Institut de recherche MiddleNext

SMALL CAPS, BIG IMPACT
The importance of small and mid cap stocks in the European economic momentum

LA FINANCIERE DE L'ECHIQUIER

This study was produced by La Financière de l'Echiquier and the MiddleNext Research Institute
Research coordinator : Gaël Faijean, portfolio manager, in charge of quantitative analysis at LFDE

About LFDE – www.lfde.com
Created in 1991, La Financière de l'Echiquier is one of the leading independent asset management companies in France with Đ8.2bn in assets under management and a team of 100 employees. LFDE is wholly owned by its managers and employees. Its business: management of savings and financial investments on behalf of individual clients, wealth management advisors and institutional investors.

About the MiddleNext Research Institute – www.middlenext.com
MiddleNext is the independent French association representing listed SMEs and midcaps. MiddleNext was founded in 1987 and represents and defends the interests of small and mid caps, assists listed companies through its training institute and contributes to the development of knowledge about mid caps through its research institute.
MiddleNext co-chairs the Smaller Issuers Committee of EuropeanIssuers, the leading European association promoting the interests of companies listed on stock exchanges. EuropeanIssuers is present in 15 countries and represents over 9,200 listed companies with market capitalisation of some Đ8,500 billion. The president of MiddleNext is Guillaume Robin and its General Manager is Caroline Weber. It is headed by a Board comprising 12 directors of listed companies. It is financed and managed by directors of mid cap companies.

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PREFACE

Small stocks becoming large ones... for how long?

Every day, the financial and economic press is filled with headlines about the market giants, the household names that capture investors' attention. These companies are presumed to be unsinkable; they have always been around and always will be successful. At any rate, this is the impression that is left to investors. However, who remembers AXA, Danone, and Carlsberg when they were immature companies yet to grow into today's dominance? Perhaps a more difficult task: apart from market professionals, who remembers the "immortal" moniker given at their peaks to groups like Mannesmann, Promodès and Compagnie Générale d'Electricité?

Obviously, it is a fact that the large capitalization companies, on which 96% of trading volumes are focused, were at one time up-and-coming small caps before reaching the top of the barrel. Observing the market over time shows that its composition is under continuous and rapid renewal. The market can be viewed as a size-based pyramid having a very wide foundation: 80% of the listed companies in Europe, or almost 3,800 companies, have a market capitalization of less than Đ1bn.

This incubator, consisting of the small and midcap segment and the focus of our study, only accounts for 4% of stock market transactions, which are the business volumes of the financial industry. We might think this is negligible. In terms of raw numbers, it may seem true, but its true relevance is serving as an incubator on which the vitality of European stock markets depends. Our analysis clearly shows that dynamism in this segment is essential for financing the expansion of companies and creating the conditions for the emergence of tomorrow's champions.

Today, this virtuous ecosystem that is a source of wealth for investors is in danger. Indeed, over the past seven years, the number of European micro and small caps has plummeted by 20% and the trend has begun to affect the number of mid and large cap stocks, which has in turn dropped by 5%. The reason for this, among other factors, is the regulatory environment, which have created disincentives for this growth source with measures such as the directive on prospectuses, on transparency, MiFid and even, to a lesser extent, the introduction of the TTF. All of these are perfect examples of regulations whose scope is too wide-reaching in their application, creating huge consequences for the segment with which we are concerned.

More than just an observation, this study raises two points worth considering for those involved in French and European regulations: on the one hand, it invites them to acknowledge how vital it is to share revenues between small and midcap stocks in order to build the financial markets of the future; on the other hand, it helps better understand the levers for building a financial market and to adapt them to companies of varying sizes. Having always been excluded, it is perhaps a plea for representatives of the midcap ecosystem to be integrated into the ESMA and the AMF.

The final merit of this study is that as a conclusion it proposes ways to stem the corrosive market trend started several years ago and to encourage savings to be invested in these segments, which do not imply greater risk for savers and are contributors to developing our economies, as discussed in the following pages.

In short, these are extremely important challenges for the markets, the economy and savers.
Happy reading!

Caroline Weber, General Manager, MiddleNext
Didier Le Menestrel, Chairman, La Financière de l'Echiquier

METHODOLOGY

This overview of small and mid-sized listed European companies is not intended to be comprehensive. In contrast, it highlights in a systematic manner the main characteristics of the market, the major stages in its development since 2000 and the challenges it is facing today.

What do we mean by small, mid and large caps?

- We have chosen to use market capitalisation as the criterion for segmentation since this is the one most commonly used for listed companies.
- The thresholds we use are those generally used by fund managers in continental Europe, which are slightly lower than those used by Anglo-US managers (in the US a micro cap is a company with a market cap of less than €500m).
- We have also created a minimal threshold of €5m in order to remain as comprehensive as possible.
- Within the small cap segment we have defined a sub-segment for micro caps. Unless the micro cap segment is explicitly mentioned, in this study the term small cap refers to the combined micro and small cap segments.
- Lastly, we have taken the company's head office address to establish its country of origin and not where the group is listed since this is more of a tactical choice on the part of a company.

Small Cap	Mid Cap	Large Cap	
Micro cap	Small cap	>€1bn and <€5bn	>€5bn
>€5m and <€150m	>€150m and <€1bn		

Why has the year 2000 been chosen as the start-point for this study?

- Indexes concerning the small and mid-cap segments were created at the end of the 1990s in Europe.
- Historical data available before the year 2000 is insufficient.
- The year 2000 was a cycle peak with the «internet bubble» bursting during the year. A cycle peak represents the end of a cycle and hence the start of the following cycle.

What main lines of investigation have been chosen?

The position of small and mid-cap stocks in Europe is first approached from four very distinct yet complementary angles:
- Market structure: analysis of the weight and changes in the small and mid-cap segment since 2000 relative to other categories of stocks.
- Stockmarket performance: a comparative observation of the behaviour of small, mid-cap and large-cap indexes in the three main European countries (UK, Germany, France).
- Economic performance: a study of the link between stock performances and economic performances in the various segments of the market.
- The asset management universe: overview and business model of the financial industry.

1
STRUCTURE OF THE EUROPEAN SMALL AND MID-CAP MARKET

This first chapter concerning the structure of European financial markets highlights the interdependence of the small, mid and large cap compartments.

In this part, we show that large cap stocks (less than 10% of listed companies) enable the financing of the entire equity markets business model whereas small and mid caps are those that are set to take over this financing in the future. This underscores the importance of small and mid cap stocks in ensuring the smooth running of a powerful financial market in Europe.

What economic weight do European mid caps have?

«Small and mid caps: 92% of European listed companies and just 20% of market capitalisation»

Figures

Global market capitalisation stood at €50 trillion in 2014: Europe therefore represents around 20% of global market capitalisation.

Based on our segmentation, a snapshot of the European market on 1 January 2014 gives the following picture:

01/01/2014	Micro	Small	Mid	Large	Total
No. of stocks	2 744	1 279	683	384	5090
%	53.9%	25.1%	13.4%	7.5%	100%
Aggregate capitalisation (€m)	122 964	542 951	1 573 120	8 634 249	10 873 283
%	1.1%	5.0%	14.5%	79.4%	100%
No. of stocks	Micro	Small	Mid	Large	Total
UK	29%	28%	27%	23%	28%
Germany	15%	10%	10%	12%	13%
France	12%	12%	10%	16%	12%
Sub-total	56%	50%	47%	52%	53%
Other countries	44%	50%	53%	48%	47%

Sources: Capital IQ / La Financière de l'Echiquier

Our conclusions

Small caps represent 80% of the number of European listed companies (including 54% for micro caps) and just 6% of market capitalisation (1% for micro caps). This imbalance between the number of companies and the weight of capitalisation should be seen in parallel with the financial industry's business model, which works on volumes (trading volumes for brokerage companies, amount of assets under management for asset management companies). The micro, small and mid cap segments are the least profitable for the financial industry given their size, thereby explaining the low level of coverage by equity research teams and the small size of asset portfolios (see part 4).

Large caps (384 companies in 2014) generate the majority of business volumes in the financial industry. If we add in mid caps, a total of 1,000 companies generate almost 95% of revenues in the sector.

The European financial markets are dominated by the United Kingdom, which represents almost a third of the European market, except in large cap compartments where its market share falls back to 23%.

Finally, note the **huge similarity between Germany and France**. Germany has slightly more listed companies (13% of European market vs. 12% for France), but these are generally smaller. As such, France represents 14.4% of market capitalisation in Europe vs. 13.4% for Germany.

For the three main countries, the weight in value terms and aggregate market capitalisation is fairly similar. Exceptions such as Switzerland (respectively 5.3% in volume terms and 11.4% in value terms) and Sweden (7.5% and 4.8%) nevertheless exist and stem from an overweighting (Sweden) or underweighting (Switzerland) of the micro, small and mid cap categories.

How has the market of European listed companies changed since 2000?

«The decline in the number of listed companies primarily concerns micro and small caps»

Figures

Three stages are set out below: January 2000 - January 2007 - January 2014:

01/01/2000	Micro	Small	Mid	Large	Total
No. of stocks	1 407	1 093	461	291	3252
%	43.3%	33.6%	14.2%	8.9%	100%
Aggregate market cap €m	78 626	448 754	1 042 605	7 356 404	8 926 390
%	0.9%	5.0%	11.7%	82.4%	100%
01/01/2007	Micro	Small	Mid	Large	Total
No. of stocks	3 342	1 627	726	406	6101
%	54.8%	26.7%	11.9%	6.7%	100%
Aggregate market cap €m	154 414	671 605	1 667 832	8 617 629	11 111 479
%	1.4%	6.0%	15.0%	77.6%	100%
01/01/2014	Micro	Small	Mid	Large	Total
No. of stocks	2 744	1 279	683	384	5090
%	53.9%	25.1%	13.4%	7.5%	100%
Aggregate market cap €m	122 964	542 951	1 573 120	8 634 249	10 873 283
%	1.1%	5.0%	14.5%	79.4%	100%

Sources: Capital IQ / La Financière de l'Echiquier

Note also changes in the breakdown of listed stocks by country

01/01/2000	Micro	Small	Mid	Large	Total
UK	43%	37%	31%	30%	38%
Germany	10%	11%	12%	11%	11%
France	13%	11%	12%	16%	12%
Sub-total	67%	59%	55%	57%	62%
Other countries	33%	41%	45%	43%	38%
01/01/2014	Micro	Small	Mid	Large	Total
UK	29%	28%	27%	23%	28%
Germany	15%	10%	10%	12%	13%
France	12%	12%	10%	16%	12%
Sub-total	56%	50%	47%	52%	53%
Other countries	44%	50%	53%	48%	47%

Sources: Capital IQ / La Financière de l'Echiquier

Our conclusions

The European market structure remains fairly stable over time: 10% of listed companies make up **80% of European market capitalisation.** This is a structural configuration.

This development has not only coincided with robust global growth and dynamic financial markets, but also pro-active policies by governments and marketplaces in Europe in order to promote access to the financial markets by micro, small and mid-cap companies. We would mention AIM in London (1995), Alternext in France, Belgium, Portugal, Holland (2005) and Entry Standard in Germany (2005).

Note nevertheless that the number of listed companies has dropped considerably since 2007 with an overall decline of 16.5% for Europe as a whole, and a fall that is visible in all regions (-13% for the UK, -12% for Germany, -18% for France and -19% for other countries). Over 14 years, the UK has lost weight relative to other European markets, while Germany has slightly increased its market share thanks to momentum in its micro segment.

The decrease in the number of listed companies has primarily affected the micro and small cap segments (-20% between 2007 and 2014) whereas the mid and large cap segments have narrowed by 5%. The European financial industry's health and economic power stems from its large caps. The economic consequences of this decline are therefore limited in the short term due to market inertia.

Why is the decline in the number of micro and small caps worrying?

«The financial markets should be understood in the same way as an age pyramid in demography»

Figures

The table below shows the origins of large caps between January 2000 and January 2014:

Origins	Large 01/2000	Large wit-hdrawn	Micro =>Large	Small =>Large	Mid => Large	IPO* Large	Large 01/2014
Europe	291	-124	2	23	127	65	384
Origins % new large	1%	11%	59%	30%			
UK	86	-46	1	6	31	12	90
Germany	33	-10	0	2	15	7	47
France	46	-16	0	2	20	10	62

*IPO = Initial public offering - Source: Capital IQ / La Financière de l'Echiquier

Our conclusions

56% of the 384 companies in the large-cap segment in January 2014 were not in this segment in January 2000. However, over 14 years, the number of large caps withdrawn has clearly exceeded the number of large-cap IPOs. Growth in this segment is essential for the health of financial markets and stems for 70% from micro, mid or small caps moving into this category.

These figures show upward momentum between the various market compartments. The financial market should be understood like an age pyramid in demography: a narrowing in the base of the pyramid necessarily causes a reduction at the top of the pyramid sooner or later. In view of natural withdrawals via takeover bids, a sufficient IPO flow is required to feed the market.

This momentum has been threatened by the decline in the number of listed companies since 2007. The risk is that a faster downtrend in the number of listed large caps could be noted in coming years given the inertia in this mechanism, with a pace of decline similar to that witnessed in the micro and small segments between 2007 and 2014. The overall European market capitalisation would then decline, prompting consequences in terms of the appeal and the power of the financial industry in Europe.

Key findings

The micro, small and mid cap compartments are the least profitable for the financial industry in view of their size. They only account for 20% of market capitalisation, but 92% of listed companies.

However, these companies represent the base of the financial markets pyramid and therefore play an essential role in renewing the large cap category. Any narrowing in these segments leads to a contraction in the number of large caps listed over time (and inversely). The wealth, appeal and dynamism of the European market over the long term is dependent on the micro, small and mid cap categories.

Momentum in the micro, small and mid cap categories is therefore vital. The specific features of these compartments must be understood in order to grasp the reasons behind this decrease and act on both supply (financial markets' appeal for these companies) and demand (directing savings towards these categories).

2
STOCKMARKET PERFORMANCES OF EUROPEAN MIDCAPS

The first part of our study focused on the structure of the European stockmarket, highlighting its pyramid structure: 80% of listed companies have market capitalisations of less than €1bn, whereas 80% of overall market capitalisation stems from 7% of large cap stocks. However, a movement of upward momentum means that over 10 years, momentum in micro, small and mid cap stocks conditions the ability to increase the number of large caps.

After noting the position of small and mid cap stocks in the stockmarket ecosystem, we have looked at the contribution of these segments to returns on investment. Analysis of the stockmarket performance of the various indexes in Europe between 2004 and 2014 confirms the essential role played by small caps in financial markets momentum.

Methodology

- Tracking the performances and behaviour of different categories of stocks can only be done by referring to stock indexes. The composition of such indexes is generally revised monthly according to criteria of size (market capitalisation) and liquidity (trading volume).

- For small caps, our study is based exclusively on national indexes (France and the UK) as pan-European indexes were only created in 2010.

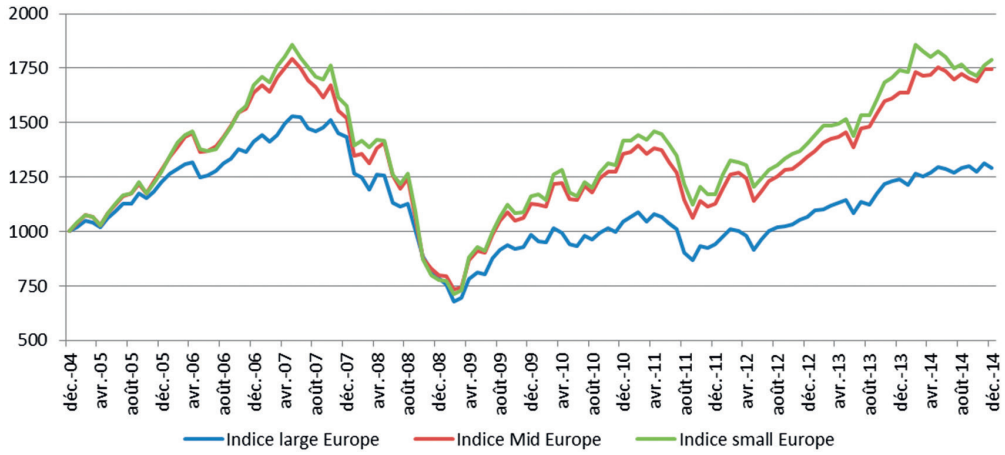
- Dividends are not taken into account in the indexes used in this overview as this calculation method only became available in 2009. This factor is unfavourable to large caps, which traditionally pay out more dividends.

European small, mid and large caps: who has performed best over 10 years?

«The performance gap between mid and large caps stands at 90% over 10 years»

Figures

This chart below compares 10-year performances (base 1000 at 31/12/2004) of STOXX indexes: the Large 200 index (median capitalisation of €24.2bn), the Mid 200 index (median capitalisation of €6.2bn) and the Small 200 index (median capitalisation of €3bn).

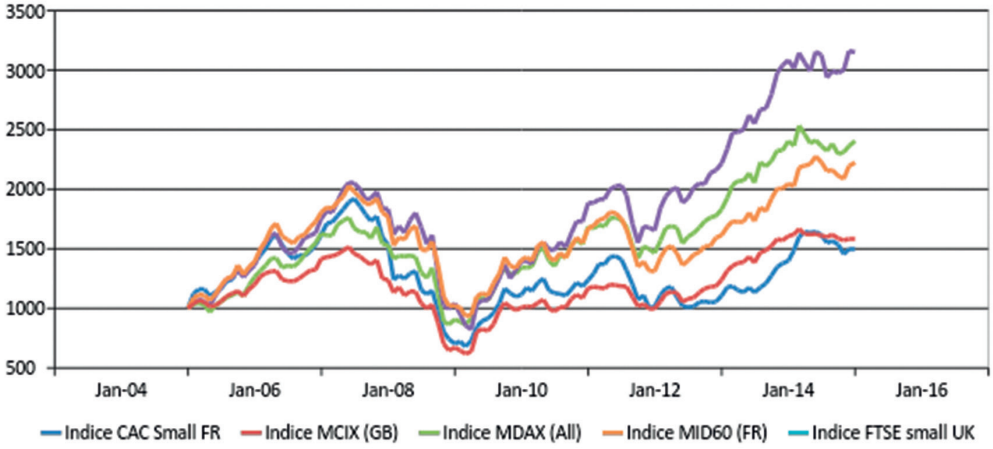


The table below summarises these last 10 years:

Index	10-year perf.	Annualised perf.	Volatility	Max drawdown
LCXP index - Large Europe	29%	2.6%	14%	-56%
MCXP index - Mid Europe	75%	5.7%	16%	-59%
SCXP index - Small Europe	79%	6.0%	18%	-62%

Source: Bloomberg / La Financière de l'Echiquier

We have then compared the three main European markets over the same period: the UK, Germany, and France. We have used local stockmarket indexes as our reference indexes: for mid caps, the MID60 in France, the MDAX in Germany and the MCIX in the UK (base 1000 on 31/12/2004), providing a comparable median capitalisation of around €3bn. For small caps, the CAC Small (€117m in median capitalisation) in France and the FTSE Small Cap for the UK (€300m in median capitalisation).



Comparative data for these benchmarks are as follows:

Index	10-year perf.	Annualised perf.	Volatility	Max. drawdown
Large Europe (for comparison)	29%	2.6%	14%	-56%
MDAX (All)	215%	12.2%	21%	-60%
MCIX (GB)	140%	9.2%	18%	-51%
MID60 (FR)	110%	7.7%	18%	-55%
FTSE Small Cap (GB)	58%	4.7%	18%	-59%
CAC Small (FR)	50%	4.1%	20%	-65%

Source: Bloomberg / La Financière de l'Echiquier

Our conclusions

The performance gap between large and small/mid caps is 120%/130% over 10 years though with higher risk measurements. Volatility is 15% to 30% higher for mid and small cap segments for a maximum drawdown for the period that is 6% to 10% higher. **On an annualised and risk-adjusted basis, the performance gap between large and mid cap segments is therefore 90% over 10 years (83% for small caps).**

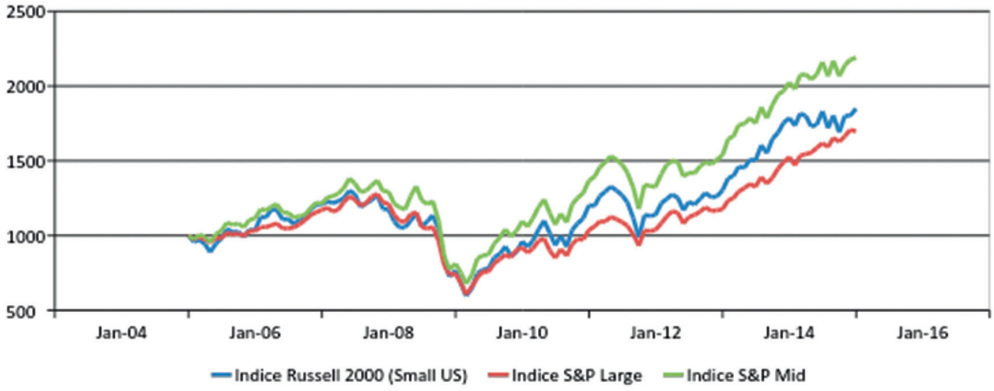
The UK, Germany and France represent 53% of the total European market for listed companies for all market cap categories combined. Small caps (FR and UK) display an annualised and risk-adjusted performance gap of 13% for the French benchmark and 44% for the UK benchmark compared with the Large Europe benchmark. Over this same period, the annualised and risk-adjusted performance gap between German mid caps and the Large Europe benchmark is 222% (371% for gross annualised data), 185% for UK mid caps and 151% for French mid caps.

Do mid caps have the same outperformance profile in the US?

«The US confirms the structural outperformance of mid cap stocks»

Figures

The following chart presents three US indexes with median capitalisations profiles comparable our European selection: S&P 500 (median capitalisation: €22.6bn), S&P Mid (median capitalisation €3bn) and finely Russell 2000 (median capitalisation: €600m).



In figures:

Index	10-year performance	Annualised performance	Volatility	Max. drawdown
S&P Large	70%	5.4%	15%	-53%
S&P Mid	119%	8.2%	18%	-51%
Russell 2000 (Small US)	85%	6.3%	20%	-54%

Source: Bloomberg / La Financière de l'Echiquier

Our conclusions

In the US, gross performances are higher and performance gaps between large and mid/small caps narrower (weight of tech stocks in the US large cap index/growth differential in the US). However risk data and above all the hierarchy (mid/small/large) are similar. **As such, these results confirm the structural outperformance of mid cap stocks.**

Why do mid caps outperform other market segments?

«Out the base of small caps, winning models emerge that feed and boost the mid cap universe»

Figures

We have analysed French and German mid cap indexes. Out of the 109 companies that make up the two indexes today, 77 were already listed at the end of 2004, 33 of which had market capitalisations under €1bn 10 years ago. Between 31/12/2004 and 31/12/2014 these 33 stocks displayed aggregate growth in market capitalisation of 308% and a median performance of 250%, with the highest performance reaching +2610% and the lowest performance +38%. The other 44 stocks with market capitalisations exceeding €1bn at 31/12/2004 generated an aggregate performance of 80% (+818% /-90% for the high/low levels).

Our conclusions

Success stories stemming from the huge universe of small caps feed mid cap indexes, relative to other compartments.

We can put this performance difference down to the upward momentum highlighted in the first part of this study. Small caps form the base of the market pyramid, grouping 75% of total listed companies, and are naturally very diverse in nature. As they grow, these emergent success stories leave the small cap segments and bolster the ranks of the mid cap universe, and in so doing, boost its growth momentum.

Key findings

The small cap segment has a slightly higher risk/return profile than that of large caps. As such, while investing in a specialised small-cap fund implies more risk for individual or institutional investors than investing in a large cap fund, the return generated covers this additional risk.

The success stories originating from the small-cap segment feed into mid cap indexes, and structurally generate significant additional returns «net of risk» for investors who allocate a portion of their savings to this mid cap segment.

This second part of the study shows that the small and mid cap segments provide a return on savings «net of risk» identical to or higher than that of large caps. As such, increasing the share of European savings invested in these segments is advisable, in order to attract entrepreneurs and to maintain this winning momentum for all those involved.

3
ECONOMIC PERFORMANCES OF EUROPEAN MICRO, SMALL AND MID CAP STOCKS

The first two parts on our study showed the position of small and mid cap stocks in European market momentum, and then established that these compartments provide a return on savings «net of risk» identical or higher than that on large caps.

We now analyse the economic behaviour of small and midcap stocks and the link with their stockmarket performance. This third section validates the principle of upward momentum that guarantees the market's balance and future and which finds its source in the small and mid cap segment.

How have European listed companies performed over the 10% years?

«Change in the sample shows upward momentum in the market, with a narrowing in the micro and small cap segments in favour of the mid and large cap segments»

Methodology

- Monitoring the economic performances of European companies over 10 years, from 2004 to 2014, requires the construction of a sample made up of companies presenting similar business models that are constant over the period.

- We have taken as a base the European companies listed at the end of 2014 (4,845 companies). We have started by eliminating the companies that were withdrawn from the market over the 10 years in question (942), those with non-compatible business models, namely financial models for the most part (banks, insurance companies, property groups, asset management companies etc (1,385 companies), and also all extremely small companies (-€5m in sales and biotechnology companies), and those with insufficient data series over the period (734).

- The sample we have created for the framework of this analysis is therefore made up of 1,782 companies. It covers 57% of the universe in 2004 as a percentage of the capitalisation, but just 37% in terms of the number of stocks. This is due to the combination of three factors: the dynamic nature of the micro cap segment as we discussed in the first part of our study, the fact that 80% of the financial sector concerns micro caps, and finally, the difficulty in obtaining good quality data in the micro backdrop over the past 10 years, especially for the smallest among these (-€20m in sales). Our sample is nevertheless sufficiently large (781 micro caps in 2004) to understand the dynamics in the segment.

Figures

The table below presents a snapshot of the study universe and the sample analysed in 2004:

Universe in 2004	Micro	Small	Mid	Large	Total
No. of stocks	2 803	1 248	510	284	4 845
as a %	57.9%	25.8%	10.5%	5.9%	100%
Aggregate capitalisation (€m)	126 699	505 732	1 131 481	5 629 606	7 393 518
as a %	1.1%	5.0%	14.5%	79.4%	100%
Sample	Micro	Small	Mid	Large	Total
No. of stocks	781	556	277	168	1 782
as a %	43.8%	31.2%	15.5%	9.4%	100.0%
Aggregate capitalisation (€m)	41 577	235 588	646 247	3 374 499	4 245 839
as a %	1.0%	5.5%	15.1%	78.4%	100.0%
% of the universe	Micro	Small	Mid	Large	Total
In number of stocks	28%	45%	54%	59%	37%
In % of capitalisation	33%	47%	57%	59%	57%

Source: Capital IQ / La Financière de l'Echiquier

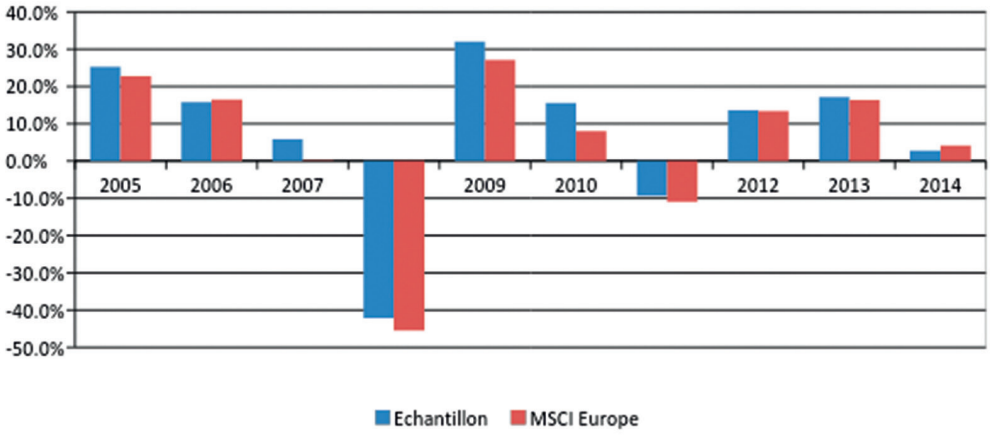
Below is the same table but 10 years later.

Universe en 2014	Micro	Small	Mid	Large	Total
No. of stocks	2 744	1 279	683	384	5 090
as a %	53.9%	25.1%	13.4%	7.5%	100%
Aggregate capitalisation (€m)	122 964	542 951	1 573 120	8 634 249	10 873 283
as a %	1.1%	5.0%	14.5%	79.4%	100%
Sample	Micro	Small	Mid	Large	Total
No. of stocks	691	490	354	247	1 782
as a %	38.8%	27.5%	19.9%	13.9%	100%
Aggregate capitalisation (€m)	37 729	217 178	795 380	5 975 490	7 025 777
as a %	0.5%	3.1%	11.3%	85.1%	100%
% of the universe	Micro	Small	Mid	Large	Total
In number of stocks	25%	38%	52%	64%	35%
In % of capitalisation	31%	40%	51%	69%	65%

Source: Capital IQ / La Financière de l'Echiquier

The chart below shows annual change in the aggregate capitalisation of this sample of 1,782 companies compared with annual change on the MSCI Europe index:

Source: Bloomberg / La Financière de l'Echiquier



Our conclusions

Annual change in the aggregate capitalisation of our sample is clearly correlated with annual change on the MSCI Europe index, thereby confirming the relevance of our methodology.

This sample of 1,782 companies represented 41% of EU GDP in terms of business volumes in 2004 and 51% in 2014. After adding in companies that were listed in 2014 but not yet floated in 2004, this percentage rises to 63%.

The change in our sample over 10 years clearly shows the market's upward momentum, with a narrowing in the micro and small segments in favour of the mid and large cap segments.

How has the sample of companies performed over 10 years in economic terms?

«Growth in our sample has exceeded that of European GDP: a stockmarket listing seems to be a growth catalyst for companies»

Figures

We now look at the change in sales of these 1,782 companies by aggregating figures (as if we were looking at a one and same company) in order to measure the global economic impact.

Aggregate - €bn	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Sales	4 345.2	4 723.6	5 226.3	5 599.6	5 960.5	5 367.3	5 964.2	6 517.0	6 881.8	6 726.3	6 914.7
Change		8.7%	10.6%	7.1%	6.4%	-10.0%	11.1%	9.3%	5.6%	-2.3%	2.8%
Underlying EBIT	437.5	533.5	594.5	659.8	653.3	521.4	644.3	717.8	679.7	634.7	638.5
Margin	10.1%	11.3%	11.4%	11.8%	11.0%	9.7%	10.8%	11.0%	9.9%	9.4%	9.2%
Capitalisation	4 245.8	5 318.5	6 156.5	6 519.2	3 769.0	4 975.4	5 752.3	5 216.1	5 926.0	6 940.5	7 134.2
Gearing	53.0%	49.2%	52.8%	54.9%	67.2%	62.7%	51.2%	53.0%	53.7%	51.1%	51.6%
Capex as % of sales	-6.9%	-7.0%	-7.2%	-7.1%	-7.4%	-7.3%	-6.3%	-6.3%	-6.4%	-6.3%	-6.2%
EV/Sales	1.22	1.36	1.43	1.42	0.92	1.24	1.23	1.06	1.12	1.29	1.29
EV/EBIT	12.13	12.08	12.53	12.06	8.40	12.75	11.38	9.63	11.32	13.62	13.95
P/BV	2.12	2.32	2.52	2.49	1.47	1.86	1.86	1.63	1.80	2.08	2.08

Source: Capital IQ / La Financière de l'Echiquier

We have then looked at median figures in order to validate the trends from a more detailed stance.

Median -€m	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Sales	255.07	278.96	312.55	347.91	362.63	337.25	364.27	400.60	415.10	402.96	420.76
Change		8.0%	11.4%	9.1%	3.5%	-5.8%	8.3%	7.4%	4.8%	-0.3%	3.8%
Underlying EBIT	17.22	21.06	24.57	29.95	25.57	17.06	23.83	25.23	24.43	23.98	26.70
Margin	6.8%	7.5%	7.9%	8.6%	7.1%	5.1%	6.5%	6.3%	5.9%	5.9%	6.3%
Capitalisation	205.41	276.46	343.05	341.54	148.65	217.50	282.97	220.34	243.91	321.48	327.72
Gearing	22.6%	23.1%	24.3%	27.5%	34.1%	28.9%	22.6%	24.4%	23.0%	21.6%	22.6%
Capex as % of sales	-3.56%	-3.64%	-3.73%	-3.69%	-3.70%	-2.90%	-2.69%	-2.93%	-2.92%	-2.83%	-2.96%
EV/Sales	0.95	1.13	1.23	1.11	0.63	0.87	0.93	0.75	0.83	0.99	0.97
EV/EBIT	11.00	12.26	13.20	11.34	7.23	10.26	11.30	9.38	10.59	12.75	12.13
P/BV	1.84	2.16	2.38	2.07	0.99	1.37	1.56	1.22	1.37	1.65	1.59

Source: Capital IQ / La Financière de l'Echiquier

Our conclusions

The growth/crisis/recovery cycle continued normally until 2011. In contrast, 2012-2014 showed a constant slowdown in growth (and even a contraction in 2013). The downturn on financial markets that came as a surprise in summer 2011 was therefore based on expectations of this trend reversal. The recovery after 2009 also resulted in a clear improvement in operating profitability in 2010/2011. In contrast, 2012/2014 showed a clear decline in operating profitability on a pan-European scale. **Since this downturn is also visible in median data, it was clearly part of a widespread trend: while the fact was known on a French level, it was news to find it on a European level.**

Valuations nevertheless continued to increase over 2012/2014, driving the 2013/2014 EV/EBIT multiple to a higher level than that of 2007. Weak activity in 2014 logically led to a stabilisation on financial markets in 2014. As such, the strong performances seen since early 2015 are therefore particularly sensitive to a sharp recovery in the growth rate and level of operating margin as of 2015 in view of the valuation levels reached. As of 2012, gearing [(short and long term financial debt - cash pile)/shareholders' equity] returned to its pre-crisis level of 2004/2005. The corporate debt reduction trend is therefore very visible in these figures.

The decline in the investment/sales ratio shows that Investment spending suffered from this situation (low growth, pressure on margins, lower debt), as shown by the decline in the capex/sales ratio. Capex remained generally stable in volume terms at around €430bn between 2011 and 2014 compared with a peak of €441bn in 2008. This is a growth driver that could pick up again.

Note however that our universe of 1,782 companies shows aggregate growth of 58% over 10 years compared with 27% for European GDP (these figures naturally include acquisitions, which are one of the major interests of **being listed on the stockmarket): being listed therefore seems to provide a catalyst for companies.**

A stockmarket listing indeed facilitates mergers and acquisitions in view of the number of companies leaving the market. Demands in terms of transparency, governance and financial discipline are often highlighted as a good reason not to be listed, but are in reality, necessary restrictions for progress, especially for smaller companies. It is therefore vital to attract entrepreneurial companies to the stockmarket: in order to do so, solutions that help reduce the overall cost of the listing without harming transparency need to be considered by all those involved on a European level.

How have the micro, small, mid and large cap segments performed economically compared with each other?

«The small and mid cap segments are more dynamic in economic terms and these results are reflected in their stockmarket performances»

Methodology

In order to make comparison as simple as possible, we have only taken into account two economic indicators, namely sales and EBIT, which we have recalculated with a base 100 in 2004 for each of the segments (micro, small, mid and large), and only one performance indicator, market capitalisation. All of these indicators are aggregate since what we are looking for is the volume of wealth creation/destruction, and not the percentage, which is very misleading, especially in the small/mid cap segments. The principle behind the construction of the four segments is just as simple: we have taken business volumes in 2004 to generate the four segments, which therefore remain on a constant company basis over the 10 years.

Figures

Sales	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Micro*	100	115	139	164	177	172	188	208	221	227	245
Small	100	111	127	142	149	138	152	169	178	179	191
Mid	100	112	127	139	145	137	146	157	165	165	171
Large	100	108	118	126	134	119	134	146	155	150	153

Source: Capital IQ /La Financière de l'Echiquier

EBIT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Micro	100	167	235	302	285	220	279	367	380	364	384
Small	100	121	146	172	166	131	162	177	178	181	189
Mid	100	115	137	155	147	124	152	161	163	156	168
Large	100	123	134	147	147	117	144	162	151	139	137

Source: Capital IQ /La Financière de l'Echiquier

Capitalisation	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Micro	100	168	215	212	100	147	185	165	190	235	247
Small	100	135	171	174	87	127	160	149	177	212	218
Mid	100	130	165	166	91	127	159	142	169	200	212
Large	100	122	137	148	88	114	127	115	129	150	152

Source: Capital IQ /La Financière de l'Echiquier

Our four segments were relatively homogenous in 2004 but economic growth differentials resulted in a very different configuration 10 years later. We have analysed them one by one in order to measure the percentage of companies that have moved into a different category (upwards of downwards) and what they generated as performance.

Change in micro cap sub-sample (€5/150m in sales - base 100 in 2004)

Micro	No. of companies	2004 sales	2014 sales	2004 EBIT	2014 EBIT	2004 mkt. cap	2014 mkt. cap	% 2004 mkt. cap	% 2014 mkt. cap
Aggregate	703	100	245	100	384	100	247	100%	100%
Micro (=)	71.1%	100	141	100	195	100	140	50%	28%
= Small	28.0%	100	341	100	516	100	338	48%	66%
= Mid	0.9%	100	2 224	100	1 960	100	891	2%	6%

Source: Capital IQ /La Financière de l'Echiquier

Change in small cap sub-sample (€150/1,000 in sales - base 100 in 2004)

Small	No. of companies	2004 sales	2014 sales	2004 EBIT	2014 EBIT	2004 mkt. cap	2014 mkt. cap	% 2004 mkt. cap	% 2014 mkt. cap
Aggregate	593	100	191	100	189	100	218	100%	100%
- Micro	6.4%	100	33	100	-3	100	42	3%	1%
Small (=)	67.1%	100	141	100	123	100	145	52%	34%
= Mid	26.1%	100	268	100	263	100	309	45%	64%
= Large	0.3%	100	829	100	1 008	100	457	1%	1%

Source: Capital IQ /La Financière de l'Echiquier

Change in mid cap sub-sample (€1,000/5,000 in sales- base 100 in 2004)

Mid	No. of companies	2004 sales	2014 sales	2004 EBIT	2014 EBIT	2004 mkt. cap	2014 mkt. cap	% 2004 mkt. cap	% 2014 mkt. cap
Aggregate	303	100	171	100	168	100	212	100%	100%
-Small	5.3%	100	45	100	38	100	45	4%	1%
Mid (=)	73.3%	100	138	100	138	100	174	60%	49%
=L(€5/10bn)	16.8%	100	205	100	200	100	237	26%	29%
=L(+€10bn)	4.6%	100	418	100	405	100	438	10%	21%

Source: Capital IQ /La Financière de l'Echiquier

Change in large cap sub-sample (€5bn in sales - base 100 in 2004)
We have divided the large cap sample into several sub-samples in order to obtain a more precise reading of changes in these stocks over 10 years.

Large	No. of companies	2004 sales	2014 sales	2004 EBIT	2014 EBIT	2004 mkt. cap	2014 mkt. cap	% 2004 mkt. cap	% 2014 mkt. cap	No. of companies
Aggregate	183	183	100	153	100	137	100	152	100%	100%
1000/5000	0,0%	7,1%	100	42	100	77	100	67	2%	1%
5000/10000	43,7%	14,2%	100	96	100	60	100	83	7%	4%
10000/20000	31,1%	34,4%	100	150	100	157	100	192	21%	26%
20000/50000	19,1%	31,7%	100	161	100	167	100	167	41%	45%
50000+	6,0%	12,6%	100	165	100	114	100	126	29%	24%

Source: Capital IQ /La Financière de l'Echiquier

Our conclusions

Micro cap segment: Out of the 703 companies in this sub-segment generating sales of €5-150m in 2004, 71% remained in this range 10 years later by generating growth of +40% (sales and capitalisation). Between 2005 and 2014, 29% of these companies exceeded the €150m mark in sales and drove the whole with outstanding performances given that they accounted for 72% of the capitalisation in the sub-sample in 2014 (compared with 50% in 2004). Among the success stories in this segment, note Asos (UK), Wirecard (Germany), Meda (Sweden), Cramo (Finland), LEM Holdings (Switzerland), Norwegian Air Shuttle (Norway), Reply (Italy), Naturex (France), Ambu (Danemark) and Do&Co (Austria).

Small-cap segment: 67% of stocks remaining in the original sales range and generating a very similar performance to that of the €5/150m segment (+40% over 10 years). In the category, 25% of the companies stand out from the pack and drive performances in this category. Among these success stories are Iliad for France, ARM Holding in the UK, Actelion Ltd in Switzerland, Elekta in Sweden, Cie Automotive in Spain, Marine Harvest in Norway, TKH Group in the Netherlands, Brembo in Italy, Icon in Ireland, United Internet AG in Germany, Konecranes in Finland, Per Aarsleff in Denmark, Econocom Group in Belgium and KTM AG in Austria. A large number of these stocks fed European midcap index performances with growth in their size and their liquidity.

Mid-cap segment: note interestingly that while the economic performances of the companies that remained in the original sales range (73%) were in line with those in the previous two tables (around 40%), their stockmarket performances were far higher (+74%). This factor is due to the increase in size and hence, liquidity, which often has an inflationary impact on valuation multiples and is representative of a change in status. This mechanism is found in the other two groups of stocks (those generating sales volumes of €5-10bn in 2014 and those that exceeded €10bn in 2014). As such, the financial markets add a premium to the economic performance, namely a re-rating, which influences the mid cap indexes. This premium is lasting since, in simple terms, it concerns a decline in the individual risk of going bankrupt. Among the success stories are Easyjet in the UK, Sika in Switzerland, Assa Abloy in Sweden, Inditex in Spain (Zara brand), Jeronimo Martins in Portugal, ASML Holding in the Netherlands, Luxottica in Italy, Shire in Ireland, Aurubis in Germany, Safran in France, Amer Sports in Finland, Novo Nordisk in Denmark and Andritz in Austria.

Large-cap segment: Even in the large cap universe, the phenomenon of transmission from one category to another is again very clear with a huge decrease in the number of companies generating between €5bn and €10bn in sales in 2004. After accounting for 44% of the panel in 2004 these only represented 14% 10 years later, while those that remained stagnated (96 index in 2014). The three sales ranges (10/20, 20/50 and 50+) all increased in terms of number of companies, driven by better industrial epics in the low ranks. To mention a few, Rolls-Royce, ABB in Switzerland, H&M in Sweden, Fresenius Se in Germany, Christian Dior in France and Inbev in Belgium.

The stockmarket underperformance of the large cap range in 2014 might seem surprising in view of its economic growth in line with the other segments. The nosedive was due to large caps in the oil, telecoms, retailing and energy sector, which absorb growth in Audi, BMW, Nestlé and others such as Airbus. In these sluggish sectors, the aggregate capitalisation of 10 stocks stood at €626bn in 2004 before falling to €468bn in 2014, whereas aggregate business volumes remained stable over the 10 years. Unlike the midcaps, this was a de-rating trend affecting companies showing a lack of growth. This again testifies to the importance of a renewal from the base.

The figures show that the hierarchy of economic performances coincides with that of stockmarket performances. The small and mid cap segments are more dynamic economically and these results are reflected in the stockmarket performances.

Key findings

The financial market is a fairly classic ecosystem. A wide base of micro, small and mid cap stocks enables a renewal of the listing by their economic growth. The wider the base, the higher the number of success stories, and in statistical terms, a figure of 20/25% over 10 years emerges from this sample. Each segment is interdependent on each other for the greater benefit of the whole.

The pyramid shaped structure of the financial market in terms of the number of listed stocks (few large caps, lots of micro and small caps) must be maintained in order to ensure the renewal of large caps, which guarantee the global appeal of a financial market and finance the infrastructure that this market needs in order to function. As such, these not only represent 7% of stocks and 80% of market capitalisation, but also and above all, 85-90 of transaction volumes, i.e. revenue sources for market players.

Understanding these mechanisms is vital in order to avoid destroying this momentum, for example, by regulations that do not take account of its specific features. The risk of erosion is very real. Indeed, since 2007, and before the welcome return of IPOs in Q1 2015, the decline in the number of listed companies was gaining momentum and threatening to overly compress the market capitalisation of Europe. Further out, this trend would have had disastrous consequences for the appeal and power of the financial industry in Europe.

4

OVERVIEW AND ECONOMIC MODEL OF THE FINANCIAL INDUSTRY

The first three parts of our study clearly demonstrated the fundamental importance of the small and mid-cap segments for the balance and future of this fragile ecosystem represented by the European market. These segments provide a return on savings «net of risk» identical or higher than that of large caps, contribute to the large cap segment's renewal and generate economic growth offering a higher rate of job creation than the rest of the economy.

After these first three chapters focusing on supply, we now take a look at demand: this fourth and final part of our series is therefore devoted to the structure of asset management in Europe across the different market segments.

We start by presenting a snapshot of trading volumes in the micro, small, mid and large cap segments, which gives a surprising picture in many respects. We then provide an overview of asset management funds in Europe in the different segments and, on that basis, extract a certain number highlights by country, before analysing the impact of this data on the financial industry.

How high are transaction volumes in the micro, small, mid and large cap segments?

«Micro and small caps are mass markets in terms of the number of listed companies but niche markets in terms of business volume»

Methodology

Our sample includes 4,865 companies, i.e. at least 225 less than the selection we used to analyse European equity markets (part one). These 225 companies were delisted in 2014. According to the consulting firm PWC[1], there were 375 IPOs in 2014 although we did not include these companies in our panel (absence of 12-month trading data).

Figures

The table below sets out aggregate trading volumes in 2014 for our sample of companies.

31/12/2014	Micro	Small	Mid	Large	Total
No. of stocks	2 576	1 200	678	411	4865
As a %	53%	25%	14%	8%	100%
Aggregate capitalisation (€m)	116 663	503 295	1 509 619	9 146 646	11 276 222
As a %	1.0%	4.5%	13.4%	81.1%	100%
Agg. annual trading volume (€m)	58 776	296 597	1 569 470	8 834 764	10 759 607
As a %	0.5%	2.8%	14.6%	82.1%	100%
Median annual trading volume (€m)	7	100	1 275	13 044	

Source: Capital IQ / La Financière de l'Echiquier

Our conclusions

The French financial industry's income is based on volume (trading volume for brokerage firms through commissions, assets under management for management companies). Volume is thus a key indicator for measuring the returns from the different market cap segments and their attractiveness for the financial industry.

Micro and small caps represent 78% of listed companies in Europe and 3.2% of annual trading activity. The breakdown by country and segment tracks overall with the market capitalization breakdown presented in the first study of this series. In the third part we analyze the meaning of these figures for the financial industry.

The specificity of the micro and small cap segments is clearly shown through these figures. They are mass markets in terms of the number of listed companies included, but niche markets in terms of volumes.

[1] Source: IPO Watch 2014, PWC

How is the European asset management industry structured?

«1,000 investment funds specialised in European micro, small and mid caps with a total of just over €190bn in assets under management»

Methodology

- Our data only covers «investment» funds. As such it does not include funds managed under discretionary mandates. According to the most recent available data (Asset Management Report 2014 – EFAMA), these investment funds represent approximately 50% of assets under management in Europe.

- Starting from the MorningStar's worldwide database, we then exclude all funds invested outside of Europe. We retain global funds and sector-based global funds by applying a 20% weighting to assets under management, adopting the hypothesis that the average investment allocation for these funds in Europe is 20% (worldwide benchmark).

- This adjustment gives us a base of approximately 6,400 funds for 1,050 management companies with funds invested in entirely or in part in Europe. Investments of these funds in Europe would total approximately €1.881 trillion. According to EFAMA, aggregate assets under management for investments of European origin are around €3.500 trillion. According to our data, investments in Europe by funds of European origin total €1.060 trillion, or 32% of the €3.500 trillion mentioned above compared to a weighting for Europe of approximately 20% of the worldwide market capitalization. These figures are in our view coherent even though they represent merely orders of magnitude.

- The MorningStar database also indicates for each of these funds a segmentation by specialization: Large or mid/small. We have validated this observation by verifying the benchmark derived from the prospectus and available in this listing.

Figures

The table below shows the results of this breakdown:

		Large	Mid & Small	Total
Total	In €bn	1 689	192	1 881
	% of total	90%	10%	100%
	In # of funds	5 370	1 004	6 374
	Average (€m)	315	191	
	Median (€m)	49	55	
Europe	In €bn	996	161	1 157
	% of total	59%	84%	62%
	In # of funds	3 940	898	4 838
	Average (€m)	253	179	
	Median (€m)	58	55	
UK	In €bn	333	66	399
	% of total	20%	35%	21%
	In # of funds	570	172	742
	Average (€m)	584	386	
	Median (€m)	159	143	
France	In €bn	129	19	148
	% of total	8%	10%	8%
	In # of funds	646	230	876
	Average (€m)	199	84	
	Median (€m)	63	33	
Luxembourg	In €bn	106	36	142
	% of total	6%	19%	8%
	In # of funds	362	211	573
	Average (€m)	292	171	
	Median (€m)	99	50	
North America	In €bn	669	30	699
	% of total	40%	16%	37%
	In # of funds	918	87	1 005
	Average (€m)	728	345	
	Median (€m)	70	83	
Rest of world	In €bn	24	0	25
	% of total	1%	0%	1%
	In # of funds	512	19	531
	Average (€m)	50	28	
	Median (€m)	7	12	

Source: Morningstar / La Financière de l'Echiquier

Our conclusions

10% of amounts are allocated to the mid/small cap segments, or €192bn, of which 84% are in Europe with the balance from funds of North American origin.

The historical performance for 2007/2014 for France indicates that French funds invested in European mid/small cap segments have stagnated at around €19bn whereas the number of funds rose 60% to 230 funds. This information implies a decline in the average (€131m to €84m) and median (€52m to €33m). Inflows have therefore declined although the French fund management industry remains buoyant, no doubt boosted by French tax incentives for equity savings accounts invested in small and mid caps (PEA-PME). Furthermore, this multiplication of small funds has improved liquidity in the micro/small cap segment. The large cap segment grew 22% to account for nearly 80% of the total number of funds. The development of ESG management also appears to be among the factors driving this trend.

The trend has been different in the UK. Assets invested in mid/small cap funds increased by 60% and the number of funds by 52%, with the average/median metrics remaining stable over the period. We also note that in the United Kingdom (as in the United States) the median size of funds is considerably higher. This might reflect the fact that the industry is more mature in these countries and the trend of mergers and concentration of management funds is already well advanced.

The strongest growth in recent years has been in Luxembourg, which counted only 88 mid/small cap funds with AuM totalling only €14bn in 2007, compared to 200 funds with AuM of €36bnin 2014. For large caps, the number of products has multiplied by four with growth in AuM of 66%. The European UCITS IV directive that entered into effect on 1 July 2011 facilitated the distribution of funds between EC Member States and was without a doubt the origin of this success for Luxembourg.

Germany was surprisingly absent from this trend with respect to dedicated mid/small cap funds, with only 46 specialised funds.

What impact do these figures have on economic models in the financial industry?

«More than 50% of listed companies are an economic conundrum for asset management companies and brokerage firms, which are remunerated on the basis of volumes»

The micro and small cap segments (78% of listed companies in 2014) generated €355bn in trading activity in 2014. At first glance, these capital flows seem sufficient in absolute terms. However, these figures must be considered in relation to the economic constraints of the financial services industry to measure their import.

For brokerage firms

Figures

The economic model of brokerage firms is based on trading volumes generated. In schematic terms, analysts at the brokerage firm propose investment or disinvestment ideas to their sellers. The latter then speak to managers who place the sale or purchase order if convinced by the arguments. Finally, the seller transmits this order to the trader to be executed on the market.

This service flow is financed by commissions charged by the brokerage firm on the total transaction amount measured by «per thousandths» (%). To simplifying, we have assumed the average commission is around 1.5% for the micro, small and mid cap segments and 1% for the large cap segment.[2]

	Micro	Small	Mid	Large
Brokerage commission rate applied %	1,5%	1,5%	1,5%	1,0%
Aggregate trading volume (€m)	58 776	296 597	1 569 470	8 834 764
Revenue from commissions €m*	176	890	4 708	17 670
No. of companies	2 576	1 200	678	411
Average commission income	0.07	0.74	6.94	42.99
Median volume	7	100	1 275	13 044
Revenue from commissions €m*	0.02	0.30	3.83	26.09

Source: La Financière de L'Echiquier

* The amount obtained is doubled given that when someone sells, someone else also buys. As such, brokerage commissions are applied twice although the exchange of securities is recognised only once.

On the basis of annual trading volume of €7m, application of a commission rate of 1.5% to 100% of all buy and sell transactions, means total median brokerage commissions generated for one year for a micro cap would be €20,000. Average commissions of €70,000 highlight the considerable disparity that exists since the top 500 companies of this segment accounted for 75% of the €58.8bn in transactions.

For a small cap, according to these same assumptions, the median commission income for one year is €300,000. This is a better result but still insufficient. In effect, this calculation is based on a scenario involving a 100% market share for the buy and sell transactions of a company, which is a utopian scenario. In reality, of course, these transaction flows are shared among hundreds of brokerage firms.

Our conclusions

If we assume that a financial analyst is able to adequately cover between 10 and 20 companies, and if we add only other direct salary costs (seller + trader), it appears that **coverage by a brokerage firm of a micro cap and a sizeable share of small caps, based on the commission income model, is synonymous with losing money.** This is all the more true in comparison to the median commission income for one year for a large cap with a rate of 1%, which is works out to around... €26m!

Accordingly, **the micro cap segment (more than 50% of listed companies) and a sizeable share of the small cap segment poses a structural problem in terms of liquidity that is virtually insurmountable for the economic model of brokerage firms based on commissions.**

[2] The calculation of brokerage commissions is in reality more complicated (different distribution channels, customer sizes, traditional management, hedge fund, quant funds...). However, the estimates adopted here are nevertheless at the upper end of the range

Financial market players partly offset this problem by means of an implicit deal whereby small/mid cap segment ideas are paid for by orders placed in the large cap segment. The other solution is remuneration by listed companies for the service of producing financial analysis provided by brokerage firms. This alternative further increases the price of being listed for companies (after IPO costs, there are recurring expenses for communications, auditing, annual and half-year reports, etc.), hence the hesitation by certain micro and small listed company managers regarding this analyst coverage service. This is nevertheless the only means for companies with small trading volumes to gain visibility at a worldwide level. This situation has nevertheless remained unchanged for years: **analyst coverage for micro/small caps is insufficient and poses a clear structural problem.**

For asset management companies

Figures

Difficulties are above all linked to the three main restrictions of active management:

1) the obligation of liquidity for savers/investors, regardless of the type of company in which their funds are invested;

2) the prudential rule imposing a limit of 30% of daily trading volume for purchases or sales of securities in order to limit the impact on the stock price;

3) the median size for portfolio investment lines of around €1.25m (adopting the hypothesis of €50m in assets under management concentrated among 40 companies[3]).

Accordingly, by respecting these constraints, 156 business days (nearly 8 months) are required to build up or sell a line in the micro cap segment based on annual trading volume of €7m, compared to 10 days in the small cap segment (€100m per year), 0.8 days in the mid cap segment and 0.08 days in the large cap segment.

Our conclusions

It is therefore difficult to ensure capital flows in the micro or small cap segments whereas the liquidity requirements for customers are the same as for other segments.

The smaller the fund's size (€10/€20 or €30m) the more it is flexible and adapted for investments in the micro/small cap segment. However, the economic model of a management company is based on assets under management generating income within a fluctuating range of 1% and 1.5% net. Accordingly, a €10m fund generates revenue of between €0.1m and €0.15m for a management company and a €100m fund revenue of between €1m and €1.5m. Note that the human and «technical» resources needed to manage a €10m fund and a €100m fund are the same.

These differences help understand the restrictions of a small cap fund, which is structurally limited in terms of assets under management and thereby also restricted in terms of profitability. Strategically, a micro or small cap fund has three choices in the event of success: it can close the fund to limit its size, increase the number of lines to maintain small amounts for each line, thereby transforming it into a sort of index, or change investment category in order to underpin growth in assets under management.

[3] In Europe, the median size of funds is Ð50m as presented in the second part of this document. Diversification is considered sufficient above 20 lines, and managers in practice have 30 to 40 major lines. Above this amount, it is difficult to actively monitor all positions.

Key findings

We count slightly more than 1,000 investment funds in European micro, small and mid caps with just over €190bn in assets under management. 90% of these funds are housed in Europe with a median amount under management of €50m. Just under half of these are physically managed from France and Germany, bearing in mind that for Luxembourg (23% of the number of specific funds), we do not know where individuals are «genuinely» domiciled. The universe is therefore concentrated into a few countries.

More than 50% of listed companies present an economic conundrum for services industries, such as management companies and brokerage firms, which derive their income from volume. This mid/small cap segment can be compared to the «Haute Couture» textile industry segment: a loss-generating or marginally profitable showcase for know-how which must make it possible to promote the sale of ready-to-wear clothing to the mass market segment.

CONCLUSION

The micro and small cap segments represent a «mass market» in terms of the number of companies and a niche market in terms of the volume of activity. This is an economic conundrum for service industries such as portfolio managers or intermediaries whose income is based on volume.

78% of listed companies or nearly 3,800 companies belong to these micro/small cap segments but only represent 3.5% of stockmarket transactions and consequently business volume for the financial industry. **In the short term, the economic model of European stock exchanges is based on a few hundred companies, but over the long term depends on the vitality of thousands of companies in the small/mid cap segments.**

However, the number of listed micro/small caps has fallen by 20% in Europe over the last seven years and that this trend has started to affect the number of listed mid/large caps, that has in turn dropped by 5%.

How can we stem this decline, which is threatening the European market over the long term?

Politically, small and mid-caps are currently in favour in a European market suffering from stagnant growth. And rightly so! We have demonstrated that they present economic vitality, and on that basis offer potential for job creation exceeding that of large caps.

On the other hand, for years, **the market regulator has multiplied counterproductive messages in the name of saver/investor protection.** Separating flows for example: it is not possible for a large cap order to «pay for» an idea for a small cap, and this has broken the fragile balance of interdependence between the different segments of the market. Another example: separating service flows and research services rendering impossible the remuneration of research services by commissions. This type of regulation could in time lead to the disappearance of research on micro/small caps which would become too costly for small cap funds and which would therefore lose its economic interest for brokerage firms. Note also the constant increase in disclosure requirements that in turn increases costs. Finally, the market regulator's is hesitant to direct the flow of savings towards these segments that are wrongly considered as too risky whereas their risk/return profile is identical to that of large caps (for small caps) and even superior (for mid caps)!

What do we suggest?

A first step to curtail the decline of micro/small segment would therefore be to stabilise regulations. To this end, the necessary interdependency between the different market segments should not be forgotten and the specific characteristics of the micro/small segment should be taken into account in order to reduce expenses and restrictions while respecting their need for key information. In exchange, the market regulator could require that any listed micro/small caps not covered by at least one analyst be financed by an annual contract with a brokerage firm. This would ensure a minimum coverage and the availability of this research to major global partners.

European savings must also be systematically channelled into these micro/small cap asset classes. This could be achieved by developing a targeted tax-driven scheme or regulatory provisions for micro/small cap funds at the European level, accompanied by easing constraints for insurance companies wishing to place a portion of their assets in these funds. Brokerage firms active in these segments could also benefit from favourable tax measures at the European level, linked to the number of specialised financial analysts (by considering them as engineers/researchers, along the lines of the research tax credit system in France). We estimate that there are less than 40 specialised financial analysts in France in the few brokerage firms still active. The resulting financial burden of such measures on public finances would therefore not be enormous!

KEY FINDINGS

Key findings

Micro and small caps (market capitalization less than €1bn)
- 78% of European listed companies
- 5% of total market capitalization
- 3% of annual trading volume

Micro, small and mid caps (market capitalization less than €5bn)
- 92% of European listed companies
- 19% of market capitalization
- 18% of annual trading volume

Mid and large caps (market capitalization greater than €5bn)
- 22% of European listed companies
- 95% of market capitalization
- 97% of annual trading volume

Study highlights

• The small/mid cap segment is a mass-market in terms of the number of companies, but a niche market in terms of trading volume.

• The dynamism of small/mid caps is nevertheless the engine of the European market: it stimulates the economy, enhances returns on savings and, over the longer term, determines the number of large caps.
- This segment has generated an annualized risk-adjusted stock market return two to three times higher than that of large caps.
- This performance reflects a greater economic dynamism: 50% of large caps were small/mid caps in 2000.

• However, this dynamism is threatened: the number of micro/small caps has fallen by 20 % since 2007.

• This decline in the number of small caps threatens over the longer term the vitality of the European economy: already, the number of mid/large caps has declined by 5% since 2007.

• Micro/small caps are faced with three major obstacles:
- The regulator's natural focus is skewed towards large caps and it does not measure the impact of its regulations/messages on these key segments of the market;
- This context does not incite financial industry players to invest in these niches which leads to a lower number of initial public offerings and reduced coverage;
- The constraints/listing costs discourage entrepreneurs from seeing the benefits of being listed.

A few proposals

Financial industry participants must understand this dynamic and invest more in the micro/small segments.

The regulator must understand the importance and interdependence of the different segments of the stock exchange ecosystem in order to create a friendlier environment for smaller sized companies.

• For companies: creation of a European status of micro/small caps
- Lower listing costs for this specific segment;
- Easing of mandatory constraints non-essential to good financial disclosure practices;
- In exchange, obligation to enter into a market coverage contract for all listed companies, as long as the trading volumes are insufficient.

• For economic agents: channeling the flow of European savings
- Creating a specific pan-European regulatory and fiscal framework for micro/small cap funds
- Easing constraints for insurance companies
- Establishing a tax advantage in the form of a tax credit for sell-side analysts specialized in micro/small cap segments


Lines