

COVID-19 Statistical Review

Today's Analysis: Data from October 19, 2020

On Monday, cases were up significantly and deaths up as well WOW. Part of the cases dynamic was the faulty weekend reporting, accounting for about 5,000 additional cases Monday. Of course, those cases should have been added to Sunday's total. More importantly, we see two effects in the top chart in Exhibit 4. As we enter the traditional flu season, cases are up in all four groups. In Groups One and Two, the mature groups, that effect is small, telling us that COVID is not having a big resurgence.

But what of the other two Groups? They are up a bunch. Is this a fall resurgence? Look at the final chart in Exhibit 4. It gives the share of new cases by group. That chart shows that Groups Three and Four have been increasing their share of cases since the beginning of July, well before any seasonal effects. What we have then is the movement of the contagion into fresh territory, as it moved from Group One to Group Two in late May. As scary as those increases are, this is good news, because Groups One and Two have proved that such increases eventually peter out as the group achieves herd immunity. Forgive me for repeating this. It's important to understand because people are understandably uncomfortable with the persistence of this bug and the obvious recent surge in cases (and a smaller increase in deaths). In this regard, the corrected numbers (Exhibit 3) show that the recent case increase is about half as bad as the raw numbers report, or a fifth of what happened during the June acceleration. Things are getting better, even if at a much slower pace than we want.

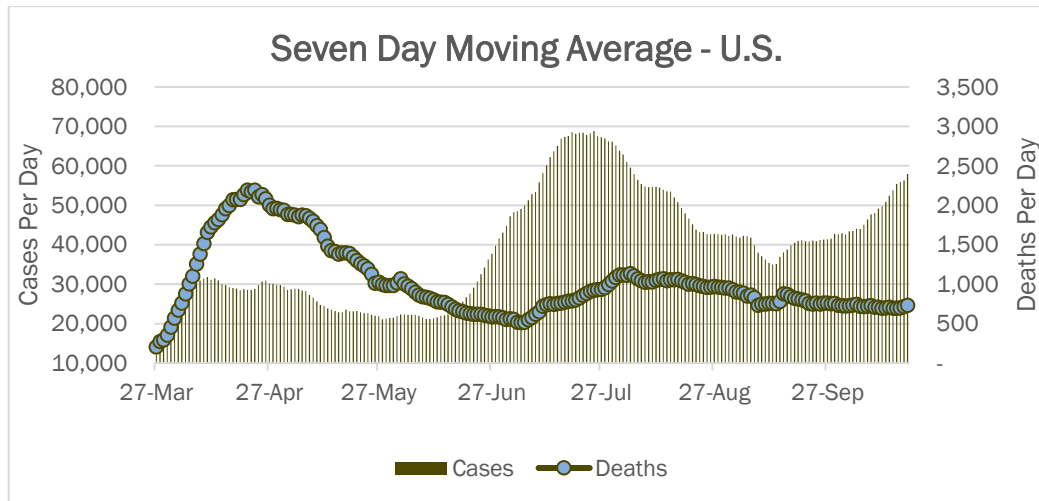
In other analysis - one of my readers asked me to present the results of studies supporting the use of masks:

If you Google 'effectiveness of COVID masks', you will get a long list of articles supporting mask use. I have reviewed a dozen or so of them and found that the primary justification for masks is the reduction of droplet spraying. The mask provides a mechanical barrier to the sprays. They do not address carefully (if at all) the effectiveness of reducing aerosol dispersion, increasingly identified as a major element in infection. The critics of masks cite the importance of aerosols in the transmission of the virus. Unfortunately, the scientific community is still not sure how COVID is spread. This uncertainty leaves us with the following confusing claims. The studies find good results in the reduction of droplet sprays, i.e., a person's projecting droplets into the atmosphere. So everybody must wear a mask to prevent their infecting others. However, the studies do not find good results in masks protecting people from infection. So, wearing a mask does not protect the wearer from others. Sounds contradictory. The explanation is: although a mask may prevent the inhalation of infected droplets, one means of transmission, it does not prevent the many other means of transmission, means that apparently have more effect than inhaling droplets. The means include: virus particles on surfaces, particles in the air, particles collected on the outside of a mask. A highly contagious virus ends up everywhere. One concludes that masks, at least the crude things that we wear and misuse, provide a modicum of protection. Since the cost is minimal, wearing one by a risk-averse person is justified, even if, over time, that person will still be exposed via the mechanisms that masks are less effective at handling.

I hope that helps. Please feel free to make other such requests, and I will do my best to answer.

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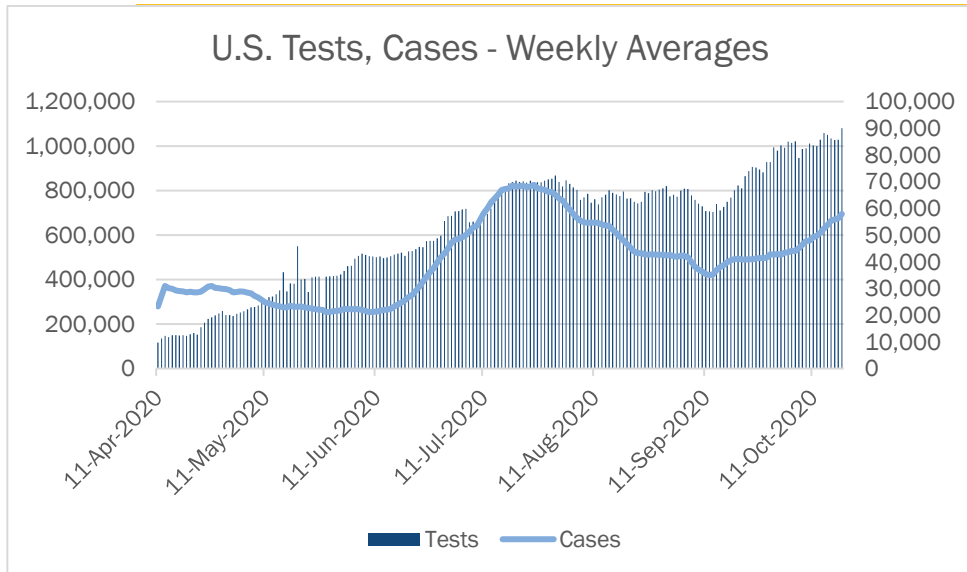
Exhibit 1



Country	Status	Cases	Deaths	Death Rate	Pop per case	Pop per death	Daly Max Cases	New Cases Latest Day	Daily Max Deaths	New Deaths Latest Day	Change In New Case Count Latest Day	Change In New Case Count From Week Before	Change in New Death Count Latest Day	Change in New Death Count From Week Ago
China	Recovery	85,685	4,634	5.4%	16,667	333,333	6,000	13	150	-	-	(8)	0	0
S. Korea	Recovery	25,275	444	1.8%	2,028	111,111	851	76	9	-	(15)	(21)	-1	-1
Italy	Recovery	423,578	36,616	8.6%	143	1,650	6,557	9,338	919	73	(2,367)	4,719	4	34
Iran	Inflection	534,631	30,712	5.7%	158	2,747	4,329	4,251	235	337	361	45	85	65
Germany	Recovery	373,731	9,899	2.6%	224	8,475	6,933	6,750	333	33	1,502	1,947	20	14
France	Recovery?	910,277	33,623	3.7%	72	1,942	14,412	13,243	1,809	146	(16,594)	4,738	61	50
UK	Recovery	741,212	43,726	5.9%	92	1,555	8,681	18,804	980	80	1,822	4,832	13	30
Norway	Recovery	16,603	278	1.7%	327	19,608	399	147	16	-	59	32	0	-1
Netherlands	Recovery?	236,226	6,768	2.9%	73	2,532	2,713	7,992	234	17	(190)	1,147	3	5
Sweden	Recovery?	103,200	5,918	5.7%	98	1,709	2,214	-	185	-	-	-	0	0
USA	Rising	8,456,653	225,222	2.7%	39	1,473	61,690	57,327	2,804	442	12,386	11,536	-6	126
Spain	Recovery	1,015,795	33,992	3.3%	46	1,376	11,291	12,214	961	73	12,214	2,928	73	8
Switzerland	Recovery	83,159	2,138	2.6%	104	4,065	1,321	8,737	75	15	8,737	4,669	14	7
Belgium	Recovery?	222,253	10,413	4.7%	52	1,115	2,454	9,138	496	21	(1,826)	3,811	-12	5
Denmark	Recovery?	35,844	686	1.9%	162	8,475	453	452	22	6	1	63	5	4
Austria	Recovery	65,927	904	1.4%	137	10,000	1,321	1,121	30	11	(551)	142	7	7
Canada	Recovery	201,437	9,778	4.9%	188	3,876	1,920	3,289	222	18	1,462	2,314	4	4
Ireland	Recovery	50,993	1,852	3.6%	-	2,674	1,515	1,031	220	-	(252)	208	-3	-1
Portugal	Recovery	101,860	2,198	2.2%	100	4,630	1,516	1,949	37	17	93	700	-2	3
Australia	Recovery	27,399	905	3.3%	934	28,571	534	8	41	1	-	(13)	1	1
Brazil	Recovery?	5,251,127	154,226	2.9%	41	1,381	70,869	15,783	1,554	321	4,801	7,354	106	118
Malaysia	Recovery	21,363	190	0.9%	1,520	166,667	235	865	8	3	(6)	302	-4	1
Mexico	Falling	851,227	86,167	10.1%	152	1,502	8,458	4,119	1,092	108	(1,328)	944	-247	-31
Singapore	Recovery	57,915	28	0.0%	101	200,000	1,426	4	2	-	(3)	-	0	-1
North America	Rising	9,509,317	321,167	3.4%	52	1,553	86,966	64,735	2,974	568	12,520	14,794	(249)	99
Western Europe	Rising	4,380,658	189,011	4.3%	92	2,129	35,453	90,916	4,450	492	2,648	29,936	183	165
Other	Falling	26,745,325	612,580	2.3%	257	11,220	220,687	182,203	4,338	3,329	(2,241)	17,892	484	369
World	Rising	40,635,300	1,122,758	2.8%	192	6,944	306,439	337,854	7,960	4,389	12,927	62,622	418	633

Source: Worldometer.com, Transport Futures

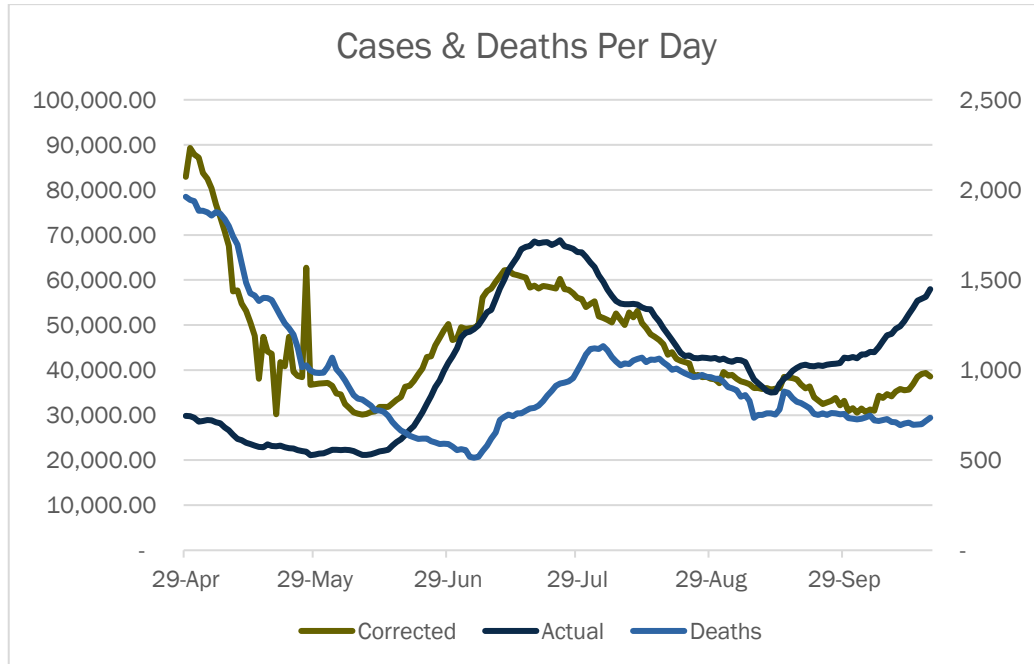
Exhibit 2



	Hot Spot Group	Total Cases	Max New Cases/Day	New Cases	Change in New Cases/Day	Change In Cases/Day	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day	New Deaths	Change In New Deaths/Day	Change In Deaths/Day	Change In Deaths/Day Since Max	Cases/M	Deaths/Million	Population
			Since 21 April	Latest Day	Since New	Since Week Ago			Since 21 April	Latest Day	Since Week Ago	Since Max				
USA Total	All	8,456,653	78,009	57,327	12,386	11,536	-27%	225,222	2,804	442	(7)	126	-84%	25,549	680	331,004,361
Hot-Spot Group 1	1	1,523,605	21,922	7,090	821	1,624	-68%	84,987	1,830	81	7	15	-96%	22,740	1,152	67,002,431
Hot-Spot Group 2	2	3,996,052	50,036	17,835	1,740	2,016	-64%	79,135	1,063	148	(25)	42	-86%	30,358	595	131,632,800
Hot-Spot Group 3	3	1,679,732	22,053	18,465	8,265	5,416	-16%	39,299	477	102	(20)	27	-79%	25,048	541	67,059,786
Hot-Spot Group 4	4	1,257,264	20,600	13,937	1,560	2,480	-32%	21,801	272	111	31	42	-59%	17,673	298	71,140,342
New York	1	521,215	10,868	1,221	(232)	71	-89%	33,497	764	20	9	8	-97%	26,793	1,722	19,453,968
New Jersey	1	225,398	4,160	1,302	178	871	-69%	16,339	458	3	(1)	2	-99%	25,376	1,840	8,882,395
Massachusetts	1	144,488	4,946	828	98	68	-83%	9,753	252	16	2	3	-94%	20,963	1,415	6,892,405
Pennsylvania	1	188,409	3,096	1,637	535	612	-47%	8,571	294	8	(12)	(10)	-97%	14,717	670	12,801,381
Louisiana	1	175,982	3,840	201	(942)	141	-95%	5,766	126	16	(7)	2	-87%	37,855	1,240	
Connecticut	1	64,021	2,109	1,191	(191)	(148)	-44%	4,554	125	12	12	10	-90%	17,957	1,277	3,565,242
Maryland	1	136,154	1,730	497	(33)	(7)	-71%	4,041	77	4	3	-	-95%	22,521	668	6,045,713
Rhode Island	1	28,347	443	85	85	85	-81%	1,159	27	1	1	1	-96%	26,759	1,094	1,059,367
District Of Columbia	1	16,395	335	25	(11)	(13)	-93%	641	19	-	-	-	-100%	23,231	908	705,739
Delaware	1	23,196	458	103	(48)	(56)	-78%	666	69	1	-	(1)	-99%	23,821	684	973,792
California	2	880,871	12,137	3,893	2,087	914	-68%	17,001	197	22	(14)	13	-89%	22,294	430	39,511,060
Florida	2	756,727	15,300	1,707	(832)	174	-89%	16,025	276	55	7	7	-80%	35,233	746	21,477,832
Texas	2	877,077	12,235	4,214	1,637	477	-66%	17,599	322	17	(11)	2	-95%	30,248	607	28,995,746
Georgia	2	341,310	4,813	752	(422)	(150)	-84%	7,657	122	19	(12)	6	-84%	32,146	721	10,617,138
Tennessee	2	232,061	3,317	3,317	712	352	0%	2,922	45	13	7	6	-71%	33,981	428	6,829,015
North Carolina	2	247,172	2,684	1,144	(1,159)	(132)	-57%	3,939	63	5	-	2	-92%	23,567	376	10,487,897
Alabama	2	173,485	2,452	859	(105)	125	-65%	2,789	50	1	1	-	-98%	35,382	569	4,903,192
Arizona	2	231,897	4,877	748	6	273	-85%	5,830	172	3	-	3	-98%	31,860	801	7,278,621
Nevada	2	90,843	1,447	582	(27)	13	-60%	1,712	38	2	(1)	(1)	-95%	29,493	556	3,080,195
South Carolina	2	164,609	2,374	619	(157)	(30)	-74%	3,661	80	11	(2)	4	-86%	31,971	711	5,148,707

Source: Worldometer.com, Transport Futures

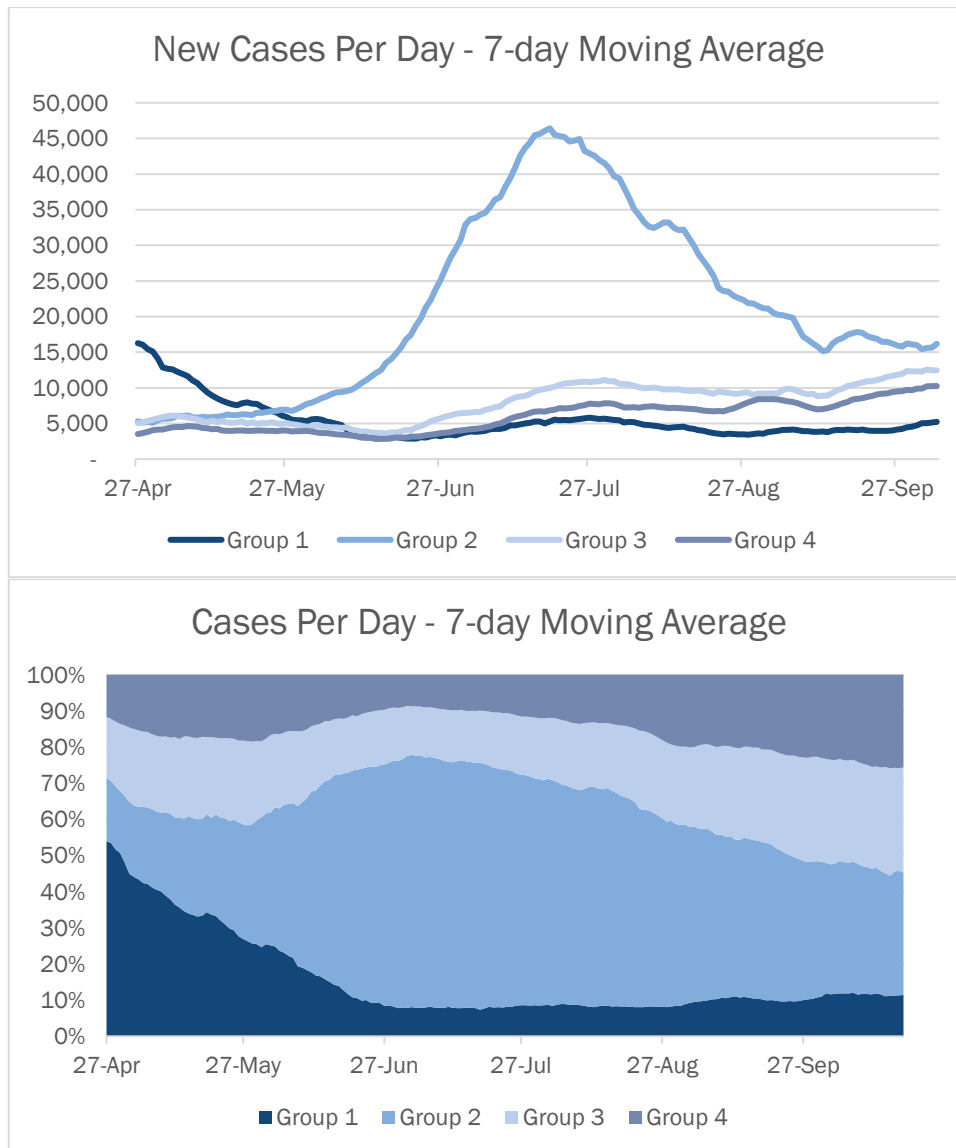
Exhibit 3



	Hot Spot Group	Total Cases	Max New Cases/Day Since 21 April	New Cases Latest Day	Change in New Cases/Day	Change In Cases/Day Since Week Ago	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day Since 21 April	New Deaths Latest Day	Change In New Deaths/Day	Change In Deaths/Day Since Week Ago	Change In Deaths/Day Since Max	Cases/M	Deaths/ Million	Population
Ohio	3	183,685	2,212	1,874	325	415	-15%	5,082	138	8	8	3	-94%	15,714	435	11,689,615
Washington	3	102,005	1,209	951	625	40	-21%	2,264	32	16	16	14	-50%	13,395	297	7,615,063
Mississippi	3	110,592	1,775	586	586	290	-67%	3,171	58	-	-	-	-100%	37,159	1,065	2,976,189
Illinois	3	350,748	5,594	3,113	(1,132)	371	-44%	9,496	191	22	-	9	-88%	27,679	749	12,671,873
Michigan	3	164,123	2,458	2,096	2,096	164	-15%	7,363	232	16	16	10	-93%	16,434	737	9,987,209
Missouri	3	163,221	3,357	1,179	(74)	135	-65%	2,681	61	2	(59)	1	-97%	26,594	437	6,137,553
Wisconsin	3	173,891	3,861	3,777	3,777	1,821	-2%	1,600	34	12	12	3	-65%	29,866	275	5,822,701
Utah	3	95,562	1,498	1,168	71	180	-22%	546	15	3	-	(2)	-80%	29,808	170	3,205,934
Arkansas	3	99,597	1,278	531	(113)	(123)	-58%	1,714	27	10	(10)	(7)	-63%	33,003	568	3,017,747
Other	3	236,308	4,588	3,190	2,104	2,123	-30%	5,382	186	13	(3)	(4)	-93%	25,549	680	8,241,190
Indiana	4	149,166	2,482	1,584	(21)	10	-36%	3,960	119	23	4	17	-81%	22,157	588	6,732,546
Colorado	4	86,374	1,312	1,072	139	496	-18%	2,180	122	4	4	1	-97%	14,999	379	5,758,981
Virginia	4	166,828	2,015	690	(210)	(164)	-66%	3,457	45	24	13	21	-47%	19,545	405	8,535,562
Iowa	4	107,748	2,574	627	(219)	117	-76%	1,539	21	9	6	(5)	-57%	34,151	488	3,155,131
Kentucky	4	88,247	1,322	640	(170)	2	-52%	1,326	20	9	4	8	-55%	19,752	297	4,467,477
Oklahoma	4	108,073	1,714	774	(22)	(23)	-55%	1,173	21	2	(1)	(4)	-90%	27,312	296	3,956,946
Minnesota	4	124,439	1,722	1,627	(95)	456	-6%	2,292	39	5	(12)	2	-87%	22,065	406	5,639,743
Kansas	4	74,315	2,084	2,084	2,084	320	0%	872	26	12	11	2	-54%	25,509	299	2,913,351
New Mexico	4	37,302	812	514	69	135	-37%	935	12	1	(4)	(3)	-92%	17,790	446	2,096,906
Oregon	4	39,794	482	262	46	57	-46%	628	14	8	8	8	-43%	9,435	149	4,218,066
Idaho	4	53,790	1,094	698	188	101	-36%	531	14	3	3	-	-79%	30,100	297	1,787,063
South Dakota	4	33,836	876	567	(91)	206	-35%	323	13	-	(8)	(2)	-100%	38,248	365	884,627
Nebraska	4	58,817	1,286	749	15	292	-42%	554	21	6	6	3	-71%	30,406	286	1,934,391
New Hampshire	4	9,746	217	52	(17)	(13)	-76%	468	19	1	-	1	-95%	7,168	344	1,359,843
West Virginia	4	20,293	498	212	(68)	59	-57%	399	11	-	-	(3)	-100%	11,323	223	1,792,229
Maine	4	5,962	76	23	(3)	(6)	-70%	146	5	-	-	-	-100%	4,435	109	1,344,330
Vermont	4	1,946	17	9	(2)	1	-47%	58	3	-	-	-	-100%	3,119	93	624,007
North Dakota	4	32,637	864	659	(58)	187	-24%	408	12	4	(1)	(2)	-67%	42,827	535	762,045
Hawaii	4	14,068	354	37	(45)	(5)	-90%	187	11	-	(1)	-	-100%	9,936	132	1,415,828
Wyoming	4	9,311	290	286	77	95	-1%	57	4	-	-	-	-100%	16,088	98	578,769
Montana	4	23,390	723	569	(19)	146	-21%	241	10	-	(1)	(2)	-100%	21,885	225	1,068,733
Alaska	4	11,182	1,453	202	(18)	11	-86%	67	5	-	-	-	-100%	15,285	92	731,588

Source: Worldometer.com, Transport Futures

Exhibit 4.



Source: Worldometer.com, [Transport Futures](http://TransportFutures.net)