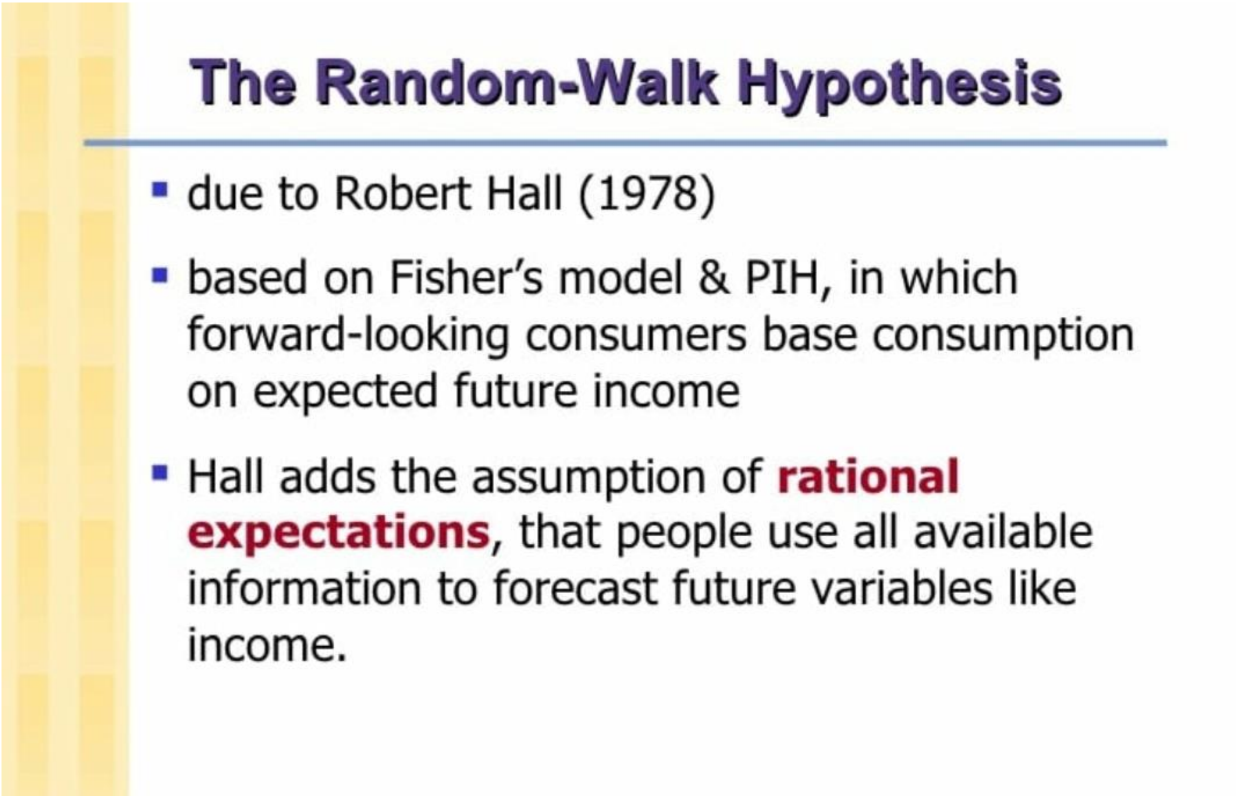
Rational Expectation and Random-walk of Consumption Expenditure



Robert Hall was the first to deriv
implications of rational expectation
consumption.

=> changes in consumption over t
should be unpredictable

– follow a "Random Walk"

=> changes in consumption reflec
"surprises" about lifetime income.

Rational Expectations &
Random-Walk Consumpti

Forward-looking consumers base their consumption decisions not only on thei current income but also on the income expect to receive in the future.

Rational expectation

People will make optimal forecasts abou future.

Determinants of Consump
Function

- Wealth & Distribution of Wealth
- Relative Income =>

  1. Current income relative to past income (Y/Y_{mp}).

  2. Own income relative to average income of the neighbourhood. (Demonstration / Bandwagon Effe

Determinants (cont…)

- Interest Rate
- Credit availability
- Consumer's expectations

Consumption Function

$$C = f\{ Y, W, Y/Y_{mp}, i, CA, CE, IWD,$$

Y = income

W = wealth

Y_{mp} = maximum past income

i = interest rate

CA = ease of credit availability

CE = consumer's expectations

IWD = inequality of income/ wealth distributic

μ = unknown/other factors

V. Robert Hall's Random-Walk Hypothesis:-

a. Random walk model is based on Fisher's model and PIH, i.e., forward looking consumers base their current consumption decision on their expected future income.
b. RW model adds another assumption to these hypotheses, called as *rational expectation*, i.e., consumers use all available information to forecast future income.
c. Thus, as RW model, if PIH is correct and consumers have rational expectations, then consumption should follow a *random walk*, i.e., the changes in consumption should be unpredictable. Any change in income that was *anticipated* has already been factored into expected permanent income, so consumption wouldn't change. The consumption will change only because of *unanticipated* changes in wealth or income.