

# CHAPTER 6

## CONCLUSION AND RECOMMENDATIONS

### 6.1 Summary Conclusion

Economic theory, on which this study is based, suggests a strong positive relationship between the general price level and the nominal money supply of the country. Similarly a rise in national output is expected to reduce the increase in price level. This second fundamental economic proposition can be challenged on rational and empirical grounds using the findings of this study.

The results of this study provide sufficient evidence in the analyses to decide that the national output is statistically significant in explaining the variation in general price level. But the statistical evidence did not find a negative relationship between the real output and the general price level after eliminating the autocorrelation effects. This finding might be used to conclude that the general price level increases when there is an increase in real national output. Due to the statistical evidence, estimating the elasticity of price with respect to national output has less economic meaning in the Sri Lankan contexts.

The results of the analysis justify the proposition that nominal money supply and the general price level of the country are positively related. That results show adequate statistical significance to explain the variations in the general price level before and after eliminating the autocorrelation.

### 6.2 Possible Extensions to this Study

Since the literature suggests that demand for cash balances is influenced by real rate of interest, inflationary expectations and the frequency of payments other than price level and real income, one can use all these variables as independent and assess their impact on the demand for cash balances.

This study assumes the income velocity of money to be constant. One can relax this assumption and test its impact on other variables of the model.

After eliminating the autocorrelation, the elasticity of price with respect to national output becomes positive and large. One can conduct an in-depth analysis to find out possible reasons for it.

Since this study does not attempt to scrutinize the economic conditions prevailed in the country in each year (period) to determine the possible causes for the reported results, one can conduct an in-depth analysis to find out reasons for such results.

### **6.3 Implications to the government/policy makers**

Money supply is significant in explaining the inflationary conditions of Sri Lanka. Therefore relevant authorities must take actions to keep the money supply in control if they wish to keep the inflation level in control.

It is found that there is a positive relationship between the price level and real gross national income. So the government and policy makers should consider control the price level while they implement the policies to increase the national output in Sri Lanka.

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# APPENDIX 1

## ORIGINAL DATA AND LOG VALUES OF GNPR, NMS AND CCPI (1952-2000)

YEAR	RGNP	NMS	CCPI	logGNPR	logNMS	LogCCPI
1952	116320	996	100.0	5.06565	2.99826	2.00000
1953	118829	927	101.6	5.07492	2.96708	2.00689
1954	121847	1093	101.1	5.08581	3.03862	2.00475
1955	128627	1225	100.5	5.10933	3.08814	2.00217
1956	129816	1314	100.2	5.11333	3.11860	2.00087
1957	131657	1256	102.8	5.11944	3.09899	2.01199
1958	135868	1338	105.0	5.13312	3.12646	2.02119
1959	137897	1477	105.2	5.13955	3.16938	2.02202
1960	147143	1572	103.5	5.16774	3.19645	2.01494
1961	150349	1643	104.8	5.17710	3.21564	2.02036
1962	157017	1748	106.3	5.19595	3.24254	2.02653
1963	161440	1974	108.8	5.20801	3.29535	2.03663
1964	172298	2142	112.2	5.23628	3.33082	2.04999
1965	176697	2283	112.5	5.24723	3.35851	2.05115
1966	182945	2244	112.3	5.26232	3.35102	2.05038
1967	192138	2495	114.8	5.28361	3.39707	2.05994
1968	208284	2724	121.5	5.31866	3.43521	2.08458
1969	217646	2851	130.5	5.33775	3.45500	2.11561
1970	226680	3115	138.2	5.35541	3.49346	2.14051
1971	227848	3435	141.9	5.35765	3.53593	2.15198
1972	235541	3974	150.9	5.37207	3.59923	2.17869
1973	245015	4154	165.4	5.38919	3.61847	2.21854
1974	253564	4569	185.8	5.40409	3.65982	2.26905
1975	259368	4777	198.3	5.41392	3.67916	2.29732
1976	266744	6321	200.7	5.42609	3.80079	2.30255
1977	278548	8717	203.2	5.44490	3.94037	2.30792
1978	302931	10891	227.8	5.48134	4.03707	2.35755
1979	322179	15057	252.3	5.50810	4.17774	2.40192
1980	340114	19860	318.2	5.53162	4.29798	2.50270
1981	353402	24447	375.4	5.54827	4.38823	2.57449
1982	371109	30510	416.1	5.56950	4.48444	2.61920
1983	385994	37257	474.2	5.58658	4.57121	2.67596
1984	405846	43427	553.1	5.60836	4.63776	2.74280
1985	427227	48409	561.2	5.63066	4.68493	2.74912
1986	446535	50860	606.0	5.64986	4.70638	2.78247
1987	453508	58335	652.8	5.65658	4.7659	2.81478
1988	465143	67946	744.1	5.66759	4.83216	2.87163
1989	475789	76434	830.2	5.67741	4.88329	2.91918

1990	506016	90546	1008.6	5.70416	4.95687	3.00372
1991	529182	110575	1131.5	5.72361	5.04366	3.05365
1992	552637	129799	1260.4	5.74244	5.11327	3.10051
1993	595343	160136	1408.4	5.77477	5.20449	3.14873
1994	626670	191670	1527.4	5.79704	5.28255	3.18395
1995	663997	228536	1644.6	5.82217	5.35895	3.21606
1996	684676	253201	1906.7	5.83549	5.40347	3.28028
1997	730947	288258	2089.1	5.86389	5.45978	3.31996
1998	764908	316174	2284.9	5.88361	5.49993	3.35887
1999	794340	358076	2392.1	5.90001	5.55398	3.37878
2000	840285	404669	2539.8	5.92443	5.60710	3.40480



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## APPENDIX 2

### MINITAB OUTPUT OF COCHRANE- ORCUTT ITERATIVE PROCEDURE

#### Regression Analysis

The regression equation is

$$\text{LogCCPI} = 3.59 + 0.789 \text{ LogNMS} - 0.792 \text{ LogGNP}$$

Predictor	Coef	StDev	T	P
Constant	3.5913	0.9055	3.97	0.000
LogNMS	0.78866	0.06418	12.29	0.000
LogGNP	-0.7922	0.2132	-3.72	0.001

S = 0.05676      R-Sq = 98.7%      R-Sq(adj) = 98.6%

#### Analysis of Variance

Source	DF	SS	MS	F	P
Regression	2	11.0297	5.5149	1711.73	0.000
Residual Error	46	0.1482	0.0032		
Total	48	11.1779			

#### Regression Analysis



The regression equation is

$$\text{RES1} = 0.00036 + 0.879 \text{ RES1t-1}$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	0.000362	0.004042	0.09	0.929
RES1t-1	0.87896	0.07456	11.79	0.000

S = 0.02799      R-Sq = 75.1%      R-Sq(adj) = 74.6%

### Regression Analysis

The regression equation is

$$P^* = - 0.517 + 0.303 X1^* + 1.00 X2^*$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.5171	0.1663	-3.11	0.003
X1*	0.30319	0.08801	3.45	0.001
X2*	1.0039	0.3122	3.22	0.002

S = 0.02148      R-Sq = 91.7%      R-Sq(adj) = 91.4%

### Regression Analysis

The regression equation is

$$RES2 = - 0.328 + 0.912 RES2t-1$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.3283	0.1144	-2.87	0.006
RES2t-1	0.91248	0.03098	29.45	0.000

S = 0.02098      R-Sq = 95.0%      R-Sq(adj) = 94.9%

### Regression Analysis

The regression equation is

$$P^{**} = - 0.424 + 0.285 X1^{**} + 1.11 X2^{**}$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.4237	0.1262	-3.36	0.002
X1**	0.28477	0.08786	3.24	0.002
X2**	1.1119	0.3195	3.48	0.001

S = 0.02116      R-Sq = 87.5%      R-Sq(adj) = 86.9%

## Regression Analysis

The regression equation is  
 $RES3 = -0.368 + 0.916 RES3t-1$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.3680	0.1223	-3.01	0.004
RES3t-1	0.91607	0.02834	32.32	0.000

S = 0.02092      R-Sq = 95.8%      R-Sq(adj) = 95.7%

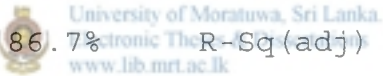
## Regression Analysis

The regression equation is  
 $P*** = -0.409 + 0.284 X1*** + 1.12 X2***$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.4089	0.1214	-3.37	0.002
X1***	0.28375	0.08789	3.23	0.002
X2***	1.1216	0.3209	3.50	0.001

S = 0.02115      R-Sq = 86.7%      R-Sq(adj) = 86.1%



## Regression Analysis

The regression equation is  
 $RES4 = -0.371 + 0.917 RES4t-1$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.3712	0.1228	-3.02	0.004
RES4t-1	0.91662	0.02805	32.68	0.000

S = 0.02092      R-Sq = 95.9%      R-Sq(adj) = 95.8%



## Regression Analysis

The regression equation is

$$P**** = - 0.405 + 0.284 X1**** + 1.12 X2****$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.4051	0.1202	-3.37	0.002
X1****	0.28355	0.08791	3.23	0.002
X2****	1.1239	0.3213	3.50	0.001

S = 0.02115      R-Sq = 86.5%      R-Sq(adj) = 85.9%

## Regression Analysis

The regression equation is

$$RES5 = - 0.372 + 0.917 RES5t-1$$

48 cases used 1 cases contain missing values

Predictor	Coef	StDev	T	P
Constant	-0.3715	0.1229	-3.02	0.004
RES5t-1	0.91662	0.02805	32.68	0.000

S = 0.02092      R-Sq = 95.9%      R-Sq(adj) = 95.8%

# APPENDIX 3

## AUTOCORRELATION ELIMINATED DATA

YEAR	P***	X1***	X2***
1953	0.174894	0.220674	0.434783
1954	0.166437	0.320775	0.437186
1955	0.165814	0.304760	0.450726
1956	0.166884	0.289863	0.433180
1957	0.179198	0.242356	0.435635
1958	0.178204	0.287782	0.443707
1959	0.170606	0.305547	0.437619
1960	0.162774	0.293300	0.459907
1961	0.174676	0.287687	0.443451
1962	0.175882	0.297017	0.453723
1963	0.180324	0.325179	0.448524
1964	0.184441	0.312281	0.465742
1965	0.173359	0.307475	0.450796
1966	0.171524	0.274631	0.455859
1967	0.181794	0.327534	0.463328
1968	0.197670	0.323490	0.478866
1969	0.206139	0.308348	0.465862
1970	0.202609	0.328681	0.466034
1971	0.191277	0.335919	0.452087
1972	0.207473	0.360319	0.464463
1973	0.222856	0.321574	0.468380
1974	0.236867	0.345306	0.467587
1975	0.218877	0.326759	0.463772
1976	0.198200	0.430680	0.466947
1977	0.198790	0.458847	0.474597
1978	0.243496	0.427692	0.493815
1979	0.242398	0.479784	0.487186
1980	0.302544	0.471171	0.486207
1981	0.282021	0.451277	0.481301
1982	0.260961	0.464828	0.487287
1983	0.276776	0.463459	0.484917
1984	0.291623	0.450533	0.491053
1985	0.236710	0.436738	0.493400
1986	0.264281	0.414984	0.492172
1987	0.266035	0.454888	0.481317
1988	0.293293	0.466573	0.486155
1989	0.288768	0.457024	0.485905
1990	0.329748	0.483779	0.503653
1991	0.302248	0.503165	0.498591

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1992	0.303361	0.493282	0.499618
1993	0.308660	0.520732	0.514692
1994	0.299720	0.515242	0.507352
1995	0.299560	0.520135	0.512078
1996	0.334371	0.494663	0.502381
1997	0.315221	0.510207	0.518582
1998	0.317785	0.498766	0.512290
1999	0.302057	0.516043	0.510620
2000	0.309838	0.519659	0.520021



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