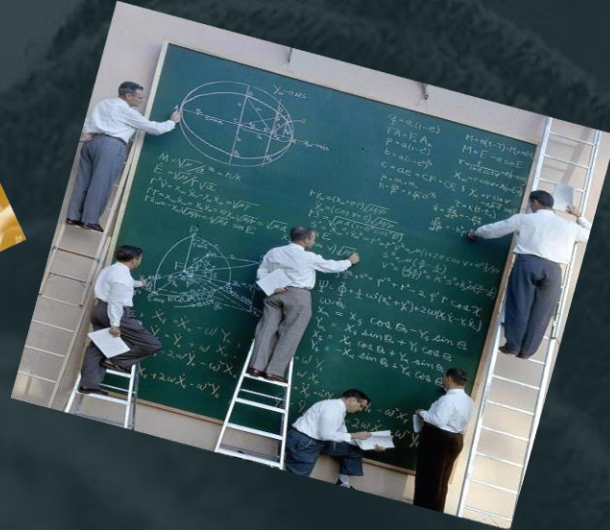




# Lecturing Economics: Is there a key to success?

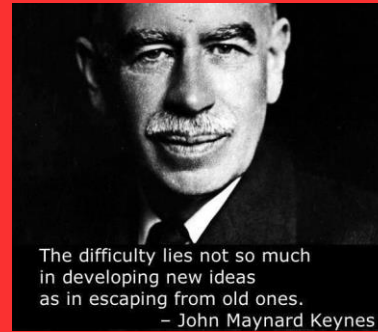




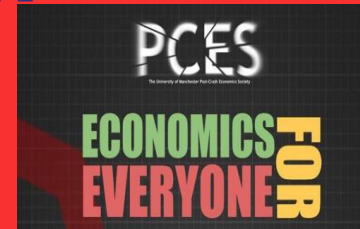
# **7 Tips on Being a Good Lecturer in Economics**



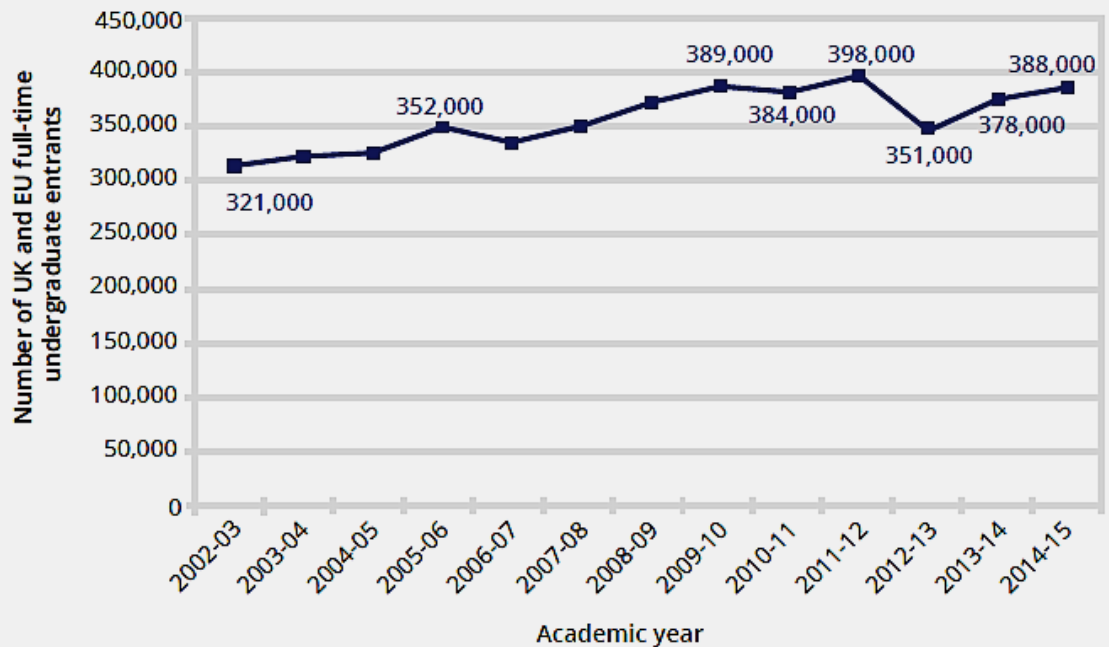
# ~~7 Tips on Being a Good Lecturer in Economics~~



■ **Economics took a battering after the financial crisis, but faculties are refusing to teach alternative views. It's as if there's only one way to run an economy**



# CHALLENGES



UK and other EU full-time undergraduate entrants, 2002-03 to 2014-15. *Source: Universities Funding Council, Higher Education Statistics Agency*



# CHALLENGES



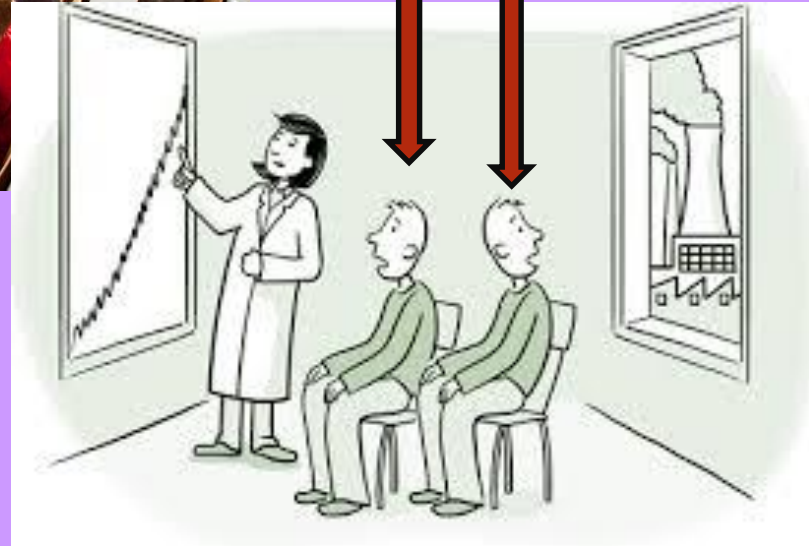


# CHALLENGES



ANALYTICAL

GLOBAL



Dunn and Griggs (2000)



## IS curve and output gap (cont.)

$$Y_t = C_t + I_t + G_t + X_t - M_t$$

$$C_t = \alpha_c \bar{Y}_t$$

$$G_t = \alpha_g \bar{Y}_t$$

$$X_t = \alpha_x \bar{Y}_t$$

$$M_t = \alpha_m \bar{Y}_t$$

$$\frac{I_t}{Y_t} = \alpha_i - b(r_t - \rho)$$

Deriving IS curve

$$\frac{Y_t}{\bar{Y}} = \frac{C_t}{\bar{Y}} + \frac{I_t}{\bar{Y}} + \frac{G_t}{\bar{Y}} + \frac{X_t}{\bar{Y}} - \frac{M_t}{\bar{Y}}$$

$$\frac{Y_t}{\bar{Y}} = \alpha_c + \alpha_i - b(r_t - \rho) + \alpha_g + \alpha_x - \alpha_m$$

## IS curve and output gap (cont.)

$$x_t = \frac{Y_t - \bar{Y}_t}{\bar{Y}_t}$$

$$\frac{Y_t}{\bar{Y}} - 1 = \alpha_c + \alpha_i - b(r_t - \rho) + \alpha_g + \alpha_x - \alpha_m - 1$$

$$\underbrace{\frac{Y_t}{\bar{Y}} - 1}_{x_t} = \underbrace{\alpha_c + \alpha_i + \alpha_g + \alpha_x - \alpha_m - 1}_a - b(r_t - \rho)$$

$$x_t = \alpha - b(r_t - \rho)$$

(IS curve)



## IS curve and output gap

$$\begin{aligned}
 Y_t &= \\
 C_t &= \\
 G_t &= \\
 X_t &= \\
 M_t &= \alpha_m Y_t
 \end{aligned}$$

$$\frac{I_t}{Y_t} = \alpha_i - b(r_t - \rho)$$

### Deriving IS curve

$$\begin{aligned}
 \frac{Y_t}{\bar{Y}} &= \frac{C_t}{\bar{Y}} + \frac{I_t}{\bar{Y}} + \frac{G_t}{\bar{Y}} + \frac{X_t}{\bar{Y}} - \frac{M_t}{\bar{Y}} \\
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 \end{aligned}$$

## IS curve and output gap (cont.)

$$x_t = \frac{Y_t - \bar{Y}_t}{\bar{Y}_t}$$

$$\frac{Y_t}{\bar{Y}_t} - 1 = \alpha_c + \alpha_i - b(r_t - \rho) + \alpha_g + \alpha_x - \alpha_m - 1$$

$$+ \underbrace{\alpha_x - \alpha_m - 1 - b(r_t - \rho)}_a$$

$$- b(r_t - \rho)$$

(IS curve)



“

- I hear and I forget.
- I see and I remember.
- I do and I understand.



- Confucius



## IS in terms of output gap

$$Y_t = C_t + I_t + G_t + X_t - M_t$$

$$C_t = \alpha_c \bar{Y}_t$$

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$$\frac{I_t}{\bar{Y}_t} = \alpha_i - b(r_t - \rho)$$

$$x_t = \alpha - b(r_t - \rho) \quad (\text{IS curve})$$



1. Consider the following economy:

$$C_t = \alpha_c \bar{Y}_t \quad (1)$$

$$G_t = \alpha_g \bar{Y}_t \quad (2)$$

$$X_t = \alpha_x \bar{Y}_t \quad (3)$$

$$M_t = \alpha_m \bar{Y}_t \quad (4)$$

$$\frac{I_t}{\bar{Y}_t} = \alpha_i - b(r_t - \rho) \quad (5)$$

(a) Derive the IS curve for this economy.

(b) Provide an explanation of equation (5).

## IS in terms of output gap

$$Y_t = C_t + I_t + G_t + X_t - M_t$$

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$$x_t = \alpha - b(r_t - \rho) \quad (\text{IS curve})$$

# TRADITIONAL?

## Application: The Global Financial Crisis of 2007-2009

- Causes:
- Financial innovations emerge in the mortgage markets
  - Subprime and Alt-A mortgages
  - Mortgage-backed securities
  - Collateralized debt obligations (CDOs) product
- Housing price bubble forms
  - Increase in liquidity from cash flows surging in emerging States (China and India)
  - Congressional Legislation that encouraged Freddie Mac to buy MBS
  - Low interest rates

## Application: The Global Financial Crisis of 2007 - 2009 (cont'd)

- Housing price bubble forms (cont'd)
  - Development of subprime mortgage market fueled housing demand and housing prices.
- Agency problems arise
  - “Originate to distribute” model is subject to principal (investor) agent (mortgage broker) problem.
  - Borrowers had little incentive to disclose information about their ability to pay

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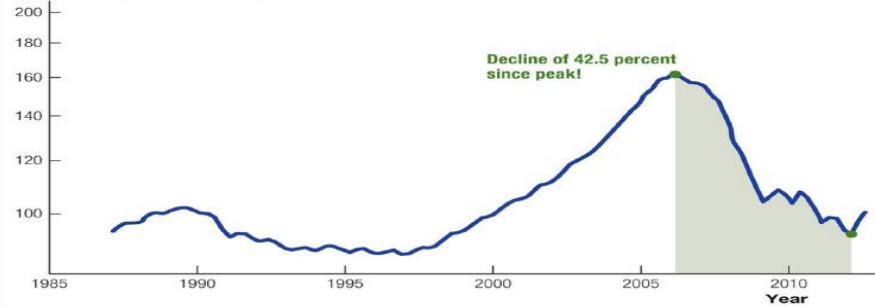
Given the centrality of **graphing** to the practice of science, an important aspect.....is being able to **use and interpret graphs** in ways that are typical to that discipline.

## The Great Recession: What happened?

### Fact 1: Housing market bubble collapse

#### A Bursting Bubble in U.S. Housing Prices?

Real housing price index  
(2000 Q1 = 100, ratio scale)





**A PICTURE IS  
WORTH A  
THOUSAND  
WORDS**



**MORTGAGE!!**

**LOW R% PEOPLE!**

**BANK**

**START**

**YAY!**

**DEMAND**

**HOUSE PRICES**

**SUBPRIME LOANS**

**PEOPLE DEFAULT ON THEIR LOANS**

**FORECLOSURE**

**HOUSING BUBBLE**

**BOOM!!**



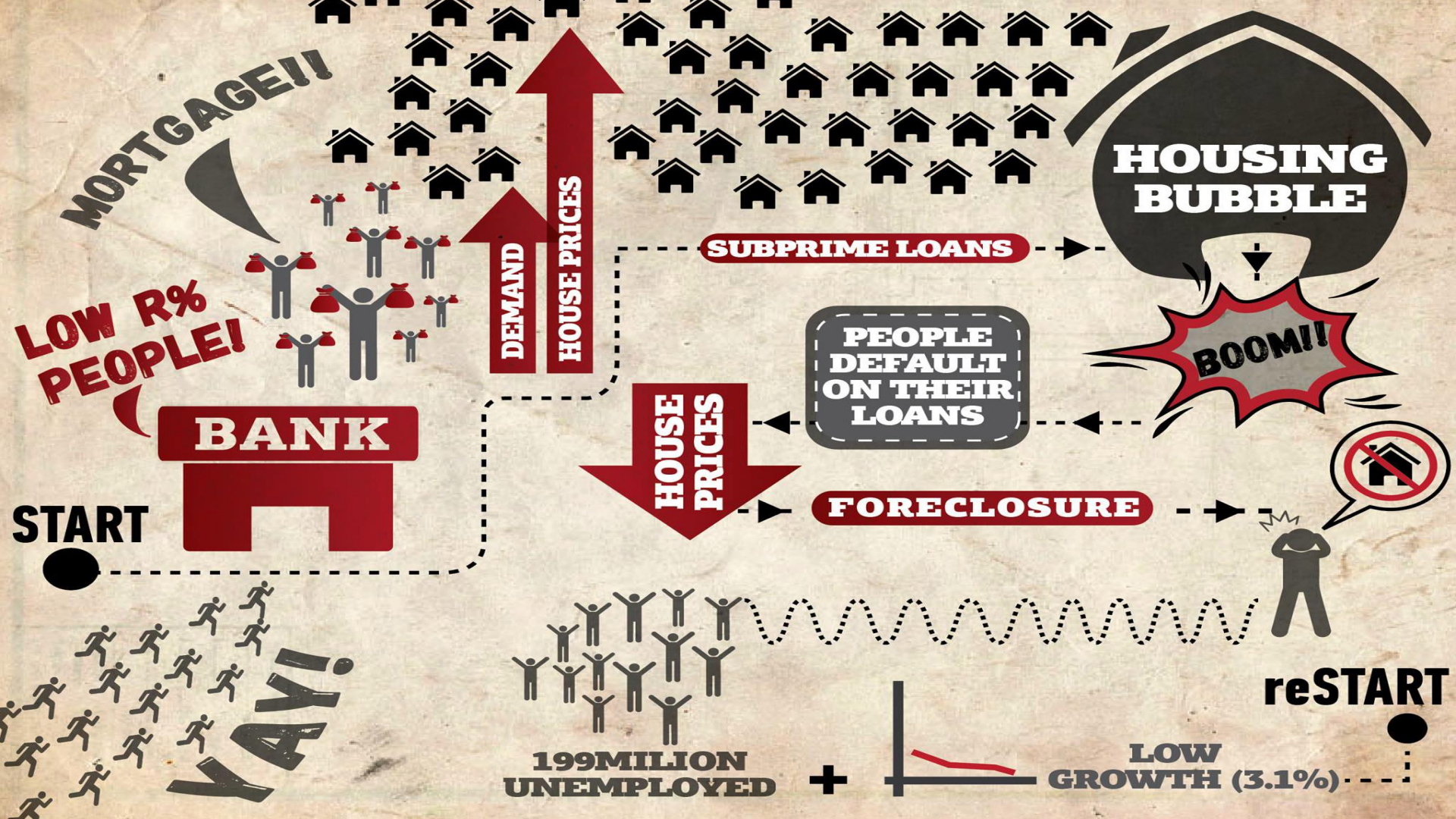
**reSTART**

**199 MILLION UNEMPLOYED**

**+**

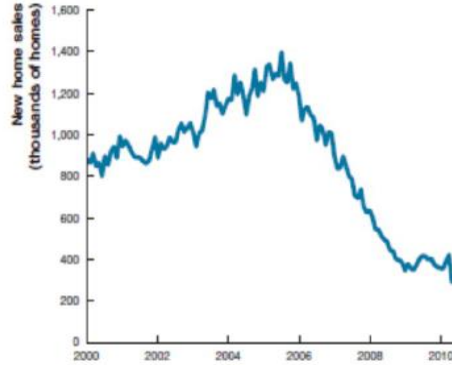


**LOW GROWTH (3.1%)**

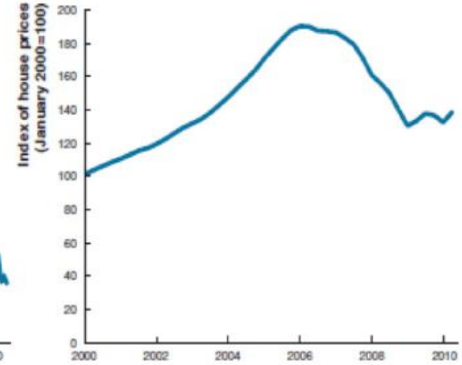




## Housing bubble - US



(a) New home sales



(b) Index of house prices



**DEBT**

**ACCUMULATION OF BORROWING**



**global debt sum**

**\$ 057,967,686,900,559**

**1.  $r > g$**

**2. future generations**



9. What were the main strengths of the lectures?

Interesting stories which emphasize how models ~~work in real~~  
relate to the real world.

9. What were the main strengths of the lectures?

Informative lecture notes  
Story and relate to real world is  
much more understandable

9. What were the main strengths of the lectures?

Made content interesting

9. What were the main strengths of the lectures?

Interesting, the amusing way of teaching.

9. What were the main strengths of the lectures?

- Graphical explanations of ideas

9. What were the main strengths of the lectures?

MUSIC



# THANK YOU!

**Any questions?**

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