



รายงานวิจัยฉบับสมบูรณ์

**โครงการ ผลตอบแทนและปริมาณการซื้อขายของหลักทรัพย์
ที่ได้รับคำแนะนำจากนักวิเคราะห์หลักทรัพย์**

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31 กรกฎาคม 2549

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ในตลาดหลักทรัพย์ของประเทศไทยที่กำลังพัฒนาเช่นตลาดหลักทรัพย์แห่งประเทศไทยซึ่งถือได้ว่านักลงทุนยังไม่ได้มีความชำนาญมากนัก ข้อมูลคำแนะนำการซื้อขายหลักทรัพย์จากนักวิเคราะห์หลักทรัพย์ถือได้ว่าเป็นข้อมูลที่สำคัญและใช้ประโยชน์ได้โดยตรงในการตัดสินใจลงทุน คำถามที่สำคัญคือข้อมูลเหล่านั้นมีคุณค่าต่อตลาดทุนมากน้อยเพียงใด งานวิจัยนี้จึงมุ่งตอบคำถามดังกล่าวโดยการวัดผลตอบแทนที่เกิดขึ้นของหลักทรัพย์ที่ได้รับคำแนะนำการลงทุนจากนักวิเคราะห์หลักทรัพย์ นอกจากนั้นแล้วยังได้ศึกษาเพิ่มเติมไปว่าคุณค่าของคำแนะนำที่เกิดขึ้นมีความสัมพันธ์กับลักษณะของตลาดทุนหรือไม่ การวิจัยได้ใช้ข้อมูลจากฐานข้อมูล I/B/E/S โดยใช้ข้อมูลในช่วงปี พ.ศ. 2536 ถึง 2545 ผลการวิจัยพบว่าข้อมูลคำแนะนำการลงทุนจากนักวิเคราะห์หลักทรัพย์เป็นข้อมูลที่มี 'คุณค่า' ต่อตลาดทุนเช่นเดียวกันกับที่ได้พบในตลาดทุนอื่นกล่าวคือการซื้อตามคำแนะนำให้ซื้ออย่างชัดเจนจะเป็นวิธีการลงทุนที่มีคุณค่าที่สุด นอกเหนือจากนั้นแล้วการวิจัยยังพบได้อีกว่าข้อมูลคำแนะนำมีความสัมพันธ์กับลักษณะการใช้ข้อมูลภายในและการใช้ข้อมูลตามอย่างกันของนักลงทุน ในด้านการทดสอบปริมาณการซื้อขายพบว่าปริมาณการซื้อขายในวันที่มีคำแนะนำการลงทุนมีค่าที่แตกต่างจากปริมาณการซื้อขายเฉลี่ยทั่วไป

คำหลัก: **คำแนะนำการซื้อขายหลักทรัพย์, นักวิเคราะห์หลักทรัพย์, ตลาดหลักทรัพย์แห่งประเทศไทย**

Stock Returns and Trading Volume Following

Analyst s' Recommendations

ABSTRACT

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Analyst s' Recommendations

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In a developing financial market such as the Thai stock market where investors are rarely professionals, analysts' recommendations are especially important as they provide useful and straightforward information to investors. Questions arise as whether the information really brings 'value' to the market by investigating returns behavior on the analysts' recommended stocks. We further hypothesize that the 'value' from analysts' recommendations should be correlated with our unique market circumstance. Using I/B/E/S data of analysts' recommendations from 1993 to 2002, we find that the analysts' recommendations convey informative 'value' to the Thai market as it was found in other developed markets. Following 'strong buy' recommendations, on average, is an outstanding investment strategy. Our results on the calendar-time approach indicate that momentum trading strategy is appropriate only for the 'strong buy' recommendations. In addition, our finding discovers the existence of 'insider' and 'herding' to the recommendations. We also find that the trading volumes on the recommendation dates are apparently higher than average volume.

Key words, *analysts' recommendations, I/B/E/S, abnormal returns, insider, herding, efficient market.*

Executive Summary

1. ความสำคัญและที่มาของปัญหา

ตลาดหลักทรัพย์แห่งประเทศไทยซึ่งเป็นตลาดทุนที่สำคัญที่สุดของประเทศไทยซึ่งได้เริ่มจัดตั้งขึ้นและดำเนินการซื้อขายในปี พ.ศ. 2518 นับตั้งแต่นั้นเป็นต้นมาตลาดหลักทรัพย์ก็ได้มีบทบาทที่สำคัญในการเป็นตัวกลางเพื่อจัดหาทุนสำหรับกิจการต่างๆเพื่อใช้ในการขยายตัวของธุรกิจในสาขาต่างๆ จึงนับได้ว่าตลาดหลักทรัพย์เป็นองค์กรที่สำคัญอย่างยิ่งต่อระบบเศรษฐกิจของประเทศไทย การพัฒนาตลาดหลักทรัพย์ให้มีประสิทธิภาพจึงถือเป็นนโยบายสำคัญของรัฐมาโดยตลอด วิธีการหนึ่งที่จะพัฒนาตลาดหลักทรัพย์ให้เกิดการดำเนินงานที่มีประสิทธิภาพและให้มีการลงทุนอย่างต่อเนื่องนั้นจะต้องให้นักลงทุนที่อยู่ในตลาดหลักทรัพย์มีข้อมูลที่เพียงพอเพื่อใช้ในการวิเคราะห์และตัดสินใจ ถ้าจะแบ่งผู้ลงทุนในตลาดหลักทรัพย์แล้วสามารถที่แบ่งผู้ลงทุนในการซื้อขายหลักทรัพย์ออกเป็น 2 กลุ่ม กลุ่มแรกก็คือกลุ่มนักลงทุนที่มีข้อมูลข่าวสารและมีความสามารถในการวิเคราะห์ข้อมูลข่าวสารที่ได้มา นักลงทุนกลุ่มนี้มักเป็นผู้ลงทุนรายใหญ่หรือเป็นนักลงทุนกลุ่มสถาบัน (Institutional Investor) นักลงทุนกลุ่มนี้จะมีความสามารถและมีบุคลากรที่มีความรู้และประสบการณ์ในการตัดสินใจเพื่อที่จะซื้อหรือขายหลักทรัพย์ ส่วนนักลงทุนกลุ่มที่สองได้แก่นักลงทุนที่เป็นนักลงทุนรายย่อย (Individual Investor) ซึ่งมักไม่ค่อยมีความรู้หรือไม่ค่อยอาศัยการวิเคราะห์ด้วยตนเองในการตัดสินใจลงทุน นักลงทุนกลุ่มนี้มักจะอาศัยคำแนะนำจากผู้อื่นเช่นคำแนะนำของเจ้าหน้าที่ทำการซื้อขายหลักทรัพย์ หรือคำแนะนำจากนักวิเคราะห์หลักทรัพย์ที่ทำงานในอยู่ในบริษัทหลักทรัพย์ต่างๆ ตลาดหลักทรัพย์แห่งประเทศไทยจัดเป็นตลาดที่กำลังพัฒนาซึ่งนักลงทุนส่วนใหญ่ยังเป็นนักลงทุนรายย่อยมากกว่านักลงทุนสถาบัน และสำหรับนักลงทุนรายย่อยนั้นข้อมูลคำแนะนำในการวิเคราะห์หลักทรัพย์ถือเป็นข้อมูลที่มีประโยชน์มาก

คำแนะนำในการซื้อหรือขายหลักทรัพย์จัดเป็นข่าวสารที่บริษัทเงินทุนหลักทรัพย์หลายแห่งจัดทำขึ้นเพื่อเผยแพร่ต่อลูกค้าของบริษัท หรือสาธารณะโดยผ่านทางรายงานคำแนะนำของบริษัท ในปัจจุบันบริษัทหลักทรัพย์แทบทุกแห่งมีการจัดทำคำแนะนำในการซื้อขายขึ้นเพื่อใช้เป็นเครื่องมือในด้านการตลาดของกิจการหรือใช้ในการดึงดูดลูกค้าให้เป็นสมาชิกของตน คำแนะนำในการซื้อหรือขายหลักทรัพย์เหล่านี้ส่วนใหญ่จะเป็นการวิเคราะห์โดยผู้เชี่ยวชาญการลงทุนหรือนักวิเคราะห์หลักทรัพย์ที่ถือได้ว่ามีความรู้ในวิเคราะห์หลักทรัพย์เป็นอย่างดี ดังนั้นคำแนะนำดังกล่าวจึงเป็นข้อมูลที่สำคัญต่อผู้ลงทุนโดยเฉพาะอย่างยิ่งผู้ลงทุนรายย่อย (Individual Investors) และนักลงทุนก็จะให้ความสนใจต่อข้อมูลการวิเคราะห์หลักทรัพย์ที่เผยแพร่ออกมาซึ่งจะเป็นข้อมูลที่ชี้ให้นักลงทุนเห็นว่าหลักทรัพย์ไหนควรที่จะได้ซื้อ หลักทรัพย์ไหนควรที่จะขายหรือถือเก็บไว้ เป็นต้น คำถามในงานวิจัยนี้คือคำแนะนำในการลงทุนนั้นมีผลต่อผลตอบแทนและปริมาณการซื้อขายในตลาดหรือไม่ และถ้าหากมีการลงทุนตามคำแนะนำเหล่านี้แล้วนักลงทุนจะได้ประโยชน์มากน้อยเพียงใด นอกจากนั้นยังเป็นที่น่าสนใจในการศึกษาว่าผลตอบแทนดังกล่าวมีความสัมพันธ์กับลักษณะเฉพาะของตลาดหลักทรัพย์แห่งประเทศไทยหรือไม่

งานวิจัยนี้จึงมุ่งเน้นที่จะตอบคำถามดังกล่าวโดยวัดผลตอบแทนที่เกิดขึ้นถ้าหากได้มีการลงทุนตามคำแนะนำของนักวิเคราะห์หลักทรัพย์ซึ่งผลของงานวิจัยนี้จะได้เป็นข้อมูลสำหรับนักลงทุนทั่วไปว่าการลงทุนตามคำแนะนำในการซื้อขายของนักวิเคราะห์นั้นมีความเหมาะสมในการลงทุนอย่างไรและเป็นการแสดงให้เห็นว่าข้อมูลการวิเคราะห์ที่เผยแพร่ให้เป็นคำแนะนำในการชื้อขายนั้นเป็นข้อมูลที่มีประโยชน์ต่อนักลงทุนมากน้อยอย่างไร ข้อแตกต่างที่สำคัญของงานวิจัยนี้เมื่อเปรียบเทียบกับงานวิจัยลักษณะเดียวกันที่ผ่านมา (อัญญา ชันธิวิทย์ (2542) พงศ์สหัสศรี และ รวี ลงกานี (2547)) ก็คืองานวิจัยนี้ได้อาศัยแหล่งข้อมูลที่รวบรวมและจัดทำขึ้นอย่างเป็นระบบโดย

สถาบันที่มีชื่อเสียงและเป็นที่ยอมรับของนักลงทุนทั่วโลกนั้นคือ Investment Broker Estimated System (I/B/E/S) ในการวิจัยนี้ยังจะได้ทดสอบความสัมพันธ์ของทิศทางความเห็นคำแนะนำในการซื้อขายหลักทรัพย์ของกลุ่มนักวิเคราะห์กับผลตอบแทนภายหลังได้รับคำแนะนำ นอกจากนี้แล้วงานวิจัยจะทดสอบการเปลี่ยนแปลงของปริมาณการซื้อขายหลักทรัพย์ภายหลังจากที่มีการเผยแพร่บทความการวิเคราะห์หลักทรัพย์ออกไป

2. วัตถุประสงค์

- 2.1. ศึกษาผลตอบแทนที่เกิดขึ้นในช่วงเวลาที่มีการแนะนำการซื้อขายโดยแบ่งตามประเภทของคำแนะนำ
- 2.2. ทดสอบผลตอบแทนในช่วงเวลาต่างๆเพื่อทดสอบความสัมพันธ์ระหว่างคุณค่าคำแนะนำในการลงทุนกับลักษณะเฉพาะของตลาดทุน
- 2.3. ศึกษาผลตอบแทนที่เกิดกับผู้ลงทุนได้ลงทุนตามคำแนะนำที่นักวิเคราะห์จัดทำและเผยแพร่ต่อสาธารณะซึ่งจะเป็นการแสดงให้เห็นว่าข้อมูลคำแนะนำในการซื้อขายหลักทรัพย์เป็นข้อมูลที่มีค่าหรือไม่สำหรับนักลงทุน
- 2.4. เพื่อศึกษาถึงปริมาณการซื้อขายหลักทรัพย์ที่เกิดขึ้นหลังจากที่มีการเผยแพร่คำแนะนำในการซื้อขายออกไปซึ่งจะเป็นการแสดงให้เห็นว่านักลงทุนมีการตอบสนองต่อคำแนะนำในการซื้อขายอย่างไร

3. ระเบียบวิธีวิจัย

ข้อมูลคำแนะนำในการซื้อขายที่ใช้ในการวิจัยครั้งนี้จะนำมาจากฐานข้อมูลที่มีชื่อว่า Institutional Broker Estimate System (I/B/E/S) ส่วนข้อมูลอื่นที่จะใช้จากฐานข้อมูล ISIM ที่จัดทำโดยตลาดหลักทรัพย์แห่งประเทศไทย รวมทั้งจากฐานข้อมูล DATA STREAM จากศูนย์การเงินและการลงทุนในมหาวิทยาลัยเชียงใหม่

ผลตอบแทนของหลักทรัพย์ที่ได้รับคำแนะนำในการซื้อขาย

ในการวิจัยจะได้แบ่งคำแนะนำเป็น 5 กลุ่มคือ คำแนะนำในการซื้ออย่างชัดเจน (Strong Buy Recommendations) คำแนะนำในการซื้อ (Buy Recommendations) คำแนะนำให้ถือ (Hold Recommendations) คำแนะนำในการขาย (Underperform Recommendations) และ คำแนะนำในการขายอย่างชัดเจน (Sell Recommendations) ซึ่งถือได้ว่าคำแนะนำทั้ง 5 กลุ่มเป็นเกณฑ์มาตรฐานที่บริษัทหลักทรัพย์ส่วนใหญ่แนะนำให้ลูกค้าที่มีบัญชีซื้อขายหลักทรัพย์กับบริษัท สำหรับหลักทรัพย์ที่มีการวิเคราะห์จะได้แบ่งช่วงการศึกษาเป็น 3 ช่วงคือ ช่วงแรกคือ วันที่มีการเผยแพร่คำแนะนำในการซื้อหรือขายหลักทรัพย์ หรือ event date (วันที่ 0) ช่วงที่ 2 หมายถึง ช่วงก่อนที่จะมีการเผยแพร่ หลักทรัพย์นั้นๆไปอย่างเป็นทางการเป็นระยะ 20 วัน หรือ pre-event date (วันที่ -1 ถึง -20) และช่วงที่ 3 คือช่วงหลังการแนะนำซึ่งจะได้ศึกษาผลตอบแทนที่เกิดขึ้นหลังจากวันที่ 0 ไปประมาณ 120 วันทำการหรือ post-event date (ประมาณ 30 สัปดาห์) การวิเคราะห์ผลตอบแทนใช้วิธีวัดผล ตอบแทนโดยการซื้อและถือหลักทรัพย์จนถึงวันที่ต้องการขาย (buy-and-hold return) ซึ่งเป็นวิธีที่ใช้กันมากในการวิจัยเพื่อหาผลตอบแทนผิดปกติที่เกิดขึ้นจากเหตุการณ์ใดเหตุการณ์หนึ่ง (events study) ซึ่งจะวัดผลตอบแทนที่ผิดปกติในรูปแบบสะสม (Cumulative Abnormal Returns)

ผลตอบแทนของกลุ่มหลักทรัพย์กับทิศทางความเห็นของคำแนะนำในการซื้อขาย

จากนั้น จึงได้ทดสอบยืนยัน (robustness check) ผลตอบแทนของหลักทรัพย์ที่เป็นกลุ่มหลักทรัพย์ (portfolio) มาใช้ในการทดสอบนอกจากนั้นแล้ว การวิจัยในส่วนนี้ยังชี้ให้เห็นถึงความสัมพันธ์ของความเห็นในการวิเคราะห์กับผลตอบแทนที่จะเกิดขึ้นด้วย การจัดกลุ่มหลักทรัพย์ตามวิธีนี้จะได้อันดับหลักทรัพย์ตามคะแนนเฉลี่ยของคำแนะนำในการซื้อขาย กำหนดให้ $\psi_{it, t-1}$ เป็นค่าของระดับคำแนะนำในการซื้อขายของหลักทรัพย์ใดๆ เช่น การได้รับคำแนะนำให้ซื้อจะถือเป็น 3 การได้รับคำแนะนำให้ถือจะเป็นคะแนน 2 หรือการได้รับคำแนะนำให้ขายจะเป็นคะแนน 1 (อย่างไรก็ตามหากฐานข้อมูลสามารถจัดกลุ่มได้มากกว่า 3 ประเภท การวิจัยก็จะแบ่งคะแนนให้แตกต่างจากที่ระบุได้) ในวันใดๆจะพิจารณาว่าในแต่ละหลักทรัพย์นั้นจะได้รับค่าเฉลี่ยของคำแนะนำจากนักวิเคราะห์ $\bar{\psi}_{i, t-1}$ ในช่วงใดเช่นหากค่าเฉลี่ยเป็น 3 ก็จะกล่าวว่าความเห็นของนักวิเคราะห์นั้นเป็นความเห็นที่สททางเดียวกันในการซื้อ (consensus buy recommendation) หากความเห็นอยู่ในระดับ 2.5-3 ค่าเฉลี่ยของคำแนะนำนี้ได้จากการเฉลี่ยคำแนะนำของหลักทรัพย์ใดๆจากนักวิเคราะห์หลายๆคนที่วิเคราะห์หลักทรัพย์ในวันนั้นๆ หรือเขียนได้ว่า

$$\bar{\psi}_{i, t-1} = \frac{1}{n} \sum_{j=1}^n \psi_{ijt-1} \quad (1)$$

เมื่อ ψ_{ijt-1} คือคำแนะนำของนักวิเคราะห์ j ที่มีต่อหลักทรัพย์ i ในวันที่ $t-1$ และ n ก็คือจำนวนนักวิเคราะห์ที่มีการแนะนำหลักทรัพย์ i ในวันนั้นๆ จากนั้นจะได้จัดกลุ่มหลักทรัพย์ตามค่าเฉลี่ยที่คำนวณได้ $\bar{\psi}_{i, t-1}$ แล้ววัดผลตอบแทนของแต่ละกลุ่มในวันที่ t

การวัดผลตอบแทนของกลุ่มหลักทรัพย์จะวัดผลตอบแทนของกลุ่มหลักทรัพย์ ในวันที่ t โดยผลตอบแทนของหลักทรัพย์จะใช้เป็นแบบถ่วงน้ำหนักตามมูลค่า (value weighted) ตามสมการดังนี้

$$R_{pt} = \sum_{i=1}^{n_{pt}-1} x_{it} - 1 R_{it} \quad (2)$$

เมื่อ

R_{pt} = ผลตอบแทนของกลุ่มหลักทรัพย์ ในวันที่ t (หลังจากมีคำแนะนำ 1 วัน)

$x_{it} - 1$ = มูลค่าตามราคาตลาดของหลักทรัพย์ i คำนวณตามราคาปิดในวันที่ $t - 1$ แล้วหารด้วยมูลค่าตามราคาตลาดรวมของกลุ่มหลักทรัพย์ในคำนวณตามราคาปิดในวันเดียวกัน

R_{it} = ผลตอบแทนของหลักทรัพย์ i ในวันที่ t

$n_{pt} - 1$ = จำนวนหลักทรัพย์ในกลุ่มหลักทรัพย์ (portfolio) ในวันที่ $t - 1$

หลังจากนั้นจะได้วัดประสิทธิภาพของกลุ่มหลักทรัพย์แต่ละกลุ่มตามแบบจำลอง 3 ปัจจัย (three factors model) ที่เสนอโดย Fama and French (1993) ดังนี้

$$R_{pt} - R_{ft} = \alpha_p + \beta_p (R_{mt} - R_{ft}) + \chi_p SiZE_t + \delta_p BVMV_t + \varepsilon_t \quad (3)$$

เมื่อ

- $\alpha_p =$ สัมประสิทธิ์ของการคำนวณที่เป็นเครื่องชี้ประสิทธิภาพของกลุ่มหลักทรัพย์
 $\beta_p =$ สัมประสิทธิ์ในสมการที่เป็นเครื่องชี้ความเสี่ยงของกลุ่มหลักทรัพย์
 $SIZE_i =$ ผลต่างของผลตอบแทนในกลุ่มหลักทรัพย์ขนาดเล็กกับกลุ่มหลักทรัพย์ขนาดใหญ่
 $BVMV_i =$ ผลต่างของผลตอบแทนในกลุ่มหลักทรัพย์ที่มีค่าอัตราส่วน book ต่อ market value สูง กับกลุ่มที่มี อัตราส่วน book ต่อ market value ต่ำ

การวัดความผิดปกติของปริมาณการซื้อขาย

ในส่วนนี้จะเป็นการทดสอบว่าปริมาณการซื้อขายหลังจากที่มีคำแนะนำในการซื้อหรือขายหลักทรัพย์ออกมาแล้วจะมีความผิดปกติหรือไม่ ซึ่งความผิดปกติดังกล่าวจะวัดจากปริมาณการซื้อขายและเปรียบเทียบกับค่าเฉลี่ยของปริมาณการซื้อขายก่อนหน้าเป็นเวลา 45 วัน หรือสมการที่จะเขียนเป็นสมการได้ดังนี้

$$\varpi_{i,T} = \frac{V_{i,T}}{\frac{1}{45} \sum_{t=-50}^{t=-6} V_{i,t}} - 1$$

โดยที่ $\varpi_{i,T}$ คือปริมาณการซื้อขายที่ผิดปกติจากปริมาณซื้อขายเฉลี่ยก่อนหน้า $V_{i,T}$ คือปริมาณการซื้อขายในแต่ละวัน

4. ผลการวิจัย

จากข้อมูลคำแนะนำจากฐานข้อมูล I/B/E/S ตั้งแต่เดือนพฤศจิกายน 2536 ถึงเดือน ธันวาคม พ.ศ. 2545 จะมีคำแนะนำที่ใช้ในการวิจัยครั้งนี้ 14,909 ข้อมูล ผลการวิจัยที่ได้รับสรุปได้ว่าคำแนะนำของนักวิเคราะห์หลักทรัพย์มีคุณค่าที่เห็นได้ชัดต่อตลาดทุนไทยกล่าวคือในวันที่มีการเผยแพร่คำแนะนำต่อหุ้นใดๆเข้ามาตลาดหลักทรัพย์จะได้รับการปรับตัวตอบสนองต่อคำแนะนำที่สอดคล้องกับคำแนะนำดังกล่าวและความสอดคล้องนี้จะเห็นได้เด่นชัดมากในกรณีที่คำแนะนำเป็นประเภท Strong buy recommendation ผลตอบแทนผิดปกติสะสมที่เกิดขึ้นสำหรับคำแนะนำในกลุ่มนี้จะมีค่าเป็นบวกทั้งสามช่วงเวลาทดสอบ ผลตอบแทนที่เกิดจากคำแนะนำในการวิเคราะห์หลักทรัพย์จะมีทิศทางที่สอดคล้องกันกับคำแนะนำเช่นสำหรับคำแนะนำให้ซื้ออย่างชัดเจนจะพบว่าผลตอบแทนที่เป็นบวก (0.41%) และสำหรับคำแนะนำให้ขายอย่างชัดเจนนั้นจะมีผลตอบแทนที่เป็นลบ (-.25%) เป็นต้น จากผลการทดสอบนี้สรุปได้ว่าคำแนะนำในการวิเคราะห์หลักทรัพย์เป็นข้อมูลที่มีประโยชน์ต่อตลาดทุนและนอกเหนือจากนั้นข้อค้นพบยังสรุปได้ว่าผลตอบแทนในช่วงเหตุการณ์ที่มีคำแนะนำนั้นน่าจะมีความสัมพันธ์กับลักษณะของตลาดหลักทรัพย์แห่งประเทศไทยที่จัดอยู่ในกลุ่มตลาดของประเทศเกิดใหม่ (Emerging Market)

ผลการวิจัยได้ชี้ให้เห็นว่าการที่ตลาดหลักทรัพย์มีการจัดการเฉพาะเช่นการห้ามซื้อขายด้วยวิธียืมหุ้นขาย (Short sell) ทำให้ได้ผลที่เป็นความอสมมาตรของการใช้ประโยชน์จากคำแนะนำเช่นผู้ลงทุนที่ไม่มีหุ้นอยู่ก็ไม่สามารถที่จะขายหุ้นได้ คำแนะนำนี้จึงเป็นประโยชน์เฉพาะกับนักลงทุนบางคนที่มีหุ้นอยู่เท่านั้น ในทางตรงข้ามคำแนะนำที่ให้ซื้อหุ้นนั้นผู้ลงทุนที่ไม่มีหุ้นอยู่ในมือสามารถที่จะลงทุนได้จึงทำให้คำแนะนำในกลุ่มชื่อนั้นมีผลต่อผลตอบแทนมากกว่าคำแนะนำให้ขาย

ลักษณะที่เห็นได้อีกประการก็คือการที่ผลตอบแทนมีการปรับตัวขึ้นมาก่อนที่จะมีคำแนะนำให้ลงทุนทำให้เห็นภาพได้ว่านักลงทุนบางกลุ่มอาจมีข้อมูลก่อนนักลงทุนอื่นซึ่งเป็นลักษณะของตลาดทุนที่ไม่มีประสิทธิภาพในแง่ข้อมูลข่าวสาร และการที่ผลตอบแทนหลังจากเกิดเหตุการณ์มีการปรับตัวที่ผิดปกติก็น่าจะสอดคล้องกับลักษณะของนักลงทุนที่มีพฤติกรรม ‘ตามหมู่’ (Herding) เพราะได้มีการซื้อหุ้นที่ได้มีคำแนะนำดี ๆ ออกมาก่อนหน้านี้แล้วทำให้ผลตอบแทนของหุ้นที่เคยได้รับคำแนะนำดี ๆ (เช่น Strong Buy) ยังคงมีผลตอบแทนเป็นบวกภายหลังจากได้ปรับคำแนะนำในการลงทุน (Post event date 120 วัน)

การทดสอบในส่วนต่อมาที่ทดสอบการลงทุนในหุ้นที่มีคำแนะนำแล้วถือหุ้นไปอีกหนึ่งวันจะพบในลักษณะเดียวกันว่าผลตอบแทนที่มีค่าเป็นบวกนั้นจะมีความสัมพันธ์กับคำแนะนำให้ซื้อชัดเจน (Strong Buy)

การทดสอบในส่วนต่อมาแสดงความสัมพันธ์ระหว่างวันที่มีคำแนะนำออกมากับปริมาณการซื้อขายในช่วงเวลาที่มีคำแนะนำได้ข้อสรุปว่าปริมาณการซื้อขายในช่วงนั้นจะมีความผิดปกติเมื่อเทียบกับค่าเฉลี่ยการซื้อขายก่อนหน้านี้และหลังการเผยแพร่ข้อมูลคำแนะนำนั้น

ข้อสรุปที่ได้จากการวิจัยคือคำแนะนำการวิเคราะห์หลักทรัพย์ที่ถือเป็นคำแนะนำจากผู้เชี่ยวชาญนั้นถือได้ว่าเป็นข้อมูลที่มีความสำคัญที่มีผลต่อการลงทุนในตลาดหลักทรัพย์แห่งประเทศไทย ซึ่งการตอบสนองต่อคำแนะนำการซื้อขายนี้จะสัมพันธ์กันกับลักษณะเฉพาะของตลาดหลักทรัพย์

5. แผนการดำเนินงานวิจัยตลอดโครงการในแต่ละช่วง 24 เดือน

กิจกรรม	..ก.ค. 47..	..มี.ค. 48..	..ก.ค. 48..	..ธ.ค. 48..	..พ.ค. 49..	..มิ.ย. 49..	..ต.ค. 49..	..ธ.ค. 49..
อนุมัติโครงการ/เริ่มดำเนินการ	→							
เก็บรวบรวมข้อมูล/ข้อมูล	→	→						
วิเคราะห์ข้อมูล		→	→					
เขียนรายงานการวิจัย			→	→				
จัดพิมพ์ รูปเล่ม					→			
ส่งรายงานฉบับสมบูรณ์					→	→		
เข้าร่วมประชุมเสนอผลงานนานาชาติ-FMA						→	→	
ส่งเอกสารตีพิมพ์							→	→

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Chapter 1

An Overview of the Research

Analysts' recommendations are information provided by brokerage houses in the stock market. This type of information can be regarded as the most straightforward guideline for investing in the stock market. Looking at other forms of widely spread information such as economic analysis information, financial statement information or other news from the market, they can not provide such conclusive information as found in analysts' recommendations information. For analysts' recommendations, which usually provide a conclusive note whether investors should buy, hold or sell the coverage stocks. Investors simply notice the type of recommendations and make a decision to invest according to the received recommendations. Obviously, analysts' recommendations are important information for investors in the market. Prior researches also confirm that contribution of the analysts' recommendations to stock markets (see for example Womack (1996), Barber et. al. (2001), Irvine (2003), Jegadeesh and Kim (2003), Green (2003) and Khanthavit (1997)). However, the contribution may not equivalently affect each market. On different market settings as the Thai stock market, analysts' recommendations are suspected to differently affect and provide value to the market. Evidence supporting this relationship can be found in Jegadeesh and Kim (2003) who investigate the value of analysts' recommendations in the G7 countries and find largest price reaction occurred in the U.S. and Japan market whose markets are regarded as the two most developed markets. Also, the paper finds that trading strategies have the highest profits in the U.S. followed by Japan. To our knowledge, the study on the effect of different market setting to the analysts' recommendations has not been yet studied in Thailand.

In Thailand where investors are different to those of developed markets as the proportion of individual investors is relatively significant. The market is also lacks enough information vendors to provide useful information. Such circumstances promote the importance of analysts' recommendations. However, in Thailand, there is no 'clear' evidence on the subsequent performance of analysts' effort. Our central objective is to investigate the value of analysts' performance.

Analyst recommendation is of more interest to academics since it proposes a conflicting conclusion to the market efficiency theory. According to the efficient

market theory, there seems to be no room for the ‘value of recommendation’ since the notion of efficient market indicates that prices already incorporate all available information including analyst recommendation information. In the efficient market, futures stock prices are inherently unpredictable since they are driven by future events and information. In a classic paper, Grossman and Stiglitz (1980), argue that there are some benefits to analyzing and researching stock information but competitive forces drive those benefits down to the “opportunity cost” His explanation is straightforward. If information has no value, no one will research any information. And, if no one care about and researches for information, stock prices could not reflect or incorporate available information. With this situation there will be no room for analysts so. But, the real world proved to be different story. There are many stock analysts doing their jobs in all stock markets. According to Grossman and Stiglitz (1980), they contend that as long as information is costly, there must be rewards to researching companies and hence there are some benefits to analyzing and researching stock information but competitive forces drive those benefits down to the ‘opportunity cost’.

The Thai market data are also appropriate to test the analysts’ value since Thailand is an emerging market, whereas information is required to efficiently disseminate. The attractiveness of such emerging stage regarding analysts’ recommendations is that the analysts’ information can be considered as being ‘insider’ to investors since not (at least not much as developed market) all participants can have access the recommendations. In this circumstance, some investors may use the analysts’ recommendations to capture the ‘extra returns’ prior to the announcement dates. Also, in low efficient economics, information can be used post to the events since investors can herd on the received information. These features (the insider and the herding) are of our interest to discover and it has not been yet studied in other developed markets. Our test, therefore, includes both the pre and post recommendation periods. The abnormal trading volume is also emphasized and examined in our study since it can reveal whether investors considerably use the recommendation information in their trading or not.

We find that the market adjusted returns on the 3-day period centered on the recommendation dates are significant and positive of +0.41% for strong buy and +0.27% for buy recommendations. The excess return is significantly negative of - 0.25% for sell recommendations. Prior to the event dates, we find that only ‘strong buy’

recommendation has a significant and positive return of +0.64%. This result reflects an ‘insider’ use of recommendation information on investors’ trading. Post to recommendation dates, we find that the cumulative abnormal returns (market adjusted) are significantly positive at 2.83%.

Further investigations on calendar-time investment on each portfolio reveal that positive significant value for alpha is found only for the strong buy recommendations portfolio. Our findings support the informative value of ‘strong buy’ recommendations. We cast doubt on the short sell limitation on the Thai market that might reduce the power of sell recommendations information.

As for academic, this paper expands the frontier of knowledge regarding the analyst recommendation. We hope to add evidences to the analyst research community with a different market data setting on the Thai stock market.

This paper is structured as follows: the first Chapter is the rationale of the study. The second chapter describes important characteristics and analysts’ roles in the Thai stock market. The third chapter shows literature relevant to this area of study. The fourth chapter discusses on the descriptive data and methodology used. The fifth chapter presents the returns behavior following the recommendations and also shows results of abnormal volume on the event dates. Finally, the last chapter summarizes the overall paper.

Chapter 2

Stock Exchange and Analysts' Industry

The Stock Exchange of Thailand and the analyst's industry

The Stock Exchange of Thailand, whose stock market has started trading since 1975, is the major national market in Thailand. The market is classified as an emerging stock market in which legal and regulatory systems are strong relative to other developed markets. The Thai stock market has the capitalization of about \$120 billion which is relatively small compared to the \$13 trillion market capitalization of the U.S. stock market and to the \$4 trillion market capitalization of Japan stock market. Despite its small size, we can observe some developments on the trading during the past decade. For example, the market capitalization, the trading volume, number of stocks and number of new issue firms are consistency increasing each year (appendix A1). For 1994 to 2004, the market capitalization increased about 37%. The underdeveloped market characteristic of Thailand is characterized by many features such as 'high degree of asymmetric information among participants' (Kim et al. (2004)), or 'high involvement of family owners' (Wiwattanakantang (2000)). It is also noted by Kouwenberg and Salomons (2005) that cloudy relationship between value premium and macroeconomic conditions is observed in this market which they mention that this is a characteristic of a less developed country.

The Thai stock market also differs from developed markets in terms of trading processes such as the short sell limitation. Prior to Jan 3, 2001, short sell activity was not allowed. Since that time, short selling is allowed but still limited for only 6 brokers that have the short sell-trading license. Clearly, in this market, the short sell trading is still very limited. These features make this market more unique to study the effect of 'value' from analysts' recommendations especially for the 'underperform' or 'the sell' recommendations.

The analyst industry performs its function in similar fashion to those in the developed market. Stock analysts follow the stocks for they are expert, investigation through the due diligent process, and make a recommendation to their clients (sell-side analysts). Analyst is quite a professional career in the stock market and also to the Thai

market. The S.E.T. requires analysts to have license such as the CFA or CISA¹. Analysts in the Thai stock market may be performed by the Thai analysts who work for local brokers or foreign analysts who work for foreign brokers in Hong Kong, Singapore or Malaysia. What make the analysts' industry in Thailand different from the foreign analysts is that most analysts' recommendations on the Thai market are publicly used by the individual investors who are clients to the local brokers on a free basis where as the foreign analysts prepared the recommendations and distributed to their executive clients on a premium basis. And most of the foreign analysts' executive clients are institutional investors or larger private funds who will contribute their funds to the recommended companies. Therefore, according to our interviewing with the local analysts, covered companies tend to favor foreign analysts more than local analysts. This situation may be a factor that makes a Thai investors herd to foreign investors on their investment decision.

¹ Certified Investment and Security Analysts: the local analyst license.

Chapter 3

Literatures

Literatures

Prior and relevant studies document the results of the analysts' recommendations in various scenarios. Commonly, the first area that research attempts to find is how analysts' recommendations affect return and volume of recommended stocks on the event dates. In other words, this area of research attempts to find whether investors can benefit from trading using analyst recommendations or if they pay attention to changes in recommendation. Examples of such research are Womack (1996), Khanthavit (1999), Desai et al. (2000), Barber et al. (2001), Jegadeesh et al. (2003). Most of the research finds that returns on the stocks following the recommendations are correlated with the level of recommendations, i.e. if analysts recommend 'Buy', the subsequent abnormal returns are positive. Amid to this discovery, many papers document some variations of that 'benefit'. Barber et al. (2001) find that the abnormal returns of stocks following analyst recommendations will be less significant when they include the trading cost in the analysis. Also, Irvine (2005) shows that the returns on the first-coverage stocks are relatively higher than other covered stocks. In details, Barber et al. (2001) constructed their test using 36,000 recommended stocks which were analyzed by 269 financial companies and 4,340 stock analysts into 5 levels of recommendations:- Strong Buy, Buy, Hold, Sell and Strong Sell. They used data from Zacks database during 1986 to 1996. Performance evaluation on each portfolio was shown by computing value weighted returns on the stocks from the portfolio. They discovered the 'gross' abnormal return on the portfolio. However, after controlling for market risk, market to book value factor and price momentum affect, the abnormal returns could not be observed.

In addition to the results found on benefit of trading on the 'level' of recommendations, results also indicate that investors can benefit from 'changes' of recommendations. For example, Womack (1996) indicates that coverage stocks in which analysts adjust their recommendations from low level to high level (for example, the mean unadjusted three-day return for add-to-buy recommendation is +3.3 percent) show a positive performance. In the opposite case, the coverage stocks which change

from high level to low level show a negative performance (for example, the mean unadjusted three-day returns for add-to-sell recommendations is -4.7 %).

In the Thai stock market, Khanthavit (1999) evaluated the value of recommendations publicized by brokerage houses using the data during the bear market period (March, 7, 1993 to March 3, 1997). These data were obtained from the Manager Information Services: MIS. Khanthavit (1999) described the limitation of the data which were available only for the 'Buy' recommendations. His research evaluated the ability of analysts in 3 aspects; market timing ability, industry identification ability and stock selection ability. Results found that price increases for recommend stocks occurred on Monday and Tuesday for the week that recommendations are published. Investors could benefit from the recommendations if they received the information before Monday or Tuesday, and held the recommended stocks for one week. He found that the recommendation value was significant at 1.181 per cent for a one-week holding period if the investors made the investment on Monday or Tuesday. Longer than this, the prices fell afterward. The one-month recommendation value was negative regardless of the day the investment was made. Khantavit (1999) also indicated that brokers and sub-brokers do not have both market timing ability and stock selection ability.

Irvine (2003) and Chan et al. (2004) explored the returns following analysts' initial coverage or stocks that recommended by analysts for the first time. The results indicated that there were significant differences between returns on initial coverage stocks and returns on other recommended stocks. These results supported the 'Liquidity hypothesis' developed by Brennan and Subrahmanyam (1995) who asserted that an increase in analyst coverage and recommendations promoted the liquidity to the stock market. In their paper, they captured the important paradigms of price formation by Kyle (1984, 1985). According to Kyle, trading by investors who possess superior information imposes significant liquidity costs on other participants due to adverse selection. Brennan and Subrahmanyam (1995) empirically analyzed the relation between the number of investment analysts following a stock and the estimated adverse selection costs of transacting in the stock, controlling for the effects of trading volume, price level, and return volatility. They found that, other things being equal, an increase in the number of investment analysts tend to be associated with a reduction in the adverse selection costs of transaction, as would be predicted.

One substantial area that draws many researchers' interest involves a test on conflict of interest that might occur from analysts who work in brokerage houses. An example of conflict of interest test, returns on stocks that received analysts' recommendations were investigated and noted the difference when the recommendations are from analysts who covered stocks underwritten by their house and recommendations from analysts who covered stocks they did not underwrite. This area of research can be found on Michaely and Womack (1999), Hong and Kubik (2003). Results from these studies showed a positive bias for recommendations on the affiliate stocks. Cowen, Groysberg and Healy (2003) found that analysts who worked in finance companies that had underwritten and trade business were less optimistic bias relative to analysts who worked in pure brokerage houses.

Researchers also attempt to find analyst's characteristic factors that might affect stock recommendations. Among this research, Sorescu and Subrahyanam (2004) found that returns of stocks following recommendations by experienced analysts are higher than returns derived from recommendations by less experience analysts.

To the question of recommendation's effect on specific stocks, Rajan and Servaes (1997) found that IPO firms recommended by affiliated underwriters perform much worse than IPOs recommended by unaffiliated underwriters. In similar to this research track are Michaely and Womack (1999), Bradley, Jordan and Ritter (2003) and Houston (2004).

Chapter 4

Sample Selection, Descriptive Analysis of Data and Results

A. Data:

Our sample is taken from the I/B/E/S International Detail History and Summary recommendations database which include the recommendations reported for the Thai stock market. We employ the recommendations for the period of 1993 to 2002. Those recommendations were collected from 51 contribution brokers which some of them located on more than one country.² The I/B/E/S categorized the recommendation into 5 levels, which are ‘strong buy’, ‘buy’, ‘hold’, ‘underperform’ and ‘sell’. According to the I/B/E/S, the total number of recommendations for Thai stocks during 1993 to 2002 was 14,909 recommendations which covered 385 listed companies. After dropping firms of no completed data on DATASTREAM, we have 11,461 recommendations and 269 covered firms. Table 1 presents the decomposition of recommendations data and covered firms’ data according to industry group based on the SET industry group classification.

[Table 1]

From Table 1, we can observe that the number of analysts’ recommendations varies across industry group. According to this variation, Financial, Property and Construction, Services and Technology have more covered firms relative to other industries (Agro & Food Industry, Consumer Products, Industrials, Rehabco, Resources). Table 2 further disaggregates the recommendations into 5 categories according to the I/B/E/S classification and also presents the data according to industry groups.

[Table 2]

Among all recommendations, a ‘strong buy’ recommendation has the largest number of recommendations (35.56%), the second largest number of recommendations is on the ‘sell’ recommendation (25.67%). This number is very close to the number of

² For example, one contribution broker, DBS VICKERS provides the recommendations to I/B/E/S both from Hong Kong and Singapore.

‘hold’ recommendation. These results support other findings that stock analysts incline to issue favorable reports over unfavorable reports (Womack (1996)). Results on industry desegregation also posit that ‘strong buy’ still has the largest number of recommendations for every sector except for the ‘Rehabco’ industry.

B. Average Rating Scale

We used the ascending rating scale consistent with the I/B/E/S reported recommendation. On this rating scale, a rating of 1 represents strong buy recommendations, 2 a buy, 3 a hold, 4 an underperform and 5 a strong sell. Table 3 provides a descriptive statistics of recommendations and also the average rating on a yearly basis from 1993 to 2002.

[Table 3]

On total year average, the number of firms that analysts follow and report recommendations is 130 firms (covered firms in column 2) per year during 1993 to 2002. This number is proportionate to 32% of listed firms in the market (column 3). The proportion of covered firms changes from a maximum of about 44% (1993 and 1994) to the lowest proportion of approximate 25% (during 1996 to 2000). Then this proportion increases to about 30% (in 2001 and 2002). These variations may be due to a financial crisis that occurred in Asian markets starting from 1996. The average number of recommendations per year is 1,146 issues. The number of recommendations each year (column 5) varies in similar pattern to those found in the columns 3 (number of covered firms). The maximum number of recommendations occurred in 1994, declining afterwards and then increasing again. The mean number of brokers and mean number of analysts per year are 25 and 143 respectively (column 6 and column 7). Finally, the last column presents the average entire analyst rating per year. Annual changes in average rating indicate that analysts’ recommendations are more unfavorable during the financial crisis (years 1996, 1997 and 1998) relative to other periods. From 1998 onward, the analysts’ recommendations average rating increase again. These systematic variations across changes in economic periods may be due to changes of analyst’s perspective on listed firms or due to variations of performance of listed firms or it can be both.

On a daily basis, each broker issues recommendations on average of 3.29 recommendations with the median being 1.75. (Table 4). The maximum recommendations per broker is 72. The mean and median daily data of recommendations per analyst are 1.54 and 1.00 recommendations respectively. The maximum recommendations per analysts is 54 and minimum of 1. For each stock, a maximum recommendation is 2 recommendations. And, for each analyst, he/she covered the stock on average of 1.49 stocks per day. The maximum of stocks covered by each analyst is 54. From the I/B/E/S, there are 51 brokers and 594 analysts who continually publish their recommendations in this market. Compared to Barber et al. (2001), covered firms per analysts in the Thai market are lower than that in the U.S. (covered firms per analyst, on average are 13).

[Table 4]

C. Consensus Recommendations

On each day, each stock may receive more than one recommendation from many analysts. We computed a consensus rating scores for each stock by averaging the rating score and using a cut-off scale to form the consensus. The average scores between 1 to 1.5 are the ‘consensus strong buy’, greater than 1.5 to 2.5 are consensus ‘buy’, from 2.5 to 3.5 are consensus ‘hold’, from 3.5 to 4.5 are consensus ‘underperform’ and average score up from 4.5 to 5 are consensus ‘sell’ recommendations. Our results which required reporting the level of recommendations within this paper will be based on the consensus recommendations. For short, we call consensus recommendations by excluding the prefix of ‘consensus. For example a consensus strong buy is called only as ‘buy’. We further investigate the transition structure of consensus recommendations. In our preliminary exploration, we divide all recommendations into to two groups. ‘Group up’ is the analysts’ recommendations in which its average rating score increases on the next adjacent recommended date. Denote, $\Gamma_{i,t}$ is the average rating score on day t , for stock i and $\Gamma_{i,t+1}$ is the average rating score on day $t + 1$, for stock i then for ‘group up’,

$$\Gamma_{i,t+1} - \Gamma_{i,t} > 0$$

And for ‘group down’, the average rating score decrease on the next adjacent recommended date, or

$$\Gamma_{i,t+1} - \Gamma_{i,t} < 0$$

The results from Table 5 presents the average number of days that analysts increase the consensus average rating scales up on next consecutive recommendations is 38 days with a maximum of 2,598 days. The average elapsed time (in days) for downward adjustment on the consensus average rating scales is 47 days with a maximum of 3,045. This point indicates that analysts take a longer time on their downgrade recommendations.

[Table 5]

The results from Table 5 show that analysts take a longer time on the downgrade revision of recommendations. However, they are not different in terms of the magnitude of revision. For example, the downward and upward adjustments of consensus average rating scores are equal (-2 and +2).

According to the transition structure (Table 6) of consensus average rating scores, most changes in recommendation are reiterated from ‘strong buy’ to ‘strong buy’. Our results indicate that good quality stocks (strong buy recommendations) have tendency to retain their quality while bad stocks show less persistence since the number of events is smaller for reiterated changes from a 5 to 5 rating scale.

[Table 6]

On average, reiterated changes (can be observed in the diagonal cells) on the highest and lowest recommendations levels (changes from 1 to 1 and changes from 5 to 5) take longer time period compared to other reiterated changes (changes from 2 to 2, 3 to 3, and 4 to 4). The average days in the reiterated changes from 1 to 1 are 49 days and the average days in the reiterated changes from 5 to 5 are 50 days. The reiterated changes from 2 to 2, 3 to 3 and 4 to 4 have the average days of 23, 37 and 21 days respectively. Median days are found to be not much different except for the reiterated from sell to sell (5 to 5). These results indicate that analysts take relatively more consideration to reconfirm recommendations on extreme sides especially the extreme negative consideration (confirm of sell recommendations).

The maximum days occurs in a transition from a rating score 4 to a rating score 2 (3,045 days) while the fastest change of rating scales uses only 1 day and it is found in every transition.

The most fluctuations occurred in the changes from underperform to buy recommendations (from 4 to 2) with the standard deviation (S.D.) of 599 days.

Research Design

We employ two approaches to test for the value of recommendations similar to Barber et al. (2001); the event study approach and the investment or calendar-time approach. The event study approach evaluates the performance based on the abnormal market-adjusted returns that might occur on the publication dates or the event dates. The calendar-time approach, which is a suitable test for abnormal returns to a number of investment strategies, is used to investigate investment strategies with respect to consensus recommendations.

A. Event study approaches

Two approaches of event study are used. The first approach measures the abnormal returns based on a market returns benchmark. The second approach computes the abnormal returns relative to the returns predicted by the CAPM model. Event is defined as the date at which analysts recommendations are publicly available to the market. We use the recommendation dates on the I/B/E/S and observe the returns around the recommendation periods which can be divided into 3 sub-periods. The first period; 5 days prior to publicly recommendations, is called pre-event date (day –6 to day –2). The 5-day period is suspect to test since it was found in Khanthavit (1999) that this 5 day period provides abnormal returns to investors. The second period is the 3-day period centered on the event dates; day –1 to day +1. And, it is called the event date. The third period; day +2 to day +121 is called the post-event date. The holding period abnormal returns of recommended stocks is analyzed. We define the stock returns as follows:

$$r_{i,t} = \frac{(p_{i,t} - p_{i,t-1})}{p_{i,t-1}} \quad (1)$$

where $r_{i,t}$ = return of stock i at date t

$$p_{i,t} = \text{price of stock } i \text{ at date } t$$

$$p_{i,t-1} = \text{price of stock } i \text{ at } t-1$$

We compute the market abnormal returns by first computing the returns of stocks i for T days and the market returns for T days as follows.

$$R_{i,T} = \prod_{t=1}^T (1 + r_{i,t}) - 1 \quad (2)$$

$$R_{M,T} = \prod_{t=1}^T (1 + r_{M,t}) - 1 \quad (3)$$

where $R_{i,T}$ is the T days holding period returns on stock i
 $R_{M,T}$ is the T days holding period returns on market
 $r_{i,t}$ is the returns of stock i for day t
 $r_{m,t}$ is the returns of market for day t

We compute the Holding period abnormal returns (HPAR) as suggested in equation 4 as follow:

$$HPAR_{i,T} = R_{i,T} - R_{M,T} \quad (4)$$

The abnormal returns (HPAR) are averaged by the number of recommendations in which the average abnormal returns (AR) is presented in equation 5.

$$AR_T = \frac{1}{n} \sum_{i=1}^n HPAR_{i,T} \quad (5)$$

Where n is the number of recommendations in each category

Under the null hypothesis of no abnormal return, the t – statistic is computed to show the significance of the return results as:

$$t = \frac{AR_T}{\hat{\sigma}_{AR_T}} \quad (6)$$

where $\hat{\sigma}_{AR_T}$ is the standard error of AR_T

In developed markets where many analysts exist and many analysts' recommendations are published, the number of recommended stocks is fairly close to the number of stocks in a well diversified portfolio. Market returns in such markets can be a good proxy to test for the abnormal returns. However, in the Thai stock market

where published recommendations can not cover a large number of stocks, the market returns used to justify the relative abnormal return, in this case, may be claimed as not appropriate. We employ the market and risk adjusted returns (Brown and Warner (1980)) to further test for the abnormal returns on recommended stocks. In this test, the abnormal returns as;

$$\varepsilon_{it} = R_{it} - \beta_i (R_{mt}) \quad (7)$$

where R_{it} , R_{mt} are defined as the risk premium ($R_{it} - R_{ft}$) of stocks i and market returns ($R_{mt} - R_{ft}$) respectively. We employ the 1-month rate on a repurchase market (Repo rate) from the Bank of Thailand (B.O.T.) as proxy for interest risk-free rate of returns. The pre-event dates (5 days prior to the recommendations), the 3 days surrounding the recommended dates (day $t = -1$ to day $t = +1$) and 120 days post-event dates are used to examine the abnormal returns. The systematic risks (Beta: β_i) is computed using the 90 day historical returns back from the event dates on the recommended stocks.

B. The Hypothesis

Event time study is a very useful approach to classify the stock market according to efficiency market theory. The basic and first null hypothesis is that the Thai stock market poses a semi-strong form of efficient market.

One characteristic of an emerging market can be found on the quality of information dissemination through the market. If stock prices adjust instantaneously on the event dates, we should not observe any abnormal returns prior to the recommendation dates. As mentioned in the first section, we hypothesize that some ‘insiders’ to the recommendations or a ‘low’ dissemination efficiency to the recommendations is present. In this circumstance, abnormal returns prior to the event dates should be found.

We also analyze whether the recommendations still maintain their value in the long run. Value of recommendations in the long run reflects herding of information by investors. Again, in the circumstance of low efficiency of information dissemination, investors react to prior information as herding behavior. Our market setting, therefore, emerges as the third hypothesis which questions on the value of analysts’

recommendations post recommendations dates. In other words, we hypothesize that the abnormal returns on the analysts' recommendations should be observed post after the recommendation dates.

C. Investment Approach

In this section, we compute the returns of portfolios following the analyst recommendations. Portfolio daily returns (one-day) for the recommended stocks can be an investment strategy based on analysts' recommendations. Thus, the results can be interpreted as investment strategies following the analyst recommendations. Portfolio construction is conducted using a similar approach as used in Barber et al. (2001).

$\psi_{i,t-1}$ is defined as the rating scales on analyst recommendations as used in the event study. On each day that has the data set of recommendations, the scales are averaged by number of analysts who covered the stocks. The average rating scales is then used to categorize the recommendations into each group on a daily basis. For example, if the average value or, $\bar{\psi}_{i,t-1}$, is 3 it is classified as 'consensus hold' portfolio. Mathematically, the average rating scales can be computed as

$$\bar{\psi}_{i,t-1} = \frac{1}{n} \sum_{j=1}^n \psi_{ijt-1} \quad (8)$$

where ψ_{ijt-1} is the recommendations of stock i from analyst j at date $t-1$ and n is the number of analysts who covered the stock. After portfolio formation at date $t-1$, we compute the value weighted returns for each portfolio on day t . The value weighted returns of the portfolio are calculated as

$$R_{pt} = \sum_{i=1}^{n_{pt}-1} x_{it-1} R_{it} \quad (9)$$

where

R_{pt} = the daily returns for the portfolio on date t (1 day after portfolio formation)

x_{it-1} = market value for stock i as computed by closing prices of stock on date $t-1$ and divided by the aggregate market capitalization of all stocks in portfolio p as of closing prices on the same date

R_{it} = the return on stock i on date t

n_{pt-t-1} = the number of stocks in portfolio p at the close of trading on date $t-1$

To evaluate the performance of each portfolio, we begin by computing market-adjusted returns for each of the constructed portfolios and use the theoretical framework of CAPM to determine the following time-series regression:

$$R_{pt} - R_{ft} = \alpha_p + \beta_p(R_{mt} - R_{ft}) + \varepsilon_{pt} \quad (10)$$

We also employ an intercept test model developed by Fama and French (1993) to strengthen our portfolio performance evaluation as follows:

$$R_{pt} - R_{ft} = \alpha_p + \beta_p(R_{mt} - R_{ft}) + \chi_p \text{SIZE}_t + \delta_p \text{BVMV}_t + \varepsilon_t \quad (11)$$

where

α_p = the estimated CAPM intercept

β_p = the estimated market beta

SIZE_t = the difference between the month t returns of a value weighted portfolio of small stocks and one of large stocks, and

BVMV_t = the difference between the month t returns of a value-weighted portfolio of high book-to-market stocks and one of low book-to-market stocks

Substantial evidence shows that the constructed portfolios with respect to analyst recommendation of different size may report significant abnormal portfolio returns (Womack, (1996), Barber, Lehavy, Desai, Liang, and Singh (2000)). For smaller size firms, there are fewer analysts following relative to large firms. As a result, less information is available for these small size firms. In this circumstance, the impact of new information should be stronger for the smaller firms. Therefore, we expect that higher abnormal returns should be higher for smaller firms. BVMV_t can be proxy for the growth of firms. We expect analysts to interest and issue more recommendation on the high growth firms or firms with low BVMV_t . On a similar basis regarding the size effect, the abnormal returns should be higher for these firms. We, therefore include these two risk factors in our performance evaluation models.

The models in equation (10) and (11) yield two testing parameters of α_p and β_p . The Jensen measurement of performance, α_p , can be indicated whether the constructed portfolio is superior or inferior in market timing and/or stock selection. A superior portfolio has a significant positive α_p showing the selection ability of the investment strategies. In contrast, an inferior portfolio's returns consistently fall short of expectations based on the CAPM model (equation 10) and on the Fama-French model (equation 11) giving consistently negative residuals. In such a case, the α_p is a significant negative value. We employ the α_p value to test the performance of the investment strategies constructed with respect to analyst recommendations.

C. Abnormal Trading Volume

Trading volume on the analyst's recommendation dates is also of interest to many researchers (Womack (1996), Jegadeesh and Kim (2003)). Such test indicates how the market responds to the issuance of analysts' recommendations. Womack (1996) investigated for abnormal volume by calculating a ratio of volume on the recommendation dates relative to the average volume three months centered to the recommendation periods. Womack (1996) finds that the abnormal volume on the reported recommendations date is approximately 190 percent above normal for added-to-buy and about 300 percent above average for added-to-sell recommendation changes. Jegadeesh and Kim (2003) also test for the trading volume around recommendations revisions of the G7 stock market countries. They find that analysts add the most value in the U.S. and Japan, and the investors in these countries trade more intensely following recommendation revisions than in the other countries. This result seems to indicate that the intension of trading is correlated with the level of a developed stock market. We also perform the volume test on the recommendation periods. As in Womack (1996) and Jegadeesh and Kim (2003), abnormal trading volume is computed as a ratio of volume on recommendation dates over the average volume centered on the recommendation date. We use the 20 days and 50 days pre- and post- event dates to compute the normalized volume. So, our test for a 20 days abnormal volume can be written as:

$$\overline{w}_{i,T} = \frac{V_{i,T}}{\frac{1}{38} \left[\sum_{t=-20}^{t=-2} V_{i,T} + \sum_{t=2}^{t=20} V_{i,T} \right]} \quad (12)$$

where $\varpi_{i,T}$ is the abnormal trading volume observed on stock i on date T (recommended date) relative to the average trading volume of stocks centered on recommendation dates. $V_{i,T}$ is the trading volume of stock i on date t .

Chapter 5

Empirical Results

A. Returns of stocks and analyst recommendations: The Event Study.

Table 7 presents the mean, median, maximum, minimum value and standard deviation for the three-day abnormal returns (AR_T) of stocks that their recommendations change on the two consecutive recommendation dates. AR_T is computed as equation 5 which is the average risk adjusted abnormal returns. We denote 0 to 1 transition matrix as the first time analyst cover stocks. We hypothesize that abnormal returns should be observed consistently with direction of changes on the recommendations. For example, upgrade scores (i.e., the transformation from 2 to 1 or from 3 to 1 etc.) should have a positive abnormal returns since such upgrade recommendations scores represent the coming of positive information on recommended stocks. In contrast, the downgrade information matrices (i.e., the transform from 1 to 2 or from 2 to 3) can be interpreted as negative information on recommended stocks. From the table, we find that the mean abnormal returns of initial coverage of stocks do not have a positive abnormal returns as found by Irvine (2003). We also find that all initial coverage abnormal returns are negative and not significant. To us, initial coverage returns could not convey any special information on recommended stocks. From the table 7, our results indicate that the market favorably responds to all consensus upgrade recommendations (below the diagonal of matrix on Table 7) except the upgrade from ‘sell’ to ‘buy’ (from 5 to 2) recommendations. However, the number is significant for only the recommendations from ‘buy’ to ‘strong buy’ recommendations (from 2 to 1). For downgrade recommendations (above the diagonal of matrix), the results indicate significant negative average abnormal returns for only the downgrade from ‘hold’ to ‘sell’ (from 3 to 5) recommendation. Our results tend to support the hypotheses of a favorable response of the market to upgrade and an unfavorable response to downgrade recommendations from stock analysts. On the standstill recommendations which represent the unchanged consensus recommendation of the two consecutive periods, the mean abnormal returns show significant positive level on the ‘strong buy’ recommendations. This result obviously illustrates that the market also reacts positively to the insistence of analysts’ consensus of ‘strong buy’ recommendations. The mean abnormal return of transition from ‘strong buy’ to ‘strong buy’ recommendation (from 1 to 1) is significantly positive at 0.72%. Other consensus

on the standstill recommendations:- the transition from ‘buy’ to ‘buy’, ‘hold’ to ‘hold’, ‘underperform’ to ‘underperform’ and ‘sell’ to ‘sell’ recommendations (the diagonal matrices) are not significant in their mean abnormal returns.

[Table 7]

The market adjusted abnormal returns (AR_T) are shown in Table 8. The three panels of table 8 present the results of the mean, median, maximum, minimum value and standard deviation of the market adjusted abnormal returns. Overall, an almost monotonic decrease of the mean abnormal returns is observed in Panel a) and Panel b). This result indicates that the market responds accordingly to the ‘recommendation’ by stock analysts. Significant and positive abnormal returns on the ‘strong buy’ for all panels indicate that the market seems to react positively to the ‘good quality’ stocks recommended by stock analysts. Moreover, this market reaction occurs for all testing windows; prior to recommendation period, on the recommendation period and post the recommendation period. The pre-event periods (day -6 to day -2) indicates positive abnormal returns on the consensus ‘strong buy’, ‘buy’ and ‘hold’ recommendation portfolios with the mean abnormal returns equal to 0.64%, 0.30%, and 0.02% respectively. However, only the ‘strong buy’ is significant (at 0.05% significant level). According to the median of average returns, only the ‘strong buy’ is positive with the median return of 0.18%. Results observed from Panel a) indicate that recommendation information can be considered as ‘insider’ to investors in the market since some ‘insiders’ to this information can earn extra returns before recommendations dates. On the event dates period (day -1 to day +1), the mean abnormal returns of ‘strong buy’ and ‘buy’ portfolios are significant and positive with the means of 0.47% and 0.27%, while the ‘sell’ recommendation portfolio is significant and negative with the mean - 0.25% respectively. Note that median value of the ‘hold’ recommendation is negative while its mean is positive. Relatively higher standard deviations over the ‘hold’ recommendations are also remarkable. The post-event recommendations (Panel c) inform that the market still responds favorably to the good quality stocks after analysts publish their recommendations (day +2 to day +121) with the mean of 2.83%. In the long run after recommendation, the ‘hold’ recommendation portfolio also indicates significant and positive abnormal returns of 2.27%.

[Table 8]

For robustness check, we further test for average abnormal returns using market and risk adjusted returns based on the CAPM framework. Results from the market adjusted returns are present in Table 9. Note that the number of recommendations tested for this approach are not equal to the recommendations we used and presented in Table 8. In this test, our data recommendations start from January 1994 to December of 2002 (recommendation on Table 8 starts from November 1993) due to the available risk free rate from the Bank of Thailand. The market and risk adjusted returns are presented in Table 9. The mean returns of the pre-event, event, and post-event date are significantly positive for ‘strong buy’ recommendations at .006, .004 and .024 respectively. The mean of event date market and risk adjusted returns for ‘sell’ recommendations are negative and significant at -0.003. And, for the 120 days post-event, result further show that the mean market and risk adjusted returns for the ‘hold’ recommendation are significant positive at 0.019. Similar to the market adjusted returns test, the mean returns for ‘strong buy’ recommendations are positive for the three windows periods. Figure 1 clearly presents the results from Table 8 (Market adjusted abnormal returns). From Figure 1, prior to recommendation dates returns are noticed for strong buy, buy, hold, and underperform recommendations. These results support our ‘insider’ hypothesis. The event-window of abnormal returns confirms that the market is a semi strong form inefficient while evidence of the post-event date shows the market herding reaction to the recommendation information. The herding or momentum reaction to recommendations is also observed in Figure 2. Figure 2 best describes the herding that is explicitly seen for the ‘strong buy’ recommendations.

[Table 9] and [Figure 1]

B. Calendar time portfolio performance evaluation

As explained in our testing methodology, we form portfolios based on consensus recommendations of each day. Then, the one-day consensus returns on each stock are averaged by its market value weighted. Each portfolio’s descriptive characteristics are presented in Table 10. The daily average number of firms in each portfolio is shown together with the minimum number, maximum number, and the median number of firms. From this table, we can observe that average number of firms is highest on

‘strong buy’ and the number of analysts is also highest on the ‘strong buy’ recommendation. These results confirm our previous remarks that analysts relatively concentrate their interest on ‘good quality’ stocks.

[Table 10]

Calendar time portfolio evaluation is conducted by the two models. Table 11 presents the regression results on the two models; the CAPM and the Fama-French model. Panel a) is the regression coefficient and its test statistics are based on the CAPM regression model according to equation (10). An almost monotonic decrease of intercept coefficients can be observed on both models which can be interpreted as more highly rated stocks pertain to higher abnormal returns. The intercepts of ‘strong buy’ portfolios are also significantly positive for both models. These results of the abnormal returns insist on a higher ‘value’ of the ‘strong buy’ recommendations relative to other type of recommendations for the Thai market. In Panel a) of Table 11, regression coefficients on the CAPM model are significantly positive at a 5% significance level for both the ‘buy’ portfolio and the ‘sell’ portfolio. The results show that analysts on both portfolios (‘buy’ and ‘sell’) concentrate their analysts on the higher than average market risk stocks. However, regression results from the Fama-French model show that the market risk factors are significantly greater than 1 in the ‘strong buy’ and ‘buy’ portfolios which can be interpreted as higher rated recommended stocks have higher than average market risk. Note that we can not observe any significant difference from zero on the size and book-to-market factor in all portfolios.

[Table 11]

Our results of the calendar time study reinforce the value of ‘strong buy’ recommendations. The investment strategy on the consensus strong buy portfolios of stocks yield higher risk adjusted market returns. We do not find, as in other developed markets, that underperform or sell recommendation portfolios yield negative returns. This result may arise from the different market setting which in this case is the limitation on the ‘short sell’ activity. When investors in the market receive the sell recommendations, they do not have as many choices as when they receive the buy

recommendations. We suspect a ‘short sell’ limitation on the market as a reason for these asymmetric findings.

C. Abnormal Volume

We measure the abnormal volume relative to the average of 20 days and 50 days prior to and post the event dates excluding the three days surrounding the recommendation dates. From Table 12, for all portfolios, the market trading volume is significant greater than the normal volume on the issuance of analysts’ recommendations. The positive and significant trading volume can be observed in the ‘strong buy’, ‘buy’ and ‘underperform’ portfolios. The volume of ‘strong buy’, ‘buy’ and ‘underperform’ portfolios are about 13%, 9% and 23% respectively. The findings show that the investors on Thai market respond the stocks analysts’ recommendations by increasing their trading on the recommendation dates.

Chapter 6

Summary and Conclusion

This paper examines analysts' recommendations in the Thai stock market (Stock Exchange of Thailand: SET) and evaluates the 'value' associated with these analysts' recommendations. The recommendation data are from the I/B/E/S database which covers the period from November 1993 to December 2002. Total recommendations of 14,909 are ranked by rating a scale of 1 to 5 on each recommendation, averaging the rating scores by the number of analysts each day and form the 5 consensus portfolios. We test the 'value' of recommendations by observing the portfolio abnormal returns surrounding event dates of publishing the recommendations and on the calendar time using the CAPM and the Fama-French Models.

Market adjusted abnormal returns on the event dates reveal that 'strong buy' portfolio is significant and positive for all windows periods i.e., the pre-event, the event and post-event dates. Mean market adjusted returns are monotonic decreasing within the consensus recommendation portfolios. For example, the mean market adjusted returns of 'strong buy' portfolio is 0.41% on the event dates while the mean adjusted abnormal returns on the 'sell' portfolio is -0.25%. For the 5-day pre-event dates window, this pattern of abnormal returns occurs in similar fashion. We conclude that the value is related to the unique market setting according to our hypothesis. With the above findings, we show that 1) the value of analyst recommendations can be captured prior to the recommendation dates due to 'insider' or 'low efficiency' of information dissemination. 2) the Thai market does not poses a semi strong form efficient market since the abnormal returns are found on announcement dates (event dates) and 3) herding or momentum trading activity is observed post the recommendations especially for the 'strong buy' recommendations.

Calendar time testing on the CAPM and the Fama-French model also indicates that the 'strong buy' recommendations have the most market and risk adjusted returns. The abnormal returns on the 'strong buy' of both models are positive and significant with the mean of 0.29%. The CAPM test show that 'buy' and 'sell' portfolios are associated with the higher than market risk of the portfolio, while the Fama-French model regression reveals that the 'strong buy' and 'buy' portfolios are associated with a

higher than market risk. We also suspect the limited alternatives of investors when they received the negative recommendations (underperform and sell) as a condition for the relatively low value on such negative recommendations.

Also, we performed the test on event dates to observe the abnormal trading volume by computing a volume on the trading dates relative to the average volume 20 days and 50 days centered on the recommendation dates excluding the three days surrounding the event dates. Our results indicate that investors trades higher than average on the event dates. We find that the abnormal volume on the ‘strong buy’ and ‘underperform’ recommendation portfolios are 1.08 and 1.22 respectively.

In summary, this paper brings additional support to the research regarding the value of analysts’ recommendations. We show that a ‘strong buy’ recommendation is an outstanding recommendation which investors can earn abnormal returns using that information. We further add that this ‘value’ is related to the market setting as our hypothesis states.

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Table 1. Decomposition of recommendations and covered firms by industry

Data of recommendations are from I/B/ES database during 1993 – 2002. Covered firms are listed firms in the Stock Exchange of Thailand (SET) which have available relevant data in the DATASTREAM database

INDUSTRY GROUP	No. of Covered Firms	%	No. of Recommendation	%
AGRO&FOOD INDUSTRY	30	11.15	576	5.03
CONSUMER PRODUCTS	25	9.29	284	2.48
FINANCIALS	41	15.24	2411	21.04
INDUSTRIALS	26	9.67	763	6.66
PROPERTY & CONSTRUCTION	41	15.24	2176	18.99
REHABCO	18	6.69	293	2.56
RESOURCES	11	4.09	988	8.62
SERVICES	51	18.96	1856	16.19
TECHNOLOGY	26	9.67	2114	18.45
TOTAL	269	100.00	11461	100.00

Table 2. Decomposition of recommendation types according to industry groups

This table presents the number and percentage of recommendations class according to industry group. Recommendation types are consistent with I/B/E/S categorization of recommendation. I/B/E/S divided recommendations into 5 categories:- Strong buy, Buy, Hold, Underperform and Sell. Industry group classification is based on the Stock Exchange of Thailand.

INDUSTRY GROUP	NO. OF RECOMMENDATIONS											
	Strong Buy	%	Buy	%	Hold	%	Under perform	%	Sell	%	Total	%
AGRO&FOOD INDUSTRY	244	42.36	64	11.11	131	22.74	17	2.95	120	20.83	576	100.00
CONSUMER PRODUCTS	113	39.79	20	7.04	74	26.06	10	3.52	67	23.59	284	100.00
FINANCIALS	839	34.80	199	8.25	623	25.84	98	4.06	652	27.04	2411	100.00
INDUSTRIALS	277	36.30	59	7.73	201	26.34	30	3.93	196	25.69	763	100.00
PROPERTY & CONSTRUCTION	723	33.23	225	10.34	543	24.95	96	4.41	589	27.07	2176	100.00
REHABCO	74	25.26	22	7.51	68	23.21	10	3.41	119	40.61	293	100.00
RESOURCES	389	39.37	117	11.84	239	24.19	56	5.67	187	18.93	988	100.00
SERVICES	690	37.18	160	8.62	448	24.14	77	4.15	481	25.92	1856	100.00
TECHNOLOGY	727	34.39	221	10.45	529	25.02	106	5.01	531	25.12	2114	100.00
TOTAL	4076	35.56	1087	9.48	2856	24.92	500	4.36	2942	25.67	11461	100.00

Table 3. Descriptive Statistics on Analyst Recommendations

The number of listed firms in the Stock Exchange of Thailand (SET) is from the SET Fact Book. The numbers of covered Firms and recommendations data are from I/B/E/S database during 1993 to 2002. The number of covered firms is the number of firms with at least one recommendation in the database. The number of brokers and the number of analysts are also from the I/B/E/S. The figures indicate the number of brokerage houses and number of analysts with at least one recommendation during the year.

Year	No. of Listed Firms	No. of Covered Firms	As a % of Listed Firms	No. of Recommendation	No. of Brokers	No. of Analyst	Average Rating
1993	380	166	43.68	839	16	113	2.73
1994	389	175	44.99	1557	22	137	2.61
1995	416	144	34.62	1328	25	136	2.81
1996	454	122	26.87	1224	24	127	2.89
1997	431	111	25.75	1110	22	143	3.15
1998	418	107	25.60	1152	25	161	3.09
1999	392	107	27.30	1180	27	168	2.59
2000	381	107	28.08	933	26	146	2.60
2001	382	120	31.41	1015	33	148	2.62
2002	389	136	34.96	1123	25	146	2.40
Average	403	130	32	1146	25	143	2.75

Table 4. Daily Basis Description Data of Recommendations

The recommendation per broker is a daily basis data that each broker report recommendations. The recommendation per analysts is a daily basis data that each analyst provides recommendations. Stock per analyst is a daily basis data of stock covered by each analyst.

Daily Data	Max	Min	Mean	Median	S.D
Recommendation/Broker	72.00	1.00	3.29	1.75	5.22
Recommendation/Analyst	54.00	1.00	1.54	1.00	1.89
Recommendation/Stock	2.00	1.00	1.04	1.00	0.12
Stock/Analyst	54.00	0.50	1.49	1.00	1.88
Total number of brokers	51				
Total number of analysts	557				

Table 5 Transition Structure of Recommendations

The analysis of transition structure based on analysts' recommendation during 1993 – 2002. Analyst recommendations are divided into two groups based on their average rating changes presented in the next consecutive published recommendation. Group up are analysts' recommendations whose average rating scores change upward on their next consecutive recommendation while group down are recommendations whose average rating scores change downward. Δ_D is the elapse time (in days) that 'group up' and 'group down' utilizes for their changes in average rating scores. Δ_X represents the average rating scores changes of all consecutive recommendations.

Recommendation Group	ΔD (Date2-Date1)					ΔX (Score1-Score2)				No. of Event
	Max	Mean	Min	Median	S.D.	Max	Mean	Min	Median	
Group Up	3045	47	1	14	192	4	2	1	2	3706
Group Down	2598	38	1	14	114	-4	-2	-1	-2	3742
Group Unchanged	2840	46	1	15	147	0	0	0	0	3212

Table 6 Transition structure of average rating scores

This table shows the number, the maximum, the minimum, the mean, the median and the standard deviation (S.D.) calendar days between changes in or reiterations of recommendations. An average rating score of 1 = strong buy, 2 = buy, 3 = hold, 4 = underperform and 5 = strong sell.

From recommendation of :	To recommendation of :					
		1	2	3	4	5
0 1st time Recommendation	No.of Event	112	19	49	16	71
1 Strong Buy	No.of Event	1,389	426	886	153	711
	Max (Day)	2,840	2,598	2,401	358	1,260
	Min (Day)	1	1	1	1	1
	Average (Day)	49	52	36	24	43
	Median (Day)	15	14	15	9	16
	S.D. (Day)	165	221	104	45	95
2 Buy	No.of Event	435	136	271	53	224
	Max (Day)	1,815	337	370	144	456
	Min (Day)	1	1	1	1	1
	Average (Day)	33	23	28	16	29
	Median (Day)	14	14	13	11	12
	S.D. (Day)	103	37	50	23	61
3 Hold	No.of Event	840	285	598	165	691
	Max (Day)	2,987	2,497	2,598	152	1,910
	Min (Day)	1	1	1	1	1
	Average (Day)	38	38	37	21	42
	Median (Day)	14	13	14	12	17
	S.D. (Day)	134	171	149	24	116
4 Underperform	No.of Event	161	46	155	32	162
	Max (Day)	2,430	3,045	2,222	73	567
	Min (Day)	1	1	1	1	1
	Average (Day)	38	145	34	21	30
	Median (Day)	14	18	11	14	14
	S.D. (Day)	192	599	179	19	56
5 Sell	No.of Event	737	225	680	142	790
	Max (Day)	2,867	387	3,017	195	2,276
	Min (Day)	1	1	1	1	1
	Average (Day)	79	24	46	23	50
	Median (Day)	15	12	19	14	18
	S.D. (Day)	291	44	160	30	125
All	No.of Event	3,674	1,137	2,639	561	2,649
	Max (Day)	2,987	3,045	3,017	358	2,276
	Min (Day)	1	1	1	1	1
	Average (Day)	50	43	38	22	43
	Median (Day)	15	13	15	12	16
	S.D. (Day)	189	204	133	32	107

Table 7. Transition Structure of Abnormal Return

This table shows the number, the maximum, the minimum, the mean, the median and the standard deviation (S.D.) of the average abnormal returns (AR) An average rating score of 1 = strong buy, 2 = buy, 3 = hold, 4 = underperform and 5 = strong sell

From recommendation of :	To recommendation of :					
		1	2	3	4	5
0 1st time Recommendation	Mean	-0.0038	-0.0231	-0.0050	-0.0160	-0.0070
	Max	0.3678	0.1328	0.2788	0.1769	0.2116
	Min	-0.5220	-0.1205	-0.0865	-0.0918	-0.1367
	Median	-0.0089	-0.0429	-0.0173	-0.0362	-0.0073
	S.D.	0.0862	0.0573	0.0715	0.0674	0.0631
	N	112	19	49	16	71
	t	-0.4633	-1.7615	-0.4856	-0.9520	-0.9291
1 Strong Buy	Mean	0.0072	0.0018	0.0026	-0.0012	-0.0030
	Max	0.6638	0.2623	0.7794	0.1336	0.3620
	Min	-0.2513	-0.1523	-0.2609	-0.1437	-0.2337
	Median	0.0034	-0.0004	0.0005	-0.0017	-0.0036
	S.D.	0.0560	0.0470	0.0578	0.0481	0.0546
	N	1389	426	886	153	711
	t	4.7657	0.7918	1.3595	-0.3008	-1.4846
2 Buy	Mean	0.0050	0.0025	-0.0005	-0.0019	0.0002
	Max	0.2441	0.2220	0.3614	0.0889	0.1373
	Min	-0.2386	-0.1873	-0.1793	-0.2011	-0.5497
	Median	0.0028	-0.0042	-0.0075	-0.0040	0.0011
	S.D.	0.0493	0.0555	0.0556	0.0429	0.0599
	N	435	136	271	53	224
	t	2.1133	0.5310	-0.1396	-0.3211	0.0457
3 Hold	Mean	0.0028	0.0043	0.0020	-0.0072	-0.0056
	Max	0.3974	0.3912	0.3450	0.1639	0.3336
	Min	-0.1469	-0.1542	-0.2113	-0.2756	-0.3372
	Median	-0.0003	0.0001	-0.0013	-0.0028	-0.0052
	S.D.	0.0509	0.0552	0.0510	0.0567	0.0606
	N	840	285	598	165	691
	t	1.5802	1.3078	0.9547	-1.6213	-2.4173
4 Underperform	Mean	0.0037	0.0056	0.0017	-0.0052	0.0063
	Max	0.2183	0.0820	0.2061	0.1462	0.3462
	Min	-0.1502	-0.0747	-0.1524	-0.1036	-0.2413
	Median	0.0023	-0.0021	-0.0007	-0.0113	0.0021
	S.D.	0.0523	0.0355	0.0543	0.0569	0.0744
	N	161	46	155	32	162
	t	0.8935	1.0637	0.3858	-0.5135	1.0785
5 Sell	Mean	0.0023	-0.0017	0.0024	-0.0041	0.0005
	Max	0.3501	0.1653	0.4162	0.1567	0.3736
	Min	-0.3493	-0.2495	-0.3203	-0.1633	-0.2665
	Median	-0.0023	0.0002	-0.0009	-0.0102	-0.0011
	S.D.	0.0625	0.0502	0.0655	0.0546	0.0615
	N	737	225	680	142	790
	t	0.9928	-0.5050	0.9413	-0.8915	0.2326
All	Mean	0.0044	0.0016	0.0019	-0.0044	-0.0019
	Max	0.6638	0.3912	0.7794	0.1769	0.3736
	Min	-0.5220	-0.2495	-0.3203	-0.2756	-0.5497
	Median	0.0010	-0.0009	-0.0012	-0.0050	-0.0026
	S.D.	0.0566	0.0507	0.0583	0.0529	0.0603
	N	3674	1137	2639	561	2649
	t	4.7580	1.0342	1.6790	-1.9640	-1.6240

Table 8 Market Adjusted Abnormal Returns on Recommendation Stocks

In these tables, figures represent the number of events, mean, median, maximum value, minimum value and standard deviation of the abnormal returns relative to SET returns. The event date is the recommendation date which is $t = 0$. Panel a) is the abnormal returns prior to the investments recommendations. Panel b) presents the event time (day -1 to day +1) abnormal returns and Panel c) shows the post event (day +2 to day +121) abnormal returns.

Panel a) pre-event date abnormal returns

Event	Pre-event date (day -6 to day -2)					
	N	Mean	Median	Max	Min	S.D.
Strong Buy	4046	0.64%**	0.18%	59.31%	-51.81%	7.14%
Buy	1075	0.30%	-0.09%	41.89%	-30.57%	6.70%
Hold	2818	0.02%	-0.36%	83.16%	-63.00%	10.29%
Underperform	493	-0.38%	-0.33%	60.42%	-42.14%	8.79%
Sell	2904	-0.01%	-0.65%	78.89%	-45.31%	8.75%

Panel b) Event-time abnormal returns

Event	Event date (day -1 to day +1)					
	N	Mean	Median	Max	Min	S.D.
Strong Buy	4,046	0.41%**	0.10%	66.38%	-52.20%	5.64%
Buy	1,075	0.27%*	-0.01%	39.12%	-24.95%	5.10%
Hold	2,818	0.11%	-0.14%	77.28%	-31.81%	7.99%
Underperform	493	-0.35%	-0.40%	17.69%	-27.56%	5.34%
Sell	2,904	-0.25%**	-0.32%	37.36%	-54.97%	5.96%

Panel c) Post-event date abnormal returns.

Event	Post-event date (day +2 to day +121)					
	N	Mean	Median	Max	Min	S.D.
Strong Buy	4,046	2.83%**	-1.30%	401.06%	-93.45%	34.77%
Buy	1,075	1.05%	-2.61%	162.73%	-80.10%	32.49%
Hold	2,818	2.27%**	-3.87%	386.85%	-131.48%	48.31%
Underperform	493	0.41%	-3.81%	256.17%	-90.39%	39.07%
Sell	2,904	0.78%	-6.43%	295.08%	-98.81%	39.16%

Figure 1 Market Adjusted Abnormal Returns on Analysts Recommendations.

This figure presents the mean of market adjusted abnormal returns for all recommended stocks by classified the returns into 5 groups. SET index returns are employed on testing the average abnormal returns. Three period windows testing are used including the pre-event, the event date and the post event.

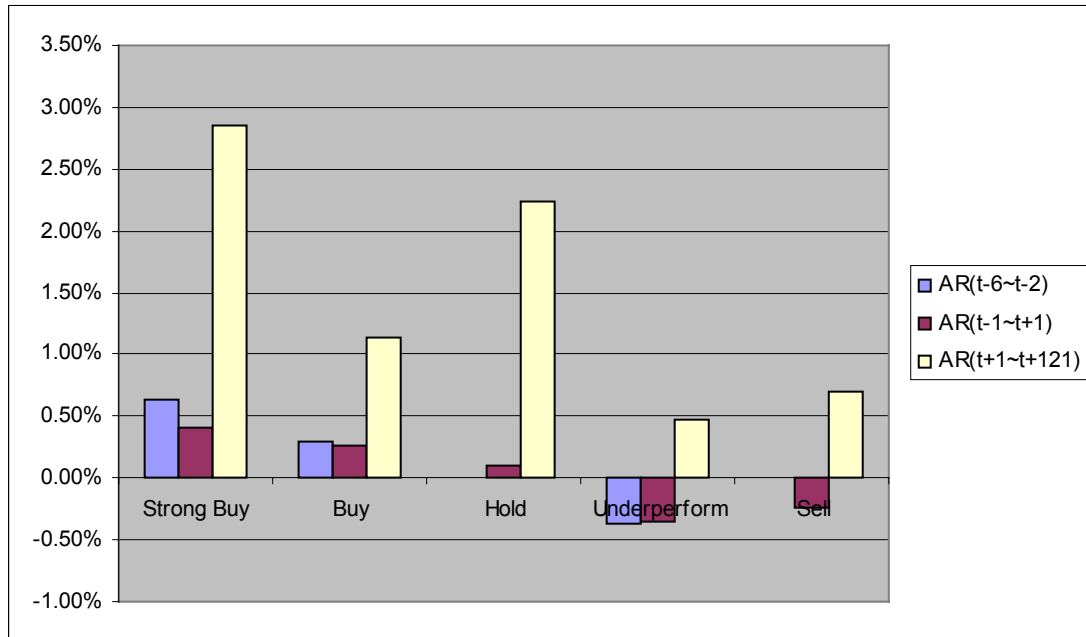


Figure 2 Cumulative Average Abnormal Returns on Recommendations Portfolios

The figure shows the cumulative average abnormal returns using the market adjusted returns on the five recommendations portfolios. Each portfolios is constructed by using the consensus recommendations of stock. Event date is defined as the published recommendation date. Recommendations of stocks are from the I/B/E/S database

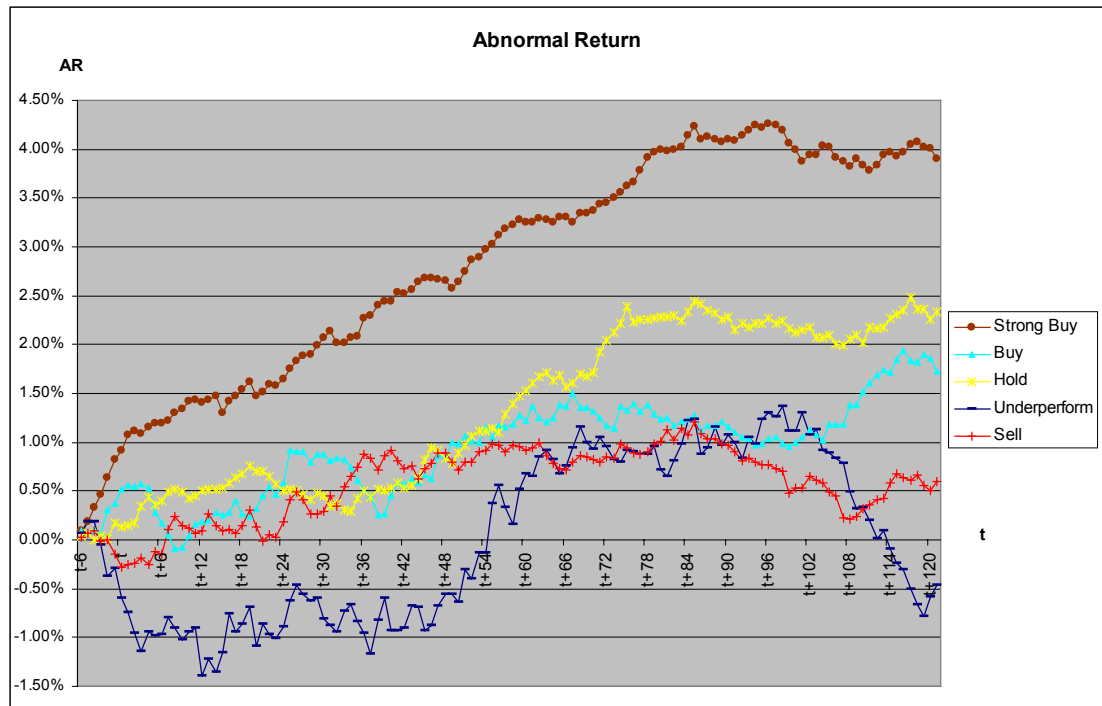


Table 9 Market and Risk Adjusted Returns on Recommendation Stocks

In this table, we use the market and risk adjusted returns to study the abnormal returns on the recommendation stocks or $\varepsilon_{it} = R_{it} - \beta_i(R_{mt})$ where ε_{it} is the abnormal returns and R_{it} , R_{mt} are defined as the risk premium ($R_{it} - R_{ft}$) of stocks i and market returns ($R_{mt} - R_{ft}$) respectively. Risk-free rate of returns are from the 30 days repurchase agreement rate (Repo rate). Mean is the average of abnormal returns on each recommendation type. Panel a) is the abnormal returns prior to the investments recommendations. Panel b) presents the event time (day -1 to day +1) abnormal returns and Panel c) shows the post event (day +2 to day +121) abnormal returns.

Panel a) pre-event date abnormal returns

EVENT	PRE-EVENT DATE (DAY -6 TO DAY -2)					
	Mean	Median	Max	Min	S.D.	N
Strong Buy	0.006**	0.000	0.576	-0.513	0.068	3,596
Buy	0.002	-0.003	0.427	-0.306	0.064	1,122
Hold	0.000	-0.003	0.846	-0.598	0.073	2,623
Underperform	-0.004	-0.004	0.617	-0.398	0.083	551
Sell	0.000	-0.007	0.736	-0.486	0.086	2,605

**significant at 0.05

Panel b) Event-time abnormal returns

EVENT	EVENT DATE (DAY -1 TO DAY +1)					
	Mean	Median	Max	Min	S.D.	N
Strong Buy	0.004**	-0.001	0.573	-0.332	0.054	3596
Buy	0.000	-0.003	0.388	-0.240	0.048	1122
Hold	0.002	-0.002	0.776	-0.317	0.058	2623
Underperform	-0.004	-0.005	0.167	-0.270	0.052	551
Sell	-0.003**	-0.004	0.330	-0.604	0.059	2605

**significant at 0.05

Panel c) Post-event date abnormal returns.

EVENT	POST-EVENT DATE (DAY +2 TO DAY +121)					
	Mean	Median	Max	Min	S.D.	N
Strong Buy	0.024**	-0.014	4.013	-0.960	0.349	3,596
Buy	0.008	-0.029	1.642	-0.957	0.318	1,122
Hold	0.019**	-0.027	3.207	-0.950	0.368	2,623
Underperform	0.008	-0.031	2.649	-1.092	0.377	551
Sell	0.011	-0.049	2.837	-1.003	0.391	2,605

**significant at 0.05

Table 10 Descriptive Characteristics of Calendar Time Portfolios Formed on the Basis of Analyst Recommendation

The table shows the descriptive characteristics of the calendar time portfolios from 1994 to 2002. Each Portfolio is formed by market value average the consensus recommendations. Average number of firms is shown together with the minimum number, maximum number, and the median number of firms. Average number of analysts per recommended stocks is the number of analysts who recommended each stock in the portfolios on the daily basis. Average rating is the average score on each portfolio.

Portfolio	Daily Avg. No. of Firms (min, max, median)	Daily Avg. No. of Analysts	Average Rating
1 (Strong Buy)	2.99 (1, 34, 2)	3.06	1.00
2 (Buy)	2.09 (1, 20, 1)	2.39	1.99
3 (Hold)	2.72 (1, 23, 2)	2.89	2.99
4 (Underperform)	1.71 (1, 13, 1)	2.07	3.96
5 (Sell)	2.73 (1, 32, 2)	2.79	5.00

Table 11 Regression Results: Calendar Time Portfolios Returns

The table indicates the regression results on the calendar time portfolios returns from 1994 to 2002. Dependent Variable is the $R_{pt} - R_{ft}$ where R_{pt} is the daily consensus portfolio returns formed by market value averaging the one-day returns on the recommended date of consensus recommended stocks. Panel a) shows the regression results from CAPM or $R_{pt} - R_{ft} = \alpha_p + \beta_p(R_{mt} - R_{ft}) + \varepsilon_t$ and Panel b) presents the regression results from the Fama-French Model or $R_{pt} - R_{ft} = \alpha_p + \beta_p(R_{mt} - R_{ft}) + \chi_p \text{SIZE}_t + \delta_p \text{BVMV}_t + \varepsilon_t$. R_{ft} is risk-free rate of return which we used the 1-month Repo Rate. t-statistics appear below the coefficients estimates. Each t-statistics pertains to the null-hypothesis that the associated coefficient is zero, except for the statistics on the coefficient estimate of $R_m - R_f$.

Panel a) Calendar Time Regression Results: CAPM

Portfolio	Intercept	Coefficient Estimates for	Adjusted R ²
		$R_m - R_f$	
1 Strong Buy	0.0029** (3.2901)	1.0422 (0.9615)	0.3368
2 Buy	0.0015 (1.3024)	1.2297** (15.2690)	0.4578
3 Hold	0.0001 (0.0602)	1.0707 (2.3472)	0.3675
4 Underperform	-0.0003 (-0.1608)	0.9802 (0.0498)	0.2952
5 Sell	0.0002 (0.2008)	1.0958** (4.7170)	0.4031

**Significant at .05

*Significant at .10

Panel b) Calendar Time Regression Result: Fama-French Model

Portfolio	Intercept	Coefficient Estimates for			Adjusted R ²
		$R_m - R_f$	SIZE	BVMV	
1 Strong Buy	0.0029** (3.1847)	1.0472** (12.4533)	0.0151 (0.1731)	0.0857 (1.2539)	0.3366
2 Buy	0.0016 (1.3284)	1.2525** (17.3206)	0.0659 (0.5239)	-0.1356 (-1.2808)	0.4578
3 Hold	0.0000 (0.0227)	1.0144 (4.8562)	-0.1201 (-1.2496)	-0.0765 (-1.0085)	0.3678
4 Underperform	-0.0001 (-0.0723)	1.0091 (1.3633)	0.0658 (0.3628)	0.1626 (1.0835)	0.2935
5 Sell	0.0001 (0.1307)	1.0876 (5.3051)	-0.0220 (-0.2324)	-0.0425 (-0.5894)	0.4021

Table 12 Abnormal Trading Volume on the Recommended Stocks

This figure of AV is the mean average abnormal volume measured on the recommendation dates. The 20 days abnormal volume is measured by

$$\bar{V}_{i,T} = \frac{V_{i,T}}{\frac{1}{38} \left[\sum_{t=-20}^{t=-2} V_{i,T} + \sum_{t=2}^{t=20} V_{i,T} \right]} \quad \text{Where } V_{i,T} \text{ is the volume of recommended stock } i \text{ on date } t.$$

And, it is presented in Panel a). Panel b) use the same measurement of abnormal volume but different average time period (50 days average). The maximum number (Max) and minimum trading volume (Min) together with their standard deviation (S.D.) are presented.

Panel a) Abnormal volume relative to normalize 20 days period

Event	Abnormal Trading Volumn [-20,-2], [+2,+20]						
	AV	Max	Min	Median	S.D.	N	t
Strong Buy	1.129	75.516	0.001	0.687	2.063	3457	3.686
Buy	1.087	11.059	0.001	0.738	1.258	1090	2.295
Hold	1.096	82.685	0.001	0.666	2.567	2535	1.874
Underperform	1.232	33.812	0.010	0.677	2.224	537	2.419
Sell	1.056	59.204	0.003	0.629	1.876	2519	1.497
All	1.104	82.685	0.001	0.671	2.099	10138	4.969

Panel b) Abnormal volume relative to normalize 50 days period

Event	Abnormal Trading Volumn [-50,-2], [+2,+50]						
	AV	Max	Min	Median	S.D.	N	t
Strong Buy	1.085	56.401	0.000	0.642	1.708	3,457	2.9301
Buy	1.052	11.504	0.001	0.680	1.267	1,090	1.3491
Hold	1.025	37.457	0.001	0.620	1.689	2,535	0.7398
Underperform	1.152	28.493	0.011	0.644	2.101	537	1.6793
Sell	1.050	59.364	0.002	0.596	2.013	2,519	1.2434
All	1.061	59.364	0.000	0.627	1.767	10,138	3.4911

Appendix A1: Major statistics for the Stock Exchange of Thailand (1990 - 2004)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
- SET index	1,360.09	1,280.81	831.57	372.69	355.81	481.92	269.19	303.85	356.48	772.15	668.10
- Daily trading (m Baht)	8,628.00	6,239.91	5,297.33	3,763.57	3,504.79	6,570.56	3,739.66	6,439.83	8,356.91	18,908.02	20,507.75
- Number of listed firms	389	416	454	431	418	392	381	382	389	407	439
Number of new listed firms	43	28	40	5	1		2	7	18	21	36
Total securities	494	538	579	529	494	450	438	449	471	526	579
- market value (m Baht)	3,300,754.79	3,564,568.96	2,559,578.74	1,133,343.88	1,270,631.12	2,172,433.29	1,279,223.84	1,607,309.60	1,981,368.47	4,789,857.03	4,521,894.55
Number of broker	40	44	50	50	28	28	28	28	37	37	37

Appendix A2 Analysts Broker

Broker ID	Broker Name
AMRO	ABN AMRO
ASIAEQFH	PARIBAS
ASIAEQFT	PARIBAS
ASSETFT	ASSET PLUS SECUR
BARINGFH	ING FINANCIAL MK
BARINGFL	ING FINANCIAL MK
BARINGFM	ING FINANCIAL MK
BARINGFT	ING FINANCIAL MK
BEARINTL	BEAR STEARNS
BNPFT	BNP PRIME PEREGR
BZWFT	BZW THAILAND
CAZENOVE	CAZENOVE & CO.
CHARTHSE	ING FINANCIAL MK
CITIFH	DBS VICKERS
CLALEXHK	CLSA LIMIT
CLARION	CLARION CAPITAL
CLFT	CL-THAILAND
CROSBY	SG SECURITIES
CSFBFH	CS-FB (HK)
DAIWAFT	DAIWA SECURITIES
DBS	DBS VICKERS
DBSFH	DBS VICKERS
DKBFH	DRESDNER KLEINWO
DLJFH	DLJ SECURITIES A
ENSKILSS	ENSKILDA SEC.
GOLDINTL	GOLDMAN INTL
HOAREFH	ABN AMRO ASIA
JARDINFH	J.P. MORGAN
JBALLAS	DBS VICKERS
JPMINTL	J.P. MORGAN
KAYHIAN	HSBC SECURITIES
KERRY	KERRY SECURITIES
KIMENGFT	KIMENGFT
LEHMANFH	LEHMAN ASIA
MERRINTL	MERRILL INTL
MGASFI	DEUTSCHE SEC
MGASFT	MORGAN BANK SECU
MGNSTAP	MORGAN STANLEY A
MOTILAFI	MOTILA OSWAL
NOMURAFH	NOMURA RESEARCH
NOMURAFH	NOMURA RESEARCH
NOMURAFT	CAPITAL NOMURA
ONGFT	ONG (THAILAND)
PANMURE	WESTLB PANMURE
PEREGFT	BNP PRIME PEREGR
PHILIPFT	PHILIPFT
PRUDBACH	PRUDENTIAL-BACHE
RHSFM	RASHID HUSSAIN S
SALLYFH	SALOMON SMITH BA
SBCIFL	UBS WARBURG
SBCIFT	WARBURG DILLION

Broker ID	Broker Name
SBCWFP	UBS WARBURG
SCBSFT	SCB SECURITIES
SCHRODFE	SCHRODER HONG KO
SNCFT	MERRILL LYNCH (T
SUNHUNG	SUN HUNG KAI
SVENSKA	HANDELSBANKEN
TISCOFT	TISCO SECURITES
WARDFT	HSBC SECURITIES
WARDLEY	HSBC SECURITIES
WARFH	UBS WARBURG
WARFI	UBS WARBURG
WARFT	UBS WARBURG
WICARRFA	WICARRFA
WICARRFE	INDOSUEZ WICARR
WICARRFT	WI CARR SECURITI
WORLDSEC	WORLDSEC INTER

Appendix A3 Article & Conferences Participation

This paper has been presented in the 3 major conferences as follows:

1. TRF Annual Conference (12-14 October 2005, Cha-um) : Poster Presentation
2. Sungvian Foundation (November 21,2005 Thammasat University)
3. CMU Academic Days (December 8-10,2005): proceeding from the conferences is attached on the title of **Stock Returns Following Analyst Recommendations**

Further, the paper is accepted to present in the major international conferences such as:

1. AFFI2006 on 26 –27 June France
2. ASIAN FMA 2006 on July 10 –13 at Carlton Hotel, Auckland, NZ.
3. FMA2006 on October 10-15 at America Hotel, Salt Lake City, USA.

The acceptance letters on these conferences are attached. (At the time of submission, the conferences are not yet occurred, so there are no proceeding conferences)

Subject: [AFFI 2006] : Communication Acceptation
From: "AFFI 2006" <affi06@iae.univ-poitiers.fr>
Date: Tue, April 18, 2006 2:10 pm
To: ravi@ba.cmu.ac.th

AFFI 2006
Poitiers, 26 et 27 Juin 2006

Dear colleague,

We are pleased to congratulate you that your paper has been accepted for the AFFI 2006 conference.

We thank you for agreeing to register you before May 10. After this date, we will not guarantee your place because of the limited number of place.

Also, do not forget to reserve housing for the 2006 meeting to take advantage of the early rates. You can register for the annual meeting at <http://www.iae.univ-poitiers.fr/affi2006/>

The best papers will be published in two special editions of "La Revue du Financier" and "Frontiers in Finance and Economics".

Sincerely,

For the Organizing Committee,

Jean-Michel Sahut

3 April 2006

Dear Dr. Ravi Lonkani

RE: ASIAN FA CONFERENCE 2006 PAPER ACCEPTANCES

Congratulations! We are pleased to advise that the following paper(s) have been accepted for presentation at the coming Asian FA 2006 conference.

The Value of Analysts' Recommendations in the Thai Stock Market

Please register for the conference as soon as possible by clicking on the following link http://asianfa-admin.massey.ac.nz/registration_er.asp?id=20702. Registration and payment must be received by 8 May 2006 for your paper(s) to be included in the programme of the Asian FA conference. Please note this acceptance is conditional upon the registration of its presenter.

If you have delegated another person to present this paper, please ensure that this person registers by the due date on the Asian FA website.

We will not be providing PowerPoint facilities at the conference for presenters for the parallel sessions. Please bring along your overheads for presentation.

We look forward to seeing you at the Conference in Auckland in July.

Regards,

Martin Young and Lawrence Rose
Programme Chairs
Asian FA 2006 Conference

April 20, 2006

Dear Ravi Lonkani:

I am pleased to tell you that your paper (The Value of Analysts' Recommendation in the Thai Stock Market) has been accepted for presentation at the 2006 Annual Meeting of the Financial Management Association International to be held at the Grand America Hotel in Salt Lake City, Utah. Congratulations!

We've tried a couple of innovations this year. First, we asked Program Committee members reviewing papers to provide reviewer-type comments to authors whenever possible. As authors, we all know the value of "blind" reviewer comments – as well as the cost and difficulty of obtaining them! If the reviewers of your paper provided comments, they are below:

This is a nice paper to read. The authors might want to check work by Melvyn Teo in Singapore and Charles Chang at Cornell. The “efficiency” statements are likely to be divisive. Why not just present results about analysts and leave efficiency for future discussion. Also, the tests for herding should be made more clear. Overall, a very interesting paper.

I hope you will join me in thanking reviewers for putting forth the extra effort to provide comments. We sincerely hope they are of value to you.

The second innovation in this year's program is what I have begun calling a "Program in a Program." We made a special effort and grouped highly ranked papers into sessions. Highly ranked papers are those that were ranked in the top 10% of submitted papers. These sessions will run in four rooms across the program's eleven time slots. The idea is to create sessions of exceptionally high quality, which are competitive with the highest quality finance conferences.

The information on your presentation is:

The Value of Analysts' Recommendation in the Thai Stock Market

Authors (Name and Affiliation)

Ravi Lonkani Chiang Ma University
Anyu Khanthavit Thammasat University
Pornchai Chunnahachinda Thammasat University

Session Number:: 195

Session Title: Exchange-Traded Funds

Day, Date, Time: Friday, October 13, 10:15 am - 11:45 am

By submitting your paper, you have agreed that the paper will be presented at the conference. If you are not able to present the paper yourself, your commitment is to arrange for a co-author or other colleague to make the presentation. Please notify me **immediately** if this is not your understanding. Also, please notify the FMA office in Tampa of any changes in your paper's title or authors' affiliations at slc@fma.org.

We only send the acceptance letter to the submitting author. Therefore, please notify any and all co-authors of the paper's acceptance and the date and time of the presentation at the meeting. If you need a paper copy of this acceptance letter, please contact the FMA office (Phone: 813 974 2084, Fax: 813 974 3318 or e-mail: slc@fma.org), and one will be sent to you.

As soon as the discussant for your paper has been identified, we'll send the submitted version of your paper to him/her. Unless you upload a newer version of your paper prior to September 15, 2006, this is the version you must use for your presentation. You will be able to upload a revised version after the conference. Please note that you will not be able to upload a new version right before the conference. Discussants give generously of their time and effort. Please be considerate, have timely interactions with your discussant, and do not abuse him/her with last minute changes.

Information on the Best Paper Awards competition will be sent to you soon in a separate email. Please note that these awards will be made only if, in the opinion of the FMA Awards Committee, a paper warrants such a decision. The decisions of the FMA Awards Committee are final.

For more information about the FMA conference, including the preliminary program, registration, housing information, the competitive paper award application, etc., please visit the FMA's web site at www.fma.org and click on "Annual Meeting" beginning April 25, 2006.

Again, congratulations on having your paper accepted for presentation at the 2006 FMA meeting. I look forward to seeing you at the FMA meeting in Salt Lake City.

Sincerely,

Douglas R. Emery, Vice President
2006 FMA Annual Meeting Program