A VIRAL MARKET UPDATE VI: THE PRICE OF RISK

Dynamic, not static...

The crisis updates continued...

- It is a sign of how volatile that the last few weeks that a week like the last one, where index levels move only 2-3% a day, huge by historic standards, felt stable.
- As in prior weeks, I will start this one by looking at how the market action played out across asset classes, and within equity, across regions and industries first
- The bulk of this post will be an update on the price of risk and how it has changed in both bond and stock markets over the last six weeks.
- In the process, I will compare this crisis to the 2008 crisis, which was also global and shook the faith people had in markets, institutions and companies.

The markets last week: Equities

				% CI	hange
	Index	Country/Region	Level on 4/3	3/27-4/3	Last Month
	S&P 500	US	2489	-2.70%	-22.29%
Americas	NASDAQ	US	7528	-2.08%	-20.49%
	TSX	Canada	12938	1.97%	-22.29%
	IPC Mexico	Mexico	33171	-1.86%	-23.57%
	Bovespa	Brazil	69538	-5.30%	-35.15%
	FTSE 100	UK	5416	-1.72%	-20.54%
	DAX	Germany	9526	-1.11%	-21.45%
Europe	CAC 40	France	4147	-4.69%	-23.98%
	S&P Euro 350	Europe	995	-3.38%	-23.32%
	Nikkei 225	Japan	17820	-8.09%	-15.54%
Asia	Shanghai 50	China	2709	0.27%	-8.10%
Asia	Hang Seng	Hong Kong	23236	-1.06%	-11.39%
	BSE	India	27591	-7.46%	-28.71%
Australia	ASX 200	Australia	5068	4.65%	-19.89%
& NZ	NZX 50	New Zealand	9935	3.96%	-12.99%
Africa	FTSE JSE top 40	South Africa	44599	3.85%	-15.74%
Africa	NSE All-Share	Nigeria	21099	-3.49%	-20.13%

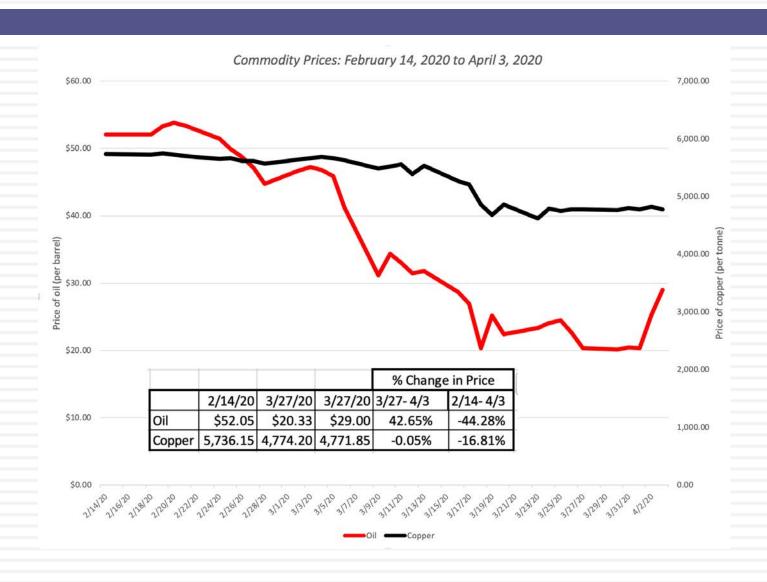
The markets last week: Treasuries

	Yields	on US Treas	uries	
Maturity	2/14/20	3/27/20	4/3/20	
3 month	1.58%	0.03%	0.10%	
2 year	1.42%	0.25%	0.23%	
5 year	1.42%	0.41%	0.39%	
10 year	1.59%	0.72%	0.62%	
20 year	1.89%	1.09%	1.05%	
30 year	2.04%	1.29%	1.24%	
	Yie	ld curve slop	e	
2 yr - 3 month	-0.16%	0.22%	0.13%	
10 yr - 2 yr	0.17%	0.47%	0.39%	
30 yr - 10 yr	0.45%	0.57%	0.62%	

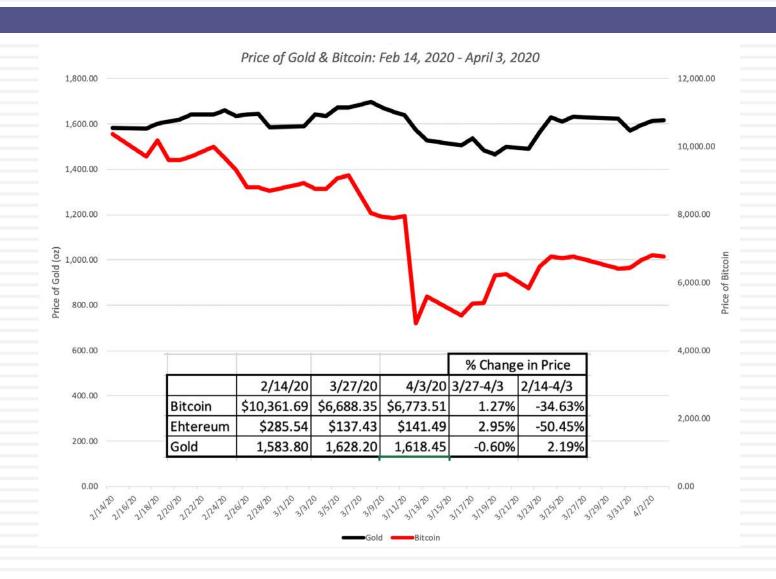
The markets last week: Corporate Bonds

	Yields and Spreads on Corporates											
	Spread	over 10-yr T	reasury	Yield on Bond								
S&P Bond Rating	2/14/20	3/27/20	4/2/20	2/14/20	3/27/20	4/2/20						
AAA	0.69%	1.52%	1.48%	2.28%	2.24%	2.10%						
AA	0.72%	1.89%	1.79%	2.31%	2.61%	2.41%						
Α	0.80%	2.46%	2.30%	2.39%	3.18%	2.92%						
BBB	1.33%	4.08%	3.97%	2.92%	4.80%	4.59%						
ВВ	1.93%	6.44%	6.56%	3.52%	7.16%	7.18%						
В	3.40%	9.59%	9.89%	4.99%	10.31%	10.51%						
CCC or lower	9.65%	17.17%	18.25%	11.24%	17.89%	18.87%						

The markets last week: Commodities



The markets last week: Gold & Bitcoin



Equities: By Region

								3/27-4/3		/3		2/14 - 4	1/3
		٨	Narket Cap	٨	Лarket Cap	٨	1arket Cap						
Sub Region	count		(2/14/20)		(3/27/20)		(4/3/20)		\$ Change	% Change	Ş	\$ Change	% Change
Africa	607	\$	573,381	\$	371,111	\$	354,215	\$	(16,896)	-4.55%	\$	(219,167)	-38.22%
Australia & NZ	1,359	\$	1,615,100	\$	1,014,786	\$	1,038,400	\$	23,614	2.33%	\$	(576,699)	-35.71%
Canada	1,574	\$	2,277,586	\$	1,522,703	\$	1,543,387	\$	20,684	1.36%	\$	(734,198)	-32.24%
China	6,176	\$	14,031,496	\$	12,672,163	\$	12,654,134	\$	(18,030)	-0.14%	\$	(1,377,363)	-9.82%
EU & Environs	4,785	\$	13,671,848	\$	10,171,423	\$	9,900,457	\$	(270,966)	-2.66%	\$	(3,771,390)	-27.59%
Eastern Europe & Russia	416	\$	818,126	\$	518,906	\$	565,954	\$	47,049	9.07%	\$	(252,172)	-30.82%
India	1,948	\$	2,201,881	\$	1,475,442	\$	1,408,760	\$	(66,682)	-4.52%	\$	(793,121)	-36.02%
Japan	3,819	\$	6,051,882	\$	5,241,757	\$	4,750,157	\$	(491,600)	-9.38%	\$	(1,301,725)	-21.51%
Latin America & Caribbean	933	\$	2,380,521	\$	1,461,726	\$	1,402,204	\$	(59,523)	-4.07%	\$	(978,317)	-41.10%
Middle East	1,148	\$	3,072,895	\$	2,609,650	\$	2,723,098	\$	113,448	4.35%	\$	(349,797)	-11.38%
Small Asia	7,987	\$	5,095,980	\$	3,812,633	\$	3,773,984	\$	(38,649)	-1.01%	\$	(1,321,996)	-25.94%
UK	1,102	\$	3,070,875	\$	2,152,456	\$	2,052,847	\$	(99,609)	-4.63%	\$	(1,018,028)	-33.15%
United States	4,943	\$	35,627,693	\$	26,363,212	\$	25,626,388	\$	(736,824)	-2.79%	\$ (10,001,306)	-28.07%
Global	36,797	\$	90,489,264	\$	69,387,968	\$	67,793,985	\$	(1,593,983)	-2.30%	\$(22,695,279)	-25.08%

Equities: By Sector

								3/27-4	/3	2/14 - 4	1/3
		٨	∕larket Cap	٨	Market Cap	٨	1arket Cap				
Primary Sector	count		(2/14/20)		(3/27/20)		(4/3/20)	\$ Change	% Change	\$ Change	% Change
Communication Services	1,697	\$	7,350,093	\$	5,846,937	\$	5,773,776	\$ (73,161)	-1.25%	\$ (1,576,317)	-21.45%
Consumer Discretionary	5,009	\$	10,154,302	\$	7,749,212	\$	7,313,709	\$ (435,504)	-5.62%	\$ (2,840,593)	-27.97%
Consumer Staples	2,314	\$	7,125,951	\$	6,011,003	\$	6,105,602	\$ 94,599	1.57%	\$ (1,020,349)	-14.32%
Energy	1,320	\$	5,939,342	\$	4,081,909	\$	4,339,487	\$ 257,578	6.31%	\$ (1,599,855)	-26.94%
Financials	3,958	\$	14,954,874	\$	10,680,135	\$	10,116,924	\$ (563,212)	-5.27%	\$ (4,837,950)	-32.35%
Health Care	3,434	\$	8,975,256	\$	7,497,464	\$	7,588,031	\$ 90,567	1.21%	\$ (1,387,225)	-15.46%
Industrials	6,584	\$	10,122,394	\$	7,565,330	\$	7,163,429	\$ (401,901)	-5.31%	\$ (2,958,964)	-29.23%
Information Technology	4,882	\$	13,619,285	\$	10,642,356	\$	10,345,371	\$ (296,985)	-2.79%	\$ (3,273,914)	-24.04%
Materials	4,469	\$	4,995,434	\$	3,781,593	\$	3,739,145	\$ (42,448)	-1.12%	\$ (1,256,289)	-25.15%
Real Estate	2,303	\$	4,046,102	\$	2,985,253	\$	2,855,025	\$ (130,228)	-4.36%	\$ (1,191,078)	-29.44%
Utilities	819	\$	3,205,164	\$	2,545,857	\$	2,452,583	\$ (93,273)	-3.66%	\$ (752,580)	-23.48%

Equities: Most & least damaged Industries

+								
			Wors	t Performers:	Week of 3/2	27 - 4/3		
					3/27	-4/3	2/14	- 4/3
		Market Cap	Market Cap	Market Cap				
Industry	count	(2/14/20)	(3/27/20)	(4/3/20)	\$ Change	% Change	\$ Change	% Change
Homebuilding	147	\$ 247,004	\$ 149,911	\$ 126,936	\$ (22,974)	-15.33%	\$(120,068)	-48.61%
Food Wholesalers	118	\$ 93,206	\$ 61,490	\$ 53,052	\$ (8,438)	-13.72%	\$ (40,154)	-43.08%
Aerospace/Defense	211	\$1,217,330	\$ 791,850	\$ 683,217	\$(108,633)	-13.72%	\$(534,114)	-43.88%
Trucking	179	\$ 238,158	\$ 171,688	\$ 152,694	\$ (18,994)	-11.06%	\$ (85,464)	-35.89%
Air Transport	151	\$ 559,587	\$ 341,073	\$ 306,939	\$ (34,134)	-10.01%	\$(252,647)	-45.15%
Auto & Truck	128	\$1,199,980	\$ 909,397	\$ 822,022	\$ (87,375)	-9.61%	\$(377,958)	-31.50%
Banks (Regional)	786	\$1,013,028	\$ 706,428	\$ 642,234	\$ (64,194)	-9.09%	\$(370,794)	-36.60%
Hotel/Gaming	502	\$ 711,573	\$ 428,985	\$ 392,855	\$ (36,130)	-8.42%	\$(318,718)	-44.79%
R.E.I.T.	761	\$2,212,624	\$1,525,793	\$1,402,508	\$(123,285)	-8.08%	\$(810,116)	-36.61%
Apparel	854	\$1,066,653	\$ 832,131	\$ 767,713	\$ (64,418)	-7.74%	\$(298,940)	-28.03%
			Best	Performers: \	Week of 3/2	7 - 4/3		
					3/27	-4/3	2/14 - 4/3	
		Market Cap	Market Cap	Market Cap				
Industry	count	(2/14/20)	(3/27/20)	(4/3/20)	\$ Change	% Change	\$ Change	% Change
Oil/Gas (Production and Exploration)	480	\$ 692,989	\$ 342,189	\$ 386,550	\$ 44,361	12.96%	\$(306,439)	-44.22%
Oil/Gas (Integrated)	50	\$3,679,307	\$2,775,504	\$2,974,298	\$ 198,793	7.16%	\$(705,009)	-19.16%
Tobacco	38	\$ 483,737	\$ 374,434	\$ 393,723	\$ 19,288	5.15%	\$ (90,014)	-18.61%
Drugs (Pharmaceutical)	1,069	\$3,629,250	\$3,091,549	\$3,190,881	\$ 99,332	3.21%	\$(438,369)	-12.08%
Oil/Gas Distribution	186	\$ 653,945	\$ 375,005	\$ 386,600	\$ 11,595	3.09%	\$(267,345)	-40.88%
Coal & Related Energy	183	\$ 170,618	\$ 142,592	\$ 146,498	\$ 3,907	2.74%	\$ (24,120)	-14.14%
Drugs (Biotechnology)	915	\$1,411,386	\$1,216,821	\$1,246,095	\$ 29,274	2.41%	\$(165,291)	-11.71%
Food Processing	1,031	\$1,793,037	\$1,582,975	\$1,616,810	\$ 33,835	2.14%	\$(176,227)	-9.83%
Retail (General)	202	\$1,056,577	\$ 887,698	\$ 904,091	\$ 16,393	1.85%	\$(152,486)	-14.43%
Heathcare Information and Technology	320	\$ 772,848	\$ 646,130	\$ 656,548	\$ 10,418	1.61%	\$(116,300)	-15.05%

Equities: By Class

- I also did the breakdown, looking at companies in PE classes, momentum classes (based upon price change over the year leading into 2/14/20, net debt classes and dividend/buyback classes).
- I found that the only categorization where there is significant differentiation is net debt, where more highly levered companies continue to be punished more than less levered companies.
- In short, there is no evidence so far that the punishment is being meted out to the stocks that have benefited the most from the long up run in stock prices.

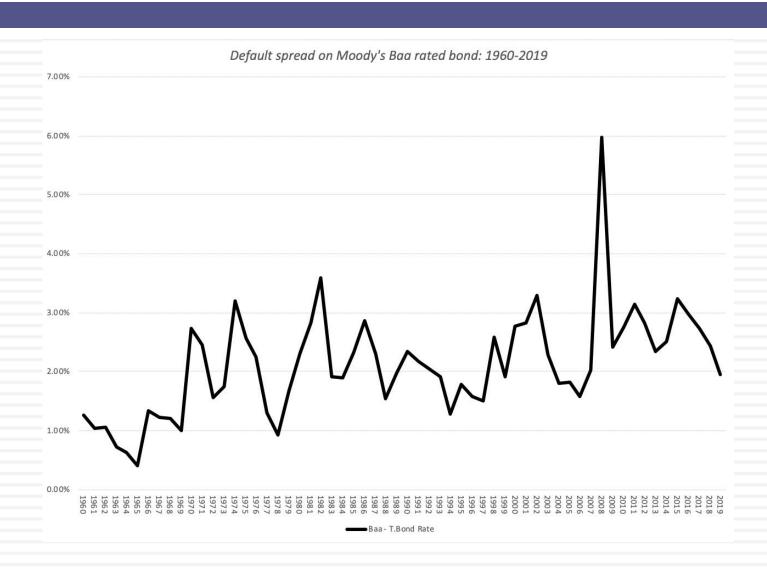
Equities; By bond rating...

		-											
									3/27-4	/3		2/14 - 4	4/3
S&P Entity Credit Rating -													
Issuer Credit Rating -													
Foreign Currency LT		٨	1arket Cap	٨	Лarket Cap	N	1arket Cap						
[Latest] (Rating)	count		(2/14/20)		(3/27/20)		(4/3/20)	,	\$ Change	% Change		\$ Change	% Change
AAA	3	\$	1,814,526	\$	1,469,979	\$	1,530,640	\$	60,661	4.13%	\$	(283,885)	-15.65%
AA+	4	\$	2,505,479	\$	1,882,014	\$	1,844,511	\$	(37,503)	-1.99%	\$	(660,968)	-26.38%
AA	18	\$	2,067,352	\$	1,616,429	\$	1,680,300	\$	63,870	3.95%	\$	(387,052)	-18.72%
AA-	49	\$	5,896,066	\$	4,832,642	\$	4,817,932	\$	(14,710)	-0.30%	\$	(1,078,134)	-18.29%
A+	81	\$	5,445,976	\$	4,321,637	\$	4,272,141	\$	(49,496)	-1.15%	\$	(1,173,835)	-21.55%
A	152	\$	6,465,210	\$	5,045,792	\$	4,861,914	\$	(183,878)	-3.64%	\$	(1,603,296)	-24.80%
A-	194	\$	7,282,965	\$	5,400,057	\$	5,147,930	\$	(252,128)	-4.67%	\$	(2,135,035)	-29.32%
BBB+	296	\$	7,196,511	\$	5,247,472	\$	5,088,034	\$	(159,438)	-3.04%	\$	(2,108,477)	-29.30%
BBB	363	\$	6,266,440	\$	4,499,248	\$	4,360,998	\$	(138,251)	-3.07%	\$	(1,905,442)	-30.41%
BB+	185	\$	1,646,204	\$	1,136,306	\$	1,088,619	\$	(47,688)	-4.20%	\$	(557,585)	-33.87%
BB	215	\$	1,269,037	\$	847,445	\$	836,208	\$	(11,237)	-1.33%	\$	(432,829)	-34.11%
BB-	211	\$	1,260,748	\$	797,442	\$	750,925	\$	(46,517)	-5.83%	\$	(509,822)	-40.44%
B+	146	\$	429,089	\$	263,856	\$	251,880	\$	(11,976)	-4.54%	\$	(177,209)	-41.30%
В	144	\$	261,985	\$	153,770	\$	140,142	\$	(13,628)	-8.86%	\$	(121,843)	-46.51%
B-	105	\$	305,558	\$	190,381	\$	173,760	\$	(16,621)	-8.73%	\$	(131,798)	
CCC+	61	\$	36,018	\$	15,567	\$	15,949	\$	382	2.45%	\$	(20,069)	-55.72%
ccc	18	\$	4,833	\$	2,539	\$	2,816	\$	278	10.95%	\$	(2,016)	-41.72%
CCC-	12	\$	4,557	\$	2,715	\$	2,507	\$	(208)	-7.68%	\$	(2,050)	-44.99%
CC	7	\$	820	\$	238	\$	176	\$	(62)	-26.11%	\$	(644)	-78.52%
D	7	\$	439	\$	153	\$	104	\$	(49)	-31.93%	\$	(335)	-76.28%

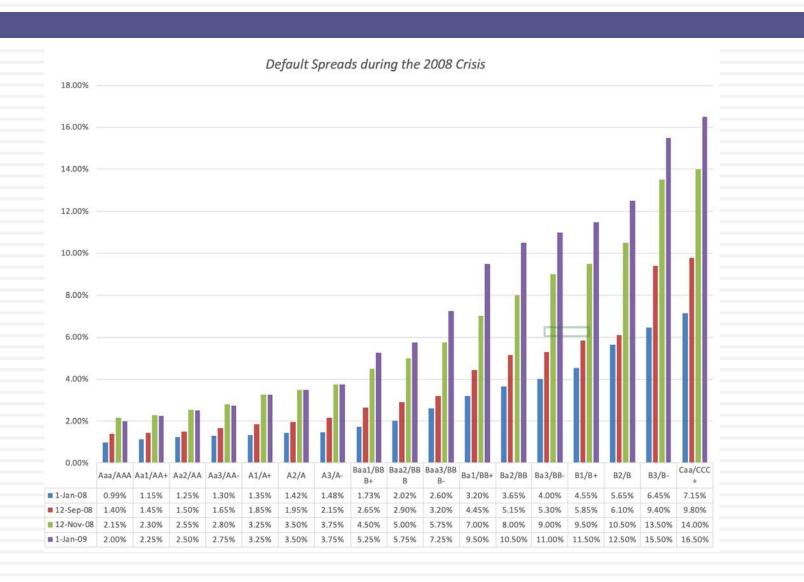
The price of risk: Determinants

- The price of risk changes on a day-to-day basis, and is determined by a combination of variables that encompass almost everything going on in the world from
 - uncertainty about future economic growth (more uncertainty -> higher price for risk) to
 - political stability (more instability -> higher price for risk) to
 - worries about catastrophes/disasters (more worries -> higher price for risk) to
 - investor risk aversion (greater risk aversion -> higher price for risk) to
 - information availability/reliability (less reliable and accessible information -> higher risk premiums).
- The more general point though that emerges from identifying the determinants is that changes in these determinants will play out as changing prices for risk, and since investing and valuation has to be based upon current and update prices for risk, you need measurement approaches that capture these day-to-day changes.

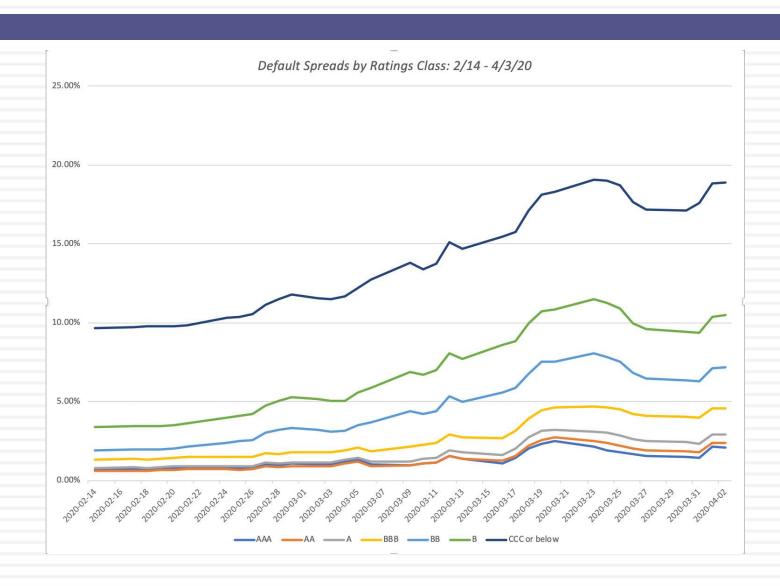
A Bond Market Price of Risk



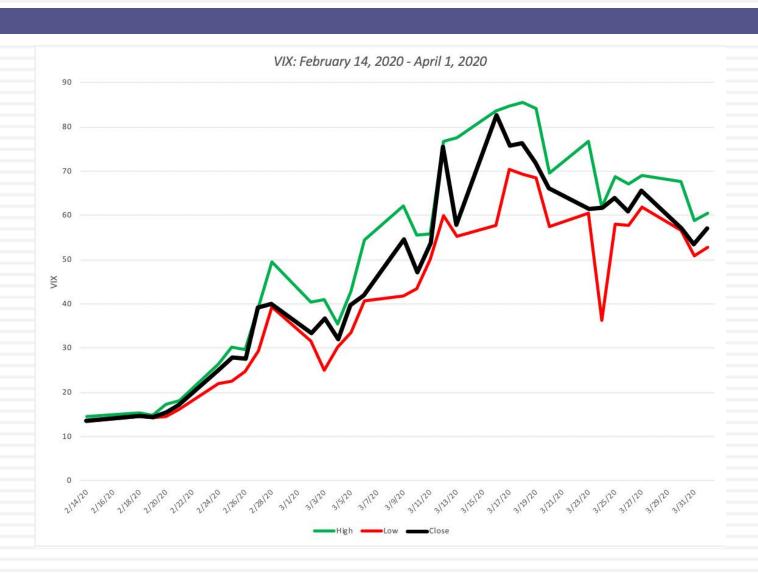
Bond Default Spreads during the 2008 crisis



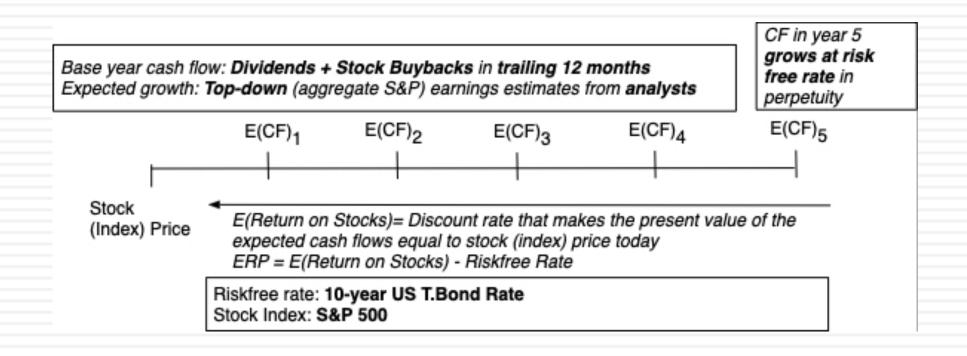
Bond Market Default Spreads: The COVID crisis



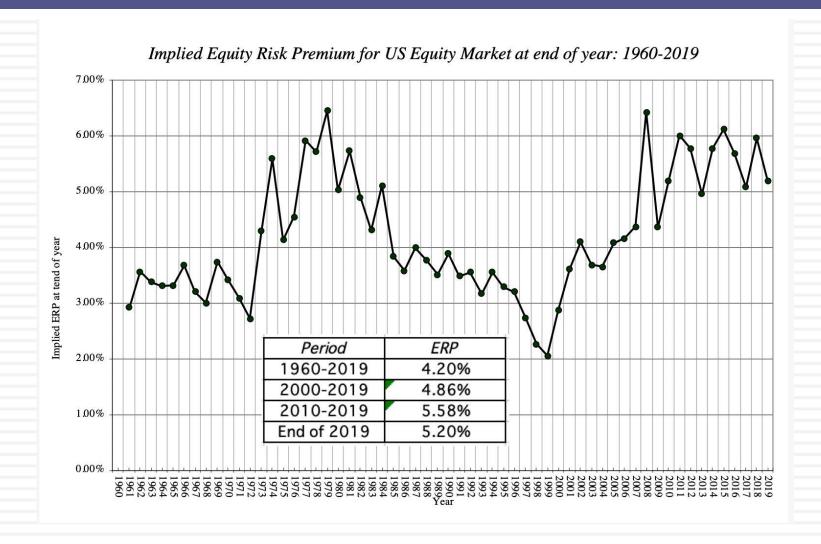
Equity Risk: VIX



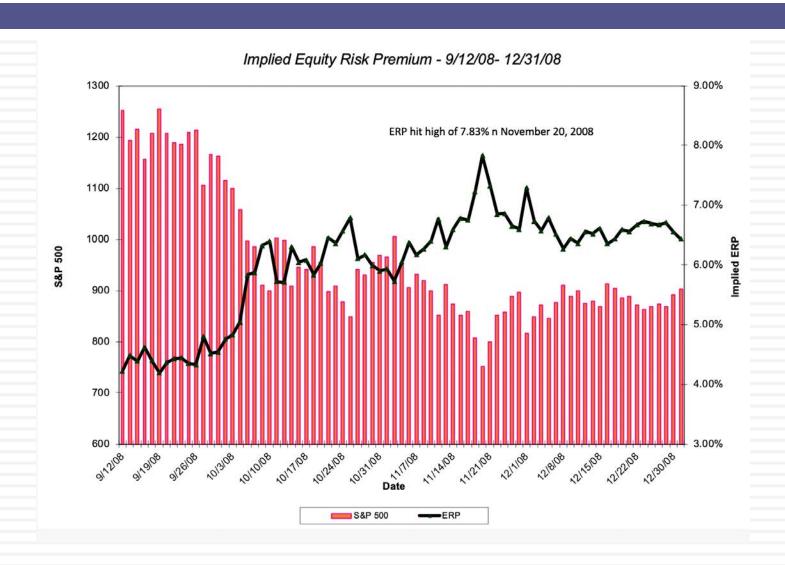
An Equity Market Price of Risk



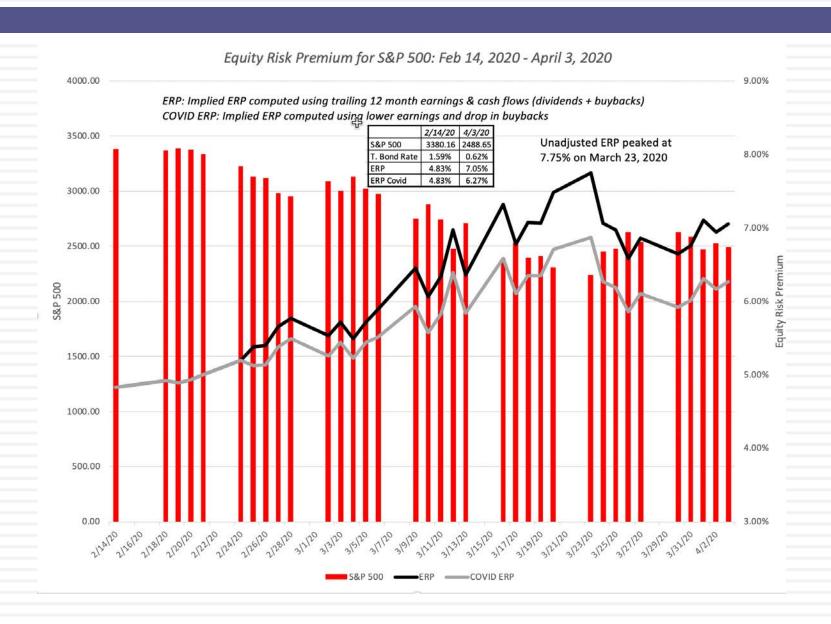
With historical perspective



The 2008 Crisis



The COVID crisis



Country Risk Premiums: Resetting the base numbers

ERP Estimation Procedure - April 1, 2020

Step 1: Mature Market Premium

Step 2: Assess country risk

Step 3: Convert country risk measure into an additional country risk premium for equity

Step 4: Estimate an ERP for country

Estimate the implied equity risk premium for S&P 500

On April 1, 2020, ERP for S&P 500 was roughly 6.01% if sovereign rating is AAA

ERP for country = US ERP

Check the sovereign local currency rating for the country, with Moody's.

If rating not available on Moody's, check on S&P & convert into Moody's equivalent If sovereign rating is less than AAA, get a default spread for the country, using one of

- 1. Spread on sovereign bond in US\$
- 2. CDS spread (April 1, 2020)
- 3. Ratings table

Relative Equity
Market Volatility =
Std dev of
emerging market
equity index/ Std
dev of emerging
market bond index

ERP for country
= US ERP
+ Default Spread *
Relative Equity Market
Volatility

In April 2020 = 1.23

If there is no sovereign rating, get a country risk score from PRS.

Estimate an ERP based on PRS score

ERP for country = PRSbased ERP

Monthly

	770		western Europe	7.5176	6.01%
			Western Europe	7.51%	6.01%
Isle of Man	6.92%	5.69%	United Kingdom	6.92%	5.69%
Ireland	7.56%	6.04%	Turkey	14.25%	9.64%
Iceland	7.56%	6.04%	Switzerland	6.01%	5.20%
Guernsey (States of)	8.93%	6.77%	Sweden	6.01%	5.20%
Greece	14.25%	9.64%	Spain	8.93%	6.77%
Germany	6.01%	5.20%	Portugal	10.04%	7.37%
France	6.92%	5.69%	Norway	6.01%	5.20%
Finland	6.74%	5.59%	Netherlands	6.01%	5.20%
Denmark	6.01%	5.20%	Malta	7.56%	6.04%
Cyprus	11.51%	8.16%	Luxembourg	6.01%	5.20%
Belgium	7.12%	5.80%	Liechtenstein	6.01%	5.20%
Austria	6.74%	5.59%	Jersey (States of)	7.30%	5.89%
Andorra	9.49%	7.08%	Italy	10.04%	7.37%

Canada	6.01%	5.20%		
United States	6.01%	5.20%		
North America	6.01%	5.20%		

Argentina	24.52%	14.08%
Belize	17.91%	11.62%
Bolivia	14.25%	8.75%
Brazil	11.51%	8.16%
Chile	7.30%	5.89%
Colombia	9.49%	7.08%
Costa Rica	16.08%	9.64%
Ecuador	24.30%	11.62%
El Salvador	17.91%	11.62%
Guatemala	10.58%	7.66%
Honduras	14.25%	9.64%
Mexico	8.21%	6.38%
Nicaragua	17.91%	10.63%
Panama	8.93%	6.77%
Paraguay	10.58%	7.66%
Peru	8.21%	6.38%
Suriname	16.08%	10.63%
Uruguay	14.25%	9.64%
Venezuela	24.52%	22.89%
Latin America	11.79%	8.48%

1	1		1
I	Angola	17.91%	11.62%
E	Benin	16.08%	10.63%
E	Botswana	7.56%	6.04%
E	Burkina Faso	16.08%	10.63%
C	Cameroon	16.08%	10.63%
C	Cape Verde	16.08%	10.63%
C	Congo (DR)	19.73%	12.59%
C	Congo (Republic of)	22.49%	14.08%
, (Côte d'Ivoire	12.60%	8.75%
E	Egypt	16.08%	10.63%
E	Ethiopia	14.25%	9.64%
(Gabon	19.73%	12.59%
C	3hana	17.91%	11.62%
ŀ	Cenya	16.08%	10.63%
N	Mali	17.91%	11.62%
N	Morocco	10.58%	7.66%
N	Mozambique	22.49%	14.08%
1	Namibia	11.51%	8.16%
ľ	Niger	17.91%	11.62%
1	Nigeria	16.08%	10.63%
F	Rwanda	16.08%	10.63%
S	Senegal	12.60%	8.75%
S	South Africa	10.58%	7.37%
S	Swaziland	16.08%	10.63%
7	l'anzania	14.25%	9.64%
7	Годо	17.91%	11.62%
7	Γunisia	16.08%	10.63%
Ţ	Jganda	16.08%	10.63%
7	Zambia	24.52%	14.08%
F	Africa	14.71%	9.89%

Albania	14.25%	9.64%
Armenia	12.60%	8.75%
Azerbaijan	11.51%	8.16%
Belarus	17.91%	11.62%
Bosnia and Herzego	17.91%	11.62%
Bulgaria	9.49%	7.08%
Croatia	11.51%	8.16%
Czech Republic	7.12%	5.80%
Estonia	7.30%	5.89%
Georgia	11.51%	8.16%
Hungary	10.04%	7.37%
Kazakhstan	10.04%	7.37%
Kyrgyzstan	16.08%	10.63%
Latvia	8.21%	6.38%
Lithuania	8.21%	6.38%
Macedonia	12.60%	8.75%
Moldova	17.91%	11.62%
Montenegro	14.25%	9.64%
Poland	7.56%	6.04%
Romania	10.04%	7.37%
Russia	10.04%	7.37%
Serbia	12.60%	8.75%
Slovakia	7.56%	6.04%
Slovenia	8.93%	6.77%
Tajikistan	17.91%	11.62%
Ukraine	19.73%	12.59%
Uzbekistan	9.49%	7.08%
E. Europe & Russia	9.98%	7.34%

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6.92%	5.69%
16.08%	10.63%
19.73%	12.59%
7.30%	5.89%
14.25%	9.64%
6.92%	5.69%
24.52%	14.08%
11.51%	7.66%
7.12%	5.80%
19.73%	12.59%
7.30%	5.89%
9.49%	6.38%
6.92%	5.69%
8.93%	6.77%
	16.08% 19.73% 7.30% 14.25% 6.92% 24.52% 11.51% 7.12% 19.73% 7.30% 9.49% 6.92%

PRS Risk Score	ERP (4/1/20)	ERP (1/1/20)
63	17.91%	11.62%
82.75	6.74%	5.59%
63.75	17.91%	11.62%
57	24.30%	15.06%
63.25	17.91%	11.62%
63.75	17.91%	11.62%
57.5	22.49%	14.08%
62.5	17.91%	11.62%
50.5	27.03%	17.03%
49.5	31.93%	21.71%
69.5	11.51%	8.16%
65.5	16.08%	10.63%
63.5	17.91%	11.62%
64	17.91%	11.62%
57	24.30%	15.06%
53	27.03%	17.03%
39.75	31.93%	21.71%
53	27.03%	17.03%
54.5	27.03%	17.03%
50.5	27.03%	17.03%
	63 82.75 63.75 57 63.25 63.75 57.5 62.5 50.5 49.5 69.5 65.5 63.5 64 57 53 39.75 53 54.5	63 17.91% 82.75 6.74% 63.75 17.91% 57 24.30% 63.25 17.91% 57.5 22.49% 62.5 17.91% 50.5 27.03% 49.5 31.93% 69.5 11.51% 65.5 16.08% 63.5 17.91% 57 24.30% 58 27.03% 39.75 31.93% 59 27.03% 39.75 31.93% 59 27.03% 59 27.03%

Bangladesh	12.60%	8.75%
Cambodia	16.08%	10.63%
China	7.30%	5.89%
Fiji	12.60%	8.75%
Hong Kong	7.12%	5.69%
India	9.49%	7.08%
Indonesia	9.49%	7.08%
Japan	7.30%	5.89%
Korea	6.92%	5.69%
Laos	8.21%	NA
Macao	7.12%	5.80%
Malaysia	8.21%	6.38%
Maldives	16.08%	10.63%
Mauritius	8.93%	6.77%
Mongolia	17.91%	11.62%
Pakistan	17.91%	11.62%
Papua New Guinea	16.08%	10.63%
Philippines	9.49%	7.08%
Singapore	6.01%	5.20%
Solomon Islands	17.91%	11.62%
Sri Lanka	16.08%	10.63%
Taiwan	7.12%	5.80%
Thailand	8.93%	6.77%
Vietnam	12.60%	8.75%
Asia	7.89%	6.21%

Australia & NZ	6.02%	5.20%
New Zealand	6.01%	5.20%
Cook Islands	14.25%	9.64%
Australia	6.01%	5.20%

Red: ERP on 4/1/20 Green: ERP on 1/1/20

In conclusion...

- One of the biggest lessons that I learned from the 2008 crisis was to move away from static approaches for computing equity risk premiums, dependent on looking at long periods of history.
- The lessons that I learned during the last three months of 2008 made me switch completely to using implied equity risk premiums in my valuation and corporate financial analysis and to compute them on a monthly basis.
- This crisis has reinforced that practice. I have always found it difficult to grasp how companies can use hurdle rates that are not only set in stone, but set in stone a decade or two ago, even as the market environment shifts and the price of risk changes.
- The median cost of capital for a global company, which was 7.6% at the start of 2020, is now closer to 8.5%, with the increase in risk premiums more than compensating for the decline in risk free rates.