The Monetary Transmission Mechanism in the New Economy: Evidence from Turkey (1997-2006)

Atilla Cifter and Alper Ozun

Abstract

This study aimed to test the money base, money supply, credit capacity, industrial production index, interest rates, inflation and real exchange rate data of Turkey during the years 1997 – 2006. These were tested through the monetary transmission mechanism and passive money hypothesis, using the vector error correction model-based causality test. Empirical findings showed that the passive money supply hypothesis of the new Keynesian economy is supported in part by accommodationalist views and differs from those of structuralist and liquidity preference theories. However, the monetary transmission mechanism has established that long-term money supply only affects general price levels, while production is influenced by interest rates in the new period of the Turkish economy. Empirical findings show that in this new period, interest transmission mechanisms are at the forefront.

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1. Introduction

Though advocating similar theories in the use of monetary politics, the New Keynesian and the Monetarist Schools differed in their opinions on whether money is active or passive. While the Monetarist School defends the fact that monetary tools, i.e., money supply, is under the control of the Central Bank, the New Keynesian School argues that, as credit control is not tied to the Central Bank, it does not completely control money supply. Defenders of the New Keynesian School put forward the following evidence in support of these claims (Seyrek and others, 2004): (1) The statistical stochastic aspect in money data and the great errors that result from it determine that money is passive; (2) According to general econometric tests, money stock is passive; (3) The passivity of monetary stock derives from the macroeconomic character of the banking system; (4) The passivity of money stock can be explained with many macroeconomic variables. In addition to credit-money supply, whether money is active or passive is also based on the correlation between money, interest, inflation and productivity. During this process in the new economic period, exchange rates also have their place. The New Keynesian view describing the correlation between money, credit, interest, inflation and exchange rates can be tested through long-term analysis. The econometric methods in long-term analysis are a causality test based on the vector error correction model for cointegrated data or the Granger causality tests for non-cointegrated data. During this study, together with the vector error correction method and the Granger causality test, the monetary transmission mechanism and monetary passivity hypothesis were tested. The second section surveys pertinent literature, the third section outlines the methodology, the fourth section concerns empirical findings, and the fifth section presents the results.

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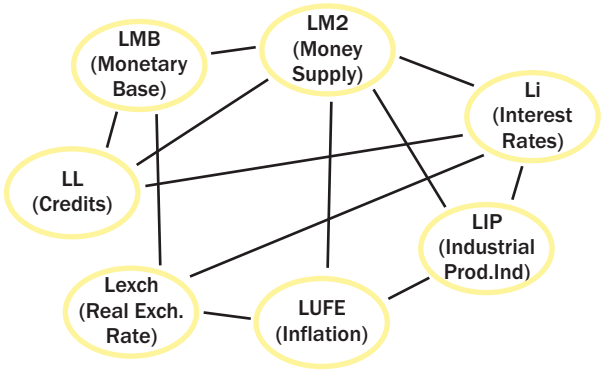
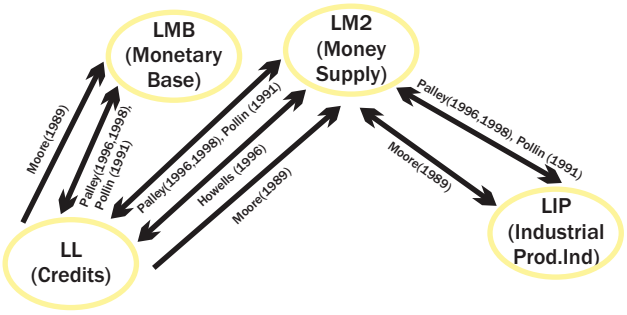
2. Literature Review and Theory

There are three main types of monetary transmission mechanism models found in the literature: the interest rate channel, the asset channel and the credit channel (Seyrek and others, 2004). According to the monetary transmission mechanism, money supply is active and, in the short term, monetary tools and increased money supply reduce interest rates. Hence the liquidity effect is only short-term. The drop in interest rates increases credit value. This situation causes a short-term increase in income. In the long term, the increased price in money supply increases its general level and the real value of money stock declines. According to the Monetarist approach, money supply is active during these processes and is controlled by the Central Bank. According to the Keynesian approach, monetary politics tools affect the monetary base first, then the money supply. Following this, the changes in money supply affect interest rates, which in turn affect investments and then revenues. New Keynesian economics argues that money supply is passive*. Rather than the Central Banks' exported money supply, credit money is determined according to the banks' credit preferences. When economic units use credit, deposits created by credit multiply. The passive money hypothesis presumes that causality moves away from credits towards deposits. Credit demands are set by the preferences of the credit applicants and creditor. For this reason, Central Banks do not have control over credits, and therefore, money stocks (Shanmugan and others, 2003). There are three approaches with regard to passive money stock; accommodationalist, structuralist and liquidity preference. According to the accommodationalists (Moree, 1989) credits are the source of money supply and money base, and that money supply and money revenue (GDP) are cointegrated and interdependent. According to the structuralists (Palley, 1996, 1998; Pollin 1991) credits are the source of money supply, money base and money multipliers and that money supply and money revenue (GDP) are cointegrated and interdependent. Finally, according to liquidity preference theorists (Howells, 1995), credits and money supply are cointegrated and interdependent. The monetary transmission mechanism is shown in Diagram No.1 and the New Keynesian Economical Passive Money Theory is shown in Diagram No. 2. In the new economic period, real exchange rates will also be distinct from general price levels.

For the New Keynesian economy, the first empirical study on passive money was carried out by Pollin (1991). Pollin (1991), obtained data supporting structuralist views for the USA from 1953 – 1988. Vera (2001), obtained findings to support accommodationalist and structuralist views for Spain from 1987 – 1998 by applying Granger causality tests using Money Multipliers (according to M1, M2 andM3) and credit data. Nell (2000-01) examined the relationships between money supply, money circulation speed and credit using the vector error correction model for South Africa from 1966 – 1997 and found that all new Keynesian approaches (structuralist, accommodationalist and liquid preference theories) were empirically valid.



Graph 1.
Monetary Transmission Mechanism



Graph 2.
Endogenity of Money in New Keynesian Economy

Shanmugan, Nair and Li (2003), examined the relationship between money base, money supply, credit and the industrial production index using the vector error correction model and Granger causality test in Malaysia from 1985 – 2000 and reached conclusions that support the findings of accommodationalists and liquid preference theorists. Lavoie (2005) tested the passivity of money according to theoretical and empirical literature for Canada and the USA, and reached conclusions that support accommodationalist views. Ahmad and Ahmet (2006) carried out short and long-term tests on the passivity of money supply for Pakistan from 1980 – 2003 using the Granger causality test. In the short term, they found that empirical findings supported structuralist and liquidity preference theory, but in the long term found that the money base

* The critical evaluation of New Keynesian monetary politics. See Cottrell (1994).

set the credit capacity and showed that the Pakistan Central Bank became active in setting money supply.Gunduz (2001) and Seyrek, Duman and Sarikaya (2004) carried out studies on Turkish data. Seyrek and others (2004) found that data for Turkey from 1968 – 1996 supported the Keynesian transmission mechanism multi-monetarist hypothesis driven by credit. Gunduz (2001) analysed the monthly macroeconomic data dependent VAR (Vector Autoregressive) model and the bank lending channel roles in Turkey. The findings for the period 1986 – 1998 show that the bank lending channel presented limited support for the transmission mechanism.

3. Data and Methodology

3.a.Data

Monthly data was used between January 1997 – June 2006 for the monetary transmission mechanism and passive money supply test. Due to the fact that the Gross Domestic Product (GDP) was published every three months, the Production Index (PI) was used instead. Because the treasury bond interest rates indicator was not available on a monthly basis before 2002, the 12 month deposit interest rate was used instead. During analyses made for Turkey, IPI was used instead of GNP for national growth and production indicators and deposit interest rates were used instead of treasury bond interest rates. Money Base, Money Supply, Credit Capacity, Industrial Production Index, Interest Rates and Real Exchange Rates were obtained from www.tcmb.gov.tr and inflation rates from www.tuik.gov.tr. Money Base reserves and total Free Market Procedures (FMP) debts have been calculated by the authors. Table 1 shows the unit root tests for the chosen indicators. All series were proven (90%-100%) to contain unit roots. In order to separate the series from unit roots, logarithmic differences have been taken and it has been established that all series are stationary in terms of entry level logarithmic differences (Table 2).

	L[a]	Augmented Dickey-Fuller Test*	Skewness	Kurtosis	Jarque-Bera statistic
R	4	1.35825 {<1.00}	0.625191	0.625191	8.95215
E	3	1.70072 {<1.00}	0.855461	2.56205	14.8155
MB	1	1.59344 {<1.00}	0.884356	2.84869	14.9684
M1	3	1.80713 {<1.00}	0.863718	2.61482	14.8789
M2	3	1.08533 {<1.00}	0.844484	2.68744	14.014
M2Y	3	1.02843 {<1.00}	0.395414	1.99569	7.76173
M3	4	0.86340 {<1.00}	0.847275	2.67047	14.1555
M3Y	2	1.31943 {<1.00}	0.422493	2.02084	7.94562
L	3	1.58811 {<1.00}	1.29503	3.86689	35.4344
Exc	1	-2.6588 {< 1.00}	0.398535	2.33168	5.13939
IP	1	-1.5450 {<0.90}	0.600842	2.68881	7.31921
I	3	-1.3675 {<0.90}	0.178638	1.864	6.73618
UFE	1	0.32292 {<0.99}	0.101448	1.40765	12.2396

R: Reserve Money, E: Emission, MB: Monetary Base, L: Credit Capacity, Exc: Real exchange rate_MPI,
IP: Industrial Production Index, i: Interest rate_12 Month, MPI: Manufacturer Price Index:
* Lag lengths have been identified as 12 maximum according to Schwartz Knowledge Criteria. Values inside brackets are the rejected unit root statistics. a Lag length.
Definitions:
Reserve Money = Emission + Bank Mandatory Payments + Bank Unbound Opportunities + Fund Calculations + Non Bank Related Deposits
Monetary Base = Reserve Money + Open Market Activity Debts
MI = Money in Circulation + Current Deposits at Depositary Banks + Central Bank Deposits
M2 = MI + Fixed Term Deposits at Depositary Banks
M2Y = M2 + Foreign Currency Deposit Accounts (TL)

Table 1.
Level Series, Unit Root Tests and Distribution Specifications

	LMB	LM 2	LL	LIP	LI	LEXC	LUFE
Mean	0.0347	0.0364	0.0336	0.0045	-0.0112	0.0022	0.0275
Mode	0.0377	0.0315	0.0358	0.0045	-0.0050	0.0053	0.0259
Max	0.3384	0.1497	0.1531	0.2238	0.7186	0.1363	0.1341
Min	-0.2467	-0.0532	-0.0772	-0.2209	-0.5579	-0.1577	-0.0228
Std. Deviation	0.1026	0.0347	0.0336	0.0810	0.1275	0.0394	0.0236
Multiplier	-0.1429	0.5159	-0.3160	0.1102	1.1458	-0.6521	0.8737
Oblateness	4.0410	3.9321	4.9116	3.7338	16.609	6.7538	5.7567
J-B	5.4877	9.1042	19.088	2.7642	896.78	74.355	50.159
Probability	0.0643	0.0105	0.0000	0.2510	0.0000	0.0000	0.0000
Observations	113	113	113	113	113	113	113

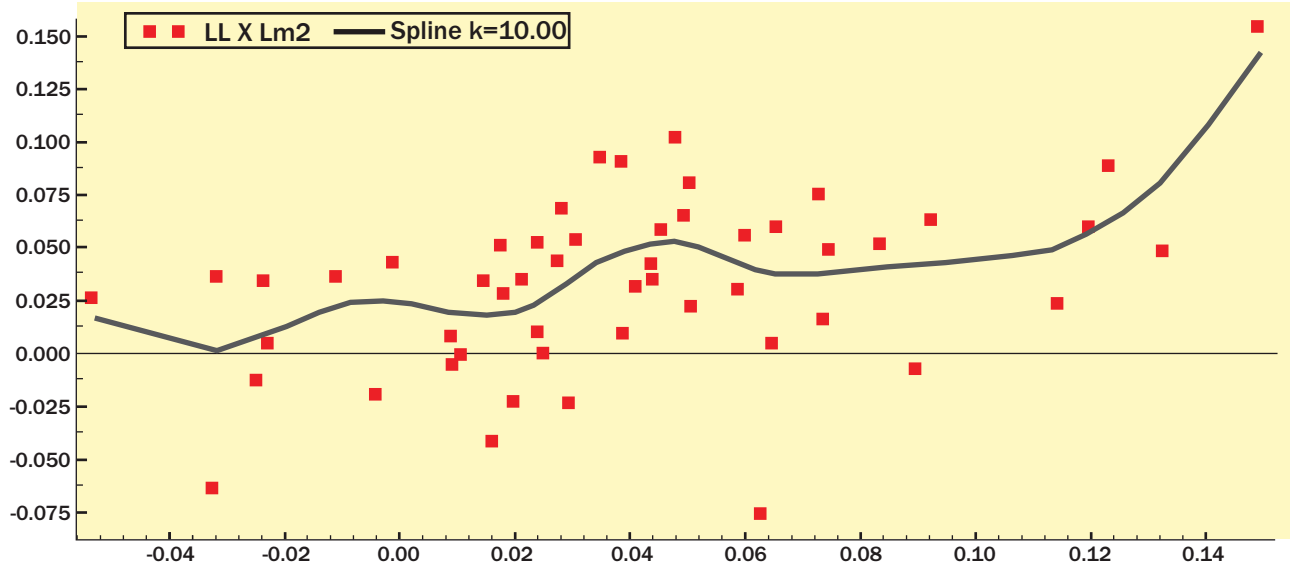
Table 2
Logarithmic Difference Series Fundamental Statistical Specifications

3.b.Methodology

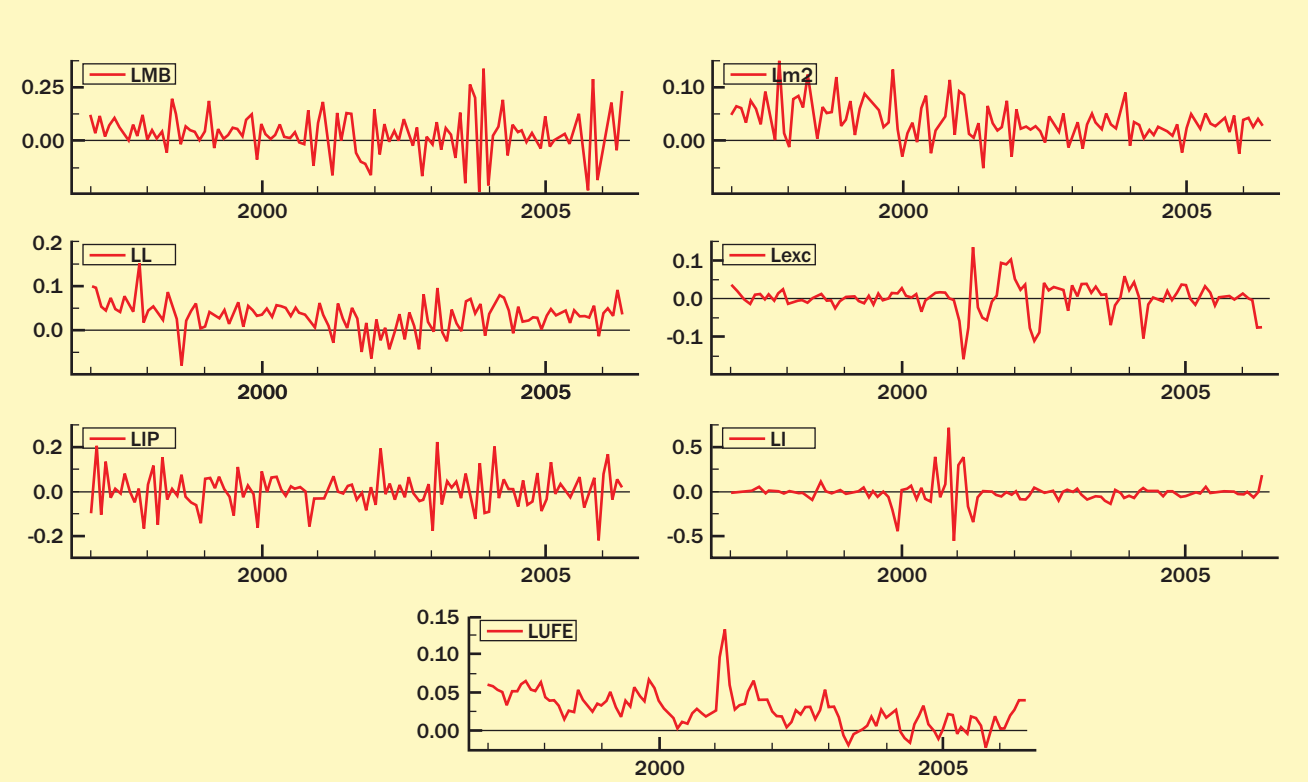
The vector error correction model-based causality test has been selected for the Passive Money Hypothesis test and the transmission mechanism, which in turn is derived from Money Base, Money Supply, Credit Capacity, Industrial Production Index, Interest Rates, Inflation and Real Exchange Rates. Before the vector error correction model is applied, it must be researched as to whether or not the series contain unit roots. In the literature, unit root-stability identification is generally made by using ADF (Augmented Dickey Fuller Test) and P-P (Philips-Perron) tests. The ADF test was developed by Dickey and Fuller (1981) and is used together with Equation No. 1:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \alpha_i \sum_{i=1}^{m} \Delta Y_{t-i} + \varepsilon_t \qquad (1)$$

ΔY_t is the first difference in testing the stability of the variable, t the trend variable and is the lag difference term. The 'i' lag difference term is added sufficiently for the error term to be a non-correlation series using knowledge criteria.



Graph 3
M2 and Credits Scatter Diagram (Log differenced series)



Graph 4
Series

Another main unit root test used in the literature is the "Phillips-Peron" (P-P) test developed by Phillips-Perron (1988). The P-P test can be applied using Equation No. 2

$$\Delta Y_t = a + cY_{t-1} + d_1\Delta Y_{t-1} + d_2\Delta Y_{t-2} + \ldots\ldots\ldots + d_{p-1}\Delta Y_{t-p-1} + \varepsilon_t \quad \textbf{(2)}$$

ΔY_t is the primary difference of Y series, $a,c,d_1,d_2,\ldots\ldots d_{p-1}$ the parameters, t is time, p the lag number and ε_t shows error term. H_0:$c=0$ shows that the series is not stationary, H_1:$c=/0$ shows that the series is stationary.

Before examining the relationship of data that that is not stationary but at the same level, the series need to be examined to determine whether or not they are integrated. Johansen(1988), Johansen and Joselius (1990) developed the Johansen cointegration test, which is used widely in the literature.

In the following model, a non-trend setting and non-restrictive cointegration test containing a stationary term has been preferred (3)

$$H_1^*(r) : \prod y_{t-1} + Bx_t = \alpha(\beta' y_{t-1}) + \rho_0 \quad \textbf{(3)}$$

In the Johansen method the cointegration among non-stationary series are identified using trace and maximum eigenvalue statistics (4-5)

$$\lambda_{trace(r)} = -T\sum_{i=r+1}^{k} In(1-\bar{\lambda}_i), r = 0,1,2,3,\ldots,n-1 \quad \textbf{(4)}$$

$$\lambda_{\max(r,r+1)} = -TIn(1-\bar{\lambda}_{r+1}) \quad \textbf{(5)}$$

In the prepared model, if cointegration can be identified between dependent and independent variables, then it can be understood that there is at least one aspect of causality (Granger, 1969). If there is no cointegration between variables, the standard causality test (Granger, 1969) can be applied; and if there is cointegration between variables, then causality can be examined using the vector error correction model (VECM) (Granger, 1988). Engle and Granger (1987) developed the VECM, which is shown in the equation below (6).

$$\Delta y_t = \alpha_0 + \sum_{i=1}^{n}\alpha_{1i}\Delta y_{t-i} + \sum_{i=1}^{n}\alpha_{2i}\Delta\chi_{t-i} + \sum_{i=1}^{n}\alpha_3 EC_{t-n} + \varepsilon_i \quad \textbf{(6)}$$

The short term causality relationship in the VECM can be tested using the significance of the parameters and the Wald test. The long-term causality relationship can be tested using the ECt-n parameter significance (Shanmugan and others, 2003).

4. Empirical Findings

Table No.3 shows the ADF and P-P unit root test results of the logarithmic difference series. All series are stationary to a 99% level of significance,

Variables	L[a]	t-statistic	P-P Test t-statistic
LMB	0	-16.0154 {<0.01}	-16.5017 {<0.01}
LM 2	2	-4.11103 {<0.01}	-10.6736 {<0.01}
LL	2	-4.32343 {<0.01}	-9.62207 {<0.01}
Lexc	1	-6.99893 {<0.01}	-6.85118 {<0.01}
LIP	4	-8.85429 {<0.01}	-16.5786 {<0.01}
Li	2	-5.17817 {<0.01}	-12.6571 {<0.01}
LUFE	0	-4.14952 {<0.01}	-4.27729 {<0.01}

MB: Monetary Base, L: Credit Capacity, Exc: Real Exchange Rate_MPI, IP: Industrial Production Index, i: Interest rate_12 Month, MPI: Manufacturer Price Index
* D Lags have been identified as 12 maximum according to Schwartz Knowledge Criteria. Values inside brackets are the rejected unit root statistics. a Lag length.

Table 3
ADF and P-P Unit Root Tests (Logarithmic difference has been taken)*

The unrestrictive Johansen cointegration tests demonstrating the passive money hypothesis and the monetary transmission mechanism test can be found in Table Nos. 4 and 5. All series are cointegrated at a secure level of 95-99%. Due to the fact that the series are all cointegrated, the vector error correction model-based causality test has been applied to all hypotheses.

	L[a]	H_o	λ_{Trace} Stat	λ_{Max} Stat
LMB& LL	4	r=0	45.0642 {<0.01}*	34.9867 {<0.01}*
		r<=1	10.0775 {<0.05}	10.0775 {<0.05}
LM2&LL	4	r=0	25.0972 {<0.01}*	14.9121 {<0.1}
		r<=1	10.1851 {<0.05}	10.1851 {<0.05}
LM2& LIP	4	r=0	55.9499 {<0.01}*	43.3068 {<0.01}*
		r<=1	12.6431 {<0.025}	12.6431 {<0.025}
LMS&LIP	4	r=0	57.3502 {<0.01}*	49.0907 {<0.01}*
		r<=1	8.25947 {<0.1}	8.25947 {<0.1}
LMB&LL&LIP	4	r=0	93.6593 {<0.01}*	53.529 {<0.01}*
		r<=1	40.1302 {<0.01}*	30.7801 {<0.01}*
		r<=2	9.35016 {<0.05}	9.35016 {<0.05}
LM2&LL&LIP	4	r=0	63.5928 {<0.01}*	40.9484 {<0.01}*
		r<=1	22.6443 {<0.025}	13.2242 {<0.2}
		r<=2	9.42012 {<0.05}	9.42012 {<0.05}

Values inside brackets are significance values. Lags have been identified as 12 maximum according to Schwartz Knowledge Criteria.
* Hypothesis of H0 is rejected at %1 significance. a Lag length.

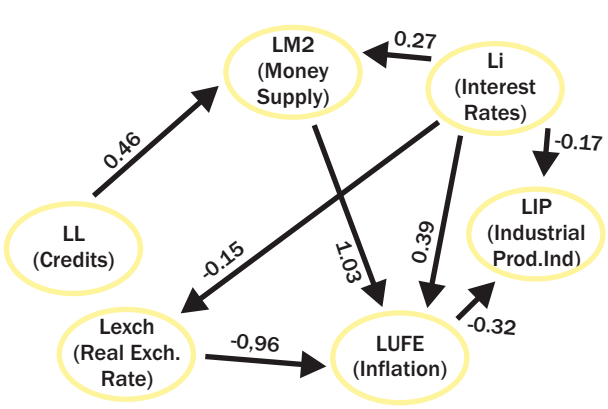
Table 4
Unrestricted Johansen Cointegration Test (Endogeneity of Money Hypothesis)

	L[a]	H_o	λ_{Trace} Stat	λ_{Max} Stat
LM2& LI	4	r=0	28.5057 {<0.01}*	16.3041 {<0.05}
		r<=1	12.2016 {<0.025}	12.2016 {<0.025}
LM2&LIP	4	r=0	55.9499 {<0.01}*	43.3068 {<0.01}*
		r<=1	12.6431 {<0.025}	12.6431 {<0.025}
LM2&LUFE	4	r=0	26.8229 {<0.01}*	21.0262 {<0.01}*
		r<=1	5.79668 {<0.5}	5.79668 {<0.5}
LM2&LExc	4	r=0	45.6645 {<0.01}*	31.1411 {<0.01}*
		r<=1	14.5233 {<0.01}	14.5233 {<0.01}
ML2&LL	4	r=0	25.0972 {<0.01}*	14.9121 {<0.1}
		r<=1	10.1851 {<0.05}	10.1851 {<0.05}
LI&LIP	4	r=0	75.0987 {<0.01}*	57.0977 {<0.01}*
		r<=1	18.001 {<0.01}	18.001 {<0.01}
LIP&LUFE	4	r=0	63.2395 {<0.01}*	56.6974 {<0.01}*
		r<=1	6.54211 {<0.2}	6.54211 {<0.2}
LUFE&LExc	4	r=0	38.3893 {<0.01}*	32.3643 {<0.01}*
		r<=1	6.02494 {<0.2}	6.02494 {<0.2}
LExc&LL	4	r=0	40.4699 {<0.01}*	30.6964 {<0.01}*
		r<=1	9.77352 {<0.05}	9.77352 {<0.05}

Values inside brackets are significance values. Lags have been identified as 12 maximum according to Schwartz Knowledge Criteria.
* Hypothesis of H0 is rejected at %1 significance. a Lag length.

Table 5.
Unrestricted Johansen Cointegration Test (Monetary Transmission Mechanism)

The causality between credit-monetary base, credit-monetary base-IP, credit-money supply and credit-money supply-IP for the passive money test was examined using the vector error correction model (Table No.6). The results show that there is causality towards credit=>Monetary Base and Credit=>Money Supply. This situation supports in part the views of the accommodationalists in the new Keynesian approach (this is supported completely because there was no Money Supply=>IP causality found). Table No.8 shows the monetary transmission



Graph 5.
Monetary Transmission Mechanism (Turkey)

	Short-term Effect	Long-term Effects	VECM	
	Wald test:	EC_{t-1}	Short-term	Long-term
DEPANDENT Var:LMB				
LL	8.28649 [0.0040] *	0.853448 [0.005]*	LL=>LMB	LL=>LMB
LL LIP	8.77713 [0.0124] **	0.861413 [0.006]* 0.192875 [0.457]	LL=>LMB LL≠>LMB	LL,LIP =>LMB
DEPANDENT Var:LM2				
LL	4.25987 [0.0390] *	0.462158 [0.041]*	LL= > Lm2	LL= > Lm2
LL LIP	3.93154 [0.1400]	0.419147 [0.097]** 0.244108 [0.318]	LL=>LM2 LL≠>LM2	LL,LIP ≠>LMB
DEPANDENT Var:LL				
LMB	0.0020319 [0.9640]	0.0099965 [0.964]	LMB≠>LL	LMB≠>LL
LM 2	2.42909 [0.1191]	0.432127 [0.122]	LM2≠>LL	LM2≠>LL
LMB LIP	1.8055 [0.4055]	0.0057303 [0.981] 0.391690 [0.211]	LMB≠>LL LIP≠>LL	LMB,LIP ≠>LL
LM 2 LIP	3.14705 [0.2073]	0.511034 [0.081]** 0.120232 [0.602]	LM2=>LL LIP≠>LL	LM2,LIP ≠>LL
DEPANDENT Var:LIP				
Lm2	2.31045 [0.1285]	-0.366596 [0.131]	LM2≠>LIP	LM2≠>LIP

* %1, ** %5 significant level of acceptance respectively.
Values inside brackets are t-stats. Lag length is determined as 4.

Table 6 .
Causality Tests Based on Vector Error Correction Model Endogeneity of Money

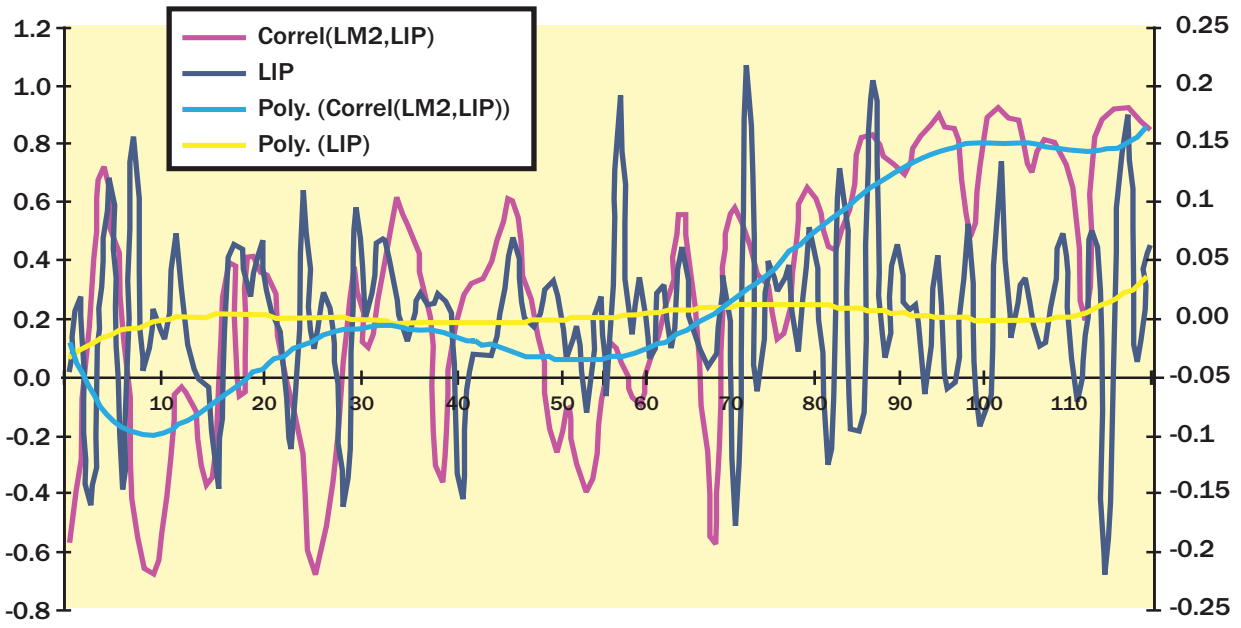
mechanism vector error correction model test. According to Table No.8, long-term causalities can be found in Diagram No.5. Eight causality directions were identified: Credits=>Money Supply, Interest Rates=>Money Supply, Interest Rates=>Real Exchange Rates (negative), Interest Rates=>Inflation, Interest Rates=>IP (negative), Money Supply=>Inflation, Real Exchange Rates=>Inflation, Inflation=>IP (negative). These results show that money supply is the cause of inflation in the long term (influence factor 1.03), that credits affect money supply (influ-

	Short-term Effect	Long-term Effects	VECM	
	Wald test:	EC_{t-1}	Short-term	Long-term
DEPANDENT Var:LM2				
Lİ	7.31782 [0.0068] *	0.276316 [0.008]*	Lİ=> Lm2	Lİ=> Lm2
DEPANDENT Var:LI				
LM 2	0.0034883 [0.9529]	0.0426212 [0.953]	LM2≠ > LI	LM2≠ > LI
DEPANDENT Var:LIP				
LM 2	2.31045 [0.1285]	-0.366596 [0.131]	LM2≠ > LIP	LM2≠ > LIP
DEPANDENT Var:LUFE				
LM 2	17.9812 [0.0000] **	1.03013 [0.000]*	LM2=> LUFE	LM2=> LUFE
DEPANDENT Var:LM2				
Lexc	0.0030329 [0.9561]	-0.0135914 [0.956]	LExc≠> LM 2	LExc≠> Lm2
DEPANDENT Var:LExc				
LM 2	1.12743 [0.2883]	-0.248525 [0.291]	LM2≠> Lexc	LM2≠> Lexc
DEPANDENT Var:LM2				
LL	4.25987 [0.0390] **	0.462158 [0.041]*	LL=>LM2	LL=>LM2
DEPANDENT Var:LL				
Lm2	2.42909 [0.1191]	0.432127 [0.122]	LM2≠>LL	LM2≠>LL
DEPANDENT Var:LIP				
LI	4.76484 [0.0290] **	-0.174685 [0.031]*	Lİ=> LIP	Lİ=> LIP
DEPANDENT Var:LIP				
LUFE	0.606543 [0.4361]	-0.167911 [0.438]	LUFE≠> LIP	LUFE≠> LIP
DEPANDENT Var:LUFE				
Lexc	5.00403 [0.0253] *	-0.967069 [0.027]*	Lexc=> LUFE	Lexc=> LUFE
DEPANDENT Var:LL				
Lexc	0.929813 [0.3349]	-0.281147 [0.337]	LExc≠> LL	LExc≠> LL
DEPANDENT Var:LUFEL				
LI	4.33088 [0.0374] **	0.390938 [0.040]*	Lİ=> LUFE	Lİ=> LUFE

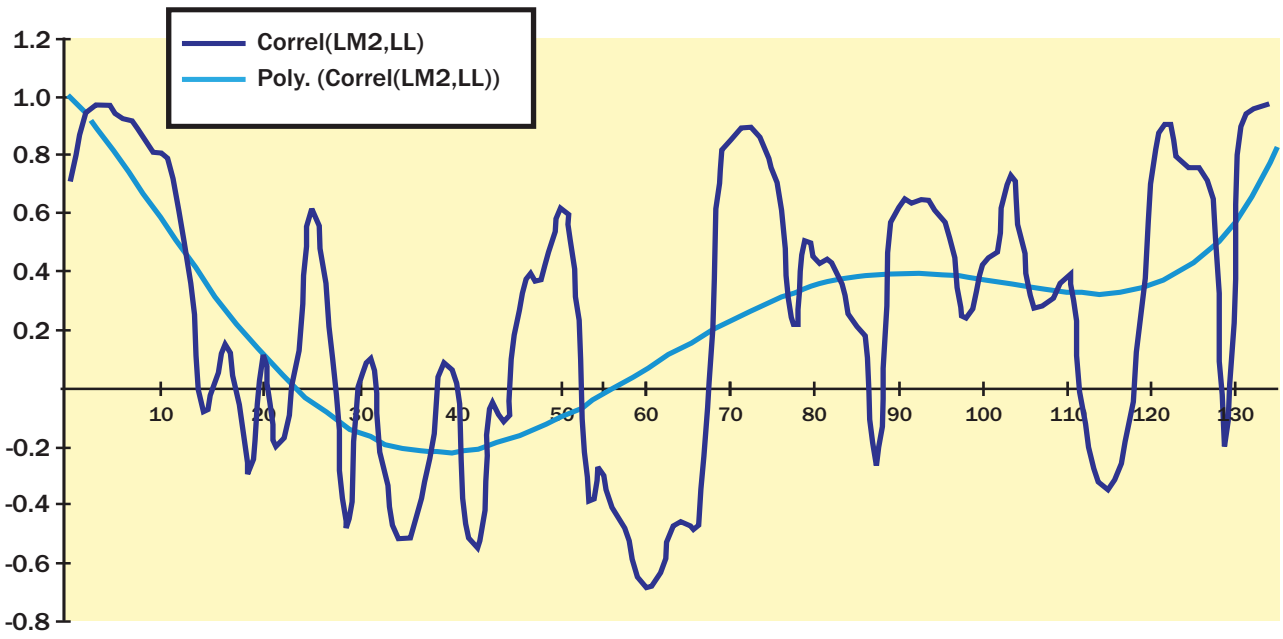
* %1, ** %5 significance level of acceptance respectively.
Values inside brackets are t-stats. Lag length is determined as 4.

Table 7.
Causality Tests Based on Vector Error Correction Model-Monetary Transmission Mechanism

ence factor 0.46), that money supply does not affect inflation rates but that interest rates affect money supply (influence factor 0.27) and that real exchange rates affect inflation in a negative and dominant way (influence factor -0.96). Also, it has been found that IP is affected by interest rates but not affected by money supply. This situation conforms neither to the monetary school nor the new Keynesian school views. The Central Bank's choice of interest rates as the main indicator and means of identifying net internal assets after the 2001 crisis is one reason for this situation. Another reason is that in the new economic period factors influenced the real economic activity through credits (consumer credits, business credits and credit cards) and interest rates. Diagram No.6 shows the difference in correlation between money supply and IP and Diagram No.7 shows the difference in correlation between money supply and credits. Because correlation is also under the influence of cyclic effects, causality was tested with the vector error correction model.



Graph 6.
Dynamic Correlation (LM2, LIP, 4 Lags)



Graph 7.
Dynamic Correlation (LM2, LL, 4 Lags)

5. Concluding Remarks

This study was conducted to test the money base, money supply, credit capacity, industrial production index, interest rates, inflation and real exchange rate data of Turkey during the years 1997 – 2006. These were tested through the monetary transmission mechanism and passive money hypothesis using the vector error correction model-based causality test. Empirical findings show that the passive money supply hypothesis of the new Keynesian economy is supported in part by accommodationalist views, and do not conform to the structuralist and liquidity preference theories. However, according to the monetary transmission mechanism, it has been established that long-term money supply only affects general price levels, and that production is influenced by interest rates in the new economic period. Empirical findings show that in the new economy, period interest transmission mechanisms are brought to the forefront. During the monetary transmission mechanism test, it was decided to leave in theforefront. During the monetary transmission mechanism test, it was decided to leave in the Markov regime variant, which takes into account cyclic effects, a vector error correction model proposed for future studies

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