Stock market: Intro. and broad lessons about behavior
266: Financial Markets and Institutions

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▶ Stock markets

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- We covered the main financial institution: Banks

  Banks provide 'indirect finance' mainly in the form of debt (loans)

- We turn to the main financial market: the stock market

  Stock markets facilitate 'direct finance' in the form of equity.

▶ Some terminology

▶ Common stock

- Common stock is the thing people are referring to when they talk generally about the stock market.
- A share literally entitles you to your share of the company.

  If there are 23 shares and you own one, you own $1/23^{rd}$ of the company

- Shares of common stock entitle you to your share (e.g., $1/23^{rd}$) of whatever dividend the firm chooses to pay
- If the firm is dissolved, you get your share of whatever value is left

  shareholders are residual claimants

- Common stock also gives you voting rights on various issues of firm management

  Of course, most share owners do as Adam Smith stated and pay almost no attention to the running of the company. Large shareholders with more at stake are more likely to pay attention.

- **Aside:: Common stock vs. Preferred stock**
  - Preferred stock is different from common stock
  - Preferred stock has fixed dividend; no voting rights, in general

    we will be talking only about common stock.

- **Primary vs. Secondary markets**
  - Primary market: where the initial party offering a financial instrument sells it to public.
  - Secondaray market: where the public trades the financial instrument among themselves.

    When we say 'the stock market,' we mean the secondary market.

- **Aside:: Primary markets**
  - Investment banks play a central role in primary markets.
  - For example, they help firms with 'initial public offerings' of securities

    If a security has already been sold, offering more is called a seasoned offering.

  - But today we are only talking about the secondary market.
  - We'll start with some broad facts about the behavior of prices in the secondary market.
  - And to discuss that, we need to be clear about the meaning of a stock index.

- **Stock index**
  - A stock index is the basic way we keep track of the general price of all the stocks listed in the index.
  - The index is a kind of weighted average of all the individual prices of stocks included in the index.

- **Making a stock index: 3 basic choices**
  - 1. Pick a list of stocks to include
  - 2. Decide how to weight their prices
    - Equal-weighted portfolio

      each stock price weighted equally; the Dow is equal weighted

    - Value-weighted portfolio

      the relative weights given to stock prices reflect relative market capitalizations of the firms

  - 3. Decide whether or not to include dividends
  - Most indices do not reflect dividends

Thus, most indices represent a measure of capital gains but not of the total return you would recieve holding the stocks.

- Indices that include dividends are generally called 'total return indices'

  You can find total return versions of most common indices.

▶ **Aside:: Details on indices**

- There are many details and adjustments in creating stock indices

  you don't need to memorize these

- Dow is not a simple average: e.g., it's adjusted to remain smooth in the face of stock splits
- S&P's weighting reflects not all shares but only 'free float'—shares that are not closely held

▶ **Some actual indices**

- Dow

  Dow Jones Industrial Average: equal-weighted index of 30 stocks (no longer strictly industrial)

- S&P 500

  Value-weighted index of 500 major firms

- S&P is considered a benchmark against which many investment strategies are compared.

▶ **Some world indices**

- UK: FTSE (footsie)
- Geramany: DAX
- France: CAC (CAC 40);
- Japan: Nikkei (Nikkei 225)
- Hong Kong: Hang Seng
- Brazil: Bovespa

▶ **Some stories you should remember about the stock market**

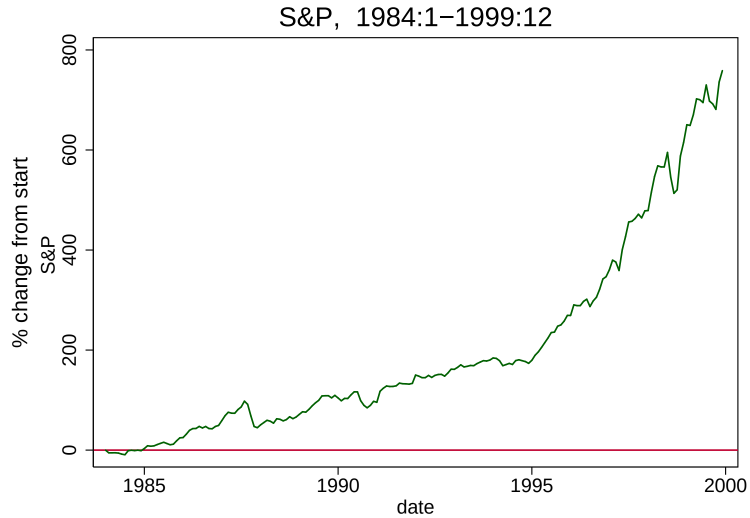
▶ **We used to tell everyone. . .**

- Stock markets mainly go up

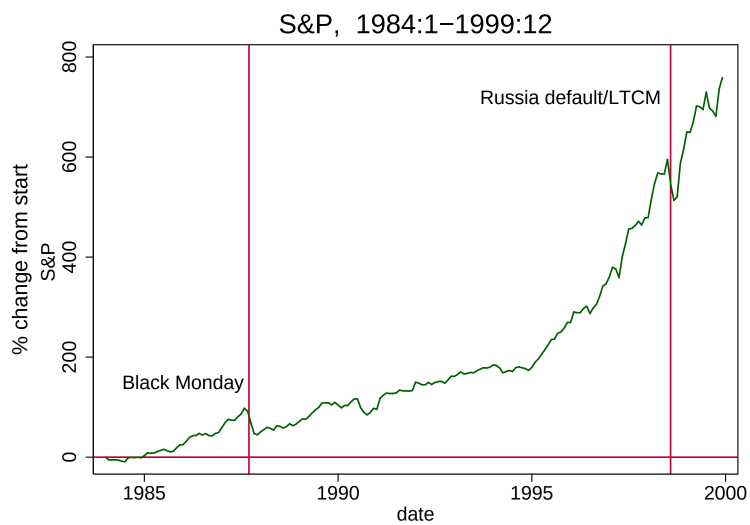
  Firms and economies grow and the value of stocks grow with them.

- Thus, over any period more than a few years you will be far better off having your money in stocks than bonds or other fixed income assets

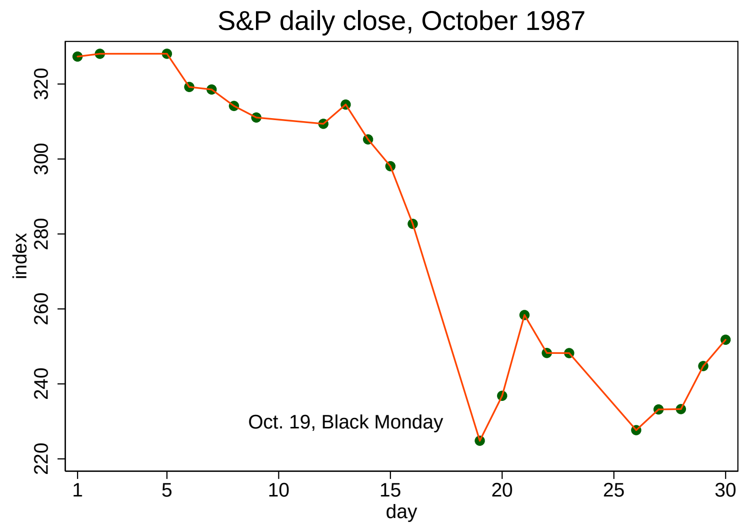
- **For example: S&P**



- **Sure, there are some hiccups**



- **Some detail on hiccups**
- **Oct. 19, 1987: Black Monday**



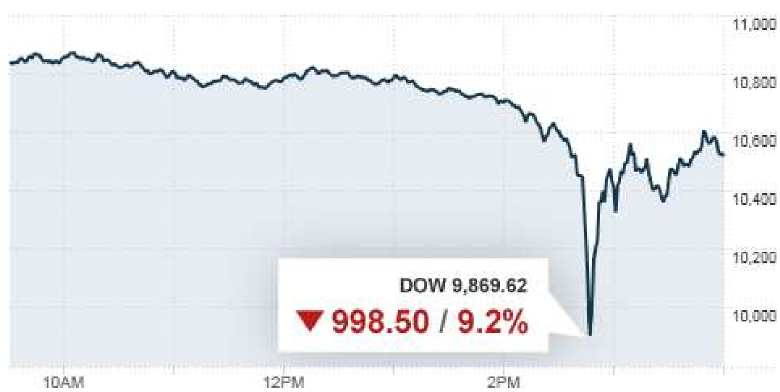
- **Black monday**
  - Stock markets around the world fell, many by far more than the S&P
  - World markets down 20 to 50 percent in a day

    some markets bounced back more quickly than others

- **But markets bounced back quickly enough to maintain the view that the stock market is the best place for your money over any long-ish horizon.**

- **More details:**
  - Markets may fall a great deal in a few minutes

- **Flash crash, May 6, 2010**



- **Source**

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    http://money.cnn.com/2010/05/06/markets/markets%5Fnewyork/index.htm

▶ **Flash crash, May 6, 2010**

- Between 2:42pm and 2:47pm, Dow fell about 600 points

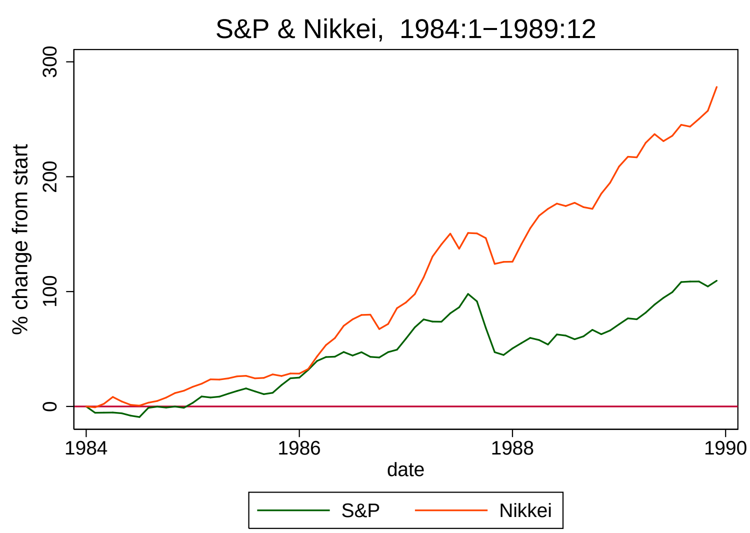
    about 6 percent

- Mostly recovered by 3:10pm
- Attributed to unusually large transaction, high frequency (computerized) trading, and fragmented markets
- But this crash disappeared quickly.

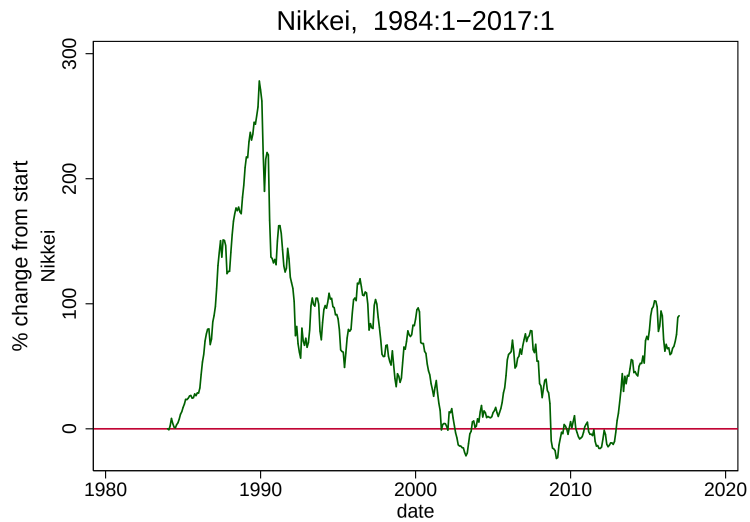
▶ **And so consistent with old view that stock markets mainly go up, so** that over any significant period of time . . .

▶ **In this view, the main issue is which stocks are better than others**

▶ **For example, Nikkei vs. S&P in the 1980s**



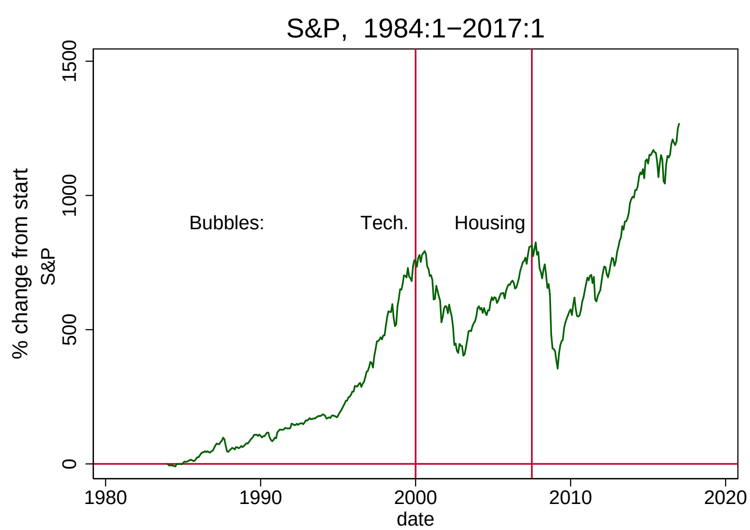
▶ **Well, one little problem**



- The Nikkei crashed around 1990 and basically has not risen much since
- So even by 2000 or so, the old view was looking a bit sketchy

But folks viewed Japan as an exception until...

▶ **S&P through today**



▶ **The old view was wishful thinking (the Great Depression should have been proof of that)**

▶ **A summary**

- Stock markets generally go up. Still true.

Betting that the stock market will go up over longish periods is basically betting that the growth period we've seen since 1850 will continue. That is, we will not return to the experience of the prior 600 years or so.

- Even settig aside all of history prior to 1850, and much of Africa through the present, it is true, however, that markets fall or fail to rise for periods measured in many years or even decades
- Thus, the old advice that the market is your best investment over any long-ish period is not necessarily right.
- Also, bubbles happen.
- Bubble means little more than 'a sharp and difficult to explain rise in values that rapidly reverses itself.'
- And sometimes the popping of bubbles is associated with a prolonged period of weak economic performance.

  See Japan after 1990 and the U.S. and Europe after 2008

▶ **End of very general lessons.**

▶ **One detail: foreign exchange values**

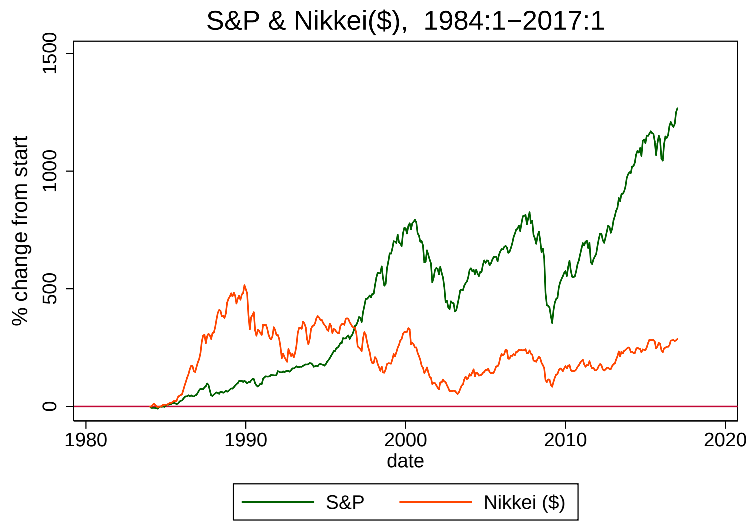
- Stock indices reflect prices in the currency of the home country

  e.g., Dollars for the S&P, yen for the Nikkei

- Thus, when comparing performance of two stock markets we really should put the two on a comparable basis by stating all prices in single currency.
- The Nikkei looks a little better relative to the S&P when both are stated in dollars.
- This is because the value of the yen was rising relative to dollar over much of this period.

  Thus the dollar value of the Nikkei stocks rose a bit faster in nominal terms than the yen value.

▶ **Nikkei vs. S&P in dollars**



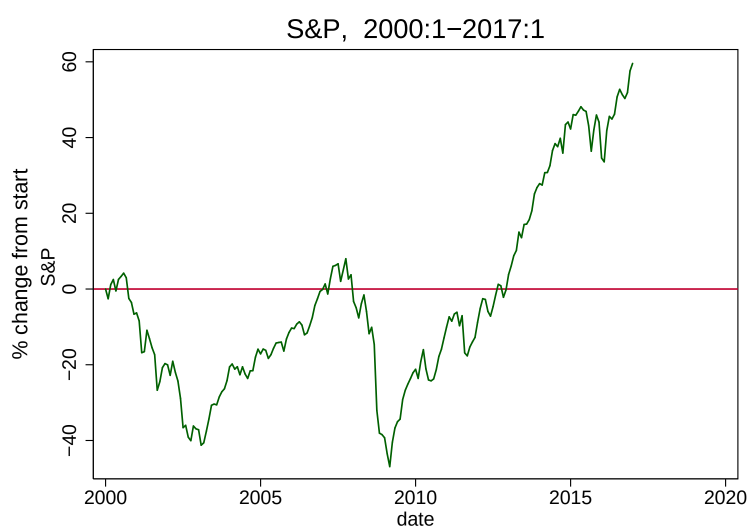
- Nikkei still looks pretty darn bad

▶ **Foreign exchange**

- For the remainder of this discussion, all stock indices will be in dollars.

▶ **Recent performance**

▶ **New millenium**

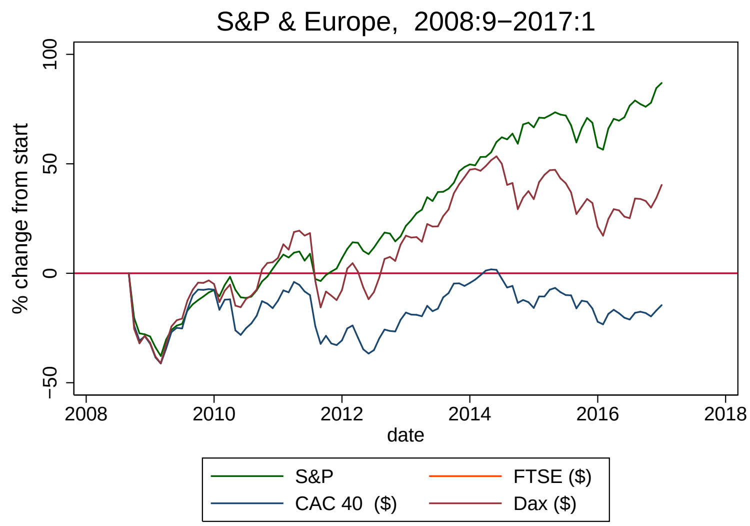


- S&P has fluctuated between $\pm$ 50%.

hit approx. -50% twice

- In 2012, S&P was at same level as 2000

▶ **U.S. and Europe since pre-crisis peak**



- All these markets very similar through, say, early 2011, when U.S. began steady rise

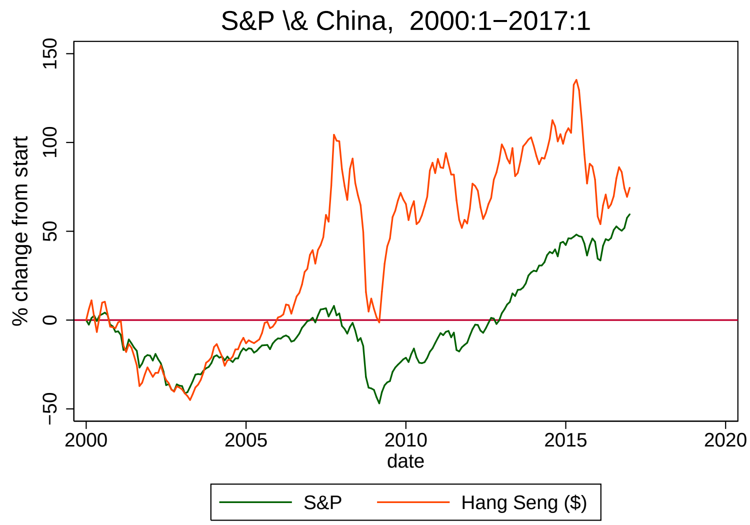
  The others, not so much

- Germany, U.K., France have all mainly fallen since beginning of 2014
- UK is below pre-crisis peak; France is even further below.

  And some European economies have performed even more poorly: Greece, Spain, Italy...

- This year, the drop has been particularly sharp (except for the U.S.)

▶ **U.S. China, new millenium**



- Hang Seng has has wider swings than S&P
- Very big drop in China since last August
- Folks are wondering whether we are in the popping of a bubble

  People are raising very serious questions about fundamental problems in China

- And there is that story about the firing of the top market regulator

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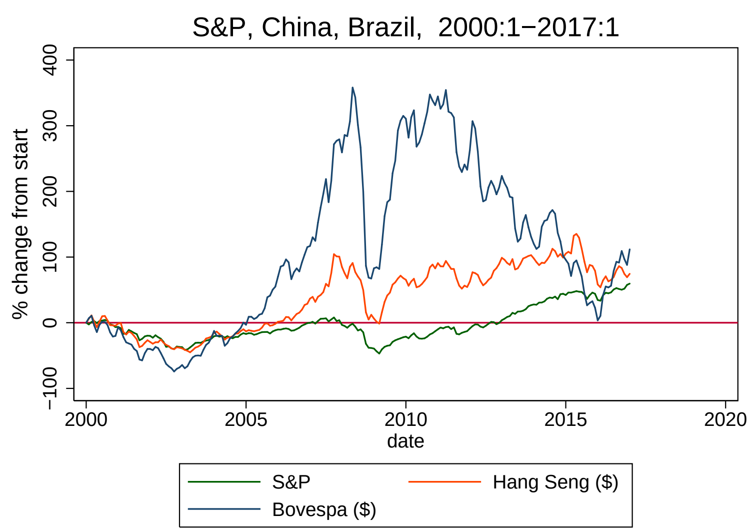
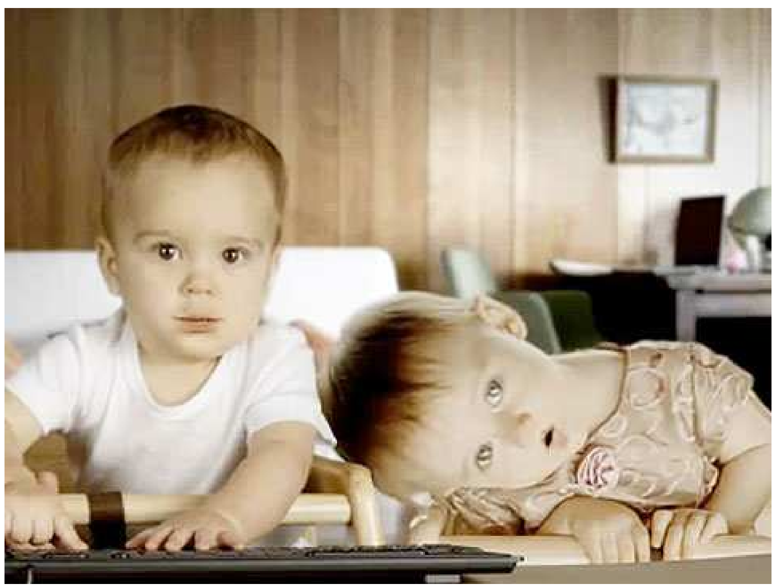
  http://www.ft.com/intl/cms/s/0/82d10b06-d781-11e5-969e-9d801cf5e15b.html

▶ **And the Bovespa, Brazil. . .**



- **One more lesson**
  - Every time a stock market takes off relative to others (Japan, 1980s; Brazil, China, 2000s) lots of folks pour money into those economies
  - Folks tell stories of some brave new economic order; that everything has changed.

    rush to get in on the ground floor.
  - Sometimes these stories are right; often they are wrong.
- **In my view: a big part of success vs. failure in the U.S., Europe, China, Brazil, everywhere is this: market institutions**
- **Next: how do secondary markets work? Or...**
- **...**



What the etrade baby forgot to tell you