured governance arrangements.

LISTED COMPANIES ACCOUNT FOR 20% OF M&A TRANSACTIONS IN ITALY

Between 2015 and 2025, listed companies generated approximately 20% of the total M&A transactions in Italy, accounting for 28% of the overall value, despite representing barely 0.01% of the Italian business fabric. This figure highlights the significantly higher propensity of listed companies to participate in extraordinary transactions, confirming the central role of the stock exchange in fostering growth, consolidation, and the capacity to generate national champions.

Having clarified the opportunity costs associated with the growth of the Italian stock market, both in terms of microeconomic benefits for the national business fabric and in terms of potential macroeconomic impact on the country, the research set itself the objective of identifying a potential pool of approximately 600 new companies that could access the exchange, net of potential delistings over the same time horizon.

This estimate was developed by cross-referencing size class and sector of activity, based on the current universe of Italian private companies.

TABLE 2: 602 NET NEW LISTINGS' PROJECTIONS

Size Category	Number of Net New Listings	% of Net New Listings	Average Market Cap (€M)	Total Market Cap (€B)
Micro (<€50M)	41	6.8%	€45	€1.8
Small (€50-100M)	62	10.3%	€85	€5.3
Medium (€100-250M)	186	30.9%	€257	€47.8
Large (€250M-€1B)	250	41.5%	€990	€247.5
Extra Large (>€1B)	63	10.5%	€2,962	€186.6
Total	602	100%		€489.0

Source: Authors' projections

The path toward 1000 listed companies rests on the construction of a diversified pipeline of companies to be brought to market over a time horizon of approximately ten years.

As demonstrated by the Bank of Italy (Finaldi Russo et al., 2020), the listing of many small private companies is unlikely to generate a significant increase in the overall market capitalization. For this reason, the objective focuses on the listing of 313 large companies, representing approximately one-ninth of current private companies with revenues above one billion euros (Very large) and one-seventh of private companies with revenues between 250 million and one billion euros (Large). These companies represent 52% of the projected net new listings and contribute 88% of the new market capitalization. In parallel, the initiative also aims to address the so-called "missing middle" phenomenon, increasing the presence on the stock market of companies with revenues between 100 and 250 million euros by approximately 4.5 times.

This change significantly reinforces the depth, liquidity, and attractiveness of the Italian stock market, since larger companies tend to account for the predominant share of market capitalization, trading volumes, analyst coverage, and international investor participation. At the same time, the expansion of the exchange also preserves representation among smaller companies, thanks to a broad market ecosystem articulated across the entire spectrum of the productive system.

Overall, the prospective structure of the Italian stock market evolves toward a more scalable and internationally competitive configuration, capable of channeling domestic capital toward competitive and transparent domestic companies, while simultaneously generating wealth shared among Italian savers and citizens, as well as greater attractiveness for international capital.

The most significant increases involve the industrial sector, with 161 new listings and approximately 145 billion euros of new market capitalization, supported by Italy's manufacturing tradition, and the consumer discretionary segment, with 107 new listings and approximately 70 billion euros of new market capitalization, driven mainly by Italian lifestyle sectors. The sectors with the highest percentage growth are consumer staples, with an increase from 16 to 112 companies, and healthcare, with an increase from 20 to 70 companies, over a ten-year time horizon, both of which are currently under-represented in the Italian market.

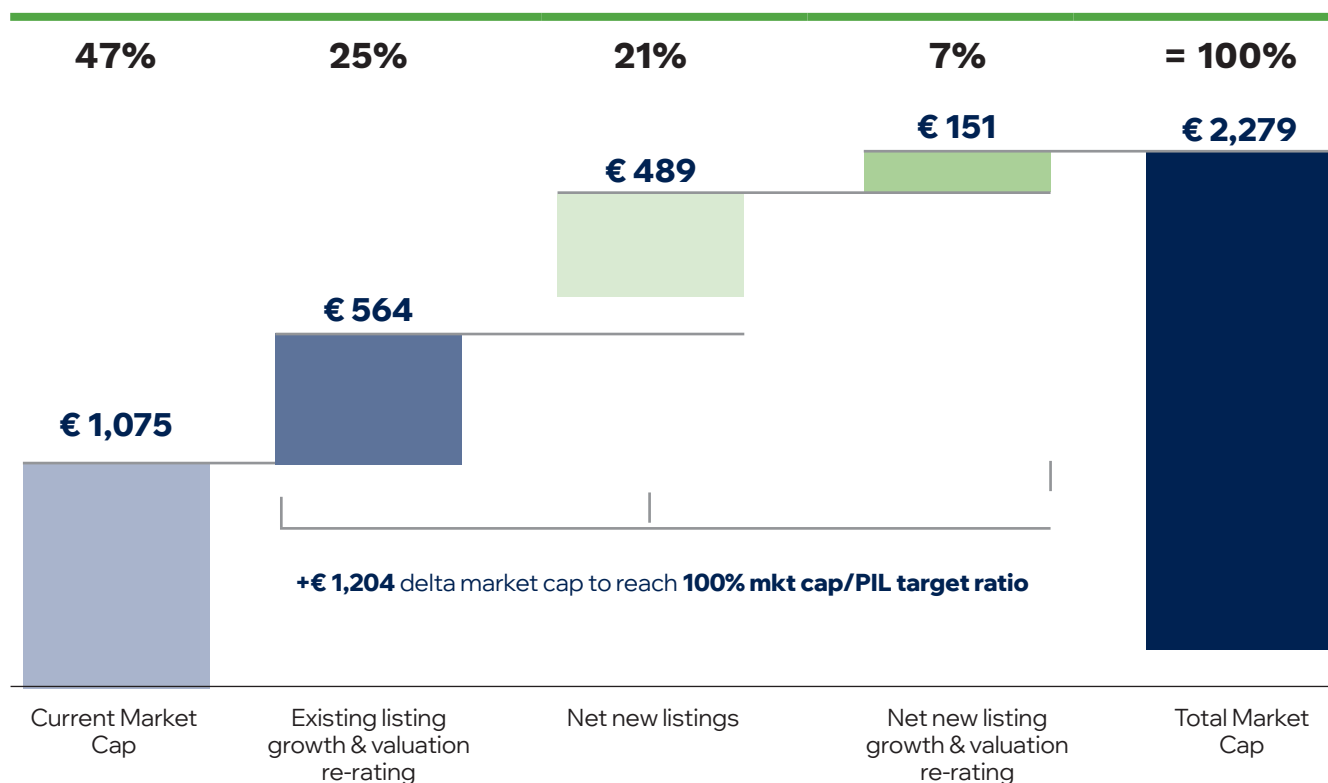
The new listings are embedded within a trajectory of sustained growth, as illustrated in Figure 4, which reinforces both companies already listed and companies accessing the market over the period considered. Listed companies tend to record more sustained revenue growth, thanks to better access to capital and more advanced governance standards; profitability also tends to grow at a faster pace than revenues, once the benefits of scale materialize. Added to this is the fact that Italian equities are currently undervalued in comparison with the main European markets. As market liquidity and participation by both domestic and international investors increase, this valuation discount progressively narrows, enabling companies to remain on the market longer and to move up the exchange, graduating from small to medium-sized and from medium-sized to large and very large companies. Applying, conservatively, an annual growth rate of 4,8% (well below the average capitalization growth of listed companies over the period 2015 to 2025, equal to roughly 8.9%), this component will contribute approximately 564 billion euros over ten years, covering approximately 47% of the market capitalization gap needed to reach 100% of GDP.

Furthermore, newly listed companies also contribute directly to market growth. Once they access the exchange, these companies generate approximately 489 billion euros of additional market capitalization, equal to 41% of the gap. Over the years, they follow a trajectory like that of already listed companies: revenue expansion, margin improvement, and progressive rerating of multiples. Assuming a uniform distribution of listings over the decade and applying the same annual growth rate of 4.8%, the incremental appreciation generates a further 151 billion euros, equivalent to the remaining 13% of the gap.

Taken together, net new listings and the growth of listed companies are conceived as two mutually reinforcing dynamics: listings immediately increase the scale of the market, already listed companies continue to create value over time, and new entrants become progressively more significant players. The new market configuration therefore supports revenue growth, profitability expansion, and the alignment of valuation multiples with European markets.

FIGURE 4: SOURCES OF MARKET CAPITALIZATION GROWTH TO REACH THE 100% OF GDP TARGET

% Total Market Cap



Source: Authors' projections



KEY POLICY RECOMMENDATIONS

The development of the Italian stock market represents one of the most significant structural reforms for strengthening the country's growth capacity, improving the allocation of private savings, and consolidating Italy's competitiveness within the European and global context.

The policy objective goes beyond simply increasing the number of listed companies; it is about building a deep and inclusive market ecosystem in which households, institutional investors, financial intermediaries, and companies can jointly contribute to long-term value creation, within a framework of transparency and the safeguards characteristic of the stock exchange.

The integration of Borsa Italiana into Euronext represented a significant increase in scale. Italian companies can now access Europe's largest pool of liquidity. With more than 1,800 issuers, the aggregate market capitalisation of companies listed on Euronext amounts to approximately 7,000 billion, roughly twice that of the UK market and three times that of the German market. However, the competitiveness of a financial market depends not only on its market infrastructure, but also on the broader environment in which it operates.

The European integration of market infrastructures is a necessary condition, but the expansion of the Italian equity market requires organic coordination across fiscal, regulatory, institutional, and cultural reforms.

In recent years, Italy has made significant efforts on regulatory reform, from the Capital Markets Law of 2024 to the recent reform of the Consolidated Financial Act, to the simplifications introduced by Borsa Italiana and CONSOB, with the objective of streamlining access to and continued listing on the exchange, particularly for SMEs, aligning standards with European best practices, and introducing instruments of flexibility in corporate governance. Furthermore, in 2026 the Listing Act enters fully into force, introducing a significant reduction in administrative and regulatory burdens for listed and newly listed companies.

The effects of this season of regulatory reform will be measurable over the medium term, but risk failing to express their full potential in the absence of a structural change in the way companies and investors use the stock exchange.

It is therefore proposed to intervene by strengthening domestic demand, both retail and institutional, in order to channel a greater share of financial resources toward the real economy represented on the exchange, and in parallel to place companies in a position to capture these flows through a fiscal framework that structurally and stably encourages access to the exchange, by virtue of the systemic benefits that listing generates for growth, transparency, and citizen welfare.

1

Channeling Italian Savings toward Listed Companies

Italy possesses an extraordinarily valuable natural resource: a large stock of private wealth that could serve as the engine of the country's finest entrepreneurial energies while simultaneously generating broad-based prosperity. This wealth remains heavily concentrated in bank deposits, real estate, and low-risk instruments, with limited participation in equity markets. Building a bridge between savings and the real economy through the equity markets means fuelling transparent, inclusive, and shared growth, enabling citizens to participate directly in the growth of Italian companies and of the country as a whole. This process requires simple, transparent, and tax-efficient investment instruments aimed at modifying saver behavior in a structural way and making this natural resource a genuine productive factor for the country. The European Commission's recommendation on Saving and Investment Accounts, in line with the Savings and Investments Union initiative, offers an extraordinary opportunity to think about concrete and systemic solutions that transform Italian savers into investors to the benefit of the domestic and European real economy. Bringing retail investors closer to domestic and European equities is, more than ever, a priority.

2

Channeling Institutional Investor Resources toward Listed Companies

Alongside the retail component, it is essential to strengthen the role of domestic institutional investors. Greater allocation to domestic equity markets by pension funds, social security funds, foundations, and insurance companies would give greater depth and solidity to the shareholder base of listed and newly listed companies, ensuring the presence of investors with a long-term horizon. The prevalence of the public pay-as-you-go pension system, regulatory constraints on institutional equity allocations, the relatively limited scale of the domestic asset management industry relative to its main international competitors, and the size of the domestic equity market have over time constrained the contribution of large investors. It is necessary to pursue structural reforms aimed at expanding the funded pension component, promoting automatic enrolment in supplementary pension funds, and introducing a fiscal regime that favours long-term investments and greater participation in the domestic and European equity market. At the same time, a gradual relaxation of the constraints on equity allocations by pension funds and insurance companies, accompanied by adequate risk management safeguards, would make it possible to direct greater institutional resources toward public markets.

While wide-ranging reforms of the sector take shape, public-private partnership initiatives - such as the Fondo Nazionale Strategico Indiretto, promoted by the Ministry of Economy and Finance and managed by CDP - need to be strengthened and replicated, with the aim of increasing both the capital allocated by major institutional investors and the number of funds dedicated to investing in Italian companies listed on Italian markets.

Within the framework of the Savings and Investments Union, it would be desirable to introduce European-scale public-private partnership initiatives, promoted by European institutions and dedicated to increasing the resources allocated by large institutional investors and the number of funds devoted to investment in the European real economy as represented on the exchanges.

3

Encouraging Italian Companies to List

It is nonetheless necessary that the expansion of the investor base proceed in parallel with the development of a sufficiently broad, solid, and dynamic corporate base capable of absorbing such capital flows and transforming them into investment, innovation, growth, and broad-based prosperity. In the absence of an adequate number of listed companies, the strengthening of demand risks failing to translate into the desired economic development. The central question is therefore not merely to increase the supply of capital, but to place companies in a position to capture these resources by encouraging them to use the stock exchange. The culture of debt in Italy is deep and entrenched. Access to the exchange requires a significant cultural shift, particularly for family-owned businesses, and, notwithstanding the simplification efforts introduced by regulatory reforms, it generates significant costs, both at the point of access and during continued listing, primarily related to regulatory, administrative, and reporting compliance, which are necessary to ensure the transparency and safeguards required by investors.

It is proposed to introduce a fiscal framework that, in a structural and stable manner over time, encourages the best Italian companies to use the stock exchange, a kind of "transparency premium" covering the costs incurred by companies in listing and remaining listed, by virtue of the systemic benefits generated for the country.

The IPO bonus introduced from 2018 onwards, and the "Quota Lombardia" and "Quota Liguria" initiatives introduced from 2025 onwards aimed at covering the listing costs of SMEs, move in this direction and should become structural measures, with the regional initiatives replicated across the national territory.

To achieve the objectives outlined in the research, it is necessary to design measures that have an impact on all companies accessing the exchange, or at least on SMEs defined by the Capital Markets Law as companies with a market capitalization below one billion euros, or on SMEs as defined for the allocation of the predominant share of the National Strategic Indirect Fund, namely companies not included in the FTSE MIB index.

The tax credit currently provided under the IPO Bonus for SMEs could be strengthened, while also rewarding capital strengthening, both at the time of the initial listing and in the context of subsequent capital increases, including with the aim of using the market to promote consolidations and the creation of national champions on the exchange.

Fiscal policy therefore constitutes a complementary and decisive lever. The current Italian tax system still tends to favour debt financing, in particular through the deductibility of interest expenses, while risk capital is subject to multiple layers of taxation, including corporate tax, dividend taxation, and capital gains tax. This asymmetry artificially incentivises recourse to financial leverage, increases corporate fragility, and reduces the availability of equity capital intended to support growth and innovation. The introduction of a fiscal framework that structurally encourages companies to use the exchange would reduce the debt bias, bringing the tax treatment of debt and equity closer together.

The initial fiscal cost of such measures would be largely offset, over the medium term, by increased economic growth, corporate profitability, and overall tax revenues.

4

Strengthening the Market Ecosystem

A further area for action concerns the strengthening of the market ecosystem. It is necessary to consolidate the network of intermediaries, competencies, and services that enables markets to function effectively and allows companies and investors to find a broad and articulated pool of counterparts across the entire advisory chain.

A deeper ecosystem of investment banks, brokers, advisors, analysts, asset managers, and market makers improves corporate visibility, pricing quality, investor engagement, and secondary market liquidity.

Greater advisory capacity helps potentially listable companies approach public markets with adequate preparation, credible equity stories, and effective investor relations strategies. At the same time, better analyst coverage reduces information asymmetries, broadens visibility among institutional and retail investors, and promotes more efficient price formation.

It is proposed to intervene with public-private initiatives in support of the weaker segments of the ecosystem, beginning with financial research on small and mid-cap listed companies, with the objective of increasing and improving the quality of information available to institutional and retail investors.

5

Regulatory Reforms

Regulatory reforms remain an essential component of the strategy, but it should be noted that for regulatory intervention to be fully effective, a sufficiently robust market base must already exist.

At present, listing costs and compliance and transparency obligations weigh disproportionately on small and medium-sized enterprises, for which the fixed costs of market access represent a significant burden relative to the capital raised. In this context, it is important that Italy and Europe continue to uphold principles of efficiency, proportionality, and harmonisation, including through differentiated listing regimes based on the size and risk profile of issuers. Streamlined disclosure requirements, proportionate governance standards, and simplified reporting obligations for smaller companies are aimed at increasing the attractiveness of listing while preserving investor protection and market integrity. Any further regulatory intervention should nonetheless be assessed in light of the effective impact of measures already in force.

6

Cultural Transformation

Cultural transformation represents the cross-cutting condition that renders the ambition outlined in the research sustainable. It is important that public equity capital be regarded both as a financing instrument for corporate growth and, above all, as a mode of economic participation and democratic access to value creation.

The limited equity culture of Italian households, reflected in portfolios still heavily oriented toward bank deposits, government bonds, and low-risk instruments, constrains both the demand for listed securities and the social legitimacy of capital market development. Financial education programs integrated into school and university curricula, informational campaigns on the benefits of diversification and the historical performance of long-term equity investments, as well as greater accessibility to investment instruments, can contribute to gradually modifying saver behaviour.

An equivalent cultural effort is necessary with respect to entrepreneurs. In Italy, listing is often perceived as a threat to family control or to the strategic autonomy of the enterprise. To overcome this bias, it is important to promote success stories of listed Italian companies that have maintained strong entrepreneurial and family continuity. Instruments such as multiple vote share structures, gradual increases in the free float, and the active continued presence of founding families after listing can contribute to promoting the stock market as an instrument of growth, longevity, and long-term preservation of family assets, rather than as a loss of control.

Access to the exchange would give many Italian companies and industrial groups the opportunity to drive consolidation both domestically and internationally, and to attain the scale, professionalisation, culture, and ambition necessary to generate sector leaders with strong roots in Italy, countering the progressive sale of the industrial heritage built since the post-war period.

CONCLUSION

The objective of bringing the Italian stock market toward 1000 listed companies and a market capitalization equal to 100% of GDP represents a structural transformation of great significance. The estimates associated with this scenario, a GDP growth increase of 0.95%, a tax revenue increase of 2.09%, and an unemployment reduction of 1.93%, indicate the high opportunity cost of maintaining the status quo. These benefits are not exhausted in an immediate effect but accumulate over time, producing significant improvements in terms of economic dynamism, fiscal sustainability, innovation, competitiveness, and living standards.

The development of equity markets is a strategic choice of economic policy. A broader, more liquid, and more inclusive capital market strengthens the link between national savings and corporate growth, improves Italy's capacity to finance innovation and industrial transition, and offers citizens more direct participation in corporate value creation. To achieve this result, it will be essential to monitor over time indicators such as the number of new listings, market capitalization, trading liquidity, institutional investor equity allocations, and saver participation.

Only through a coordinated, gradual, and iterative approach will it be possible to transform the Italian stock market into a stable platform for long-term growth, investment, and national competitiveness.

CHAPTER 1

EQUITY MARKET LANDSCAPE

ABSTRACT

This study provides a comprehensive empirical analysis of the Italian equity market structure, examining the representation of the national economy in the stock market and comparing the performance characteristics of listed versus unlisted companies. Using data from 411 Italian listed companies and over 300,000 unlisted firms across four European markets (Italy, France, United Kingdom, Sweden), we document that Italy's equity market remains significantly under-represented relative to its economic size, with a market capitalization to GDP ratio of approximately 47% compared to 107% in France, 130% in the United Kingdom, and 185% in Sweden. The analysis reveals systematic differences between listed and unlisted firms across multiple dimensions: listed companies exhibit higher revenue growth, greater employment generation, superior asset productivity, more extensive use of financial leverage, and higher M&A activity propensity.

1. INTRODUCTION AND RESEARCH CONTEXT

1.1 THE ITALIAN EQUITY MARKET IN EUROPEAN PERSPECTIVE

The Italian equity market occupies a distinctive position within the European financial landscape, characterized by a relatively small number of listed companies despite Italy's status as the third-largest economy in the Eurozone. As of 2025, Italy hosts approximately 411 listed companies with a combined market capitalization of roughly €1,075 billion, representing 47% of national GDP. This stands in stark contrast to comparable European markets: France with 739 listed companies and market capitalization exceeding 107% of GDP, the United Kingdom with 1,482 listed companies representing 130% of GDP, and Sweden with 759 listed companies at 185% of GDP.

TABLE 3: STOCK MARKET OVERVIEW BY COUNTRY

Country	N. Listed companies	Mkt Cap (€B)	Mkt Cap/ GDP(%)
Italy	411	~1,075	~47%
France	7392	~3,200	~107%
United Kingdom	1,482	4,500-5,000	~130%
Sweden	7592	~1,300	~185%

Source: Orbis Database, World Bank, Consob, Refinitiv, Euronext
(2) Excl. Warrants and BSA (Bons de Souscription d'Actions); referring to companies listed on Euronext, Euronext Growth, Nasdaq main market, Nasdaq first north, LSE Main market, LSE AIM

This under-representation raises fundamental questions about the efficiency of capital allocation, the accessibility of equity financing for Italian firms, and the broader implications for economic growth and competitiveness. The average market capitalization per listed company in Italy (approximately €2.7 billion) exceeds that of Sweden (approximately €1.5 billion) but falls short of France (approximately €4.3 billion) and the United Kingdom (approximately €3.1 billion), suggesting that a substantial population of mid-sized enterprises remains in the private domain.

1.2 RESEARCH OBJECTIVES

This study addresses three interrelated research questions:

1 To what extent is the Italian economy represented in the stock market?

We examine the sectoral composition of listed companies, their contribution to national production, employment and value added, and the degree of alignment between the structure of the equity market and the structure of the real economy.

2 Which segments of the Italian economy are most and least represented in public markets?

We provide granular sector-level analysis to identify industries with high versus low listing propensities and explore the structural factors that explain these patterns .

3 What are the systematic differences between listed and unlisted companies?

We conduct comprehensive performance comparisons across multiple dimensions including growth, profitability, productivity, investment intensity, and financial structure, using matched samples from Italy, France, United Kingdom, and Sweden.

1.3 CONTRIBUTION AND POLICY RELEVANCE

This research contributes to the literature on equity market development and corporate finance in several ways. First, it provides the most comprehensive empirical characterization of the Italian listed company universe to date, documenting systematic patterns in size distribution, sectoral composition, and geographic concentration. Second, it extends the comparative analysis of public versus private firms beyond the traditional focus on profitability and growth to encompass productivity, investment behavior, and capital structure across four major European markets. Third, it provides an empirical foundation for evaluating policy initiatives aimed at expanding equity market participation, such as envisioning increasing Italy's listed company base to 1000 firms.

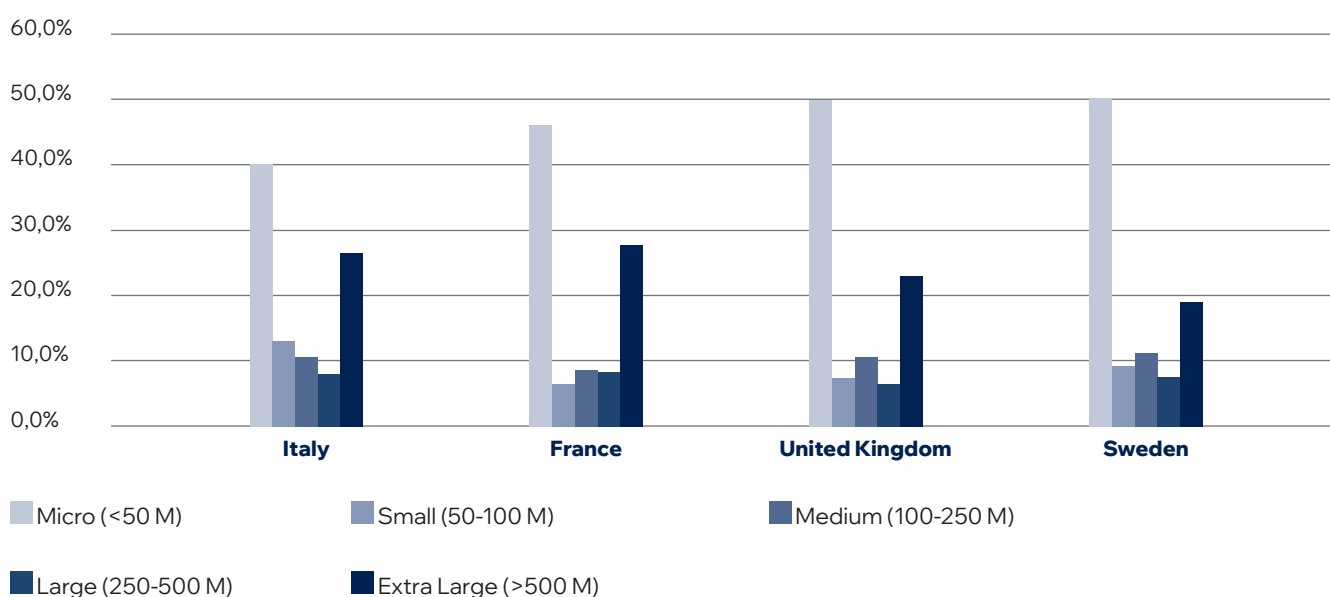
From a policy perspective, understanding the characteristics that differentiate listed from unlisted firms is essential for designing effective incentives for initial public offerings (IPOs), reducing regulatory barriers to listing, and promoting equity culture among Italian entrepreneurs and investors. The cross-country comparisons illuminate whether Italy's market structure reflects idiosyncratic institutional factors or broader European patterns.

2. REPRESENTATION OF THE ITALIAN ECONOMY IN THE STOCK MARKET

2.1 STOCK MARKET STRUCTURE AND SIZE DISTRIBUTION

The Italian equity market comprises 411 listed companies distributed across Euronext Milan (main market) and Euronext Growth Milan. The size distribution of these companies reveals a polarized structure characteristic of European markets more broadly.

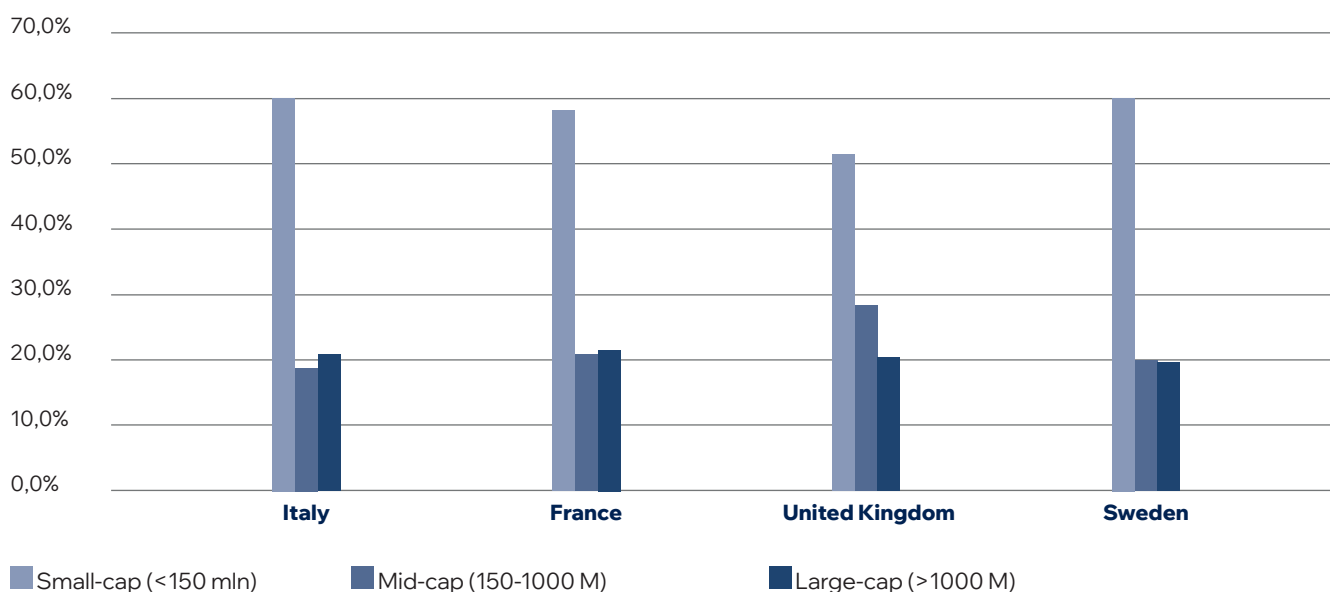
FIGURE 5: DISTRIBUTION OF LISTED COMPANIES BY REVENUE CLUSTER, 2024 (%)



Source: Orbis Database

The distribution exhibits a characteristic bimodal pattern: approximately 40% of Italian listed companies fall into the micro category (revenue below €50 million), while approximately 30% are extra-large companies exceeding €500 million revenues. This pattern is consistent across all four markets examined, with micro companies representing approximately 50% of listings, and extra-large companies accounting for 20% to 30% of the total, suggesting possible barriers to listing for mid-sized companies.

FIGURE 6: DISTRIBUTION OF LISTED COMPANIES BY MARKET CAPITALIZATION CLUSTER (%)



Source: Orbis Database, Refinitiv Financial Data

The distribution of listed companies across market capitalization class shows instead a single polarization: approximately 60% of Italian listed companies fall into the small-cap category (market capitalization below €150 million), in line with comparable European markets where small-cap companies represent 50% to 60% of listings in France, United Kingdom, and Sweden.

The relatively high concentration of small-cap companies among listed firms suggests a stronger propensity, and possibly greater incentives, for smaller companies to access public markets. Conversely, the relative scarcity of mid-cap listed companies points to the presence of barriers or disincentives that prevent firms in the €150-1,000 million market capitalization range from accessing public markets. In particular, listing costs and ongoing compliance requirements may place a disproportionate burden on mid-sized firms, for which the fixed costs associated with becoming and remaining listed can be substantial relative to the amount of capital raised.

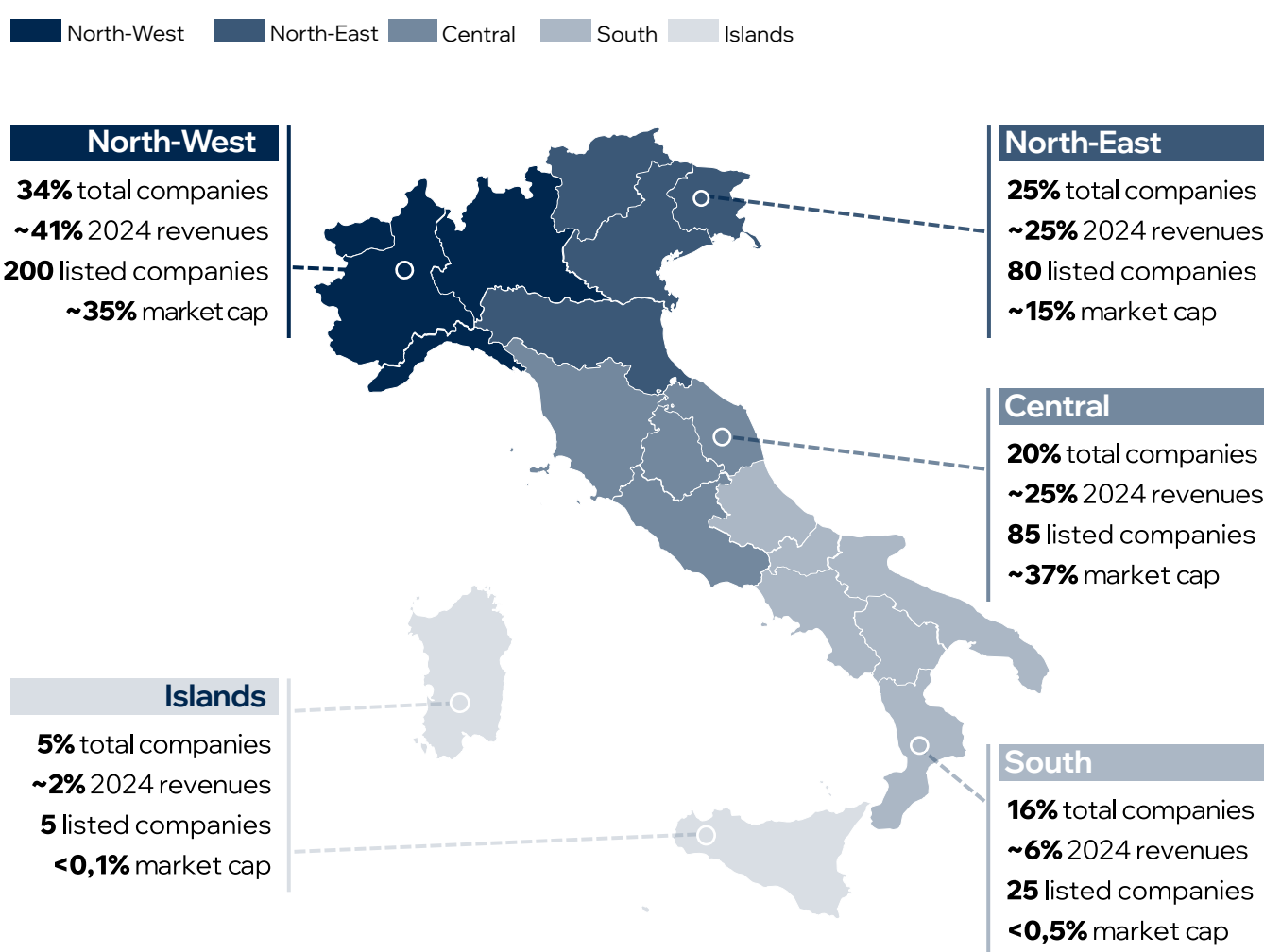
Overall, the evidence points to a “missing middle” phenomenon among listed firms: while small firms appear relatively more willing or able to access public markets, medium-sized firms seem to face greater obstacles in scaling and consolidating. The fact that this polarization is stronger in revenue terms than in market-cap terms highlights that stock market valuations partly smooth this structural gap, creating a disconnect between firms’ operating size and their financial valuation. This “missing middle” phenomenon has important implications for capital allocation efficiency and entrepreneurial growth trajectories.

2.2 ITALIAN ECONOMY GEOGRAPHIC DISTRIBUTION

The Italian entrepreneurial fabric is strongly polarized towards the northern regions, which account for around 60% of all firms and approximately 65% of total revenues. This concentration gradually weakens moving southwards: central Italy represents roughly 20% of firms and 25% of total revenues, while the South and Islands account for about 20% of firms but only 8% of total revenues.

The geographical distribution of listed companies is broadly representative of this overall pattern. Of the 411 listed companies, 395 are domestic, and around 70% of these are headquartered in Northern Italy, pointing to a particularly strong ecosystem for capital market access. Around 22% are located in central Italy, while only about 8% are based in the South and Islands.

FIGURE 7: DISTRIBUTION OF ITALIAN COMPANIES BY REGION



Source: Orbis Database, Refinitiv Financial Data

Notes: Italian companies data refer to firms with registered office in Italy and revenues above €2 million; regional classification based on ISTAT



2.3 REPRESENTATION OF LISTED COMPANIES ON NATIONAL ECONOMY

The Italian equity market comprises 411 listed companies, of which 398 actively traded, representing only 0.01% of the overall national corporate population (4,547,058 firms). This proportion is broadly consistent with that observed in other European markets, with listed companies accounting for between 0.01% and 0.09% of total firms in France, United Kingdom and Sweden (Table 4).

Nevertheless, the Italian stock market appears markedly less representative of the real economy than its major European peers. Listed companies account for only 19% of aggregate revenues (€4,175 billion for the economy as a whole), 10% of total employment (out of 14,335 thousand total employees), and 16% of total value added. This contrasts sharply with the evidence for comparable economies: in France, listed firms account for 39% of revenues, 44% of employment, and 76% of EBITDA, in the United Kingdom, they represent 57% of revenues and 27% of employment, while in Sweden they account for 51% of revenues, 55% of employment, and 70% of EBITDA.

These findings suggest that the Italian equity market remains comparatively limited in its ability to reflect the economic weight of the national productive system. More broadly, this evidence suggests that the Italian stock market performs a comparatively weaker intermediation function, limiting its capacity to channel capital towards the corporate sector.

TABLE 4: STOCK MARKET REPRESENTATION OF NATIONAL ECONOMY, 2024 (%)

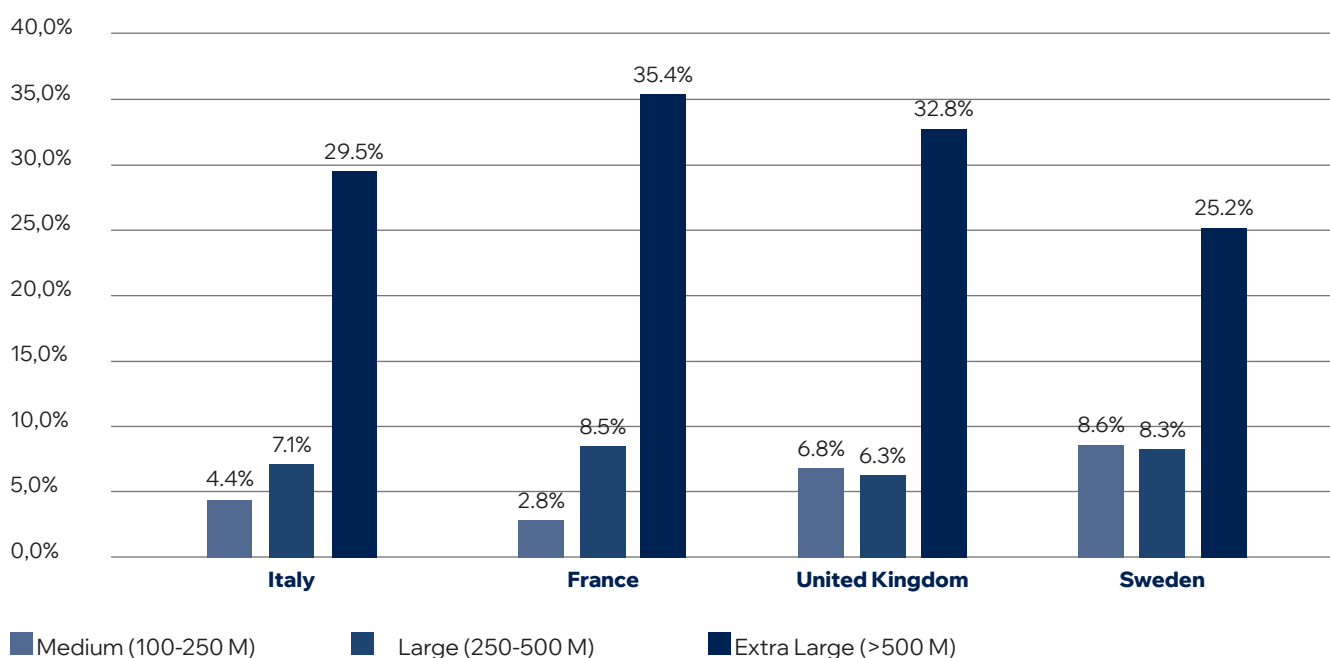
Country	% Listed companies	% Revenues	% Employees	% EBITDA
Italy	~0.01%	~19%	~10%	~16%
France	~0.01%	~39%	~44%	~76%
United Kingdom	~0.03%	~57%	~27%	-
Sweden	~0.09%	~51%	~55%	~70%

Source: Orbis Database, Eurostat, Government UK

Furthermore, looking at the stock market representation of the national economy by revenue class (Figure 8), the evidence suggests that Italian public equity markets remain relatively less effective than other major European markets in representing companies that have already reached meaningful scale. Across Europe, larger firms are generally more represented in listed markets than smaller firms, reflecting their greater ability to meet listing requirements, attract institutional investors, and sustain the costs associated with being public.

In the mid-sized segment (between €100 and €250 million revenues) Italy records a market coverage delta of +4.4%. This is below the United Kingdom at +6.8% and Sweden at +8.6%, indicating that the Italian market has a thinner listed base of medium-sized companies compared with several European peers. A similar pattern emerges in the large segment, (between €250 and €500 million revenues): Italy records +7.1%, below France at +8.5% and Sweden at +8.3%. Importantly, this weakness does not disappear at the upper end of the size distribution. Although extra-large companies (revenues above €500 million) are positively represented in all markets analyzed, Italy's coverage delta of +29.5% remains below France at +35.4% and the United Kingdom at +32.8%. This suggests that, even among companies with the scale and characteristics that should make access to public markets more likely, Italy still lags some of the largest European markets. In other words, the Italian stock market is not only missing part of the medium and large company pipeline; it also appears less able to capture the full potential of the country's extra-large corporate base. The underrepresentation of mid-sized and larger companies is particularly significant, as these firms are typically best positioned to enhance market capitalization, liquidity, analyst coverage, international investor interest, and overall market visibility. Their limited presence reduces the extent to which Italy's stock market reflects the country's productive capacity and economic potential. Addressing this gap should therefore be a priority for policy efforts and market initiatives, with the aim of strengthening the pipeline of larger companies accessing public equity markets and enhancing the role of the stock market in supporting long-term growth.

FIGURE 8: DELTA MARKET COVERAGE BY REVENUE CLUSTER, 2024



Source: Orbis Database

Note: Delta market coverage = (% Incidence of total companies) / (% Incidence of listed companies). Incidence of total companies = (N. companies within revenue cluster) / (Total N. companies), Incidence of listed companies = (N. listed companies within revenue cluster) / (Total N. listed companies)

2.4 EMPLOYMENT CONTRIBUTION OF LISTED COMPANIES

Listed companies play a disproportionate role in Italian employment relative to their number. Data shows that the 411 listed companies collectively employ approximately 1.4 million workers, representing roughly 10% of total employment in Italy.

TABLE 5: EMPLOYMENT CONCENTRATION IN LISTED COMPANIES

Metric	Value
Total employment in listed companies	1,392,726
Total private-sector employment (Italy)	12,942,104
Listed companies as % of total employment	~10%
Average employees per listed company	3,389
Employment concentration (top 10 companies)	~50%

Source: Orbis, ISTAT, authors' calculations

The average listed company employs 3,389 workers, but this figure is heavily influenced by large industrial groups. Employment is indeed highly concentrated: the ten largest employers among listed companies account for roughly 50% of total listed-company labour force underscoring the dominant role of major industrial and service groups in the Italian economy.

Sector-specific employment patterns reveal that manufacturing companies account for approximately 50% of listed-company employment despite representing only 34.5% of listings, reflecting the labor-intensive nature of Italian manufacturing. Financial services companies, accounting for 13.3% of listings, employ 21% of listed-company workers, consistent with their higher capital-to-labor ratios.

2.5 REVENUE CONCENTRATION AND MARKET POWER

The revenue distribution among Italian listed companies exhibits even greater concentration than employment. Total revenues of listed companies amount to approximately €812 billion annually, representing roughly 36% of Italian GDP (as of 2025).

TABLE 6: REVENUE CONCENTRATION IN ITALIAN LISTED COMPANIES

Metric	Value
Total annual revenues (listed companies)	€812B
Italian GDP	€2,258B
Listed company revenues as % of GDP	~36%
Average revenue per listed company	€1.98B
Revenue concentration (top 10 companies)	~62,0%
Revenue concentration (top 50 companies)	~89.5%

Source: Orbis, World Bank, authors' calculations

The top 10 listed companies by revenue account for roughly 62% of total listed-company revenues, and the top 50 companies represent roughly 90%. This concentration is somewhat higher than in peer markets: in France, the top 50 companies account for roughly 83% of listed-company revenues; in the United Kingdom, 76%; and in Sweden, 79%. The greater incidence in Italy reflects the presence of very large industrial groups (e.g., energy, automotive, utilities).

3. SECTOR-SPECIFIC ANALYSIS: OVER- AND UNDER-REPRESENTATION

3.1 METHODOLOGY

To identify which sectors are most and least represented in Italian public markets, we calculate representation ratios for each of the eleven major industry groups. The representation ratio is defined as:

Representation Ratio =

(% of Listed Companies Market Cap in Sector) / (Sector's % Contribution to GDP)

A ratio greater than 1.0 indicates that the sector is over-represented in public markets relative to its economic weight; a ratio less than 1.0 indicates under-representation.

3.2 SECTORAL COMPOSITION AND ECONOMIC REPRESENTATION

The sectoral composition of the Italian equity market reveals striking patterns of over- and under-representation when comparing the distribution of listed companies against their respective contributions to national economic output. The analysis demonstrates that certain sectors maintain substantially greater presence in public markets relative to their economic weight, while others remain dramatically underrepresented despite significant contributions to gross domestic product.

TABLE 7: SECTORAL DISTRIBUTION OF ITALIAN LISTED COMPANIES

Sector	Market Cap (€B)	% of Total Market Cap	Sector GDP Contribution (%)	Representation Ratio
Consumer Discretionary	153	14.23%	7.40%	1.92
Industrials	120	11.16%	15.80%	0.71
Financials	463	43.14%	4.20%	10.27
Technology	38	3.53%	3.10%	1.14
Utilities	146	13.57%	2.10%	6.46
Healthcare	22	2.01%	6.90%	0.29
Energy	94	8.75%	2.80%	3.12
Consumer Staples	11	1.01%	7.40%	0.14
Real Estate	2	0.19%	8.60%	0.02
Basic Materials	5	0.47%	2.00%	0.24
Telecommunication	21	1.94%	1.90%	1.02
Total	~1,075	100.00%	62.20%¹	-

Source: Orbis Database, ISTAT, Borsa Italiana, authors' calculations

Note: Representation Ratio = (% of Listed Companies Market Cap) / (% of GDP Contribution).

Values >1 indicate over-representation; values <1 indicate under-representation; (1) Total GDP contribution excluding economic sectors not covered by listed companies (e.g., public administration, education, etc.)

Among over-represented sectors, **Financials** exhibits the highest representation ratio at **10.27**, with a market capitalization of **€463 billion**, constituting **43.14%** of total market capitalization while the sector contributes only **4.20%** of GDP. This concentration reflects the capital-intensive nature of financial institutions and regulatory requirements that favor or mandate public market access for banks and insurance companies. High capital requirements make public equity markets an attractive funding source, while investor demand for financial sector exposure in diversified portfolios ensure ready market reception for financial institution offerings. Historical privatization of state-owned banks and insurance companies further contributed to the sector's prominence in public markets, while transparency and disclosure requirements reduce the incremental cost of public listing for already highly regulated institutions.

Utilities show the second-highest over-representation with a ratio of **6.46**, as the sector accounts for **€146 billion** in market capitalization, representing **13.57%** of total market capitalization while contributing only **2.10%** of GDP. This pattern reflects the large capital requirements for infrastructure investment in power generation, transmission, distribution, and water systems, combined with the stable and predictable cash flows that appeal to income-oriented investors. Historical privatization programs that brought state-owned utilities to public markets substantially increased the sector's representation, while regulatory frameworks that often assume or encourage public ownership for transparency purposes further reinforce the sector's public market presence.

Energy shows strong over-representation with a ratio of **3.12**, with **€94 billion** in market capitalization representing **8.75%** of total market capitalization in a sector contributing **2.80%** of GDP. The capital requirements for energy exploration, production, and distribution make public markets attractive funding sources, though the sector's representation remains constrained by high concentration and the dominance of a few large integrated energy companies. State ownership or control of major energy assets further limits the number of potential public listings, while regulatory and strategic considerations favoring concentrated ownership structures in certain energy subsectors.

Consumer Discretionary companies demonstrate meaningful over-representation with a ratio of **1.92**, as the sector accounts for **€153 billion** in market capitalization, representing **14.23%** of total market capitalization while contributing **7.40%** of GDP. This pattern reflects the brand-intensive nature of consumer discretionary businesses, where public listing provides both capital for expansion and enhanced brand visibility that reinforce market positioning. The sector's sensitivity to economic cycles and consumer sentiment creates volatility that equity markets can efficiently price, making public listing attractive for companies seeking to signal quality and stability to consumers and business partners alike.

Technology exhibits moderate over-representation with a ratio of **1.14**, with **€38 billion** in market capitalization constituting **3.53%** of total market capitalization while the sector contributes **3.10%** of GDP. This reflects the high growth potential and strong investor appetite for technology stocks, combined with the scalability of software and platform businesses that make public market funding particularly attractive. The venture capital and private equity ecosystems that have developed around technology companies further channel promising firms toward public listings, while the international orientation of many Italian technology companies drives them to seek access to global capital pools through public market participation.

Telecommunication demonstrate only slight over-representation with a ratio of **1.02**, as the sector accounts for **€21 billion** in market capitalization, representing **1.94%** of total market capitalization while contributing **1.90%** of GDP. The capital intensity of telecommunications infrastructure and the regulatory frameworks governing the sector create conditions favorable to public listing, though consolidation trends have limited the absolute number of listed entities.

Among under-represented sectors, **Industrials** shows the most moderate under-representation with a ratio of **0.71**, with **€120 billion** in market capitalization representing **11.16%** of total market capitalization despite contributing **15.80%** of GDP. This under-representation is notable given Italy's strong industrial tradition and the sector's capital intensity, which would normally make public markets attractive for funding expansion, modernization, and international growth. However, the gap may reflect the prevalence of family-owned industrial firms, the importance of small and medium-sized enterprises in the Italian industrial base, as well as the availability of alternative financing channels that reduce the need for public listing.

Healthcare exhibits substantial under-representation with a ratio of **0.29**, as the sector accounts for **€22 billion** in market capitalization, representing **2.01%** of total market capitalization while contributing **6.90%** of GDP. This under-representation may reflect the prevalence of small-scale healthcare service providers and the fragmentation of the sector across numerous specialized subsegments. At the same time, the growing importance of medical technology, biotechnology, and pharmaceutical companies suggests potential for expanded representation in the future.

Basic Materials demonstrates substantial under-representation with a ratio of **0.24**, as the sector accounts for only **€5 billion** in market capitalization, constituting **0.47%** of total market capitalization while contributing **2.00%** of GDP. Although the capital intensity of materials production, processing, and distribution can make public market access attractive for funding capacity expansion and technological upgrading, the current data suggest that the sector remains relatively absent from public markets. This may reflect concentration among a limited number of operators, private ownership structures, or the tendency for materials businesses to rely on strategic investors and bank financing rather than equity market listings.

Consumer Staples exhibits severe under-representation with a ratio of **0.14**, as the sector accounts for **€11 billion** in market capitalization, constituting **1.01%** of total market capitalization while contributing **7.40%** of GDP. The sector's characteristics include stable demand, mature markets, and often family-owned business structures may discourage public listing, while private equity and strategic acquirers provide alternative exit routes for company owners that reduce the flow of new listings.

Real Estate demonstrates the most severe under-representation with a ratio of **0.02**, as the sector accounts for only **€2 billion** in market capitalization, representing **0.19%** of total market capitalization while contributing **8.60%** of GDP. This substantial gap reflects the prevalence of private real estate investment vehicles and family holdings, combined with the complexity and subjectivity inherent in valuing real estate assets. Tax considerations that favor private ownership structures and the illiquidity of underlying assets create challenges for public market trading that discourage real estate companies from pursuing listings. The limited development of Real Estate Investment Trusts (REITs) in Italy relative to other European markets further constrains the sector's public market representation.



3.3 OVER-REPRESENTED SECTORS

FINANCIALS (REPRESENTATION RATIO: 10.27)

The financial sector demonstrates substantial over-representation with a ratio of 10.27, as €463 billion market capitalization (constituting 43.14% of total listings) serves a sector representing 4.2% of GDP. This concentration reflects both the structural characteristics of financial institutions and the regulatory environment within which they operate.

Multiple factors drive the financial sector's pronounced representation in public markets. Regulatory requirements favor or mandate public listing for certain categories of financial institutions, particularly banks above specified size thresholds, creating a regulatory push toward public market participation that other sectors do not experience. High capital requirements inherent in financial intermediation make public equity markets an attractive and often necessary funding source, as the permanent capital that equity provides supports the leverage and risk-taking that financial business models require. Investor demand for financial sector exposure in diversified portfolios ensures ready market reception for financial institution offerings, while the transparency and disclosure requirements that public listing imposes align naturally with the regulatory reporting obligations that financial institutions already face, reducing the incremental compliance burden relative to other sectors.

Historical privatization programs that brought state-owned banks and insurance companies to public markets substantially increased the sector's representation during the 1990s and early 2000s, creating a cohort of large, liquid financial sector listings that anchor the Italian equity market. The financial services category encompasses diverse subsectors including commercial banks, insurance companies, asset management firms, investment banks and broker-dealers, and specialized financial services, each of which benefits from public market access for different reasons ranging from raising capital to providing equity currency for acquisitions to enabling employee ownership through stock-based compensation.

UTILITIES (REPRESENTATION RATIO: 6.46)

Utilities exhibit strong over-representation with a ratio of 6.46, as €146 billion market capitalization representing 13.57% of total listings operate in a sector contributing 2.1% of GDP. This pattern reflects the fundamental characteristics of utility business models and the historical evolution of the sector.

The pronounced over-representation stems from several reinforcing factors. Large capital requirements for infrastructure investments in power generation, transmission, distribution, and water systems make public equity markets an essential funding source, as the scale of investment required exceeds what most private ownership structures can efficiently finance. Stable and predictable cash flows characteristic of regulated utility operations appeal particularly to income-oriented investors seeking dividend yields, creating natural demand for utility sector exposure in public markets. Historical privatization programs that brought state-owned utilities to public markets during the 1990s and early 2000s substantially increased the sector's representation, while regulatory frameworks often assume or encourage public ownership for transparency purposes further reinforce public market participation.

The utilities category encompasses electric power companies, natural gas distributors, water utilities, multi-utility companies and waste disposal services each of which leverages public market access for different strategic purposes. Electric power companies utilize public listings to fund the generation capacity additions and grid modernization required by energy transition, natural gas distributors access public markets to finance network expansion and digitalization, and multi-utility companies leverage public market liquidity to facilitate the acquisitions necessary for achieving geographic and service diversification.

ENERGY (REPRESENTATION RATIO: 3.12)

Energy demonstrates moderate over-representation with a ratio of 3.12, as €94 billion market capitalization representing 8.75% of listings operate in a sector contributing 2.8% of GDP. This pattern reflects the substantial capital requirements characteristic of energy exploration, production, refining, and distribution, combined with the regulatory and strategic considerations that shape industry structure. The energy category encompasses oil and gas equipment, refining, marketing and other services, besides renewable energy equipment.

The sector's over-representation, despite being more modest than other capital-intensive sectors, stems from the enormous capital requirements for energy infrastructure that make public market access attractive or necessary for funding major projects. However, the sector remains dominated by few large and integrated companies that limit the number of potential public listings. State ownership or control of major energy assets further restricts the pool of potential listings, while regulatory and strategic considerations, including energy security and geopolitical factors, favor concentrated ownership structures in certain energy subsectors.

CONSUMER DISCRETIONARY (REPRESENTATION RATIO: 1.92)

Consumer Discretionary emerges with an over-representation ratio of 1.92, with €153 billion market capitalization (representing 14.23% of total listings) serving a sector that contributes 7.4% of GDP. The sector's pronounced representation in public markets stems from several distinctive characteristics that align consumer discretionary business models with equity market participation. Brand-intensive business models benefit from the visibility and credibility that public listing confers, as stock market presence signals quality, stability, and permanence to consumers whose purchasing decisions increasingly incorporate perceptions of corporate reputation and longevity. The capital requirements for brand building, retail network expansion, and international market entry make public equity markets attractive funding sources, while the sector's sensitivity to economic cycles creates the volatility that equity markets can efficiently price and allocate across investors with varying risk tolerances and investment horizons.

Consumer Discretionary encompasses diverse subsectors including fashion and luxury goods, automotive and components, hotels and leisure, media and entertainment, apparel, and consumer durables, each of which leverages public market access for different strategic purposes. Fashion and luxury companies utilize public listings to fund international expansion while maintaining the brand mystique essential to premium positioning, automotive suppliers access public markets to finance the technological transformation required by electrification and autonomous driving, whereas media companies use public market liquidity to facilitate the acquisitions necessary for achieving scale in consolidating industries.

TECHNOLOGY (REPRESENTATION RATIO: 1.14)

The technology sector exhibits an over-representation ratio of 1.14, with €38 billion market capitalization constituting 3.53% of total listings while serving a sector that represents only 3.1% of gross domestic product. The pronounced over-representation reflects multiple reinforcing factors that make technology companies particularly well-suited to public market participation. High growth potential and strong investor appetite for technology stocks create ready market reception for new technology offerings, while the scalability inherent in software and platform businesses generates the rapid revenue and profit growth that public market investors seek. Venture capital and private equity ecosystems that have developed around technology companies actively channel promising firms toward public listings as a preferred exit mechanism, providing both the capital and advisory support necessary to navigate the listing process successfully. The international orientation characteristic of many Italian technology companies drives them to seek access to global capital pools that only public markets can efficiently provide, while the intangible asset-intensive nature of technology businesses makes traditional bank financing less accessible and public equity financing correspondingly more attractive.

Within the technology sector, software companies, information technology services, hardware and equipment production firms dominate the listed universe, reflecting the particularly strong alignment between these subsectors' business models and public market characteristics. Software companies benefit from recurring revenue models, high gross margins, and network effects that generate the predictable growth trajectories valued by public market investors. Information technology services firms leverage public market access to fund geographic expansion, acquire specialized capabilities, and signal stability to B2B customers for whom vendor's financial strength constitutes a key selection criterion.

TELECOMMUNICATIONS (REPRESENTATION RATIO: 1.02)

Telecommunications demonstrate slight over-representation with a ratio of 1.02, as €21 billion market capitalization constituting 1.94% of listings serve a sector contributing 1.9% of GDP. The capital intensity of telecommunications infrastructure including mobile networks, fiber optic systems, and data centers makes public equity markets attractive funding sources, while regulatory frameworks governing the sector create conditions favorable to public listing including transparency requirements and ownership restrictions that align naturally with public market participation.

However, consolidation trends driven by the need for scale economies in network deployment and the competitive dynamics of converged telecommunications services have limited the absolute number of listed entities. The sector's modest over-representation reflects the balance between capital intensity that favors public listing and industry consolidation that reduces the number of independent entities.

3.4 UNDER-REPRESENTED SECTORS

INDUSTRIALS (REPRESENTATION RATIO: 0.71)

Industrials show the most moderate under-representation with a ratio of 0.71, with €120 billion in market capitalization representing 11.16% of total listings despite contributing 15.80% of GDP. The sector encompasses diverse subsectors including machinery and equipment, transportation, aerospace and defense. Italy's strong industrial tradition and the capital-intensive nature of the sector would normally make public equity markets an attractive source of financing for expansion, modernization, technological upgrading, and international growth. Industrial companies often face substantial funding needs linked to manufacturing facilities, equipment, working capital, export development, foreign direct investment, and acquisitions. Yet the data suggest that these needs are not reflected in proportional public market representation. This under-representation may be explained by the structure of Italy's industrial base, where private family-owned firms, small-mid sized enterprises, as well as bank financing continue to play a central role. These factors may reduce the perceived need for listing or limit the ability and incentives of industrial companies to access public equity markets.

HEALTHCARE (REPRESENTATION RATIO: 0.29)

Healthcare exhibits moderate under-representation with a ratio of 0.29, as €22 billion market capitalization (representing 2.01% of listings) serve a sector contributing 6.9% of GDP. This modest under-representation, less severe than consumer staples or real estate, may reflect the sector's heterogeneity and the varying characteristics of healthcare subsectors. It encompasses pharmaceuticals, biotechnology, medical equipment and healthcare services.

The prevalence of small-scale healthcare service providers including medical practices, diagnostic centers, and specialized clinics creates a fragmented industry structure where most entities remain below the scale threshold for economically viable public listing. Regulatory complexity in healthcare including reimbursement systems, quality standards, and professional licensing creates barriers to scaling that limit the number of companies achieving sufficient size for public markets. However, the growing importance of medical technology companies, pharmaceutical firms, and healthcare services consolidators suggests potential for expanded representation as these subsectors achieve greater scale and operational maturity.

BASIC MATERIALS (REPRESENTATION RATIO: 0.24)

Basic Materials demonstrates substantial under-representation with a ratio of 0.24, as the sector accounts for only €5 billion in market capitalization, constituting 0.47% of total listings, while contributing 2% of GDP. Basic Materials, which include chemicals, industrial materials, and metals, remain relatively absent from public markets despite the sector's significant capital requirements. Activities such as production, processing, distribution, mining, and manufacturing typically require substantial investment in capacity expansion and technological upgrading, which would normally make listings an attractive source of financing. However, the limited market capitalization represented by the sector suggests that these funding needs are often met outside listed equity markets. This may reflect concentrated or private ownership structures, the presence of long-term industrial shareholders, and a reliance on bank financing or strategic investors. In addition, while the commodity-linked nature of revenues can be priced by equity markets, the associated cyclicity and earnings volatility may discourage some companies from capital opening and reduce the sector's attractiveness to certain investors.

CONSUMER STAPLES (REPRESENTATION RATIO: 0.14)

Consumer Staples demonstrates substantial under-representation with a ratio of 0.14, as €11 billion market capitalization (constituting 1.01% of listings) serves a sector contributing 7.4% of GDP. This significant gap reflects characteristics of consumer staples businesses that make public listing less attractive or necessary relative to other sectors.

The sector's under-representation stems from several factors including the stable demand and mature markets characteristic of consumer staples categories, including food & beverage and personal care products, which reduce the capital requirements for growth that often motivate public listings. Family-owned business structures remain prevalent in these industries, with family owners often preferring to maintain control rather than pursue public listing. The sector's stable cash flows and modest growth rates make traditional bank financing readily accessible, reducing the need for public equity capital. Private equity and strategic acquirers provide alternative exit routes for company owners that reduce the flow of new listings, as family owners seeking liquidity often prefer negotiated sales to strategic buyers or private equity firms over the public market process.

REAL ESTATE (REPRESENTATION RATIO: 0.02)

Real Estate exhibits the most severe under-representation of any sector, with only €2 billion market capitalization representing 0.19% of total listings operating in a sector that contributes 8.6% of GDP. This dramatic gap represents the single largest misalignment between market structure and economic structure in the Italian equity market.

The pronounced under-representation reflects multiple reinforcing factors that create substantial barriers to public listing for real estate companies. The prevalence of private real estate investment vehicles and family holdings provides alternative ownership structures that many real estate investors and operators prefer to public market participation, as private structures offer greater operational flexibility and avoid the disclosure requirements that public listing imposes. Complexity and subjectivity inherent in valuing real estate assets create challenges for public market investors who require transparent and verifiable valuations, while the heterogeneity of real estate holdings within individual companies compounds valuation difficulties. Tax considerations including favorable treatment of certain private ownership structures and the capital gains tax implications of real estate transfers create incentives that favor private ownership over public listing.

The illiquidity of underlying real estate assets creates a fundamental tension with the liquidity expectations of public equity markets, as investors expect to trade shares freely while the underlying assets may require extended periods to buy or sell. The limited development of Real Estate Investment Trusts (REITs) in Italy relative to other European markets where REIT structures have become the dominant vehicle for real estate securitization further constrains the sector's public market representation. Listed real estate companies that do exist encompass REITs, real estate developers, and real estate services firms, but their modest number and limited aggregate market capitalization leave vast segments of the Italian real estate market without public market representation.

4. COMPARATIVE ANALYSIS: LISTED VS. UNLISTED COMPANIES

4.1 METHODOLOGY AND SAMPLE CONSTRUCTION

To understand the systematic differences between listed and unlisted companies, we constructed matched samples from four European markets: Italy, France, the United Kingdom, and Sweden. For each market, we identified all listed companies with available financial data in the Orbis database and constructed a comparison group of unlisted companies matched on industry sector and, where possible, size category.

The analysis covers the period 2015-2024, providing a ten-year window that encompasses both the post-financial-crisis recovery, the COVID-19 pandemic, and the subsequent recovery. We focus on several key performance dimensions:

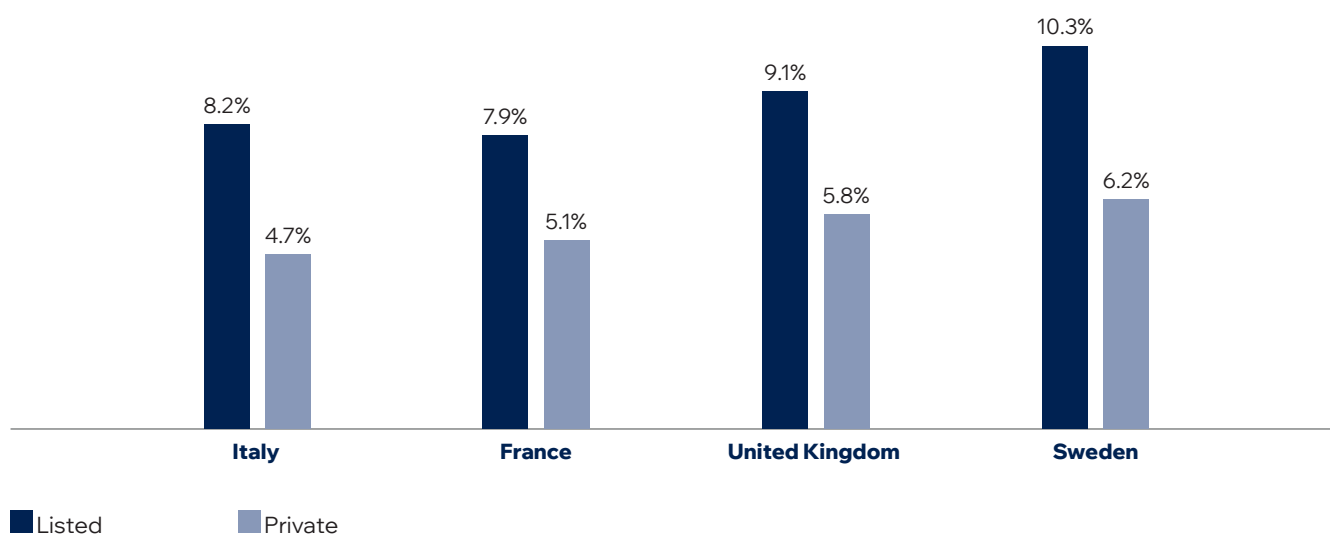
1. **Growth metrics:** Revenue growth, employment growth
2. **Profitability:** Return on Assets (ROA), Return on Equity (ROE), EBITDA margin
3. **Productivity:** Revenue per employee
4. **Investment:** Capital expenditure intensity
5. **Financial structure:** Leverage ratio

All financial data are expressed in euros to facilitate cross-country comparisons.

4.2 REVENUE GROWTH

Listed companies exhibit systematically higher revenue growth rates than their unlisted counterparts across all four markets examined.

FIGURE 9: ANNUAL REVENUE GROWTH, 2015-2024 AVERAGE (%)



Source: Orbis Database, authors' calculations

Note: Growth rates are compound annual growth rates (CAGR) calculated over the full period. Extreme outliers (growth >100% or <-50% annually) are excluded.

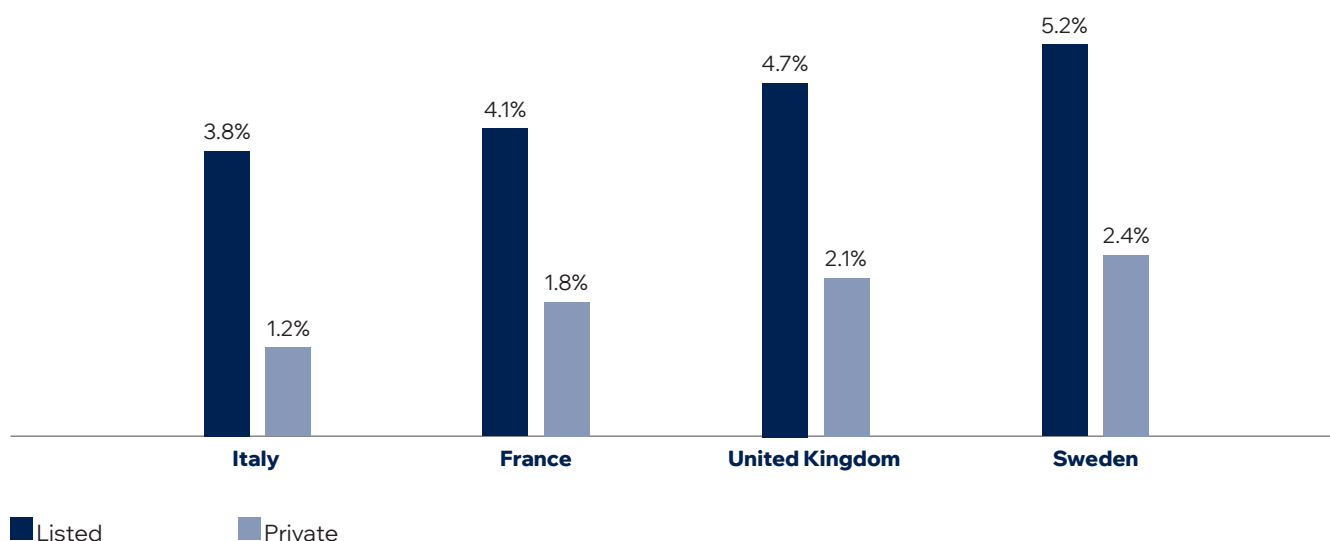
Italian listed companies grew revenues at an average annual rate of 8.2% over the period, compared to 4.7% for unlisted companies, a difference of 3.5 percentage points. This growth premium is consistent across all markets, ranging from 2.8% in France to 4.1% in Sweden. The United Kingdom exhibits the highest growth rates for listed companies (9.1%), while Sweden shows the strongest performance overall with listed companies growing at 10.3% annually.

The growth premium for listed companies likely reflects multiple factors: superior access to capital for expansion, greater operational scale and efficiency, stronger management practices, and selection effects whereby faster-growing firms are more likely to pursue public listings. The consistency of the pattern across four distinct institutional environments suggests that these advantages are structural rather than country-specific.

4.3 EMPLOYMENT GROWTH

Employment growth patterns mirror revenue growth, with listed companies generating jobs at substantially higher rates than unlisted firms.

FIGURE 10: ANNUAL EMPLOYMENT GROWTH, 2015-2024 AVERAGE (%)



Source: Orbis Database, authors' calculations

Italian listed companies increased employment at an average annual rate of 3.8%, more than triple the 1.2% growth rate of unlisted companies. The employment growth premium is remarkably consistent across countries, ranging from 2.3% in France to 2.8% in Sweden. Sweden again exhibits the strongest absolute performance, with listed companies growing employment at 5.2% annually.

These findings have important implications for labor market policy and economic development. Listed companies not only create jobs at faster rates but also tend to offer higher average wages (Table 8), more comprehensive benefits, and greater training opportunities. Italian public companies show a median cost per employee 1.3 times higher than private companies. This fosters a positive selection mechanism whereby offering higher wages, stronger growth opportunities, and better employment prospects, listed companies tend to attract and retain talents more effectively within the country. Policies that facilitate access to public capital markets may therefore generate positive externalities for employment quality and quantity.

TABLE 8: LABOR COST PER EMPLOYEE, 2024 MEDIAN (€K)

	Italy	France	UK	Sweden
Listed	56	67	67	83
Private	43	57	54	63
Delta %	+30%	+17%	+24%	+31%

Source: Orbis Database, authors' calculations

Note: Extreme outliers are excluded.

4.4 PROFITABILITY: RETURN ON ASSETS (ROA)

Profitability comparisons yield more nuanced results. While listed companies generally exhibit higher median ROA, the differences are more modest than for growth metrics.

TABLE 9: RETURN ON ASSETS (ROA), 2015-2024 MEDIAN (%)

	Italy	France	UK	Sweden
Listed	5.8%	6.3%	7.2%	8.1%
Private	4.1%	4.9%	5.1%	6.2%
Delta p.p.	+1.7	+1.4	+2.1	+1.9

Source: Orbis Database, authors' calculations

Note: ROA = Net Income / Total Assets. Extreme outliers are excluded.

Overall, across all countries, listed companies display higher asset profitability than private companies, with the United Kingdom and Sweden standing out as the markets where this profitability gap is most pronounced. The United Kingdom exhibits the strongest listed-company advantage (+2.1 p.p. median ROA), followed by Sweden (+1.9 p.p.), while Italy and France show slightly narrower but still positive gaps of +1.7 p.p. and +1.4 p.p., respectively.

This consistent profitability premium suggests that listed companies may benefit from stronger operational scale, greater access to capital and more structured governance frameworks. However, the relatively contained size of the gap indicates that public listing does not translate into a dramatically higher profitability profile, but rather into a moderate and consistent advantage across markets.

4.5 PROFITABILITY: RETURN ON EQUITY (ROE)

Return on equity provides a measure of profitability from the perspective of shareholders, accounting for the effects of financial leverage.

TABLE 10: RETURN ON EQUITY (ROE), 2015-2024 MEDIAN (%)

	Italy	France	UK	Sweden
Listed	11.2%	12.8%	14.9%	16.2%
Private	9.8%	11.1%	10.3%	11.9%
Delta p.p.	+1.4	+1.7	+4.6	+4.3

Source: Orbis Database, authors' calculations

Note: ROE = Net Income / Shareholders' Equity. Extreme outliers are excluded.

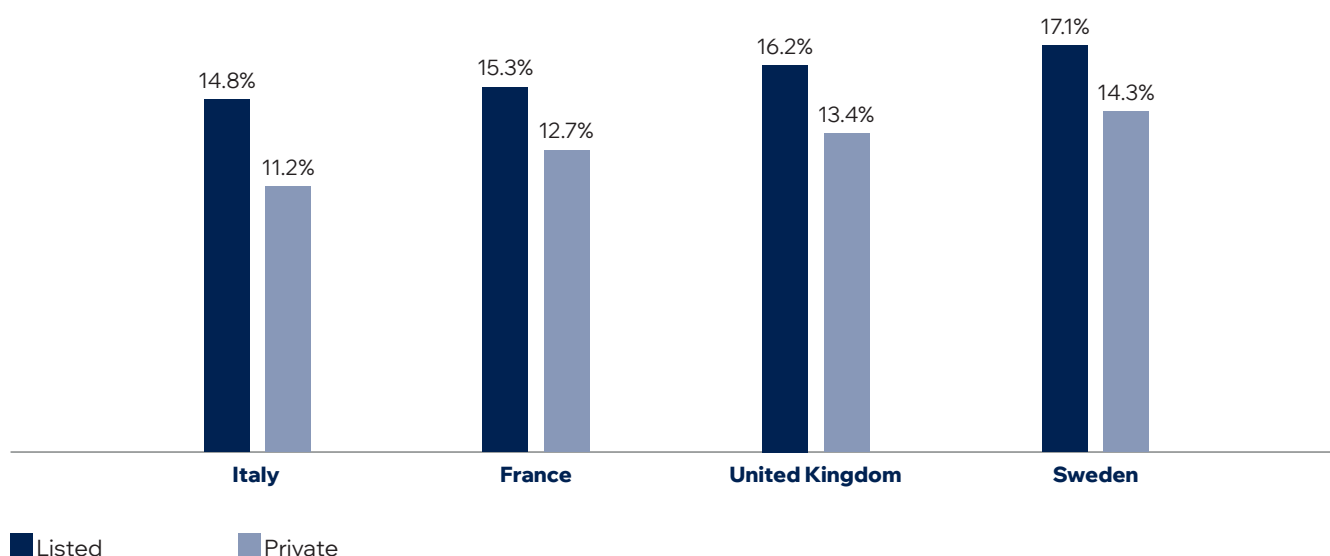
ROE patterns are similar to ROA, with listed companies in UK and Sweden showing higher equity returns (14.9% vs. 10.3% in UK; 16.2% vs. 11.9% in Sweden). The ROE differentials are somewhat larger than ROA ones, reflecting the impact of leverage differences (discussed in Section 4.9).

Listed companies in Italy show median ROE of 11.2%, exceeding the unlisted median of 9.8%, again suggesting that the typical listed company is more profitable than the typical unlisted firm

4.6 OPERATING PROFITABILITY: EBITDA MARGIN

EBITDA margin (Earnings Before Interest, Taxes, Depreciation, and Amortization as a percentage of revenue) provides a measure of operating profitability independent of capital structure and tax effects.

FIGURE 11: EBITDA MARGIN, 2015-2024 AVERAGE (%)



Source: Orbis Database, authors' calculations

Listed companies exhibit consistently higher EBITDA margins across all four markets, with differentials ranging from 2.6% in France to 3.6% in Italy. This suggests that public companies achieve superior operating efficiency, potentially through economies of scale, better management practices, more efficient capital allocation, or selection effects whereby more efficient firms choose to go public.

The consistency of the operating margin advantage across countries, combined with similar patterns in net profitability (ROA and ROE), suggests that listed companies outperform both in terms of operating and non-operating cost efficiency.

4.7 PRODUCTIVITY: REVENUE PER EMPLOYEE

Labor productivity, measured as revenue per employee, provides insight into the efficiency with which companies utilize human capital.

TABLE 11: REVENUE PER EMPLOYEE, 2015-2024 AVERAGE (€ THOUSANDS)

	Italy	France	UK	Sweden
Listed	€387	€418	€445	€472
Private	€312	€356	€378	€401
Delta %	+24.0%	+17.4%	+17.7%	+17.7%

Source: Orbis Database, authors' calculations

Note: Revenue per employee = Total Revenue / Number of Employees

Listed companies demonstrate substantially higher labor productivity across all markets. Italian public companies generate €387,000 in revenue per employee, 24% higher than the €312,000 for unlisted companies. The productivity premium is somewhat smaller but still substantial in the other three markets, ranging from 17.4% to 17.7%.

Higher productivity in listed companies likely reflects multiple factors: greater capital intensity (more investments in machinery, technology, and infrastructure per worker), economies of scale, superior technology adoption, more skilled workforces, and better management practices. The productivity advantage contributes directly to the higher revenue growth observed in Section 4.2.

4.8 INVESTMENT INTENSITY

Capital expenditure intensity (capex as a percentage of revenue) provides complementary perspectives on investment behavior and capital efficiency.

TABLE 12: CAPITAL EXPENDITURE INTENSITY, 2015-2024 AVERAGE (% OF REVENUE)

	Italy	France	UK	Sweden
Listed	6.8%	7.1%	5.9%	6.4%
Private	4.2%	4.8%	3.9%	4.5%
Delta p.p.	+2.6	+2.3	+2.0	+1.9

Source: Orbis Database, authors' calculations

Listed companies invest more heavily in capital assets, with capex intensity 2.0% to 2.6% higher than unlisted companies. Italian listed companies invest 6.8% of revenues in capital expenditures annually, compared to 4.2% for unlisted firms. This pattern is consistent across all markets and reflects both the greater availability of capital for listed companies and their focus on growth and scale expansion.

4.9 FINANCIAL STRUCTURE: LEVERAGE

Leverage ratio (total debt as a percentage of equity) reveal systematic differences in capital structure between listed and unlisted companies.

TABLE 13: LEVERAGE RATIO (DEBT/EQUITY), 2024 MEDIAN (%)

	Italy	France	UK	Sweden
Listed	72.4	66.3	16.4	40.1
Private	49.5	21.7	24.1	5.3
Delta p.p.	+23.0	+44.6	-7.6	+34.7

Source: Orbis Database, authors' calculations

Note: Leverage = Total Debt / Total Equity × 100. Extreme outliers (leverage >500%) are excluded.

Leverage patterns vary substantially across countries. In Italy, France, and Sweden, listed companies exhibit higher median leverage than unlisted ones (by +23.0 p.p., +44.6 p.p., and +34.7 p.p. respectively), consistent with their greater access to debt markets and more sophisticated financial management.

France shows the largest difference, with listed companies at 66.3% leverage compared to 21.7% for unlisted firms. Overall, public companies tend to benefit from larger sizes, better credit ratings, and more diversified funding sources.

The United Kingdom presents an anomalous pattern, with unlisted companies showing higher leverage (24.1% vs. 16.4% for listed companies). This likely reflects the prevalence of private equity-backed companies in the UK unlisted sector, which typically employ high leverage as part of their investment strategy (KPMG, 2025).

5. MERGERS AND ACQUISITIONS ACTIVITY

5.1 M&A PATTERNS: LISTED VS. UNLISTED COMPANIES

Analysis of merger and acquisition activity provides additional insight into the strategic behavior and market dynamics of listed versus unlisted companies. Using data from Mergermarket covering the period 2015-2026 (year-to-date), we examine deal frequency and disclosed transaction values.

TABLE 14: M&A ACTIVITY IN ITALY, 2015-2026 YTD

Type of company (Buyer)	Cumulated 2015-2026 YTD					2025				
	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value
Listed	1,353	20%	806	218	28%	181	16%	101	35	16%
Private	5,477	80%	1,453	556	72%	953	84%	218	184	84%
Total	6,830	100%	2,259	775	100%	1,134	100%	319	219	100%

Source: Mergermarket

Note: data referring to (1/1/2015-01/03/2026); Excluding Private Equity deals

TABLE 15: M&A ACTIVITY IN FRANCE, 2015-2026 YTD

	Cumulated 2015-2026 YTD					2025				
Type of company (Buyer)	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value
Listed	2,816	25%	954	598	42%	287	20%	79	43	18%
Private	8,284	75%	6,781	811	58%	1,164	80%	211	201	82%
Total	11,100	100%	7,735	1,409	100%	1,451	100%	290	244	100%

Source: Mergermarket

Note: data referring to (1/1/2015-01/03/2026); Excluding Private Equity deals

TABLE 16: M&A ACTIVITY IN UNITED KINGDOM, 2015-2026 YTD

	Cumulated 2015-2026 YTD					2025				
Type of company (Buyer)	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value
Listed	4,468	40%	2,834	852	49%	466	19%	259	60	22%
Private	12,308	111%	3,104	895	51%	2,007	81%	361	214	78%
Total	16,776	151%	5,938	1,747	100%	2,473	100%	620	274	100%

Source: Mergermarket

Note: data referring to (1/1/2015-01/03/2026); Excluding Private Equity deals

TABLE 17: M&A ACTIVITY IN SWEDEN, 2015-2026 YTD

Type of company (Buyer)	Cumulated 2015-2026 YTD					2025				
	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value	Deals	% Deals	Deals w/ disclosed value	Total Disclosed value (€B)	% Deal value
Listed	2,844	26%	1,023	121	20%	305	29%	100	11	39%
Private	4,213	38%	1,060	498	80%	733	71%	165	17	61%
Total	7,057	64%	2,083	619	100%	1,038	100%	265	29	100%

Source: Mergermarket

Note: data referring to (1/1/2015-01/03/2026); Excluding Private Equity deals

Listed companies in Italy participated in 1,353 M&A/JV transactions over the 2015–2026 YTD period, accounting for around 20% of total deal count (6,830 transactions overall), while private companies accounted for 5,477 deals, or roughly 80% of the total. In value terms, private-company transactions generated €556 billion of cumulative disclosed amount versus €218 billion for listed firms. It is relevant to notice that listed companies represent the 0.01% of Italian companies, but account for 20% in absolute M&A deal count and 28% in cumulative disclosed deal amount.

Further, Italy's M&A/JV market within listed companies is in line with major European countries. Although in absolute terms the UK records the largest number of transactions (16,776 cumulative deals over 2015–2026 YTD, versus 11,100 in France, 7,057 in Sweden, and 6,830 in Italy), Italy has by far the smallest pool of listed companies among the four countries considered (398, compared with 739 in France, 1,482 in the UK, and 759 in Sweden). As a result, once deal activity is normalized by the size of the listed universe, Italy emerges among the most active markets in relative terms, with approximately 3.4 cumulative transactions per listed company, compared with 3.8 in France, 3.0 in the UK, and 3.7 in Sweden.

However, in terms of average deal values, Italian M&A deals are only bigger than the Swedish ones. Sweden displays €118 million per deal, while Italy accounts for €270 million per deal. France, with €626 million, and the UK, with €300 million, are the biggest in value. The distribution is skewed in this case too, with a few deals being high in value and many others being small. Taken together, these findings suggest that the Italian corporate market is not the largest in absolute scale, but it is among the most active in relative terms, with listed firms operating in an environment characterized by a comparatively strong propensity toward strategic transactions. Despite the comparatively small size of its stock market, Italy therefore displays an intense deals' dynamic, making corporate control and partnership activity a particularly relevant channel of growth and restructuring.

CHAPTER 2

1000 LISTED COMPANIES

ABSTRACT

Italy's equity market stands at a critical juncture. With 398 actively traded companies (out of 411 listed companies) and a market capitalization representing the 47% of GDP, Italy lags behind comparable European economies where market capitalization often exceeds 100% of GDP. The chapter presents a comprehensive, evidence-based analysis of the transformation required to expand Italy's listed company base to 1000 firms while simultaneously achieving a market capitalization-to-GDP ratio of 100%.

The projected 602 new net listings over a 10-year timeframe would be strategically distributed across key sectors, with Industrials (161 companies) representing the largest expansion, followed by Consumer Discretionary (107 companies), Technology (89 companies), and Consumer Staples (96 companies combined). The size distribution will account for roughly 48% small and medium-cap companies besides including 250 large-cap companies (€250M-1B in revenues) and 63 extra-large companies (with revenues above €1B). With an estimated aggregate market capitalization of approximately €489 billion for new listings, combined with organic growth in existing companies and valuation re-ratings, this expansion would elevate total market capitalization to approximately €2,279 billion, achieving the 100% market cap-to-GDP target and positioning Italy alongside France, Sweden, and the United Kingdom as a major European capital market.

1. INTRODUCTION: THE ITALIAN EQUITY MARKET GAP

1.1 CURRENT STATE ASSESSMENT

The Italian equity market exhibits a structural under-development that distinguishes it from comparable European economies. Italy hosts 411 listed companies, of which 13 with suspended trading and 398 with combined market capitalization of approximately €1,075 billion. As of 2025, Italy registers a market capitalization-to-GDP ratio of 47%, substantially below European benchmarks:

- **France:** 739 listed companies, market cap-to-GDP ratio of 107%
- **United Kingdom:** 1,482 listed companies, market cap-to-GDP ratio of 130%
- **Sweden:** 759 listed companies, market cap-to-GDP ratio of 185%

This under-representation reflects both a shortage of listed companies (Italy has 44% fewer listings than France despite comparable economic size) and a valuation gap (Italian listed companies trade at lower multiples relative to earnings and book value than their European peers). The implications extend beyond capital market statistics: equity market reduced size constrains growth financing for Italian firms, limits portfolio diversification opportunities for Italian savers, and reduces the efficiency of capital allocation across the economy.

1.2 THE DUAL OBJECTIVE: 1000 COMPANIES AND 100% MARKET CAP-TO-GDP

This analysis examines the feasibility and implications of two interrelated objectives:

Objective 1: Expand the listed company base from 398 to 1000 companies (an increase of 602 companies, or 151%). This expansion would position Italy closer to France (739 companies) and the United Kingdom (1,482 companies) in absolute terms and would dramatically improve the representativeness of public markets across Italian economic sectors.

Objective 2: Achieve a market capitalization-to-GDP ratio of 100% (an increase from 47% to 100%). This would require total market capitalization to reach approximately €2,258 billion (considering 2025 GDP), an increase of €1,183 billion or 110% above current levels.

These objectives are complementary but not identical. Achieving 1000 listed companies through listings of small firms would not necessarily achieve 100% market cap-to-GDP if the new listings are predominantly micro-cap companies. Conversely, achieving 100% market cap-to-GDP through growth in existing large-cap companies would not improve market breadth or sectoral representation. The optimal path requires both expansion in the number of listings and substantial market capitalization growth through a combination of new listings of meaningful size and organic growth in existing companies.

1.3 EVIDENCE BASE AND METHODOLOGY

This analysis draws up three primary sources of evidence:

- **Cross-country comparisons** of market structure, size distribution, and sectoral composition across Italy, France, United Kingdom, and Sweden, using data from Orbis, Refinitiv, and Euronext covering 2015-2024.
- **Performance analysis** of listed versus unlisted companies across multiple dimensions (growth, profitability, productivity, investment, leverage) to establish the characteristics that differentiate public from private firms and to project the likely candidates for future listings.
- **Sectoral decomposition** of the Italian economy to identify industries with the greatest potential for expanded public market participation, accounting for structural characteristics (capital intensity, scale economies, growth potential) that influence listing propensity.

The projections presented in this document are grounded in empirical patterns observed in the data. Where assumptions are required (e.g., average market capitalization of new listings, time horizon for expansion), we provide explicit justification and sensitivity analysis. The projections' rationale is to focus on sectors whose revenues constitute a substantial part of the Italian GDP but are weakly represented in the Italian Stock Exchange (see Table 7 for reference). These sectors often constitute the core of Italian peculiar real economy structure, points of excellence in which Italy is a leader (as design, machinery, fashion, food, robotics). Indeed, Italy is the second manufacturing power in Europe, and the eighth largest exporter in the world. Further, focusing on our "magnificent seven" (machinery, fashion, food, pharmaceuticals, design, ICT, and automotive) is an ideal pathway to identify new companies' listings.

2. THE PATH TO 1000 COMPANIES: COMPOSITION AND FEASIBILITY

2.1 QUANTITATIVE FRAMEWORK

Expanding from 398 to 1000 listed companies requires adding 602 new listings, a 151% increase. To project the feasible composition of these new listings, we employ a three-step methodology:

Step 1: Identify the pool of potential candidates by analyzing unlisted Italian companies with characteristics like existing listed companies (size, growth, profitability, capital intensity).

Step 2: Apply sectoral constraints based on structural characteristics that influence listing propensity (capital intensity, scale economies, intangible asset intensity, regulatory environment).

Step 3: Estimate realistic penetration rates by sector, drawing on cross-country comparisons of listing propensity in comparable European markets.

2.2 SECTORAL DECOMPOSITION OF NEW LISTINGS

The expansion from 398 to 1000 listed companies necessitates the addition of 602 new listings, representing a 151% increase in the total number of publicly traded entities on Borsa Italiana. This substantial growth is not uniformly distributed across sectors; rather, it reflects a strategic rebalancing designed to address existing sectoral imbalances, capitalize on Italy's competitive advantages, and align the equity market structure with the composition of the broader Italian economy. Table 18 presents the projected sectoral distribution of new listings, revealing significant heterogeneity in both the absolute number of additions and the relative growth rates across industries.

The most pronounced expansion occurs in the **industrials** sector, which is projected to add 161 new listings to its current base of 95 companies, yielding a total of 256 listed industrial firms and representing a 169% increase. This substantial growth reflects Italy's deep industrial heritage and the presence of numerous mid-sized manufacturing enterprises, particularly in aerospace and defense, advanced manufacturing, precision engineering, and industrial equipment production. The average market capitalization of €900 million for new industrial listings suggests a focus on established, operationally mature companies with proven business models and stable cash flows. Indeed, the category is the most represented among Italian listed companies with revenues above €1 billion. The sector's projected contribution of €145 billion in new market capitalization represents the largest single sectoral addition, underscoring the central role that industrial enterprises play in the Italian economy and the significant untapped potential for public market participation among privately held manufacturers.

The **consumer discretionary** sector, which includes companies producing non-essential goods and services such as automobiles, luxury goods, retail, leisure and entertainment, and consumer durables, is projected to add 107 new listings to its current base of 97 companies, achieving a total of 204 listed entities and representing a 110% increase. Italy's global leadership in luxury goods, automotive manufacturing, and consumer brands provides a robust pipeline of potential listings in this category. With an average market capitalization of €650 million, these new listings are expected to contribute €70 billion in market value, further strengthening Italy's position as a premier destination for consumer-focused equity investment.

The **technology** sector, currently comprising 44 listed companies, is projected to add 89 new listings to reach a total of 133 technology firms, representing a 202% increase. While this represents a substantial absolute addition, the relatively modest percentage increase reflects the sector's already reasonable representation in the current market structure. The average market capitalization of €850 million for new technology listings reflects the capital-intensive nature of technology development and the premium valuations typically commanded by software, semiconductor, IT services, and digital platform companies. The sector's projected contribution of €76 billion in new market capitalization strengthens Italy's position in the European technology landscape.

The **consumer staples** sector, encompassing companies that produce essential goods including food and beverage, household products, personal care items, and tobacco, is projected to expand from 16 to 112 companies through the addition of 96 new listings, representing a 600% increase. This substantial growth addresses the current underrepresentation of food producers, beverage companies, and consumer packaged goods manufacturers in the public markets. The average market capitalization of €600 million for new consumer staples listings reflects the stable, cash-generative nature of these businesses, with the sector's total new market capitalization of €57.6 billion providing investors with enhanced access to defensive equity exposure.

The **healthcare** sector is projected to add 50 new listings to its current base of 20 companies, yielding a total of 70 listed healthcare entities and representing a 250% increase. This expansion reflects Italy's strong pharmaceutical industry, growing biotechnology sector, and expanding medical device and healthcare services markets. The average market capitalization of €1,100 million for new healthcare listings suggests a focus on established pharmaceutical companies, mature biotechnology firms, and specialized medical device manufacturers, with the sector's total new market capitalization of €55.0 billion significantly enhancing investor access to healthcare innovation and demographic-driven growth opportunities.

The **basic materials** sector, encompassing companies engaged in mining, chemicals, construction materials, metals and mining, and forestry products, is projected to expand from 13 to 58 listed companies through the addition of 45 new listings, representing a 346% increase. This substantial growth reflects

both the current underrepresentation of materials companies in the public markets and the strategic importance of securing domestic production capacity in critical materials and construction inputs. The average market capitalization of €550 million for new basic materials listings suggests a focus on mid-sized producers and processors, with the sector's total new market capitalization of €25 billion providing significant depth to this currently thin market segment.

The **financial** sector, which currently accounts for 53 listed companies (13,3% of the existing market), is projected to add only 16 new listings, achieving a total of 69 financial institutions and representing a 30% increase, the lowest relative growth rate among all sectors. This modest expansion reflects the sector's already adequate representation in the current market structure, the high regulatory barriers to entry into banking and insurance, and the trend toward consolidation rather than proliferation in financial services. The average market capitalization of €1,700 million for new financial listings (the second highest after the energy sector) reflects the capital-intensive nature of banking and insurance operations and the substantial equity bases required for regulatory compliance. Despite the relatively modest number of additions, the sector's total new market capitalization of €27.0 billion represents a significant absolute contribution, with new listings likely concentrated among regional banks, specialized lenders, asset managers, and insurance companies.

The **telecommunication** sector exhibits a 180% increase, expanding from 10 to 28 listed companies through the addition of 18 new listings. This substantial relative growth addresses the current underrepresentation of telecommunications infrastructure providers, mobile network operators, and digital communications services companies. The average market capitalization of €800 million for new telecommunications listings reflects the competitive intensity and capital requirements of the industry, with the sector's total new market capitalization of €14.4 billion providing enhanced investor access to digital infrastructure and connectivity services.

The **real estate** sector exhibits a doubling, with projections indicating an increase from 13 to 27 listed companies through the addition of 14 new listings, representing a 108% growth rate. This extraordinary expansion addresses a significant structural underrepresentation in the current market composition, where real estate companies constitute only 3.3% of listed entities despite the sector's substantial economic importance. The proliferation of Real Estate Investment Trusts (REITs) and specialized property companies focusing on commercial real estate, residential development, logistics facilities, and hospitality assets provides a natural pipeline for public listings. With an average market capitalization of €800 million, these new listings are expected to contribute €11.2 billion in aggregate market value, offering investors enhanced exposure to Italy's property markets and providing real estate developers with improved access to growth capital.

The **utilities** sector is projected to expand from 20 to 23 listed companies through the addition of 3 new listings, representing a 15% increase. This moderate expansion reflects the sector's capital-intensive nature, regulatory complexity, and the presence of large, established incumbents that dominate electricity generation, natural gas distribution, water services, and renewable energy infrastructure. The average market capitalization of €1,700 million for new utility listings (on par with the financial sector) reflects the substantial asset bases and stable cash flows characteristic of infrastructure-intensive businesses. The sector's total new market capitalization of €5.1 billion provides enhanced investor access to essential services and energy transition opportunities, though the relatively modest number of additions suggests limited scope for significant market structure transformation.

The **energy** sector, encompassing oil and gas exploration and production, refining and marketing, and oilfield services, is projected to add 3 new listings to its current base of 17 companies, achieving a total of 20 energy firms and representing an 18% increase. This moderate expansion reflects both the sector's mature market structure and the ongoing energy transition that is reshaping investment priorities. The average market capitalization of €1,800 million for new energy listings suggests a focus on mid-sized exploration and production companies, specialized service providers, and potentially renewable energy developers. The sector's total new market capitalization of €5.4 billion represents a relatively modest contribution.

In aggregate, the 602 new listings are projected to contribute €489 billion in total market capitalization. This sectoral decomposition reveals a deliberate strategy to address existing imbalances, with the most dramatic expansion occurring in currently underrepresented sectors (**industrials, consumer staples,**

basic materials, and healthcare) while maintaining more modest growth in already well-represented sectors (**financials, utilities, and energy**). The resulting market structure would provide significantly enhanced sectoral diversification, improved alignment with the composition of the French and English economy, and greater depth across all major industry categories.

TABLE 18: PROJECTED SECTORAL DISTRIBUTION OF NEW LISTINGS

Sector	Current Listings	Net New Listings (Projected)	Total Future Listings	% Increase	Average Market Cap (€M)	Total New Market Cap (€B)
Industrials	95	161	256	169%	€900.00	€144.90
Consumer Discretionary	97	107	204	110%	€650.00	€69.55
Technology	44	89	133	202%	€850.00	€75.65
Consumer Staples	16	96	112	600%	€600.00	€57.60
Healthcare	20	50	70	250%	€1,100.00	€55.00
Basic Materials	13	45	58	346%	€550.00	€24.75
Financials	53	16	69	30%	€1,700.00	€27.20
Telecommunication	10	18	28	180%	€800.00	€14.40
Real Estate	13	14	27	108%	€800.00	€11.20
Utilities	20	3	23	15%	€1,700.00	€5.10
Energy	17	3	20	18%	€1,800.00	€5.40
Total	398	602	1,000	151%	-	€489.0

Source: Authors' projections

2.3 SIZE DISTRIBUTION OF NET NEW LISTINGS

The projected 602 new listings would exhibit a size distribution skewed toward large companies (revenues above €250 million). For the purpose of this study, we consider the number of new listings as net of the number of delistings.

TABLE 19: PROJECTED SIZE DISTRIBUTION OF 602 NET NEW LISTINGS

Size Category	Number of Net New Listings	% of Net New Listings	Average Market Cap (€M)	Total Market Cap (€B)
Micro (<€50M)	41	6.8%	€45	€1.8
Small (€50-100M)	62	10.3%	€85	€5.3
Medium (€100-250M)	186	30.9%	€257	€47.8
Large (€250M-€1B)	250	41.5%	€990	€247.5
Extra Large (>€1B)	63	10.5%	€2,962	€186.6
Total	602	100%		€489.0

Source: Authors' projections

This distribution would substantially increase representation of large and extra large-cap companies (combined 52% of new listings), while still including a significant number of small-medium companies, that would contribute roughly 41% of new listings. As Finaldi Russo et al. (2020) point out, listing a high number of small private companies will unlikely lead to big market capitalization increases. Therefore, we move our focus on bigger companies. We aim at listing 313 companies exceeding €250M in revenues, specifically addressing the 1,743 companies, of which 1,682 are held private, whose revenues are between €250 million and €1 billion, and the 597 companies, of which 520 are held private, whose revenues are above €1 billion. Bigger companies are incentivized to get listed, as access to public capital can give them the means they need to finance structural growth which could be difficult to obtain otherwise. The risk lies in the fact that, if not adequately supported locally, bigger companies will try to get listed on other, more robust, stock exchanges.

Further, we deliberately address the "missing middle" phenomenon, aiming at a 443% increase in medium companies' listings. Medium-sized firms seem to face greater obstacles in scaling and consolidating. Over the past 20 years, few companies (relative to the other revenue groups) got listed, and most abandoned the public market. Initiatives to target the phenomenon are now in place (e.g., simplified requirements for smaller companies) and the model assumes the plans are going to be able to address part of the issue.

The combined size distribution of 1000 total listings (398 current + 602 net new) would be:

TABLE 20: SIZE DISTRIBUTION OF 1000 TOTAL LISTINGS (CURRENT + PROJECTED)

Size Category	Current	New	Total
Micro (<€50M)	165	41	206
Small (€50-100M)	53	62	115
Medium (€100-250M)	42	186	228
Large (€250M-€1B)	61	250	311
Extra Large (>€1B)	77	63	140
Total	398	602	1,000

Source: Authors' projections

This distribution would substantially strengthen the upper segment of the Italian equity market, with the expansion driven primarily by large and extra-large listed companies. In particular, the number of large firms (€250M–€1B) would increase from 61 to 311 listings, while extra-large firms (above €1B) would rise from 77 to 140 listings. Together, these two categories would account for 451 out of the projected 1000 listed companies, representing, as number of companies, 45% of the total market, but approximately 90% in market value. This shift would significantly increase the depth, liquidity, and institutional attractiveness of the Italian stock market, as larger firms tend to account for the majority of market capitalization, trading volumes, analyst coverage, and international investor participation. At the same time, the expansion would preserve representation across smaller firm categories, ensuring a broad market ecosystem that spans the full corporate spectrum. Overall, the projected structure would move the Italian equity market toward a more scalable and internationally competitive configuration, capable of supporting both domestic capital formation and greater integration with global financial markets. Furthermore, total market capitalization, currently approximately €1.075 billion, is projected to increase by approximately €489 billion, reaching €1,564 billion.

3. ACHIEVING 100% MARKET CAP-TO-GDP: THE VALUATION CHALLENGE

3.1 THE MARKET CAPITALIZATION GAP

As of 2025 Italian stock market capitalization represents only 47% of national GDP (€2,258 billion). Achieving 100% market cap-to-GDP requires total market capitalization of €2,258 billion, an increase of €1,183 billion or 110%.

The 602 new listings projected in Section 2 would add approximately €489 billion in market capitalization, closing roughly 41% of the gap. The remaining €620 billion (roughly 59% of the gap) must come from organic growth in existing listed companies and valuation expansion.

3.2 SOURCES OF MARKET CAPITALIZATION GROWTH

Achieving the 100% target requires contributions from three sources:

SOURCE 1: ORGANIC GROWTH OF EXISTING COMPANIES & VALUATION RE-RATING (€564 BILLION, 47% OF GAP)

Existing listed companies would continue to grow through three channels: revenue growth, margin expansion, and multiples expansion (re-rating), as the listing will allow access to the capital needed for enhanced growth.

Existing listed companies would continue to expand through sustained revenue growth, as public listing facilitates access to external financing that supports investment in innovation, capacity expansion, market penetration, and strategic acquisitions. As firms operate within a more liquid and competitive public market environment, they are expected to benefit from stronger governance structures, greater managerial discipline, and enhanced visibility among customers and business partners. As highlighted by the empirical evidence presented in Section 4 of Chapter 1, these mechanisms can accelerate commercial expansion by improving firms' ability to attract clients, enter new markets, and scale operations. Moreover, larger and publicly listed firms often benefit from reputational advantages and broader distribution networks that reinforce growth opportunities. Consequently, revenues are expected to increase steadily over the projection period, reflecting both organic expansion and the enhanced growth opportunities associated with public market access.

As companies mature within a more liquid and competitive listed environment, they are expected to benefit from enhanced operational discipline, more efficient capital allocation, and the cost advantages that accompany increased scale. Importantly, profitability tends to grow at a faster rate than revenue under these conditions, as fixed costs are spread across a larger revenue base and management incentives (sharpened by public market scrutiny) drive efficiency gains. This dynamic implies that earnings growth, and by extension market capitalization, should outpace revenue growth over the projection period.

Additionally, as market liquidity improves, analyst coverage expands, and international investor participation increases, Italian listed companies should experience multiples expansion toward European averages. First, we expect a reduced illiquidity discount as market depth increases, resulting in direct multiples expansion. Further, current price-to-earnings ratios for Italian listed companies average approximately 14x compared to 16-18x for comparable French and Swedish companies, triggering an upward re-rating of listed equities, thereby increasing the overall market capitalization of the Italian stock exchange.

Market capitalization growth historically averages roughly 8,9% annually for Italian listed companies (over the period 2015-2025). Thus, it would compound to 134% growth over 10 years. Taking a conservative approach, we hypothesized a growth of 4.8% annually, over the 10-year expansion period.

The revenue growth and re-rating would, combined, add to approximately €564 billion, account for roughly 47% of the current market capitalization gap.

SOURCE 2: NET NEW LISTINGS (€489 BILLION, 41% OF GAP)

As detailed in Section 2.3, 602 net new listings would contribute €489 billion. This assumes: Extra Large-cap new listings (63 companies) averaging €2,962 million: €186.6 billion; Large-cap new listings (250 companies) averaging €990 million: €247.5 billion; Medium-cap new listings (186 companies) averaging €257 million: €47.8 billion; Small-cap new listings (62 companies) averaging €85 million: €5.3 billion; Micro-cap new listings (41 companies) averaging €45 million: €1.8 billion.

The extra-large and large-cap categories dominate (89% of new listing market cap), underscoring that achieving the market cap target requires listings of companies producing substantial revenues, while it will not be achieved by increasing the count of micro-cap listings.

SOURCE 3: NET NEW LISTING GROWTH & VALUATION RE-RATING (€151 BILLION, 12% OF GAP)

Similarly, over a 10-year time horizon, the contribution of net new listings to the overall market capitalization of the Italian stock exchange is expected to increase progressively, driven by the organic revenues and market growth of the newly listed companies' underlying businesses, and by the multiples' expansion and the incremental benefits associated with public market status. By considering one tenth of the net listings per year, and a conservative market capitalization growth rate of 4.8%, the pillar is expected to account for €151 billion. The channels determining growth are the same ones explained in source 1.

TABLE 21: SOURCES OF MARKET CAPITALIZATION GROWTH TO ACHIEVE 100% TARGET

Source	Amount (€B)	% of Gap	% of Total
Existing listing growth & valuation re-rating	564	47%	25%
Net new listings	489	41%	21%
Net new listing growth & valuation re-rating	151	12%	7%
Total Growth	1,204	-	53%
Current Market Cap	1,075	-	47%
Target Market Cap	2,279	-	100%

Source: Authors' projections

4. ECONOMIC BENEFITS OF MARKET EXPANSION

4.1 IMPROVED CAPITAL ALLOCATION EFFICIENCY

The expansion of the equity market from 398 to 1000 companies would generate substantial improvements in the efficiency of capital allocation throughout the Italian economy. Under current conditions, capital allocation occurs primarily through three channels: bank lending totaling €1,600 billion in corporate loans concentrated in real estate and large corporate borrowers; retained earnings whereby companies fund growth primarily through internal cash flow; and private equity providing €15 billion to €20 billion annually focused on buyouts of mature companies. This existing allocation mechanism suffers from systematic inefficiencies that constrain economic growth and productivity.

Public equity markets provide superior capital allocation through multiple complementary mechanisms that address the limitations of bank-centric financing. The first mechanism involves broader sectoral reach, as current bank lending concentrates in asset-intensive sectors including real estate, manufacturing, and utilities where tangible collateral facilitates credit assessment and risk management. Service sectors, technology companies, and growth businesses with predominantly intangible assets struggle to access bank financing, as traditional lending criteria emphasize collateral value over growth prospects or intangible capabilities. Equity markets do not require collateral and can efficiently fund intangible-asset-intensive businesses based on growth potential and competitive positioning rather than asset backing.

Empirical evidence demonstrates the binding nature of capital constraints for companies in these underserved sectors. Technology and service sector companies that successfully complete public listings experience average revenue growth of 15 to 20% in the three years post-listing, compared to 5 to 8% for comparable unlisted companies. This substantial growth differential indicates that capital constraints were binding pre-listing, and that access to public equity capital enabled these companies to pursue growth opportunities that were previously infeasible. The aggregate economic impact of relieving these capital constraints extends beyond the individual companies to encompass broader sectoral dynamism and innovation.

The second mechanism through which public equity markets enhance capital allocation efficiency involves price discovery and information aggregation. Public equity markets aggregate dispersed information about companies' prospects through continuous trading and price formation, whereby thousands of investors with diverse information sets and analytical perspectives contribute to market prices. Stock prices thus provide real-time signals about which companies are creating value and which are destroying it, guiding capital flows toward high-return opportunities and away from low-return activities. This information aggregation function proves particularly valuable in dynamic environments characterized by rapid technological change, evolving consumer preferences, or shifting competitive landscapes.

Empirical evidence supports the capital allocation benefits of equity market participation. Industries with higher equity market representation, measured by market capitalization as a percentage of industry value added, exhibit 1.5 to 2.0% higher annual productivity growth than industries with lower representation. This productivity differential, documented by Wurgler (2000) and confirmed in subsequent research, reflects superior capital allocation whereby high-productivity firms receive disproportionate capital inflows while low-productivity firms face capital constraints. The cumulative effect of this differential capital allocation generates substantial aggregate productivity gains over time.

The third mechanism involves disciplining underperforming management through multiple channels inherent in public market participation. Stock price declines that threaten management tenure create powerful incentives for performance improvement. Activist investors demanding strategic changes provide external pressure and alternative perspectives that can overcome organizational inertia or entrenched interests. Takeover threats from potential acquirers seeking to unlock value through management changes or strategic redirection create ultimate accountability for persistent underperformance. Private companies face substantially weaker discipline mechanisms, as ownership concentration and limited external monitoring reduce accountability pressures.

Empirical evidence demonstrates the governance benefits of public market participation. Italian listed companies exhibit 8 to 12% higher total factor productivity than comparable unlisted companies, partially reflecting governance improvements and management discipline from public market scrutiny. This productivity advantage persists after controlling for company size, sector, and other observable characteristics, indicating that public market status itself generates performance improvements through enhanced governance and accountability mechanisms.

The quantified impact of improved capital allocation efficiency from market expansion proves substantial. If the 602 new listings achieve average productivity gains of 10%, a conservative estimate relative to the observed eight to twelve% advantage of existing listed companies, and these companies collectively generate €300 billion in annual revenues, the productivity improvement would add €30 billion annually to national output. This represents 1.4% of GDP, a meaningful contribution to aggregate economic performance. Over a ten-year horizon, cumulative gains would approach €300 billion in present value, accounting for the time value of money and the gradual realization of productivity improvements. These estimates likely understate the full benefits, as they exclude spillover effects to suppliers, customers, and competitors that may adopt superior practices in response to competitive pressure from more productive listed companies.

4.2 ENHANCED EMPLOYMENT GROWTH AND JOB CREATION

Listed companies demonstrate substantially higher employment growth rates than unlisted companies, creating significant job creation benefits from market expansion. As documented in Section 2.3, Italian listed companies grow employment at 3.8% annually compared to 1.2% for unlisted companies, yielding a 2.6% advantage. This employment growth differential reflects multiple factors, including superior access to growth capital that enables business expansion, greater operational scale that supports geographic and product diversification, enhanced management capabilities that improve execution effectiveness, and stronger competitive positioning that enables market share gains.

The quantified impact of this employment growth differential proves substantial when applied to the scale of market expansion contemplated. The 602 new listings would collectively employ approximately 1.2 million to 1.5 million workers initially, assuming average employment of 2,000 to 2,500 per company consistent with companies in the €100 million to €1 billion revenue range. If these companies grow employment at the listed-company rate of 3.8% annually rather than the unlisted rate of 1.2%, the differential of 2.6% translates to significant cumulative job creation over time.

In the first year following market expansion, the employment growth differential would generate an additional 31,000 to 39,000 jobs created beyond what would occur absent public listing. By year five, cumulative additional job creation would reach 170,000 to 215,000 positions, reflecting the compounding effect of sustained higher growth rates. By year ten, cumulative additional job creation would total 380,000 to 475,000 positions, representing a meaningful contribution to aggregate employment growth and labor market performance.

The economic value of this enhanced job creation extends beyond the direct employment benefits to encompass broader fiscal and social impacts. At an average annual wage of €35,000 including benefits, the ten-year cumulative employment impact represents €13 billion to €17 billion in additional wage income. This wage income generates €3 billion to €4 billion in additional tax revenues at an average tax rate of 25%, partially offsetting the fiscal costs of policy interventions to support market expansion. Beyond these direct fiscal benefits, enhanced employment growth reduces social costs associated with unemployment, including income support programs, social assistance, and the psychological and social costs of joblessness. The geographic and demographic distribution of job creation also merits consideration, as listed companies typically offer higher-quality employment with greater stability, better compensation, and enhanced career development opportunities compared to informal or precarious employment.



4.3 INCREASED PRODUCTIVITY AND INTERNATIONAL COMPETITIVENESS

Listed companies demonstrate substantially higher labor productivity than unlisted companies, reflecting superior capital intensity, technology adoption, economies of scale, and management practices. Italian listed companies achieve revenue per employee of €387,000 compared to €312,000 for unlisted companies, representing a seventeen to twenty-four% productivity premium. This productivity advantage reflects multiple underlying factors that distinguish listed from unlisted companies.

The superior capital intensity of listed companies, enabled by better access to equity capital for investment in productive assets, directly enhances labor productivity through capital deepening. Technology adoption proceeds more rapidly in listed companies, as both financial resources and competitive pressures drive investment in productivity-enhancing technologies. Economies of scale, more readily achieved by listed companies through their superior growth rates and access to expansion capital, reduce unit costs and enhance productivity. Management practices in listed companies benefit from professional management capabilities, external monitoring and accountability, and exposure to best practices through board members, investors, and advisors with diverse experience.

The quantified impact of this productivity differential proves substantial when applied to the employment base of newly listed companies. If the 602 new listings achieve the listed-company productivity level of €387,000 per employee compared to €312,000 for unlisted companies, the productivity premium of €75,000 per employee applied to 1.2 to 1.5 million employees yields an annual productivity gain of €90 billion to €113 billion in additional revenue. This represents 4.7 to 5.9% of current GDP, a transformative contribution to aggregate economic performance.

The productivity gain translates directly to improved international competitiveness, as higher productivity enables Italian companies to compete on quality and innovation rather than cost alone. This competitive positioning proves particularly valuable in high-value-added products and services where Italian companies can leverage design capabilities, craftsmanship, and brand strength. Empirical evidence demonstrates this competitive advantage, as Italian listed manufacturing companies export 48% of revenues on average compared to 32% for unlisted manufacturers. Moreover, listed companies achieve 15% higher export prices controlling for product category, indicating superior quality and brand strength that command premium pricing in international markets.

The international competitiveness benefits extend beyond individual company performance to encompass broader sectoral and national economic impacts. Enhanced export performance improves the trade balance and reduces external vulnerability. Premium pricing in international markets captures greater value from Italian productive capabilities and intellectual property. The demonstration effect of successful internationally competitive listed companies encourages emulation and raises performance standards throughout the economy. The cumulative effect of these mechanisms positions Italy more favorably in global value chains and enhances long-term economic resilience.

4.4 GREATER ECONOMIC RESILIENCE AND DIVERSIFIED FUNDING SOURCES

The expansion of equity market participation would substantially reduce Italian companies' dependence on bank lending, enhancing economic resilience during financial crises or credit contractions. The problematic nature of bank dependence became evident during the 2008-2012 financial crisis, when bank credit contracted sharply and bank-dependent companies faced severe financing constraints. Companies with access to public equity markets maintained investment and employment substantially better than bank-dependent companies during this crisis period, demonstrating the resilience benefits of diversified funding sources.

Empirical analysis of the 2008-2012 crisis period quantifies these resilience benefits. Italian listed companies reduced employment by 8% on average during this period, while comparable unlisted companies reduced employment by 18%, yielding a 10% difference in employment resilience. Investment patterns showed even larger differentials, with listed companies reducing investment by 22% compared to 41% for unlisted companies, a nineteen% difference. These substantial differentials reflect the ability of listed companies to access equity capital even during credit contractions, maintain investor confidence through transparent communication, and adjust capital structure flexibly in response to changing conditions.

The quantified impact of enhanced resilience from market expansion proves substantial when projected to a future crisis scenario. If a future crisis of similar magnitude to 2008-2012 occurs, having 1000 listed companies employing three million to three and a half million workers rather than 398 companies employing 1,5 million workers would result in 400,000 to 500,000 fewer workers unemployed. Investment reductions would be €40 billion to €60 billion less severe, preserving productive capacity and enabling faster recovery post-crisis. The maintained productive capacity proves particularly valuable for post-crisis recovery, as companies that preserve their workforce and capital stock can respond more rapidly to demand recovery than companies that must rebuild capabilities from a diminished base.

Beyond these direct crisis mitigation benefits, diversified funding sources enhance ongoing economic stability by reducing systemic vulnerability to banking sector problems. The concentration of corporate financing in the banking sector creates systemic risk, as banking sector difficulties rapidly transmit to the real economy through credit contraction. A more balanced financing mix incorporating substantial equity market participation reduces this transmission mechanism and enhances overall economic stability. The resulting reduction in economic volatility generates welfare benefits through reduced uncertainty, enhanced planning horizons, and more efficient resource allocation.

4.5 STRENGTHENED SAVINGS AND WEALTH ACCUMULATION

The expansion of equity market participation would provide Italian households with substantially enhanced opportunities for long-term wealth accumulation, addressing the inadequacy of current savings vehicles for retirement security and intergenerational wealth building. Historical evidence demonstrates the superior long-term returns of equity investments compared to traditional Italian household savings vehicles. Italian equities have generated 8 to 10% annual returns over the 1990-2024 period, compared to 3 to 4% for government bonds and 1 to 2% for bank deposits. This substantial return differential compounds dramatically over long investment horizons, generating transformative differences in accumulated wealth.

The quantified impact of shifting household savings toward equity investments proves substantial over multi-decade horizons. If Italian households shift €200 billion from bank deposits, which currently total €1,400 billion, to equity investments over a ten-year transition period, and these investments earn 6% higher annual returns reflecting the historical differential between equity returns of 8% and deposit returns of 2%, the additional wealth accumulation would be substantial. By year ten, households would accumulate €80 billion in additional wealth compared to maintaining deposits. By year twenty, additional wealth accumulation would reach €280 billion. By year thirty, the cumulative benefit would total €634 billion in additional household wealth.

This enhanced wealth accumulation would generate multiple economic and social benefits extending beyond the direct financial gains to participating households. Improved retirement security reduces dependence on public pension systems, alleviating fiscal pressures from demographic aging. Enhanced household wealth provides capital for entrepreneurship, as households can draw on accumulated savings to fund business ventures or support family members' entrepreneurial activities. Increased consumption capacity from wealth effects supports aggregate demand and economic growth. Intergenerational wealth transmission enables families to invest in education, housing, and other opportunities for younger generations.

The distributional implications of enhanced equity market participation merit careful consideration. Historically, equity market participation has been concentrated among higher-income and higher-wealth households, potentially exacerbating wealth inequality. Policy design must therefore incorporate mechanisms to broaden participation across income and wealth distributions, including tax-advantaged savings vehicles accessible to middle-income households, financial literacy programs that reach underserved populations, and low-cost investment platforms that reduce barriers to entry. The Piani Individuali di Risparmio program, with its focus on small- and mid-capitalization Italian equities and its tax advantages for modest contribution levels, exemplifies policy design that promotes broad-based participation while supporting domestic equity market development.

CHAPTER 3

MARKET CAPITALIZATION

MACROECONOMIC EFFECTS

ABSTRACT

Having established that 1000 listed companies would generate a 100% market capitalization-to-GDP ratio, we now turn to the macroeconomic effects of such transformation. To estimate these impacts, we examine the empirical relationship between equity market development and three key macroeconomic outcomes: real GDP growth, unemployment dynamics, and real tax revenue growth. Our analysis employs an unbalanced panel of 20 advanced economies observed annually from 1990 to 2024. The empirical framework relies on pooled OLS regressions in which all independent variables are lagged by one year to mitigate reverse causality concerns.

The results reveal a positive and statistically robust association between market capitalization as a share of GDP and both GDP growth and real fiscal revenues, alongside a negative association with unemployment growth. In contrast, the stocks traded turnover ratio, which captures short-term market liquidity rather than long-term capital formation, exhibits a negative association with GDP growth and fiscal revenues across all sub-windows considered. These findings prove robust across three alternative model specifications and across five-year and ten-year sub-period analyses, with one notable exception: the 2010 to 2019 period, during which unconventional monetary policy appears to have weakened the traditional relationship between equity markets and growth. Overall, the evidence aligns with capital allocation, corporate governance, and information signaling theories of financial development, suggesting that deeper equity markets facilitate more efficient resource allocation, improve corporate oversight, and enhance price discovery mechanisms that support sustainable economic growth.

1. INTRODUCTION AND RESEARCH MOTIVATION

The relationship between financial market development and real economic performance has long occupied a central position in macroeconomic research, beginning with Schumpeter's (1911) argument that a well-functioning financial system is a fundamental driver of sustained economic development rather than a passive reflection of it. Subsequent empirical contributions formalized and tested this proposition. King and Levine (1993) show that initial financial depth predicts subsequent long-run growth, while Levine and Zervos (1996) document that equity market development, measured through market capitalization and liquidity indicators, is positively associated with long-run growth even after controlling for banking sector development and standard macroeconomic covariates. Beck, Levine, and Loayza (2000) extend this line of inquiry using dynamic panel methodologies and provide evidence consistent with a causal effect of financial development on growth. Taken together, this literature implies that institutional and regulatory arrangements governing the scale, structure, and functioning of capital markets have broad macroeconomic implications.

This study builds on and extends this empirical tradition along three dimensions. First, it expands the temporal coverage to the period 1990 to 2024, thereby encompassing multiple macroeconomic regimes, including the expansionary 1990s, the Global Financial Crisis and subsequent sovereign debt crisis, the era of unconventional monetary policy, and the post-pandemic inflationary adjustment. Evaluating the finance–growth relationship across these distinct regimes provides a stringent test of its structural stability. Second, the analysis moves beyond aggregate output growth to examine labor market dynamics and real tax revenue growth, thereby capturing broader macroeconomic and fiscal dimensions of equity market development. This approach is consistent with Wurgler (2000), who emphasizes the role of capital market efficiency in shaping investment allocation and, ultimately, real economic performance. Third, the study implements five-year and ten-year sub-period analyses to assess whether the estimated relationships are stable over time or concentrated in specific macroeconomic environments.

The empirical analysis is conducted on an unbalanced panel of 20 advanced economies, yielding up to 700 country-year observations. The data are drawn from the World Bank's World Development Indicators and the Barro–Lee (2013) educational attainment dataset. Three model specifications are considered, labeled Sets A, B, and C, which differ in the choice of development controls and the measurement of unemployment. In all specifications, independent variables enter with a one-period lag in order to mitigate concerns related to simultaneity and reverse causality.

2. DATA AND METHODOLOGY

2.1 SAMPLE COMPOSITION

The dataset is structured as an unbalanced panel of 20 advanced economies observed annually from 1990 to 2024, yielding a maximum of 700 country-year observations. The economies are the following: Australia, Austria, Belgium, Canada, Switzerland, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Iceland, Ireland, Italy, Japan, Netherlands, Norway, Sweden, and the United States. Restricting the sample to advanced economies ensures institutional comparability, common features include established legal systems, mandatory financial disclosure, and broadly comparable labor market institutions, reducing the risk that cross-country variation reflects institutional incomparability. Table A1 in the Appendix provides full descriptive statistics.

2.2 VARIABLE DEFINITIONS

DEPENDENT VARIABLES

Three dependent variables are employed. (i) Real GDP growth rate; (ii) Unemployment growth rate (primary specification, (Set A) or unemployment level (Set B): Set A uses the year-on-year percentage change in the ILO modelled total unemployment rate, capturing labor-market dynamics; Set B uses the rate in levels to test whether equity market development is associated with structurally lower unemployment. (iii) Real tax-revenue growth rate: nominal growth in total tax revenues in local currency minus CPI inflation, yielding real fiscal resource growth. This variable, less common in the literature than the first two, is motivated by the observation of Cecchetti and Kharroubi (2012) that the real economic effects of financial development may operate partly through fiscal channels.

INDEPENDENT VARIABLES, EQUITY MARKET PROXIES

The two primary market-development proxies follow Levine and Zervos (1996). (i) Market capitalization of listed domestic companies (% of GDP): captures the breadth and depth of the equity market, measuring the aggregate market value of listed equities relative to national output. (ii) Stocks traded, turnover ratio of domestic shares (%): total value of shares traded divided by average market capitalization, capturing trading intensity and market liquidity. Theory, elaborated in Section 8, predicts potentially opposing effects of these two proxies on real outcomes.

CONTROL VARIABLES

Four controls are included. (i) Log GDP per capita (Sets A, B) or GDP per capita growth rate (Set C): controls for income-level convergence effects per Islam (1995) and Mankiw, Romer and Weil (1992). (ii) Domestic credit to the private sector (% GDP): standard proxy for banking-sector depth, following King and Levine (1993), allowing us to isolate equity-market effects from banking-channel effects. (iii) Barro–Lee average years of schooling (ages 25–29): the Barro and Lee (2013) data are available every five years and are linearly interpolated to generate an annual series. This cohort is chosen because it represents the pool of new labor-market entrants whose human capital most directly affects near-term productivity growth, as argued by Card (1999). All independent variables are lagged one period.

2.3 ECONOMETRIC SPECIFICATION

The baseline specification is a pooled OLS regression applied to the stacked panel:

$$Y_{it} = \beta_0 + \beta_1 \cdot \text{MktCap}_{i,t-1} + \beta_2 \cdot \text{Turnover}_{i,t-1} + \beta_3 \cdot \text{LogGDPpc}_{i,t-1} + \beta_4 \cdot \text{BL}_{i,t-1} + \beta_5 \cdot \text{Credit}_{i,t-1} + \varepsilon_{it}$$

Pooled OLS uses both changes over time within each country and differences across countries, but it does not control country-specific heterogeneity that remain constant over time. Consistent with the financial development literature (Beck and Levine, 2001), the fixed-effects estimates in the benchmark analysis broadly confirm the pooled OLS results. Two further methodological caveats apply. First, endogeneity: lagged variables help establish the timing of relationships, but do not fully address reverse causality, since expectations of future growth may affect both current market valuations and subsequent real outcomes. Second, multicollinearity: condition numbers in the range 6.27–6.39 indicate moderate collinearity among regressors, inflating standard errors and reducing precision in estimating individual coefficients, as documented by Greene (2012).

3. BASELINE RESULTS, FULL PERIOD 1990–2024

Figure 12 provides a preliminary visual overview of the co-movement between sample-average market capitalization and real GDP growth from 1990 to 2024. Several features stand out: the secular rise in average market cap from roughly 40% of GDP in 1990 to a peak above 100% in 1999–2000 and again in 2021, the strong co-movement with GDP growth in the 1990s and mid-2000s, and the visible decoupling during the 2010–2019 period of quantitative easing, when market capitalizations rose but GDP growth remained subdued.

FIGURE 12: SAMPLE-AVERAGE MARKET CAPITALIZATION AND REAL GDP GROWTH, 1990-2024 (20 ADVANCED ECONOMIES; SHARED AREAS: GLOBAL FINANCIAL CRISIS, EZ DEBT CRISIS, COVID-19)



Figure 13 confirms this relationship at the observation level: the bivariate OLS regression of GDP growth on one-period-lagged market capitalization yields a statistically significant slope ($\beta = 0.0076$), with a Pearson correlation of $r = 0.16$. It establishes that the positive market–growth relationship is not an artefact of control variables.

FIGURE 13: UNCONDITIONAL ASSOCIATION: MARKET CAPITALIZATION (T-1) AND GDP GROWTH (BIVARIATE OLS; 20 ADVANCED ECONOMIES, 1990-2024).

Each point represents a country-year observation. The solid line is the bivariate OLS fit; extreme observations with growth rates above $\pm 20\%$ or market cap above 280% of GDP have been trimmed for visual clarity.

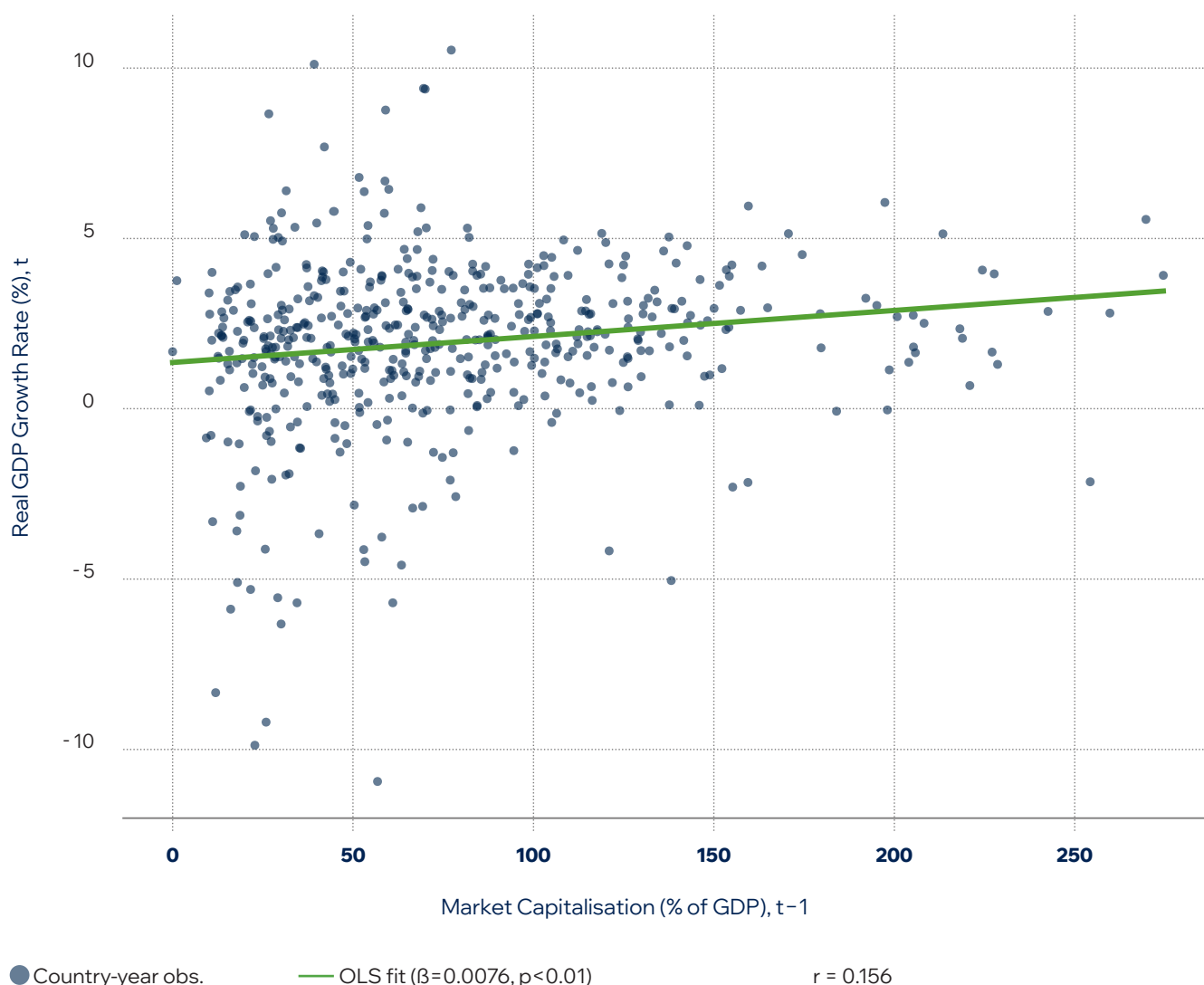


Table 22 presents the full multivariate OLS estimates for the three regressions under the baseline specification (Set A). Effective sample sizes are 394 observations for GDP growth, 394 for unemployment growth, and 353 for real tax-revenue growth.

TABLE 22: BASELINE OLS REGRESSION RESULTS, SET A, FULL PERIOD 1990–2024
(20 ADVANCED ECONOMIES)

Independent Variable	Reg. 1 GDP Growth	Reg. 2 Unemp. Growth	Reg. 3 TAX Rev. Growth
Market Capitalization (% GDP), t–1	0.0178***	–0.0365*	0.0393***
Stocks Traded Turnover Ratio, t–1	–0.0133***	0.0277*	–0.0225***
Log GDP per Capita, t–1	0.293	4.130	–1,290
Barro–Lee Years of Schooling, t–1	0.358*	–3.660***	1.928***
Domestic Credit (% GDP), t–1	–0.0162***	0.0698***	–0.0437***
Constant	–4,327	–4,870	–4,883
Observations	394	394	353
R²	0.171	0.049	0.076
Adjusted R²	0.161	0.037	0.063
F-statistic	16.06***	4,040**	5,726***
Observations	394	394	353

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. All independent variables lagged one period ($t - 1$). Significant coefficients shown in dark red. Condition numbers 6.27–6.39 indicate moderate multicollinearity.

3.1 MODEL 1, GDP GROWTH

The GDP growth regression achieves an R^2 of 0.171 and an F-statistic of 16.06 ($p < 0.001$). The modest R^2 is expected: annual GDP growth in a pooled specification spanning four macroeconomic regimes is inherently difficult to explain with a parsimonious model. The market capitalization coefficient is 0.0178 ($p < 0.01$), implying that a 10-percentage-point increase in the prior-year market-cap-to-GDP ratio is associated with approximately 0.18 pp additional GDP growth, holding other variables constant. Given sample-average market cap of 77.6% (std. dev. 52.7 pp), this is both statistically and economically meaningful, consistent with Beck and Levine's (2001) benchmark estimates. The positive effect operates through the capital-allocation channel identified by Wurgler (2000): deeper equity markets direct investment toward higher-return uses, raising total productivity and GDP growth.

The turnover ratio coefficient is -0.0133 ($p < 0.01$). Conditional on market capitalization, higher trading intensity is associated with lower subsequent GDP growth. As discussed in Section 8, this is consistent with the speculative noise hypothesis of Shiller (1981) and the governance-weakening mechanism of Stiglitz (1989): high turnover markets may feature more noise trading and weaker shareholder monitoring, attenuating the capital-allocation benefits of financial depth.

The Barro–Lee schooling variable is positive and marginally significant (0.358, $p = 0.068$), consistent with Card's (1999) human capital–growth nexus and Mincer wage equations: more educated labor forces generate higher productivity growth. Domestic private credit is negative and highly significant (-0.0162 , $p < 0.01$), consistent with the 'too much finance' hypothesis of Arcand, Berkes and Panizza (2012) and Cecchetti and Kharroubi (2012): for countries already at high banking-sector penetration, as all 20 economies are, marginal credit expansion is associated with capital misallocation, balance-sheet fragility, or the crowding-out of equity finance rather than productive investment.

3.2 MODEL 2, UNEMPLOYMENT GROWTH

The unemployment regression has an R^2 of 0.049, reflecting the well-known difficulty of predicting unemployment from financial variables alone. Unemployment dynamics depend heavily on institutional factors, employment protection legislation, wage rigidity, union density, that are largely time-invariant within countries and therefore absent from the time-varying regressors in the pooled specification. The market capitalization coefficient is -0.0365 ($p < 0.10$), indicating that deeper equity markets are associated with lower subsequent unemployment growth, consistent with the labor-demand channel: lower cost of equity capital facilitates firm investment and hiring. The marginal significance suggests the effect is modest and primarily indirect, operating through the GDP growth channel.

The most striking result is the Barro–Lee coefficient: $-3,660$ ($p < 0.01$). A one-year increase in average schooling for the 25–29 cohort is associated with approximately 3.7 pp less annual unemployment growth, the largest and most precisely estimated effect in the regression table. This confirms Card's (1999) finding that education is the primary protective factor against unemployment, particularly structural unemployment arising from skill mismatches, a problem that was acute in several European economies during the 2010–2013 period (Blanchard and Summers, 1986). The result has direct implications for labor-market policy and underscores the importance of educational investment as a labor-market stabilizer.

Domestic private credit is positive and significant (0.0698, $p < 0.01$): highly banked economies experience greater unemployment volatility, consistent with Reinhart and Rogoff's (2009) documentation that credit-cycle crises are followed by prolonged unemployment increases. Countries with high credit-to-GDP ratios entering 2008, Ireland, Spain, the Netherlands, experienced far sharper labor-market deteriorations than those with more moderate banking sectors.

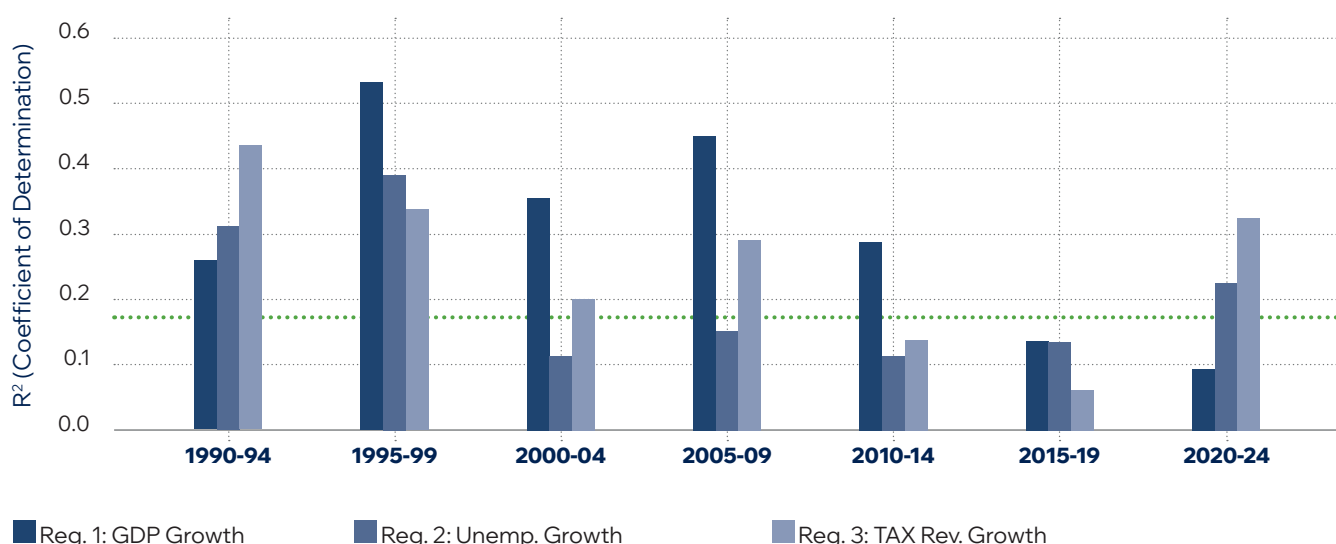
3.3 MODEL 3, REAL TAX-REVENUE GROWTH

The tax-revenue regression yields $R^2 = 0.076$ and $F = 5.726$ ($p < 0.001$). The market capitalization coefficient is 0.0393 ($p < 0.01$) - the largest and most precisely identified equity-market effect in the baseline table. This positive association operates through three channels: (i) the income and output growth generated by deeper equity markets expands the income and profits tax base; (ii) market transactions generate direct fiscal revenues through capital-gains and dividend taxes; (iii) the transparency requirements imposed on listed companies reduce fiscal opacity relative to unlisted firms, as documented by La Porta et al. (2000). The turnover ratio is again negative (-0.0225 , $p < 0.01$): high-frequency, speculative trading generates gross transaction volumes but limited tax-relevant value added, and may benefit from more favourable fiscal treatment (short-term capital gains) than labor income. Education and credit exhibit the expected signs (1.928 and -0.0437 , both $p < 0.01$), consistent with regressions 1 and 2.

4. FIVE-YEAR SUB-WINDOW ANALYSIS

Figure 14 provides a visual overview of how the explanatory power (R^2) of all three regressions evolves across seven non-overlapping five-year windows. The heterogeneity is stark: R^2 for GDP growth peaks at 0.533 in 1995–1999 and falls to 0.094 in 2020–2024; for unemployment, it is highest in the early 1990s and during the pandemic window but negligible in the 2015–2019 window; for tax-revenue growth, the 1990–1994 window achieves the highest R^2 (0.436) of any regression-window combination in the entire analysis.

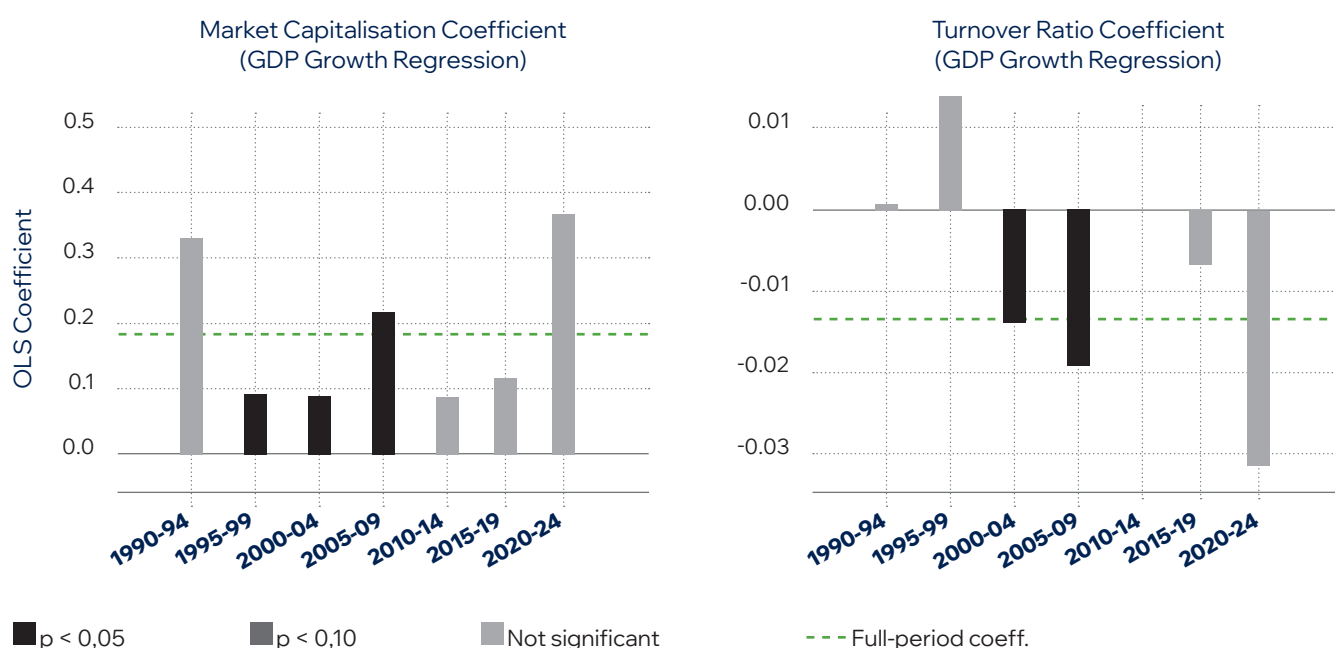
FIGURE 14: EXPLANATORY POWER (R^2 OF THE THREE REGRESSIONS ACROSS FIVE-YEAR WINDOWS (DOTTED LINE: FULL-PERIOD 1990–2024 R^2 FOR GDP GROWTH = 0.171)).



R^2 of the three OLS regressions across seven five-year sub-windows (1990–2024). The dotted horizontal line marks the full-period 1990–2024 R^2 for the GDP Growth regression (0.171).

Figure 15 decomposes this picture further by plotting the market capitalization and turnover ratio coefficients in the GDP growth regression across all five-year windows, with color intensity indicating statistical significance. The key pattern is unmistakable: both coefficients are most precisely estimated and largest in magnitude in the 2000–2004 and 2005–2009 windows and lose significance in 2010–2014 and 2015–2019, the decade of quantitative easing.

FIGURE 15: MARKET CAP AND TURNOVER COEFFICIENTS ACROSS FIVE-YEAR WINDOWS (GDP GROWTH REGRESSION; DARKNESS = STATISTICAL SIGNIFICANCE).



OLS coefficients on market capitalization (left panel) and turnover ratio (right panel) in the GDP Growth regression, across seven five-year sub-windows. Bar darkness indicates statistical significance: black = $p < 0.05$, dark grey = $p < 0.10$, light grey = not significant. Dashed lines show the full-period 1990–2024 coefficients.

Table 23 reports the complete results across all seven five-year windows and three dependent variables.

TABLE 23: OLS RESULTS BY FIVE-YEAR WINDOWS, MARKET CAPITALIZATION AND TURNOVER COEFFICIENTS (1990–2024)

Period	Dep. Variable	N	R ²	Adj. R ²	Mkt Cap Coeff.	Mkt Cap p-val	Turnover Coeff.	Turnover p-val
1990 1994	GDP Growth	32	0.260	0.117	0.0323	0.111	0.0008	0.943
	Unemp. Growth	32	0.314	0.182	-0.1578	0.420	-0.0009	0.994
	TAX Rev. Gr.	30	0.436	0.319	0.0558	0.321	-0.0058	0.852
1995 1999	GDP Growth	40	0.533	0.464	0.0093**	0.047	0.014	0.308
	Unemp. Growth	40	0.392	0.303	-0.0935**	0.014	-0.0882	0.421
	TAX Rev. Gr.	35	0.338	0.224	-0.0574	0.450	0.4767**	0.012
2000 2004	GDP Growth	73	0.355	0.307	0.0090***	0.010	-0.0140***	0.000
	Unemp. Growth	73	0.114	0.048	0.0131	0.656	0.0547*	0.080
	TAX Rev. Gr.	65	0.201	0.133	-0.0013	0.921	-0.0661***	0.001
2005 2009	GDP Growth	82	0.452	0.416	0.0212***	0.001	-0.0192***	0.000
	Unemp. Growth	82	0.152	0.096	0.0177	0.737	0.0021	0.947
	TAX Rev. Gr.	77	0.292	0.242	0.0497**	0.021	-0.0393***	0.003
2010 2014	GDP Growth	75	0.289	0.238	0.0089	0.391	-0.0002	0.973
	Unemp. Growth	75	0.114	0.049	-0.0824	0.116	0.0013	0.966
	TAX Rev. Gr.	70	0.137	0.070	0.0359	0.108	0.0095	0.472
2015 2019	GDP Growth	54	0.137	0.047	0.0117	0.519	-0.0068	0.506
	Unemp. Growth	54	0.135	0.045	-0.0240	0.815	0.0644	0.265
	TAX Rev. Gr.	49	0.061	-0.048	-0.0012	0.963	-0.0093	0.498
2020 2024	GDP Growth	38	0.094	-0.047	0.0358	0.496	-0.0313	0.477
	Unemp. Growth	38	0.226	0.105	0.1123	0.431	-0.1560	0.194
	TAX Rev. Gr.	27	0.324	0.163	0.1983	0.113	-0.1323	0.199

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. All independent variables lagged one year ($t - 1$). Coefficients in dark red indicate statistical significance. Reduced samples in some windows reflect data availability constraints.

4.1 THE 1990S: EXPANDING MARKETS AND CLEAN EFFECTS

The 1990–1994 window shows a positive market capitalization coefficient for GDP growth (0.032, $p = 0.111$), not significant at conventional levels due to the small sample ($N = 32$), but of comparable magnitude to later, better-identified windows. For tax-revenue growth, the R^2 of 0.436 is the highest in the entire five-year analysis: the early 1990s, characterized by stable macroeconomic conditions in most advanced economies and a near-uniform trend of financial liberalization, are the period in which the parsimonious model fits best.

The 1995–1999 window confirms the clearest evidence of the equity-market-growth nexus: market capitalization is positive and significant at 5% for GDP growth (0.009, $p = 0.047$), and the model explains 53.3% of GDP growth variance, by far the highest R^2 for this regression in any window. The late 1990s represent the period of most rapid equity market deepening in the sample: average market capitalization rose from below 50% to above 100% of GDP across the sample, accompanied by robust growth in all 20 economies. The turnover ratio is positive but insignificant for GDP growth in this window, suggesting that in the genuine innovation-driven boom of the late 1990s, high trading activity was associated with productive investment rather than pure speculation.

4.2 THE 2000S: BUST, RECOVERY, AND CRISIS

The 2000–2004 window, spanning the dot-com bust and mild 2001 recession, yields the clearest negative turnover effect: -0.014 for GDP growth ($p < 0.001$) and -0.066 for tax-revenue growth ($p < 0.001$). This is consistent with the interpretation, advanced by De Long et al. (1990), that the residual speculative activity of the post-dot-com period represented noise trading that depressed growth. The market capitalization coefficient for GDP growth remains positive and significant (0.009, $p = 0.010$), indicating that even after the technology bubble, breadth of equity markets (capitalization) continued to support growth, while intensity of trading (turnover) did not.

The 2005–2009 window, incorporating the pre-crisis boom and the most severe recession since the Great Depression, yields the highest GDP growth R^2 (0.452) among all five-year windows, with a significant positive market capitalization coefficient (0.021, $p < 0.001$). Importantly, Reinhart and Rogoff (2009) document that the 2008–2009 crisis was primarily a banking and derivatives crisis: equity market capitalization, which had already peaked and was declining by 2008, was not the initiating factor. Countries with deeper equity markets in 2005–2007 were not necessarily those that experienced the worst 2008–2009 outcomes.

4.3 THE 2010S: MONETARY POLICY AND THE ATTENUATION OF THE NEXUS

The two post-crisis windows tell a consistent story of attenuation. In 2010–2014, the market capitalization coefficient for GDP growth is positive (0.009) but insignificant ($p = 0.391$); in 2015–2019, it is 0.012 with $p = 0.519$. Both windows exhibit R^2 below 0.15 for GDP growth.

The most plausible explanation, consistent with Gagnon et al. (2011) and the literature on central bank asset purchases, is that the decade of quantitative easing severely distorted the informational content of equity prices. When central banks are the dominant marginal buyers of financial assets, market capitalization reflects monetary accommodation as much as, or more than, underlying corporate profitability or growth prospects. Under these conditions, the information-signaling channel through which equity markets normally support investment decisions is impaired: prices no longer reliably signal which sectors or firms have the highest expected returns, attenuating the capital-allocation mechanism identified by Wurgler (2000).

5. TEN-YEAR SUB-WINDOW ANALYSIS

Table 24 presents the decade-level analysis, aggregating four non-overlapping windows with substantially larger effective samples (65–155 observations), providing higher statistical power at the cost of intra-decade heterogeneity.

TABLE 24: OLS RESULTS BY TEN-YEAR WINDOWS, MARKET CAPITALIZATION AND TURNOVER COEFFICIENTS

Period	Dep. Variable	N	R ²	Adj. R ²	Mkt Cap Coeff.	Mkt Cap p-val	Turnover Coeff.	Turnover p-val
1990 1999	GDP Growth	72	0.360	0.312	0.0205***	0.000	0.006	0.456
	Unemp. Growth	72	0.299	0.246	−0.1458***	0.005	−0.0381	0.610
	TAX Rev. Gr.	65	0.160	0.089	0.0764*	0.089	0.1101*	0.083
2000 2009	GDP Growth	155	0.408	0.388	0.0160***	0.000	−0.0194***	0.000
	Unemp. Growth	155	0.080	0.049	0.0186	0.522	0.0195	0.372
	TAX Rev. Gr.	142	0.227	0.199	0.0198	0.110	−0.0473***	0.000
2010 2019	GDP Growth	129	0.160	0.126	0.0111	0.244	−0.0035	0.542
	Unemp. Growth	129	0.012	−0.028	−0.0400	0.442	0.0225	0.468
	TAX Rev. Gr.	119	0.050	0.008	0.0119	0.443	0.0034	0.714
2020 2024	GDP Growth	38	0.094	−0.047	0.0358	0.496	−0.0313	0.477
	Unemp. Growth	38	0.226	0.105	0.1123	0.431	−0.1560	0.194
	TAX Rev. Gr.	27	0.324	0.163	0.1983	0.113	−0.1323	0.199

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. The 2020–2024 window contains only 27–38 observations and estimates are unreliable. All independent variables lagged one year.

The 1990–1999 decade shows market capitalization significant at 1% for GDP growth (0.021) and significant at 1% and negative for unemployment growth (−0.146), with R^2 of 0.360, the richest evidence of the equity-market-macroeconomy nexus in the sample. The 1990s were characterized by genuine financial deepening, privatization waves, and the expansion of institutional investors, conditions under which Levine and Zervos's (1996) mechanisms operated most clearly.

The 2000–2009 decade achieves the highest R^2 for GDP growth (0.408) and confirms both significant market capitalization (0.016, $p < 0.001$) and significant negative turnover (−0.019, $p < 0.001$) effects, the latter driven principally by the 2000–2004 sub-window. The 2010–2019 decade shows, as discussed in Section 4.3, a structural break in the market–growth relationship, consistent with Gagnon et al.'s (2011) evidence that QE compressed risk premia and distorted asset pricing.

6. PRE-CRISIS ROBUSTNESS CHECK

Table 25 restricts the sample to 1990–2005, predating both the Global Financial Crisis and the era of unconventional monetary policy, to assess whether the baseline results are contaminated by post-crisis structural breaks or extraordinary monetary conditions.

TABLE 25: GDP GROWTH REGRESSION: FULL SAMPLE VS. PRE-CRISIS SUB-PERIOD (1990–2005)

Variable	Full Period 1990–2024	Pre-Crisis 1990–2005	Interpretation
Market Capitalization, $t-1$	0.0178***	0.0115***	Positive; stronger for overall period
Stocks Turnover Ratio, $t-1$	–0.0133***	–0.0086***	Negative; consistent
Log GDP per Capita, $t-1$	0.293 (n.s.)	–1.142**	Significant only pre-crisis
Barro–Lee Schooling, $t-1$	0.358*	0.833***	Much stronger pre-crisis
Domestic Credit, $t-1$	–0.0162***	–0.0110***	Negative; consistent
R ²	0.171	0.276	Markedly higher pre-crisis
N. Observations	394	163	-

Note: n.s. = not significant at the 10% level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Comparison focuses on the GDP Growth regression. All independent variables lagged one year.

The pre-crisis results confirm and strengthen the main findings. Market capitalization is positive and highly significant (0.0115, $p < 0.001$) and the R² of 0.276 is markedly higher than the full-sample 0.171, consistent with Beck and Levine's (2001) benchmark findings. Two variables that were insignificant in the full sample gain significance here. Log GDP per capita is negative and significant (–1.142, $p < 0.05$), consistent with the conditional convergence hypothesis of Barro (1991): conditional on human capital and financial endowments, richer economies grow more slowly. Barro–Lee schooling is 0.833 ($p < 0.001$), almost 2.5 times the full-sample estimate, suggesting that in the pre-crisis period the human-capital-growth mechanism of Lucas (1988) and Romer (1990) operated more visibly, before being overshadowed by post-crisis macroeconomic dominance of financial distress, austerity and monetary policy.

7. ALTERNATIVE SPECIFICATIONS

Table 26 reports the market capitalization coefficient and R^2 for each of the three dependent variables under the three model specifications (Sets A, B and C), together with the change in R^2 relative to the baseline Set A. The three specifications differ only in two choices: the development-level control (log GDP per capita in Sets A and B vs. GDP per capita growth rate in Set C) and the unemployment measure (growth rate in Sets A and C vs. level in Set B).

TABLE 26: ROBUSTNESS: OLS RESULTS ACROSS THREE MODEL SPECIFICATIONS (1990–2024)

Dependent Variable	Mkt Cap β (t-1)	R^2	vs. Set A (R^2)
Set A, Baseline		Log GDP per capita · Unemployment: growth rate (%Δ)	
GDP Growth (%)	0.0178***	0.171	—
Unemployment Growth (%)	-0.0365*	0.049	—
TAX Rev. Growth (%)	0.0393***	0.076	—
Set B, Unemployment in levels		Log GDP per capita · Unemployment: level (%)	
GDP Growth (%)	0.0178***	0.171	$\approx +0.000$
Unemployment Level (%)	-0.0081 ns	0.114	$\uparrow +0.065$
TAX Rev. Growth (%)	0.0393***	0.076	$\approx +0.000$
Set C, GDP per capita growth as control		GDP per capita growth rate · Unemployment: growth rate (%Δ)	
GDP Growth (%)	0.0153***	0.215	$\uparrow +0.044$
Unemployment Growth (%)	-0.0195 ns	0.042	$\downarrow -0.007$
TAX Rev. Growth (%)	0.0285***	0.081	$\approx +0.005$

Note: All independent variables lagged one period (t-1). Significant MktCap coefficients in dark red. “vs. Set A” shows the change in R^2 relative to the baseline; green $\uparrow$ = improvement, red $\downarrow$ = deterioration. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. ns = not significant.

Two results stand out. First, the market capitalization coefficients for GDP growth and tax-revenue growth are positive and highly significant across all three specifications, confirming the robustness of the main findings. Second, the unemployment results are sensitive to specification: the coefficient is marginally significant only in Set A (-0.037*); in Set B (unemployment level) it loses significance but R^2 rises from 0.049 to 0.114, capturing more cross-sectional variation in structural unemployment; in Set C it is also insignificant. Set C improves R^2 for GDP growth to 0.215 (vs. 0.171 in Set A) because replacing log GDP per capita with the GDP per capita growth rate generates a highly significant own-lag coefficient, capturing growth momentum in the spirit of Islam (1995), without materially affecting the equity-market estimates.

8. ECONOMIC INTERPRETATION

8.1 FOUR CHANNELS FROM EQUITY MARKETS TO GROWTH

The positive association between market capitalization and real outcomes is consistent with four theoretical channels.

The capital allocation channel (Wurgler, 2000; Beck, Levine and Loayza, 2000): a deep and informationally efficient equity market directs investment toward its highest-valued uses, raising total factor productivity. This mechanism predicts that market capitalization effects should be strongest in industries most dependent on external equity finance, a prediction supported by Wurgler's cross-industry evidence.

The corporate governance channel (Shleifer and Vishny, 1997; La Porta et al., 2000): mandatory disclosure, quarterly reporting and the threat of hostile takeover or activist shareholder pressure discipline management, limiting empire-building and value-destroying investments, improving firm efficiency and aggregate productivity.

The information signaling channel (Greenwood and Jovanovic, 1990): equity prices aggregate the dispersed private information of investors, producing a public signal that reduces coordination failures in investment and facilitates the large-scale resource commitments required by innovation-intensive industries. This channel depends on market depth: thin markets produce less informative prices.

The wealth effect channel (Case, Quigley and Shiller, 2005): rising equity valuations increase household financial wealth, stimulating consumption demand and aggregate GDP. This channel is largest in the United States and smallest in continental European economies but has grown in importance everywhere with the spread of pension fund investment.

8.2 THE GROWING FISCAL RELEVANCE OF EQUITY MARKETS

The increase in the market capitalization–tax-revenue coefficient from 0.020 (2000–2009) to 0.039 (1990–2024) reflects a structural shift in the composition of fiscal revenues in advanced economies. As bond yields converged toward zero under the influence of quantitative easing, capital gains from equity portfolios became the dominant source of asset-based income for high-net-worth households and institutional investors, consistent with Piketty's (2014) observation of rising capital-income shares. Consequently, capital-gains taxes, dividend withholding taxes and securities transaction taxes constituted a growing share of total fiscal revenues. Tax systems that efficiently capture financial income, through non-deferrable capital-gains taxes, well-designed transaction taxes and dividend taxation systems that reduce incentives for fiscal engineering, therefore have a direct stake in promoting equity market development.

8.3 SENSITIVITY

TABLE 27: IMPLIED EFFECT ON ITALIAN MACRO-OUTCOMES

Linear extrapolation from Set A - Italy 2025 baseline: 47% of GDP

	Conservative	Target	Best Case
	80%	100%	125%
	Δ +33 pp	Δ +53 pp	Δ +78 pp
GDP growth	+ 0.60 pp	+ 0.95 pp	+ 1.40 pp
Tax-revenue growth	+ 1.30 pp	+ 2.09 pp	+ 3.07 pp
Unemployment growth	- 1.20 pp	- 1.93 pp	- 2.85 pp

β coefficients (Set A, Table 22): GDP +0,0178***. Tax rev. +0,0393***. Unempl. -0,0365*

Table 27 summarizes the estimated macroeconomic implications of expanding the Italian equity market from its current level of approximately 47% market capitalization-to-GDP toward scenarios comparable to European peers. The projections suggest that increasing market depth would generate meaningful improvements across key macroeconomic dimensions, with effects becoming progressively stronger as the capitalization ratio rises from a conservative benchmark (80%) to a target scenario (100%) and a more optimistic benchmark (125%).

The central result is that moving Italy from its current position to a 100% market capitalization-to-GDP ratio, consistent with more developed European markets, would be associated with an additional +0.95% of GDP growth, +2.09% of tax revenue growth, and a reduction in unemployment of approximately 1.93%. These effects are interpreted as the outcome of several transmission channels identified throughout the report: improved capital allocation, stronger corporate governance mechanisms, increased investment capacity, and a deeper ecosystem connecting firms with long-term capital providers.

Importantly, the figure highlights that even under a more conservative scenario, where Italy reaches only an 80% market capitalization-to-GDP ratio, the effects remain economically substantial, implying +0.60% of additional GDP growth and a reduction of unemployment by 1.20%. This suggests that benefits emerge well before achieving the full objective of 1000 listed companies. In contrast, the best-case scenario of reaching 125%, approximately in line with the most developed European equity markets, implies even larger gains, with GDP growth increasing by 1.40% and unemployment declining by 2.85%.

These results should however be interpreted as long-term structural effects rather than immediate policy outcomes. The mechanism proposed throughout the report is cumulative in nature: a deeper equity market enables a broader set of firms, particularly medium and large companies currently underrepresented in Italian public markets, to access growth capital. This strengthens investment, innovation, and employment creation, which subsequently expand the fiscal base and improve public finances. Consequently, the figure should not be interpreted as suggesting that simply increasing the number of listed companies mechanically generates growth; rather, it illustrates the potential economic dividend associated with developing a broader and more efficient capital market ecosystem. In this sense, the estimated gains can be viewed as quantifying the opportunity cost of maintaining the current underdeveloped equilibrium of the Italian equity market.

FINAL THOUGHTS

The transformation of Italian equity markets from their current constrained configuration to a depth and liquidity commensurate with Italy's economic sophistication represents one of the most consequential structural reforms available to policymakers seeking to enhance long-term growth, strengthen fiscal sustainability, and address persistent labor market challenges. The comprehensive analysis developed across the three chapters of this research establishes that expanding Italy's listed company universe from approximately 411 firms to 1000 companies would fundamentally restructure the relationship between capital markets and the real economy, elevating market capitalization from 47% of GDP to approximately 100% while generating substantial macroeconomic dividends that extend far beyond financial sector statistics. The quantitative projections emerging from this analysis demonstrate that achieving international benchmarks for equity market depth would contribute an additional 0.95% to annual GDP growth, accelerate tax revenue growth by 2.09%, and reduce unemployment by 1.93%, representing improvements in economic performance that would compound over time to produce transformative effects on living standards, public finances, and social welfare. These findings underscore that Italy's equity market size constitutes not merely a financial sector anomaly but a fundamental constraint on economic dynamism that imposes substantial opportunity costs across multiple dimensions of national economic performance.

The analytical framework developed in Chapter 1 establishes the essential foundation for understanding both the magnitude of Italy's equity market deficit and the specific structural factors that have perpetuated this underdevelopment despite Italy's position as a major advanced economy with sophisticated industrial capabilities. The historical analysis reveals that Italy's limited equity market depth reflects persistent patterns rooted in institutional arrangements, regulatory frameworks, and cultural preferences that have systematically favored bank-based financing and concentrated family ownership over public equity structures. The examination of contemporary market architecture demonstrates that Italy's listed company universe fails to capture the true diversity and dynamism of the Italian economy, with systematic underrepresentation of mid-sized firms, industrial, healthcare and consumer-oriented sectors. The comprehensive barrier analysis identifies regulatory costs, cultural resistance to dilution of family control, limited equity culture among retail investors, and constrained intermediary capacity as key impediments to market expansion, while simultaneously establishing that none of these obstacles represents an insurmountable constraint. This nuanced assessment provides essential context for policy design by clarifying that equity market expansion requires not a single dramatic intervention but rather a coordinated package of reforms addressing multiple dimensions of market ecosystem, regulatory framework, and institutional capacity.

The transformative potential of equity market expansion emerges clearly from Chapter 2's rigorous analysis of the pathway from 398 to 1000 listed companies and the corresponding elevation of market capitalization to 100% of GDP. The identification of a substantial pool of Italian companies that exhibit the scale, profitability, and growth characteristics typically associated with successful public companies in other European markets demonstrates that Italy possesses the fundamental economic substrate necessary to support a significantly larger listed company universe. The sectoral analysis reveals that potential new issuers span diverse industries including specialized manufacturing, technology, consumer goods, and healthcare, indicating that market expansion would enhance not only aggregate depth but also sectoral diversity and representativeness. The valuation framework developed in

Chapter 2 establishes that newly public companies would command market capitalizations consistent with international comparables while accounting for Italian-specific factors including initially lower liquidity premiums for smaller listings. Critically, the analysis incorporates positive feedback effects through which increased market depth enhances valuations for existing listed firms by improving overall liquidity, attracting greater international investor attention, and strengthening the ecosystem of market intermediaries that support efficient price discovery. These feedback mechanisms suggest that the benefits of equity market expansion would accrue not only to newly public companies and their stakeholders but also to existing market participants through enhanced market quality and improved valuation multiples.

The macroeconomic analysis presented in Chapter 3 demonstrates that the benefits of equity market deepening extend far beyond the financial sector to generate substantial improvements in real economic performance across multiple dimensions. The projection of 0.95% additional annual GDP growth reflects the operation of multiple transmission channels through which deeper equity markets enhance economic dynamism. Improved capital allocation efficiency enables resources to flow more readily to high-productivity firms and sectors, reducing the misallocation that constrains aggregate productivity growth and allowing innovative enterprises to access the patient, long-term capital necessary to realize their growth potential. Enhanced corporate governance and operational efficiency associated with public listing disciplines improve management quality, reduce agency costs, and strengthen strategic decision-making, with measurable effects on firm-level productivity that aggregate to influence economy-wide performance. Increased investment rates facilitated by access to equity financing support expenditures on research and development, capacity expansion, and market development that drive innovation and competitiveness. The employment effects of this investment acceleration contribute directly to the projected 1.93% reduction in unemployment while simultaneously addressing skill mismatches and regional disparities through the expansion of high-productivity firms and sectors across diverse geographic locations.

The fiscal implications of equity market expansion carry particular significance in the Italian context, where elevated public debt levels constrain policy flexibility and demographic pressures threaten the long-term sustainability of social insurance programs. The projection of 2.09% additional tax revenue growth reflects increased corporate income tax collections from higher aggregate profits, greater personal income tax receipts from expanded employment and rising wages and enhanced value-added tax revenues from increased consumption enabled by income growth. Critically, these revenue gains would accrue without requiring increases in statutory tax rates, instead reflecting the expansion of tax bases that occurs as economic activity accelerates, and productivity improves. The magnitude of these fiscal benefits suggests that equity market deepening could make substantial contributions to gradual fiscal consolidation while preserving essential public services and social protections, or alternatively could finance growth-enhancing public investments in infrastructure, education, and research that would complement the private sector dynamism unleashed by deeper capital markets. The fiscal dividends of equity market expansion thus create policy space for addressing Italy's most pressing economic challenges while reducing the need for politically contentious austerity measures or tax increases that might undermine growth prospects.

The key policy implications emerging from this research span multiple domains of economic governance and require coordinated action across, fiscal, regulatory and institutional dimensions.

The first and most immediate priority is the structural reorientation of Italian household savings toward the equity market. Italy's stock of private wealth is extraordinary in its scale and remains one of the most underutilized productive resources in the national economy. The persistent concentration of this wealth in bank deposits, real estate, and low-risk fixed-income instruments reflects a combination of deeply rooted behavioural tendencies, limited financial literacy, and the absence of sufficiently accessible and tax-efficient vehicles for equity participation. The European Commission's recommendation on Saving and Investment Accounts, framed within the Savings and Investments Union initiative, offers a concrete architectural model for addressing this gap. Italy should move decisively to design a domestic instrument that is simple in structure, transparent in its cost profile, and meaningfully advantaged from a fiscal standpoint, with an explicit allocation toward domestic and European listed equities. The objective is structural: to modify the savings behaviour of Italian households in a durable and measurable way,

transforming accumulated private wealth from a stock of latent potential into an active productive factor for the national economy.

The second lever concerns the mobilization of domestic institutional capital. Pension funds, social security funds, foundations, and insurance companies remain significantly under-allocated to domestic equities, constrained by a combination of regulatory limits, the predominance of the public pay-as-you-go pension system, and the relatively limited scale of the domestic asset management industry. Structural reforms aimed at expanding the funded component of the pension system and promoting automatic enrolment in supplementary pension funds would, over time, substantially increase the pool of long-term institutional capital available for domestic equity markets. Alongside this, a gradual and carefully managed relaxation of the regulatory constraints on equity allocations by pension funds and insurance companies, accompanied by commensurate risk management requirements, would allow a greater proportion of institutional resources to flow toward the public markets. At the European level, the Savings and Investments Union framework offers the appropriate context within which to promote public-private partnership initiatives designed to increase the number of institutional funds dedicated to investing in the European real economy as represented on the exchanges.

The third area of intervention is the fiscal treatment of listed companies. The current Italian tax system preserves a structural asymmetry that systematically favors debt financing over equity capital, through the full deductibility of interest expenses, while subjecting risk capital to multiple layers of taxation at the corporate, dividend, and capital gains levels. This debt bias artificially suppresses the attractiveness of listing, increases corporate fragility, and reduces the availability of equity capital for growth and innovation. The policy response requires the introduction of a stable and permanent fiscal framework that functions as a structural incentive for the best Italian companies to access and remain on the exchange. The IPO bonus introduced in 2018 and the regional initiatives Quota Lombardia and Quota Liguria, launched in 2025 with the aim of covering listing costs for small and medium-sized enterprises, represent important steps in the right direction and should be made permanent features of the national fiscal architecture, with the regional models replicated across the full national territory. More broadly, fiscal measures should be designed to reward capital strengthening both at the point of initial listing and in the context of subsequent capital increases, and should apply at minimum to companies with a market capitalization below one billion euros as defined by the Capital Markets Law, or to companies outside the FTSE MIB index. The initial fiscal cost of such measures would be largely offset, over the medium term, by the increase in economic growth, corporate profitability, and aggregate tax revenues generated by a more dynamic and inclusive equity market.

The fourth priority is the reinforcement of the market ecosystem itself. A deep and functional capital market requires a robust network of intermediaries, advisory capacity, research coverage, and liquidity provision across the full size spectrum of listed companies. At present, small and mid-cap listed companies suffer from limited analyst coverage, constrained investor relations capacity, and insufficient secondary market liquidity, all of which reduce their visibility to both domestic and international investors and contribute to the valuation discount that currently characterizes the Italian market relative to European peers. Targeted public-private initiatives, modelled on best practices from comparable European markets, should be introduced to support financial research on smaller listed companies, strengthen the advisory pipeline for companies approaching the market for the first time, and develop the institutional infrastructure necessary to sustain a broader and more liquid equity market over time.

The fifth area concerns the continued development and proportionate application of the regulatory framework. The regulatory season that has unfolded in Italy over recent years, encompassing the Capital Markets Law of 2024, the reform of the TUF, the simplifications introduced by Borsa Italiana and CONSOB, and the entry into force of the EU Listing Act in 2026, has substantially reduced the administrative and regulatory burden associated with listing, particularly for smaller companies. These reforms represent a significant and necessary foundation. Their full effects will be measurable only over the medium term, and any further regulatory intervention should be assessed against the demonstrated impact of measures already in force rather than introduced in parallel to a reform cycle that has yet to express its full potential. Going forward, the guiding principles should be proportionality, efficiency, and harmonization,

with differentiated listing regimes calibrated to the size and risk profile of issuers, and with disclosure and governance requirements designed to protect investors while remaining genuinely accessible to companies of smaller dimensions.

The sixth and most structurally demanding priority is cultural transformation, both among Italian households and among Italian entrepreneurs. The limited equity culture of Italian families, reflected in portfolios still heavily oriented toward deposits and fixed income, constrains the demand for listed securities and reduces the social legitimacy of capital market development as a policy objective. Financial education integrated into school and university curricula, informational campaigns on the historical performance of long-term equity investment, and greater accessibility to low-cost investment instruments can contribute progressively to shifting this orientation. Among entrepreneurs and family business owners, the cultural challenge is different in character. Listing is frequently perceived as a threat to family control or to the strategic continuity of the enterprise, a perception that the evidence does not support. The preservation of entrepreneurial identity after listing, the availability of multiple-vote share structures, the option of gradual increases in the free float, and the active continued presence of founding families in the governance of listed companies are instruments that should be systematically promoted as part of the broader communication effort. More fundamentally, listing should be reframed in public discourse as an instrument of long-term growth, international competitiveness, and intergenerational wealth preservation, and as a mechanism through which Italian industrial groups can build the scale, professionalization, and ambition required to generate national and European champions with strong roots in Italy.

The conclusion that emerges from this comprehensive analysis is unambiguous: equity market development represents a strategic priority for Italian economic policy with the potential to generate transformative benefits across multiple dimensions of national economic performance. The expansion to 1000 listed companies and the achievement of 100% market capitalization-to-GDP ratio would constitute one of the most consequential structural reforms available to Italian policymakers, with effects that would compound over time to produce substantial improvements in living standards, fiscal capacity, and economic dynamism. The pathway to this transformation requires coordinated action across regulatory, fiscal, and institutional domains, sustained political commitment across multiple electoral cycles, and active engagement from private sector participants. The magnitude of the opportunity and the compelling nature of the evidence suggest that the question facing Italian policymakers is not whether to pursue equity market development but rather how to design and implement the policy package that will most effectively achieve this strategic objective while managing implementation challenges and ensuring that benefits are broadly shared across Italian society. The transformation of Italian equity markets from constraint to catalyst represents an achievable ambition whose realization would fundamentally enhance Italy's economic prospects and secure the foundations for sustained prosperity in the decades ahead.

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APPENDIX A:

DATA SOURCES AND VARIABLE DEFINITIONS

A.1 DATA SOURCES

Orbis Database (Bureau van Dijk) - Company-level financial statements (balance sheet, income statement, cash flow) - Ownership structures and corporate hierarchies - Industry classifications (NACE Rev. 2 codes) - Employment data - Coverage: 411 Italian listed companies, over 300,000 Italian unlisted companies, comparable samples for France, United Kingdom, and Sweden

World Bank - World Development Indicators - National GDP (current and constant prices) - Sectoral GDP contributions - Employment statistics - Financial sector development indicators

Refinitiv - Market capitalization data - Trading volumes and liquidity metrics - Index constituents and weights

Euronext - Listed company directories - Market segment classifications - IPO and delisting data

Mergermarket - M&A transaction data - Deal values and structures - Acquirer and target characteristics

A.2 VARIABLE DEFINITIONS

Market Capitalization: Share price $\times$ number of shares outstanding, expressed in euros

Market Cap/GDP Ratio: Total market capitalization of listed companies / National GDP $\times$ 100

Revenue Growth: $(\text{Revenue}_t / \text{Revenue}_{t-1} - 1) \times 100$, compound annual growth rate over 2015-2024

Employment Growth: $(\text{Employees}_t / \text{Employees}_{t-1} - 1) \times 100$, compound annual growth rate over 2015-2024

Return on Assets (ROA): Net Income / Total Assets $\times$ 100

Return on Equity (ROE): Net Income / Shareholders' Equity $\times$ 100

EBITDA Margin: EBITDA / Total Revenue $\times$ 100

Revenue per Employee: Total Revenue / Number of Employees, expressed in euros

Capital Expenditure Intensity: Capital Expenditures / Total Revenue $\times$ 100

Return on Capital Employed (ROCE): EBIT / (Total Assets - Current Liabilities) $\times$ 100

Leverage Ratio: Total Debt / Total Equity $\times$ 100

Representation Ratio: (% of Listed Companies in Sector) / (Sector's % of GDP)

APPENDIX B:

SIZE CLASSIFICATION THRESHOLDS

Companies are classified into four size categories based on market capitalization:

Micro: Market capitalization < €50 million

Small: Market capitalization €50-100 million

Medium: Market capitalization €100-250 million

Large: Market capitalization €250 million - €1 billion

Extra Large: Market capitalization > €1 billion

These thresholds align with European Commission definitions for SME classification and market practice in equity research.

APPENDIX C:

SECTOR CLASSIFICATION

Companies are classified into eleven major sectors based on NACE Rev. 2 industry codes:

1. **Manufacturing** (NACE C): Manufacturing of goods across all sub-sectors
2. **Financial Services** (NACE K): Banking, insurance, asset management, financial intermediation
3. **Information Technology** (NACE J62, J63): Software, IT services, data processing
4. **Consumer Goods** (NACE C10-C33, selezionati): Food, beverages, textiles, apparel, consumer durables
5. **Healthcare** (NACE Q, C21): Healthcare services, pharmaceuticals, medical devices
6. **Utilities** (NACE D, E): Electricity, gas, water supply, waste management
7. **Real Estate** (NACE L): Real estate development, REITs, property services
8. **Construction** (NACE F): Building construction, civil engineering, specialized construction
9. **Telecommunication** (NACE J61): Telecommunications services and infrastructure
10. **Energy** (NACE B): Mining, oil and gas extraction, refining
11. **Other Services** (NACE G, H, I, M, N, R, S): Wholesale, retail, hospitality, professional services, administrative services, arts and entertainment

APPENDIX D:

LIMITATIONS

The study in Chapter 1 has several limitations that should be acknowledged:

Data Coverage: - Orbis database coverage is incomplete for smaller unlisted companies, potentially introducing selection bias in the unlisted company sample - Financial data availability varies across countries and time periods, resulting in unbalanced panels - Market capitalization data may not fully account for dual listings and cross-holdings

Methodological Constraints: - The analysis is primarily descriptive and cross-sectional, limiting causal inference - Matching of listed and unlisted companies is based on industry classification and approximate size, not rigorous statistical matching techniques - Performance comparisons do not fully account for survivor bias (companies that fail or delist are excluded from later periods) - The analysis does not control for all potential confounding factors (e.g., management quality, ownership structure, geographic location)

Temporal Scope: - The 2015-2024 period encompasses several major shocks (Brexit, COVID-19, energy crisis) that may have differentially affected listed versus unlisted companies - Long-term trends may differ from patterns observed in this particular decade

The study in chapter 3 has four principal limitations. (i) **Endogeneity:** lagged variables provide a necessary but insufficient condition for causal identification. Instrumental variable approaches, exploiting, for example, regulatory changes to listing requirements or investor protection laws as exogenous shifters of market development, as in La Porta et al. (1998), or dynamic panel GMM estimators (Arellano and Bond, 1991) would provide stronger causal identification. (ii) **Unobserved heterogeneity:** country and time fixed effects would partial out institutional confounders and global shocks respectively, but at the cost of identifying effects from within-country variation alone. (iii) **Non-linearity:** as demonstrated by Arcand, Berkes and Panizza (2012) and Law and Singh (2014), the finance–growth relationship may exhibit a threshold, beyond which additional financial depth reduces growth. Including quadratic terms or applying threshold regression (Hansen, 2000) would allow testing for such non-linearities. (iv) **Temporal aggregation:** annual data mask higher-frequency dynamics; quarterly panel data would improve precision in timing the equity–market–growth relationship.

APPENDIX E:

DESCRIPTIVE STATISTICS CHAPTER 3

Table A1 reports descriptive statistics for all variables on the full stacked dataset of 700 country-year observations, computed on the non-lagged, non-transformed series. Missing values in market capitalization, turnover and private credit reflect data gaps in early years for some countries.

TABLE A1, DESCRIPTIVE STATISTICS, FULL SAMPLE, 1990–2024
(N = 700 COUNTRY * YEAR OBSERVATIONS)

Variable	N	Mean	Std. Dev.	Min	Max
GDP Growth (annual %)	700	2,03	2.9	−10.94	24.62
GDP per Capita (const. 2015 USD)	700	43.357	15.238	15.375	97.794
Market Capitalization (% of GDP)	538	77.6	52,7	0.02	285.5
Stocks Traded Turnover (%)	519	74	60.8	5.24	694.4
Domestic Credit (% of GDP)	554	112.9	44.3	23.8	301
Barro–Lee Years of Schooling	700*	12.28	0.93	9.57	13.78
Unemployment, Total (% labor force)	700	7.36	4.12	1.82	27.69
Unemployment Growth (%)	700	0.71	16.9	−37.2	145.1
Real TAX Revenue Growth (%)	626	2.74	9.02	−35.5	92.8

Note: * Barro–Lee schooling is available every five years (140 benchmark observations); the annual series is obtained by linear interpolation. Market capitalization, turnover and private credit exhibit fewer than 700 observations due to missing data.

DATA SOURCES

Orbis Database (Bureau van Dijk)
World Bank - World Development Indicators
Consob (Commissione Nazionale per le Società e la Borsa)
Refinitiv Financial Data
Euronext Market Data
ISTAT – Italian National Institute of Statistics
Mergermarket Transaction Database

METHODOLOGY

- Comparative Cross-Sectional Analysis
- Listed vs. Unlisted Firms
- Multi-Country Benchmarking
- OLS Regression

RESEARCH INSTITUTION

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