

	Mkt-RF	SMB	HML	RF	AMZN	AVGO	BRK.B	CVX	DHR
201202	4.42	-1.85	0.43	0	-7.585888	10.81317	0.102072	5.818476	0.609378
201203	3.11	-0.65	1.14	0	12.69965	3.616111	3.441689	-0.997327	6.000384
201204	-0.85	-0.41	-0.78	0	14.51286	-11.2107	-0.862606	-0.606297	-3.13477
201205	-6.19	0.07	-1.06	0.01	-8.198875	-4.012307	-1.364874	-7.752127	-4.159746
201206	3.89	0.67	0.62	0	7.25189	8.459203	5.002521	8.279441	0.211643
201207	0.79	-2.77	-0.02	0	2.167725	3.240502	1.812065	3.867298	1.452095
201208	2.55	0.48	1.3	0.01	6.406631	-0.904347	-0.599345	2.344403	1.429111
201209	2.73	0.51	1.6	0.01	2.426863	-4.658585	4.566715	4.745003	2.939449
201210	-1.76	-1.16	3.59	0.01	-8.436392	-4.855207	-2.107505	-5.432133	-6.168261
201211	0.78	0.64	-0.84	0.01	8.21706	6.256987	1.993479	-4.137336	4.320161
201212	1.18	1.5	3.51	0.01	-0.478161	-9.839021	1.829231	3.190325	3.566071
201301	5.57	0.33	0.96	0	5.831706	13.57588	8.060204	6.482324	7.259399
201302	1.29	-0.28	0.11	0	-0.463277	-4.333236	5.39565	1.736861	2.786554
201303	4.03	0.81	-0.19	0	0.84005	4.967863	1.996861	2.215168	0.892866
201304	1.55	-2.36	0.45	0	-4.758152	-10.55152	2.034552	2.684729	-1.906711
201305	2.8	1.73	2.63	0	6.063591	18.05385	7.289315	0.606511	1.444026
201306	-1.2	1.33	0.03	0	3.153789	-0.927655	-1.884809	-2.815211	2.394057
201307	5.65	1.86	0.57	0	8.473478	-1.296586	3.529311	6.379936	6.424997
201308	-2.71	0.28	-2.69	0	-6.719341	4.989104	-4.01312	-4.337107	-2.702682
201309	3.77	2.91	-1.22	0	11.26771	11.86706	2.058983	1.721908	5.79974
201310	4.18	-1.56	1.25	0	16.43744	6.076082	1.391943	-1.267478	4.033705
201311	3.13	1.29	0.32	0	8.128451	-1.540855	1.251197	2.067343	3.759175
201312	2.81	-0.45	-0.02	0	1.313455	18.22045	1.74204	2.873978	3.208562
201401	-3.32	0.9	-2.07	0	-10.05542	3.81286	-5.870445	-10.63166	-3.608525
201402	4.65	0.37	-0.31	0	0.950682	12.92092	3.745521	3.31454	2.822969
201403	0.43	-1.85	4.93	0	-7.105766	4.392245	7.937469	4.019945	-1.947956
201404	-0.19	-4.2	1.17	0	-9.584689	-0.991279	3.104749	5.558819	-2.028392
201405	2.06	-1.88	-0.13	0	2.768553	11.29136	-0.395817	-2.174943	6.881991
201406	2.61	3.08	-0.7	0	3.912974	1.981048	-1.386939	7.227303	0.382513
201407	-2.04	-4.29	0.03	0	-3.63015	-3.337003	-0.892856	-1.003439	-6.041728
201408	4.24	0.4	-0.45	0	8.32295	18.31937	9.423583	0.162469	3.695185
201409	-1.97	-3.72	-1.34	0	-4.896177	5.981262	0.648451	-7.041976	-0.822365
201410	2.52	4.2	-1.81	0	-5.266096	-0.499893	1.462288	0.527978	5.954205
201411	2.55	-2.06	-3.09	0	10.8623	8.289825	6.0859	-9.23718	3.930318
201412	-0.06	2.49	2.27	0	-8.353999	7.698091	0.981903	3.995913	2.573016
201501	-3.11	-0.55	-3.58	0	14.23554	2.645659	-4.155838	-8.602266	-3.774687
201502	6.13	0.61	-1.86	0	7.229284	24.04748	2.432076	4.047586	5.948093
201503	-1.12	3.04	-0.37	0	-2.120155	-0.501499	-2.096192	-0.626742	-2.72688
201504	0.59	-3.03	1.82	0	13.35126	-7.682305	-2.154933	5.79161	-3.405375
201505	1.36	0.92	-1.14	0	1.766319	26.68554	1.267611	-7.257361	5.422571
201506	-1.53	2.9	-0.79	0	1.13226	-10.2249	-4.818181	-5.406511	-0.845696
201507	1.54	-4.19	-4.13	0	23.51126	-5.594274	4.871063	-8.28236	7.143816
201508	-6.04	0.33	2.77	0	-4.338338	0.663239	-6.095006	-8.465216	-4.958475
201509	-3.07	-2.63	0.56	0	-0.194977	-0.762086	-2.715607	-1.378084	-2.079974
201510	7.75	-1.87	-0.46	0	22.27236	-1.195063	4.309824	15.21298	9.683848
201511	0.56	3.59	-0.42	0	6.215057	5.944937	-1.418915	0.48418	3.300837
201512	-2.17	-2.82	-2.61	0.01	1.658159	11.25869	-1.538826	-0.29616	-3.65143
201601	-5.77	-3.43	2.09	0.01	-13.16154	-7.607721	-1.729168	-3.889481	-6.583589
201602	-0.07	0.71	-0.57	0.02	-5.893939	0.174439	3.370609	-3.524113	3.003649
201603	6.96	0.82	1.19	0.02	7.422265	15.30432	5.726446	15.76385	6.241882

201604	0.91	0.74	3.28	0.01	11.09943	-5.361075	2.527349	7.096912	2.154735
201605	1.78	-0.18	-1.66	0.01	9.57171	5.897406	-3.405658	-1.164806	1.654087
201606	-0.05	0.6	-1.48	0.02	-1.011995	0.65373	3.00405	4.86923	2.663999
201607	3.95	2.51	-1.27	0.02	6.015326	4.543083	-0.379133	-2.261698	6.509113
201608	0.49	1.18	3.13	0.02	1.343983	8.894675	4.291361	-1.87404	-0.056838
201609	0.25	2.13	-1.23	0.02	8.840318	-2.230619	-4.020268	3.384701	-3.729589
201610	-2.02	-4.42	4.12	0.02	-5.691734	-1.02071	-0.13767	1.758068	0.345701
201611	4.86	5.67	8.19	0.01	-4.979489	0.113315	9.096028	6.491196	-0.493764
201612	1.81	0.08	3.56	0.03	-0.123262	3.653486	3.488797	6.529972	-0.452179
201701	1.94	-1.14	-2.76	0.04	9.776368	13.46371	0.671746	-5.435051	7.942158
201702	3.57	-2.02	-1.68	0.04	2.578155	5.689328	4.395238	0.992759	1.902322
201703	0.17	1.14	-3.32	0.03	4.881013	3.776959	-2.795141	-3.676437	-0.053371
201704	1.09	0.72	-2.1	0.05	4.287086	1.25224	-0.931921	-0.674015	-2.46313
201705	1.06	-2.52	-3.78	0.06	7.467647	8.395239	-0.017635	-3.0778	1.872066
201706	0.78	2.23	1.48	0.06	-2.736393	-2.744992	2.414586	1.786974	-0.707491
201707	1.87	-1.46	-0.24	0.07	1.973384	6.220671	3.236374	4.588305	-3.346427
201708	0.16	-1.67	-2.09	0.09	-0.816885	2.103309	3.447751	-1.527839	2.278398
201709	2.51	4.46	3.12	0.09	-2.05308	-3.870706	1.102318	10.18741	2.739055
201710	2.25	-1.93	0.21	0.09	14.88165	9.165715	1.884686	-1.460198	7.652384
201711	3.12	-0.58	-0.08	0.08	6.386238	5.236212	3.167027	2.594936	2.185067
201712	1.06	-1.32	0.05	0.09	-0.708658	-7.659976	2.609345	6.105421	-1.72204
201801	5.57	-3.15	-1.33	0.12	23.9439	-2.932682	8.03256	0.007808	9.157931
201802	-3.65	0.23	-1.07	0.11	4.132907	-0.742978	-3.459197	-10.824	-3.565744
201803	-2.35	4.05	-0.23	0.11	-4.414937	-4.496113	-3.835869	2.798537	0.022949
201804	0.28	1.14	0.54	0.14	8.067479	-1.357174	-3.022495	9.567124	2.490292
201805	2.65	5.26	-3.18	0.14	3.913942	9.73271	-1.2756	-0.787412	-1.176692
201806	0.48	1.15	-2.33	0.14	4.166519	-3.881027	-2.687906	2.460529	-0.744344
201807	3.19	-2.23	0.47	0.16	4.407601	-7.53556	5.851252	-0.286538	3.961911
201808	3.44	1.13	-3.98	0.16	13.07645	-1.395514	5.323401	-6.345173	0.775843
201809	0.06	-2.28	-1.69	0.15	-0.63243	12.49665	2.432407	4.064372	4.794954
201810	-7.68	-4.77	3.44	0.19	-20.40918	-8.929097	-4.314049	-8.883166	-8.577402
201811	1.69	-0.68	0.28	0.18	5.587176	6.048466	6.133331	6.349336	10.0212
201812	-9.57	-2.37	-1.85	0.2	-11.33497	6.905856	-6.642454	-7.839802	-6.06086
201901	8.4	2.89	-0.46	0.21	14.22171	6.395581	0.456079	5.176509	7.526455
201902	3.4	2.05	-2.67	0.18	-4.770599	2.470518	-2.242854	4.120054	14.33496
201903	1.1	-3.03	-4.1	0.19	8.40357	9.016135	-0.393678	3.856028	3.746384
201904	3.97	-1.74	2.14	0.21	7.975875	6.618563	7.66496	-2.742886	0.239741
201905	-6.94	-1.31	-2.35	0.21	-8.071319	-21.17732	-9.111301	-5.382396	-0.534651
201906	6.93	0.27	-0.72	0.18	6.499174	14.21356	7.797915	10.19711	8.084523
201907	1.19	-1.93	0.47	0.19	-1.607918	1.515795	-3.820907	-1.258815	-1.7645
201908	-2.58	-2.37	-4.77	0.16	-5.007382	-2.694566	-1.143298	-4.538184	0.971658
201909	1.43	-0.97	6.74	0.18	-2.453274	-2.504502	2.086359	1.603208	1.466837
201910	2.06	0.29	-1.92	0.16	2.18747	6.894262	2.032096	-2.234193	-4.62376
201911	3.87	0.79	-2	0.12	1.23873	7.856775	3.511574	0.732408	5.800757
201912	2.77	0.73	1.77	0.14	2.472169	-0.200073	2.674343	3.759469	4.997648
202001	-0.11	-3.11	-6.23	0.13	8.576381	-2.58838	-1.04391	-11.22451	4.801321
202002	-8.13	1.07	-3.79	0.12	-6.341372	-10.78327	-8.180419	-13.00034	-10.24619
202003	-13.39	-4.86	-13.95	0.13	3.372057	-13.15911	-11.52381	-21.5925	-4.397527
202004	13.65	2.47	-1.26	0	26.89001	16.50651	2.477711	26.9666	18.263
202005	5.58	2.47	-4.89	0.01	-1.288494	7.224388	-0.960042	-0.3361	1.917081
202006	2.46	2.7	-2.17	0.01	12.94667	8.346487	-3.819681	-1.275005	6.124088

202007	5.77	-2.32	-1.37	0.01	14.70136	1.385181	9.664531	-5.938497	15.36304
202008	7.63	-0.22	-2.96	0.01	9.036103	9.587467	11.3599	-0.021927	1.300118
202009	-3.63	0.04	-2.68	0.01	-8.767859	4.935989	-2.349016	-12.98748	4.28119
202010	-2.1	4.37	4.22	0.01	-3.585409	-3.16723	-5.194563	-3.482225	6.683448
202011	12.47	5.81	2.13	0.01	4.333987	14.84857	13.36792	25.42885	-2.149049
202012	4.63	4.89	-1.5	0.01	2.795838	9.02183	1.283081	-1.716095	-1.118492
202101	-0.03	7.34	2.97	0.01	-1.567601	3.755793	-1.735105	0.878096	7.145049
202102	2.78	2.06	7.17	0	-3.532841	4.299656	5.547023	17.37089	-7.639584
202103	3.08	-2.37	7.39	0	0.037178	-1.321628	6.220118	6.271252	2.46279
202104	4.93	-3.2	-0.95	0	12.06627	-0.839834	7.625166	-1.641378	12.93016
202105	0.29	-0.25	7.09	0	-7.047026	3.535708	5.270045	0.69856	0.866346
202106	2.75	1.7	-7.83	0	6.735499	0.954852	-3.980096	2.150595	4.770835
202107	1.27	-3.99	-1.78	0	-3.272229	2.591983	0.13313	-2.797415	10.94155
202108	2.91	-0.43	-0.15	0	4.303417	2.43305	2.687836	-4.950397	8.964995
202109	-4.37	0.72	5.09	0	-5.351811	-2.469778	-4.48962	6.249637	-6.083422
202110	6.65	-2.34	-0.49	0	2.660246	10.442	5.154982	12.85362	2.478496
202111	-1.55	-1.32	-0.45	0	3.99237	4.139805	-3.595696	-1.41496	3.1658
202112	3.1	-1.65	3.26	0.01	-4.935197	20.16949	8.053175	5.160801	2.281384
202201	-6.25	-5.93	12.75	0	-10.28299	-11.38877	4.68896	11.91308	-13.07994
202202	-2.29	2.21	3.08	0	2.667252	0.266259	2.693126	9.647465	-3.981935
202203	3.05	-1.6	-1.8	0.01	6.133728	7.180503	9.7769	14.25357	6.884767
202204	-9.46	-1.4	6.17	0.01	-23.76251	-11.37148	-8.533424	-3.793068	-14.32162
202205	-0.34	-1.83	8.39	0.03	-3.306432	4.612941	-2.151852	11.45272	5.023145
202206	-8.43	2.1	-5.98	0.06	-11.70592	-16.31843	-13.6558	-16.48561	-3.964168
202207	9.57	2.8	-4.1	0.08	26.9796	11.05794	10.02183	13.04337	15.00624
202208	-3.77	1.37	0.3	0.19	-6.251504	-6.982028	-6.776832	-3.682494	-7.586997
202209	-9.35	-0.79	0.06	0.19	-11.05219	-11.22963	-5.097407	-8.468233	-4.495124
202210	7.83	0.09	8.05	0.23	-9.575131	6.538316	10.28232	25.68355	-2.701442
202211	4.6	-3.4	1.38	0.29	-6.04947	16.9205	7.677064	1.042219	8.348301
202212	-6.41	-0.68	1.32	0.33	-13.31944	1.139966	-3.374574	-1.656467	-3.252356
202301	6.65	5.02	-4.05	0.35	22.42381	5.151615	0.498169	-3.397526	-0.645722
202302	-2.58	1.1	-0.8	0.34	-8.969879	1.246298	-2.375181	-7.954069	-6.713397

ED	FCX	PM	VZ	HON
-1.458612	-7.328086	11.70253	2.511214	2.636104
1.590216	-10.62027	6.094351	0.314829	3.130862
1.763125	0.683456	1.905869	5.623873	-0.638791
1.520656	-15.63366	-5.595975	4.471149	-8.252686
4.084699	6.335842	3.25404	6.724266	0.97867
3.71441	-1.17407	5.736924	1.575178	3.957743
-6.025494	8.260961	-2.350341	-3.812266	0.679071
-0.269478	9.59955	0.706659	6.114816	2.870399
0.808182	-1.778587	-0.627431	-2.050792	2.483745
-7.611851	1.111294	1.480496	-0.085983	0.136937
0.620981	-12.34015	-6.952563	-1.936557	4.199475
2.412658	3.070161	5.558309	0.785755	7.51537
3.727179	-8.643591	4.072117	7.939618	2.725652
4.565913	3.696755	1.046321	5.63077	8.119435
4.292961	-8.066468	4.068058	9.684588	-2.402104
-10.33779	2.994357	-4.895877	-9.128008	6.690218
3.203645	-11.07892	-4.718968	3.836602	1.643233
2.72682	7.062996	3.972992	-1.708396	4.587844
-6.126901	8.085715	-6.436415	-3.273059	-4.109415
-0.928021	9.463948	3.775146	-1.498551	4.885319
5.585792	11.12456	4.011223	8.228034	4.443623
-5.170054	-4.724187	-4.017045	-0.648551	2.052336
1.18967	8.792215	1.85875	-0.967393	3.757786
-1.573816	-14.12297	-9.321178	-2.279175	-0.153197
3.014159	1.526515	3.544898	0.160463	3.518571
-3.152431	1.379536	1.186506	-0.021037	-1.305213
8.164022	3.931023	5.582485	-1.765768	0.150934
-5.204201	0.012135	3.640399	8.102674	0.269072
6.152695	7.195317	-4.777499	-2.061613	0.276397
-2.857619	1.972596	-1.706285	3.045123	-1.205006
3.209137	-1.490292	4.353099	-0.125996	3.702518
-1.028922	-10.22817	-2.547291	0.341225	-1.751549
11.82492	-12.71059	7.981481	0.520093	3.221625
-0.331441	-4.832896	-2.336793	1.803677	3.069117
5.580515	-12.99813	-6.303961	-7.531123	1.402116
4.953814	-28.0394	-0.284916	-2.287283	-2.161732
-8.862587	30.44317	3.389814	9.461824	5.135041
-2.422578	-12.39019	-9.197194	-1.658214	1.994774
0.901638	22.79683	12.2109	3.721961	-3.249947
0.471143	-15.32515	-0.479219	-0.876025	3.250071
-5.403315	-5.241756	-3.491034	-5.724124	-1.662986
9.865219	-36.89581	7.98482	0.386187	3.020479
-1.069336	-8.567433	-6.699442	-0.508912	-5.502151
7.2989	-8.928559	-0.588951	-5.433588	-4.146501
-1.645463	21.46544	12.86154	7.745351	9.071723
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