Class 1: Financial Markets Amidst Covid-19

Financial Markets, Spring 2021, SAIF

Jun Pan

Shanghai Advanced Institute of Finance (SAIF)
Shanghai Jiao Tong University

May 15-16, 2021
During the current Covid-19 crisis, the price discovery function of financial markets becomes all the more important. Financial market should remain open for:
  ▶ Timely aggregation and processing of otherwise diverse information.
  ▶ Efficient allocation and distribution of capital and resources.

Comparisons to past crises:
  ▶ 1987: stock market crash.
  ▶ 2020: ?

The politics of financial markets:
  ▶ Central banks and governments: their respective responses and responsibilities.
Capital Markets in the US and Chinese Economy

<table>
<thead>
<tr>
<th></th>
<th>End-2019</th>
<th>US</th>
<th>CN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>$21.4T</td>
<td>$14.3T</td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>$38T</td>
<td>$13T</td>
<td></td>
</tr>
<tr>
<td>Bond</td>
<td>$44T</td>
<td>$14T</td>
<td></td>
</tr>
<tr>
<td>Mutual Fund</td>
<td>$18T</td>
<td>$2T*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>End-2020</th>
<th>US</th>
<th>CN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>$20.9T</td>
<td>$14.7T</td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>$46T</td>
<td>$13T</td>
<td></td>
</tr>
<tr>
<td>Bond</td>
<td>$50T</td>
<td>$14T</td>
<td></td>
</tr>
<tr>
<td>Mutual Fund</td>
<td>$20T</td>
<td>$2T*</td>
<td></td>
</tr>
</tbody>
</table>

* Includes money market funds
Equity Markets’ Reactions to Covid-19: US and China

1/23: Wuhan lockdown.
2/04: Covid19 test approved by FDA.
2/12: CDC: Faulty virus tests.
2/24: Virus widely spread outside China.
2/25: Trump: USA under control.
2/26: Trump: Pence leads virus response.
2/27: CDC: test criteria revised.
3/03: Fed: rate cut by 50 bps.
3/10: President Xi visits Wuhan.
3/11: Trump: TV address.
3/12: Fed: injects $1.5T via term repo.
3/15: Fed: rate to zero and $700B QE.
3/25: Senate: $2T relief bill passed 96-0.
## Top 10 Worst One-Day SPX Returns

<table>
<thead>
<tr>
<th>Rank</th>
<th>Date</th>
<th>SPX Ret (%)</th>
<th>VIX (%)</th>
<th>SSE Ret (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10/19/1987</td>
<td>-20.47</td>
<td>150.19</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3/16/2020</td>
<td>-11.98</td>
<td>82.69</td>
<td>-3.40</td>
</tr>
<tr>
<td>3</td>
<td>3/12/2020</td>
<td>-9.51</td>
<td>75.47</td>
<td>-1.52</td>
</tr>
<tr>
<td>4</td>
<td>10/15/2008</td>
<td>-9.03</td>
<td>69.25</td>
<td>-1.12</td>
</tr>
<tr>
<td>5</td>
<td>12/1/2008</td>
<td>-8.93</td>
<td>68.51</td>
<td>1.25</td>
</tr>
<tr>
<td>6</td>
<td>9/29/2008</td>
<td>-8.79</td>
<td>46.72</td>
<td>0.00</td>
</tr>
<tr>
<td>7</td>
<td>10/26/1987</td>
<td>-8.28</td>
<td>113.33</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10/9/2008</td>
<td>-7.62</td>
<td>63.92</td>
<td>-0.84</td>
</tr>
<tr>
<td>9</td>
<td>3/9/2020</td>
<td>-7.60</td>
<td>54.46</td>
<td>-3.01</td>
</tr>
<tr>
<td>10</td>
<td>10/27/1997</td>
<td>-6.87</td>
<td>31.12</td>
<td>4.88</td>
</tr>
</tbody>
</table>
Past Crises: SPX vs. SSE

1997 Asian Crisis

1998 LTCM Crisis

2001/9/11 Terrorist Attack

2008 Crisis
Traditional Safe Havens and Fear Gauges in 2020

- **10-Year US Treasury (%):**
  - Jan: 1.8
  - Feb: 1.5
  - Mar: 1.2
  - Apr: 1.0
  - Mar 3: Rate Cut
  - Mar 16: Rate to 0
  - Mar 9

- **Gold ($):**
  - Jan: 1550
  - Feb: 1600
  - Mar: 1650
  - Apr: 1700
  - Mar 16: Rate to 0
  - Mar 12
  - Feb 27
  - Mar 9
  - Feb 24

- **YEN (Yen/$):**
  - Jan: 102
  - Feb: 104
  - Mar: 106
  - Apr: 108
  - Mar 16: Rate to 0
  - Mar 12
  - Feb 27
  - Mar 9
  - Feb 24

- **COBE VIX (%):**
  - Jan: 50
  - Feb: 60
  - Mar: 70
  - Apr: 80
  - Mar 16: Rate to 0
  - Mar 9
  - Feb 27
  - Mar 12

- **US Treasury Yield VIX (%):**
  - Jan: 4
  - Feb: 6
  - Mar: 8
  - Apr: 10
  - Mar 16: Rate to 0
  - Mar 9
  - Feb 27
  - Mar 12

- **Investment Grade CDX Index:**
  - Jan: 95
  - Feb: 96
  - Mar: 97
  - Apr: 98
  - Mar 16: Rate to 0
  - Mar 9
  - Feb 27
  - Mar 12

---

Financial Markets, Spring 2021, SAIF

Class 1: Financial Markets Amidst Covid-19

Jun Pan
March: the ultimate safe haven. 

Since June: steady decline
- Uncertain path to recovery.
- Recovery elsewhere (e.g., China).
- Monetary policy:
  - zero short rate.
  - sub 1% 10-yr rate.
  - infinite QE injecting trillions of USD.
- Declining reserve holdings by foreign central banks?
The Main Takeaways

- Financial markets are the most efficient aggregators of information.
- The maturation of China’s markets and their integration into the global markets:
  - The increasing correlation between the US and Chinese equity markets.
  - The Chinese yuan becoming a prime indicator of dollar’s strength.
  - China’s bond market (to be discussed later).

- Questions to be answered by next week’s student presentations:
  - What is the value of China’s equity market to global investors?
  - What are the risk and return?
  - For a global investor, what should be his/her optimal portfolio weight on China according to financial theory?