"the Viceroy", displayed in a 1637 Dutch catalog
Jan Brueghel the Younger, Satire on Tulip Mania
Semper Augustus
Mackay: One Single root of the “Viceroy” sold for:

- Two lasts of wheat (448 florins)
- Four lasts of rye (558 florins)
- Four fat oxen (480 florins)
- Eight fat swine (240 florins)
- Twelve fat sheep (120 florins)
- Two Hogsheads of wine (70 florins)
- Four tons of beer (32 florins)
- Two tons of butter (192 florins)
- One thousands lbs. of cheese (120 florins)
- A complete bed (100 florins)
- A suit of clothes (80 florins)
- A silver drinking-cup (60 florins)
Thompson’s Tulip Price Index

Tulip price index
1636–37

Nov 12

Nov 25

Dec 1

Dec 12

Feb 3

Feb 5

Feb 9

May 1
Fig. 1 An index of prices recorded in Dutch tulip contracts
Commonly Expected, Realized, and Unexercised Strike Prices
Tulip Prices over the Whole Period
Tulip Growing Regions and Swedish Troops
South Sea Bubble
South Sea Bubble Shares

Figure 17.1
Daily South Sea Share Prices, 1720. Data courtesy of Larry Neal.
South Sea Bubble and Dotcom Mania

<table>
<thead>
<tr>
<th>Stock</th>
<th>Price increase*</th>
<th>Peak-to-trough**</th>
<th>St.dev. of daily returns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>South Sea bubble</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sea Company</td>
<td>843.0%</td>
<td>-88.0%</td>
<td>6.3%</td>
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<tr>
<td>East India Company</td>
<td>45.0%</td>
<td>-68.0%</td>
<td>12.8%</td>
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<tr>
<td>Bank of England</td>
<td>51.0%</td>
<td>-54.0%</td>
<td>15.8%</td>
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<tr>
<td><strong>Dotcom mania</strong></td>
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<tr>
<td>Amazon</td>
<td>188.0%</td>
<td>-79.9%</td>
<td>5.9%</td>
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<tr>
<td>Cisco</td>
<td>220.0%</td>
<td>-76.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Microsoft</td>
<td>86.0%</td>
<td>-65.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Note: * from minimum during 12 months prior to peak  
** 12 months subsequent to peak
South Sea Shares and Hoare’s Bank Trades
South Sea Shares and Hoare’s Holdings
The French Fiscal Dilemma
French Fiscal Crisis
Revenues and Spending

![Graph showing revenues and spending over time](image)

- **spending (gross of interest)**
- **revenues**
A Royal Bank Note, circa 1720
Fiscal System before Law

\[ g \leq \bar{\tau} - 90mL \]

- **State**
  - \( \bar{\tau} \)
  - "constant" = 90mL
- **Public**
  - creditor
- **Collectors**

Before

\[ \tau \]
Law’ Fiscal System

$g \leq \tau - 48mL$

States

$\tau - 48mL$

Creditors

Shareholders

Public

Company

Variable dividend $\geq 48mL$

After

Trade
Share Price of the Mississippi Company
Share Price
Did Hedge Funds Ride the Tech Bubble?
Did Soros Ride the Bubble?
Did Hedge Funds Time Stocks?
(Average share of outstanding equity held by hedge funds around price peaks of individual stocks)
Midterm One

mean = 68  std dev = 10.9