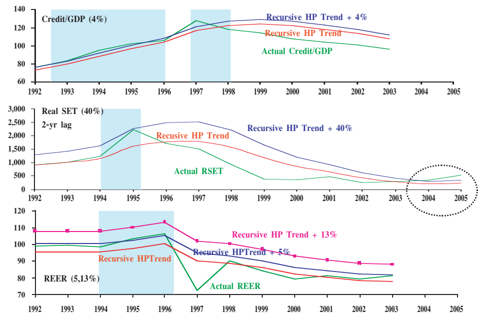
Asset price bubble and the development of the SET

The recent economic recovery in Thailand contributed to improvements and rapid expansion in the real estate sector and stock market, and to concerns over future financial imbalances, especially on asset price speculation (with respect to equity and real estate in particular) as well as asset price bubble. The MPC deemed it important for the Bank of Thailand to understand and be prepared to handle the aforementioned risks in order to maintain financial and economic stability.

Early warning indicators

Theoretically, a bubble is defined as a state where asset prices greatly deviate from their fundamental values. The tasks of correctly forecasting and identifying a bubble, as well as the likelihood of any pending financial crisis, however, are very difficult. Historical data from various countries indicate that the equity price leads asset price by about 1 year. The equity price can thus be used as a leading indicator. In the case of Thailand, where a real estate price index is lacking, a BOT in-house research[1/] uses a set of 3 key financial variables, namely (1) credit-to-GDP ratio (henceforth credit), (2) real Stock Exchange of Thailand (SET) index (CPI adjusted) and (3) real effective exchange rate (REER) index to construct a composite index. This composite index is then compared against thresholds proposed by Borio and Lowe[2/]. An indicator that rises beyond a threshold signals the possibility of a bubble which, if remained undealt, could lead to a financial crisis.

Early warning signals from credit, stock prices, the exchange rate and their long-term trends



Source: Bank of Thailand

In 2003, the Stock Exchange of Thailand (SET) index grew continuously and rapidly at a 60 per cent rate over the first 9 months of 2003. Using the early warning technique mentioned above, the real SET indicator at the end of 2003 Q3 started to rise beyond the threshold. The MPC thus called for cautions.

From historical cross-country experiences, however, a bubble and ensuing financial crisis is to occur only if the credit indicator sends a signal before or together with another indicator. Considering that the other 2 indicators for Thailand, namely the credit to GDP and REER indices remain significantly below their respective thresholds, the signal from only the real SET indicator does not warrant a concern over an economy-wide bubble.

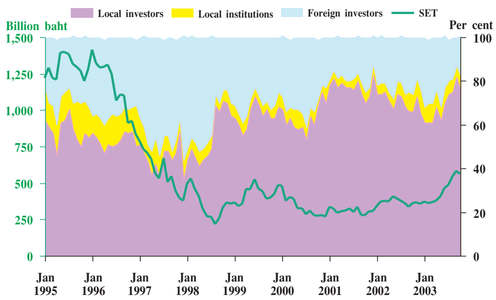
1/ Ashvin Ahuya, titanun Mallikamas and Chaipat Poonpatpibul (August 2003) "Asset price bubble and monetary policy: Indentification and policy response under inflation targeting", Paper presented at the BOT Symposium 2003 on Managing the Recovery: Challenges Ahead.

2/ Borio, Claudio and Philip Lowe (2002) "Assessing the risk of banking crises", BIS Quarterly Review, Basel, December.

The present development of the Stock Exchange of Thailand (SET)

The SET index achieved the highest gains among those in the region, owing partly to the lower P/E ratio, at around 9 times at the end of September. The gains were wide-ranging, and covered sectors with strong fundamentals such as communication, energy, construction and banking.

Proportion of gross buy investor



Source: SET

Regional stock market's index and P/E ratio

	Index	% Change from end-				P/E (as of)			
	Sep 03	Dec 02	Mar 03	Jun 03	Aug 03	Dec 02	Mar 03	Jun 03	Aug 03
Thailand	580.3	62.8	59.2	25.7	7.9	6.9	6.5	8.0	9.3
Indonesia	597.1	40.5	50.0	18.1	12.7	6.7	7.4	6.1	8.1
Malaysia	736.1	13.9	15.8	6.4	-1.0	17.9	18.1	19.0	19.4
Philippines	1,310.3	28.7	26.0	7.2	9.8	14.4	13.4	16.4	15.9
Singapore	1,628.7	21.4	28.5	12.5	1.8	21.1	21.4	20.9	23.6
Hong Kong	11,141.0	19.5	29.0	16.3	2.1	15.5	13.2	14.8	17.0
Korea	696.0	10.9	29.9	3.9	-8.3	16.9	13.5	9.7	11.0

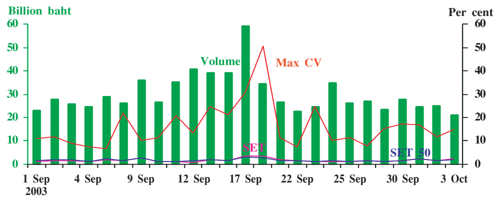
Source: Bloomberg

SET's Sectoral index and P/E ratio

	Index	% Change from end-				P/E (as of)				
	Sep 03	Dec 02	Mar 03	Jun 03	Aug 03	Sep 03	Dec 02	Mar 03	Jun 03	Aug 03
SET	580.8	62.8	59.2	25.7	7.9	9.89	6.9	6.5	8.0	9.3
SET50	35.9	57.1	51.9	18.6	5.8	12.08	10.9	9.4	11.8	11.9
BANK	214.9	48.3	36.6	24.0	5.4	13.19	9.3	10.2	11.0	14.1
BUILD	6,107.4	49.8	43.8	24.8	6.8	11.61	13.1	10.2	9.9	11.0
COMMUN	66.6	88.4	64.8	9.0	10.5	10.45	12.2	9.3	13.1	9.6
ENERG	5,739.6	58.7	56.1	13.3	6.5	8.04	6.4	6.4	7.1	7.7
PROP	166.0	89.3	100.6	58.7	14.3	15.08	5.6	6.2	7.8	13.5

Source: Bloomberg

Fluctuation of stock prices



% 10 Most active stocks to total turnover

Per cent

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
24.3	29.5	33.4	28.5	29.1	27.4	28.5	21.4	21.1

Source: SET

In 2003 Q3, liquidity and average daily turnover in the SET rose noticeably, with rising proportions of local investor purchases over those of foreign and institutional investors. More new trading accounts were opened, while existing accounts also showed a rise in transactions. Most importantly, net settlement transactions rose markedly and drove up stock turnovers and price volatilities. Looking at the *Coefficient of Variance (C.V.),* calculated from the difference between the highest and lowest stock price divided by its average price, those of the 10 most active stocks in September were noticeably beyond that of the market. The C.V. of the major core stocks (SET 50) was, on the other hand, similar to that of the market C.V.. The 10 most active stock turnovers, however, accounted for only 20 per cent of the market daily turnover.

Overall, the recent developments of stock prices in Thailand were in line with those of regional markets. The supporting factors included improved economic fundamentals and better investor confidence that resulted in a continuous rise of capital inflows to Asia. In the first 9 months of 2003, the increase in stock prices and turnovers were concentrated among stocks with good fundamentals. Trading in certain sectors and rising net settlement transactions, however, needed further close monitoring especially if coincided with high credit growth.