

Supplementary Materials: Regime-Switching Determinants of Mutual Fund Performance in South Africa

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Table S1. Normality and unit root test on the MS variables.

Fund	Variable	Mean	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Observations	ADF unit root test
DENKER	Flows	0.804	0.429	-1.620	8.769	102.171	0.000	56	-7.413***
	Perf	0.363	1.565	0.196	3.626	4.079	0.013	56	-6.589***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	6.024	3.037	-1.450	3.225	19.751	0.000	56	-3.751***
	Stdret	0.006	0.001	0.858	4.333	11.022	0.004	56	-5.393***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.476	0.376	0.382	1.567	6.160	0.046	56	-7.736***
GRAVITON	Flows	0.072	0.775	-0.210	1.256	7.509	0.023	56	-3.382***
	Perf	1.699	1.454	-1.656	5.738	56.641	0.000	56	-6.159***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	0.136	0.577	0.811	4.975	15.240	0.000	56	-7.857***
	Stdret	0.002	0.001	1.256	5.559	29.994	0.000	56	-4.601***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.791	0.055	-0.706	2.424	5.436	0.066	56	-3.879***
GTC	Flows	0.730	21.552	-0.816	13.051	241.942	0.000	56	-4.979***
	Perf	0.114	2.618	0.034	4.161	9.337	0.009	56	-6.353***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	0.136	0.577	0.811	4.975	15.240	0.000	56	-3.727***
	Stdret	0.006	0.005	-0.145	1.965	2.690	0.072	56	-2.930***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	3.049	0.194	-0.229	1.858	3.531	0.080	56	-13.708***
HUYSAMER	Flows	-0.039	2.842	1.199	4.717	20.319	0.000	56	-7.481***
	Perf	0.459	3.779	-0.183	3.450	7.330	0.025	56	-7.219***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.338	0.171	1.731	8.779	105.938	0.000	56	-4.342***
	Stdret	0.009	0.003	3.733	21.896	963.217	0.000	56	-4.715***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.325	0.069	-0.391	1.986	3.826	0.012	56	-29.173***
DALEBROOK	Flows	-0.052	3.192	0.219	1.470	5.907	0.052	56	-3.076***
	Perf	0.275	3.068	-0.415	3.332	6.107	0.047	56	-6.463***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.678	0.143	-0.466	4.271	5.797	0.055	56	-8.739***
	Stdret	0.009	0.002	1.071	4.741	17.768	0.000	56	-3.491***
	Stdmkt	0.712	0.205	1.265	5.156	6.107	0.047	56	-3.647***
	Lnage	0.592	0.607	0.846	2.196	8.186	0.017	56	-22.230***
COUNTER-POINT	Flows	4.366	13.153	4.046	19.452	784.326	0.000	56	-3.664***
	Perf	0.553	1.535	-0.081	3.853	21.128	0.000	56	-7.282***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.792	2.288	0.533	1.374	8.817	0.012	56	-3.676***
	Stdret	0.005	0.016	6.821	49.657	5513.497	0.000	56	-7.117***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.608	0.763	0.632	1.677	7.814	0.020	56	-13.562***
CANNON	Flows	-0.086	1.364	0.296	1.414	6.691	0.035	56	-5.137***
	Perf	1.162	5.517	0.554	3.631	29.876	0.000	56	-4.558***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***

	Size	0.543	0.477	-0.256	1.110	8.947	0.011	56	-3.812***
	Stdret	0.007	0.005	0.452	7.727	54.042	0.000	56	-4.489***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.128	0.326	2.274	6.538	77.448	0.000	56	-22.521***
BRIDGE	Flows	2.496	13.608	6.319	45.040	4496.589	0.000	56	-6.743***
	Perf	3.469	3.574	-0.539	2.235	34.138	0.000	56	-6.602***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	2.022	2.744	0.610	1.388	9.535	0.009	56	-7.178***
	Stdret	0.004	0.005	0.483	1.749	5.830	0.054	56	-6.798***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.127	0.169	-0.864	2.781	7.078	0.029	56	-6.570***
ANALYTICS	Flows	-0.991	12.188	0.813	20.457	717.208	0.000	56	-5.476***
	Perf	2.232	2.982	-1.317	4.266	6.834	0.000	56	-6.157***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	3.042	3.308	0.162	1.051	9.107	0.011	56	-9.082***
	Stdret	0.003	0.004	0.537	1.686	6.721	0.035	56	-4.601***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.582	0.031	-0.750	2.499	5.837	0.054	56	-29.173***
360One	Flows	16.852	58.165	3.307	18.756	681.506	0.000	56	-0.447***
	Perf	3.666	5.000	-1.055	4.249	14.025	0.001	56	-0.669***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	4.320	3.034	-0.390	1.579	6.127	0.047	56	-8.730***
	Stdret	0.006	0.002	1.399	5.785	36.374	0.000	56	-4.535***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.993	0.594	-0.752	2.549	5.756	0.054	56	-9.547***
4D BCI	Flows	3.466	31.088	1.359	7.219	58.765	0.000	56	-1.029***
	Perf	2.160	3.317	0.151	3.304	7.709	0.021	56	-0.546***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.412	1.869	0.619	1.530	8.617	0.013	56	-11.522***
	Stdret	0.005	0.004	0.003	1.278	6.917	0.031	56	-4.788***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.247	0.004	-0.642	2.308	4.971	0.083	56	-31.975***
3LAWS	Flows	5.473	32.679	5.532	33.863	2508.153	0.000	56	-0.705***
	Perf	-0.073	3.199	-0.468	2.154	6.459	0.039	56	-1.009***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.120	0.202	-0.262	1.939	3.265	0.080	56	-7.511***
	Stdret	0.009	0.004	1.651	5.753	43.116	0.000	56	-3.184***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	2.533	0.360	-0.634	2.383	4.639	0.091	56	-6.465***
ABSA PRIME	Flows	14.411	46.788	2.516	13.353	309.166	0.000	56	-0.586***
	Perf	3.410	4.089	0.104	2.728	8.683	0.013	56	-0.567***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	3.065	3.057	0.142	1.238	7.431	0.024	56	-7.638***
	Stdret	0.011	0.004	1.911	7.896	90.012	0.000	56	-3.873***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.611	0.845	-0.799	2.386	6.837	0.033	56	-5.398***
AFENA	Flows	0.969	43.741	1.959	12.908	264.901	0.000	56	-0.378***
	Perf	1.921	3.440	-0.933	3.393	8.497	0.014	56	-0.939***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.219	1.779	1.202	3.260	13.408	0.001	56	-6.861***
	Stdret	0.002	0.005	1.105	2.482	11.799	0.002	56	-7.701***
	Stdmkt	0.712	0.205	1.265	5.1569	25.784	0.000	56	-3.647***
	Lnage	1.784	0.751	-0.990	3.100	9.014	0.011	56	-23.733***
ALLAN GRAY	Flows	-0.321	2.988	1.095	3.852	12.892	0.002	56	-1.028***
	Perf	2.107	5.218	-0.304	4.135	4.911	0.086	56	-0.825***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	8.353	3.332	-1.927	5.173	45.673	0.000	56	-5.300***
	Stdret	0.008	0.004	1.384	5.828	36.526	0.000	56	-5.056***

	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.183	0.002	-0.589	2.224	4.638	0.000	56	-33.974***
ALUWANI	Flows	-0.204	25.299	2.750	16.749	511.707	0.000	56	-1.122***
	Perf	3.549	5.780	0.108	2.240	6.736	0.034	56	-0.741***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.945	0.051	1.649	6.886	60.623	0.000	56	-8.274***
	Stdret	0.010	0.005	1.922	8.253	98.888	0.000	56	-3.359***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.466	0.521	1.098	2.789	11.362	0.003	56	-6.415***
ANCHOR	Flows	41.000	75.394	2.290	9.288	141.228	0.000	56	-0.515***
	Perf	2.877	3.592	-0.376	3.540	12.542	0.002	56	-0.482***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	2.576	3.367	0.531	1.299	9.381	0.009	56	-2.932**
	Stdret	0.004	0.004	0.268	1.298	7.430	0.024	56	-5.534***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.757	0.831	0.379	1.429	7.092	0.029	56	-23.836***
BLUE ALPHA	Flows	0.837	25.458	1.935	13.772	305.683	0.000	56	-0.896***
	Perf	1.864	3.813	-0.055	2.582	6.946	0.031	56	-0.744***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.788	0.055	-0.694	4.806	12.107	0.002	56	-5.018***
	Stdret	0.028	0.033	1.642	5.347	38.013	0.000	56	-4.726***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.074	0.224	-1.102	3.327	11.577	0.003	56	-9.547***
CAPITA BCI	Flows	20.225	93.622	5.921	40.103	3539	0.000	56	-0.696***
	Perf	1.427	1.435	-1.509	6.067	43.197	0.000	56	-0.819***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.447	0.114	0.529	9.005	86.749	0.000	56	5.039***
	Stdret	0.004	0.000	0.018	4.782	7.415	0.025	56	-7.672***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.591	0.607	0.846	2.196	8.186	0.017	56	-5.898***
CENTEAUR	Flows	26.963	137.795	5.690	53.599	2781.937	0.000	56	-0.561***
	Perf	2.779	6.282	-0.890	4.182	10.658	0.005	56	-0.412***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.949	0.178	-0.302	1.394	6.871	0.032	56	-8.953***
	Stdret	0.007	0.003	2.075	7.266	82.662	0.000	56	-3.699***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.464	0.017	-0.681	2.374	5.242	0.073	56	-3.988***
CLUCASGRAY	Flows	1.597	1.703	-1.387	6.219	42.151	0.000	56	-0.940***
	Perf	0.789	2.836	0.394	4.558	7.111	0.029	56	-0.786***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.934	2.668	0.707	1.636	9.005	0.011	56	-8.457***
	Stdret	0.008	0.002	0.950	4.403	13.021	0.001	56	-4.061***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.824	0.696	-0.772	2.477	6.204	0.045	56	-3.745***
HARVARD BCI	Flows	125.159	608.591	5.423	33.039	2379.950	0.000	56	-0.430***
	Perf	0.006	2.605	-1.347	7.701	68.516	0.000	56	-0.498***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.051	0.049	-0.684	3.833	5.994	0.049	56	-6.565***
	Stdret	0.008	0.002	0.667	3.937	6.205	0.044	56	-4.813***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.940	0.312	-0.833	2.341	7.499	0.024	56	-5.399***
IMARA	Flows	10.679	89.253	5.509	36.498	2901.458	0.000	56	-0.859***
	Perf	2.288	3.716	-0.381	3.564	7.914	0.019	56	-0.574***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.032	0.075	-0.718	2.738	4.976	0.083	56	-7.620***
	Stdret	0.008	0.002	0.327	2.939	1.012	0.060	56	-4.455***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.824	0.696	-0.772	2.477	6.204	0.000	56	-3.745***

IP HIGH	Flows	21.979	76.404	3.566	17.259	593.134	0.000	56	-0.666***
	Perf	-0.927	2.905	0.562	4.427	7.695	0.021	56	-1.009***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.818	0.065	1.552	7.749	75.093	0.000	56	-4.719***
	Stdret	0.009	0.002	1.932	8.109	95.739	0.000	56	-4.246***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.723	0.683	0.599	1.796	6.739	0.034	56	-5.813***
KAGISO	Flows	15.845	49.634	1.843	7.018	69.366	0.000	56	-0.666***
	Perf	3.382	6.054	0.895	4.998	16.788	0.000	56	-1.005***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.752	0.320	-1.009	2.575	9.942	0.006	56	-6.209***
	Stdret	0.007	0.002	0.591	4.306	7.231	0.027	56	-4.284***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.993	0.594	-0.752	2.549	5.755	0.056	56	-9.547***
MAESTRO	Flows	46.976	259.842	6.605	47.126	4950.395	0.000	56	-0.629***
	Perf	0.484	3.479	-0.587	3.919	5.188	0.075	56	-0.452**
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	2.029	2.356	0.549	1.838	5.961	0.051	56	-7.281***
	Stdret	0.008	0.004	1.779	8.764	107.068	0.000	56	-4.038***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.590	0.027	-0.658	2.337	5.068	0.079	56	31.483***
NAVIGA	Flows	1.278	21.181	-0.063	7.762	52.971	0.000	56	-0.879***
	Perf	-0.092	2.259	-0.007	4.959	8.959	0.011	56	-1.415***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	2.405	3.070	0.547	1.444	8.446	0.015	56	-7.343***
	Stdret	0.004	0.003	0.197	1.925	3.057	0.052	56	-3.505***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.561	0.916	-0.789	2.172	7.407	0.025	56	-3.041***
NORTHSTAR	Flows	8.305	26.746	1.539	6.589	52.176	0.000	56	-0.774***
	Perf	2.462	3.733	0.808	6.745	38.825	0.000	56	-0.713***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	4.438	1.049	0.137	1.357	6.472	0.039	56	-3.005**
	Stdret	0.001	0.001	0.897	2.191	9.042	0.011	56	-13.224***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	2.772	0.258	-0.306	1.914	3.627	0.023	56	-22.451***
PERSONAL TRUST	Flows	28.359	207.011	7.261	53.822	6518.791	0.000	56	-1.162***
	Perf	-0.286	3.139	-0.381	5.003	10.715	0.005	56	-0.897***
	Ecosize	0.825	1.046	-1.029	2.963	9.8850	0.007	56	-0.614***
	Size	1.789	0.166	-0.115	1.660	4.311	0.081	56	-8.039***
	Stdret	0.008	0.002	1.060	3.929	12.506	0.002	56	-3.956***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.173	0.783	-0.034	1.415	5.873	0.054	56	-21.134***
PRESCIENT	Flows	41.810	169.122	3.640	17.513	615.158	0.000	56	-0.882***
	Perf	3.792	4.582	-0.929	2.401	8.887	0.012	56	-0.805***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.815	0.155	-1.136	6.663	43.339	0.000	56	-2.876***
	Stdret	0.008	0.002	0.407	2.723	1.724	0.014	56	-4.320***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.135	0.001	-0.595	2.235	4.681	0.096	56	-13.133**
RCI	Flows	2.953	33.788	3.738	24.994	1259.079	0.000	56	-1.051***
	Perf	1.539	4.598	-1.031	4.144	12.972	0.002	56	-0.636***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	0.538	0.005	-0.557	4.172	6.105	0.047	56	-3.492***
	Stdret	0.007	0.004	-3.037	20.201	776.432	0.000	56	-8.109***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.131	0.172	-0.867	2.753	7.165	0.027	56	-3.810***
RECM	Flows	3.395	28.565	1.649	10.479	155.945	0.000	56	-0.600***
	Perf	1.238	4.907	-0.922	5.689	24.809	0.000	56	-0.428***

	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.846	0.149	-0.479	1.913	4.902	0.086	56	-5.804***
	Stdret	0.006	0.002	1.872	6.715	64.894	0.000	56	-7.738***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	1.131	0.172	-0.867	2.753	7.165	0.000	56	-3.811**
STANLIB	Flows	27.838	51.257	1.653	7.679	76.599	0.000	56	-0.501***
	Perf	4.012	4.374	-0.093	2.529	11.095	0.004	56	-0.733***
	Ecosize	0.825	1.046	-1.029	2.963	9.885	0.007	56	-0.614***
	Size	1.864	0.214	-0.753	1.984	7.694	0.021	56	-10.021***
	Stdret	0.010	0.004	1.891	7.789	86.879	0.000	56	-3.873***
	Stdmkt	0.712	0.205	1.265	5.156	25.784	0.000	56	-3.647***
	Lnage	0.888	0.418	-1.239	3.219	14.441	0.000	56	-8.279***

Source: Authors' estimations (2021).