Consumption Smoothing and Intertemporal Substitution versus the Household Financial Squeeze in the Great Recession

Robert E. Hall Hoover Institution and Department of Economics Stanford University

> JRC Third Annual Conference Princeton University

> > February 20, 2014

# Household purchases dominated the movements of GDP in the Great Recession



# The Ratio of Consumption to Disposable Income



### REAL HOUSEHOLD LIABILITIES



## BURDEN OF DELEVERAGING AS A PERCENT OF CONSUMPTION



# GOOGLE SEARCHES FOR "WITHDRAWAL PENALTY"



# INDEXES OF LENDING STANDARDS INFERRED FROM THE FRB SENIOR LOAN OFFICER SURVEY



$$\Delta \log c_t = \sigma(d_t - \rho)$$

$$\Delta \log c_t = \sigma(d_t - \rho)$$

 $d_t$  is the consumption-relevant discount rate and  $\rho$  is the rate of impatience

$$\Delta \log c_t = \sigma(d_t - \rho)$$

 $d_t$  is the consumption-relevant discount rate and  $\rho$  is the rate of impatience

 $d_t$  captures the financial risk (correlation with marginal utility) of future consumption

$$\Delta \log c_t = \sigma(d_t - \rho)$$

 $d_t$  is the consumption-relevant discount rate and  $\rho$  is the rate of impatience

 $d_t$  captures the financial risk (correlation with marginal utility) of future consumption

Increase in  $d_t$  alters consumption plans toward higher growth, and thus lower current consumption

# DISCOUNT RATE FOR THE S&P STOCK-PRICE INDEX

