

MONETARY POLICY AND THE TRANSMISSION MECHANISM IN THAILAND

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OUTLINE

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 - CHANNELS OF MONETARY TRANSMISSION
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INTRODUCTION

- **THE MAIN POINT OF CONDUCTING THIS RESEARCH**
 - To study how monetary policy really works
- **Vector Auto-regression(VARs) was used to conduct in the test**
- **Effects of Monetary Policy in the research**
 - Interest rate pass-through
 - How it affects output(GDP) and price(CPI)
 - How it affects each component in Aggregate Demand
 - How it affects in each Monetary transmission channel

INTEREST RATE PASS-THROUGH IN THAILAND

- **Key dimension of Monetary transmission mechanism**
 - Size
 - Speed
- **Point of study**
 - To see the size and speed of the effect from monetary policy
 - To see the different between before and after 1997 crisis
 - To compare with other countries
- **Method**
 - Use 14-day repurchase rate(RP14) as retail rates
 - See how Bank lending (Minimum lending rate) and Deposit rate (3-month deposit rate) respond to retail rate(RP14)
 - Dynamic multiplier method (Impact,3months,6months,Long-run)
 - Error correction model(ECM) (Long-run)

RESULT

Table 1: Pass-through to 3-Month Deposit Rate

Method	Period	Immediate	3-month	6-month	Long-run	Speed of Adjustment
Dynamic multiplier	1989M1-1995M12	0.057	0.402	0.612	0.700	
	1989M1-2002M3	0.059	0.317	0.399	0.429	
ECM: Engel-Granger	1989M1-1995M12				0.500	0.147
	1989M1-2002M3				0.350	0.070

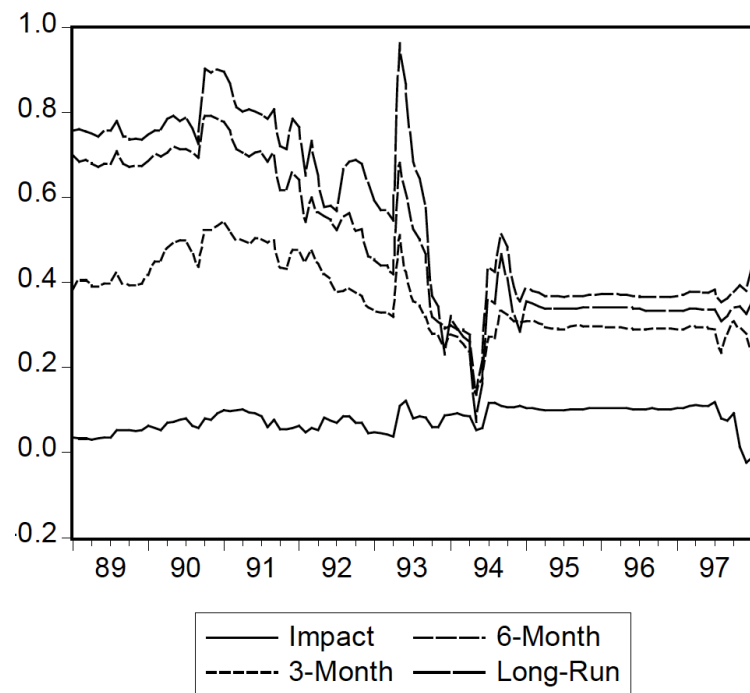
Notes: The dynamic multiplier model was run with 6 lags. The ECM models were both estimated using 4 lags.

Table 2: Pass-through to Minimum Lending Rate

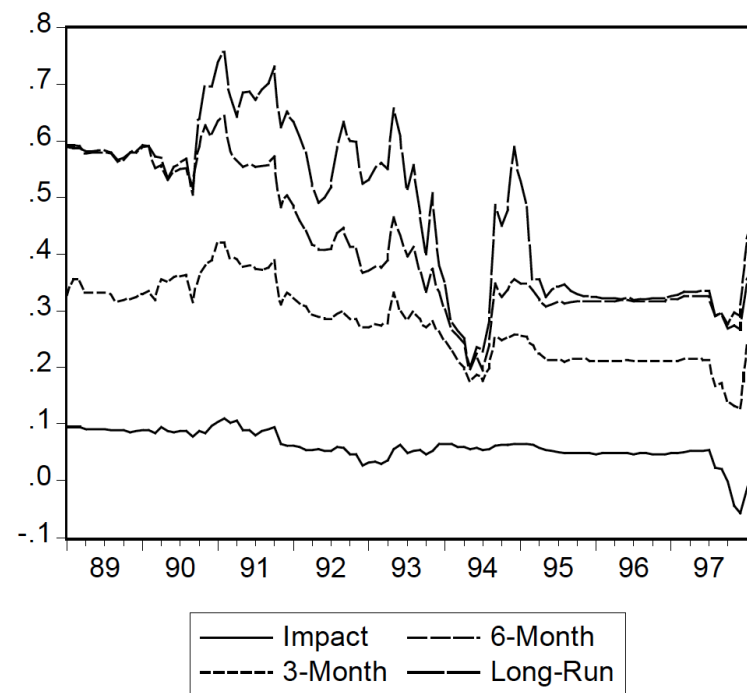
Method	Period	Immediate	3-month	6-month	Long-run	Speed of Adjustment
Dynamic multiplier	1989M1-1995M12	0.089	0.328	0.521	0.558	
	1989M1-2002M3	0.041	0.239	0.356	0.389	
ECM: Engel-Granger	1989M1-1995M12				0.400	0.101
	1989M1-2002M3				0.356	0.080

Notes: The dynamic multiplier model was run with 6 lags. The ECM models were both estimated using 4 lags.

Impact on 3-Month Deposit Rate (Multiplier Method)



Impact on MLR (Multiplier Method)



COMPARE WITH OTHERS

Table 3: Results from Cottarelli and Kourelis (1994)

Country	Impact	3 months	6 months	Long Run
Germany	0.38	0.67	0.83	1.04
Australia	n.a.	0.35	0.67	0.81
US	0.41	0.97	0.97	0.97
UK	0.82	1.02	1.04	1.04
Denmark	0.07	0.25	0.38	0.71
Finland	0.13	0.20	0.27	0.60
Singapore	0.27	0.71	0.82	0.95
Indonesia	0.20	0.74	0.74	1.00
Philippines	0.24	0.64	0.64	0.64
Malaysia	0.13	0.28	0.37	0.44
Japan	0.03	0.22	0.35	0.53
Thailand	0.09	0.33	0.52	0.56

Notes: The table shows dynamic multipliers for measures of minimum lending rates.

INTEREST RATE PASS-THROUGH

Summary of Interest rate pass-through

- **The effectiveness of the monetary policy decline after the crisis**
- **Retail rates in Thailand relatively sticky compares with others**

VAR RESULT

INDICATOR OF MONETARY POLICY

- Using RP14 as Monetary Policy Indicator (best indicator among M1, M2, and Overnight rate)

VAR RESULT

BASIC MODEL

- **To study how RP14 affects GDP and Price**
 - Using impulse response function

Figure 4: Basic Model

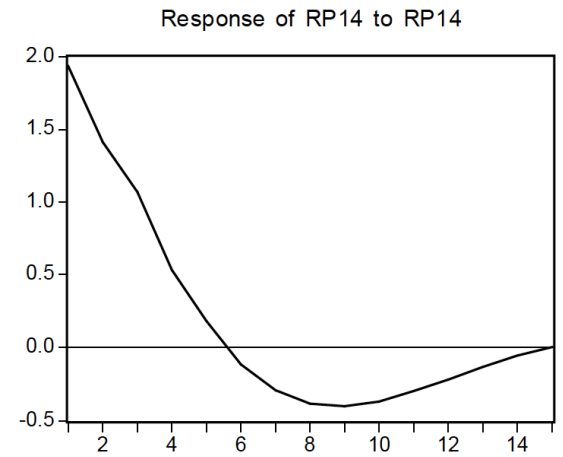
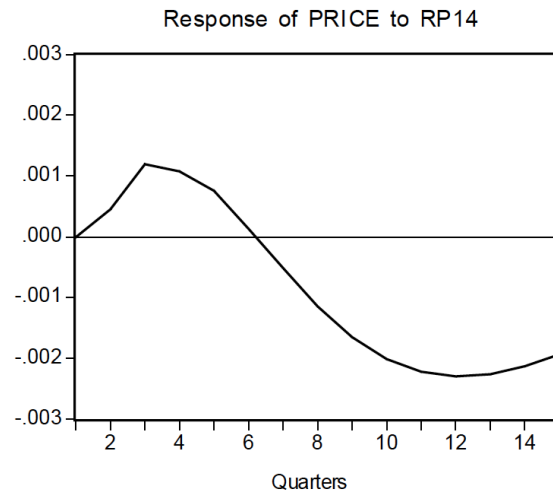
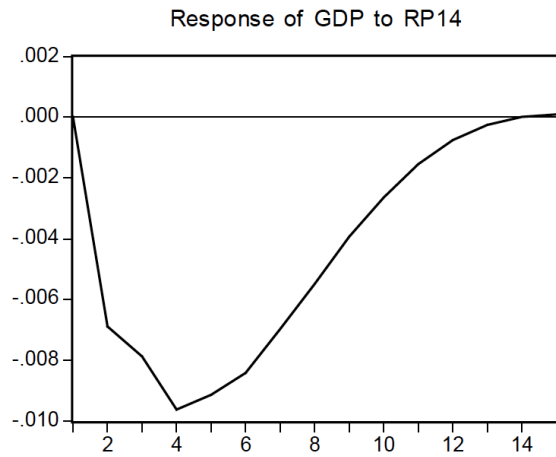


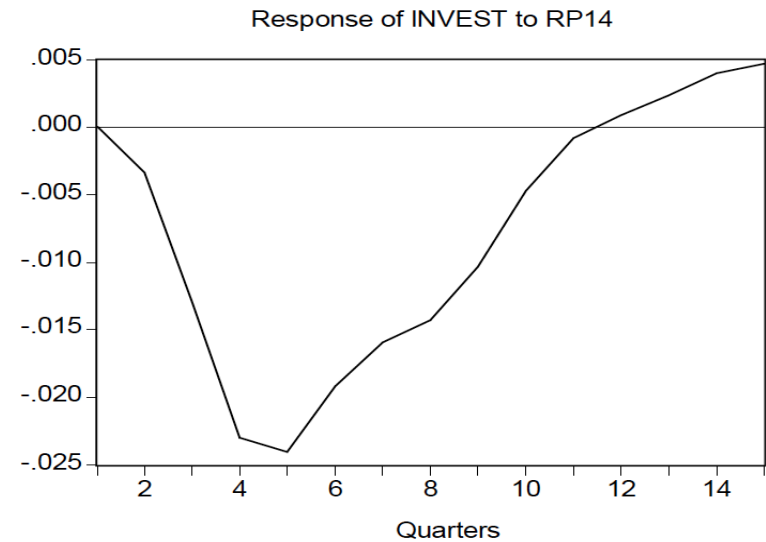
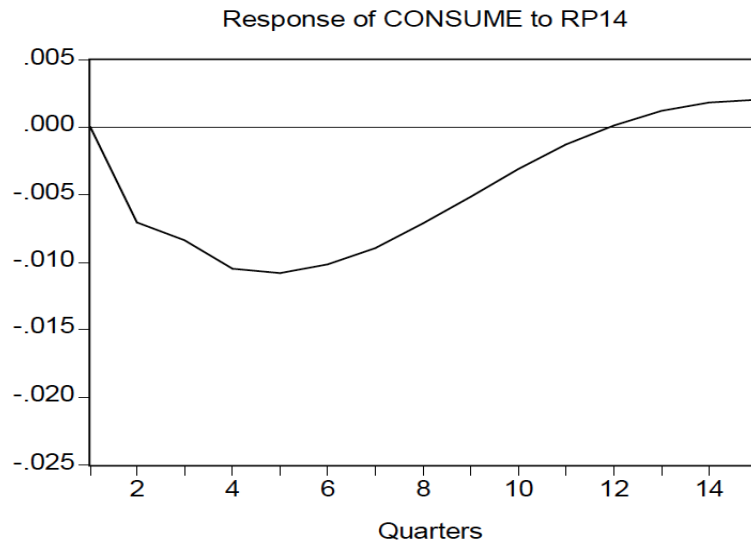
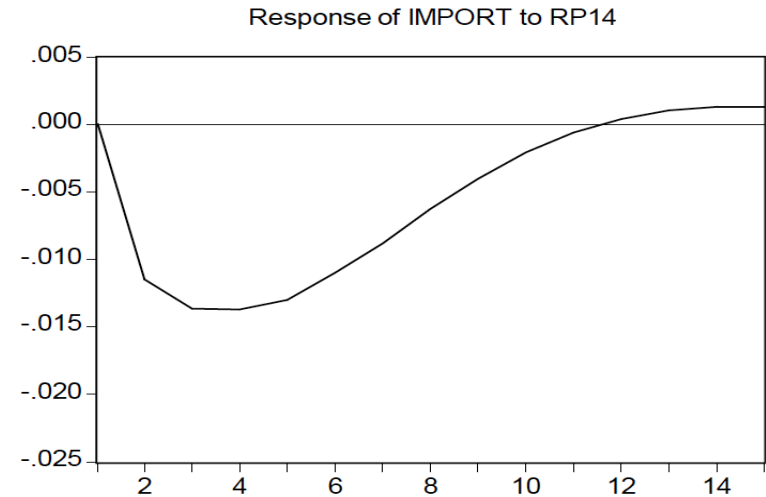
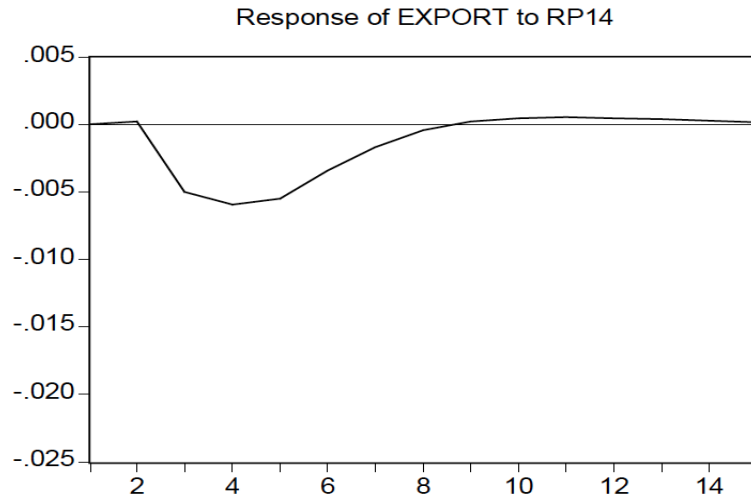
Table 8: Variance Decomposition for the Basic Model

Variance Decomposition of GDP			
Period	GDP	PRICE	RP14
4	73.30	5.15	21.56
8	58.23	5.91	35.86
12	56.10	8.05	35.85
16	55.90	8.47	35.63
Variance Decomposition of PRICE			
Period	GDP	PRICE	RP14
4	12.19	82.91	4.90
8	55.87	40.20	3.93
12	59.35	28.60	12.05
16	54.80	26.98	18.22
Variance Decomposition of RP14			
Period	GDP	PRICE	RP14
4	30.30	14.49	55.20
8	38.81	16.31	44.88
12	38.14	15.90	45.96
16	38.77	15.83	45.40

VAR RESULT

COMPONENTS OF AGGREGATE DEMAND

Figure 5: Components of Aggregate Demand



VAR RESULT

CHANNELS OF MONETARY TRANSMISSION

- Bank Lending Channel
- Exchange Rate Channel
- Asset Price Channel
- Direct Interest Rate Channel

PS. Each channel will be calculated in two sets: one with the variable treated as endogenous in the VAR and another where it is included as an exogenous variable. Obtain data from 1993Q1-2001Q4 in quarterly basis.

VAR RESULT

Bank Lending Channel

Figure 6: Private Credit to GDP Ratio (Average for 1995-2000)

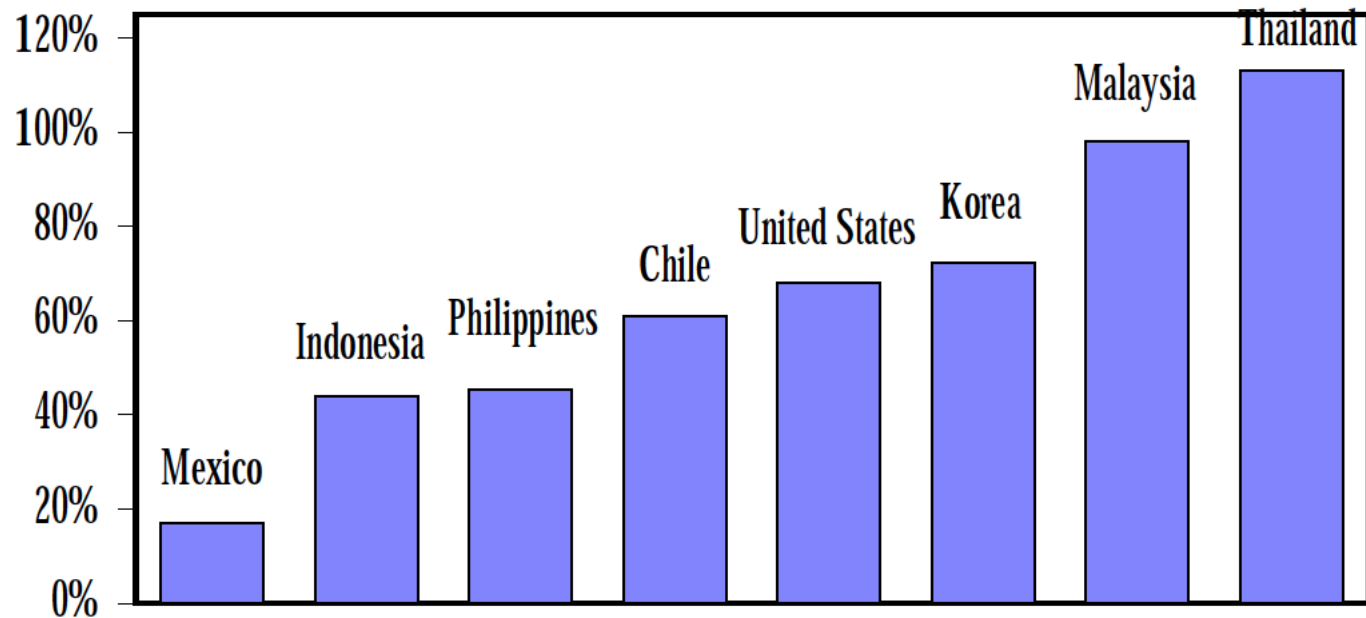


Figure 9: The Bank Lending Channel

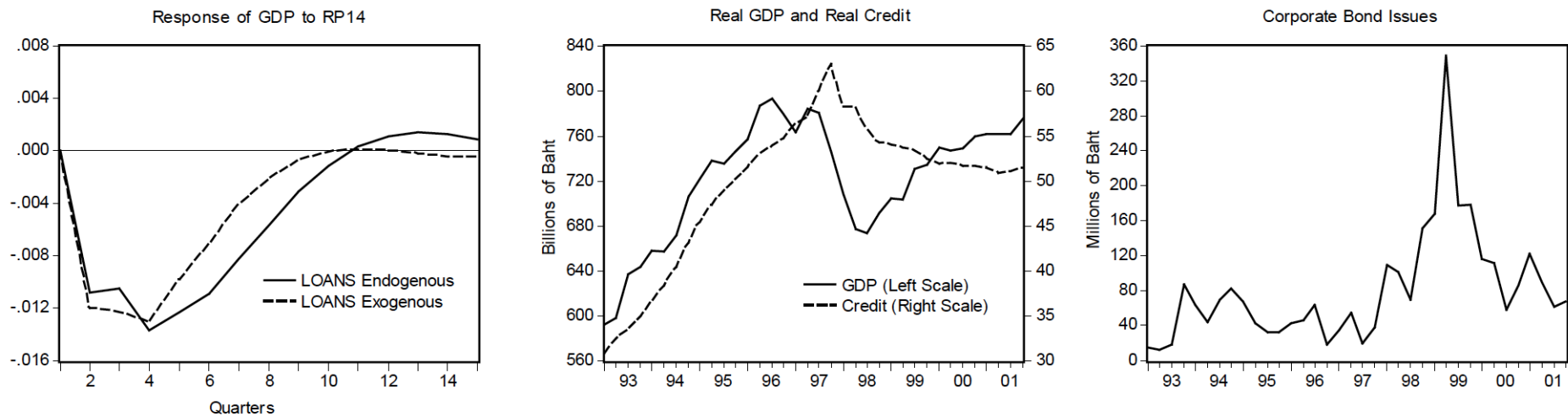
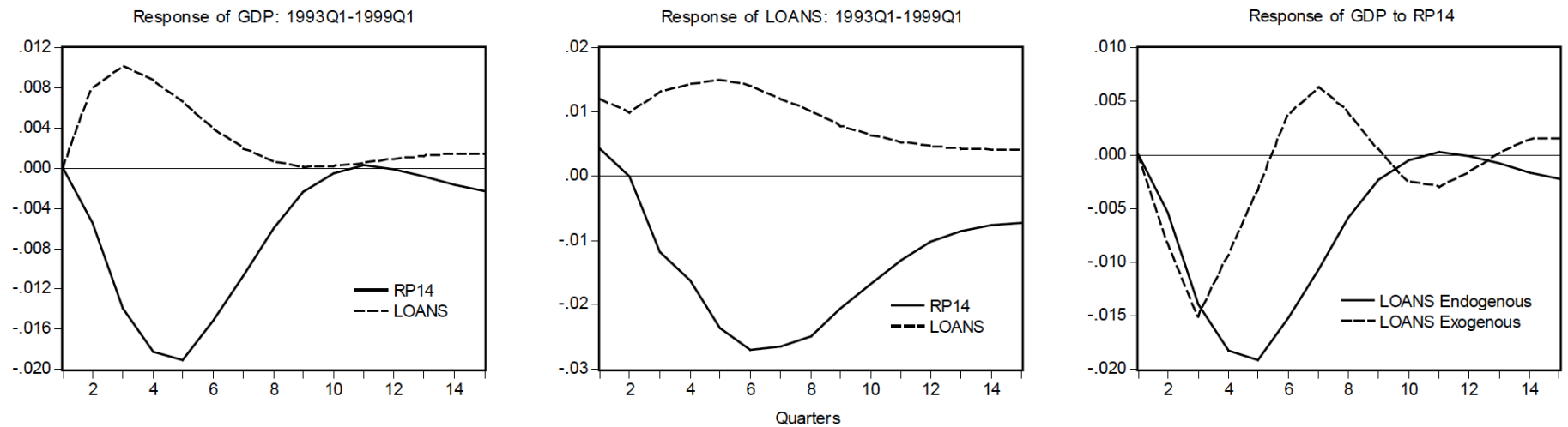


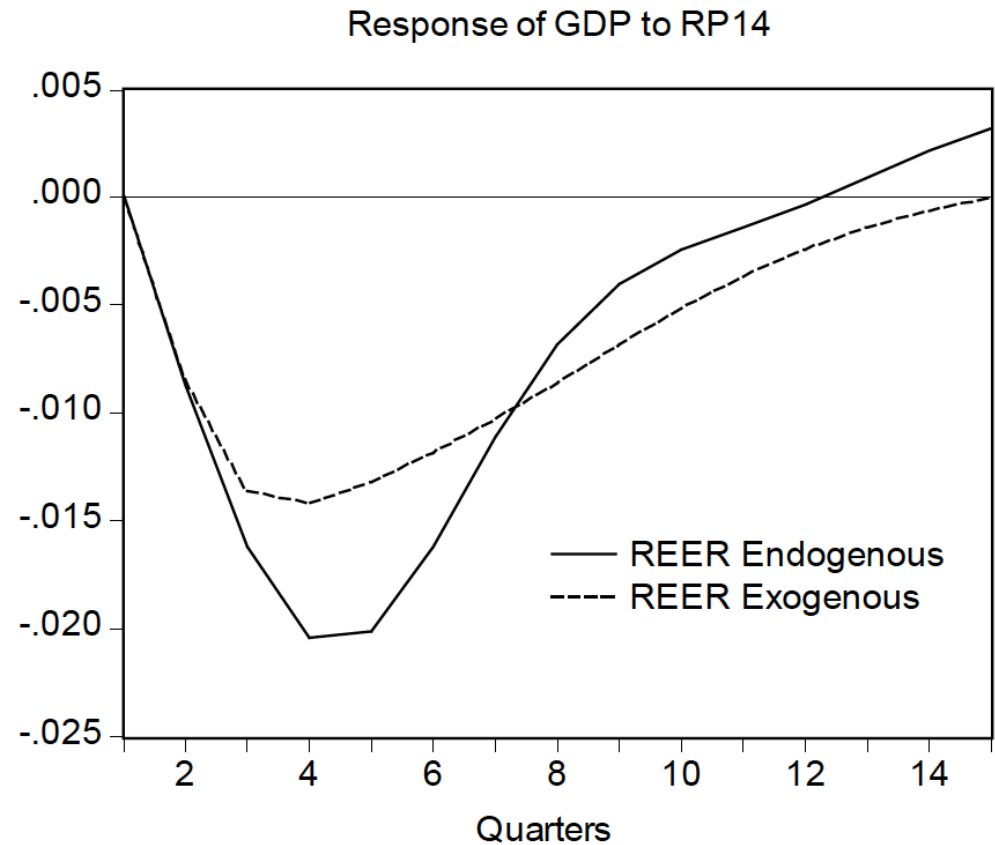
Figure 10: Pre-Crisis Bank Lending Channel



VAR RESULT

Exchange Rate Channel

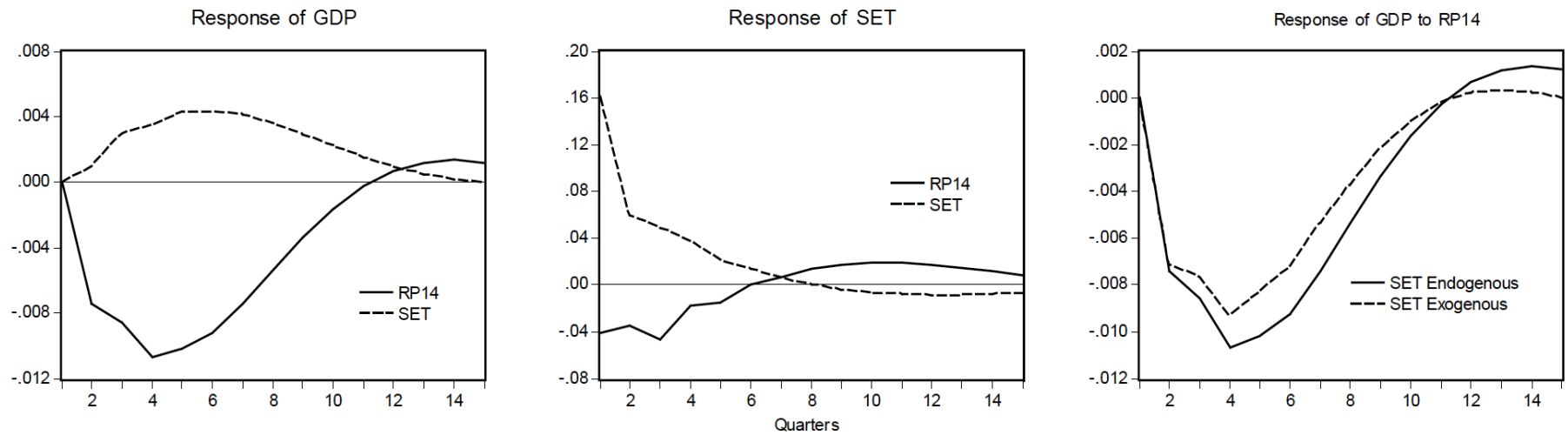
Figure 11: The Exchange Rate Channel



VAR RESULT

Asset Price Channel

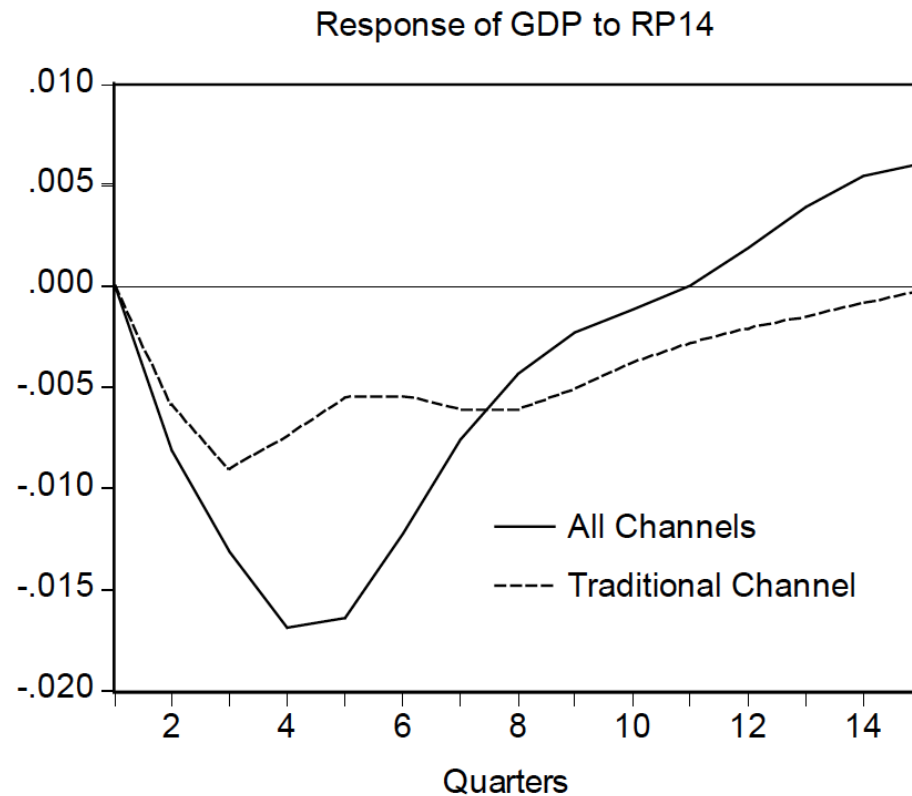
Figure 12: Asset Price Channel



VAR RESULT

Direct Interest Rate Channel

Figure 13: The Traditional Interest Rate Channel



CONCLUSION

- There was a decline in response of monetary shock after the crisis
- Monetary shock can affect the output as U-shape response(max of the effect takes about 4 quarters)
- Monetary shock take about a year to have an effect on price, the effect is quite persistently in long-run
- Investment is affected the most among the others components in AD
- Bank lending channel is the most important channel(exclude direct interest rate itself) above exchange rate channel and asset price channel