

Household Debt and Income Inequality, 1963–2003

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Abstract

I construct an economy with heterogeneous agents that mimics the time-series behavior of the earnings distribution in the United States from 1963 to 2003. Agents face aggregate and idiosyncratic shocks and accumulate real and financial assets. I estimate the shocks that drive the model using data on income inequality, aggregate income, and measures of financial liberalization. I show how the model economy can replicate two empirical facts: the trend and cyclical behavior of household debt and the diverging patterns in consumption and wealth inequality over time. While business cycle fluctuations can account for the short-run changes in household debt, its prolonged rise of the 1980s and the 1990s can be quantitatively explained only by the concurrent increase in income inequality.

LITERATURE CITED

Aiyagari, S. Rao. (1994) "Uninsured Idiosyncratic Risk and Aggregate Saving. *Quarterly Journal of Economics*, 109, 659–84.

[Web of Science®](#) | [Google Scholar](#)

Aizcorbe, Ana M., Arthur B. Kennickell, and Kevin B. Moore. (2003) "Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances. *Federal Reserve Bulletin*, 89, 1–32.

[Google Scholar](#)

Autor, David, Lawrence F. Katz, and Melissa S. Kearney. (2004) "U.S. Wage and Consumption Inequality Trends: A Re-Assessment of Basic Facts and Alternative Explanations." Working Paper, Massachusetts Institute of Technology .

[Google Scholar](#)

Brav, Alon, George M. Constantinides, and Christopher C. Geczy. (2002) "Asset Pricing with Heterogeneous Consumers and Limited Participation: Empirical Evidence." *Journal of Political Economy*, 110, 793-824.

[Web of Science®](#) | [Google Scholar](#)

Cagetti, Marco, and Mariacristina De Nardi. (2005) "Wealth Inequality: Data and Models." Working Paper, Federal Reserve Bank of Chicago .

[Google Scholar](#)

Campbell, Jeffrey, and Zvi Hercowitz. (2005) "The Role of Collateralized Household Debt in Macroeconomic Stabilization." NBER Working Paper 11330.

[Google Scholar](#)

Campbell, John Y., and Gregory N. Mankiw. (1989) "Consumption, Income and Interest Rates: Reinterpreting the Time Series Evidence." In *NBER Macroeconomics Annual 1989*, edited by Olivier J. Blanchard and Stanley Fisher, pp. 185-216. Cambridge, MA : MIT Press.

[Web of Science®](#) | [Google Scholar](#)

Card, David, and Thomas Lemieux. (1994) "Changing Wage Structure and Black-White Wage Differentials." *American Economic Review Papers and Proceedings*, 84, 29-33.

[Web of Science®](#) | [Google Scholar](#)

Castaneda, Ana, Javier Díaz-Giménez, and Victor Ríos-Rull. (2003) "Accounting for the U.S. Earnings and Wealth Inequality." *Journal of Political Economy*, 111, 818-57.

[Web of Science®](#) | [Google Scholar](#)

Den Haan, Wouter J. (1997) "Solving Dynamic Models with Aggregate Shocks and Heterogeneous Agents." *Macroeconomic Dynamics*, 1, 355-86.

[Google Scholar](#)

Eckstein, Zvi and Eva Nagypál. (2004) "The Evolution of U.S. Earnings Inequality: 1961-2002." *Federal Reserve Bank of Minneapolis Quarterly Review*, 28, 10-29.

[Google Scholar](#)

Frederick, Shane, George Loewenstein, and Ted O'Donoghue. (2002) "Time Discounting and Time Preference: A Critical Review." *Journal of Economic Literature*, 40, 351-401.

[Web of Science®](#) | [Google Scholar](#)

Heathcote, Jonathan, Kjetil Storesletten, and Gianluca Violante. (2004) "The Macroeconomic Implications of Rising Wage Inequality in the United States." Working Paper, Georgetown University .

[Google Scholar](#)

Heaton, Jonathan, and Deborah Lucas. (1996) "Evaluating the Effect of Incomplete Markets on Risk Sharing and Asset Pricing." *Journal of Political Economy*, **104**, 443-87.

[Web of Science®](#) | [Google Scholar](#)

Huggett, Mark. (1993) "The Risk Free Rate in Heterogeneous-Agents, Incomplete Insurance Economies." *Journal of Economic Dynamics and Control*, **17**, 953-70.

[Web of Science®](#) | [Google Scholar](#)

Iacoviello, Matteo. (2005) "House Prices, Borrowing Constraints and Monetary Policy in the Business Cycle." *American Economic Review*, **95**, 739-64.

[Web of Science®](#) | [Google Scholar](#)

Jappelli, Tullio. (1990) "Who Is Credit Constrained in the U.S. Economy" *Quarterly Journal of Economics*, **105**, 219-34.

[Web of Science®](#) | [Google Scholar](#)

Katz, Lawrence, and David Autor. (1999) "Changes in Wages Structure and Earnings Inequality." In *Handbook of Labor Economics*, edited by Oscar Ashenfelter and David Card. Amsterdam : Elsevier.

[Google Scholar](#)

Kennickell, Arthur B. (2003) "A Rolling Tide: Changes in the Distribution of Wealth in the U.S., 1989 to 2001." Working Paper, Federal Reserve Board .

[Google Scholar](#)

Kennickell, Arthur B., and Janice Shack-Marquez. (1992) "Changes in Family Finances from 1983 to 1989: Evidence from the Survey of Consumer Finances." *Board of Governors of the Federal Reserve System*, January, 1-18.

[Google Scholar](#)

Krueger, Dirk, and Fabrizio Perri. (2006) "Does Income Inequality Lead to Consumption Inequality? Evidence and Theory." *Review of Economic Studies*, **73**, 163-94.

[Web of Science®](#) | [Google Scholar](#)

Krusell, Per, Burhanettin Kuruşçu, and Anthony A. Smith, Jr. (2001) "Time Orientation and Asset Prices. *Journal of Monetary Economics*, 49, 107–35.

[Web of Science®](#) | [Google Scholar](#)

Krusell, Per, and Anthony A. Smith, Jr. (1998) "Income and Wealth Heterogeneity in the Macroeconomy. *Journal of Political Economy*, 106, 867–96.

[Web of Science®](#) | [Google Scholar](#)

Lawrence, Emily. (1991) "Poverty and the Rate of Time Preference: Evidence from Panel Data. *Journal of Political Economy*, 119, 54–77.

[Web of Science®](#) | [Google Scholar](#)

Lemieux, Thomas. (2006) "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill *American Economic Review*, 96, 461–98.

[Web of Science®](#) | [Google Scholar](#)

Ludvigson Sydney. (1999) "Consumption and Credit: A Model of Time-Varying Liquidity Constraints. *The Review of Economics and Statistics*, 81, 434–47.

[Web of Science®](#) | [Google Scholar](#)

Moffitt, Robert A., and Peter Gottschalk. (2002) "Trends in the Transitory Variance of Earnings in the United States. *The Economic Journal*, 112, C68–C73.

[Web of Science®](#) | [Google Scholar](#)

Nakajima, Makoto. (2005) " Rising Earnings Instability, Portfolio Choice, and Housing Prices." Manuscript, University of Illinois Urbana-Champaign .

[Google Scholar](#)

Piketty, Thomas, and Emmanuel Saez. (2003) "Income Inequality in the United States, 1913-1998. *Quarterly Journal of Economics*, 1, 1–39.

[Web of Science®](#) | [Google Scholar](#)

Ríos-Rull, Victor. (1999) " Computation of Equilibria in Heterogeneous-Agents Models." In *Computational Methods for the Study of Dynamic Economies*, edited by Ramon Marimon and Andrew Scott. New York : Oxford University Press.

[Web of Science®](#) | [Google Scholar](#)

Samwick, Andrew A. (1998) "Discount Rate Heterogeneity and Social Security Reform. *Journal of Development Economics*, 57, 117–46.

[Web of Science®](#) | [Google Scholar](#)

Solon, Gary. (1992) "Intergenerational Income Mobility in the United States. *American Economic Review*, 82, 393–408.

[Web of Science®](#) | [Google Scholar](#)

Storesletten, Kjetil, Chris I. Telmer, and Amir Yaron. (2004) "Cyclical Dynamics in Idiosyncratic Labor-Market Risk. *Journal of Political Economy*, 112, 695–718.

[Web of Science®](#) | [Google Scholar](#)

Tauchen, George. (1986) "Finite State Markov-Chain Approximations to Univariate and Vector Autoregressions. *Economics Letters*, 20, 177–81.

[Web of Science®](#) | [Google Scholar](#)

Warner, John T., and Saul Pleeter. (2001) "The Personal Discount Rate: Evidence from Military Downsizing Programs. *American Economic Review*, 91, 33–53.

[Web of Science®](#) | [Google Scholar](#)

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