

Table 13-1: Correlations of forwards 1-30 Years

-	-	FRTNF01	FRTNF02	FRTNF03	FRTNF04	FRTNF05	FRTNF06	FRTNF07	FRTNF08	FRTNF09	FRTNF10	FRTNF11	FRTNF12	FRTNF13	FRTNF14	FRTNF15
-	0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
FRTNF01	0	1.0000000	0.9022676	0.7447811	0.5823557	0.4446397	0.3386376	0.2616275	0.2082525	0.1734081	0.1528718	0.1431642	0.1415402	0.1456419	0.1533395	0.1626698
FRTNF02	0	0.9022676	1.0000000	0.9445412	0.8295074	0.7073929	0.6005961	0.5153414	0.4510592	0.4050337	0.3742078	0.3555999	0.3465892	0.3447294	0.3476125	0.3527359
FRTNF03	0	0.7447811	0.9445412	1.0000000	0.9649308	0.8923459	0.8132206	0.7413210	0.6812455	0.6334859	0.5969396	0.5698420	0.5503401	0.5364953	0.5262459	0.5173147
FRTNF04	0	0.5823557	0.8295074	0.9649308	1.0000000	0.9787517	0.9339008	0.8831200	0.8345096	0.7911317	0.7536719	0.7216410	0.6941060	0.6698367	0.6473514	0.6248873
FRTNF05	0	0.4446397	0.7073929	0.8923459	0.9787517	1.0000000	0.9869252	0.9583444	0.9241453	0.8889867	0.8547978	0.8220608	0.7905876	0.7597548	0.7286038	0.6958707
FRTNF06	0	0.3386376	0.6005961	0.8132206	0.9339008	0.9869252	1.0000000	0.9915388	0.9720084	0.9468404	0.9186594	0.8885402	0.8567660	0.8231088	0.7869610	0.7474147
FRTNF07	0	0.2616275	0.5153414	0.7413210	0.8831200	0.9583444	0.9915388	1.0000000	0.9940411	0.9792858	0.9586220	0.9333880	0.9040809	0.8706525	0.8326566	0.7893683
FRTNF08	0	0.2082525	0.4510592	0.6812455	0.8345096	0.9241453	0.9720084	0.9940411	1.0000000	0.9953270	0.9828690	0.9639788	0.9391615	0.9083679	0.8711457	0.8267896
FRTNF09	0	0.1734081	0.4050337	0.6334859	0.7911317	0.8889867	0.9468404	0.9792858	0.9953270	1.0000000	0.9959118	0.9842567	0.9653983	0.9391495	0.9049174	0.8618765
FRTNF10	0	0.1528718	0.3742078	0.5969396	0.7536719	0.8547978	0.9186594	0.9586220	0.9828690	0.9959118	1.0000000	0.9960612	0.9842199	0.9640571	0.9347409	0.8952115
FRTNF11	0	0.1431642	0.3555999	0.5698420	0.7216410	0.8220608	0.8885402	0.9333880	0.9639788	0.9842567	0.9960612	1.0000000	0.9959083	0.9830817	0.9603856	0.9264398
FRTNF12	0	0.1415402	0.3465892	0.5503401	0.6941060	0.7905876	0.8567660	0.9040809	0.9391615	0.9653983	0.9842199	0.9959083	1.0000000	0.9954905	0.9809121	0.9545072
FRTNF13	0	0.1456419	0.3447294	0.5364953	0.6698367	0.7597548	0.8231088	0.8706525	0.9083679	0.9391495	0.9640571	0.9830817	0.9954905	1.0000000	0.9948134	0.9777673
FRTNF14	0	0.1533395	0.3476125	0.5262459	0.6473514	0.7286038	0.7869610	0.8326566	0.8711457	0.9049174	0.9347409	0.9603856	0.9809121	0.9948134	1.0000000	0.9939074
FRTNF15	0	0.1626698	0.3527359	0.5173147	0.6248873	0.6958707	0.7474147	0.7893683	0.8267896	0.8618765	0.8952115	0.9264398	0.9545072	0.9777673	0.9939074	1.0000000
FRTNF16	0	0.1717214	0.3576050	0.5074576	0.6007396	0.6603835	0.7037010	0.7402563	0.7748400	0.8094860	0.8447114	0.8801527	0.9147524	0.9468329	0.9739550	0.9929021
FRTNF17	0	0.1788516	0.3598577	0.4946275	0.5734861	0.6213583	0.6555666	0.6854455	0.7156352	0.7481319	0.7835122	0.8215240	0.8612265	0.9010311	0.9384893	0.9702003
FRTNF18	0	0.1828304	0.3577990	0.4776252	0.5426336	0.5790043	0.6038410	0.6262670	0.6508699	0.6797216	0.7135697	0.7523838	0.7954504	0.8413857	0.8878533	0.9313921
FRTNF19	0	0.1831627	0.3508013	0.4564779	0.5089470	0.5348044	0.5506795	0.5654793	0.5838123	0.6079145	0.6387923	0.6767204	0.7213006	0.7714492	0.8250518	0.8787123
FRTNF20	0	0.1800965	0.3393333	0.4322573	0.4740482	0.4909166	0.4987924	0.5063532	0.5182772	0.5370232	0.5639101	0.5995684	0.6439691	0.6963914	0.7550246	0.8166453
FRTNF21	0	0.1744036	0.3246334	0.4066870	0.4399849	0.4496929	0.4508865	0.4520101	0.4578431	0.4710991	0.4934328	0.5258486	0.5687074	0.6216802	0.6833086	0.7506206
FRTNF22	0	0.1670242	0.3081523	0.3814406	0.4084710	0.4128930	0.4088518	0.4045664	0.4049371	0.4129424	0.4305724	0.4591976	0.4995629	0.5517312	0.6146137	0.6855373
FRTNF23	0	0.1588682	0.2911889	0.3577580	0.3805385	0.3813741	0.3734687	0.3648358	0.3605067	0.3637207	0.3767864	0.4014176	0.4387191	0.4891260	0.5519142	0.6247290
FRTNF24	0	0.1505624	0.2745659	0.3362902	0.3565724	0.3552915	0.3447435	0.3327636	0.3245204	0.3235033	0.3323158	0.3529842	0.3869413	0.4349647	0.4966757	0.5700392
FRTNF25	0	0.1425128	0.2588113	0.3173193	0.3365536	0.3343677	0.3222086	0.3077647	0.2963461	0.2916779	0.2966323	0.3135150	0.3440520	0.3893286	0.4492848	0.5221936
FRTNF26	0	0.1349146	0.2441147	0.3007439	0.3200767	0.3179425	0.3050092	0.2888471	0.2749094	0.2671405	0.2686549	0.2820056	0.3091770	0.3515277	0.4092867	0.4810174
FRTNF27	0	0.1277822	0.2304736	0.2862853	0.3066447	0.3053361	0.2923169	0.2750678	0.2591857	0.2488196	0.2473019	0.2574037	0.2813361	0.3206982	0.3759789	0.4460113

FRTNF16	FRTNF17	FRTNF18	FRTNF19	FRTNF20	FRTNF21	FRTNF22	FRTNF23	FRTNF24	FRTNF25	FRTNF26	FRTNF27	FRTNF28	FRTNF29	FRTNF30	
0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	
0.1717214	0.1788516	0.1828304	0.1831627	0.1800965	0.1744036	0.1670242	0.1588682	0.1505624	0.1425128	0.1349146	0.1277822	0.1211722	0.1150402	0.1093436	
0.3576050	0.3598577	0.3577990	0.3508013	0.3393333	0.3246334	0.3081523	0.2911889	0.2745659	0.2588113	0.2441147	0.2304236	0.2177267	0.2058965	0.1948176	
0.5074576	0.4946275	0.4776252	0.4564779	0.4322573	0.4066870	0.3814406	0.3577580	0.3362902	0.3173193	0.3007439	0.2862853	0.2736860	0.2626212	0.2527832	
0.6007396	0.5734861	0.5426336	0.5089470	0.4740482	0.4399849	0.4084710	0.3805385	0.3565724	0.3365536	0.3200767	0.3066447	0.2957739	0.2869682	0.2797536	
0.6603835	0.6213583	0.5790043	0.5348044	0.4909166	0.4496929	0.4128930	0.3813741	0.3552915	0.3343677	0.3179425	0.3053361	0.2958803	0.2889423	0.2839166	
0.7037010	0.6555666	0.6038410	0.5506795	0.4987924	0.4508865	0.4088518	0.3734687	0.3447435	0.3222086	0.3050092	0.2923169	0.2833171	0.2772667	0.2734547	
0.7402563	0.6854455	0.6262670	0.5654793	0.5063532	0.4520101	0.4045664	0.3648358	0.3327636	0.3077647	0.2888471	0.2750678	0.2654976	0.2593050	0.2556928	
0.7748400	0.7156352	0.6508699	0.5838123	0.5182772	0.4578431	0.4049371	0.3605067	0.3245204	0.2963461	0.2749094	0.2591857	0.2481606	0.2409336	0.2366381	
0.8094860	0.7481319	0.6797216	0.6079145	0.5370232	0.4710991	0.4129424	0.3637207	0.3235033	0.2916779	0.2671405	0.2488196	0.2356445	0.2266653	0.2209625	
0.8447114	0.7835122	0.7135697	0.6387923	0.5639101	0.4934328	0.4305724	0.3767864	0.3323158	0.2966323	0.2686549	0.2473019	0.2314766	0.2202013	0.2125212	
0.8801527	0.8215240	0.7523838	0.6767204	0.5995684	0.5258486	0.4591976	0.4014176	0.3529842	0.3135150	0.2820056	0.2574037	0.2386192	0.2246705	0.2145876	
0.9147524	0.8612265	0.7954504	0.7213006	0.6439691	0.5687074	0.4995629	0.4387191	0.3869413	0.3440520	0.3091770	0.2813361	0.2594806	0.2426520	0.2298877	
0.9468329	0.9010311	0.8413857	0.7714492	0.6963914	0.6216802	0.5517312	0.4891260	0.4349647	0.3893286	0.3515277	0.3206982	0.2958703	0.2761381	0.2605720	
0.9739550	0.9384893	0.8878533	0.8250518	0.7550246	0.6833086	0.6146137	0.5519142	0.4966757	0.4492848	0.4092867	0.3759789	0.3485092	0.3260553	0.3077485	
0.9929021	0.9702003	0.9313921	0.8787123	0.8166453	0.7506206	0.6855373	0.6247290	0.5700392	0.5221936	0.4810174	0.4460113	0.4164786	0.3917120	0.3709323	
1.0000000	0.9920353	0.9675339	0.9277615	0.8765213	0.8189399	0.7599707	0.7032437	0.6509676	0.6042231	0.5631480	0.5274807	0.4967132	0.4702821	0.4475250	
0.9920353	1.0000000	0.9915828	0.9669335	0.9289735	0.8823315	0.8318607	0.7813956	0.7334697	0.6895100	0.6499813	0.6148815	0.5839149	0.5566844	0.5326669	
0.9675339	0.9915828	1.0000000	0.9917483	0.9687225	0.9348851	0.8948340	0.8524963	0.8106649	0.7710788	0.7345218	0.7012556	0.6712076	0.6441579	0.6197373	
0.9277615	0.9669335	0.9917483	1.0000000	0.9924903	0.9723985	0.9439340	0.9110001	0.8765658	0.8426265	0.8102541	0.7799601	0.7518885	0.7259960	0.7020700	
0.8765213	0.9289735	0.9687225	0.9924903	1.0000000	0.9935965	0.9770074	0.9540103	0.9276640	0.9001532	0.8727915	0.8463103	0.8210508	0.7971329	0.7744929	
0.8189399	0.8823315	0.9348851	0.9723985	0.9935965	1.0000000	0.9948079	0.9815949	0.9634328	0.9426277	0.9206810	0.8985058	0.8766108	0.8552582	0.8345171	
0.7599707	0.8318607	0.8948340	0.9439340	0.9770074	0.9948079	1.0000000	0.9959079	0.9855557	0.9713112	0.9548102	0.9371069	0.9188450	0.9004036	0.8819634	
0.7032437	0.7813956	0.8524963	0.9110001	0.9540103	0.9815949	0.9959079	1.0000000	0.9968056	0.9887063	0.9774259	0.9641218	0.9495409	0.9341543	0.9182323	
0.6509676	0.7334697	0.8106649	0.8765658	0.9276640	0.9634328	0.9855557	0.9968056	1.0000000	0.9974985	0.9910744	0.9819561	0.9709650	0.9586413	0.9453245	
0.6042231	0.6895100	0.7710788	0.8426265	0.9001532	0.9426277	0.9713112	0.9887063	0.9974985	1.0000000	0.9980031	0.9927805	0.9852041	0.9758630	0.9651477	
0.5631480	0.6499813	0.7345218	0.8102541	0.8727915	0.9206810	0.9548102	0.9774259	0.9910744	0.9980031	1.0000000	0.9983610	0.9939885	0.9875043	0.9793340	
0.5274807	0.6148815	0.7012556	0.7799601	0.8463103	0.8985058	0.9371069	0.9641218	0.9819561	0.9927805	0.9983610	1.0000000	0.9986144	0.9948450	0.9891395	
0.4967132	0.5839149	0.6712076	0.7518885	0.8210508	0.8766108	0.9188450	0.9495409	0.9709650	0.9852041	0.9939885	0.9986144	1.0000000	0.9987942	0.9954559	
0.4702821	0.5566844	0.6441579	0.7259960	0.7971329	0.8552582	0.9004036	0.9341543	0.9586413	0.9758630	0.9875043	0.9948450	0.9987942	1.0000000	0.9989238	
0.4475250	0.5326669	0.6197373	0.7020700	0.7744929	0.8345171	0.8819634	0.9182323	0.9453245	0.9651477	0.9793340	0.9891395	0.9954559	0.9989238	1.0000000	
FRTNF16	FRTNF17	FRTNF18	FRTNF19	FRTNF20	FRTNF21	FRTNF22	FRTNF23	FRTNF24	FRTNF25	FRTNF26	FRTNF27	FRTNF28	FRTNF29	FRTNF30	
Standard deviation	0.2234137	0.2264793	0.2338326	0.2459087	0.2628479	0.2845611	0.3107061	0.3408176	0.3744441	0.4111029	0.4503599	0.4919497	0.5356184	0.5811191	0.6285494

Table 13-2 Standard deviations forwards

Weekly 20 year

FRTNF01	FRTNF02	FRTNF03	FRTNF04	FRTNF05	FRTNF06	FRTNF07	FRTNF08	FRTNF09	FRTNF10	FRTNF11	FRTNF12	FRTNF13	FRTNF14	FRTNF15
0.3661786	0.25829	0.19542	0.1612305	0.1396335	0.1246615	0.1138281	0.105877	0.1000516	0.09578192	0.09261759	0.09020078	0.08829662	0.08680216	0.0857495

Monthly 10 year

FRTNF01	FRTNF02	FRTNF03	FRTNF04	FRTNF05	FRTNF06	FRTNF07	FRTNF08	FRTNF09	FRTNF10	FRTNF11	FRTNF12	FRTNF13	FRTNF14	FRTNF15
1.024942	0.7035344	0.5092956	0.4176259	0.3671967	0.3349871	0.3116489	0.2931037	0.2774772	0.2639579	0.2522023	0.242148	0.2339105	0.2277277	0.2240435

Weekly 10 year

FRTNF01	FRTNF02	FRTNF03	FRTNF04	FRTNF05	FRTNF06	FRTNF07	FRTNF08	FRTNF09	FRTNF10	FRTNF11	FRTNF12	FRTNF13	FRTNF14	FRTNF15
0.4832274	0.3331059	0.2481395	0.2023378	0.1732032	0.1528764	0.1381854	0.1274864	0.1197584	0.1142416	0.1103488	0.1076256	0.1057697	0.1046421	0.1042561