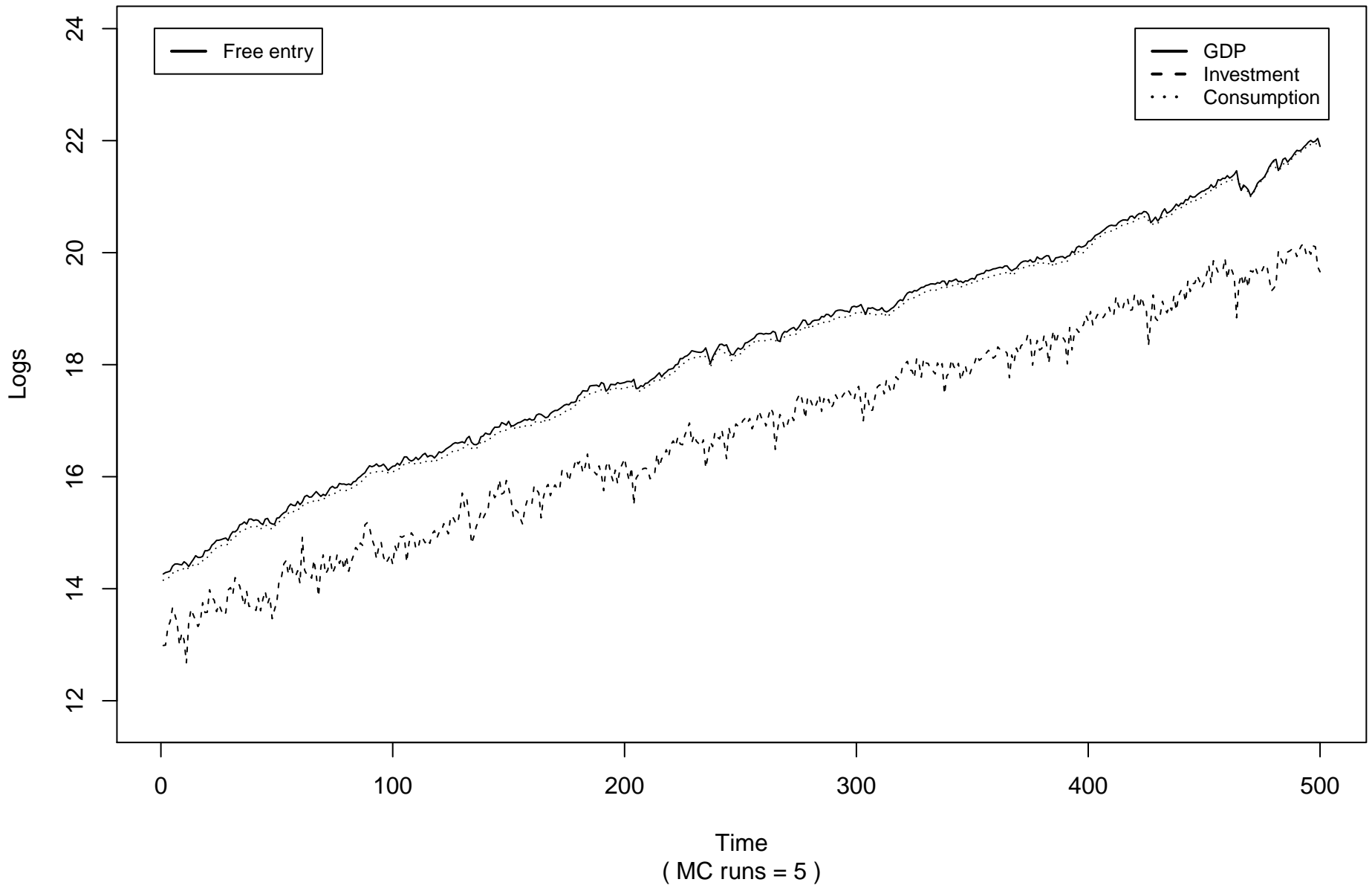
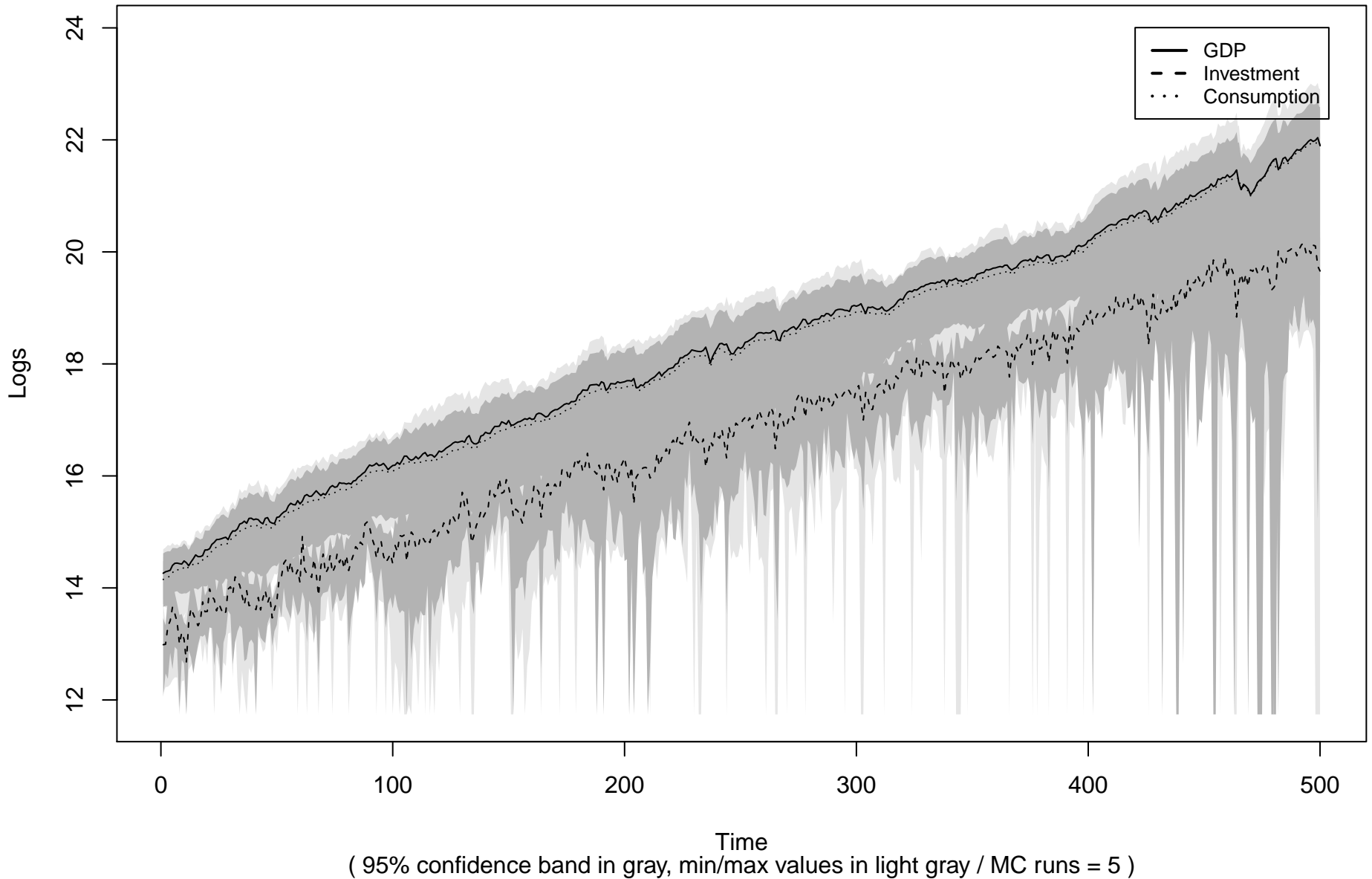


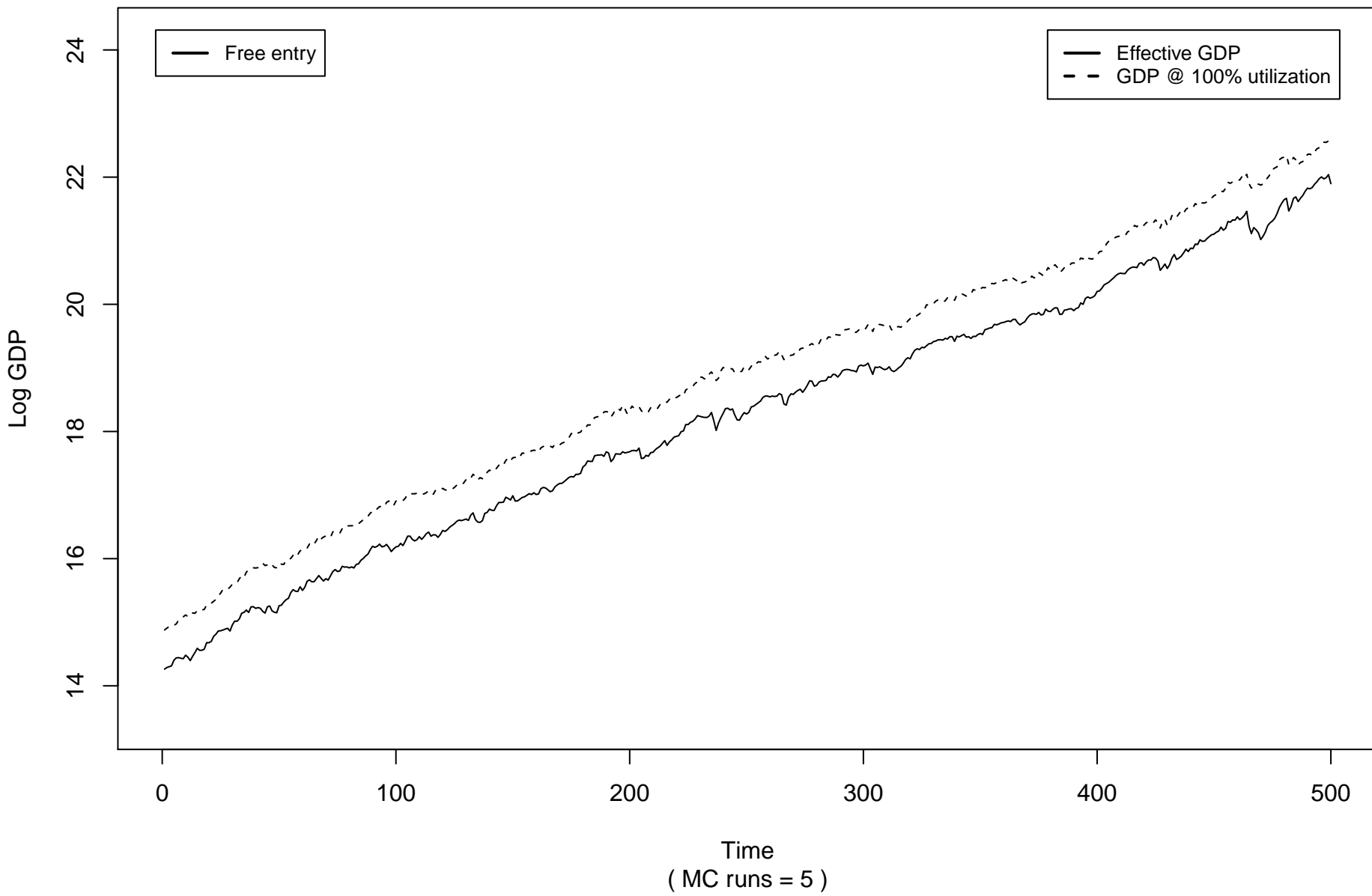
GDP, investment and consumption (all experiments)



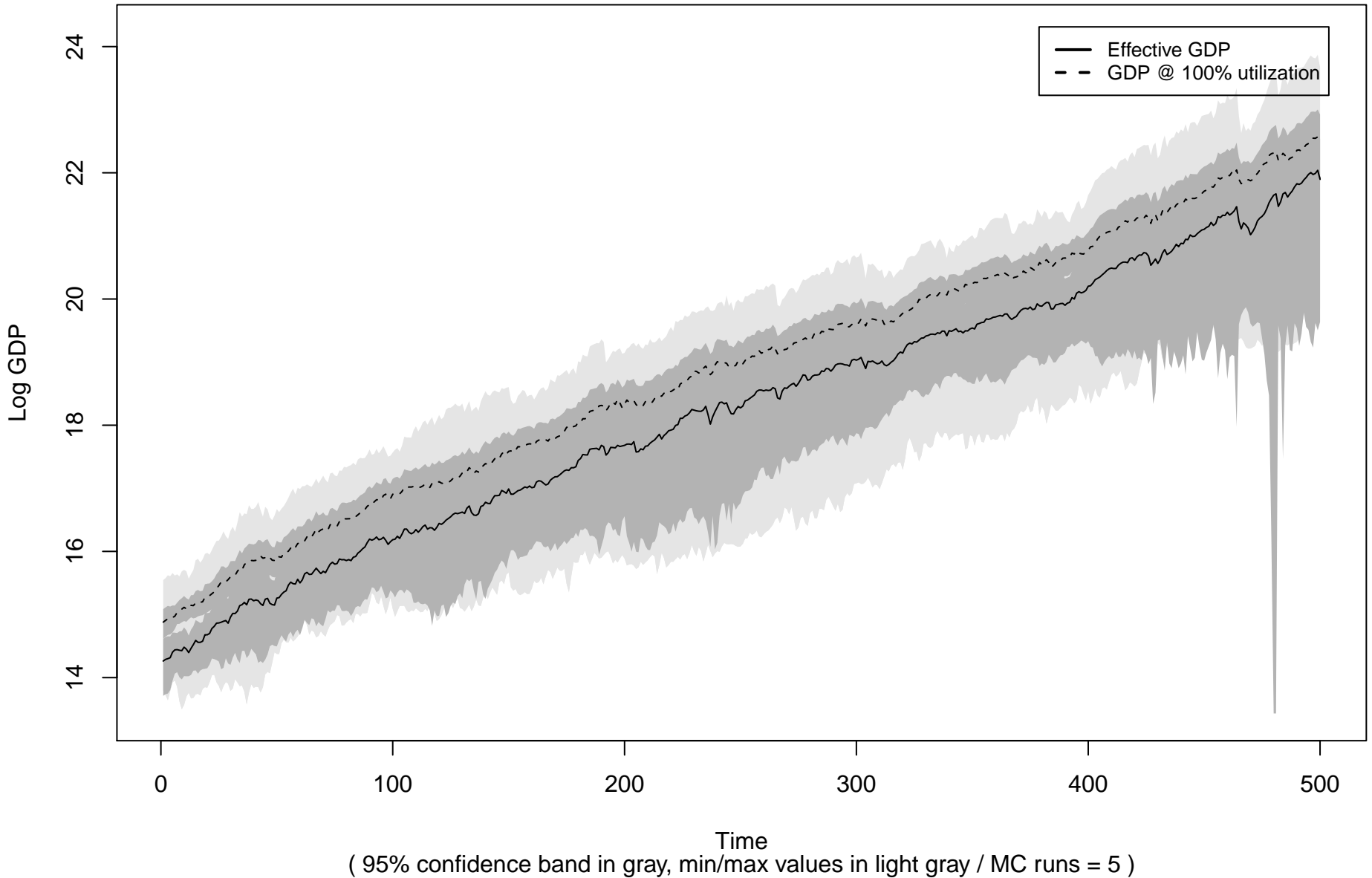
GDP, investment and consumption (Free entry)



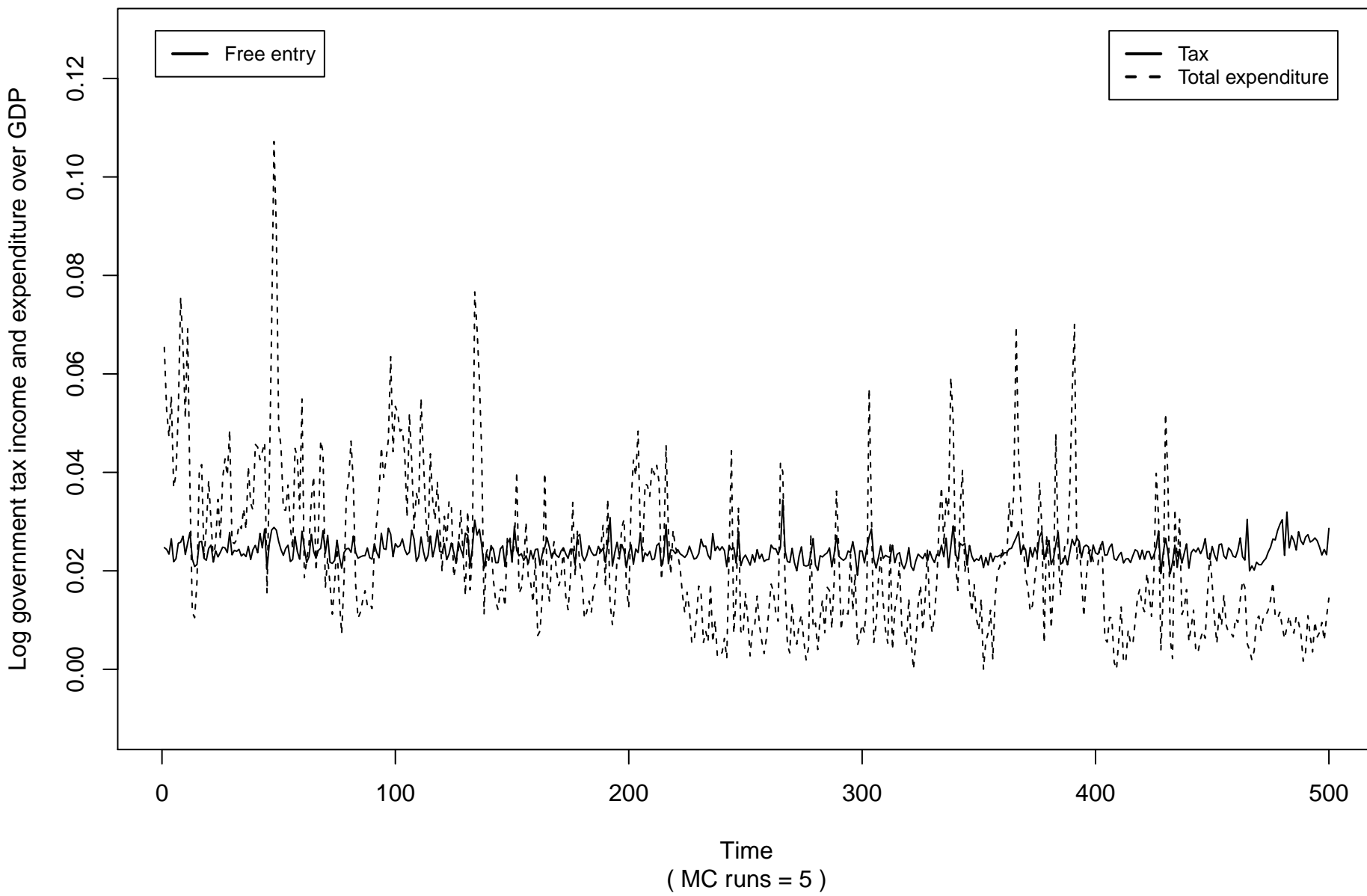
GDP (all experiments)



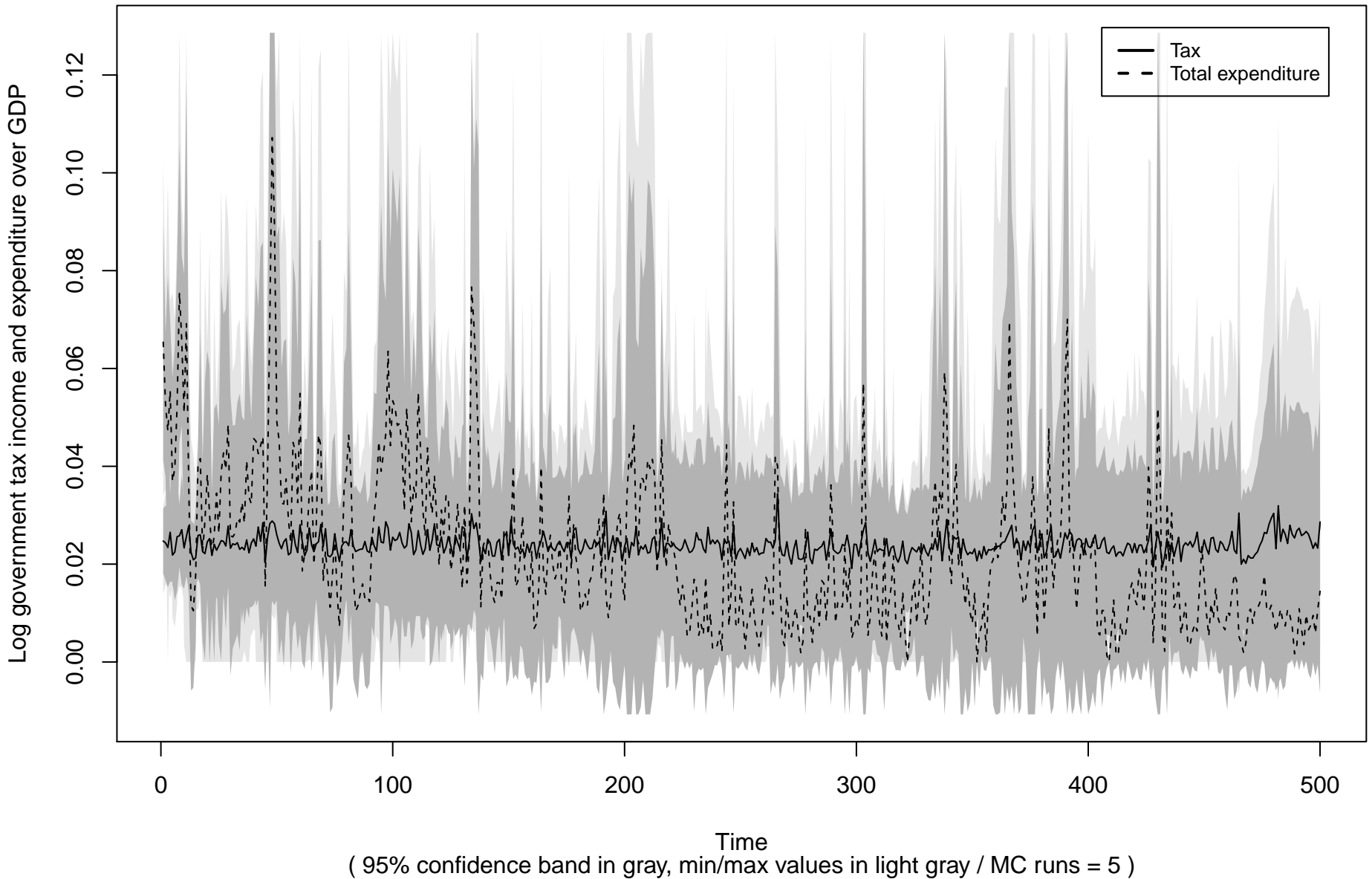
GDP (Free entry)



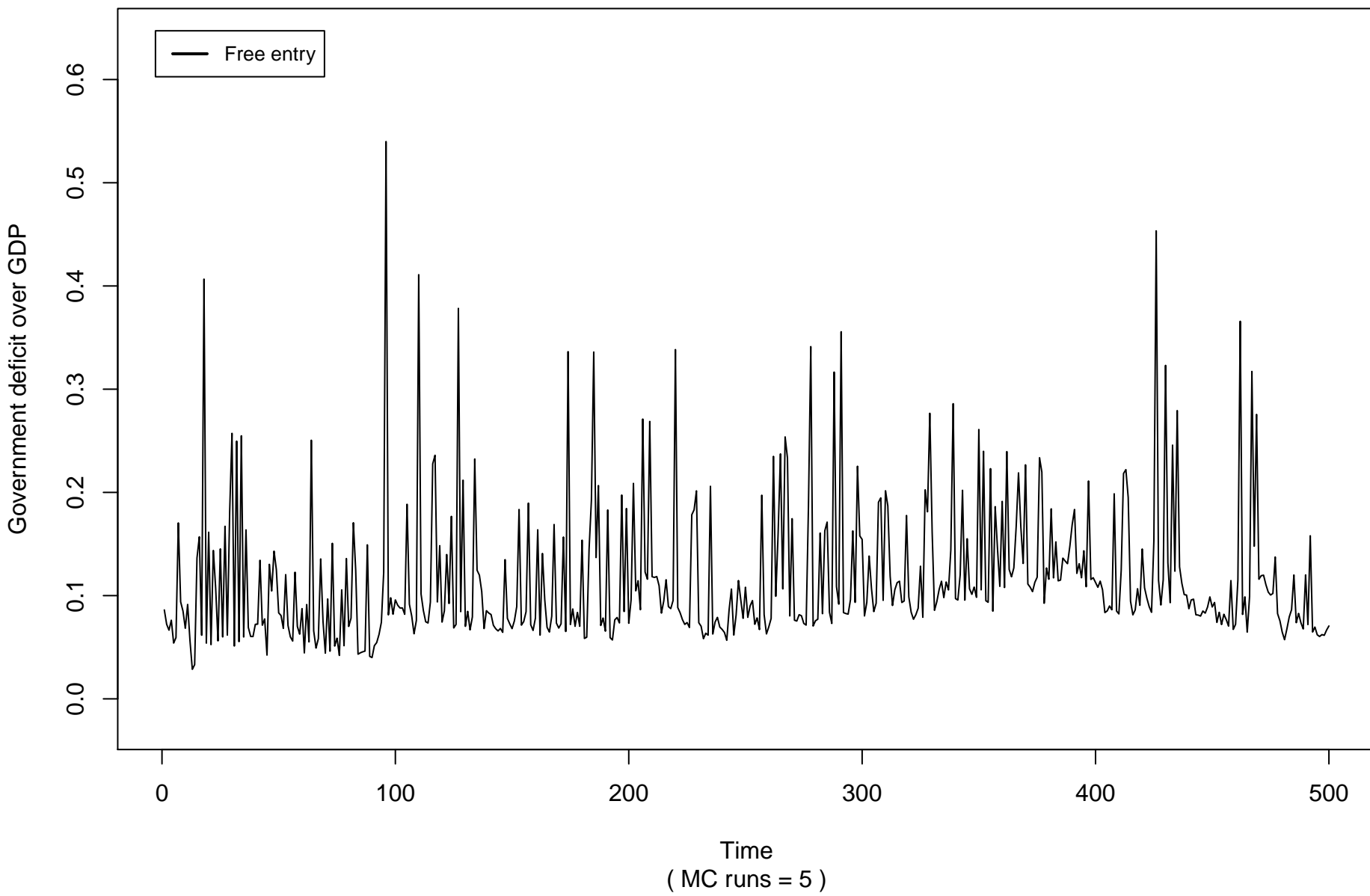
Government income and expenditure on GDP (all experiments)



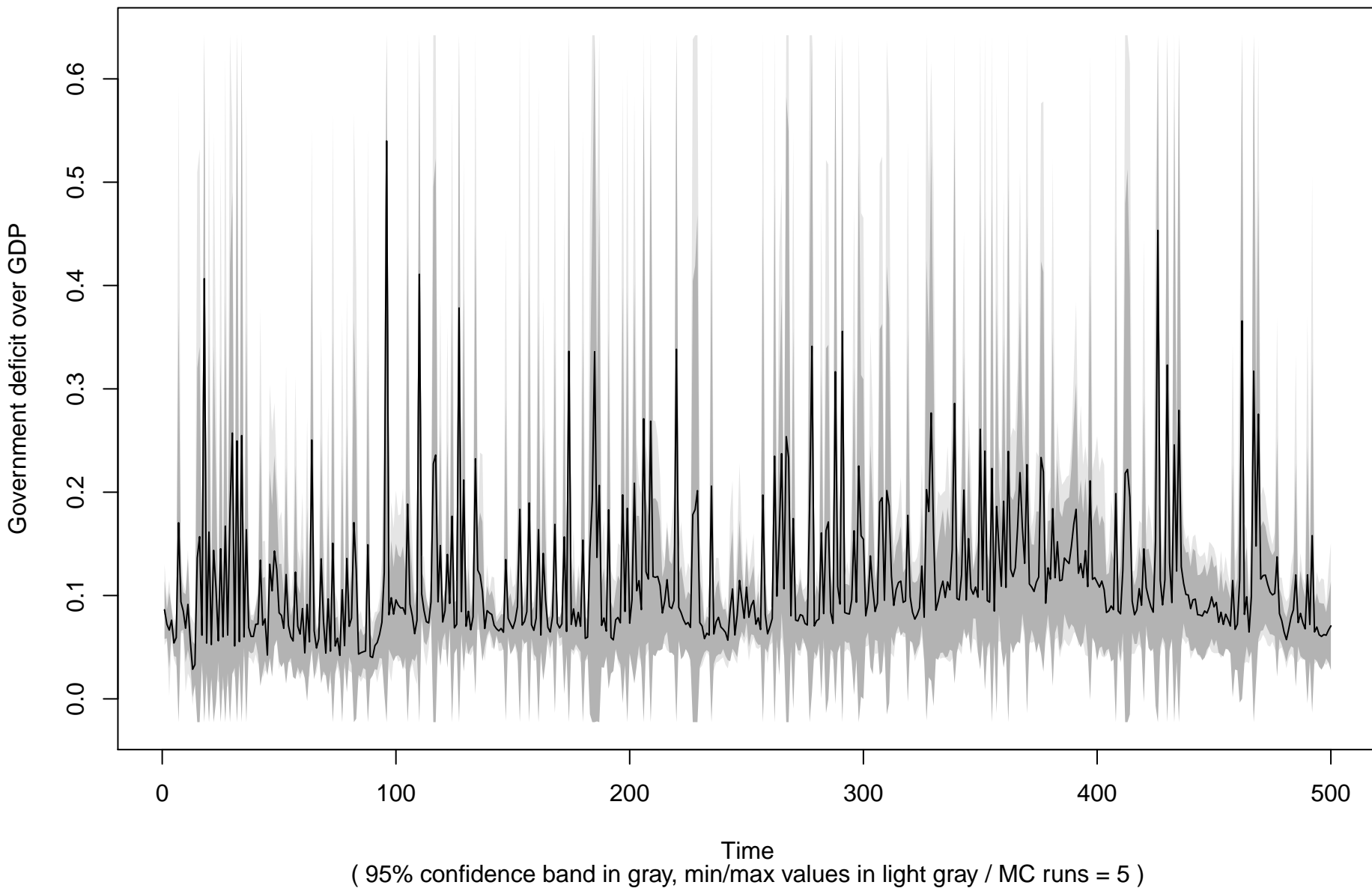
Government income and expenditure on GDP (Free entry)



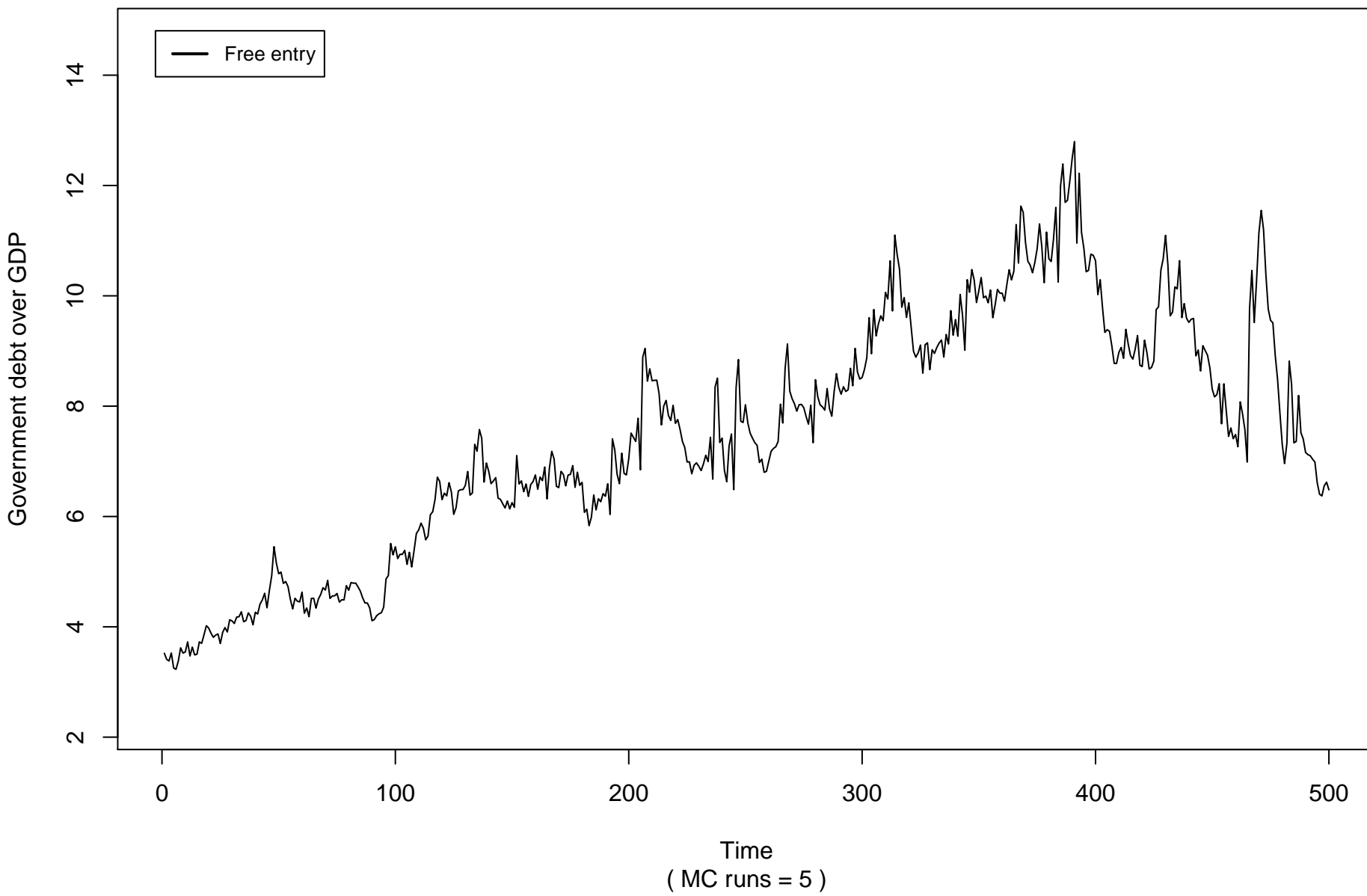
Government deficit on GDP (all experiments)



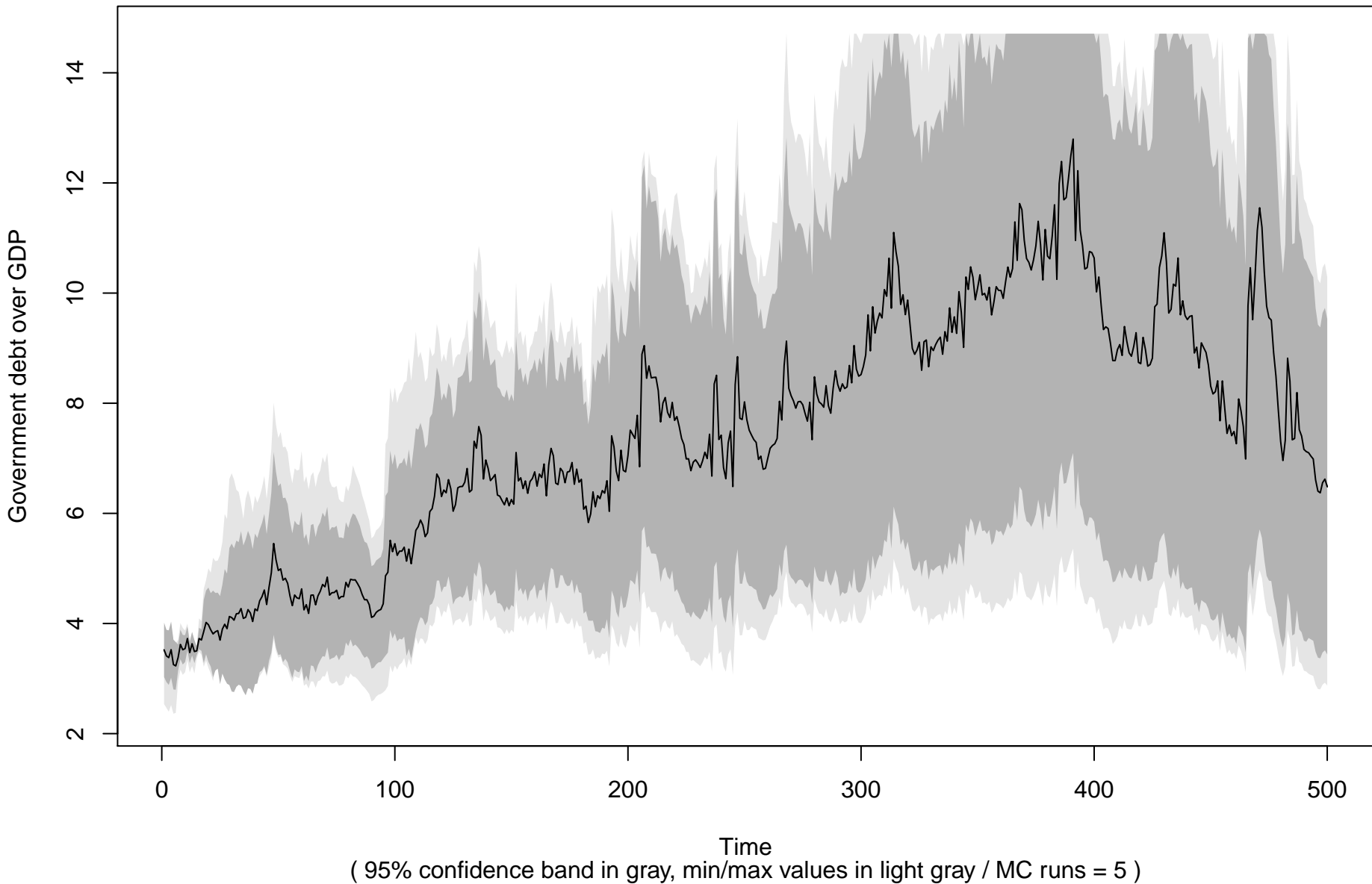
Government deficit on GDP (Free entry)



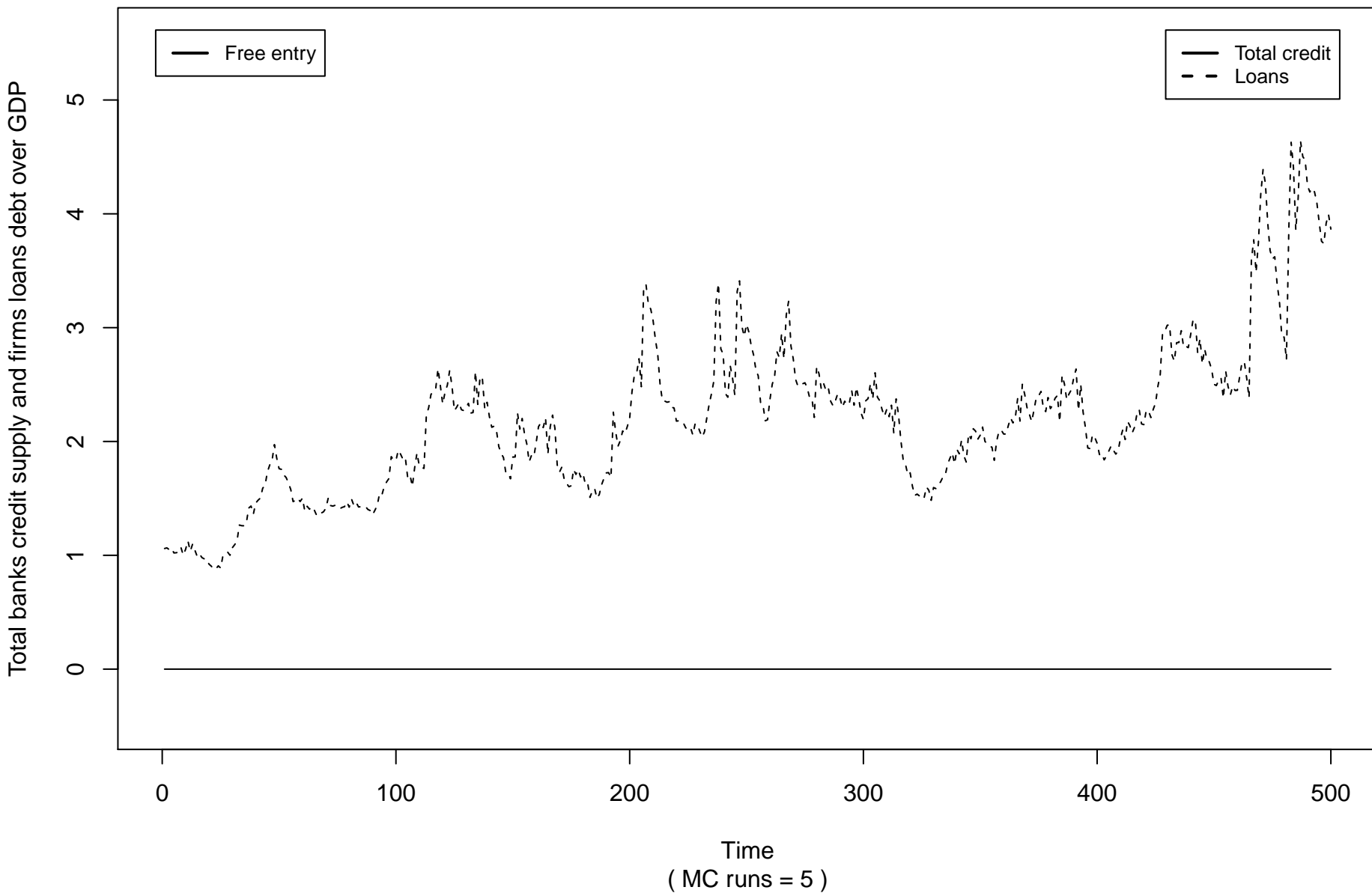
Government debt on GDP (all experiments)



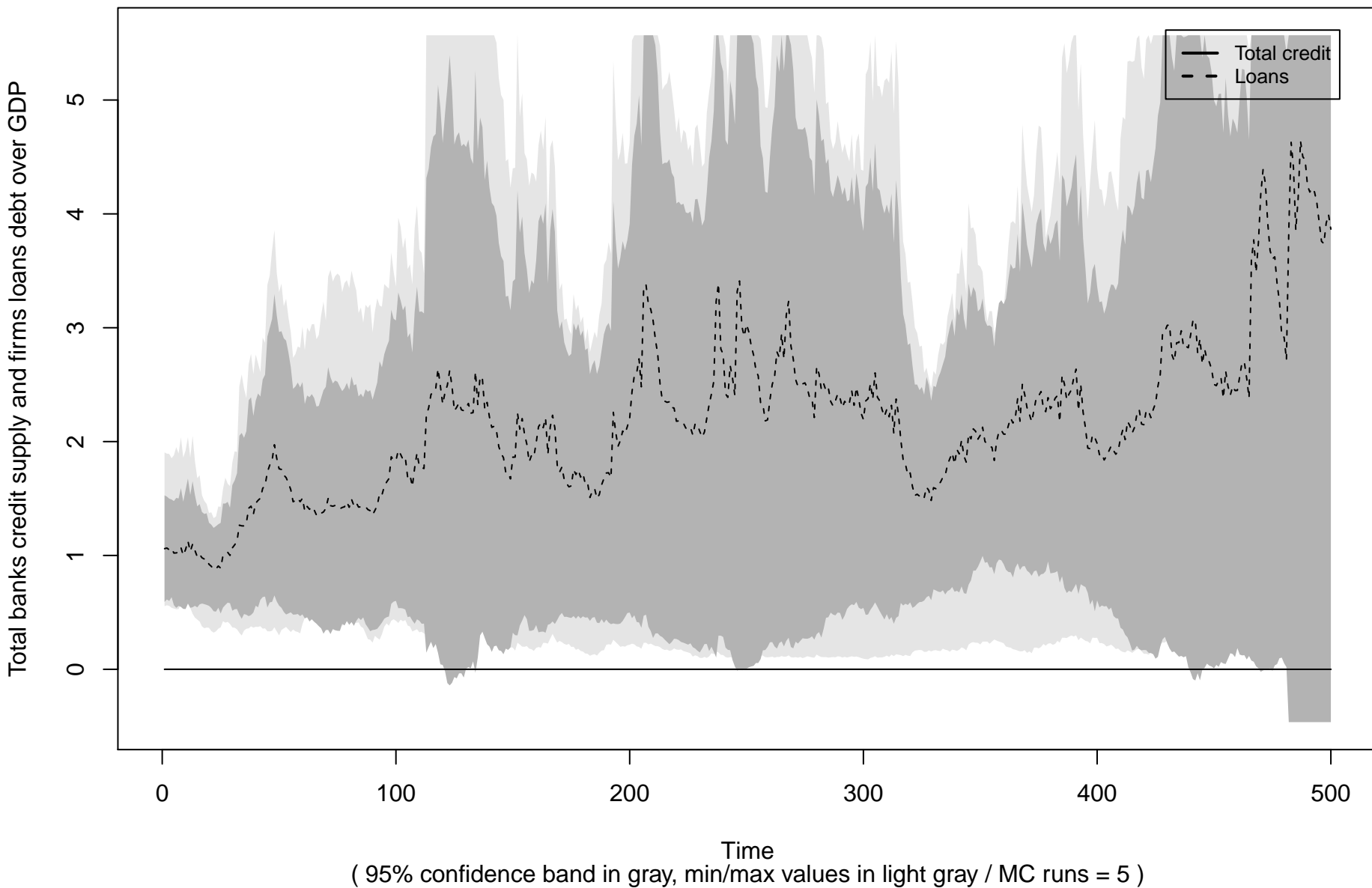
Government debt on GDP (Free entry)



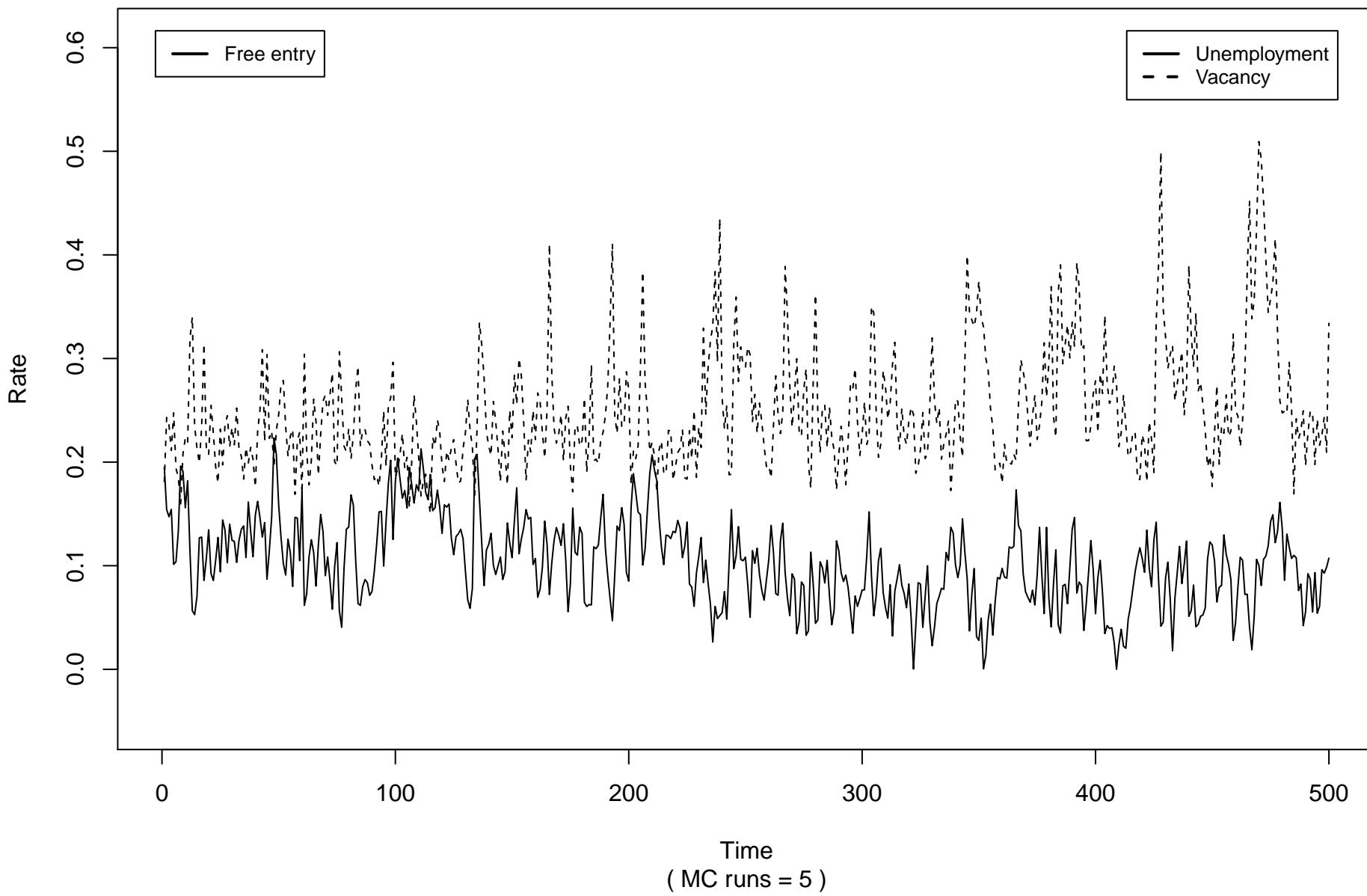
Total credit supply and loans on GDP (all experiments)



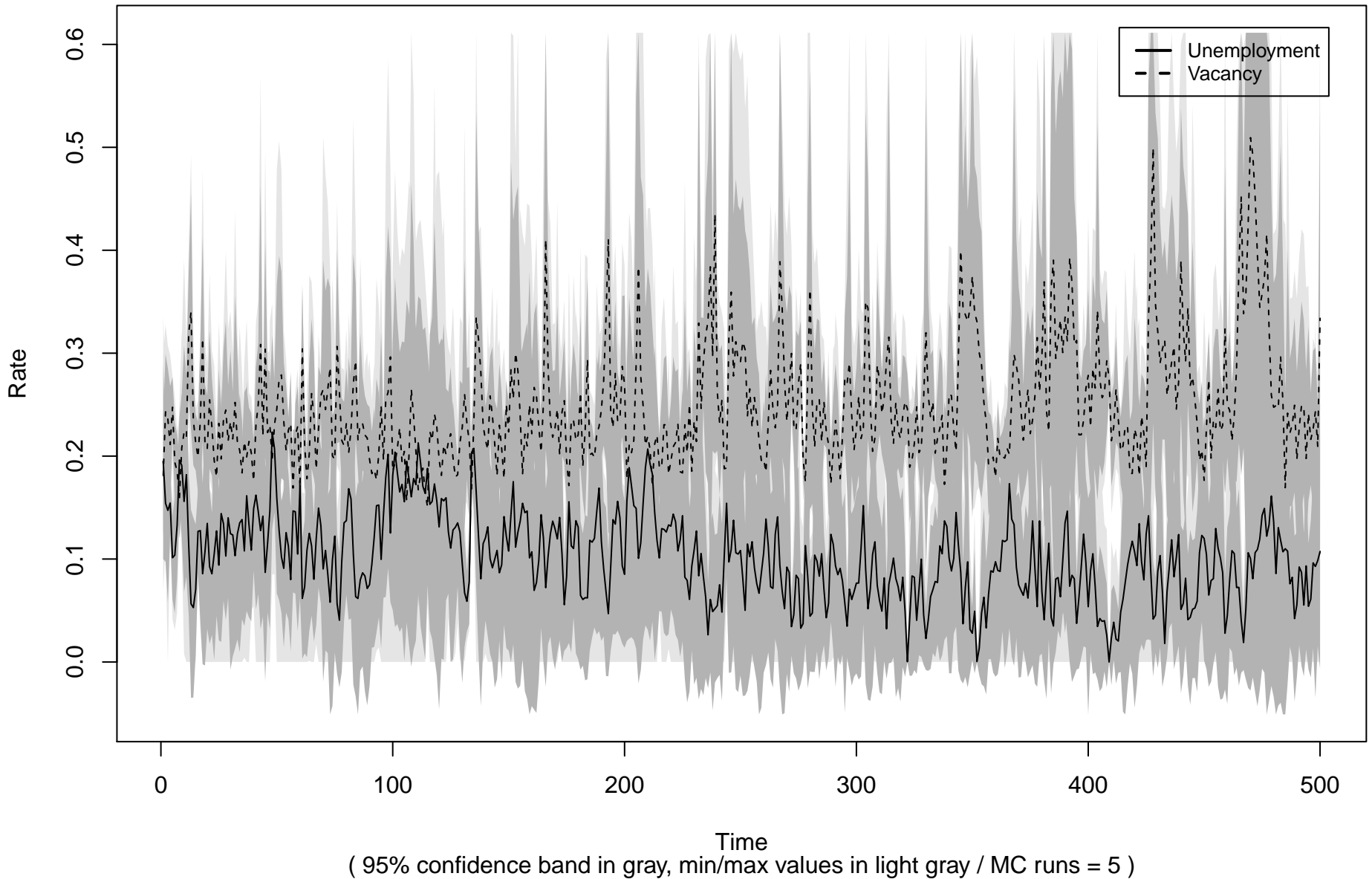
Total credit supply and loans on GDP (Free entry)



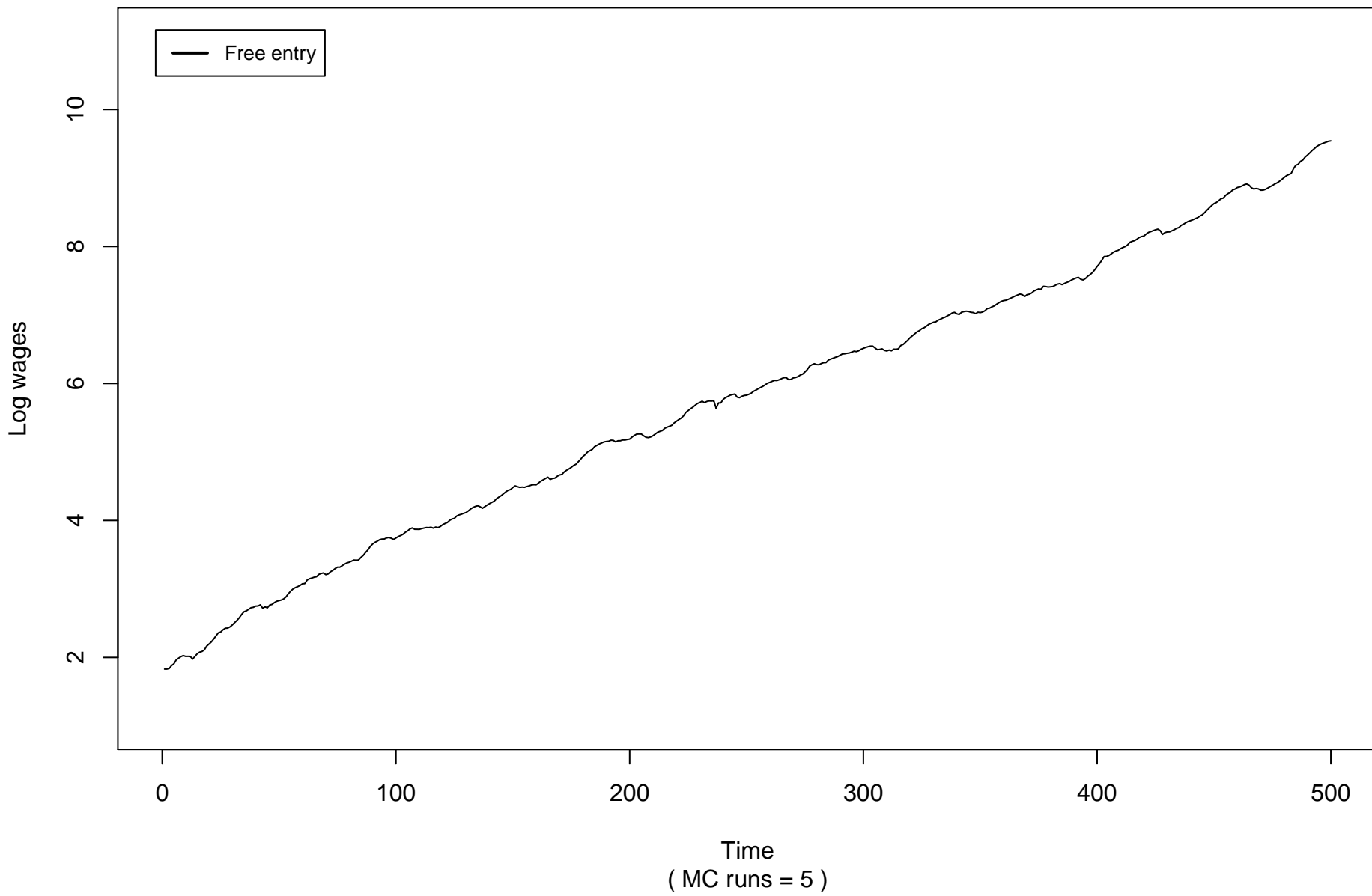
Unemployment and vacancy rates (all experiments)



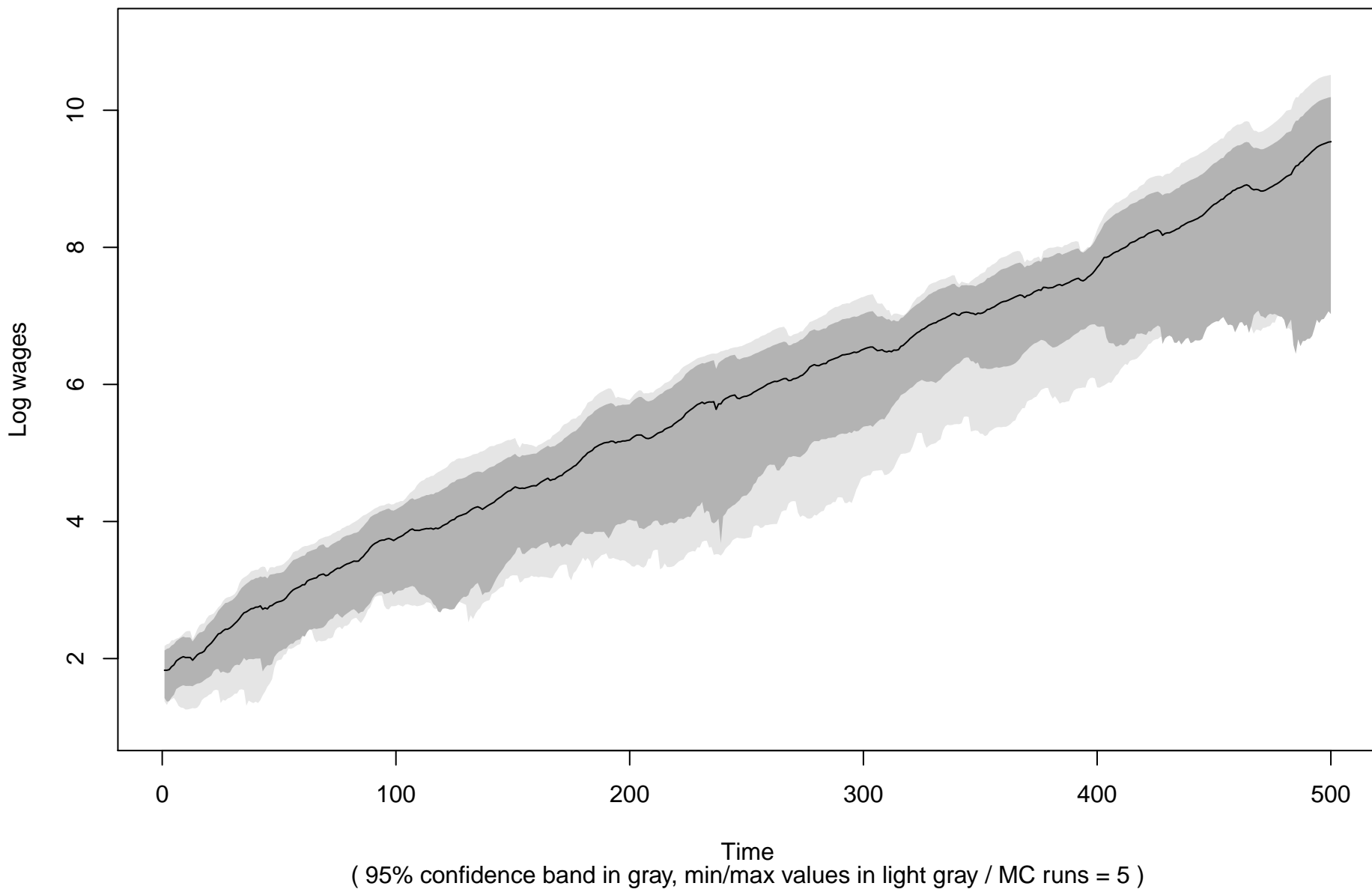
Unemployment and vacancy rates (Free entry)



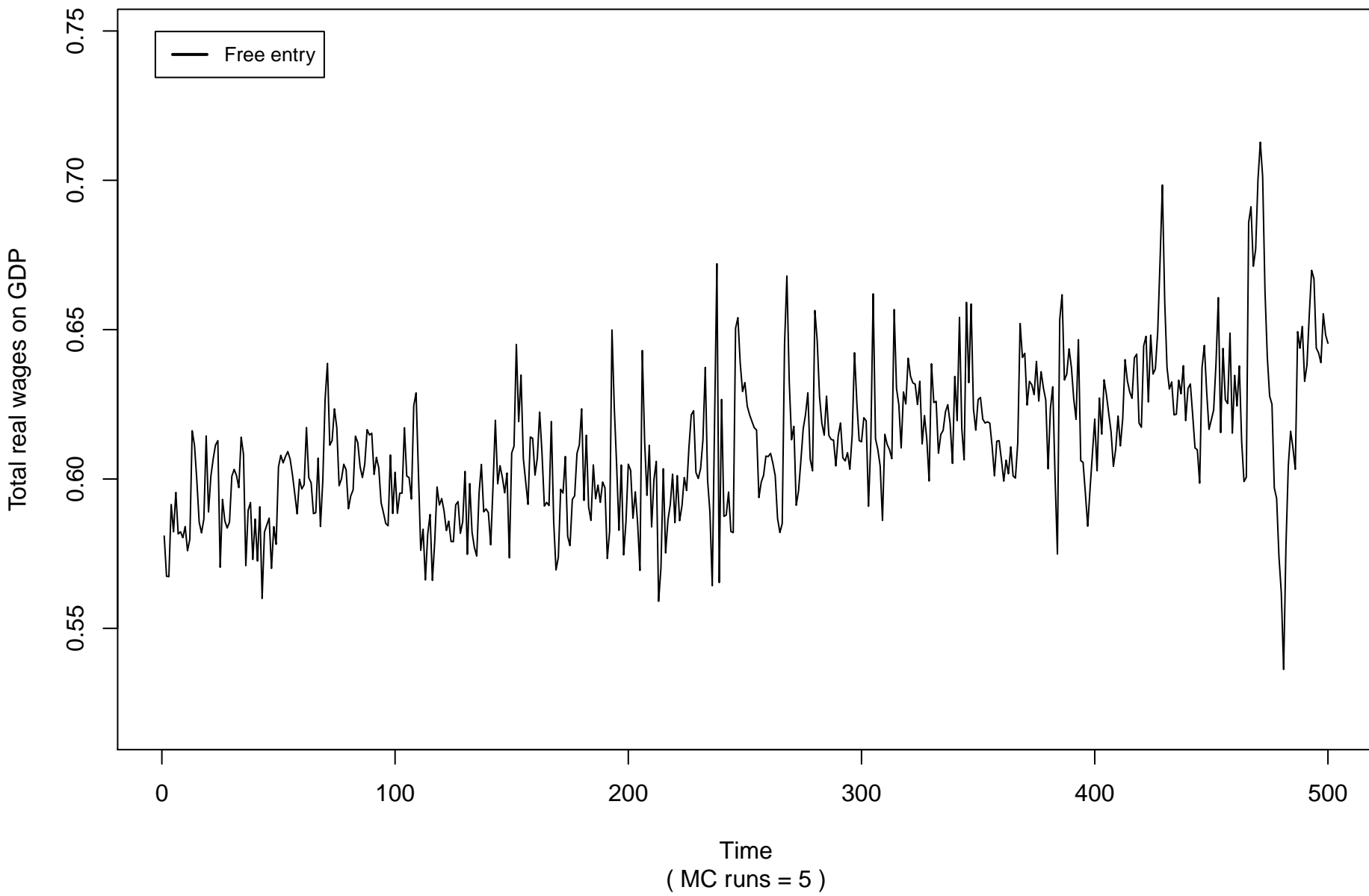
Real wages average (all experiments)



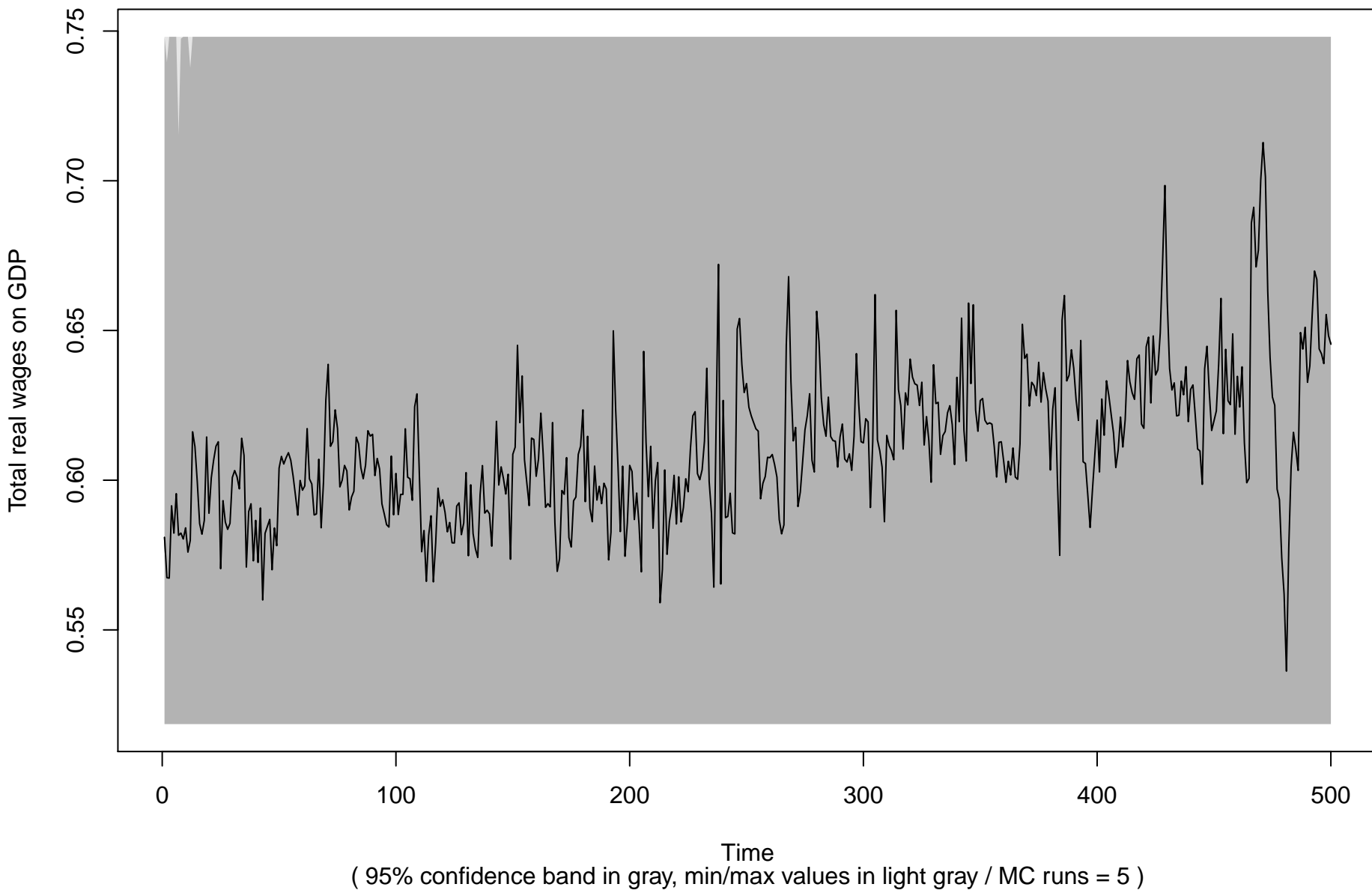
Real wages average (Free entry)



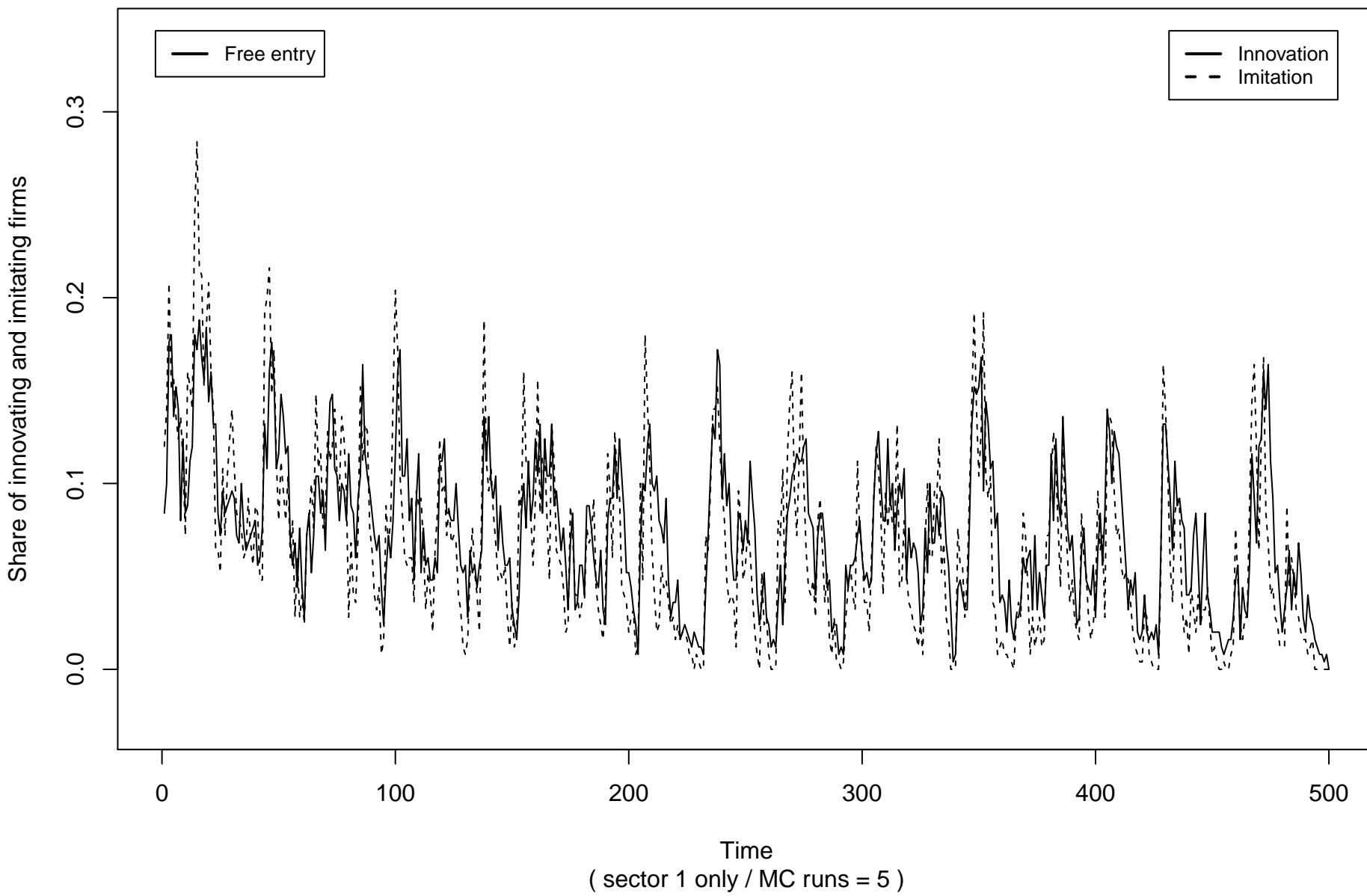
Wage share (all experiments)



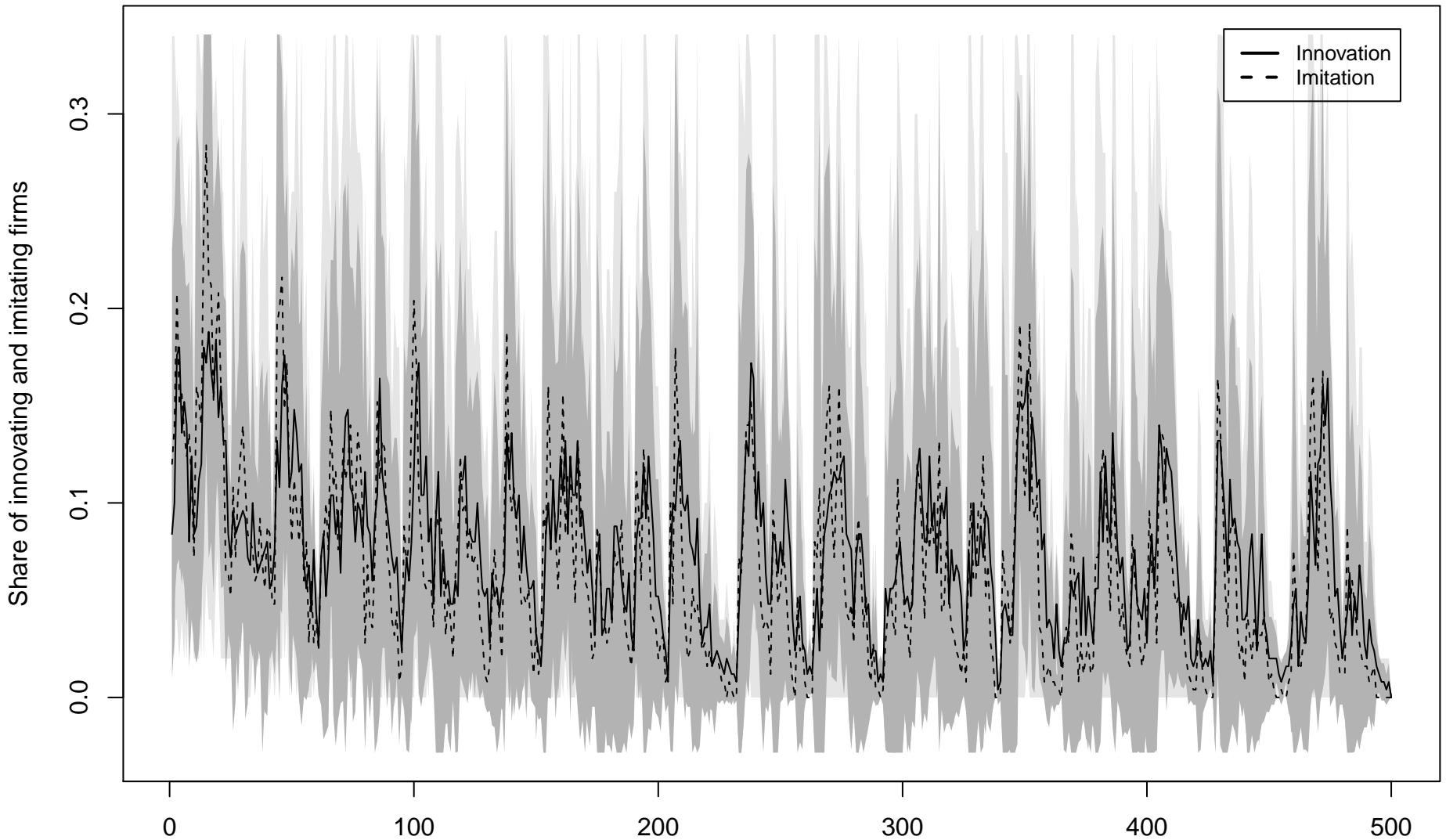
Wage share (Free entry)



Innovation and imitation (all experiments)

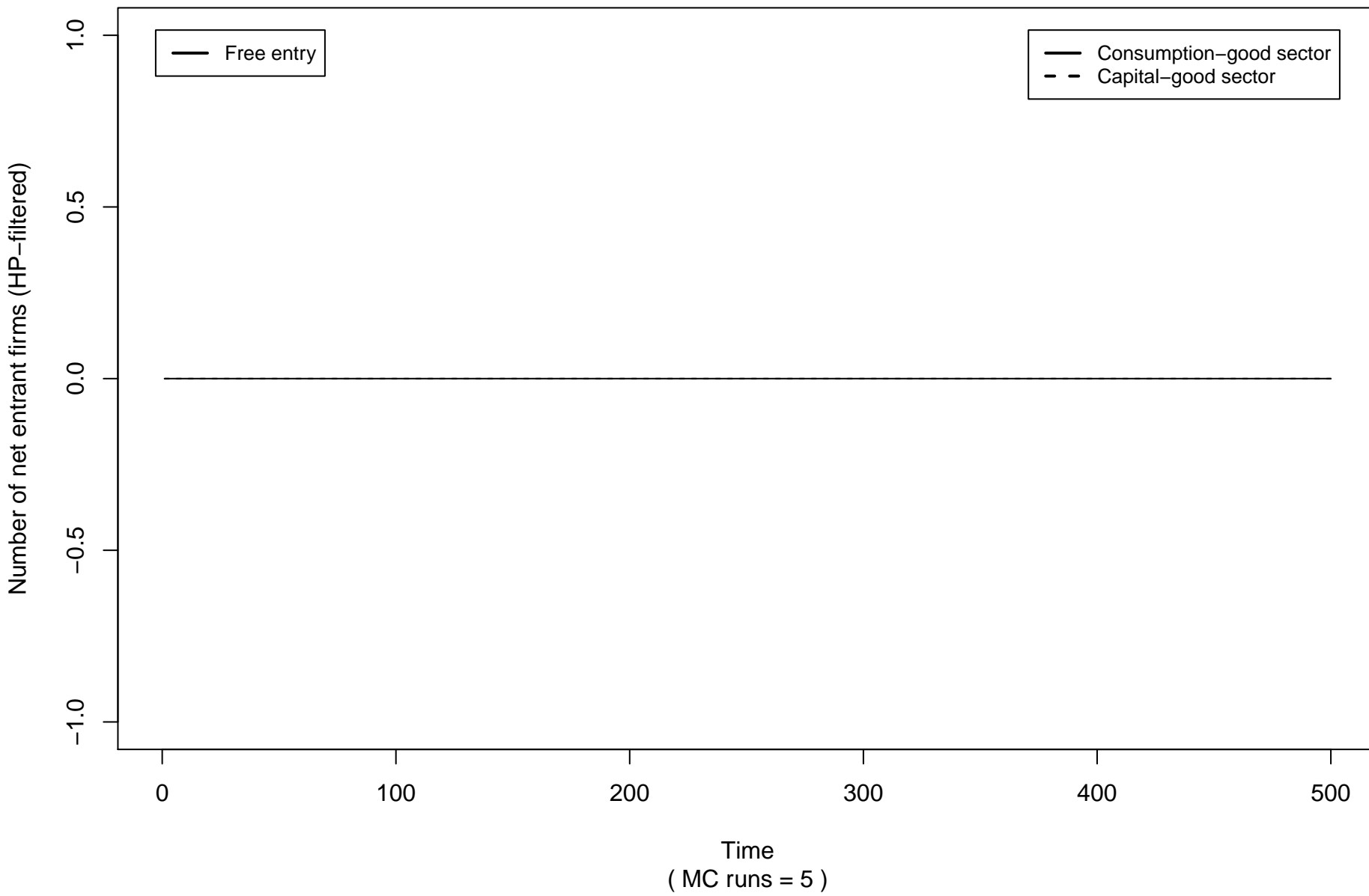


Innovation and imitation (Free entry)

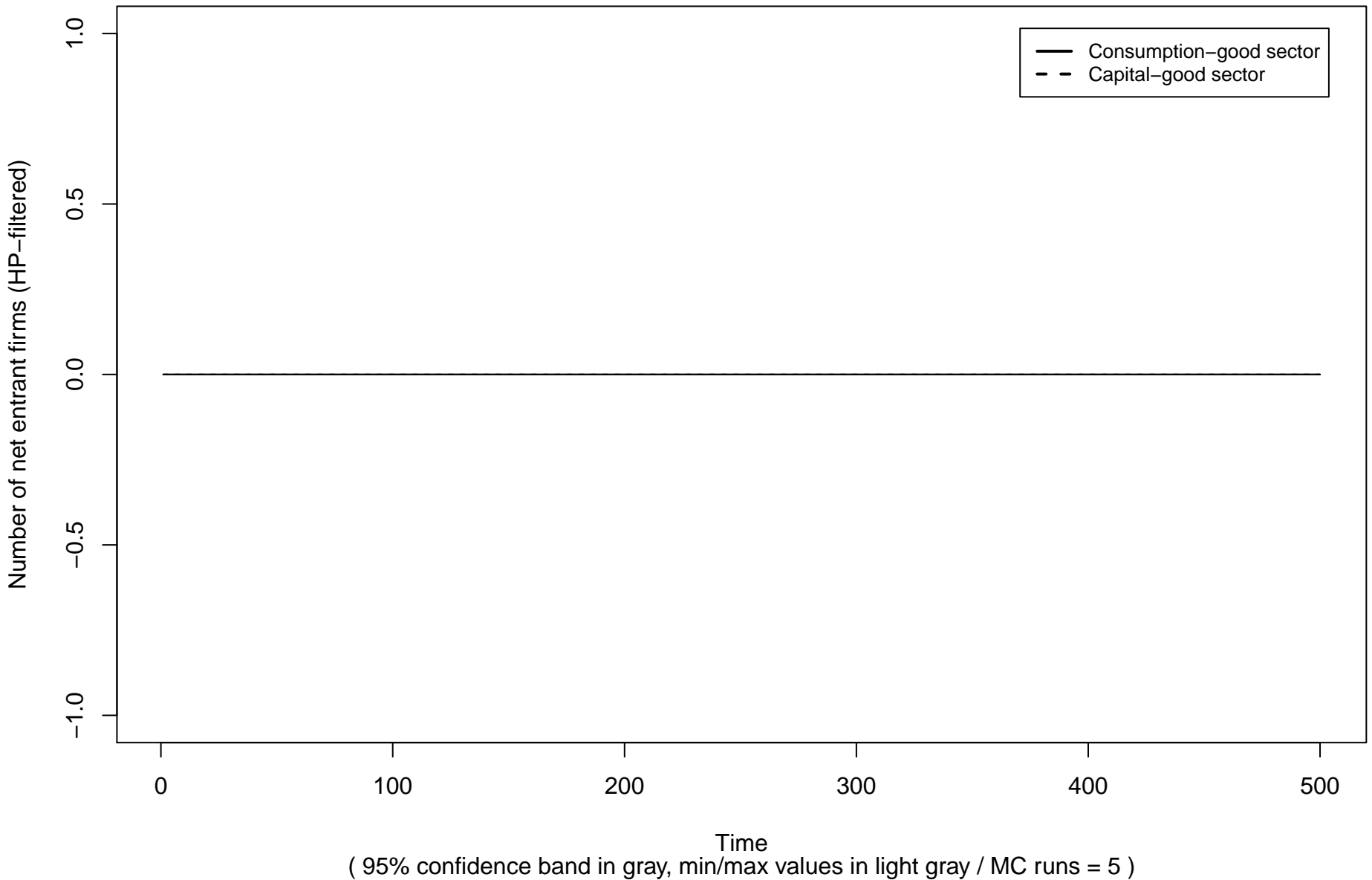


Time
(95% confidence band in gray, min/max values in light gray / sector 1 only / MC runs = 5)

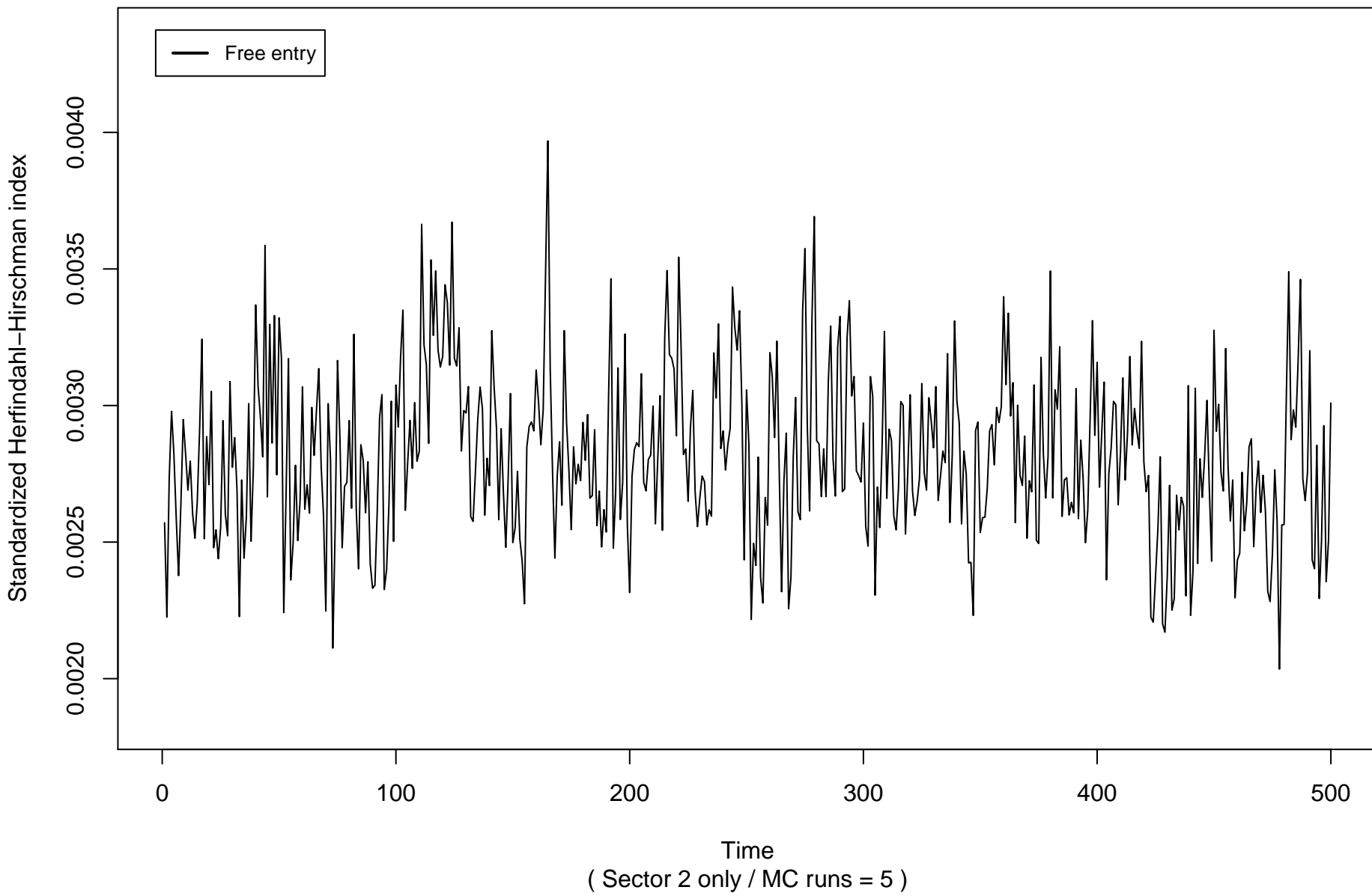
Net entry of firms trend (all experiments)



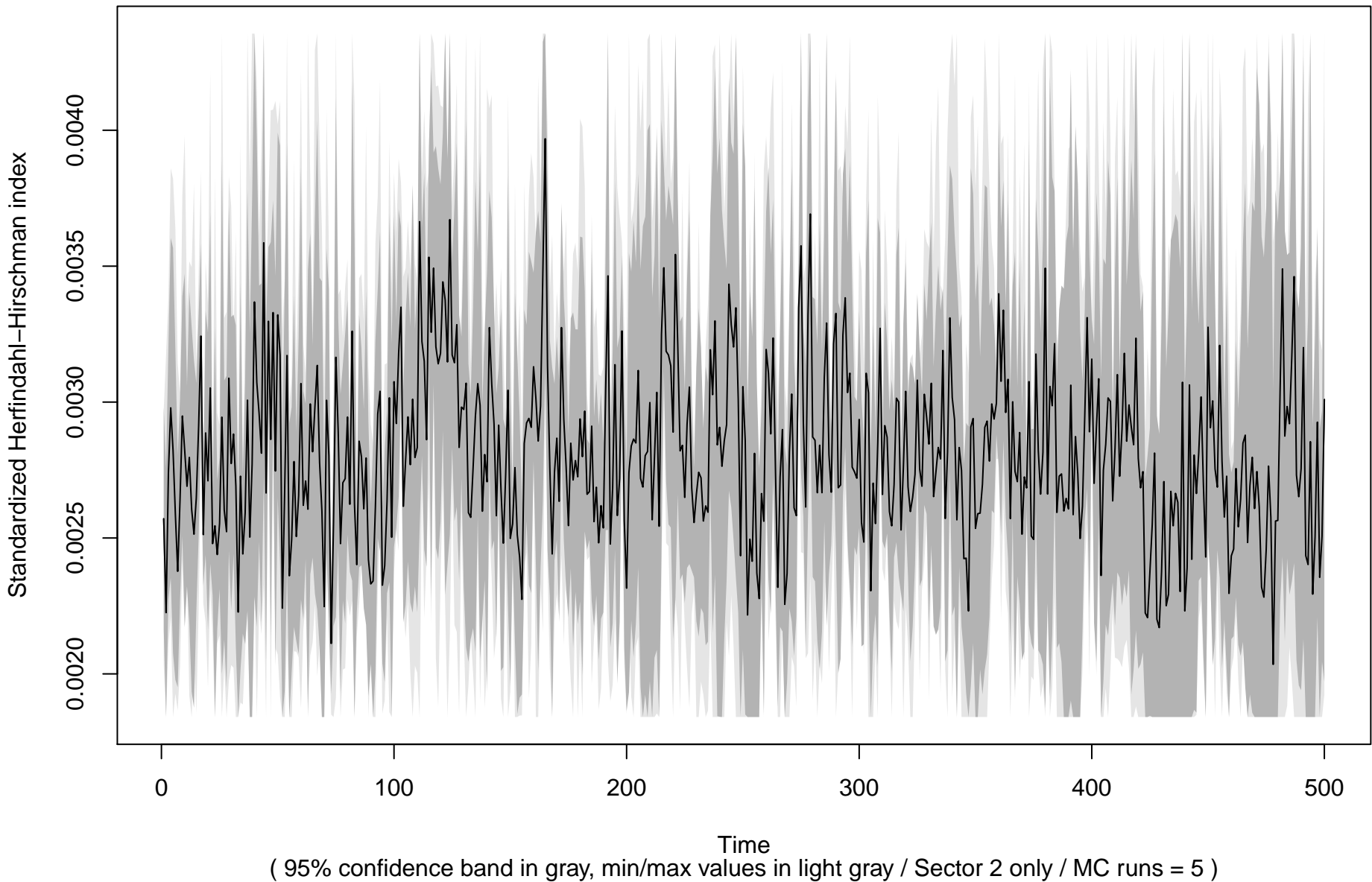
Net entry of firms trend (Free entry)



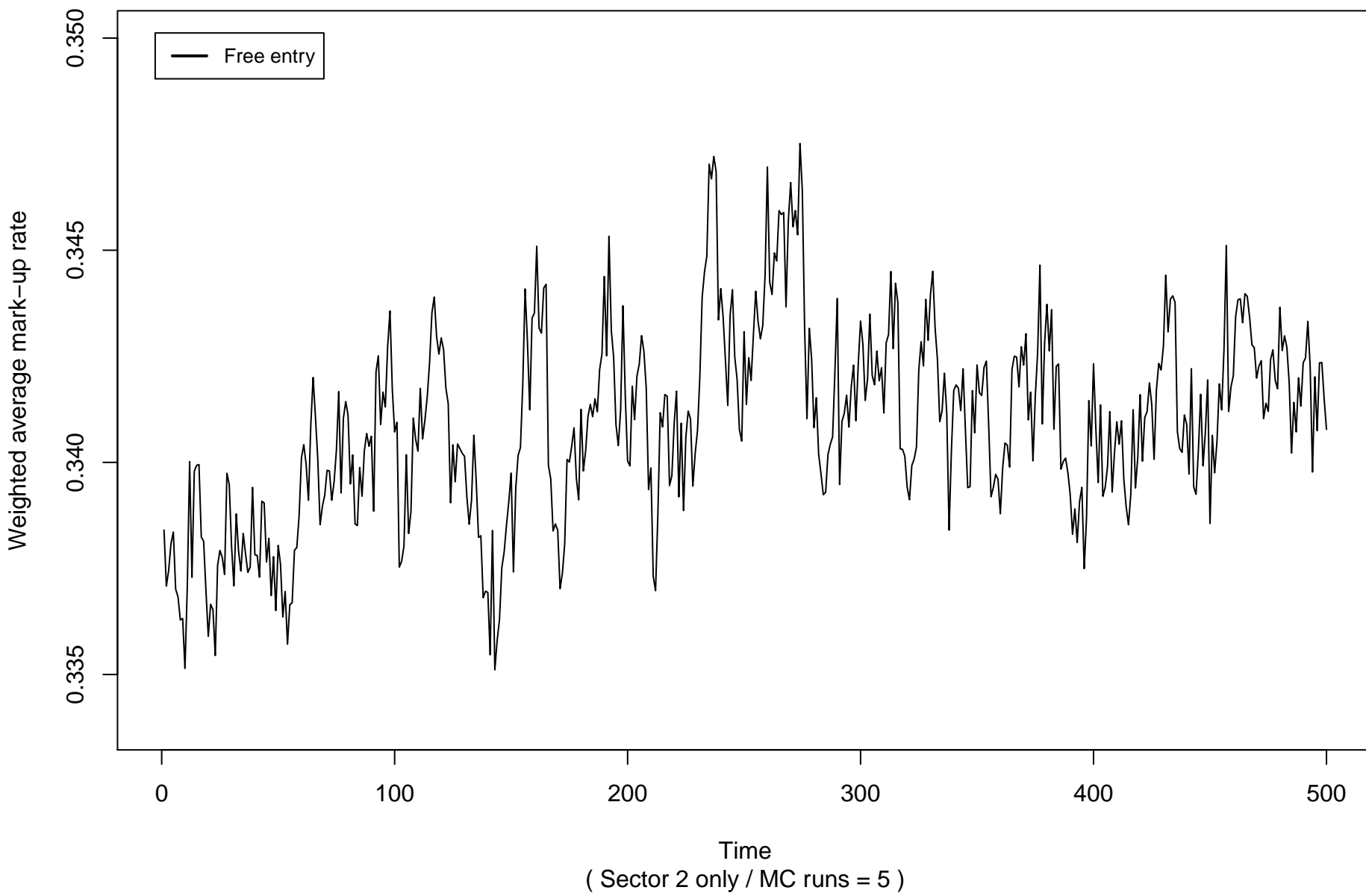
Market concentration (all experiments)



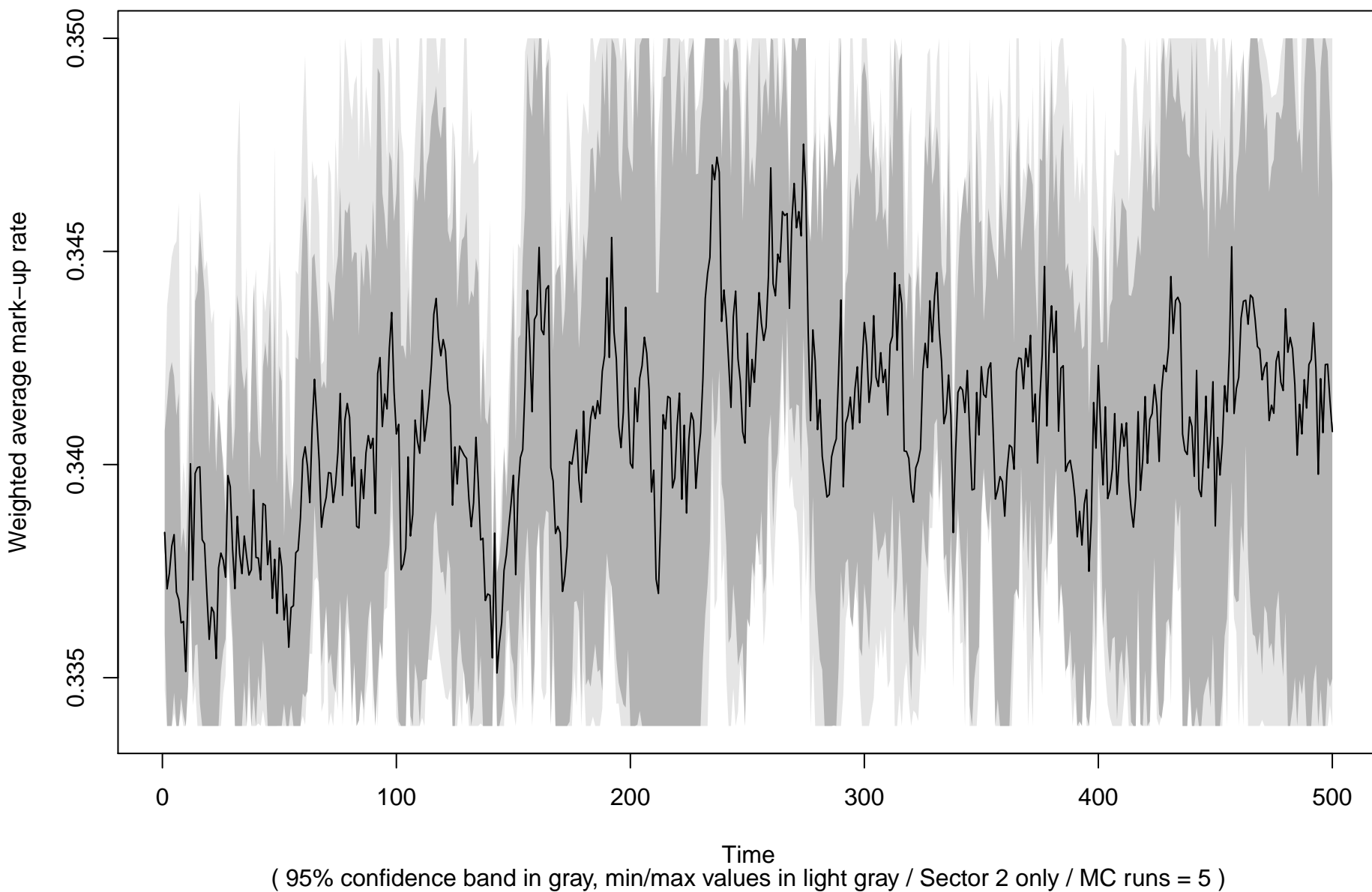
Market concentration (Free entry)



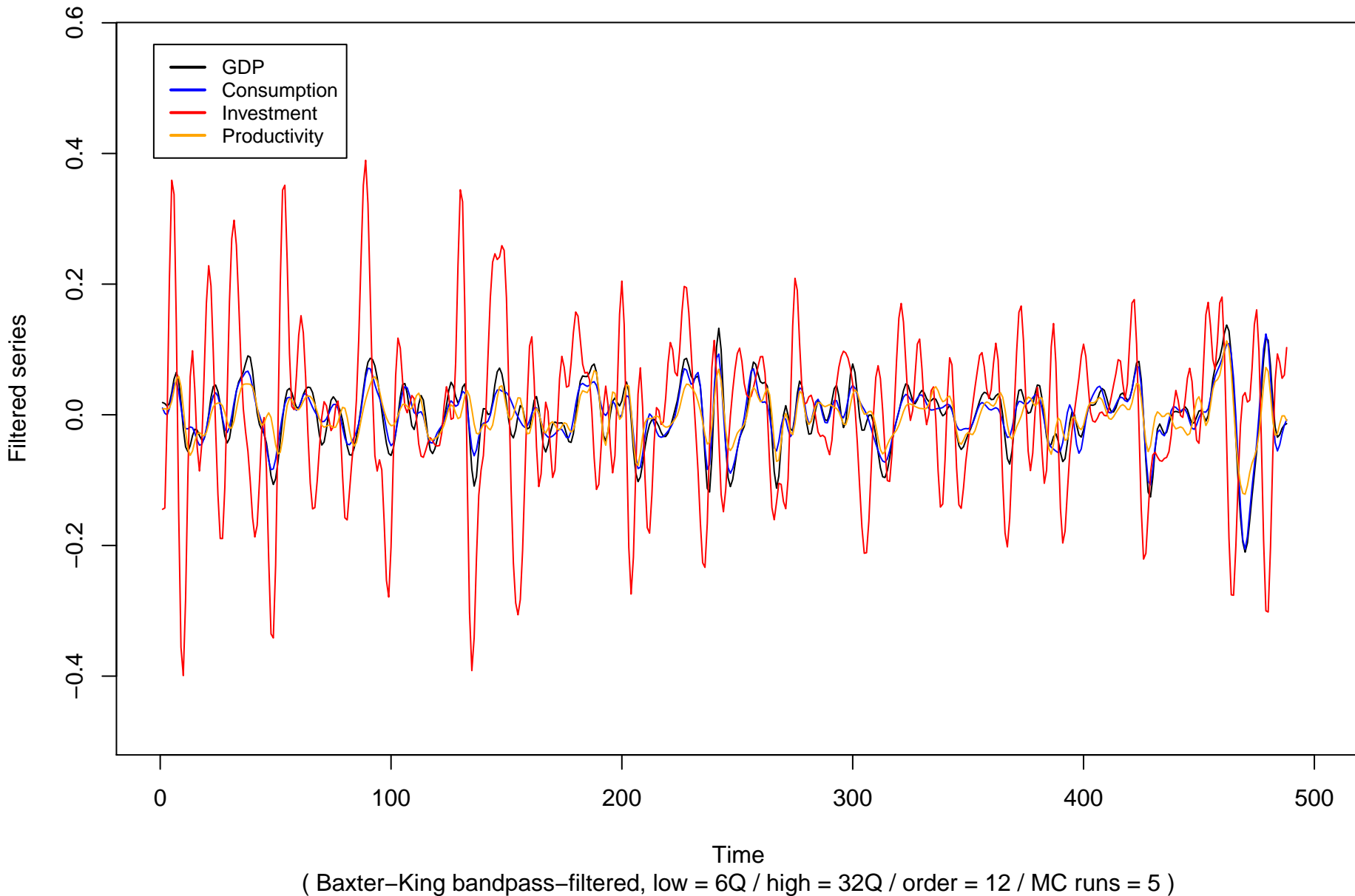
Mark-up average (all experiments)



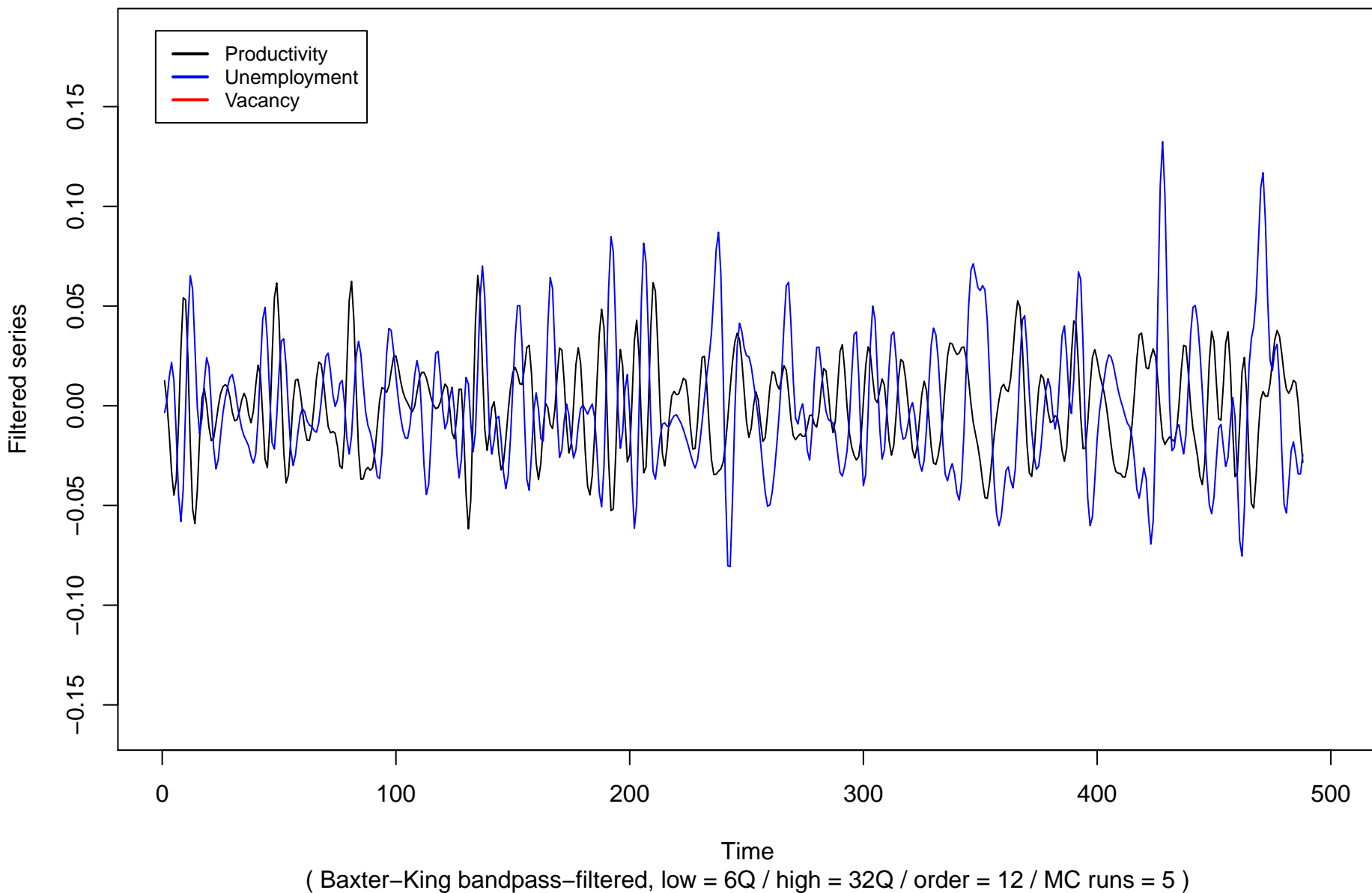
Mark-up average (Free entry)



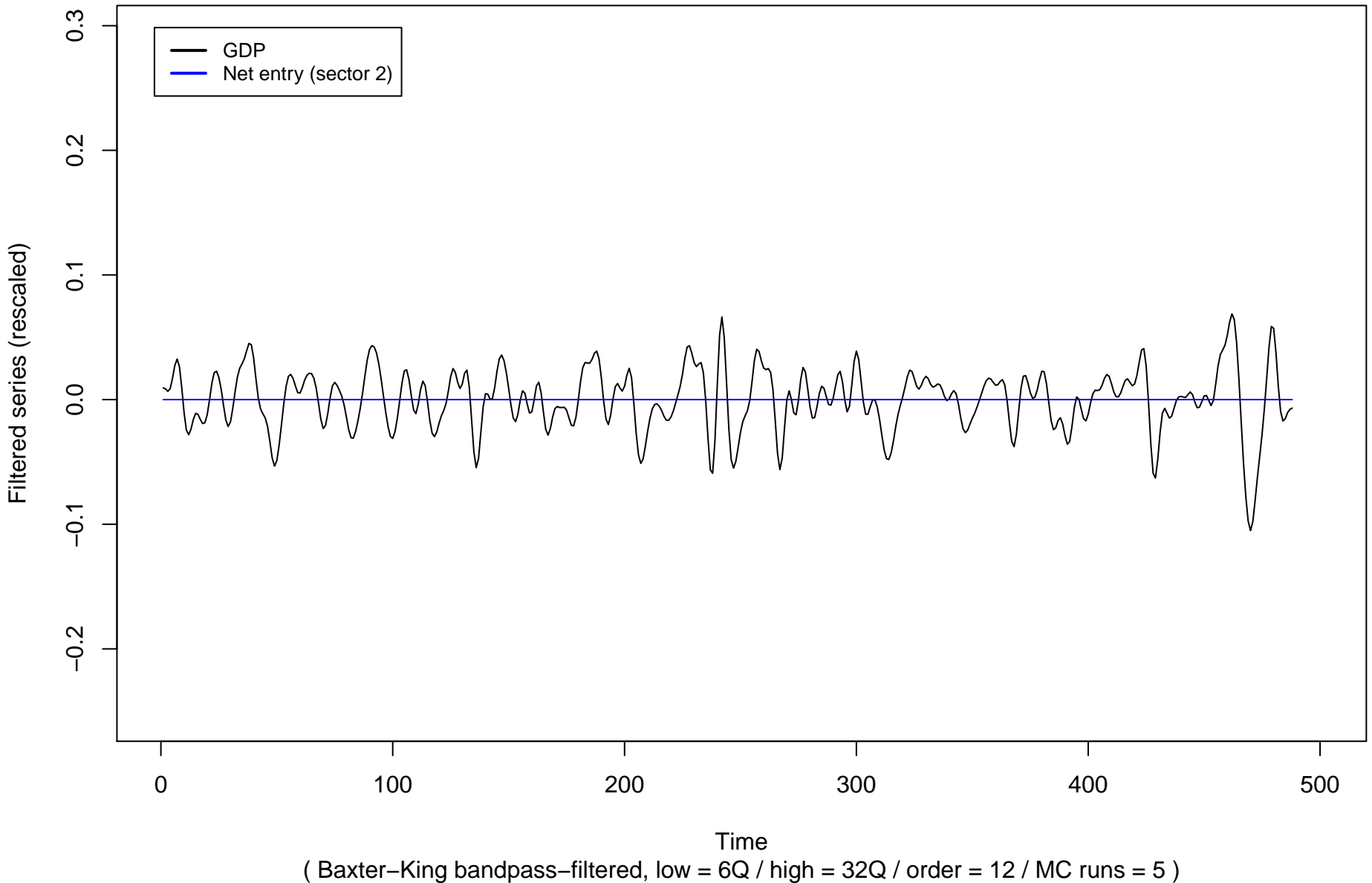
GDP cycles (Free entry)



Shimer puzzle (Free entry)



Net entry dynamics and business cycle (Free entry)



Key statistics and unit roots tests for cycles (Free entry)

	GDP (output)	Consumption	Investment	Product.	Real wage
avg. growth rate	0.01364	0.0139	−0.0002961	0.01329	0.01382
(s.e.)	0.001253	0.001213	0.01234	0.0009079	0.001053
ADF test (logs)	−2.693	−2.365	−6.693	−2.581	−2.592
(s.e.)	0.3531	0.4461	0.1209	0.4415	0.3749
(p-val.)	0.3304	0.4676	0.01	0.3891	0.3661
(s.e.)	0.1127	0.1519	0	0.1467	0.1298
ADF test (bpf)	−5.515	−5.21	−6.791	−5.684	−5.759
(s.e.)	0.1456	0.155	0.1236	0.08843	0.2923
(p-val.)	0.01	0.01	0.01	0.01	0.01
(s.e.)	0	0	0	0	0
s.d. (bpf)	0.0877	0.06941	1.394	0.05954	0.06157
(s.e.)	0.004696	0.005164	0.05186	0.003623	0.005285
relative s.d. (GDP)	1	0.7914	15.89	0.6789	0.7021

(bpf: Baxter–King bandpass–filtered series, low = 6Q / high = 32Q / order = 12 / MC runs = 5 / period = 301 – 600)
(ADF test H0: there are unit roots / non–stationary at 5% level)

Correlation structure for GDP (Free entry)

	-4	-3	-2	-1	0	1	2	3	4
GDP (output)	-0.03523	0.226	0.5721	0.8755	1	0.8755	0.5721	0.226	-0.03523
(s.e.)	0.05444	0.05115	0.03201	0.009731	2.483e-17	0.009731	0.03201	0.05115	0.05444
(p-val.)	0.399	0.0231	5.221e-05	6.712e-08	NA	6.712e-08	5.221e-05	0.0231	0.399
Consumption	0.06373	0.274	0.5551	0.8121	0.9317	0.8383	0.5779	0.2565	-0.01262
(s.e.)	0.05166	0.05167	0.03665	0.01607	0.005998	0.01645	0.04183	0.06501	0.06951
(p-val.)	0.2013	0.009941	0.0001022	6.948e-07	7.376e-09	6.62e-07	0.0001428	0.02664	0.3103
Investment	-0.2625	-0.3699	-0.3967	-0.2788	-0.02932	0.2549	0.4522	0.4918	0.3915
(s.e.)	0.02416	0.02804	0.03429	0.0433	0.05145	0.05001	0.04373	0.04046	0.03981
(p-val.)	0.0008228	0.000247	0.0003821	0.005053	0.4075	0.01249	0.0005228	0.0002626	0.00072
Net investment	-0.2128	-0.3165	-0.3499	-0.2485	-0.02073	0.2427	0.4269	0.4624	0.3639
(s.e.)	0.02694	0.03372	0.03773	0.04179	0.04911	0.05263	0.05336	0.05248	0.04857
(p-val.)	0.003942	0.00109	0.00101	0.007863	0.3771	0.01828	0.001444	0.0009435	0.002137
Change in inventories	-0.3011	-0.2059	0.005548	0.2424	0.3884	0.3664	0.2275	0.06732	-0.02625
(s.e.)	0.05894	0.05743	0.03162	0.0338	0.05167	0.04097	0.02281	0.03496	0.04061
(p-val.)	0.009967	0.04678	0.9108	0.004309	0.001979	0.001102	0.001473	0.6034	0.5882
Unemployment rate	0.2763	0.3414	0.2926	0.1212	-0.1084	-0.2857	-0.3442	-0.2822	-0.1618
(s.e.)	0.03038	0.04383	0.05163	0.05634	0.05724	0.04624	0.03958	0.05339	0.06538
(p-val.)	0.001479	0.001985	0.007328	0.1014	0.1464	0.005632	0.001309	0.009657	0.08809
Productivity	0.1513	0.3555	0.5904	0.7703	0.8114	0.6787	0.4282	0.1546	-0.05644
(s.e.)	0.06647	0.06608	0.0524	0.03593	0.03906	0.05574	0.06623	0.06772	0.05956
(p-val.)	0.03101	0.007024	0.0003113	2.164e-05	2.395e-05	0.000213	0.003134	0.04228	0.3502
Mark-up (sector 2)	0.1192	0.1064	0.0464	-0.04749	-0.1411	-0.1994	-0.2066	-0.173	-0.1224
(s.e.)	0.05819	0.04276	0.0309	0.02332	0.02286	0.02959	0.03907	0.04689	0.04833
(p-val.)	0.08887	0.119	0.7472	0.88	0.02786	0.007839	0.01582	0.05913	0.1006
Total firm debt	0.205	0.08938	-0.03083	-0.1257	-0.178	-0.1853	-0.1627	-0.1309	-0.1046
(s.e.)	0.03065	0.0514	0.08172	0.1053	0.1082	0.09303	0.07349	0.06464	0.06118
(p-val.)	0.007563	0.2981	0.0151	0.02516	0.01876	0.00547	0.006226	0.08588	0.2914
Liquidity-to-sales ratio	0.1846	-0.04056	-0.3118	-0.5538	-0.6895	-0.6702	-0.5258	-0.3234	-0.1359
(s.e.)	0.05981	0.04229	0.02715	0.02311	0.0195	0.02009	0.03498	0.048	0.05109
(p-val.)	0.07588	0.5613	0.0005166	1.671e-05	3.12e-06	4e-06	0.0001092	0.003562	0.1678
Bankruptcy rate	0.4116	0.5013	0.4336	0.2257	-0.0258	-0.2051	-0.2532	-0.1952	-0.1065
(s.e.)	0.06719	0.08769	0.1036	0.1	0.08199	0.06014	0.03498	0.03578	0.06906
(p-val.)	0.003924	0.00431	0.01348	0.05393	0.003824	0.05296	0.003876	0.01617	0.09297

(non-rate/ratio series are Baxter-King bandpass-filtered, low = 6Q / high = 32Q / order = 12 / MC runs = 5 / period = 301 – 600)

(test H0: lag coefficient is not significant at 5% level)

Correlation structure for GDP (Free entry)

	-4	-3	-2	-1	0	1	2	3	4
GDP (output)	-0.03523	0.226	0.5721	0.8755	1	0.8755	0.5721	0.226	-0.03523
(s.e.)	0.05444	0.05115	0.03201	0.009731	2.483e-17	0.009731	0.03201	0.05115	0.05444
(p-val.)	0.399	0.0231	5.221e-05	6.712e-08	NA	6.712e-08	5.221e-05	0.0231	0.399
Consumption	0.06373	0.274	0.5551	0.8121	0.9317	0.8383	0.5779	0.2565	-0.01262
(s.e.)	0.05166	0.05167	0.03665	0.01607	0.005998	0.01645	0.04183	0.06501	0.06951
(p-val.)	0.2013	0.009941	0.0001022	6.948e-07	7.376e-09	6.62e-07	0.0001428	0.02664	0.3103
Investment	-0.2625	-0.3699	-0.3967	-0.2788	-0.02932	0.2549	0.4522	0.4918	0.3915
(s.e.)	0.02416	0.02804	0.03429	0.0433	0.05145	0.05001	0.04373	0.04046	0.03981
(p-val.)	0.0008228	0.000247	0.0003821	0.005053	0.4075	0.01249	0.0005228	0.0002626	0.00072
Productivity	0.1513	0.3555	0.5904	0.7703	0.8114	0.6787	0.4282	0.1546	-0.05644
(s.e.)	0.06647	0.06608	0.0524	0.03593	0.03906	0.05574	0.06623	0.06772	0.05956
(p-val.)	0.03101	0.007024	0.0003113	2.164e-05	2.395e-05	0.000213	0.003134	0.04228	0.3502
Net entry	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
(s.e.)	NA	NA	NA	NA	NA	NA	NA	NA	NA
(p-val.)	1	1	1	1	1	1	1	1	1
Entry	-0.06787	0.1347	0.3576	0.5339	0.6032	0.5447	0.3943	0.2196	0.08047
(s.e.)	0.04406	0.05015	0.06188	0.06621	0.05865	0.04837	0.0437	0.04291	0.0417
(p-val.)	0.2252	0.1258	0.005474	0.001185	0.0004366	0.0003282	0.0009899	0.01565	0.1271
Wage	0.3722	0.5441	0.681	0.7294	0.6615	0.4863	0.2687	0.07224	-0.0656
(s.e.)	0.04662	0.03678	0.02682	0.02337	0.03712	0.05232	0.06092	0.0593	0.04794
(p-val.)	0.001653	0.0001136	1.174e-05	4.987e-06	4.851e-05	0.0007409	0.01815	0.1557	0.2959
Unemployment rate	0.2763	0.3414	0.2926	0.1212	-0.1084	-0.2857	-0.3442	-0.2822	-0.1618
(s.e.)	0.03038	0.04383	0.05163	0.05634	0.05724	0.04624	0.03958	0.05339	0.06538
(p-val.)	0.001479	0.001985	0.007328	0.1014	0.1464	0.005632	0.001309	0.009657	0.08809
Vacancy rate	0.1343	-0.09007	-0.3533	-0.5434	-0.5757	-0.4485	-0.2406	-0.05769	0.03323
(s.e.)	0.08921	0.0834	0.09138	0.1055	0.1088	0.09105	0.05585	0.03849	0.06409
(p-val.)	0.03879	0.1399	0.02015	0.005878	0.005182	0.007761	0.02262	0.5352	0.1743

(non-rate/ratio series are Baxter–King bandpass-filtered, low = 6Q / high = 32Q / order = 12 / MC runs = 5 / period = 301 – 600)

(test H0: lag coefficient is not significant at 5% level)

Stationarity, i.i.d. and ergodicity tests (Free entry)

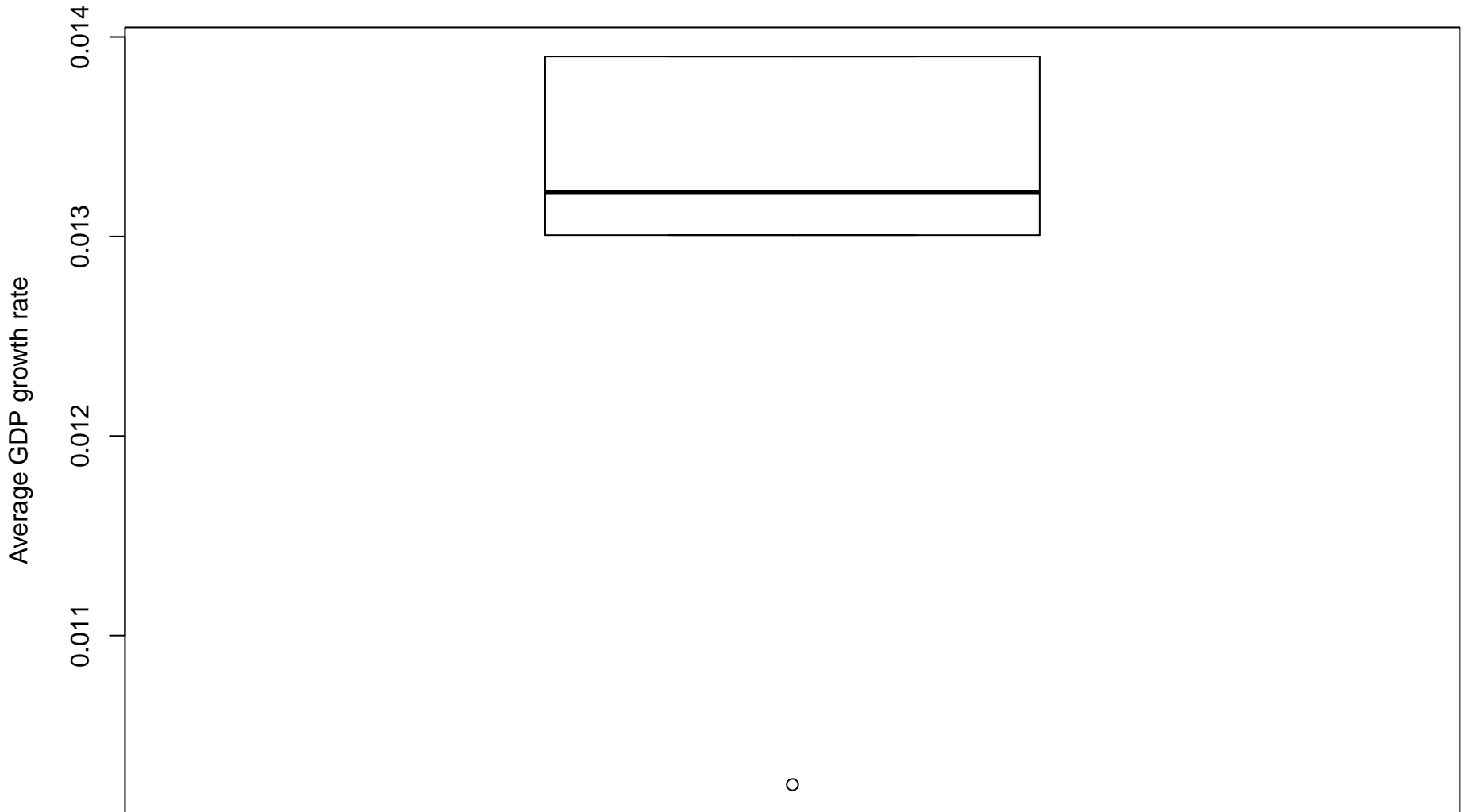
	avg.ADF	rej.ADF	avg.PP	rej.PP	avg.KPSS	rej.KPSS	avg.BDS	rej.BDS	avg.KS	rej.KS	AD	V
dGDP	0.01	1.00	0.01	1.00	0.10	0.00	0.10	0.60	0.21	0.30	0.01	C
dA	0.01	1.00	0.01	1.00	0.10	0.00	0.03	0.80	0.10	0.60	0.00	C
dw	0.01	1.00	0.01	1.00	0.10	0.00	0.05	0.80	0.10	0.80	0.00	C
V	0.02	1.00	0.01	1.00	0.08	0.20	0.04	0.80	0.01	1.00	0.00	C
U	0.03	0.80	0.01	1.00	0.02	1.00	0.03	0.80	0.00	1.00	0.00	C
mu2avg	0.06	0.60	0.01	1.00	0.04	0.60	0.00	1.00	0.01	0.90	0.00	C
HH1	0.01	1.00	0.01	1.00	0.10	0.00	0.00	1.00	0.17	0.60	0.03	C
HH2	0.01	1.00	0.01	1.00	0.04	0.60	0.00	1.00	0.08	0.80	0.00	C

(average p-values for testing H0 and rate of rejection of H0 / MC runs = 5 / period = 301 – 600)

(ADF/PP H0: non-stationary, KPSS H0: stationary, BDS H0: i.i.d., KS/AD/WW H0: ergodic)

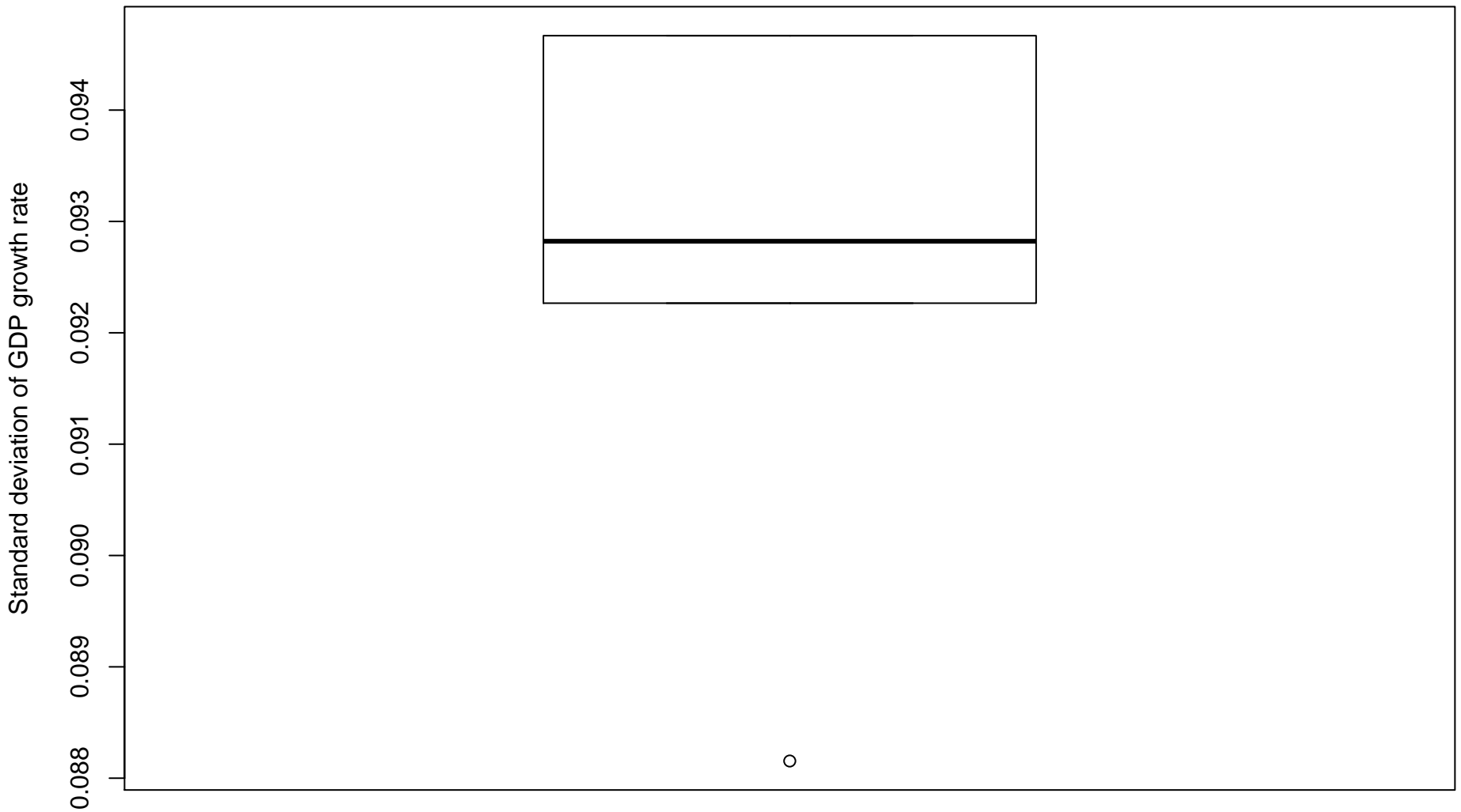
(significance = 0.05)

GDP growth



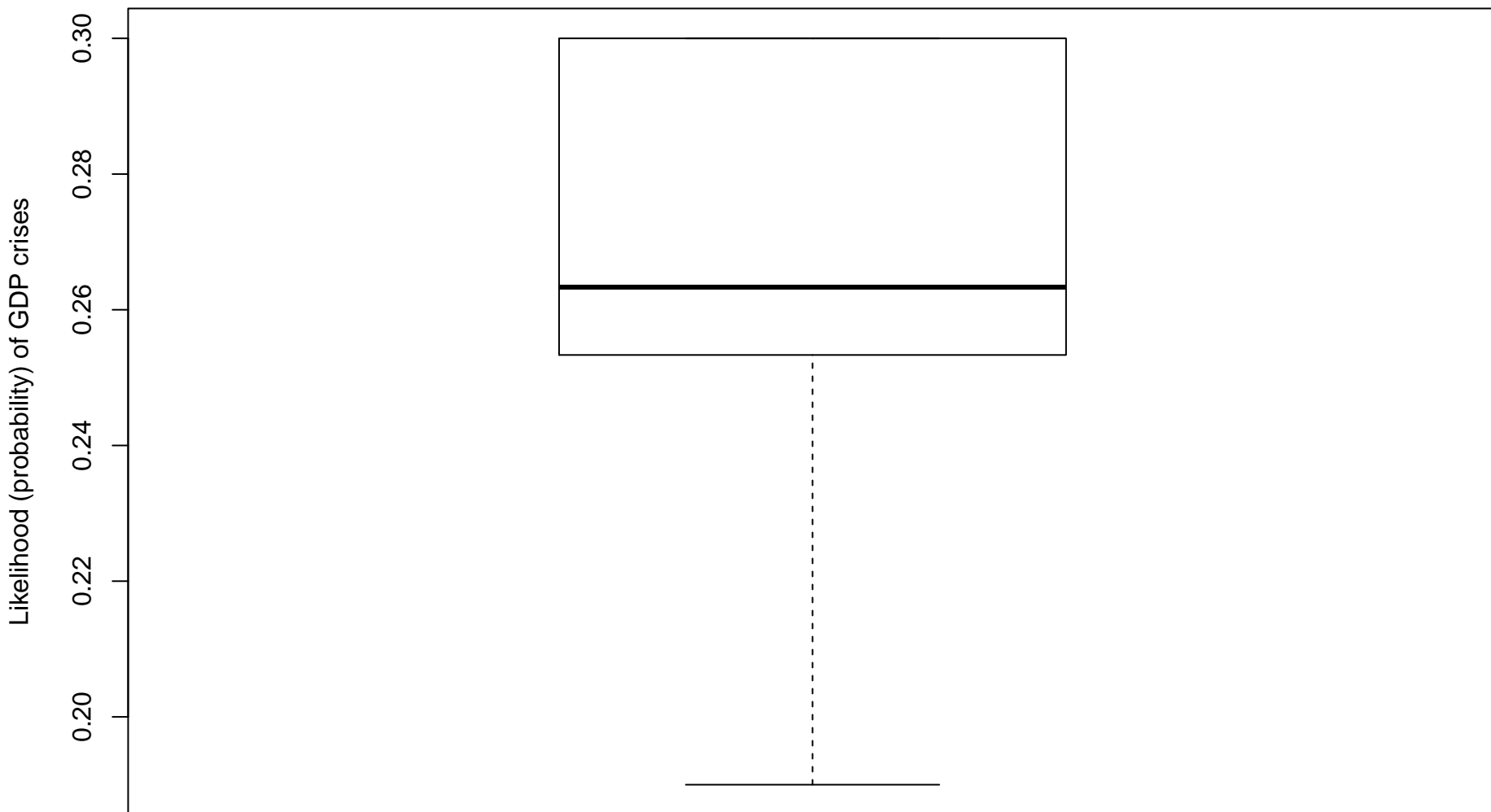
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Volatility of GDP growth



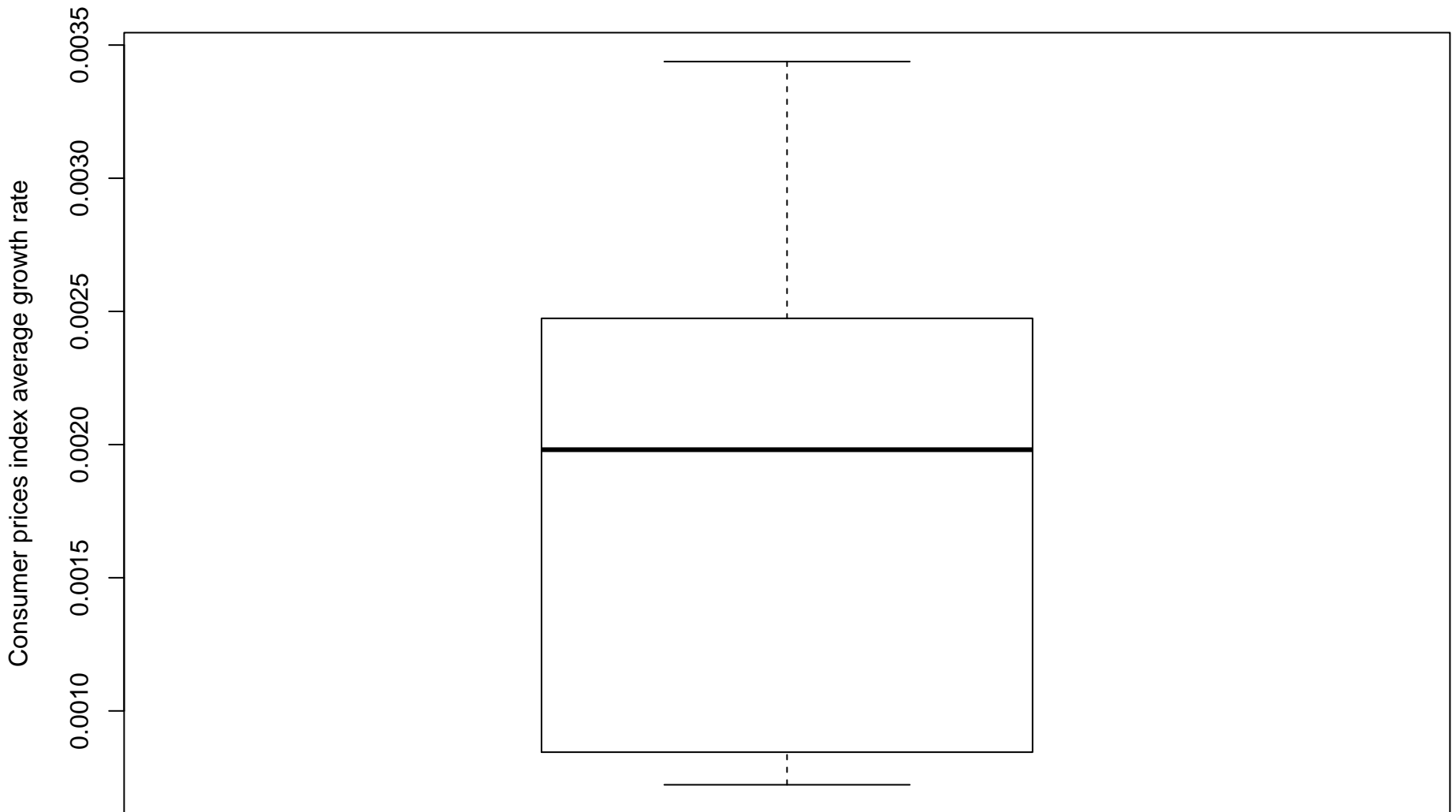
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Likelihood of GDP crises

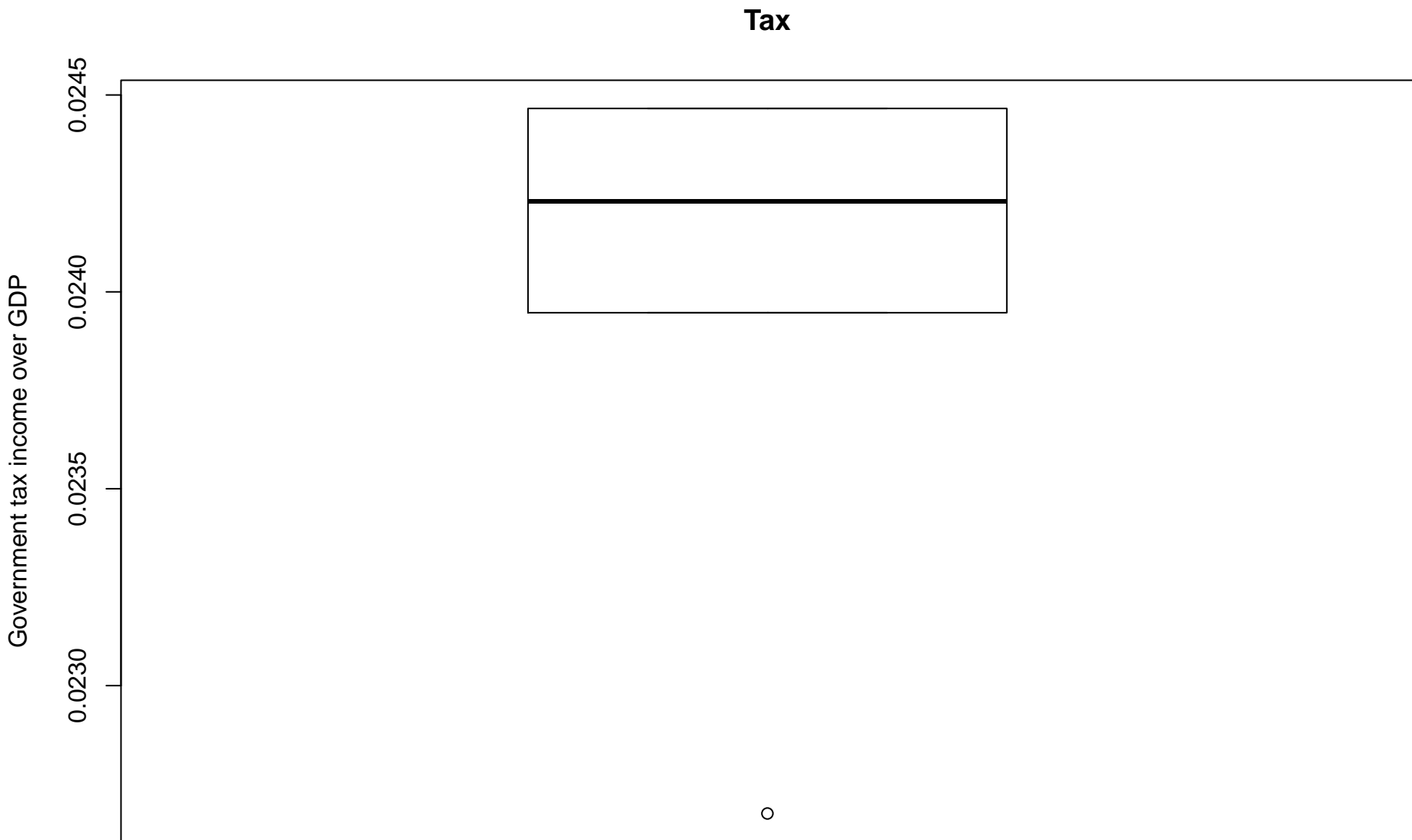


(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Inflation

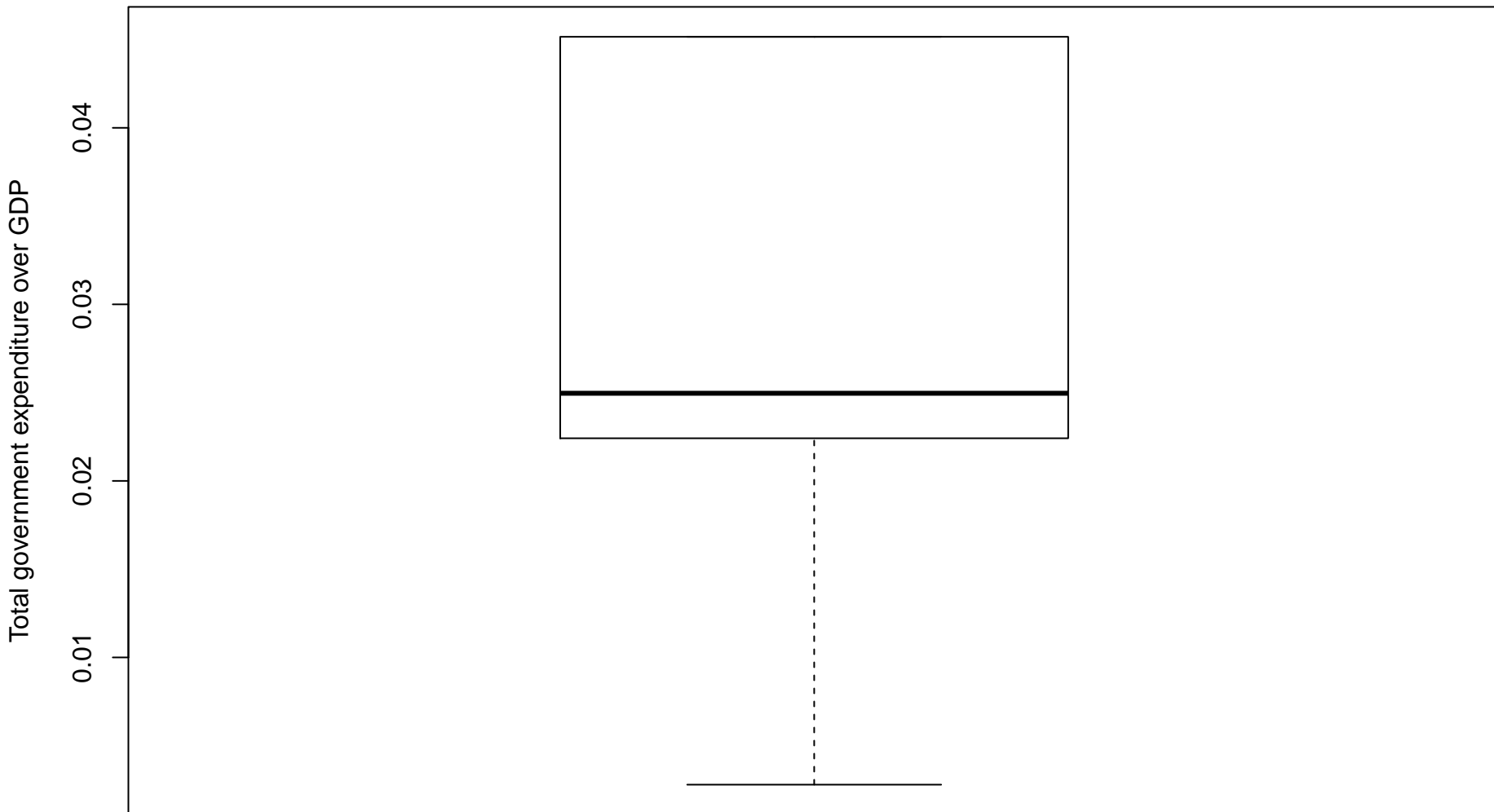


(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)



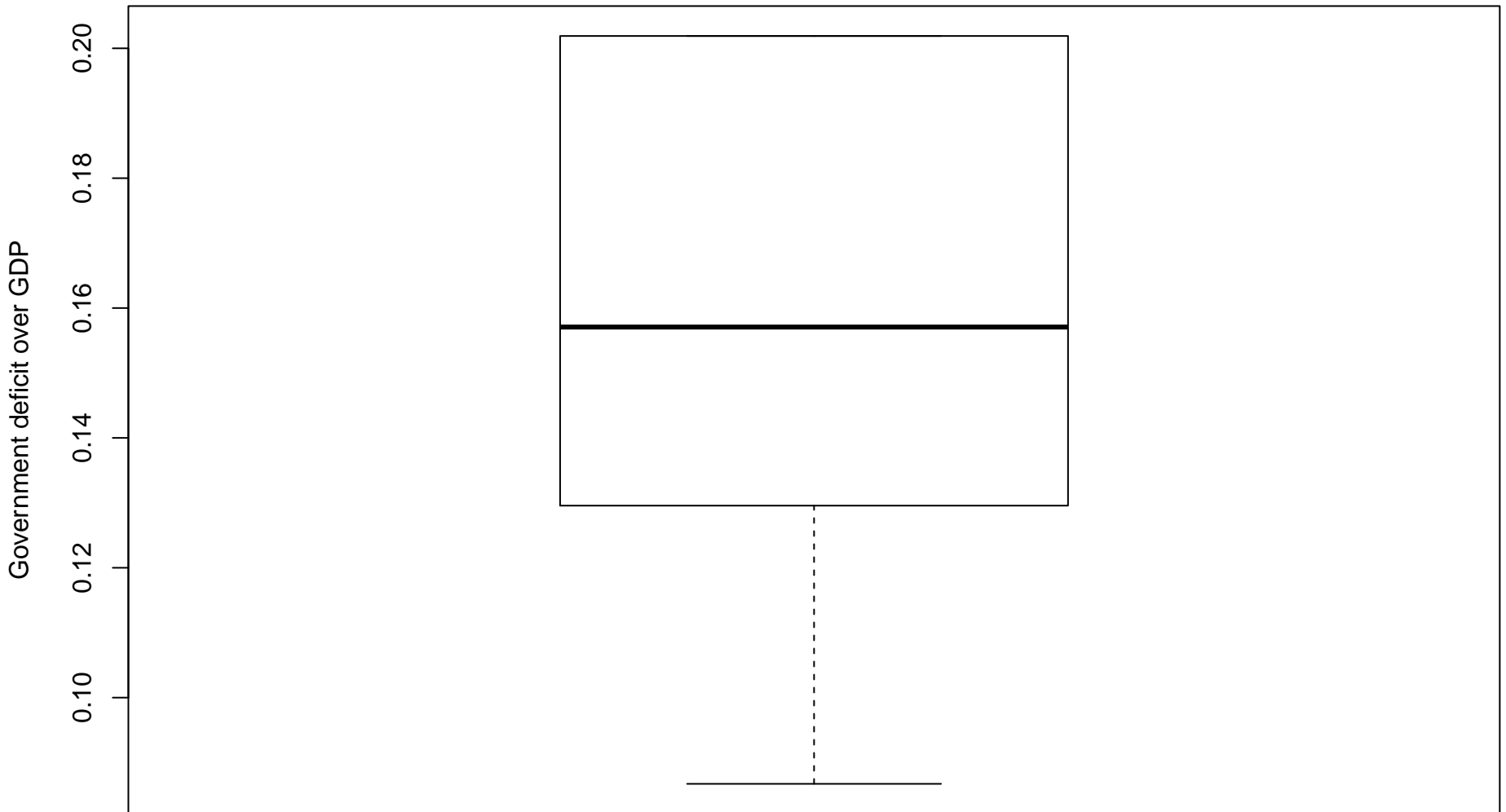
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Government total expenditure



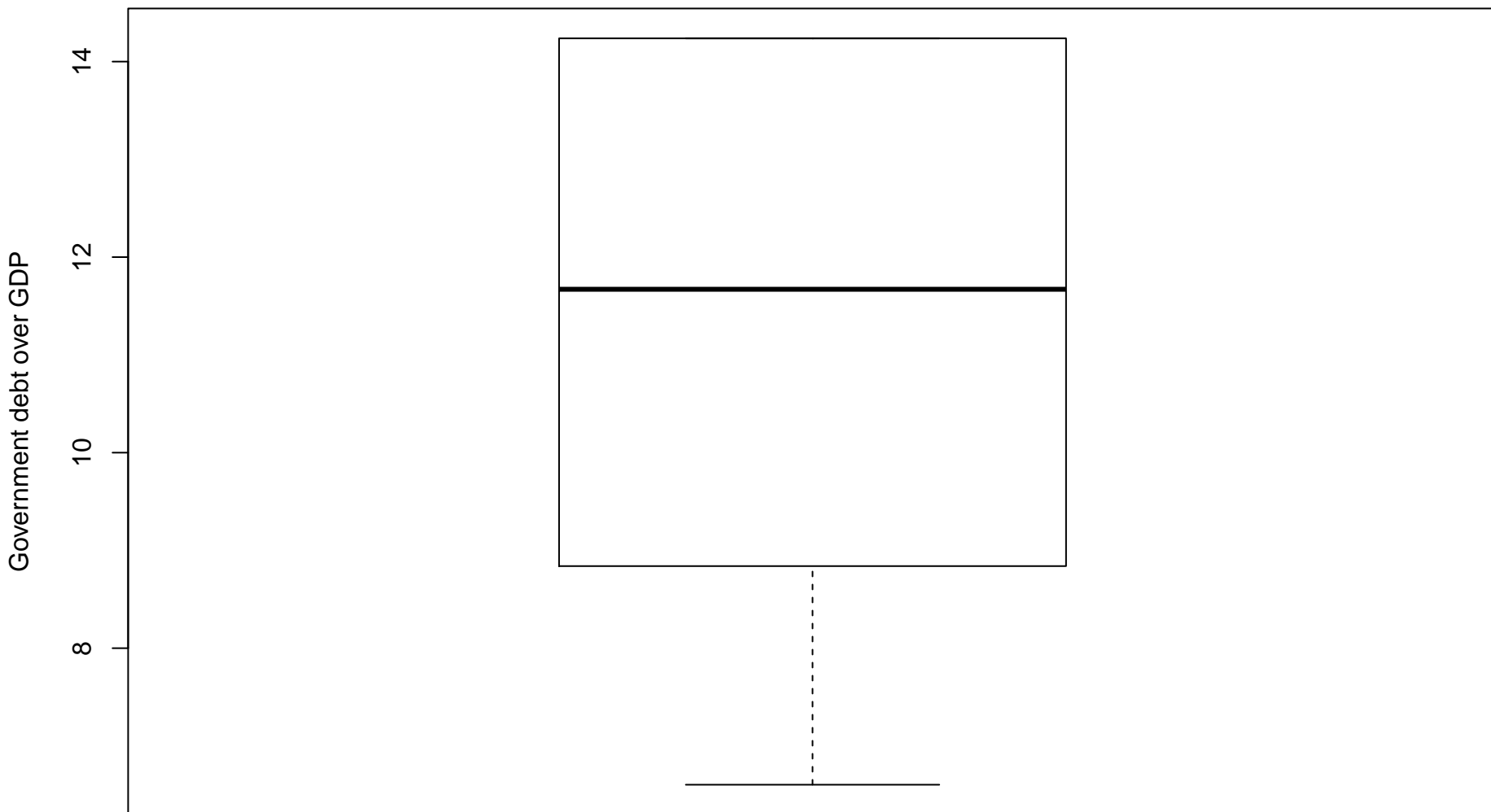
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Government deficit



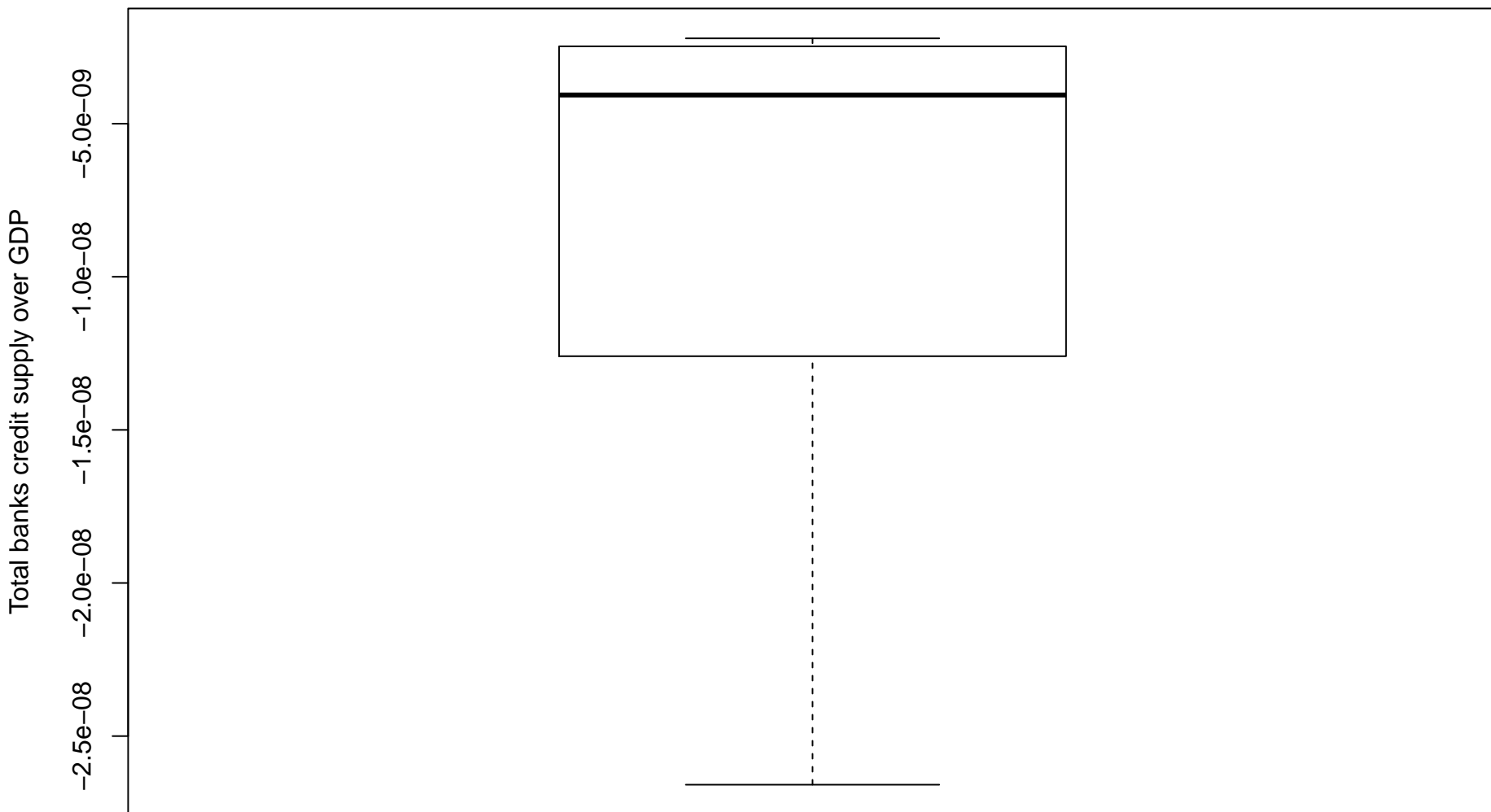
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Government debt



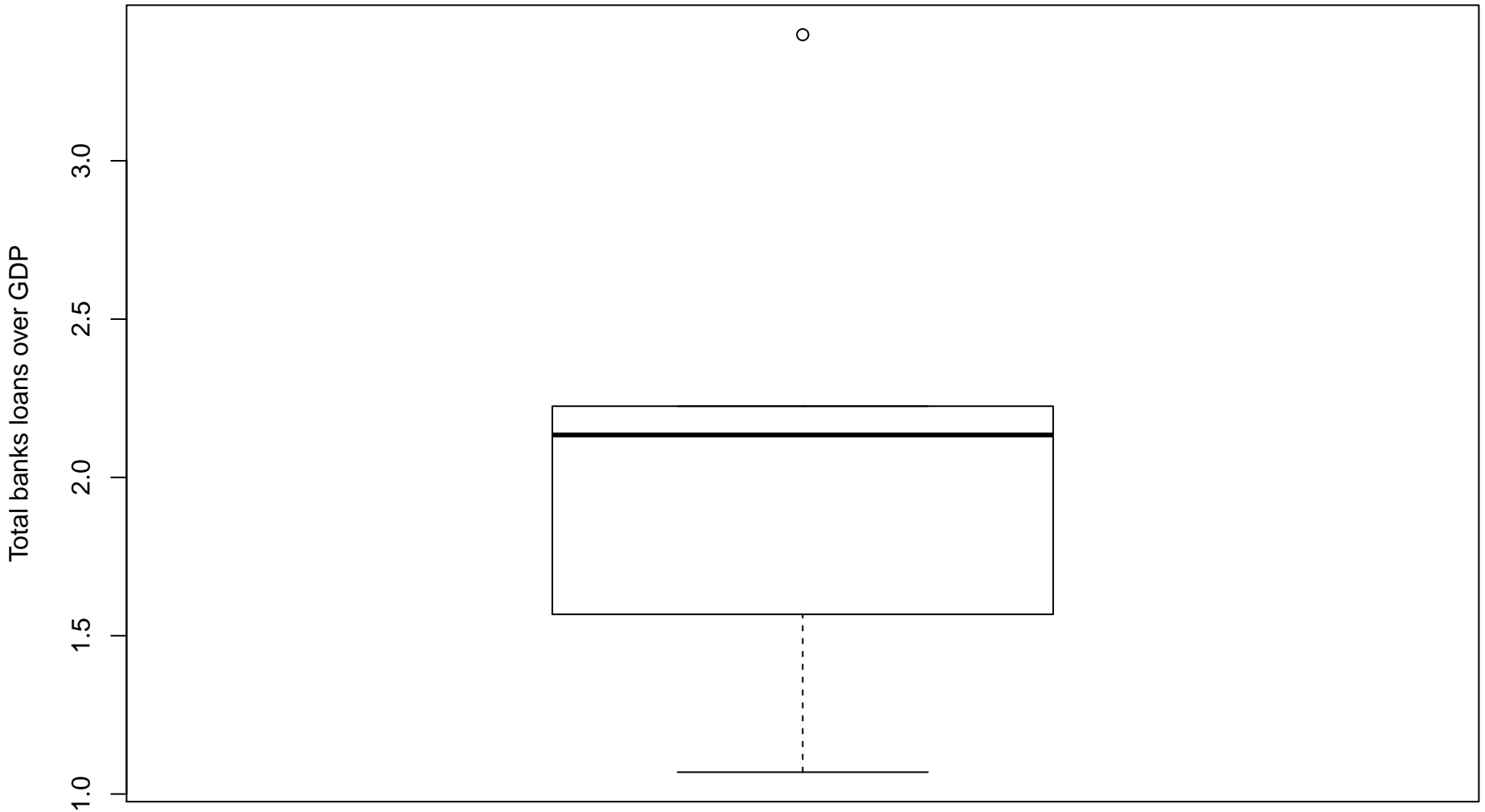
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Credit supply



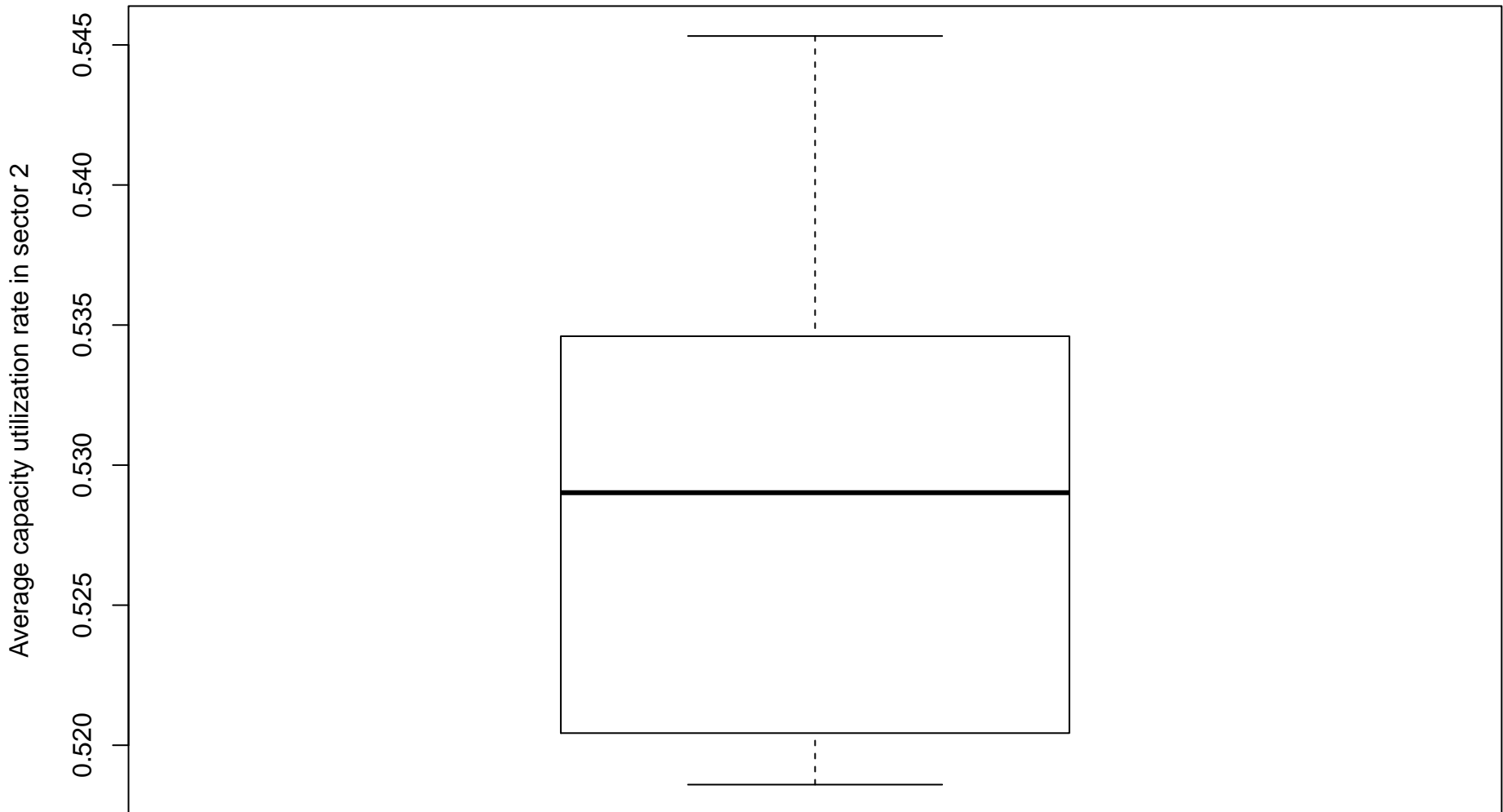
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Loans



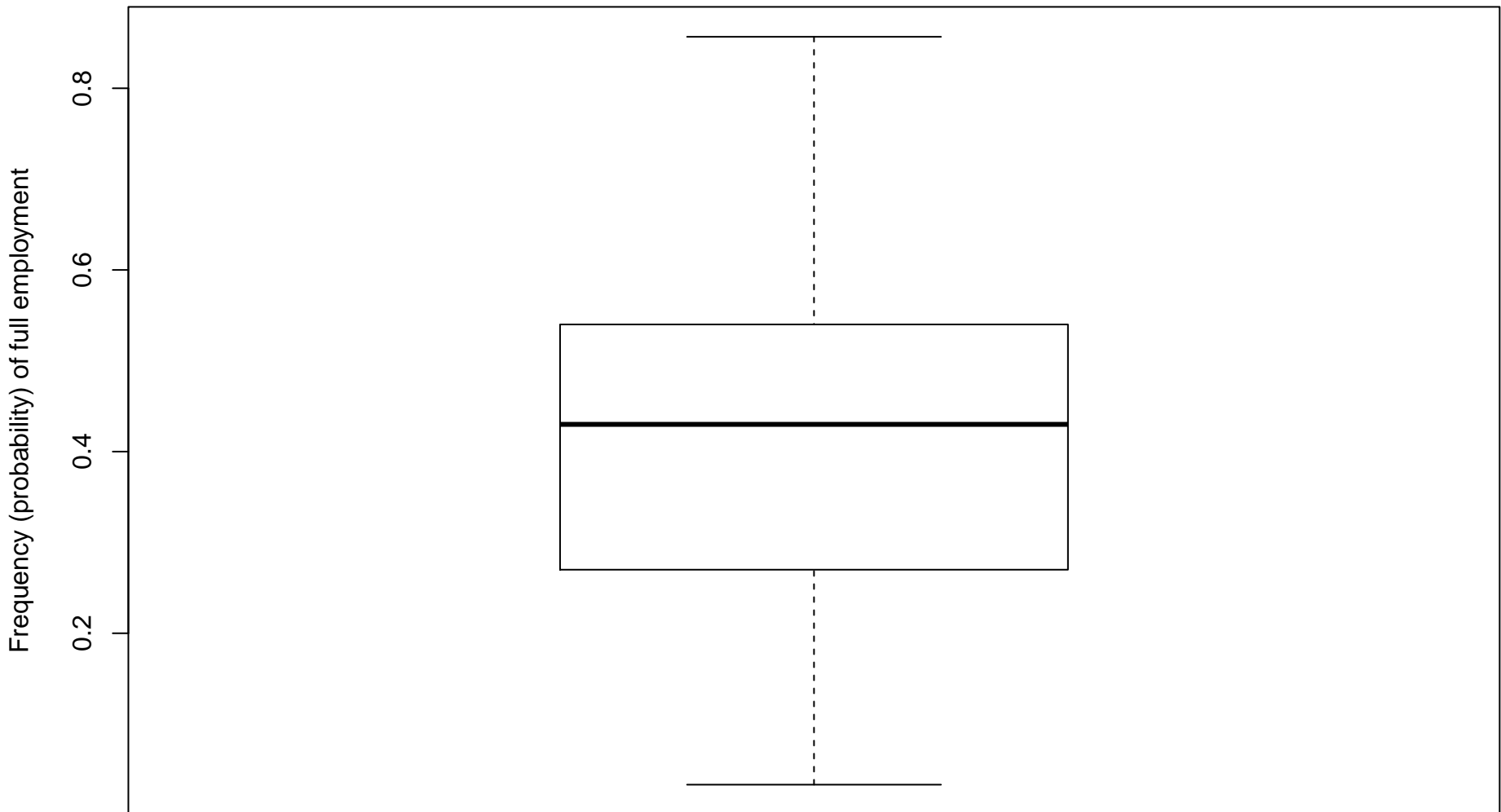
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Capacity utilization



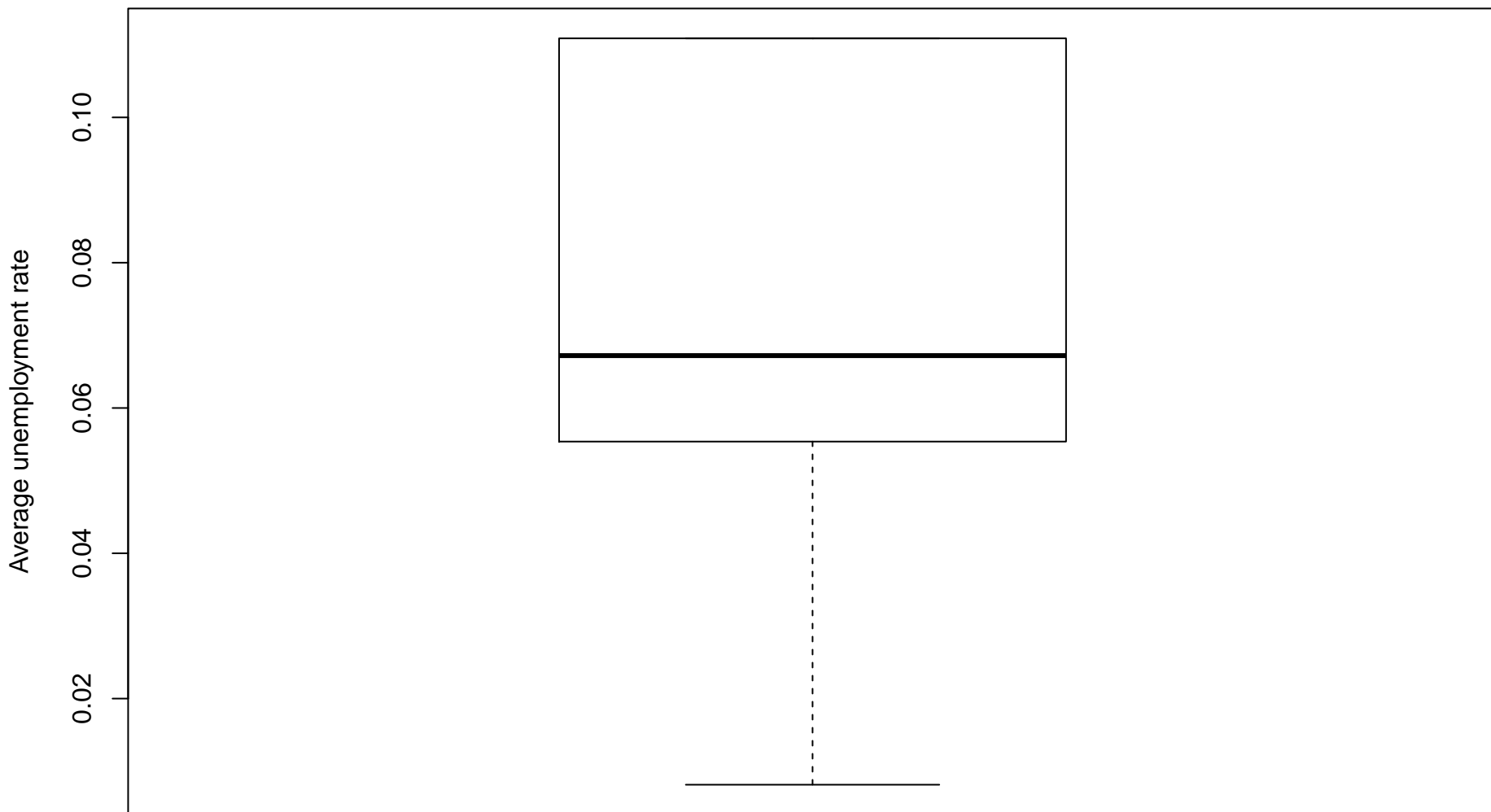
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Full employment frequency



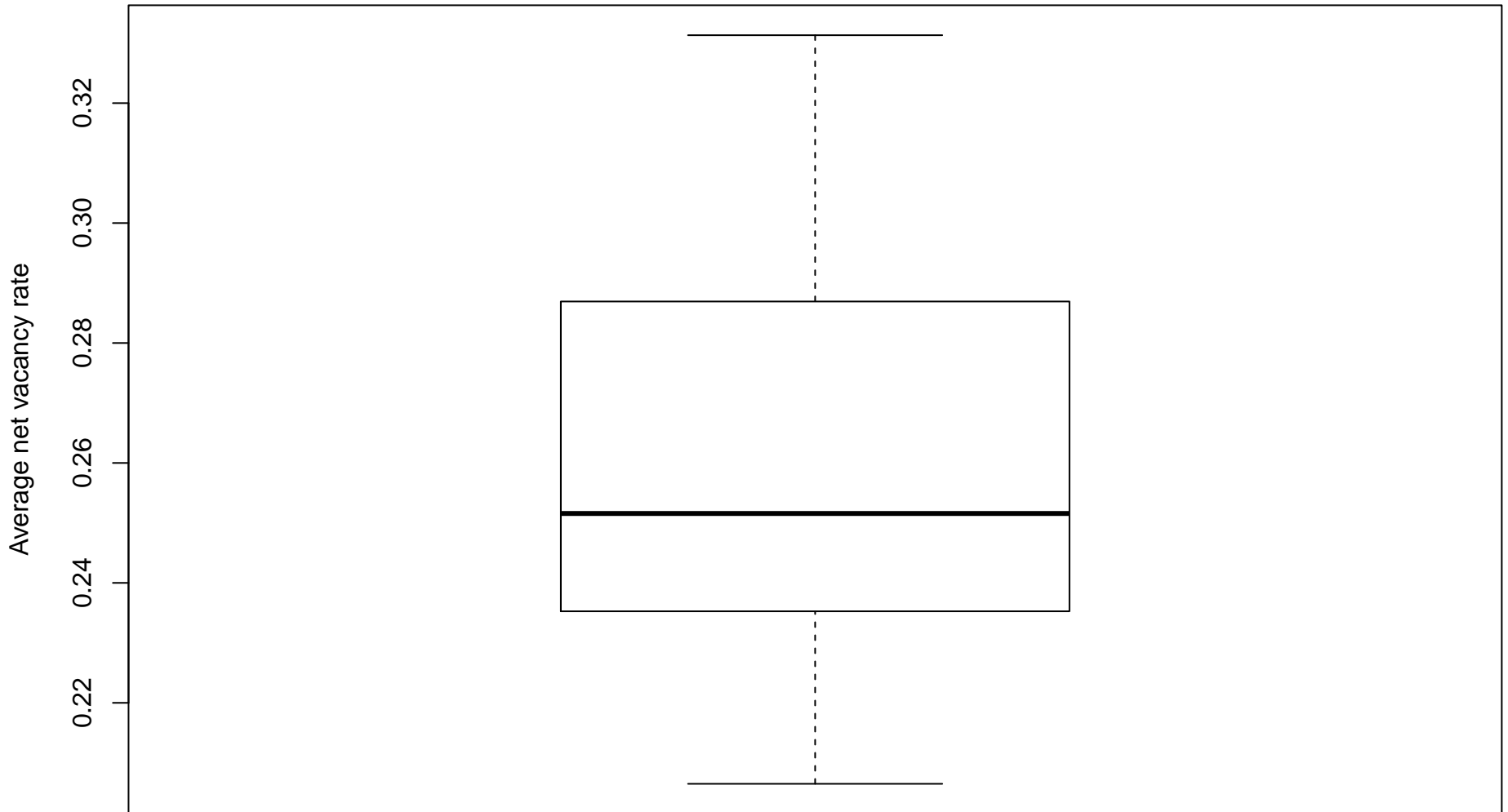
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Unemployment



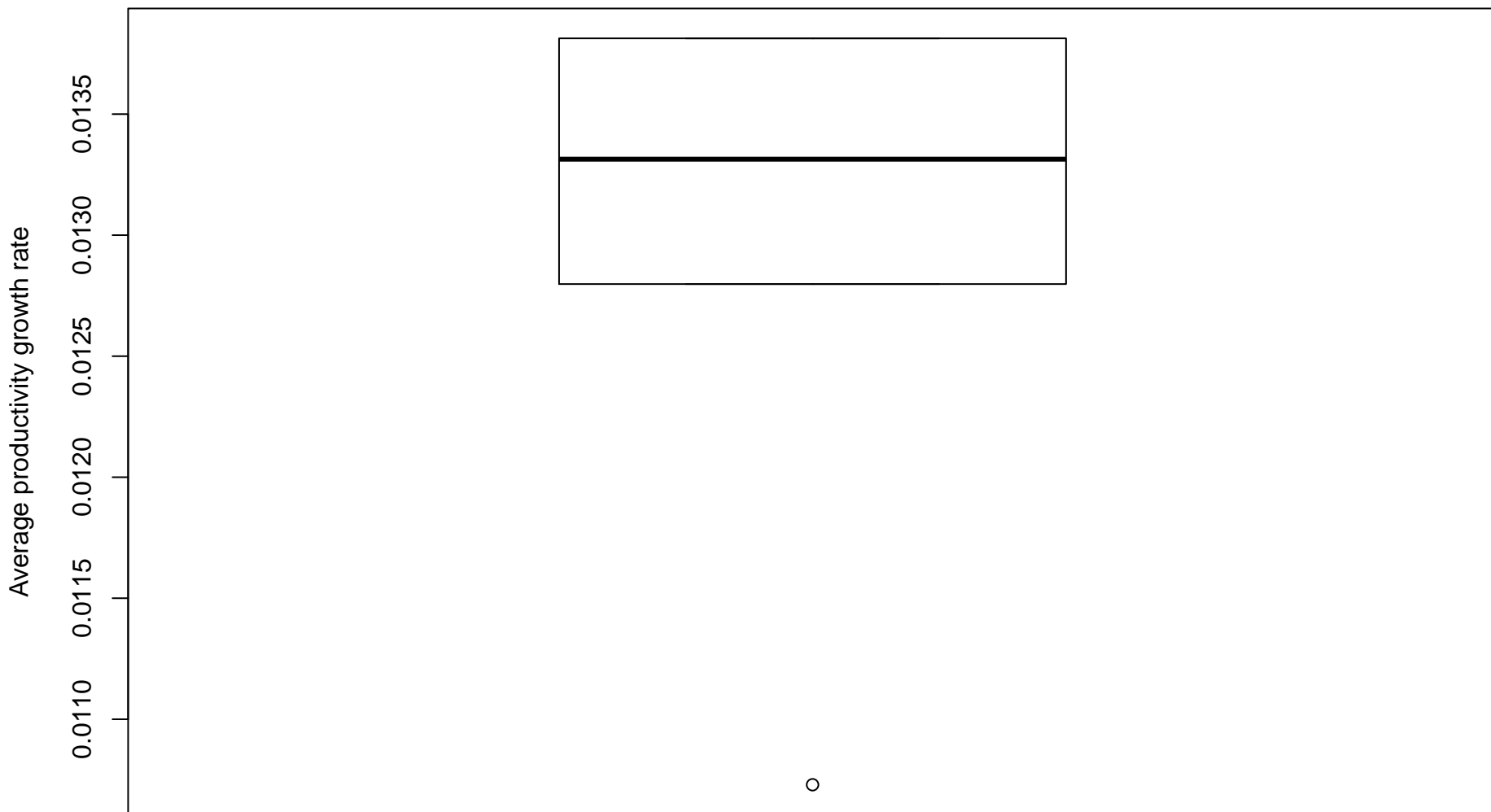
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Vacancy



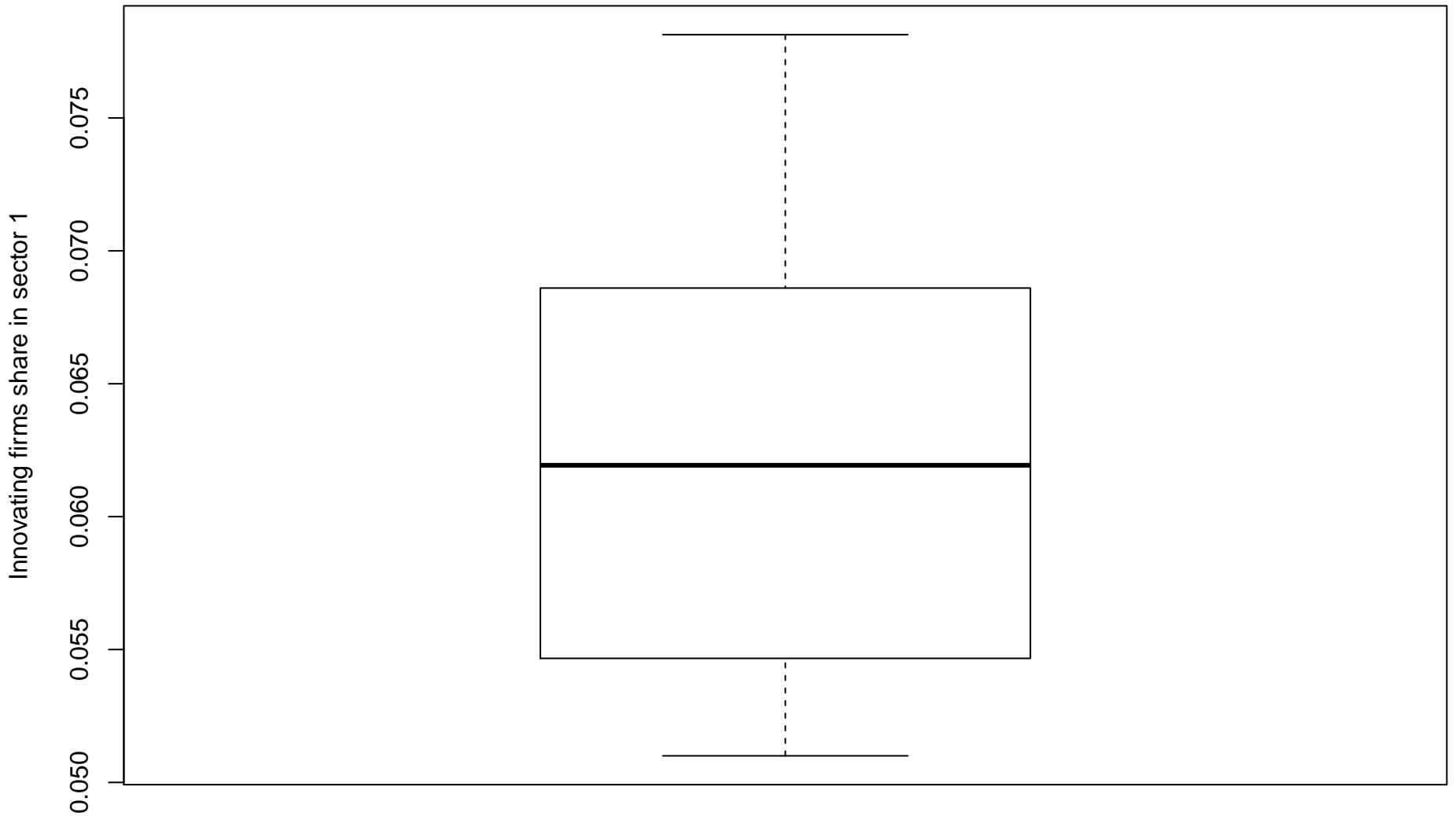
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Productivity growth



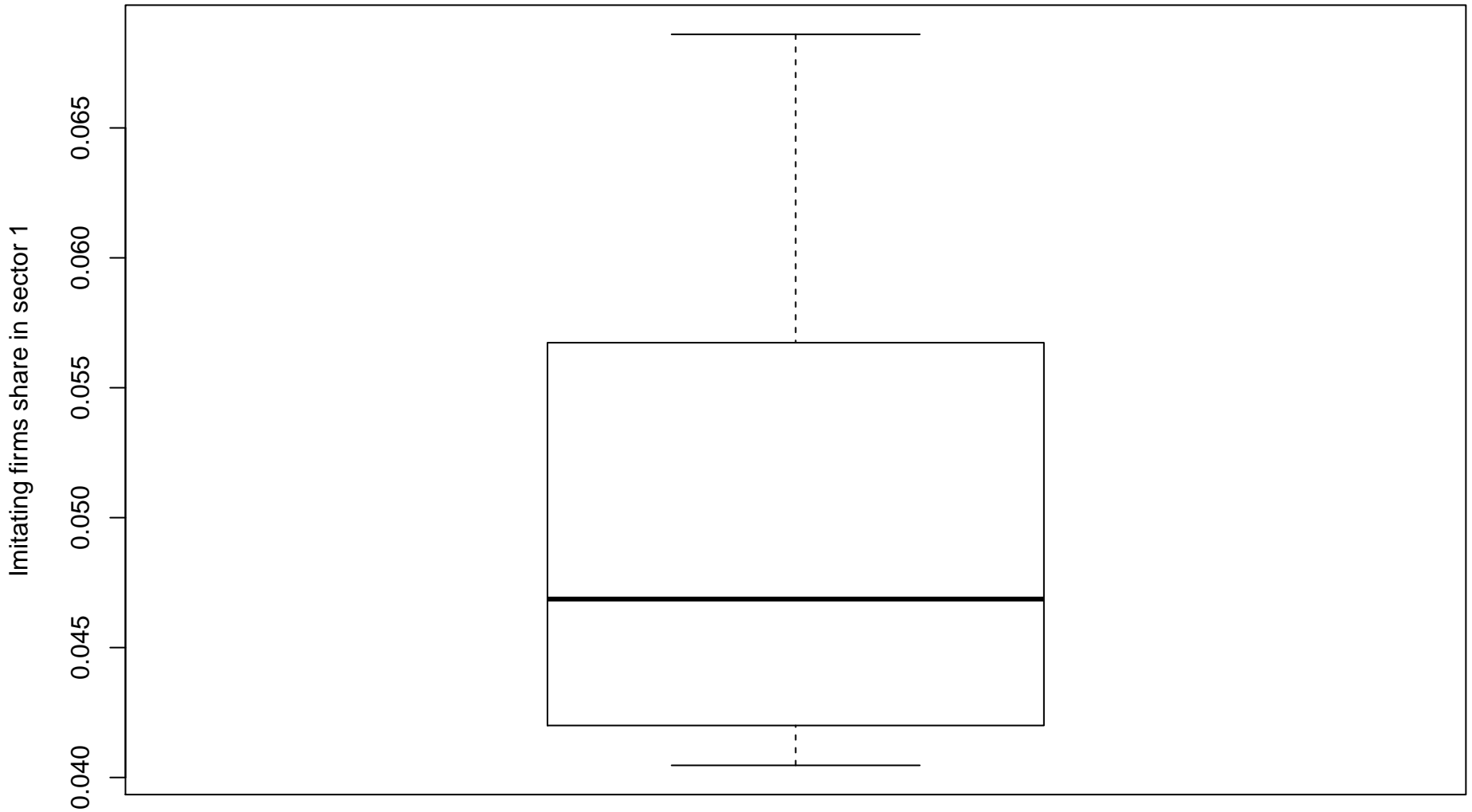
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Innovation



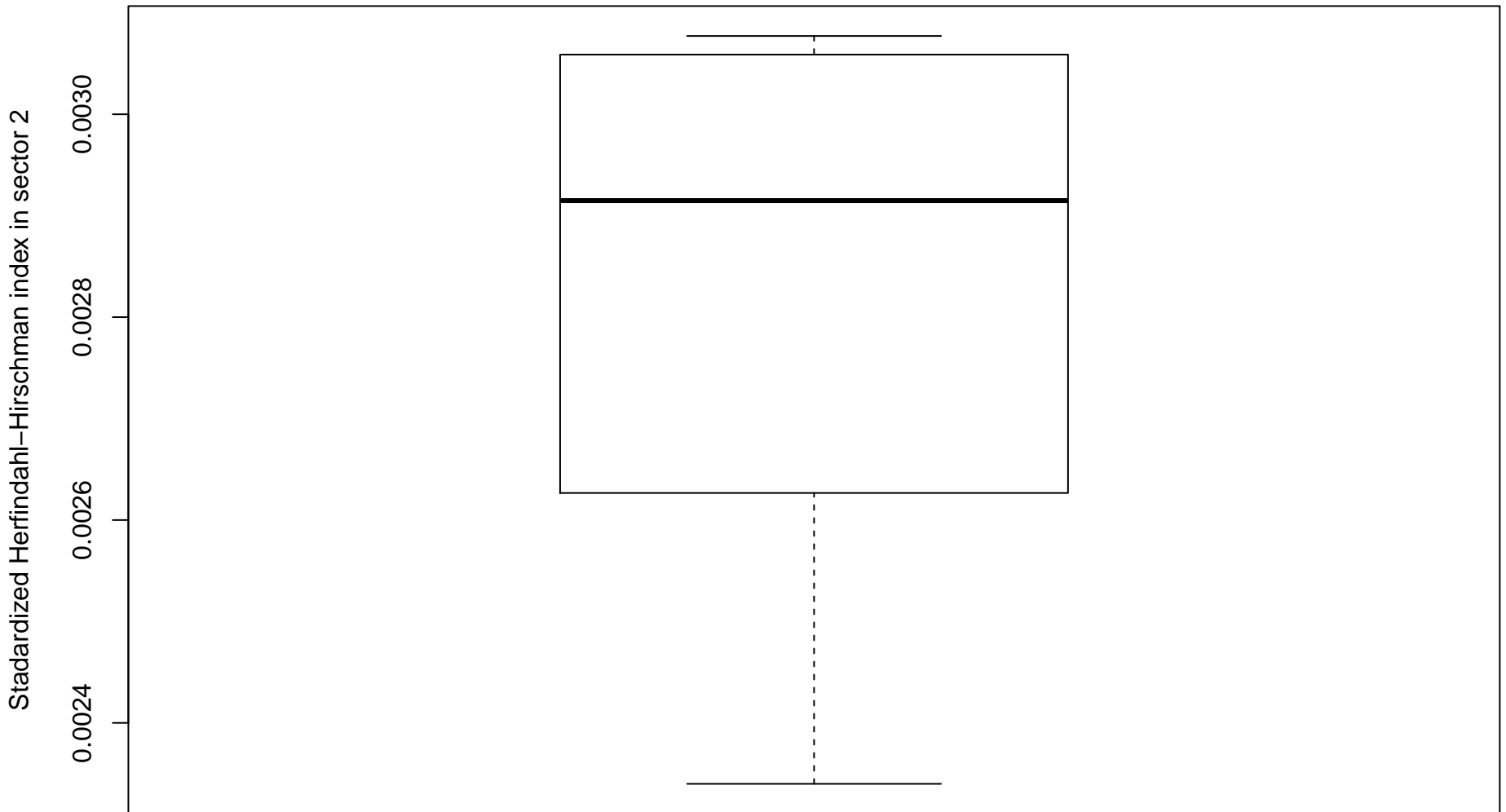
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Imitation



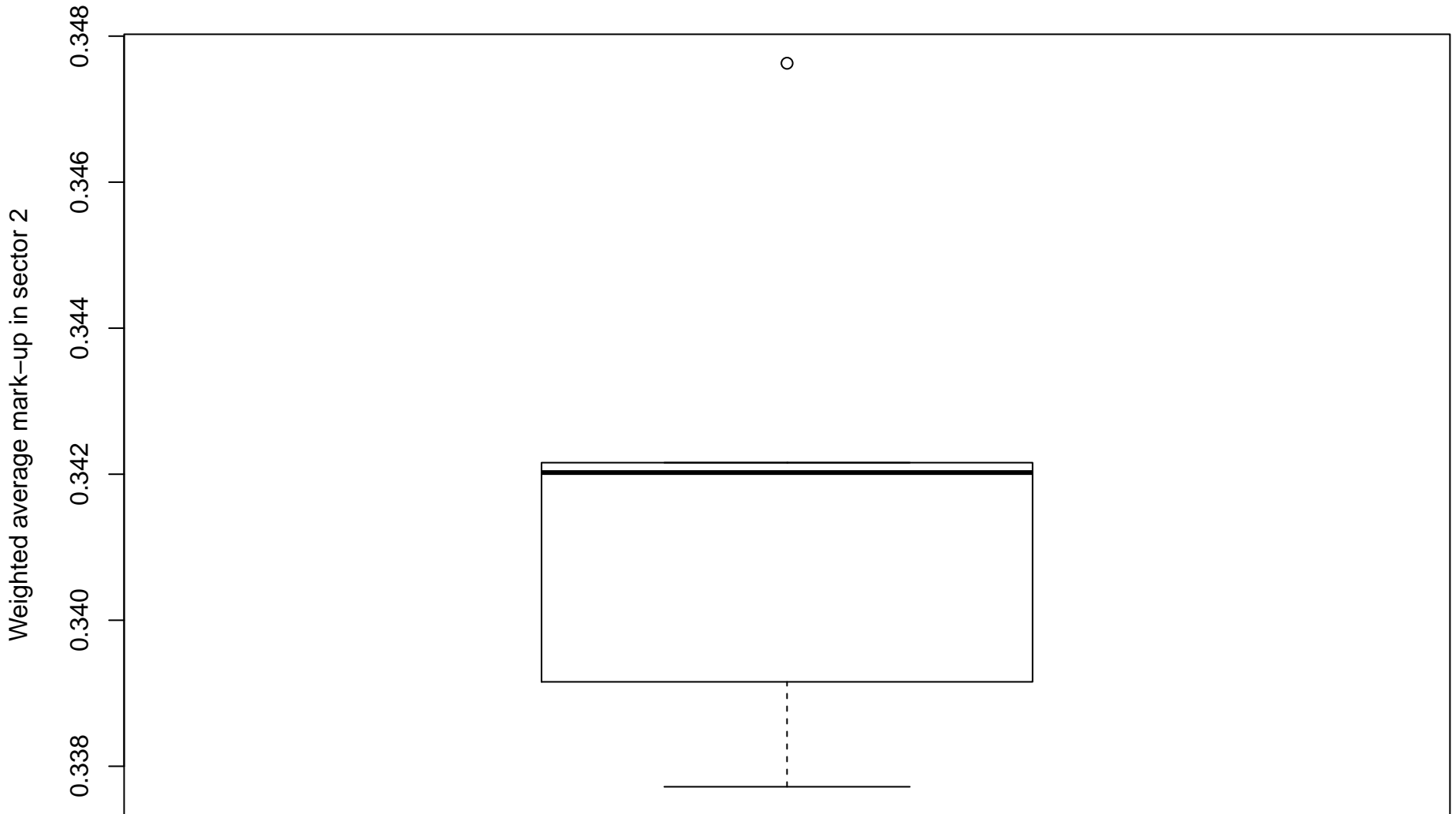
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Market concentration



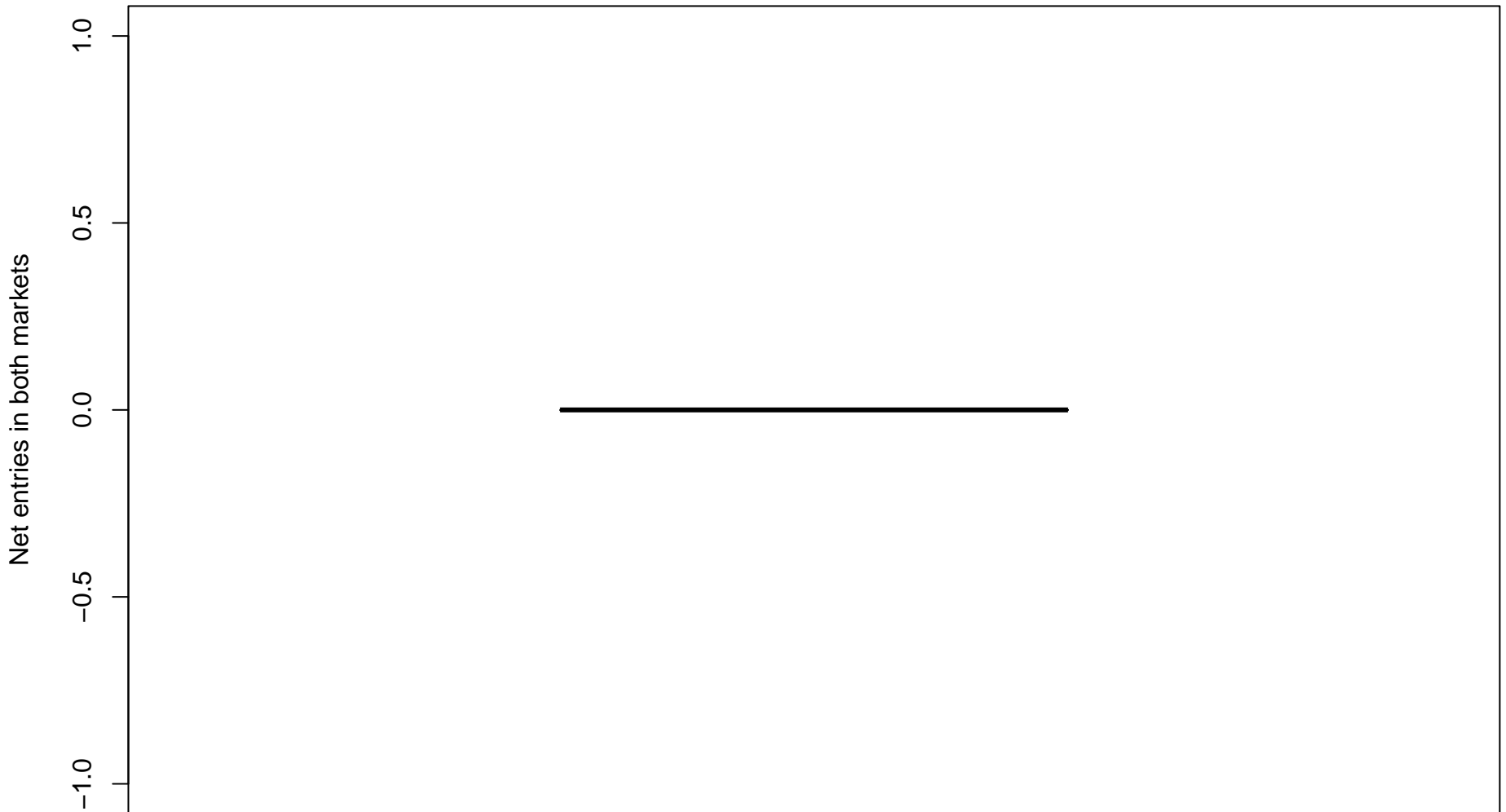
(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Mark-ups



(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Net entry of firms



(bar: median / box: 2nd–3rd quartile / whiskers: max–min / points: outliers / MC runs = 5 / period = 301 – 600)

Monte Carlo descriptive statistics (all experiments)

	Avg[1]	SD[1]	Min[1]	Max[1]
GDP growth	0.01345	0.002372	0.01025	0.01689
Volatility of GDP growth	0.09385	0.004807	0.08815	0.1013
Likelihood of GDP crises	0.2613	0.04513	0.19	0.3
Inflation	0.001892	0.00114	0.0007227	0.003438
Tax	0.02417	0.001029	0.02268	0.02553
Government total expenditure	0.03496	0.02906	0.002794	0.07948
Government deficit	0.1835	0.09817	0.08672	0.3424
Government debt	13.68	8.019	6.603	27.07
Credit supply	-9.587e-09	1.041e-08	-2.659e-08	-2.213e-09
Loans	2.079	0.8727	1.069	3.398
Capacity utilization	0.5296	0.01093	0.5186	0.5453
Full employment frequency	0.426	0.307	0.03333	0.8567
Unemployment	0.08725	0.0703	0.008145	0.1947
Vacancy	0.2623	0.0483	0.2065	0.3313
Productivity growth	0.01341	0.002031	0.01073	0.01637
Innovation	0.06287	0.0109	0.051	0.07813
Imitation	0.05093	0.01174	0.04047	0.0686
Market concentration	0.002803	0.0003157	0.00234	0.003077
Mark-ups	0.3417	0.003801	0.3377	0.3476
Net entry of firms	0	0	0	0

Experiments: [1] Free entry

(numbers in brackets indicate the experiment number / MC runs = 5 / period = 301 – 600)