

# ANALYSING THE VOLATILITY OF LARGE, MID AND SMALL CAP SHARES IN SOUTH AFRICA

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# Analysing the volatility of large, mid and small cap shares in South Africa

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*Keywords:* Volatility, ALSI, Standard deviation

*JEL classification* L250, L100

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## 1. Introduction

In general, small cap stocks tend to have higher volatility than large cap stocks, and mid cap stocks tend to fall in between the two in terms of volatility. This is because small cap companies typically have less established business models and less predictable revenue streams, which can lead to greater fluctuations in their stock prices. On the other hand, large cap companies tend to have more established business models and more predictable revenue streams, which can lead to less volatility in their stock prices. In R, one can use the package ‘PerformanceAnalytics’ to calculate the volatility of different indexes.

Fama & French ([1997: 33](#)) and Grinold & Kahn ([2000](#))

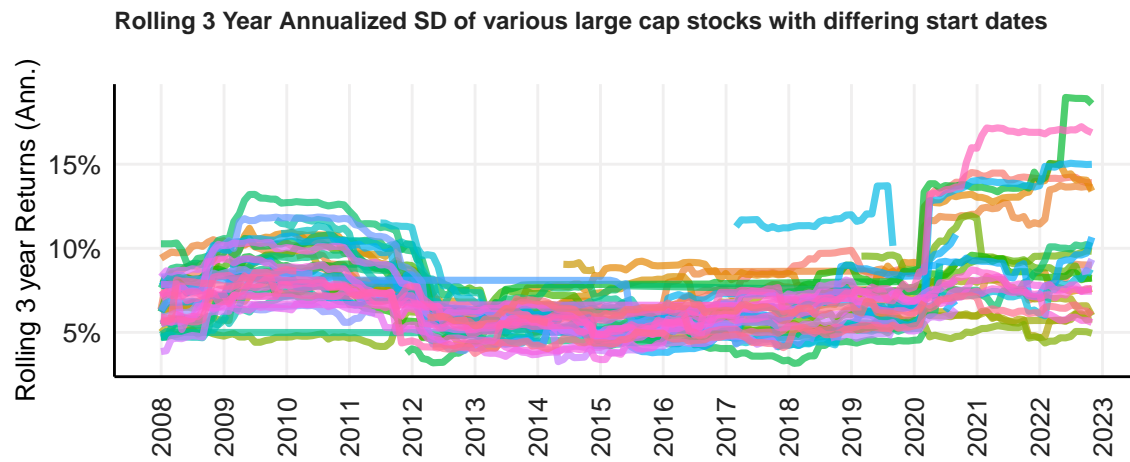
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### **Contributions:**

*The authors would like to thank no institution for money donated to this project. Thank you sincerely.*

## 2. Large cap shares



Note:  
Distortions are not evident now.

Figure 2.1: Large rolling SD

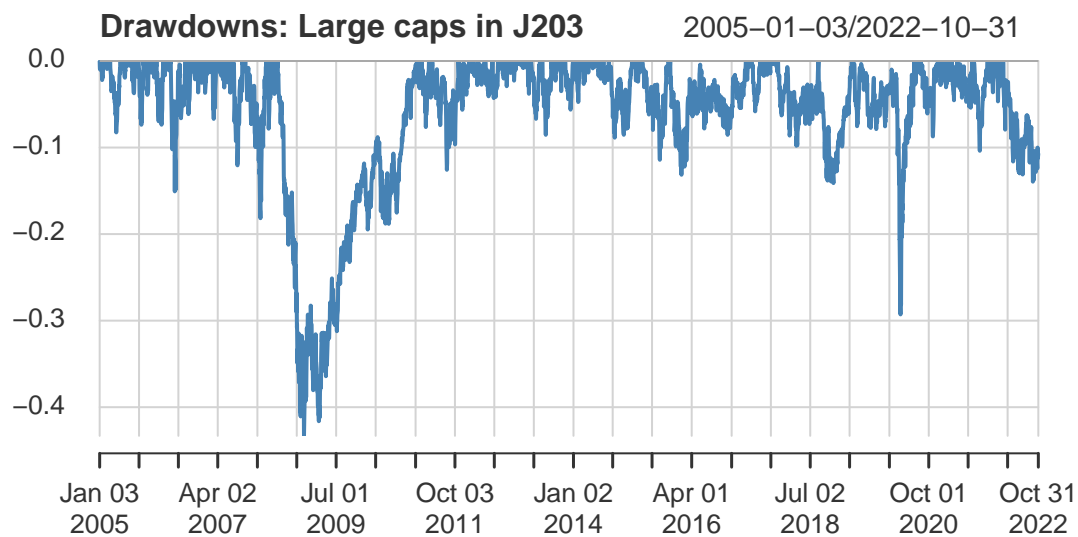


Figure 2.2: Large cap drawdown chart

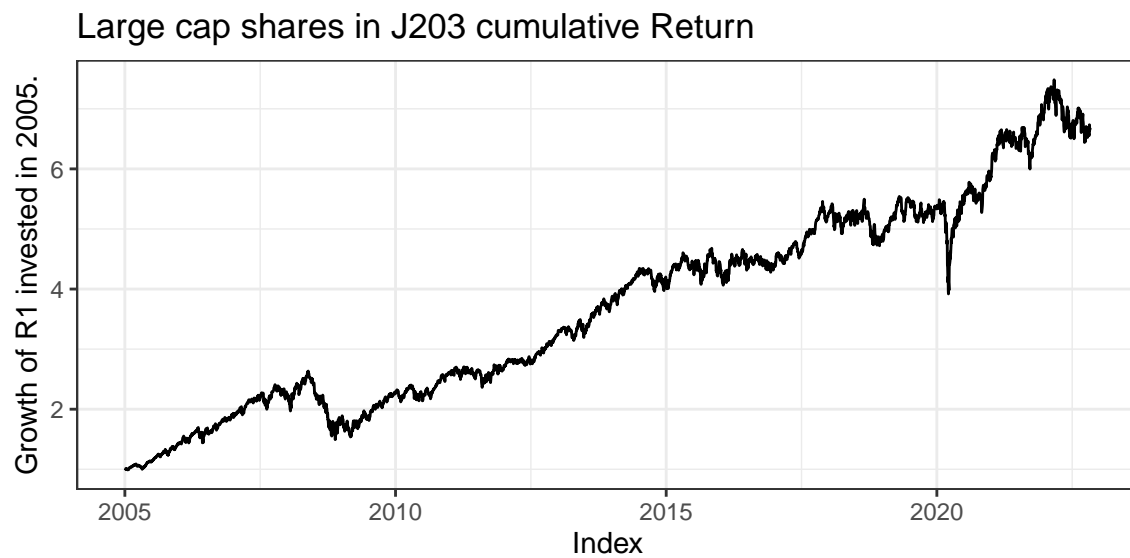
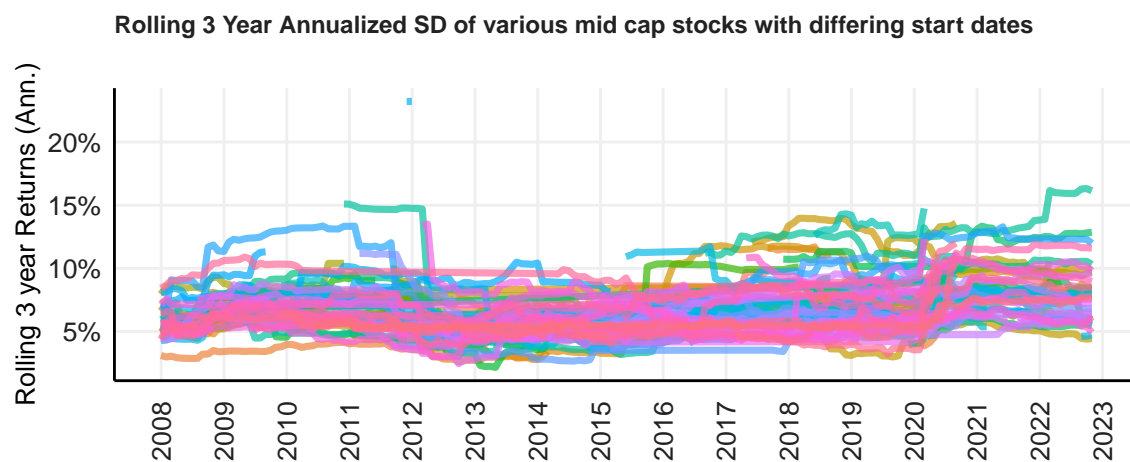


Figure 2.3: Caption Here

### 3. Mid cap shares



Note:  
Distortions are not evident now.

Figure 3.1: Caption Here

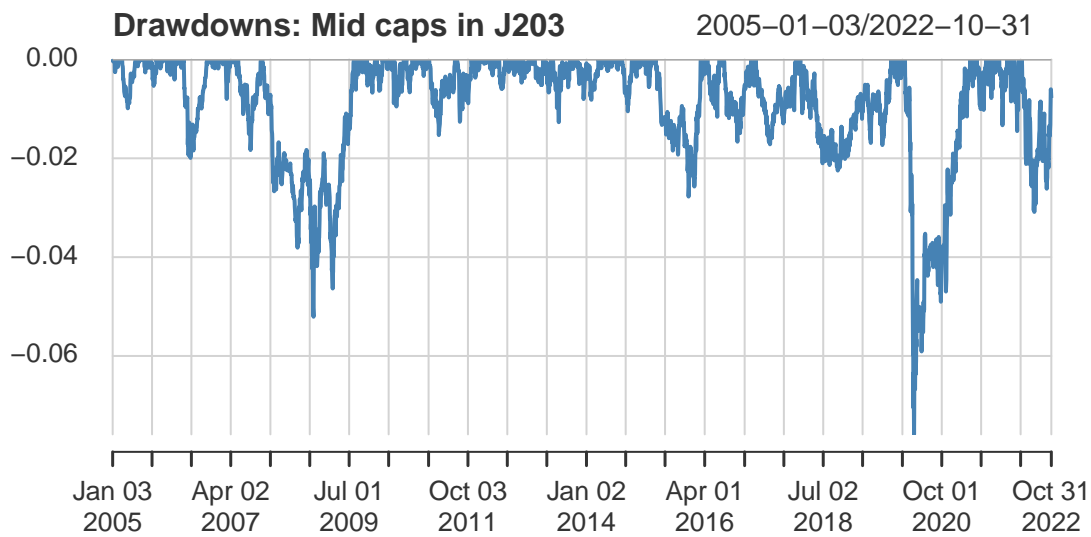


Figure 3.2: Caption Here

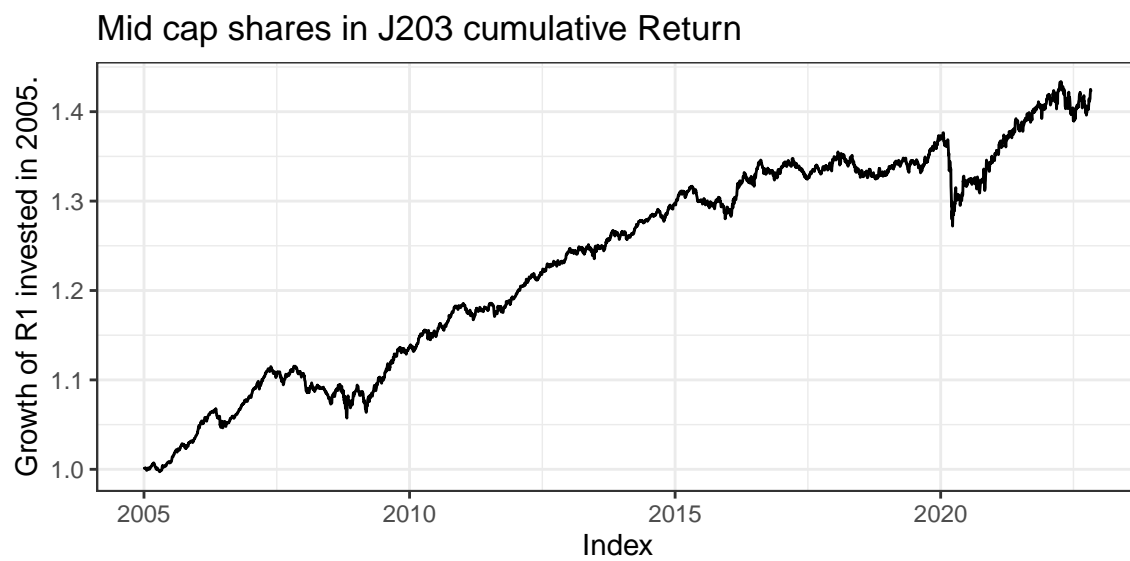
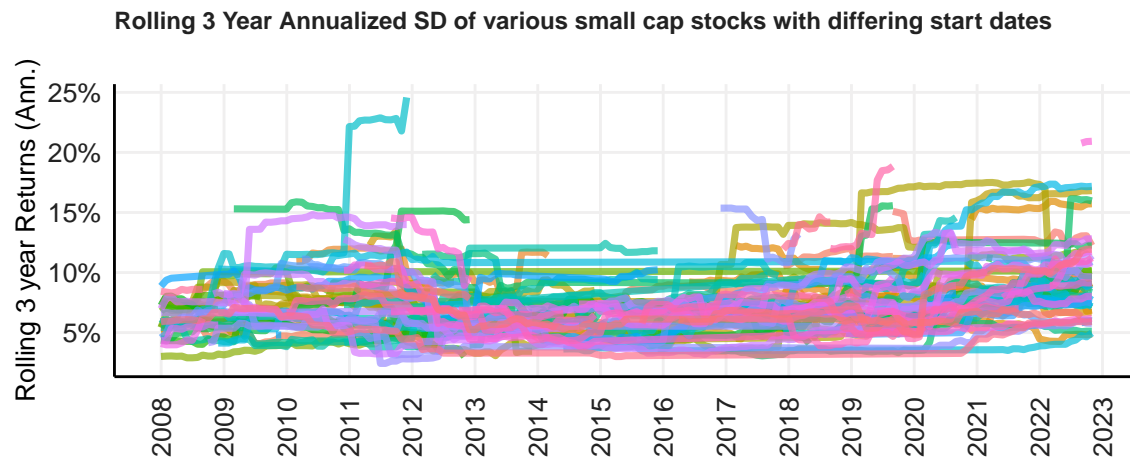


Figure 3.3: Caption Here

#### 4. Small cap shares



Note:  
Distortions are not evident now.

Figure 4.1: Caption Here

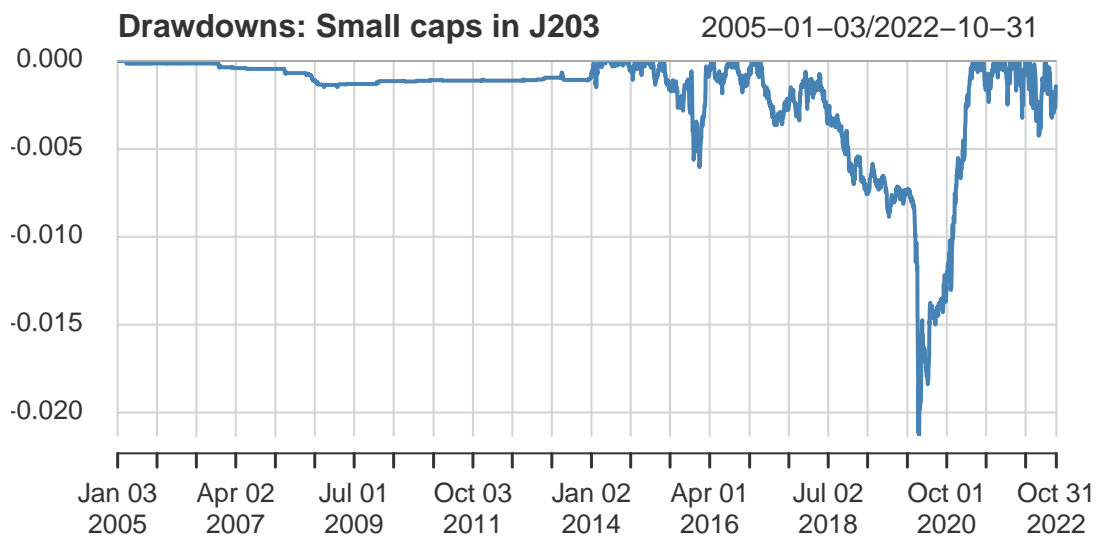


Figure 4.2: Caption Here

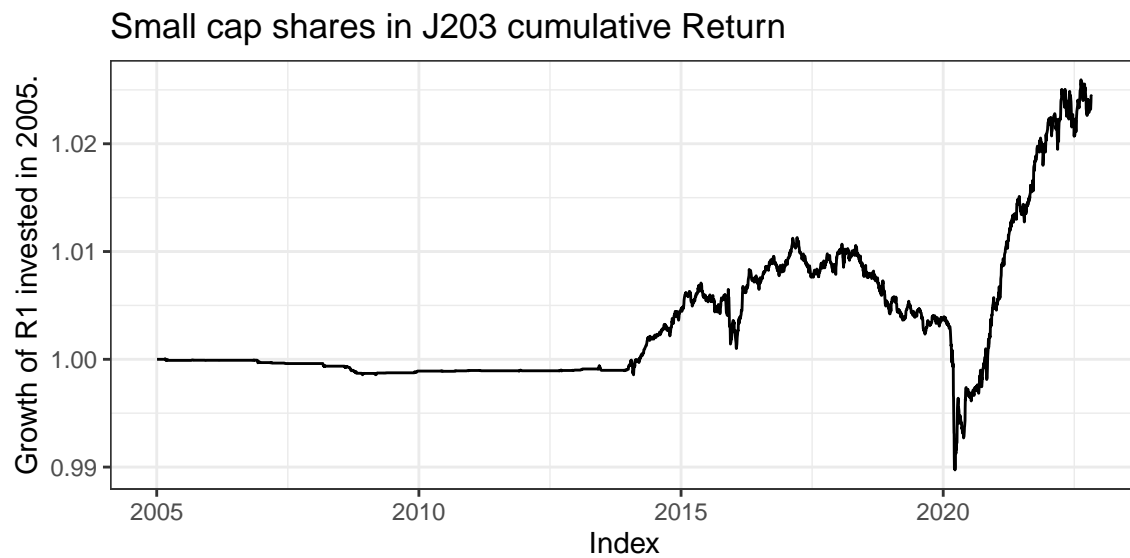
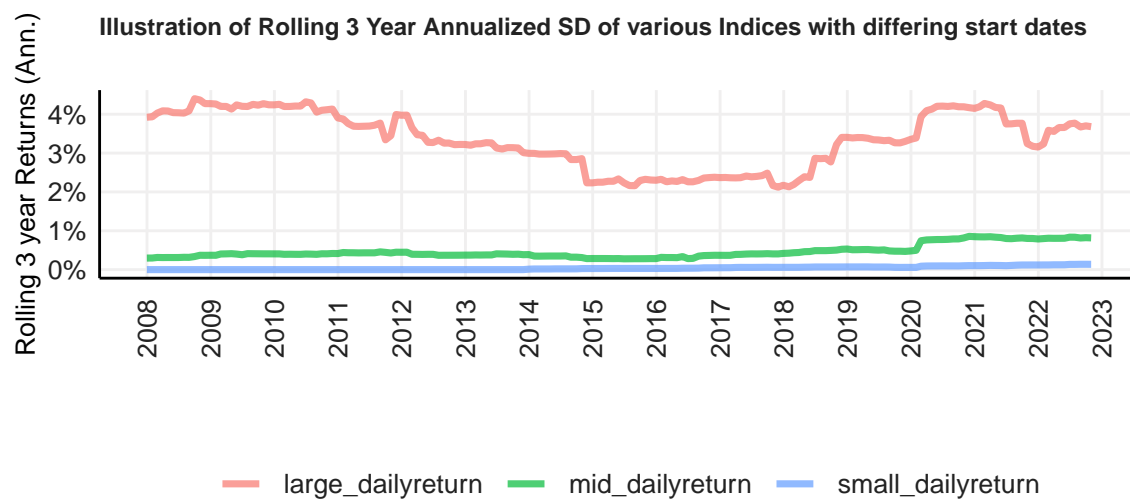


Figure 4.3: Caption Here

## 5. Rolling Standard deviation



Note:  
Distortions are not evident now.

Figure 5.1: Caption Here

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	Standard deviation
Large cap	0.01118614
Mid cap	0.001418264
Small cap	0.0002078111

Table 5.1: Standard deviation

Figures [2.1](#) and [2.2](#)

	Large cap	Mid cap	Small cap
Volatility skewness	1.067183	0.9504131	0.9286573

Table 5.2: Volatility skewness

The upside/downside ratio is often used to gauge overbought and oversold conditions in the market. Low values can indicate that the market is reaching oversold levels, while high values can indicate that the market is becoming overbought.

## 6. Conclusion

I hope you find this template useful. Remember, [stackoverflow](#) is your friend - use it to find answers to questions. Feel free to write me a mail if you have any questions regarding the use of this package. To cite this package, simply type `citation("Texevier")` in Rstudio to get the citation for Katzke ([2017](#)) (Note that uncited references in your bibtex file will not be included in References).



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## References

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## Appendix

### *Appendix A*

Some appendix information here

### *Appendix B*