

[Working Papers](#)

# Asset Pricing and Optimal Portfolio Choice in the Presence of Illiquid Durable Consumption Goods

Sanford J. Grossman & Guy Laroque

SHARE       

WORKING PAPER 2369

DOI 10.3386/w2369

ISSUE DATE August 1987

We analyze a model of optimal consumption and portfolio selection in which consumption services are generated by holding a durable good. The durable good is illiquid in that a transaction cost must be paid when the good is sold. It is shown that optimal consumption is not a smooth function of wealth; it is optimal for the consumer to wait until a large change in wealth occurs before adjusting his consumption. As a consequence, the consumption based capital asset pricing model fails to hold. Nevertheless, it is shown that the standard, one factor, market portfolio based capital asset pricing model does hold in this environment. It is shown that the optimal durable level is characterized by three numbers (not random variables), say  $x$ ,  $y$ , and  $z$  (where  $x < y < z$ ). The consumer views the ratio of consumption to wealth ( $c/W$ ) as his state variable. If this ratio is between  $x$  and  $z$ , then he does not sell the durable. If  $c/W$  is less than  $x$  or greater than  $z$ , then he sells his durable and buys a new durable of size  $S$  so that  $S/W = y$ . Thus  $y$  is his "target" level of  $c/W$ . If the stock market moves up enough so that  $c/W$  falls below  $x$ , then he sells his small durable to buy a larger durable. However, there will be many changes in the value of his wealth for which  $c/W$  stays between  $x$  and  $z$ , and thus consumption does not

value of his wealth for which  $c/w$  stays between  $x$  and  $z$ , and thus consumption does not change. Numerical simulations show that small transactions costs can make consumption changes occur very infrequently. Further, the effect of transactions costs on the demand for risky assets is substantial.

Download a PDF

[Information on access](#)

Acknowledgements and Disclosures



Download Citation



## Published Versions

[Econometrica](#), vol. 58, no. 1, January 1990, pp. 25-51. citation courtesy of [RePEc](#)

## More from the NBER

In addition to [working papers](#), the NBER disseminates affiliates' latest findings through a range of free periodicals — the [NBER Reporter](#), the [NBER Digest](#), the [Bulletin on Health](#), and the [Bulletin on Entrepreneurship](#) — as well as online [conference reports](#), [video lectures](#), and [interviews](#).



Martin Feldstein Lecture, Summer Institute 2025  
**The Fiscal Future**

N. Gregory Mankiw, Harvard University and NBER  
July 10, 2025

**2025, 17th Annual Feldstein Lecture, N. Gregory Mankiw, "The Fiscal Future"**

FELDSTEIN LECTURE

PRESENTER: [N. GREGORY MANKIW](#)

N. Gregory Mankiw, Robert M. Beren Professor of Economics at Harvard University, presented the 2025 Martin Feldstein...



Methods Lecture, Summer Institute 2025  
**Uncovering Causal Mechanisms:  
Mediation Analysis and  
Surrogate Indices**

Raj Chetty, Harvard University and NBER  
Kosuke Imai, Harvard University  
July 24, 2025



**2025, Methods Lecture, Raj Chetty and Kosuke Imai, "Uncovering Causal Mechanisms: Mediation Analysis and Surrogate Indices"**

PRESENTERS: [RAJ CHETTY](#) & [KOSUKE IMAI](#)

SlidesBackground materials on mediationImai, Kosuke, Dustin Tingley, and Teppei Yamamoto. (2013). "Experimental Designs...



**2025 International Trade and Macroeconomics, "Panel on The Future of the Global Economy"**

PANEL DISCUSSION

PRESENTERS: [OLEG ITSKHOKI](#), [PAUL R. KRUGMAN](#) & [LINDA TESAR](#)

Supported by the Alfred P. Sloan Foundation grant #G-2023-19633, the Lynde and Harry Bradley Foundation grant #20251294...

**National Bureau of Economic Research**

[Contact Us](#)

1050 Massachusetts Avenue

Cambridge, MA 02138

[617-868-3900](tel:617-868-3900)

[info@nber.org](mailto:info@nber.org)

[webaccessibility@nber.org](mailto:webaccessibility@nber.org)

[HOMEPAGE](#)

[Accessibility Policy](#)

[Diversity Policy](#)

[Privacy Policy](#)

FOLLOW



© 2025 NATIONAL BUREAU OF ECONOMIC RESEARCH. ALL RIGHTS RESERVED.