

Class 1: Financial Markets Amidst Covid-19

Financial Markets, Fall 2020, SAIF

Jun Pan

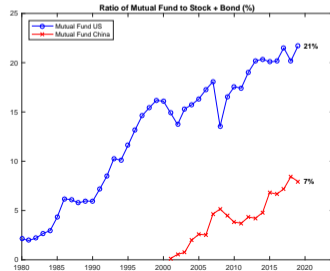
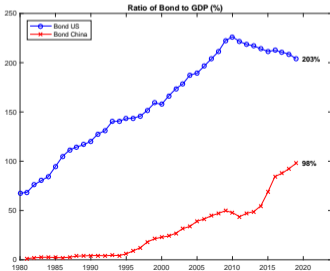
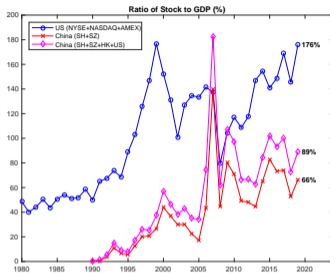
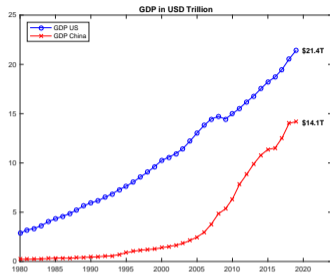
**Shanghai Advanced Institute of Finance (SAIF)
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November 23, 2020

Outline

- 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.
 - ▶ 2008: financial crisis.
 - ▶ 2020: ?
- The politics of financial markets:
 - ▶ Central banks and governments: their respective responses and responsibilities.
 - ▶ Collisions of states' interests: an all-out war on oil price in 2020 amid Covid-19.

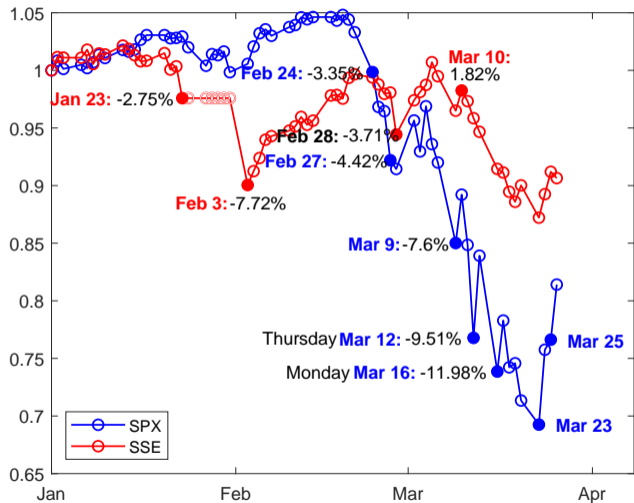
Capital Markets in the US and China Economy



End-2019	US	CN
GDP	\$21T	\$14T
Equity	\$38T	\$13T
Bond	\$44T	\$14T
Mutual Fund	\$18T	\$2T*

* Includes money market funds

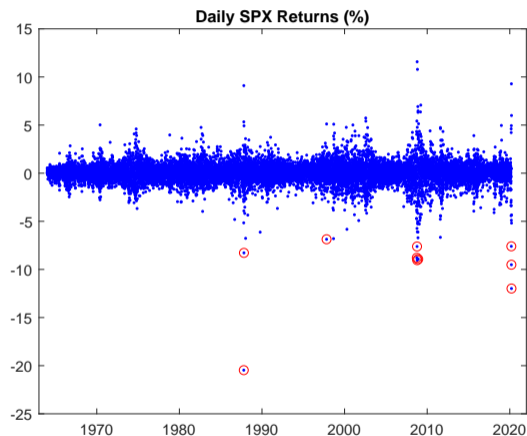
Equity Markets' Reactions to Covid-19: US and China



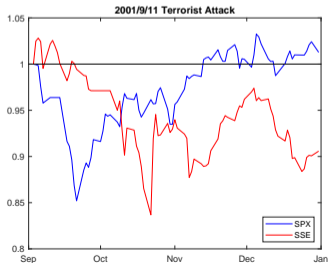
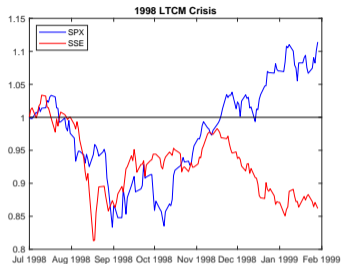
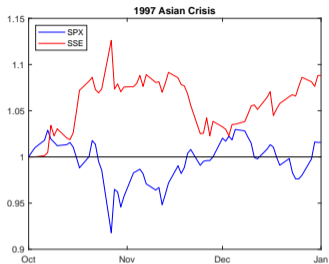
- 1/23: Wuhan lockdown.
- 2/04: Covid19 test approved by FDA.
- 2/12: CDC: Faulty virus tests.
- 2/24: Virus widely spread outside China.
- 2/25: Trump: USA under control.
- 2/26: Trump: Pence leads virus response.
- 2/27: CDC: test criteria revised.
- 3/03: Fed: rate cut by 50 bps.
- 3/10: President Xi visits Wuhan.
- 3/11: Trump: TV address.
- 3/12: Fed: injects \$1.5T via term repo.
- 3/13: Trump: national emergency.
- 3/15: Fed: rate to zero and \$700B QE.
- 3/17: Fed: CP funding & PD credit facility.
- 3/18: Fed: MMMF liquidity facility.
- 3/23: Fed: Infinite QE announced at 8 am.
- 3/25: Senate: \$2T relief bill passed 96-0.

Top 10 Worst One-Day SPX Returns

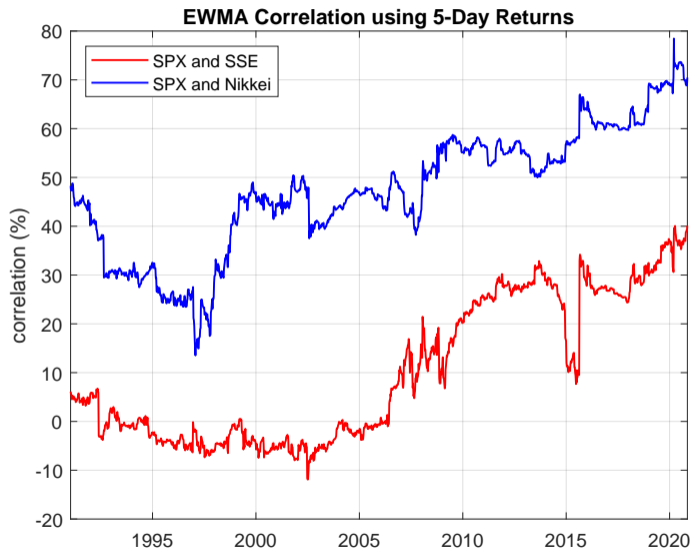
Rank		SPX Ret (%)	VIX (%)	SSE Ret (%)
1	10/19/1987	-20.47	150.19	
2	3/16/2020	-11.98	82.69	-3.40
3	3/12/2020	-9.51	75.47	-1.52
4	10/15/2008	-9.03	69.25	-1.12
5	12/1/2008	-8.93	68.51	1.25
6	9/29/2008	-8.79	46.72	0.00
7	10/26/1987	-8.28	113.33	
8	10/9/2008	-7.62	63.92	-0.84
9	3/9/2020	-7.60	54.46	-3.01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



Past Crises: SPX vs. SSE



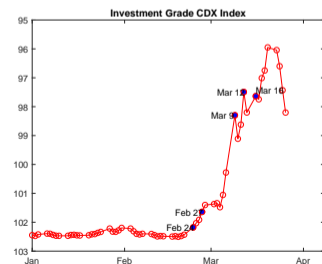
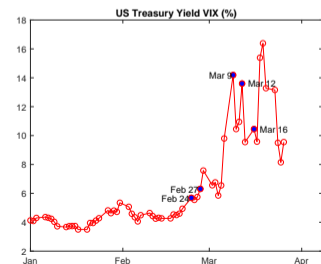
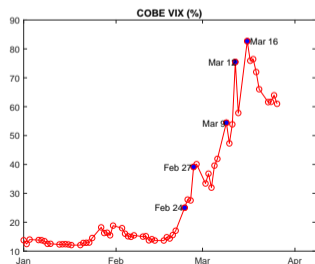
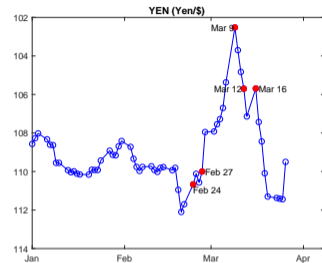
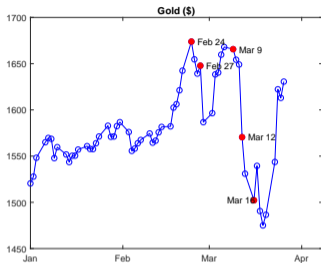
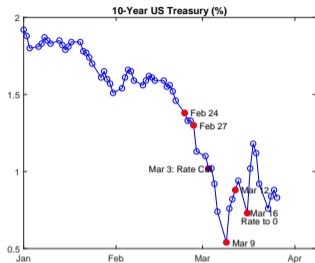
The US and China Correlation in Equity Markets



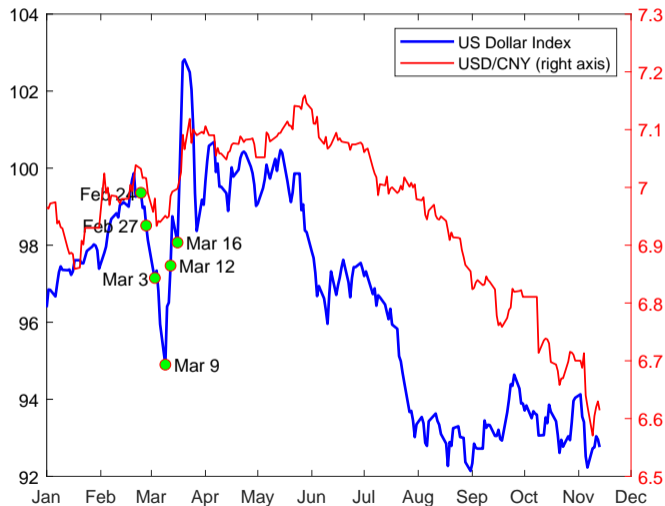
year	corr (%)	t-stat
2010	43	5.25
2011	37	3.35
2012	28	3.20
2013	39	2.75
2014	-11	-0.84
2015	35	1.51
2016	26	1.73
2017	-7	-0.51
2018	44	4.83
2019	40	3.28
2020	44	4.54

*Rolling windows of 5-day returns;
t-stats corrected for serial correlations.

Traditional Safe Havens and Fear Gauges in 2020



Dollar in 2020

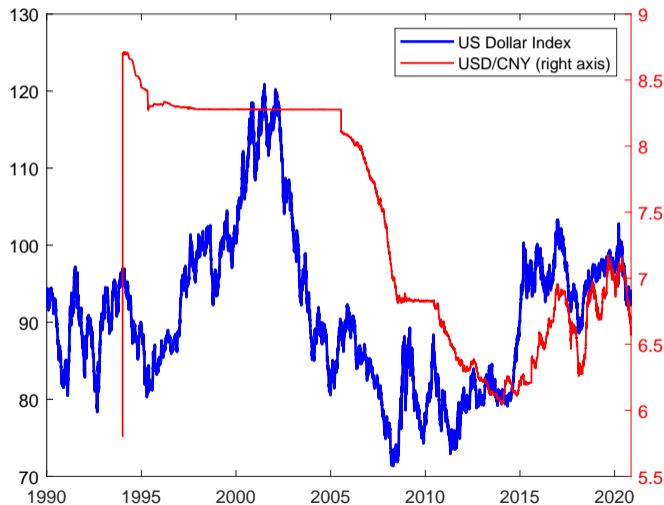


March: the ultimate safe haven.

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?

USD and RMB



For decades:

- RMB was fixed or very tightly managed by PBoC.
- played only a minor part in global markets.

Since 2015:

- allowed to trade more freely.
- enabled the RMB to become a prime indicator of USD's strength, as Yen did in the 1990s.

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 Wednesday'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?