$$e_t = m_t - m^*_t - \frac{\eta}{1+\varepsilon} y_t + \frac{\eta^*}{1+\varepsilon} y_t^* + \varepsilon k g a_t + \varepsilon k \left(\frac{R}{H} \right) gR_t$$
$$+ \varepsilon k \left(\frac{D}{H} \right) gD_t - \varepsilon k^* \; m_t$$

Even though the results produced a very high value of R^2, none of the conventional t test is statistically significant. An evidence to show a sign of multicollinearity. However, since the sole purpose of the regression analysis is for predictions, multicollinearity will not be a serious problem as long as the R^2 is sufficiently high (more than 0.8), the prediction is considered good. Thus, the results obtained from this model of estimation do support the predictions of the monetary model.

The conclusion of the studies is that all the results in the analysis conformed to the predictions of the monetary approach model. It cannot be denied that the monetary phenomena could play the main role of causing the crises either to the balance of payments problem or the exchange rate problem. Since Malaysia was following a managed floating system that pegged its currency to the US dollar, a general rule to remember is it needs to match an international system with its domestic monetary policy which may result into conflicts that lead to crises and breakdowns. A pegged exchange rate would sooner or later always collapse.

Although this paper analysis is rather a short period that is only 12 years, the evidence shown still lend support to the monetary approach model. It is better that if the analysis were being conducted for a period of more than 20 years to ensure a complete adjustment process is achieved as well as to avoid the problem of multicollinearity. It is also interesting to do a research to compare the Malaysia situation adopting a managed floating system and its situation after implementing the fixed exchange rate system.

5.2 Policy Implications

The first policy implication that concerns the monetary approach is that the balance of payments disequilibrium are essentially monetary phenomena and deficits may not occur if they did not rely so heavily on inflationary money supply growth to finance government spending.

The second policy implication is that the enjoyed years of substantial economic growth in Malaysia can be said to be characterized by little internal competition, various monopolies power, strong family ties and close links between business and government leaders.

Third implication, balance of payments disequilibrium can be handled with domestic monetary policy rather than with adjustments in the exchange rate. Any devaluation, if the underlying monetary cause of the devaluation is not corrected, then future devaluations will be required to offset the continued excess supply of the country's money. Domestic balance of payments will be improved by an increase in domestic income via an increase in money demand, if not offset by an increase in domestic credit.

As for the exchange rate, the importance of expectations implies that the stability of exchange rates may also require the stability of expectations at least in the short run. This may have particular relevance for the way in which monetary policy is conducted with respect to domestic and external objectives.

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APPENDIX A

DATA (1987 - 1997)

Appendix 1: Malaysia 's International Reserves For the Year 1987-1997 (Millions of RM)

Year	Rm mil
1986	16,539.00
1987	19,432.00
1988	18,328.00
1989	21,660.00
1990	27,025.00
1991	30,452.00
1992	47,196.00
1993	76,435.00
1994	68,172.00
1995	63,769.00
1996	70,014.00
1997	59,123.00

Appendix 2: Reserve Money of Malaysia (Millions of RM)

Year	RM mil
1986	9,947.00
1987	10,455.00
1988	11,661.20
1989	14,993.40
1990	18,501.30
1991	22,050.10
1992	24,745.00
1993	27,564.20
1994	39,445.20
1995	47,330.80
1996	64,559.40
1997	82,896.10

Appendix 3: Money Supply in Malaysia (Currency + Demand Deposits)

Year	Currency	Dd.Deposit	Money SS
1986	6,580.50	7,376.50	13,957
1987	7,329.80	8,355.10	15,684.90
1988	8,338.70	9,391.00	17,729.70
1989	9,125.80	11,979.10	21,104.90
1990	10,000.50	13,724.80	23,725.30
1991	10,973.10	15,819.20	26,792.30
1992	12,028.10	18,108.60	30,136.70
1993	13,408.30	28,104.70	41,513.00
1994	15,765.40	31,450.30	47,215.70
1995	17,294.70	35,998.60	53,293.30
1996	18,821.30	43,577.50	62,398.80
1997	21,169.00	42,121.10	63,290.10

Appendix 4: Consumer Price Index in Malaysia (1990=100)

Year	Weight
1986	125.8
1987	126.8
1988	130.0
1989	133.7
1990	100
1991	88.9
1992	93.1
1993	96.4
1994	137.8
1995	103.4
1996	107.0
1997	109.9

Appendix 5: Industrial Production Index In Malaysia (1990=100)

Year	Weight
1986	125.80
1987	118.80
1988	135.00
1989	148.80
1990	100.00
1991	83.90
1992	91.20
1993	75.50
1994	112.40
1995	127.10
1996	141.10
1997	156.10

Appendix 6: Interest Rates In Malaysia (%)

Year	%
1986	4.13
1987	2.68
1988	3.49
1989	5.29
1990	6.12
1991	7.27
1992	7.66
1993	6.48
1994	3.68
1995	5.50
1996	6.41
1997	6.41

Appendix 7: Exchange Rate defined as RM/Yen

Year	RM/Yen
1986	1.63
1987	2.03
1988	2.15
1989	1.88
1990	2
1991	2.17
1992	2.09
1993	2.41
1994	2.56
1995	2.47
1996	2.18
1997	2.99

Appendix 8: Money Supply in Japan (Currency + Demand Deposits)

Year	Yen
1986	98,214.00
1987	102,973.00
1988	111,844.00
1989	114,474.00
1990	119,628.00
1991	131,044.00
1992	136,138.00
1993	145,615.00
1994	151,665.00
1995	171,544.00
1996	188,147.00
1997	204,283.00

Appendix 9: Japan's Industrial Production Index (1990=100)

Year	Weight
1986	99.80
1987	82.80
1988	90.80
1989	96.10
1990	100.00
1991	101.70
1992	95.50
1993	91.20
1994	92.00
1995	95.00
1996	102.30
1997	106.00

Appendix 10: Consumer Price Index in Japan (1990=100)

Year	Weight
1986	94.10
1987	94.20
1988	94.90
1989	97.00
1990	100.00
1991	103.30
1992	105.00
1993	106.40
1994	107.10
1995	107.00
1996	100.10
1997	101.90

APPENDIX B

Output 1: Regression Analysis of the Balance of Payments

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	X5, X3, X2, X1, X4[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.969[a]	.940	.890	7.7071	2.648

a. Predictors: (Constant), X5, X3, X2, X1, X4

b. Dependent Variable: Y

ANOVA[b]

Model		Sum of Squares	df	Mean Square
1	Regression	5565.808	5	1113.162
	Residual	356.394	6	59.399
	Total	5922.202	11	

ANOVA[b]

Model		F	Sig.
1	Regression	18.740	.001[a]
	Residual		
	Total		

a. Predictors: (Constant), X5, X3, X2, X1, X4

b. Dependent Variable: Y

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	115.716	38.334		3.019	.023
X1	.105	.208	.075	.504	.632
X2	.281	.118	.314	2.371	.055
X3	-1.539	.230	-1.133	-6.682	.001
X4	-1.072	.180	-1.068	-5.950	.001
X5	-.127	2.064	-.009	-.061	.953

a. Dependent Variable: Y

Residuals Statistics[a]

	Minimum	Maximum	Mean
Predicted Value	14.0611	72.8167	43.1788
Residual	-8.2287	10.0667	-8.29E-15
Std. Predicted Value	-1.294	1.318	.000
Std. Residual	-1.068	1.306	.000

Residuals Statistics[a]

	Std. Deviation	N
Predicted Value	22.4941	12
Residual	5.6920	12
Std. Predicted Value	1.000	12
Std. Residual	.739	12

a. Dependent Variable: Y

Output 2(a):Regression Analysis of the Exchange Rates Under a Perfect Flexible System

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	YF, YD, MDMF, CHG.MT, CHG.MD[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: E

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.806[a]	.650	.359	.2843	2.266

a. Predictors: (Constant), YF, YD, MDMF, CHG.MT, CHG.MD

b. Dependent Variable: E

ANOVA[b]

Model		Sum of Squares	df	Mean Square
1	Regression	.901	5	.180
	Residual	.485	6	8.080E-02
	Total	1.386	11	

ANOVA[b]

Model		F	Sig.
1	Regression	2.230	.179[a]
	Residual		
	Total		

a. Predictors: (Constant), YF, YD, MDMF, CHG.MT, CHG.MD

b. Dependent Variable: E

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	2.348	1.639	
MDMF	4.479	1.466	.895
CHG.MD	-.106	.120	-.268
CHG.MT	-4.864E-03	.029	-.045
YD	4.114E-03	.036	.030
YF	-.109	.167	-.196

Coefficients[a]

	t	Sig.
(Constant)	1.433	.202
MDMF	3.055	.022
CHG.MD	-.883	.411
CHG.MT	-.168	.872
YD	.115	.912
YF	-.655	.537

a. Dependent Variable: E

Residuals Statistics[a]

	Minimum	Maximum	Mean
Predicted Value	1.8664	2.6187	2.2130
Residual	-.3668	.4046	-3.70E-17
Std. Predicted Value	-1.211	1.418	.000
Std. Residual	-1.290	1.423	.000

Residuals Statistics[a]

	Std. Deviation	N
Predicted Value	.2862	12
Residual	.2099	12
Std. Predicted Value	1.000	12
Std. Residual	.739	12

a. Dependent Variable: E

Output 2(b):Regression Analysis of Exchange Rates Under A Perfect Flexible System

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	YF, YD, MDMF, CHG.MT, CHG.MD[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: E

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.887[a]	.786	.608	.2223	2.847

a. Predictors: (Constant), YF, YD, MDMF, CHG.MT, CHG.MD

b. Dependent Variable: E

ANOVA[b]

Model		Sum of Squares	df	Mean Square
1	Regression	1.089	5	.218
	Residual	.297	6	4.942E-02
	Total	1.386	11	

ANOVA[b]

Model		F	Sig.
1	Regression	4.407	.050[a]
	Residual		
	Total		

a. Predictors: (Constant), YF, YD, MDMF, CHG.MT, CHG.MD

b. Dependent Variable: E

Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	3.847	1.505	
MDMF	4.601	1.176	.919
CHG.MD	-8.298E-02	.082	-.275
CHG.MT	-4.204E-02	.023	-.448
YD	-2.797E-02	.033	-.205
YF	-.209	.135	-.375

Coefficients[a]

	t	Sig.
(Constant)	2.555	.043
MDMF	3.913	.008
CHG.MD	-1.014	.350
CHG.MT	-1.846	.114
YD	-.846	.430
YF	-1.554	.171

a. Dependent Variable: E

Residuals Statistics[a]

	Minimum	Maximum	Mean
Predicted Value	1.7533	2.7554	2.2130
Residual	-.2844	.2346	-2.04E-16
Std. Predicted Value	-1.461	1.724	.000
Std. Residual	-1.279	1.055	.000

Residuals Statistics[a]

	Std. Deviation	N
Predicted Value	.3146	12
Residual	.1642	12
Std. Predicted Value	1.000	12
Std. Residual	.739	12

a. Dependent Variable: E

Output 3: The Exchange Rate Equation and Managed Floating System

Two Stage Least Squares Method of Regression

Dependent variable.. E

Listwise Deletion of Missing Data

Multiple R	.90515
R Square	.81929
Adjusted R Square	.33739
Standard Error	.28890

Analysis of Variance:

	DF	Sum of Squares	Mean Square
Regression	8	1.1351935	.14189919
Residuals	3	.2503893	.08346311

F = 1.70014 Signif F = .3603

------------------ Variables in the Equation ------------------

Variable	B	SE B	Beta	T	Sig T
MD	-2.91705939E-05	5.5670E-05	-1.487274	-.524	.6365
MF	1.57244449E-05	2.4537E-05	1.504422	.641	.5672
YD	-.004008	.006465	-.293111	-.620	.5792
YF	-.019749	.023475	-.353556	-.841	.4620
R	2.48388514E-05	4.2215E-05	1.623891	.588	.5976
D	2.48458620E-05	3.4761E-05	1.196077	.715	.5264
A	.919124	1.873103	.598751	.491	.6573
MT	-.004979	.032542	-.045786	-.153	.8881
(Constant)	1.504860	4.372439		.344	.7534

Correlation Matrix of Parameter Estimates

	MD	MF	YD	YF	
MD	1.0000000	-.4843381	-.3909499	.1633752	-.53
MF	-.4843381	1.0000000	.3188425	-.0974429	-.40
YD	-.3909499	.3188425	1.0000000	-.0440380	-.14
YF	.1633752	-.0974429	-.0440380	1.0000000	.03
R	-.5354792	-.4026749	-.1403724	.0350669	1.00
D	-.1653030	-.5480643	-.5196993	.0976284	.87
A	.3022649	-.1140305	-.6458520	.4833096	.14
MT	-.2917370	-.0981122	.0890081	-.2846734	.28

	D	A	MT
MD	-.1653030	.3022649	-.2917370
MF	-.5480643	-.1140305	-.0981122

YD	-.5196993	-.6458520	.0890081
YF	.0976284	.4833096	-.2846734
R	.8728490	.1479075	.2854046
D	1.0000000	.5099856	.1299213
A	.5099856	1.0000000	-.2706230
MT	.1299213	-.2706230	1.0000000