

Year	ZMB	PAN	FJI	COM	Year2	LOG-ZMB	LOG-PAN	LOG-FJI	LOG-COM	Year3	Year2 ²	ZMB - Quad	PAN - Quad	FJI - Quad	COM - Quad	ZMB - Detrended	PAN - Detrended	FJI Detrended	COM - Detrended
1970	2088.39	2188.98	2988.01	2988.01	1970	8.16	8.54	8.15	7.98	1970	368890	8.30	8.68	8.16	7.97	1970	-0.12	-0.15	-0.20
1971	2788.39	2588.11	3588.07	2788.39	1971	7.93	8.03	8.11	7.93	1971	388891	8.18	8.60	8.37	7.95	1971	-0.28	-0.38	-0.18
1972	2682.81	3787.94	3788.38	3711.96	1972	7.68	8.68	8.24	7.91	1972	388894	8.68	8.68	8.38	7.98	1972	-0.11	-0.83	-0.14
1973	3154.24	3884.27	4111.54	2852.37	1973	8.05	8.87	8.32	7.98	1973	388239	8.68	8.87	8.58	8.05	1973	0.05	0.68	-0.05
1974	2882.69	4682.69	4218.62	2882.69	1974	7.93	8.88	8.28	7.96	1974	388269	7.93	8.87	8.42	8.07	1974	0.07	0.88	-0.07
1975	2387.88	5532.78	4707.88	2948.28	1975	7.78	8.62	8.48	7.95	1975	388025	7.78	8.68	8.47	8.02	1975	-0.04	-0.03	0.05
1976	2482.38	5443.78	4832.13	2885.95	1976	7.82	8.68	8.44	7.96	1976	388478	7.74	8.68	8.42	8.03	1976	0.08	-0.88	0.02
1977	1978.89	5234.88	4824.82	2885.59	1977	7.58	8.58	8.48	7.97	1977	388239	7.47	8.68	8.43	8.04	1977	-0.08	-0.18	0.04
1978	1778.88	5782.78	4878.82	2881.88	1978	7.44	8.65	8.48	7.98	1978	387284	7.38	8.67	8.48	8.05	1978	-0.18	-0.82	0.08
1979	1787.81	5844.08	5833.33	3812.42	1979	7.48	8.64	8.61	8.01	1979	381841	7.43	8.67	8.43	8.05	1979	-0.04	-0.83	0.17
1980	1588.52	6284.47	5488.74	3182.81	1980	7.38	8.74	8.60	8.06	1980	382840	7.47	8.68	8.46	8.08	1980	-0.11	0.04	0.18
1981	1882.68	6889.39	4891.24	3892.28	1981	7.48	8.78	8.11	8.11	1981	382841	7.47	8.68	8.47	8.06	1981	-0.11	0.08	0.04
1982	1883.98	6484.17	4737.32	3231.41	1982	7.38	8.77	8.48	8.08	1982	382834	7.38	8.68	8.48	8.07	1982	0.08	0.98	-0.01
1983	1883.53	8513.18	4838.74	3383.17	1983	7.37	8.78	8.42	8.12	1983	382284	7.31	8.70	8.49	8.07	1983	0.08	0.98	-0.05
1984	1828.18	8833.94	4889.38	3484.02	1984	7.51	8.78	8.48	8.12	1984	382838	7.28	8.72	8.58	8.07	1984	0.25	0.84	-0.08
1985	1881.22	8382.22	4737.45	3872.37	1985	7.58	8.78	8.47	8.21	1985	384233	7.23	8.72	8.51	8.07	1985	0.38	0.83	0.13
1986	1848.68	8718.88	4782.38	4145.87	1986	7.41	8.81	8.47	8.33	1986	384188	7.18	8.75	8.52	8.08	1986	0.21	0.97	-0.05
1987	1725.35	8982.02	4782.2	4838.82	1987	7.45	8.85	8.47	8.33	1987	384888	7.18	8.76	8.54	8.08	1987	0.25	0.88	-0.07
1988	1787.84	8728.88	4881.08	4882.38	1988	7.44	8.72	8.48	8.21	1988	384888	7.18	8.78	8.58	8.08	1988	0.38	-0.88	-0.08
1989	1241.18	5871.45	5274.77	3888.02	1989	7.25	8.68	8.57	8.18	1989	388511	7.12	8.80	8.38	8.08	1989	0.08	-0.11	0.11
1990	1388.68	6182.48	5787.87	3487.18	1990	7.18	8.72	8.48	8.18	1990	388888	7.11	8.82	8.57	8.08	1990	0.07	-0.18	0.08
1991	1388.64	6883.48	5883.88	3272.72	1991	7.18	8.81	8.61	8.08	1991	388481	7.10	8.85	8.58	8.07	1991	0.08	-0.04	0.03
1992	1882.14	6782.22	6282.68	3883.81	1992	7.58	8.88	8.73	8.08	1992	388884	7.08	8.87	8.67	8.07	1992	-0.18	0.98	0.08
1993	1872.02	7485.03	5877	3248.03	1993	8.02	8.82	8.64	8.08	1993	387284	7.08	8.88	8.61	8.07	1993	-0.17	0.82	0.03
1994	854.81	7483.18	5838.81	2888.38	1994	8.88	8.82	8.67	7.88	1994	387888	7.08	8.93	8.83	8.08	1994	-0.23	-0.01	0.04
1995	988.81	7281.02	5883.31	3148.18	1995	8.88	8.88	8.88	8.03	1995	388882	7.18	8.98	8.84	8.08	1995	-0.28	-0.87	0.04
1996	1888.88	7838.38	8728.88	3838.18	1996	8.98	8.93	8.72	8.08	1996	388888	7.12	8.98	8.88	8.08	1996	-0.18	-0.87	0.04
1997	1877.87	8181.77	8824.88	2888.81	1997	8.88	8.81	8.67	8.07	1997	388888	7.14	8.93	8.67	8.05	1997	-0.18	-0.83	0.04
1998	1818.88	8234.03	8737.87	2782.23	1998	8.82	8.87	8.88	7.82	1998	388884	7.18	8.98	8.88	8.08	1998	-0.24	0.01	-0.03
1999	1818.88	8888.11	8828.78	2742.84	1999	8.88	8.98	8.78	7.82	1999	388881	7.18	8.98	8.78	8.01	1999	-0.28	-0.01	0.01
2000	1188.88	8842.84	8888.24	2828	2000	7.88	9.11	8.67	7.87	2000	488888	7.28	9.14	8.72	8.02	2000	-0.14	-0.03	-0.05
2001	1222.83	8188.18	8887.37	2848.18	2001	7.11	9.13	8.67	7.81	2001	488881	7.28	9.18	8.82	8.01	2001	-0.18	-0.83	-0.07
2002	1281.88	8478.08	8888.78	2827.37	2002	7.14	9.18	8.88	7.88	2002	488884	7.28	9.22	8.78	8.01	2002	-0.18	-0.87	-0.07
2003	1328.38	18822.85	8888.81	2788.78	2003	7.18	9.24	8.67	7.83	2003	481288	7.18	9.27	8.78	8.01	2003	-0.18	-0.82	-0.08
2004	1428.81	18888.28	8825.77	2878.11	2004	7.28	9.28	8.78	7.88	2004	481888	7.48	9.31	8.78	7.98	2004	-0.13	-0.83	-0.08
2005	1888.68	11828.84	8825.42	2838.48	2005	7.35	9.38	8.69	7.88	2005	482888	7.48	9.38	8.88	7.97	2005	-0.18	0.01	-0.11
2006	2822.22	12828.88	8828.28	2881.28	2006	7.52	9.48	8.78	7.88	2006	482888	7.48	9.48	8.88	7.98	2006	-0.28	0.88	-0.08
2007	2423.98	19484.88	8828.83	2227.03	2007	7.88	9.58	8.78	7.74	2007	482888	7.48	9.58	8.93	7.95	2007	0.22	-0.87	-0.08
2008	2478.28	19887.05	8848.68	2288.98	2008	7.81	9.47	8.77	7.77	2008	482884	7.48	9.51	8.85	7.94	2008	0.18	-0.84	-0.08
2009	2725.47	13878.05	8848.74	2481.38	2009	7.91	9.58	8.78	7.78	2009	482881	7.72	9.58	8.98	7.92	2009	0.18	-0.82	-0.08
2010	2878.38	14872.02	8828.68	2282.28	2010	8.18	9.68	8.84	7.74	2010	484888	7.68	9.62	8.98	7.92	2010	0.28	-0.88	-0.08
2011	3387.48	18838.24	7418.18	2488.21	2011	8.12	9.71	8.91	7.81	2011	484411	7.88	9.68	8.98	7.88	2011	0.23	0.83	0.01
2012	3515.05	17488.47	7484.87	2973.18	2012	8.18	9.77	8.92	7.85	2012	484814	7.88	9.74	8.92	7.87	2012	0.18	0.83	0.01
2013	3884.72	18871.88	7824.41	2738.18	2013	8.18	9.83	8.97	7.87	2013	485814	8.07	9.80	8.94	7.88	2013	0.11	0.84	0.01
2014	3884.84	18828.78	8213.78	2883.28	2014	8.28	9.87	9.01	7.84	2014	485818	8.07	9.88	8.98	7.84	2014	0.03	0.81	0.01
2015	3483.81	20881.41	8481.14	2814.98	2015	8.28	9.93	9.08	7.84	2015	486823	8.27	9.82	8.97	7.82	2015	-0.87	0.81	0.07
2016	3888.38	21842.38	8442.83	2888.28	2016	8.21	9.97	9.04	7.84	2016	488488	8.38	9.88	8.98	7.88	2016	-0.17	-0.83	0.08
2017	3888.17	22847.18	8833.68	2832.2	2017	8.24	10.02	9.08	7.88	2017	488888	8.38	10.05	8.91	7.78	2017	-0.21	-0.84	0.08

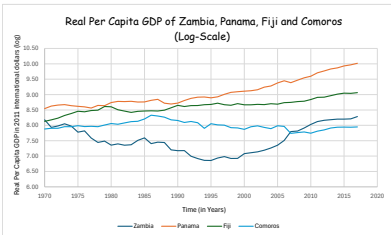
SUMMARY OUTPUT - ZMB

Regression Statistics
Multiple R 0.9187065
R Square 0.84886
Adjusted R 0.8388537
Standard E 0.1796874
Observation 47

ANOVA

	df	SS	MS	F	Significance F
Regression	2	7.4765335	3.738267	120.72742	0
Residual	44	1.3852439	0.330965		
Total	46	8.8687874			

	Coefficients	Standard E	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%
Intercept	9882.9686	620.2617	15.12744	4.79E-19	8132.9374	10633.054	8132.9374	10633.054
1970	-0.410707	0.6221487	-15.12611	4.80E-19	-10.66457	-8.156846	-10.66457	-8.156846
3888900	0.0002614	0.000156	15.13878	4.68E-19	0.000247	0.0002758	0.000247	0.0002758



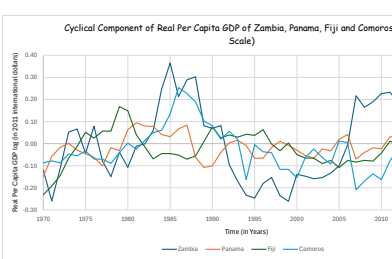
SUMMARY OUTPUT

Regression Statistics
Multiple R 0.99315076
R Square 0.98643186
Adjusted R 0.98591212
Standard E 0.05178883
Observation 47

ANOVA

	df	SS	MS	F	Significance F
Regression	2	8.55293883	4.27646792	1589.444968	0
Residual	44	0.11784588	0.00267372		
Total	46	8.67078471			

	Coefficients	Standard E	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%
Intercept	32481.8183	182.264452	17.8248339	8.47E-22	2881.50199	3616.16127	2881.50199	3616.16127
1970	-3.27942827	0.18291871	-17.9381189	7.40E-22	-3.64787076	-2.91097699	-3.64787076	-2.91097699
3888900	0.000629279	4.58424E-5	18.101064	5.21E-22	0.0007374	0.00092218	0.0007374	0.00092218



SUMMARY OUTPUT

Regression Statistics
Multiple R 0.937871284
R Square 0.878602545
Adjusted R 0.874128933
Standard E 0.072880345
Observation 47

ANOVA

	df	SS	MS	F	Significance F
Regression	2	1.70649213	0.85324606	160.728115	0
Residual	44	0.23387912	0.00538883		
Total	46	1.94037124			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%
Intercept	450.7894125	256.8236275	1.75524899	0.086177454	-66.8046	968.3834	-66.80459152
1970	-0.457458911	0.257604766	-1.77581696	0.082679244	-0.97663	0.61709	-0.976627197
3880900	0.000118211	6.45947E-05	1.83004612	0.07022652	-1.2E-05	0.000248	-1.19708E-05