

Supplementary Material

Table S1: Unit root results: 1970-1999

This table presents the unit root test results for the 16 countries exports (E) and imports (M) of goods and services as a ratio of GDP (%). The results relate to: Australia (1), Bangladesh (2), Chile (3), China (4), Ecuador (5), France (6), Honduras (7), Mexico (8), New Zealand (9), Panama (10), Peru (11), Philippines (12), Paraguay (13), United States (14), Venezuela (15), and South Africa (16).

	ADF test		PP test		Perron test				ADF test		PP test		Perron test		
	ADF stat	prob.	PP stat	prob.	one break	stat.	prob.		ADF stat	prob.	PP stat	prob.	one break	stat.	prob.
1E	0.101	0.960	-0.719	0.827	1990	-2.978	0.699	9E	-1.793	0.376	-1.739	0.402	1978	-3.803	0.235
D1E	-4.139	0.004	-11.422	0.000				D9E	-3.108	0.039	-5.448	0.000			
1M	-1.194	0.661	0.306	0.975	1992	-1.911	0.987	9M	-2.989	0.049	-2.235	0.199	1984	-4.254	0.084
D1M	-3.549	0.015	-9.673	0.000				D9M	-5.130	0.000	-5.534	0.000			
2E	0.110	0.960	-0.529	0.871	1992	-4.167	0.107	10E	-2.089	0.250	-1.731	0.406	1989	-2.775	0.799
D2E	-2.806	0.072	-6.450	0.000				D10E	-3.053	0.044	-3.441	0.018			
2M	-1.275	0.625	-3.413	0.019	1994	-4.287	0.077	10M	-1.732	0.404	-1.761	0.391	1988	-2.431	0.920
D2M	-2.212	0.207	-10.652	0.000				D11M	-3.000	0.049	-3.540	0.014			
3E	-2.214	0.206	-1.429	0.554	1981	-4.190	0.101	11E	-1.771	0.386	-2.267	0.189	1985	-3.378	0.456
D3E	-3.021	0.047	-4.054	0.004				D11E	-3.839	0.008	-5.571	0.000			
3M	-3.554	0.014	-2.545	0.116	1983	-2.670	0.842	11M	-2.350	0.165	-2.466	0.134	1983	-3.042	0.661
D3M	-3.351	0.023	-5.835	0.000				D11M	-3.215	0.031	-7.142	0.000			
4E	-0.169	0.931	-0.420	0.893	1986	-2.704	0.829	12E	0.462	0.982	1.101	0.997	1993	-2.042	0.980
D4E	-3.749	0.009	-8.235	0.000				D12E	-5.249	0.000	-5.250	0.000			
4M	-1.047	0.721	-1.033	0.728	1984	-2.447	0.916	12M	0.442	0.981	-0.211	0.926	1992	-2.659	0.847
D4M	-3.756	0.009	-6.916	0.000				D12M	-1.896	0.329	-4.091	0.004			
5E	-1.192	0.662	-2.246	0.195	1989	-5.872	< 0.01	13E	-1.293	0.617	-1.001	0.739	1983	-4.040	0.144
D5E	-5.405	0.000	-5.803	0.000				D13E	-1.405	0.564	-3.913	0.006			
5M	-1.365	0.584	-2.091	0.249	1986	-5.672	< 0.01	13M	-1.609	0.464	-1.263	0.633	1983	-2.776	0.798
D5M	-3.244	0.029	-6.945	0.000				D13M	-1.564	0.486	-3.642	0.011			
6E	-1.153	0.679	-1.249	0.639	1996	-2.663	0.845	14E	-1.149	0.680	-1.637	0.452	1990	-3.942	0.176
D6E	-2.994	0.049	-5.162	0.000				D14E	-3.005	0.048	-2.604	0.104			
6M	-2.883	0.061	-2.357	0.162	1979	-3.025	0.672	14M	-1.619	0.459	-1.502	0.519	1993	-2.504	0.902
D6M	-3.330	0.024	-6.820	0.000				D14M	-3.176	0.034	-5.901	0.000			
7E	-1.779	0.382	-0.303	0.913	1993	-3.403	0.439	15E	-2.916	0.057	-2.918	0.056	1988	-4.108	0.123
D7E	-1.729	0.405	-3.169	0.033				D15E	-5.493	0.000	-9.353	0.000			
7M	0.234	0.970	0.236	0.973	1992	-2.291	0.948	15M	-2.270	0.189	-2.611	0.102	1983	-3.140	0.603
D7M	-1.893	0.330	-4.535	0.001				D15M	-2.447	0.140	-5.809	0.000			
8E	-0.611	0.852	-0.432	0.891	1981	-2.997	0.688	16E	-2.048	0.266	-1.913	0.322	1988	-3.766	0.250
D8E	-3.571	0.014	-6.455	0.000				D16E	-4.394	0.002	-3.932	0.006			
8M	0.022	0.953	-0.019	0.949	1987	-2.599	0.869	16M	-1.230	0.646	-1.788	0.379	1981	-4.108	0.151
D8M	-2.676	0.092	-5.079	0.000				D16M	-3.163	0.035	-6.704	0.000			

Table S2: Unit root results: 1970-2004

This table presents the unit root test results for the 16 countries exports (E) and imports (M) of goods and services as a ratio of GDP (%). The results relate to: Australia (1), Bangladesh (2), Chile (3), China (4), Ecuador (5), France (6), Honduras (7), Mexico (8), New Zealand (9), Panama (10), Peru (11), Philippines (12), Paraguay (13), United States (14), Venezuela (15), and South Africa (16).

	ADF test		PP test		Perron test				ADF test		PP test		Perron test		
	ADF stat	prob.	PP stat	prob.	One break	Stat.	prob.		ADF stat	prob.	PP stat	prob.	One break	Stat.	prob.
1E	-0.427	0.892	-1.417	0.563	1990	-3.139	0.604	9E	-1.904	0.326	-2.014	0.280	1990	-3.523	0.375
D1E	-4.250	0.002	-6.300	0.000				D9E	-3.733	0.009	-5.517	0.000			
1M	-1.734	0.405	-0.965	0.755	1992	-2.495	0.904	9M	-3.111	0.036	-2.432	0.141	1984	-4.134	0.116
D1M	-3.622	0.011	-8.705	0.000				D9M	-5.692	0.000	-6.076	0.000			
2E	-0.702	0.832	-0.819	0.801	1992	-4.265	0.081	10E	-2.229	0.201	-1.953	0.305	1989	-2.855	0.760
D2E	-2.957	0.051	-6.724	0.000				D10E	-3.305	0.024	-4.582	0.001			
2M	-1.370	0.584	-3.227	0.027	1994	-4.702	0.024	10M	-1.979	0.294	-1.767	0.390	1988	-2.872	0.752
D2M	-2.495	0.127	-11.200	0.000				D11M	-3.337	0.022	-4.531	0.001			
3E	-1.298	0.618	-0.720	0.828	1981	-3.080	0.640	11E	-1.825	0.362	-2.215	0.205	1985	-2.809	0.783
D3E	-2.863	0.062	-4.267	0.002				D11E	-3.908	0.006	-5.657	0.000			
3M	-3.227	0.028	-2.253	0.193	1983	-2.792	0.791	11M	-2.604	0.103	-2.675	0.089	1989	-3.172	0.583
D3M	-3.864	0.006	-6.825	0.000				D11M	-3.598	0.012	-7.880	0.000			
4E	1.416	0.999	1.670	0.999	2002	-0.490	>0.99	12E	0.166	0.966	0.241	0.971	1993	-2.732	0.818
D4E	-2.216	0.205	-4.665	0.001				D12E	-2.417	0.146	-6.485	0.000			
4M	0.595	0.987	1.162	0.997	1999	-1.022	>0.99	12M	-0.258	0.920	-0.202	0.929	1992	-3.059	0.651
D4M	-2.572	0.110	-4.155	0.003				D12M	-2.561	0.112	-5.294	0.000			
5E	-1.460	0.540	-2.648	0.094	1989	-5.495	<0.01	13E	-1.224	0.651	-1.070	0.716	1983	-4.270	0.080
D5E	-5.875	0.000	-11.438	0.000				D13E	-2.063	0.260	-5.077	0.000			
5M	-0.996	0.742	-1.771	0.388	1986	-4.587	0.034	13M	-1.711	0.416	-1.425	0.558	1983	-2.751	0.810
D5M	-3.677	0.010	-9.366	0.000				D13M	-2.405	0.149	-4.762	0.001			
6E	-1.268	0.632	-1.461	0.541	1996	-3.218	0.557	14E	-1.802	0.373	-2.063	0.260	1990	-4.144	0.113
D6E	-3.009	0.045	-5.569	0.000				D14E	-3.368	0.020	-3.116	0.035			
6M	-2.189	0.214	-2.139	0.232	1996	-3.097	0.629	14M	-1.209	0.658	-0.931	0.766	1994	-4.095	0.127
D6M	-3.417	0.018	-7.125	0.000				D14M	-3.477	0.016	-6.410	0.000			
7E	-0.287	0.916	-0.205	0.929	1993	-3.399	0.442	15E	-3.130	0.035	-3.117	0.035	2001	-4.222	0.093
D7E	-2.008	0.282	-3.988	0.004				D15E	-4.940	0.000	-9.163	0.000			
7M	0.481	0.983	0.512	0.985	1992	-2.192	0.964	15M	-2.249	0.194	-2.670	0.090	1983	-3.266	0.526
D7M	-2.280	0.185	-4.512	0.001				D15M	-2.721	0.082	-6.406	0.000			
8E	-0.575	0.862	-0.012	0.951	1994	-2.988	0.693	16E	-2.362	0.160	-2.410	0.147	1988	-3.502	0.386
D8E	-3.632	0.011	-6.014	0.000				D16E	-4.169	0.003	-4.246	0.002			
8M	0.141	0.964	0.737	0.991	1987	-2.238	0.957	16M	-1.135	0.689	-1.960	0.302	1981	-2.935	0.720
D8M	-3.032	0.043	-5.162	0.000				D16M	-3.128	0.035	-7.250	0.000			

Table S3: Unit root results: 1970-2009

This table presents the unit root test results for the 16 countries exports (E) and imports (M) of goods and services as a ratio of GDP (%). The results relate to: Australia (1), Bangladesh (2), Chile (3), China (4), Ecuador (5), France (6), Honduras (7), Mexico (8), New Zealand (9), Panama (10), Peru (11), Philippines (12), Paraguay (13), United States (14), Venezuela (15), and South Africa (16).

	ADF test		PP test		Perron test				ADF test		PP test		Perron test		
	ADF stat	prob.	PP stat	prob.	One Break	Stat	prob.		ADF stat	prob.	PP stat	prob.	One Break	Stat	prob.
1E	0.137	0.964	0.351	0.978	1991	-2.542	0.890	9E	-2.197	0.211	-2.287	0.181	1978	-3.516	0.378
D1E	-3.821	0.006	-8.355	0.000				D9E	-3.619	0.010	-5.679	0.000			
1M	-1.280	0.628	-0.050	0.948	1992	-2.449	0.915	9M	-3.441	0.016	-2.798	0.068	1988	-3.350	0.473
D1M	-4.558	0.001	-15.328	0.000				D9M	-5.649	0.000	-6.491	0.000			
2E	0.596	0.988	0.290	0.975	1992	-2.239	0.957	10E	-2.469	0.131	-1.892	0.333	1989	-3.225	0.552
D2E	-3.800	0.007	-6.685	0.000				D10E	-3.690	0.009	-4.802	0.000			
2M	0.142	0.965	-1.259	0.639	1994	-3.158	0.592	10M	-2.338	0.166	-2.110	0.242	1988	-2.826	0.775
D2M	-2.891	0.057	-10.436	0.000				D11M	-3.503	0.014	-4.823	0.000			
3E	-1.692	0.427	-1.334	0.604	1981	-3.350	0.474	11E	-1.484	0.530	-1.461	0.543	2003	-2.907	0.735
D3E	-3.104	0.035	-4.319	0.002				D11E	-4.091	0.003	-5.549	0.000			
3M	-2.967	0.048	-2.410	0.146	1983	-3.263	0.528	11M	-2.298	0.178	-2.616	0.098	2004	-2.907	0.735
D3M	-4.357	0.002	-8.117	0.000				D11M	-3.561	0.012	-7.738	0.000			
4E	-1.607	0.469	-0.975	0.753	1989	-2.693	0.833	12E	-1.442	0.551	-1.222	0.655	1992	-2.248	0.956
D4E	-2.605	0.102	-2.582	0.105				D12E	-0.945	0.762	-5.384	0.000			
4M	-1.370	0.586	-1.221	0.656	1991	-2.669	0.842	12M	-1.622	0.461	-1.332	0.605	1992	-2.461	0.912
D4M	-2.479	0.129	-3.811	0.006				D12M	-1.242	0.645	-4.363	0.001			
5E	-1.138	0.690	-2.339	0.165	1998	-3.915	0.187	13E	-1.497	0.524	-1.327	0.607	1983	-4.172	0.106
D5E	-5.834	0.000	-9.173	0.000				D13E	-2.066	0.259	-5.216	0.000			
5M	-0.840	0.795	-1.806	0.372	1986	-3.665	0.299	13M	-1.918	0.321	-1.584	0.481	1983	-2.827	0.774
D5M	-4.150	0.003	-8.988	0.000				D13M	-2.631	0.097	-5.059	0.000			
6E	-1.685	0.430	-1.866	0.344	1994	-3.448	0.415	14E	-1.927	0.317	-1.908	0.326	1990	-4.368	0.062
D6E	-3.228	0.027	-5.147	0.000				D14E	-3.594	0.011	-2.990	0.045			
6M	-1.844	0.354	-2.037	0.270	1996	-3.366	0.463	14M	-1.329	0.606	-1.734	0.407	1993	-2.796	0.789
D6M	-4.048	0.003	-7.044	0.000				D14M	-3.268	0.024	-4.659	0.001			
7E	-1.708	0.419	-1.317	0.612	1992	-3.102	0.626	15E	-3.582	0.011	-3.402	0.017	2001	-4.131	0.117
D7E	-1.259	0.638	-2.976	0.046				D15E	-4.563	0.001	-6.172	0.000			
7M	-1.229	0.651	-1.225	0.654	1992	-3.188	0.573	15M	-2.529	0.117	-2.939	0.050	1983	-3.604	0.328
D7M	-1.754	0.396	-3.508	0.013				D15M	-3.053	0.040	-6.983	0.000			
8E	-0.903	0.776	-0.751	0.822	1994	-3.215	0.558	16E	-2.398	0.149	-2.688	0.085	1987	-3.378	0.455
D8E	-4.107	0.003	-8.608	0.000				D16E	-4.689	0.001	-4.279	0.002			
8M	-0.444	0.891	-0.269	0.920	1987	-2.699	0.831	16M	-0.815	0.803	-2.001	0.285	2004	-2.836	0.770
D8M	-3.368	0.019	-6.651	0.000				D16M	-3.474	0.015	-5.680	0.000			

Table S4: Unit root results: 1970-2014

This table presents the unit root test results for the 16 countries exports (E) and imports (M) of goods and services as a ratio of GDP (%). The results relate to: Australia (1), Bangladesh (2), Chile (3), China (4), Ecuador (5), France (6), Honduras (7), Mexico (8), New Zealand (9), Panama (10), Peru (11), Philippines (12), Paraguay (13), United States (14), Venezuela (15), and South Africa (16).

	ADF test		PP test		Perron test				ADF test		PP test		Perron test		
	ADF stat	prob.	PP stat	prob.	Break date	Stat.	prob.		ADF stat	prob.	PP stat	prob.	Break date	Stat.	prob.
1E	-0.698	0.836	-1.011	0.741	1992	-3.666	0.299	9E	-2.383	0.153	-2.512	0.120	1974	-3.712	0.277
D1E	-5.377	0.000	-18.070	0.000				D9E	-3.922	0.004	-6.555	0.000			
1M	-2.162	0.223	-1.053	0.726	1992	-2.992	0.691	9M	-3.711	0.008	-3.037	0.039	1973	-4.178	0.104
D1M	-4.630	0.001	-9.859	0.000				D9M	-6.023	0.000	-7.915	0.000			
2E	0.746	0.992	0.489	0.984	1991	-1.997	0.983	10E	-2.681	0.086	-2.383	0.152	1989	-3.478	0.399
D2E	-4.221	0.002	-7.321	0.000				D10E	-3.225	0.026	-4.760	0.000			
2M	0.537	0.986	-0.863	0.791	2004	-4.175	0.105	10M	-2.395	0.149	-2.269	0.186	1988	-3.016	0.677
D2M	-3.296	0.022	-11.495	0.000				D11M	-3.427	0.016	-5.884	0.000			
3E	-2.129	0.235	-1.680	0.434	1981	-3.509	0.382	11E	-1.585	0.481	-1.773	0.389	2003	-3.009	0.681
D3E	-3.064	0.038	-4.872	0.000				D11E	-4.083	0.003	-5.900	0.000			
3M	-2.980	0.045	-2.310	0.173	2008	-3.443	0.418	11M	-1.797	0.377	-2.143	0.230	2005	-3.590	0.337
D3M	-4.582	0.001	-10.791	0.000				D11M	-3.851	0.005	-9.064	0.000			
4E	-1.265	0.637	-1.225	0.655	1986	-2.223	0.960	12E	-1.334	0.605	-1.334	0.605	1983	-1.836	> 0.99
D4E	-3.040	0.040	-5.116	0.000				D12E	-1.984	0.292	-1.984	0.292			
4M	-1.296	0.623	-1.291	0.626	1991	-2.362	0.935	12M	-1.650	0.449	-1.650	0.449	1986	-2.134	0.971
D4M	-3.271	0.023	-5.207	0.000				D12M	-2.288	0.181	-2.288	0.181			
5E	-1.077	0.716	-2.182	0.215	1998	-4.228	0.091	13E	-1.600	0.474	-1.600	0.474	1983	-4.021	0.150
D5E	-6.224	0.000	-14.764	0.000				D13E	-2.379	0.154	-2.379	0.154			
5M	-0.782	0.814	-1.590	0.479	1986	-3.245	0.539	13M	-2.018	0.278	-2.018	0.278	1983	-3.020	0.674
D5M	-4.312	0.002	-12.380	0.000				D13M	-2.911	0.053	-2.911	0.053			
6E	-0.993	0.747	-1.162	0.682	1996	-3.494	0.391	14E	-0.806	0.807	-0.806	0.807	2010	-3.091	0.633
D6E	-4.079	0.003	-7.114	0.000				D14E	-3.697	0.008	-3.697	0.008			
6M	-0.904	0.777	-1.139	0.692	1999	-3.117	0.617	14M	-0.991	0.748	-0.991	0.748	1993	-2.662	0.845
D6M	-4.617	0.001	-8.762	0.000				D14M	-4.562	0.001	-4.562	0.001			
7E	-1.164	0.681	-1.226	0.655	1993	-3.937	0.178	15E	-3.318	0.020	-3.318	0.020	2013	-3.935	0.179
D7E	-2.742	0.076	-5.316	0.000				D15E	-5.703	0.000	-5.703	0.000			
7M	-1.004	0.743	-1.079	0.716	1993	-3.600	0.330	15M	-2.660	0.090	-2.660	0.090	1982	-3.571	0.347
D7M	-3.167	0.030	-6.885	0.000				D15M	-3.193	0.028	-3.193	0.028			
8E	-0.543	0.872	-0.351	0.909	1994	-3.067	0.647	16E	-2.276	0.184	-2.276	0.184	2010	-3.317	0.494
D8E	-4.626	0.001	-10.693	0.000				D16E	-5.056	0.000	-5.056	0.000			
8M	-0.205	0.930	0.158	0.967	1994	-2.544	0.889	16M	-0.587	0.862	-0.587	0.862	2005	-3.002	0.685
D8M	-3.926	0.004	-7.386	0.000				D16M	-4.335	0.001	-4.335	0.001			