



Download This Paper (Delivery.cfm/SSRN_ID1310283_code658905.pdf?abstractid=1310283&mirid=1)

Open PDF in Browser (Delivery.cfm/SSRN_ID1310283_code658905.pdf?abstractid=1310283&mirid=1&type=2)



Add Paper to My Library

Share:

Which Bank is the 'Central' Bank? An Application of Markov Theory to the Canadian Large Value Transfer System

FRB of New York Staff Report No. 356

20 Pages
Posted: 2 Dec 2008

Morten L. Bech (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=280113)
Bank for International Settlements (BIS) - Committee on Payments and Market Infrastructures

James T. E. Chapman (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=682781)
Government of Canada - Bank of Canada

Rod Garratt (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=81230)
University of California, Santa Barbara (UCSB) - Department of Economics

Date Written: November 2008

Abstract

Recently, economists have argued that a bank's importance within the financial system depends not only on its individual characteristics but also on its position within the banking network. A bank is deemed to be "central" if, based on our network analysis, it is predicted to hold the most liquidity. In this paper, we use a method similar to Google's PageRank procedure to rank banks in the Canadian Large Value Transfer System (LVTS). In doing so, we obtain estimates of the payment processing speeds for the individual banks. These differences in processing speeds are essential for explaining why observed daily distributions of liquidity differ from the initial distributions, which are determined by the credit limits selected by banks.

Keywords: federal funds, network, topology, interbank, money markets

JEL Classification: C11, E50, G20

[Suggested Citation](#) >

[Show Contact Information](#) >



Download This Paper (Delivery.cfm/SSRN_ID1310283_code658905.pdf?abstractid=1310283&mirid=1)

Open PDF in Browser (Delivery.cfm/SSRN_ID1310283_code658905.pdf?abstractid=1310283&mirid=1&type=2)

0 References

Fetch References

0 Citations

Fetch Citations

Do you have negative results from your research you'd like to share?

We use cookies that are necessary to make our site work. We may also use additional cookies to analyze, improve, and personalize our content and your digital experience. For more information, see our [Cookie Policy](#). [Submit Negative Results \(https://www.ssrn.com/index.cfm/en/Negative-Results/\)](#)

[Cookie Settings](#)

Accept all cookies

DOWNLOADS	101
ABSTRACT VIEWS	1,370
RANK	481,522

18 Citations

13 References

PlumX Metrics



(https://plu.mx/ssrn/a/?ssrn_id=1310283)

Related Journals

<div>Economics of Networks eJournal (https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=1475417)</div> <div>Follow ⓘ</div>
<div>Federal Reserve Bank of New York Research Paper Series (https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=570402)</div> <div>Follow ⓘ</div>

Recommended Papers

<div>Payment System Disruptions and the Federal Reserve following September 11, 2001 (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2184505&rec=1&srcabs=1310283&pos=1)</div> <div>By Jeffrey M. Lacker (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=16382)</div>
<div>Technology Diffusion within Central Banking: The Case of Real-Time Gross Settlement (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=932596&rec=1&srcabs=1310283&pos=2)</div> <div>By Morten L. Bech (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=280113) and Bart Hobijn (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=52843)</div>
<div>Illiquidity in the Interbank Payment System Following Wide-Scale Disruptions (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=890345&rec=1&srcabs=1310283&pos=3)</div> <div>By Morten L. Bech (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=280113) and Rod Garratt (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=81230)</div>

View more >

Feedback

Submit a Paper > (<https://hq.ssrn.com/submissions/CreateNewAbstract.cfm>)

SSRN Quick Links	▼
SSRN Rankings	▼
About SSRN	▼

(<http://www.elsevier.com/>)

Copyright (<https://www.ssrn.com/index.cfm/en/dmca-notice-policy/>) Terms and Conditions (<https://www.ssrn.com/index.cfm/en/terms-of-use/>)

Privacy Policy (<https://www.elsevier.com/legal/privacy-policy>)

All content on this site: Copyright © 2023 Elsevier Inc., its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the Creative Commons licensing terms apply.

We use cookies to help provide and enhance our service and tailor content.

To learn more, visit [Cookie Settings](#).



(<http://www.relx.com/>)

(<https://papers.ssrn.com/sol3/updateInformationLog.cfm?process=true>)