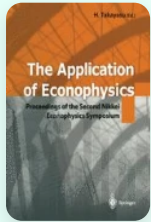


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# Time Evolution of Fractal Structure by Price-Axis Scaling and Foreign Exchange Intervention Operations


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[Yoshiaki Kumagai](#)

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## Summary

We propose a simple method to describe the fractal structure of data, which are irregularly spaced. Using the extreme values determined with a scale, we define a kind of fractal dimension: the fold dimension. This method is based on the same concept as a technical analysis: Kagi chart. In this contribution, we use a high-frequency data set on bid and ask prices of the Dollar/Yen exchange rates, and investigate time evolution of the fractal dimension. Moreover we analyze the effect of foreign exchange intervention operations.



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## Author information

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### Authors and Affiliations

**School of Education, Waseda University, 1-6-1 Nishi-waseda, Shinjuku ku, Tokyo, 169-8050, Japan**

Yoshiaki Kumagai

# Editor information

---

## Editors and Affiliations

**Sony Computer Science Laboratories, Inc., 3-14-13 Higashi-Gotanda,  
Shinagawa-ku, Tokyo, 141-0022, Japan**

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