

Appendix A

Table A5
U.S. and Canada Productivity and Output Index/Construction of z_1 and z_2

Manufacturing Output per Hour					
Base Period 1973 = 100					
Data Obtained from U.S. Bureau of Labor Statistics					
Year	Canada Index Value	U.S. Index Value	LN of Canada Index Value	LN of U.S. Index Value	Difference (Z1)
1971	90.63	94.14	4.50683	4.54475	-0.037915
1972	94.71	98.21	4.55085	4.58709	-0.036241
1973	100.00	100.00	4.60517	4.60517	0.000000
1974	101.51	99.67	4.62016	4.60191	0.018255
1975	97.73	104.72	4.58225	4.65132	-0.069069
1976	106.19	109.12	4.66526	4.69245	-0.027191
1977	113.14	113.52	4.72864	4.73196	-0.003317
1978	115.86	114.66	4.75239	4.74195	0.010438
1979	114.65	113.68	4.74191	4.73339	0.008512
1980	113.44	114.17	4.73131	4.73768	-0.006373
1981	117.52	115.15	4.76663	4.74621	0.020425
1982	116.77	120.85	4.76018	4.79452	-0.034341
1983	124.47	124.92	4.82408	4.82766	-0.003587
1984	136.25	129.32	4.91452	4.86226	0.052260
1985	139.58	134.04	4.93862	4.89813	0.040485
1986	135.95	139.90	4.91230	4.94094	-0.028645
1987	136.86	143.81	4.91894	4.96850	-0.049557
1988	137.31	146.91	4.92225	4.98979	-0.067540
1989	141.54	147.07	4.95259	4.99090	-0.038310
1990	144.56	151.14	4.97371	5.01821	-0.044499
1991	143.96	154.72	4.96952	5.04164	-0.072118
1992	151.06	162.87	5.01766	5.09293	-0.075271
1993	157.85	165.96	5.06168	5.11175	-0.050075
1994	166.01	171.01	5.11206	5.14172	-0.029660
1995	167.67	177.52	5.12202	5.17911	-0.057088
1996	165.41	183.71	5.10841	5.21338	-0.104962
1997	170.39	190.72	5.13811	5.25079	-0.112683
1998	169.94	202.44	5.13544	5.31046	-0.175015
1999	174.02	214.17	5.15916	5.36677	-0.207608

Average Annual Hours in Manufacturing					
Base Period 1973 = 100					
Data Obtained from U.S. Bureau of Labor Statistics					
Year	Canada Index Value	U.S. Index Value	LN of Canada Index Value	LN of U.S. Index Value	Difference (Z2)
1971	100.69	98.50	4.6120	4.5900	0.0220
1972	100.78	100.10	4.6130	4.6062	0.0068
1973	100.00	100.00	4.6052	4.6052	0.0000
1974	99.31	98.10	4.5983	4.5860	0.0123
1975	98.14	96.70	4.5864	4.5716	0.0148
1976	98.24	97.80	4.5874	4.5829	0.0045
1977	98.14	98.20	4.5864	4.5870	-0.0006
1978	98.92	98.20	4.5943	4.5870	0.0074
1979	98.43	97.60	4.5894	4.5809	0.0085
1980	97.45	96.40	4.5794	4.5685	0.0109
1981	96.57	96.50	4.5703	4.5695	0.0008
1982	95.79	94.69	4.5621	4.5507	0.0115
1983	97.06	97.30	4.5753	4.5778	-0.0024
1984	96.96	98.70	4.5743	4.5921	-0.0177
1985	97.55	98.80	4.5804	4.5931	-0.0127
1986	97.94	98.70	4.5844	4.5921	-0.0077
1987	98.82	99.20	4.5933	4.5971	-0.0038
1988	100.88	100.10	4.6139	4.6062	0.0078
1989	98.63	100.10	4.5914	4.6062	-0.0148
1990	98.14	99.50	4.5864	4.6002	-0.0138
1991	97.75	98.80	4.5824	4.5931	-0.0107
1992	97.94	100.10	4.5844	4.6062	-0.0218
1993	99.02	101.40	4.5953	4.6191	-0.0238
1994	99.90	102.30	4.6042	4.6279	-0.0237
1995	99.41	101.60	4.5993	4.6211	-0.0218
1996	100.00	101.60	4.6052	4.6211	-0.0159
1997	101.08	102.30	4.6159	4.6279	-0.0120
1998	100.39	101.30	4.6091	4.6181	-0.0090
1999	101.27	102.10	4.6178	4.6260	-0.0082