

[Download This Paper \(Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1)[Open PDF in Browser \(Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1&type=2\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1&type=2)[Add Paper to My Library](#)Share: [!\[\]\(56549452e01ca28bdf2500ced9653143_img.jpg\)](#) [!\[\]\(235f8f87c36d896db1ddff2848125c86_img.jpg\)](#) [!\[\]\(4c4afa2dcab95991c60f31fce713d641_img.jpg\)](#) [!\[\]\(1205f6f8a2eee5164f325ab7908828d5_img.jpg\)](#)

The Envelope Theorem and Identification: Implications for Some Empirical Work in Economics and Finance

13 Pages

Posted: 22 Nov 2014

Last revised: 10 Feb 2015

Rose Neng Lai (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=106712)

University of Macau

Robert A. Van Order (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=1293314)

George Washington University

Date Written: February 10, 2015

Abstract

This paper is about identification and endogeneity in models that estimate the effects of instrument choice on performance (or wealth or welfare) in situations where the instruments are chosen to optimize performance. Such models occur frequently in corporate finance, analysis of happiness and effectiveness of economic policy. The instruments are endogenous because of the optimization. We suggest an impossibility theorem: that identification is not possible for this class of models, and that in a well-specified model the expected values of estimated impacts of instruments choices will be exactly zero. This is a direct application of the envelope theorem. We follow with four applications to empirical work in economics and finance.

Keywords: Envelope Theorem; endogeneity; identification problem**JEL Classification:** C60[Suggested Citation](#) >[Show Contact Information](#) >[Download This Paper \(Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1)[Open PDF in Browser \(Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&mirid=1&type=2\)](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2562820_code106712.pdf?abstractid=2528570&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?

[Submit Negative Results \(https://www.ssrn.com/index.cfm/en/Negative-Results/\)](https://www.ssrn.com/index.cfm/en/Negative-Results/)

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 \(https://www.elsevier.com/legal/cookiepolicy\)](https://www.elsevier.com/legal/cookiepolicy)

Paper statistics

[Cookie Settings](#)[Accept all cookies](#)

14 References

PlumX Metrics



(https://plu.mx/ssrn/a/?ssrn_id=2528970)
Related Journals

Corporate Finance: Governance, Corporate Control & Organization eJournal (https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=1508972)

Follow



Corporate Finance: Valuation, Capital Budgeting & Investment Policy eJournal (https://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalBrowse&journal_id=1508981)

Follow



View more >

Feedback

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

SSRN Quick Links



SSRN Rankings



About SSRN



(<https://www.facebook.com/SSRNcommunity/>)

([https://www.linkedin.com/company/493409?](https://www.linkedin.com/company/493409?trk=tyah&trkInfo=clickedVertical%3Acompany%2CentityType%3AentityHistoryName%2CclickedEntityId%3Acompany_493409%2Cidx%3A0)

[trk=tyah&trkInfo=clickedVertical%3Acompany%2CentityType%3AentityHistoryName%2CclickedEntityId%3Acompany_493409%2Cidx%3A0](https://www.linkedin.com/company/493409?trk=tyah&trkInfo=clickedVertical%3Acompany%2CentityType%3AentityHistoryName%2CclickedEntityId%3Acompany_493409%2Cidx%3A0)

(<https://twitter.com/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>)