אוניברסיטת תל-אביב TEL AVIV UNIVERSITY

מכון יוסף קסירר
למחקר בחשבונאות
THE JOSEPH KASIERER
INSTITUTE FOR RESEARCH
IN ACCOUNTING

מידע וולונטרי בשוק ההון הישראלי

רן זילברמן
ברוך לב
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החוקרים הם, לפי הסדר: רו"ח ומועמד לדוקטוראט באוניברסיטת תל-אביב, פרופ' באוניברסיטת ברקלי בארה"ב ומועמד לדוקטוראט באוניברסיטת ברקלי.

מחקר זה וכן המחקר המצורף לו על חברות אמריקאיות הסתייעו בתמיכת מכון יוסף קסירר למחקר בחשבונאות ועל כך נתונה תודת החוקרים.

I. ה ק ד מ ה

אין עוררין על כך שדרישות הדוח הכספי המעוגנות בחוק ובתקנות של כלכלות מפותחות הן דרישות מינימליות שמטרתן לספק מידע בסיסי למשקיעים ולמשתמשים אחרים בדוח"ות הכספיים. מקבלי החלטות בשוקי הון מודרניים נדרשים למידע החורג במידה ניכרת מהמוכתב בחוק. מידע מעודכן יותר ומפורט יותר מאשר בדו"חות הכספיים, ומידע לא כספי (לדוגמה, נצולת יכולת הייצור, שביעות רצון הלקוחות, צבר הזמנות לעתיד), מהווים כיום מרכיב מרכזי בשיקולי ההחלטה של משקיעים מתוחכמים. באיזו מידה ותכיפות מסופק מידע וולונטרי שכזה למשקיעים בישראל? זו השאלה המרכזית הנבחנת במחקר זה.

המחקר הנוכחי מהווה המשך לעבודה מקיפה שהושלמה לאחרונה ע"י שנים מעורכי עבודה זו על נתוני חברות ציבוריות בארה"ב (להלן המחקר האמריקאי)[1], ממצאי המחקר האמריקאי מאפשרים להשוות ולהעריך את תוצאות המחקר הישראלי המפורטות בדו"ח זה.

במחקר האמריקאי נבחנה סוגיית המידע הוולונטרי מהיבט מיוחד: לעתים תכופות קורה שבהתקרב מועד פרסום הדו"ח הכספי הרבעוני, נוכחים המנהלים לדעת שהרווח המדווח <u>יפתיע</u> את ציבור המשקיעים (ההפתעה נמדדת בדרך כלל ביחס לתחזיות האנליסטים - מנתחי נירות ערך). הפתעות שכאלה, בעיקר אכזבות, אינן רצויות לחברה ולמנהלים כיון שהן גורמות לתנודות גדולות במחירי המניות, ואכזבות רציניות מביאות לעתים קרובות (בארה"ב בעיקר) להביעות משפטיות כנגד המנהלים ורואי החשבון. סביר על כן להניח שבהתברר למנהלים שהם עומדים להפתיע את ציבור המשקיעים, הם יפרסמו וולונטרית, לפני פרסום הרווח, מידע (התראה) שיצמצם את הפער שבין תחזיות המשקיעים לרווח המדווח ויקטין את ההפתעה בפרסום הדו"ח הרבעוני. במחקר האמריקאי נבדקו 565 חברות ציבוריות לשנים 1989-1991, ע"י בחינה מדוקדקת של כל הפרסומים מטעם ההנהלה שהובאו לידיעת הציבור בתקופה של 60 יום לפני פרסום הדו"ח הרבעוני.

שלוש השאלות העיקריות שנבחנו במחקר האמריקאי הן: מה המידע שמפרסמות חברות העומדות להפתיע את המשקיעים בתוצאותיהן הכספיות? מה המאפיינים של חברות המפרסמות מידע וולונטרי לעומת אלה שאינן מפרסמות מידע שכזה? מה תגובת המשקיעים לפרסום מידע וולונטרי? התשובות לשאלות אלה נמצאות בנספח לעבודה זו וחלקן יובא בהמשך, כהשוואה לנתוני המחקר הישראלי.

בעבודה הנוכחית על נתוני חברות ישראליות לא הגבלנו עצמנו לחברות המפתיעות את הציבור, כיון שנתקלנו בקשיים בכימות ציפיות המשקיעים. יתרה מכך, כיון שזו למיטב ידיעתנו העבודה האמפירית הראשונה בנושא מידע וולונטרי בישראל, ראינו לנכון להתמקד במגזר רחב של חברות גדולות כקטנות, המייצגות את הסקטורים העיקריים הנסחרים בבורסה. הגבלנו עצמנו במחקר הישראלי לשאלה הראשונה שנבחנה במחקר האמריקאי, דהיינו - מה כמות ואיכות הפרסום הוולונטרי של חברות ציבוריות בישראל?

מחקר על פרסום מידע וולונטרי בישראל הוא בעל ענין מיוחד בימים אלה עם כניסתן לתוקף של תקנות ניירות הערך בדבר סקירת המנהלים (בעקבות המלצות "הועדה לדווח לא כספי של תאגידים שניירות הערך שלהם הוצעו לציבור"). סקירת מנהלים זו שמטרתה לספק מידע תפעולי כללי ובמדת הצורך גם תחזיות, בא להשלים את החסר במידע וולונטרי המפורסם ע"י מנהלים והמהווה נושא לעבודה זו.

סדר עבודה זו הינו כדלקמן: הפרק הבא עוסק בסקירה קצרה של התיאוריה והממצאים האמפיריים בנושא פרסום מידע וולונטרי למשקיעים. לאחריו אנו דנים בשיטת המחקר (מדגם, איסוף החומר וכו') של עבודה זו. הפרק הרביעי עוסק בממצאי המחקר והפרק החמישי והאחרון מסכם אותו.

II. מידע וולונטרי: תאוריה

מדוע תפרסמנה חברות ציבוריות מידע מעבר לנדרש בחוק? בסוגיה זו עוסקות מספר תאוריות בשטח הידוע כ-Information Economics[2]. התאוריה הבסיסית טוענת שלמנהלים הסבורים שמחיר המניה של חברתם מוערך בחסר (undervalued) יש תמריץ חזק לפרסם מידע שיגרום למשקיעים להגדיל הביקוש למניה ולהעלות ע"י כך את מחירה. בשווי משקל, תאוריה זו טוענת שכל החברות תפרסמנה את המידע שברשותן. הסיבה: כאשר חברות מסויימות מפרסמות מידע ואחרות שותקות, תעורר השתיקה חשד שהמנהלים מסתירים מידע שלילי. חשד זה יגרום לירידה במחירי המניות של החברות "השותקות", דבר שיאלץ את מנהליהן לפרסם המידע שברשותם, אף אם מלכתחילה הוא נראה להם כשלילי. תהליך זה של ירידה במחירי המניות של החברות השותקות ואילוץ המנהלים לפרסם המידע שברשותם יתקיים כמובן רק בתנאי שהמשקיעים מעריכים שאכן ברשות המנהלים מידע שאינם מגלים אותו. כמו כן יתקיים תהליך זה במלואו (דהיינו - יביא לגילוי מידע מלא: full revelation) אם אין עלות לגילוי המידע (לדוגמה, מידע העלול להועיל לחברות מתחרות).

תאוריה זו, אלגנטית ככל שתהיה, לא עומדת למרבה הצער במבחן המציאות. הן מחקר אמפירי[3], והן בחינה כוללת של הנעשה בשוק ההון אינם תומכים בתאוריה. לדוגמה, ההשלכה העיקרית של התאוריה דלעיל היא שפרסום המידע הוולונטרי יגרום, בממוצע, לעליה במחירי המניות. אכן כך היה המצב בשנות הששים והשבעים, אך בעשור האחרון, חלק ניכר מן המידע הוולונטרי גורם לירידה במחירי המניות של החברות המפרסמות. בהמשך נעמוד על הסברים לתופעה זו. נראה על כל פנים, שהתאוריה שתמציתה הובאה לעיל אינה מספקת כדי להסביר את התופעות המתרחשות בשוק ההון ויש לפיכך להעלות הסברים חילופיים לפרסום מידע וולונטרי.

הסבר שכזה, הוצע לפני מספר שנים ע"י פרופסור Brett Trueman[4], ועיקרו שלמנהלים יש תמריץ לפרסם מידע מעבר לנדרש בחוק על מנת לשכנע את המשקיעים ביכולת הניהול שלהם (signaling managerial quality). לדוגמה, פרסום תחזית רווחים מצביעה לדברי Trueman על כך שלמנהל מערכת מידע ובקרה משוכללים, ושהוא/היא מוכנים לחשוף עצמם לבקורת המשקיעים על מידת הדיוק של התחזית. מאידך גיסא, מנהלים שאינם "שולטים במצב" ושהמידע שברשותם לוקה

בחסר - לא יסתכנו בפרסום וולונטרי. גם גורלה של תאוריה זו לא שפר במבחן האמפירי. מספר מחקרים שבחנו את המתאם בין יכולת הניהול (כפי שמתבטאת בהצלחת החברה) לבין תכיפות הפרסום הוולונטרי לא מצאו מתאם גבוה. למרות זאת מוקדם עדין לסתום את הגולל על היפותיזה זו. המחקר בנושא המידע הוולונטרי נמצא בעיצומו ויתכנו עוד הפתעות.

התופעה שהוזכרה לעיל, לפיה בעשור האחרון מתרבות בארה"ב הידיעות הוולונטריות השליליות (דהיינו, אלה שגורמות לירידה במחירי המניות), הביאה לתאוריה חדשה: מניעות תביעות משפטיות של בעלי מניות (litigation deterrence). היפותיזה זו קשורה כמובן למספר הרב של תביעות משפטיות (class action suits) המובאות ע"י בעלי מניות בארה"ב כנגד מנהלים ולעתים אף רואי חשבון, בטענה של דווח כוזב (או העדר דווח המתחייב לפי החוק). תופעה זו של תביעות משפטיות רבות אופייניות לארה"ב ושנויה במחלוקת. יש הטוענים שהנה מוגזמת, שרבות התביעות חסרות הבסיס, ושהמרוויחים העיקריים הם עורכי הדין. מאידך גיסא, יש המאמינים ש"חרדת התביעות" תורמת לאספקת מידע אמין ומלא יותר לשוקי ההון ומעלה את רמת הביקורת של רואי החשבון. לא כאן המקום לדון בסוגיה חשובה זו.

ברור על כל פנים, שמנהלי חברות חוששים חשש רב מתביעות משפטיות המובאות בעיקר במקרים של ירידות חדות בשערי המניות. לפיכך, נטען שריבוי ההודעות השליליות שמפרסמות חברות אמריקאיות לציבור מקורו במידה רבה בחשש מפני תביעות משפטיות. כך לדוגמה, ההראה למשקיעים לפני פרסום ירידה חדה ברווחים, הודעה על ביטול חוזה מכירות גדול, או על כשלון של תכנית מחקר ופיתוח, עשויים לדעת המנהלים למנוע תביעה משפטית לאחר פרסום הידיעה השלילית (הירידה ברווח, לדוגמה), או לפחות להפחית מחומרת התביעה ופסק הדין.

היפותיזה נוספת להסבר פרסום וולונטרי של חברות ציבוריות היא שלמנהלים אינטרס להקטין את הפער שבין ציפיות המשקיעים למציאות (כפי שהיא נראית למנהלים). הסיבות לרצון להקטין פער זה רבות. לדוגמה, פערים רציניים גורמים לתנודות גדולות בשערי המניות עם פרסום הדו"חות הכספיים, תנודות הגורמות לעתים להפסדים למשקיעים ומעלות את הסיכון שבהחזקת המניה. הקטנת

הפער שבין ציפיות המשקיעים לבין המידע שבידי המנהלים, ניתנת להעשות באמצעות פרסום שוטף של מידע וולונטרי שיקטין את פער המידע (information asymmetry) שבין המנהלים למשקיעים.

בסקירה קצרה זו לא מיצינו כמובן את כל התאוריות העוסקות במידע וולונטרי, אך מכינו את העיקריות שבהן. המחקר האמפירי בנושא זה עסק בעשרים השנים האחרונות בעיקר בבחינת תחזיות הרווח של המנהלים (managerial earnings forecasts). כ-10 אחוז מהחברות הציבוריות בארה"ב מפרסמות תחזיות רווחים, והיבטים שונים של תחזיות אלה (מידת דיוקן, אופי החברות המפרסמות וכו') נבחנו בקפידה. למרות העניין שבנושא, אין מחקרים אלה מלמדים הרבה על מידע וולונטרי. ראשית, מרבית המידע (כפי שיתברר להלן) המפורסם ע"י חברות אינו במתכונת של תחזית רווחים. שנית, חברות המפרסמות תחזיות רווחים אינן אופייניות למגזר החברות הציבוריות הכללי (הן גדולות מהממוצע, בעלות סיכון נמוך מהממוצע וכו'). מחקר העוסק במכלול הפרסום הוולונטרי, כדוגמת העבודה המדווחת כאן, נמצא בחיתוליו. למעשה, רק לאחרונה התפרסמה אחת העבודות הראשונות הבוחנת את כל הודעות המנהלים הקשורות לרווח, ולא רק תחזיות כמותיות של רווחים.[5] המחקר האמריקאי העומד ביסוד עבודה זו שלנו (ראה נספח) הנו לפיכך אחד הראשונים העוסק במכלול המידע הוולונטרי המסופק למשקיעים. למיטב ידיעתנו, הוא הראשון הבוחן את כל המידע שפורסם לציבור, ולא רק זה המוגבל לרווחים או למכירות. כך גם המחקר הנוכחי העוסק בחברות ישראליות הבוחן את מכלול ההודעות הוולונטריות שלהן.

III. שיטת מחקר ובחירת המדגם

המדגם הנבחן בעבודה זו כולל 52 חברות שמרביתן מתוך "רשימת המשתכים" בבורסה התל-אביבית. מדגם זה מהווה כ-20 אחוזים מכלל החברות הציבוריות לשנת 1990 (ראה רשימת החברות במדגם בנספח א' לעבודה זו). מרבית החברות במדגם הן מן הגדולות במשק הישראלי ומייצגות את הענפים העיקריים בה. עבור כל חברה שבמדגם נאספו כל הידיעות שפורסמו לציבור מתחילת הרבעון הרביעי (1 באוקטובר) ועד לפרסום הדו"ח הכספי השנתי של אותה שנה (בדרך כלל במרס-אפריל של השנה הבאה). אסוף הידיעות נעשה עבור שלוש השנים: 1990, 1991 ו-1992. ההודעות לוקטו מתיקי החברות בבורסה הכוללים הודעות לבורסה והודעות לעתונות, מידע מראיונות לעתונות של גורמים בחברות, מידע מסקירת המנהלים בדוחו"ת הכספיים של הרבעון השלישי, מידע ממסיבות עתונאים של החברות, ומידע שפורסם בעתונות (שיתכן ואינו יזום ע"י החברות). בסה"כ נמצאו 730 הידיעות.

כלל ההודעות סווג לקטגוריות הבאות (כפי שנעשה במחקר האמריקאי):

א. <u>תחזיות רווחים ו/או מכירות</u>

1. תחזית נקודתית (point estimate) של רווח נקי או מכירות
2. תחזית טווח (range estimate) של רווח נקי/מכירות
3. תחזית איכותית (qualitative estimate) של רווח נקי/מכירות

ב. <u>מידע עסקי כללי</u>

4. מידע על סעיף (line item) מהדו"ח הכספי, מידע על צבר הזמנות, מכירות במגזר מסוים וכו'.
5. מידע על רכישת חברות, פתוח מוצרים חדשים, חתימת חוזים/הסכמי שיווק, השקעות הוניות וחכניות תפעוליות ואסטרטגיות.
6. שינוי בדיבידנדים או חלוקות הוניות אחרות לבעלי המניות.

ג. <u>מידע ארגוני או העדר מידע</u>

7. הודעות על שינויים בהנהלה, משכורות, הטבות, שינויי שליטה בחברה וכו'.
8. העדר כל מידע וולונטרי.

שלוש קטגוריות המידע העיקריות דלעיל נבדלות בכך שהראשונה כוללת תחזיות מפורשות של רווח או מכירות, השניה כוללת מידע ישיר על פעולות החברה (אך לא תחזית לעתיד), והשלישית כוללת ידיעות שאינן מתייחסות ישירות לפעילות השוטפת של החברה. בתוך כל קטגוריה עיקרית דורגו הידיעות בהתאם לאופיין לקבוצות משנה, בסה"כ מ-1 עד 8. ראוי לציין שדרוג זה משקף את חשיבות המידע למשקיעים. לדוגמה, תחזית רווח (קבוצה 1) מספקת מידע ישיר וברור יותר לגבי ערך המניה מאשר תחזית חוזה שווק (קבוצה 5). להלן דוגמאות לכל קבוצת ידיעות:

1. תחזית נקודתית: פולגת (1.12.1992): מנכ"ל החברה מודיע שמכירות החברה ב-1992 יגיעו ל-175 מיליון דולר, מהם 65 אחוזים לייצוא.
   קרור ואספקה (1.11.1990): היקף המכירות הצפוי ב-1991 הוא 160 מליון שקל.

2. תחזית טווח: לא מצאנו מידע שכזה.

3. תחזית איכותית: מקסימה (22.11.1990): בדו"ח של הרבעון השלישי נאמר שהחברה צופה עליה בהכנסות הרבעון האחרון.

4. מידע על סעיפי רווח, צבר הזמנות וכו': אזורים (3.2.1993): בהודעה לבורסה מדווחת החברה על רווח הון של 8 מיליון שקל מהנפקת חברה בת.
   פקר פלדה (11.3.1993): צבר הזמנות החברה גדל ב-30 אחוזים.

5. רכישת חברות, פתיחת קווי ייצור: כלל ביטוח (29.12.1992): החברה רכשה את תיק ביטוח החיים של "צור שמיר".
   אריה (18.2.1993): החברה תייצר מכשיר לאגירת מידע.
   הבנק הבינלאומי הראשון (11.12.1992): הבנק יקים חברות לחיתום והשקעה ולניהול תיקי השקעות.

6. שינויים בהנהלה וכו': דלק חיפושי נפט (2.3.1992): החברה החליפה מנכ"ל של חברה בת.

7. העדר מידע: לגבי החברות חירון, ליפסקי, גב ים ועמק לא מצאנו כל מידע בתקופה שנבחנה (1/10 עד לפרסום הדו"ח הכספי השנתי) בשלוש השנים 1990-1992.

מהדוגמאות שהובאו לעיל נראה שההגדרה שלנו של <u>מידע וולונטרי</u> היא רחבה מאוד. למעשה כללנו במסגרת הגדרה זו כל מידע שפורסם על החברה לציבור הרחב מעבר למה שכלול בדוחות הכספיים. בין היתר, אנו כוללים במסגרת המידע הוולונטרי הודעות של חברות לבורסה, על אף שניתן לטעון שחלק מהודעות אלה אינן וולונטריות וכן ידיעות שמקורן אינו בחברה. מכאן, שקיימת בממצאים שלנו <u>הערכת יתר</u> מסוימת של כמות הפרסום הוולונטרי בישראל.

IV. מ מ צ א י ם

טבלה 1 מסכמת את מאפייני הדווח הוולונטרי של 52 החברות שבמדגם ע"י סווג כל 730 ההודעות והידיעות שנמצאו בתיקי הבורסה של חברות אלה. מטבלה זו עולה שמתוך כלל ההודעות שליקטנו, רק 1.9% הן תחזיות רווחים או מכירות. 62.7% מן ההודעות עוסקות בהיבטים תפעוליים שונים של החברות (הזמנות, רכישת חברות, מוצרים חדשים וכו'), בעוד ש-35.4% מההודעות ניתן לסווג כבלתי תפעוליות. מתוך ההודעות התפעוליות (קבוצות 6-4), מספר ההודעות הגדול ביותר עוסק בחוזים והסכמי שוק חדשים (18.6% מכלל ההודעות שבמדגם) ובתכניות תפעוליות (14.5%).

טבלה 1 כוללת מספר שונה של ידיעות לגבי החברות שבמדגם. כמה חברות פרסמו ידיעות רבות ואחרות לא פרסמו כלל. עובדה זו עלולה לשקף תמונה מוטעית לגבי כלל הדווח הוולונטרי, כפי שיתברר מהדוגמה ההיפותתית להלן. הנח ששתי חברות פרסמו כל אחת 350 ידיעות וולונטריות מסוגים שונים בתקופה הנבחנת, בעוד ששאר 50 החברות שבמדגם לא פרסמו כל ידיעה. התמונה שתתקבל מסווג 700 הידיעות של שתי החברות עשויה להראות כזו שבטבלה 1, דהיינו פרסום נרחב למדי של מידע וולונטרי. אך כמובן שזו תמונה מוטעית לגבי מאפייני הפרסום הוולונטרי של כלל החברות שבמדגם, שלמעלה מ-95 אחוזים מהן לא פרסמו כלל מידע שכזה. מכאן הצורך בטבלה שונה המדווחת לגבי כל חברה/שנה, על ידיעה אחת בלבד, כך שכל החברות במדגם מקבלות ייצוג שווה. לגבי החברות שפרסמו יותר מידיעה אחת במשך התקופה הנבחנת, יש לבחור ידיעה אחת. בחרנו לדווח את הידיעה "הגבוהה ביותר" בסווג שלנו (מ-1 עד 8), דהיינו הידיעה הקרובה ביותר לתחזית רווחים/מכירות. זאת בהנחה שידיעות אלו הן המשמעותיות ביותר למשקיעים. (השווה לדוגמה, תחזית מכירות לעומת הודעה על התקשרות עסקית). טבלה 2 להלן מסווגת עבור כל חברה/שנה את הידיעה בדרוג הגבוה ביותר. בסה"כ מסווגות בטבלה זו 156 ידיעות (52 חברות כפול 3 שנים).

טבלה 3 מובאת כאן מן המחקר האמריקאי לצרכי השוואה.

טבלה 1

כל 730 ההודעות הוולונטריות שפורסמו על 52 החברות הישראליות ברבעון הרביעי בשנים 1990-1992.

קטגוריה	מס' ההודעות	% מתוך הסה"כ
1. תחזית נקודתית של רווח/מכירות	8	1.1
2. תחזית טווח	0	0.0
3. תחזית איכותית	6	0.8
סיכום ביניים	14	1.9
4. מרכיבי רווח, הזמנות וכו'	39	5.3
5. 5.1 רכישת חברות	50	6.9
5.2 מוצרים חדשים	65	8.9
5.3 חוזים/הסכמי שיווק	136	18.6
5.4 השקעות הוניות	59	8.1
5.5 הכניות אופרטיביות	106	14.5
6. שינוי בדיבידנדים	3	0.4
סיכום ביניים	458	62.7
7. 7.1 דיבידנד רגיל	35	4.8
7.2 שינויים בהנהלה	15	2.1
7.3 הנפקת מניות	42	5.8
7.4 מידע אחר	131	17.9
8. אי-פרסום מידע	35	4.8
סיכום ביניים	258	35.4
ס י כ ו ם	730	100.0

מטבלה 2, עולה שרק 5.8% מהחברות שבמדגם פרסמו בשנים 1990-1992 תחזית רווחים או מכירות (כולל תחזיות איכותיות). כמעט כל התחזיות מתייחסות למכירות ולא לרווחים. מספר זה מקבל יתר משמעות בהשוואה לממצאי המחקר האמריקאי (טבלה 3) המראה שבארה"ב פרסמו לציבור תחזית מכירות או רווחים לפני פרסום הדו"ח הרבעוני 9.4% מהחברות שדווחו רווח גבוה בהשוואה להתחזיות אנליסטים (good news firms), ו-21.1% מהחברות שדווחו רווח נמוך מצפיות המנתחים (bad news firms). ברורה מכאן המסקנה, שפרסום תחזיות רווחים/מכירות (כמותיות או איכותיות) אינו נפוץ בישראל כפי שהוא נפוץ בארה"ב.[6]

מרבית הפרסומים הוולונטריים בחברות הישראליות (43.6%) עסק בסוג מס' 5: רכישת חברות, מוצרים חדשים, חוזים והסכמי שוק, השקעות הוניות ותוכניות אופרטיביות שונות (לדוגמה: כניסה למכרזים). מאידך גיסא, בחברות האמריקאיות (טבלה 3) יש יותר הודעות על שינויים בדיבידנדים. מספר החברות שלא פרסמו כל מידע דומה בשני המחקרים: כ-20%.

טבלה 2

פרסום וולנטרי של מידע על 52 חברות ישראליות ברבעון הרביעי (ועד לפרסום הדו"ח השנתי) של השנים 1990-1992. כל צירוף חברה-שנה מיוצג בטבלה פעם אחת בלבד, על ידי הידיעה השייכת לקטגוריה בדרוג הגבוה ביותר מבין קטגוריות 1 (גבוהה) עד 8 (הנמוכה ביותר). סה"כ חברות-שנים: 156.

קטגוריה	מס' התצפיות	% מתוך הסה"כ
1. תחזית נקודתית של רווח/מכירות	6	3.9
2. תחזית טווח	-	-
3. תחזית איכותית	3	1.9
סיכום ביניים	9	5.8
4. מרכיבי רווח, הזמנות וכו'	25	16.0
*5. רכישת חברות, מוצרים חדשים וכו'	68	43.6
6. שינויי דיבידנדים	0	-
סיכום ביניים	93	59.6
*7. שינויי הנהלה, משכורת, הנפקות	19	12.2
8. אי-פרסום מידע	35	22.4
סיכום ביניים	54	34.6
ס י כ ו ם	156	100.0

* קטגוריות 5 ו-7 ללא פיצול לסעיפי משנה.

טבלה 3

פרסום וולונטרי של חברות בארה"ב (מתוך המחקר האמריקאי)

DISCRETIONARY DISCLOSURES CLASSIFIED BY TYPE OF INFORMATION

Classification of Discretionary Disclosure Made By All Sample Firms (N=565) During a 60-Day Interval Prior to Announcing Fourth Quarter Surprises. For Firms That Released Multiple Disclosures Within the Interval, This Table Reports The Primary Disclosure, Namely That Which Ranks Highest In The One To Eight Disclosure Type Ranking in the Table (I.e., The Most Quantitative, Earnings-Related Disclosure). Good News Firms Are Those Disclosing Earnings Above Analysts' Expectations, While Bad News Firms Are Those Whose Earnings Fell Below Analysts' Expectations. Numbers in Parentheses Refer to the Subsample of Firms Excluding Those with Large Special Items.

Disclosure type	Good News Firms		Bad News Firms	
	N	%	N	%
I. Earnings or sales forecasts				
1. Point estimates of EPS or sales	6(6)	3.5(3.7)	14(12)	3.6(3.6)
2. Range estimates of EPS or sales	4(4)	2.3(2.5)	20(14)	5.1(4.2)
3. Qualitative disclosures about EPS or sales	6(6)	3.6(3.7)	49(43)	12.4(12.8)
Subtotal	16(16)	9.4(9.9)	83(69)	21.1(20.6)
II. Other operating information				
4. Earnings components, write-offs, load factors, backlogs, etc.	9(8)	5.3(4.9)	52(33)	13.2(9.8)
5. Capital expenditures, new products, contracts etc.	29(27)	17.0(16.7)	58(51)	14.7(15.2)
6. Shareholder payouts	20(19)	11.7(11.7)	26(22)	6.6(6.5)
Subtotal	58(54)	34.0(33.3)	136(106)	34.5(31.5)
III. Nonoperating or no-information				
7. Non-operating information	62(59)	36.2(36.4)	103(93)	26.1(27.7)
8. No disclosures made	35(33)	20.5(20.4)	72(68)	18.3(20.2)
Subtotal	97(92)	56.7(56.8)	175(161)	44.4(47.9)
T o t a l	171(162)	100%(100%)	394(336)	100%(100%)

בולט במדגם הישראלי העדר כמעט מוחלט של ידיעות שליליות בכלל ותחזיות רווח שלילי בפרט. במדגם האמריקאי (טבלה 3), 21.1% מהחברות שדווחו רווח מאכזב יחסית לתחזיות אנליסטים (חברות המוגדרות כ-Bad News Firms), פרסמו לפני הוצאת הדו"ח הכספי תחזית (התראה) על האכזבה הצפויה. בנוסף, 13.2% מהחברות שבמדגם האמריקאי עם הודעות מאכזבות פרסמו לפני הדווח על הרווח הודעות על מרכיבי רווח שליליים (לדוגמה, "לחברה תהיה הוצאה ניכרת ברבעון זה כתוצאה מריאורגניזציה", או "החברה תכיר בהפסד של X מיליון דולר כתוצאה מהפחתת ערך נכסים - "asset writeoff"). מכאן שלמעלה משליש החברות במדגם האמריקאי שפרסמו רווח מאכזב, התריאו מראש בצורה זו או אחרת על האכזבה הצפויה (קטגוריות פרסום 4-1 בטבלה 3). מאידך גיסא, במדגם הישראלי, מתוך 730 ההודעות שליקטנו, איתרנו מספר קטן ביותר של פרסומים וולונטריים שליליים. למעשה מצאנו רק תחזית שלילית אחת (פולגת, מודיעה ב-20.3.1991 - לפני פרסום דו"ח 1990 - על הערכה להפסד של 10 מיליון דולר בשנת 1990). שאר ההודעות השליליות, וגם הן מועטות, עוסקות בעיקר בביטול חוזים או בהפסד מעסקות ספציפיות.

לדוגמה, טמפו (15.11.1991): "בוטלה רכישת יפו-מור". פולגת (25.2.1991): "הסגור שני מפעלים באנגליה עקב ירידת הזמנות". דלק חיפושי נפט (15.10.1992): "בעלי שתי החנות דלק הפסיקו חוזה עם החברה". הכשרת הישוב (29.4.1991): "פרשה ממכרז רכישת המזרחי."

מתוך כלל 458 ההודעות הוולונטריות מסוגים 6-1 (ראה טבלה 1), אבחנו 36 הודעות בעלות אופי שלילי, דהיינו כ-8 אחוזים.

מסקנתנו בדבר מיעוט ידיעות וולונטריות בעלות אופי שלילי בישראל ראויה למספר סייגים. הראשון, יתכן והשנים שנבחנו (1990, 1991 ו-1992) היו טובות במיוחד למשק הישראלי כך שלא היו ארועים שליליים רבים הראויים לדווח. השני, כיון שאין לנו במחקר הישראלי תחזיות אנליסטים, יתכן ולא הבחנו במספר הודעות שליליות. לדוגמה, פולגת הודיעה ב-1.12.1992 ש"מכירות 1992 יגיעו ל-175 מיליון דולר". אם, לדוגמה היתה ברשותנו תחזית משקיעים (אנליסטים) של מכירות 1992 בסך 200 מיליון דולר, ניתן היה לסווג הודעה זו כשלילית. כמו כן, יתכן ופורסמו ידיעות שליליות לפני הרבעון הרביעי של כל שנה שבו החלנו ללקט הידיעות. ידיעות אלה לא כלולות בעבודה שלנו.

V. סיכום

במחקר זה בחנו את המידע הוולונטרי על 52 חברות צבוריות בישראל בשנים 1990-1992, החל מתחילת הרבעון הרביעי ועד לפרסום הדו"ח הכספי השנתי. בהשוואה לממצאי מחקר דומה על חברות אמריקאיות בולטות שתי תופעות: מיעוט התחזיות רווחים או מכירות ומספרן המצומצם של ההודעות השליליות. כיון שאין זה סביר להניח שהביקוש למידע וולונטרי נמוך בישראל מאשר בארה"ב, נראה שהסיבה לשוני באופי הדווח נעוצה בתנאים השונים ובעיקר בתמריץ החזק הקיים למנהלים אמריקאיים לפרסם התראות על אכזבות רווח כדי להקטין את ההסתברות לתביעות משפטיות ולקיים את אמינות הדווח (reporting credibility) בפני המשקיעים/האנליסטים.

בהתחשב בעובדה שזו ככל הנראה עבודה ראשונה בישראל בנושא הדווח הוולונטרי, ניתן כמובן להרחיב המחקר בכוונים שונים. לדוגמה, עבודה זו עוסקת בעיקרה בחברות גדולות. חשוב לבחון את כמות ואיכות המידע הוולונטרי של חברות קטנות. סביר להניח שהוא יהיה נמוך מזה המדווח בעבודה זו. כמו כן, ראוי לבחון את תגובת המשקיעים לפרסום וולונטרי (ראה בדיקה זו במחקר האמריקאי). עוצמת התגובה של המשקיעים תצביע על הבקוש בישראל למידע שכזה. כוון שלישי הוא בחינה של המידע הוולונטרי המופץ ע"י חברות ישראליות שמניותיהן נסחרות בחו"ל, יחסית לחברות ישראליות שמניותיהן נסחרות בישראל בלבד.

ככלל, מחקר על מידע וולונטרי מהווה מרכיב חשוב של המחקר על חשיבות המידע בקביעת ערך נכסים בשוק ההון.

הערות שוליים

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עבודה זו מופיעה כנספח למחקר הנוכחי.

2. המחקרים בנושא זה רבים ותקצר היריעה מלאזכרן. חלק מהעבודות נדון ומאוזכר במחקר האמריקאי המופיע כנספח לעבודה זו (הערה מס' 1, לעיל).

3. ראה: B. Lev and S. Penman, "Voluntary Forecast Disclosure, Nondisclosure, and Stock Prices," Journal of Accounting Research (Spring 1990), 49-76.

4. B. Trueman, "Why Do Managers Voluntarily Release Earnings Forecasts?" Journal of Accounting and Economics (March 1986), 53-71.

5. ראה: D. Skinner, "Why Firms Voluntarily Disclose Bad News," Journal of Accounting Research (Spring 1994), 38-60.

6. יש לזכור שלחברות במדגם האמריקאי היתה הפתעת רווח גדולה, עובדה המגדילה ככל הנראה את שכיחות פרסום תחזיות רווח במידה מסוימת. מאידך גיסא, מרבית החברות במדגם הישראלי הנן מהגדולות בבורסה, וחברות גדולות מפרסמות בדרך כלל מידע רב יותר למשקיעים.

נ ס פ ח א'

רשימת החברות שבמדגם

1. טבע
2. טמפו
3. גיבור סברינה
4. אלביט
5. דובק
6. הדר ביטוח
7. כבלים
8. דשנים
9. איתן
10. מנורה
11. אסותה
12. יעסור
13. חירון
14. מולט
15. מקסימה
16. זיקית
17. ורדינון
18. אזורים
19. מפעלי ניר אמריקאיים
20. קניאל
21. קרור ואספקה
22. אלקטרה
23. פולגת
24. אלקו
25. אגן
26. פריון
27. שופרסל
28. פקר פלדה
29. ת.א.ת.
30. קליל
31. הכשרת הישוב
32. הבנק הבינלאומי הראשון
33. בנק הספנות
34. נכסים ובנין
35. ליפסקי
36. מבני העשיה
37. כלל ביטוח
38. יענ"א מחשבים
39. מלונות ים סוף
40. חנ"ל
41. וולקן מצברים
42. החברה לישראל
43. דלק חיפושי נפט
44. גב ים
45. אפריקה ישראל
46. קופל
47. אינטרגאמא
48. קרדן
49. אריה
50. עמק
51. מנרב
52. קריסטל

נספח ב'

המחקר האמריקאי

TO WARN OR NOT TO WARN:
MANAGERS' DILEMMA FACING AN EARNINGS SURPRISE

Synopsis And Introduction:

The specter of surprising investors, particularly disappointing them with large unexpected earnings presents managers with a daunting disclosure dilemma: to warn investors of the impending surprise ahead of the earnings announcement or to keep silent. In fact, the dilemma is considerably more complicated than the warning/no-warning binary choice: warnings can take various forms, such as a specific earnings forecast or a qualitative production report, and be communicated through alternative channels (e.g., a public announcement via the news wires or by a conference call with analysts).[1] Research on the motives and consequences of alerting investors to forthcoming surprises is in an early stage. Various motives for such communications have been advanced, such as adjusting investors' expectations in order to decrease their transaction costs (Ajinkya and Gift 1984; King et al. 1990), deterring shareholder litigation (Skinner 1994), enhancing managers' reputation (Trueman 1986), and decreasing managers' exposure to insider trading allegations. Yet, evidence on the validity of these motives, and in general, on managers' disclosure behavior and consequences is still sparse.

We present in this study evidence on various important aspects of managers' disclosure choices when facing the release of large earnings surprises. Based on a sample of firms which announced large earnings surprises, and the examination of all public managerial disclosures (quantitative as well as qualitative) made prior to the earnings announcement, we identify company and industry attributes distinguishing between firms that warn investors prior to the earnings release and those that do not alert investors to the surprise. We extend the analysis of discretionary disclosure beyond the common and restrictive disclosure/no-disclosure dichotomy, to examine the choice of the specific type of message: from "hard" earnings forecasts to "soft" operating or product-related releases. We

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[1] The Wall Street Journal recently commented on a shift in disclosure channels used by public companies: "Such conference calls [to analysts] seem to be replacing public meetings as the vehicle of choice to get out bad news -- which then filters out, through the analysts, to selected investors. Companies like doing them because they're quicker and cheaper than setting up meetings. And by screening the calls, they can try to keep out analysts they don't like." (August 25, 1993, p. C2).

then examine the capital market consequences of warnings, focusing on the combined reaction of investors to the warnings and the subsequent earnings announcements.

We find that the frequency of releasing quantitative earnings or sales forecasts even among large-surprise firms is rather low: only six percent of the positive surprise firms and nine percent of the negative surprise firms disclosed such information. On the other end of the disclosure spectrum, roughly half the sample firms did not provide any operating information prior to surprising investors. The remaining firms provided some qualitative information prior to earnings announcement. The frequency of voluntary disclosure of negative information (warnings) is twice as large as that of positive information among our large surprise firms, a phenomenon noted recently on a random sample (Skinner 1994).

With respect to the attributes distinguishing between warning and no warning firms, we find that the likelihood of issuing a warning increases with the size of the earnings surprise (expectations gap), the existence of an earlier prospective disclosure made by management, firm's membership in a high-tech industry, and firm size. On the other hand, regulated firms disclose less than unregulated ones. These findings are consistent with various economic and legal hypotheses discussed below. With respect to the choice of type of disclosure, we find that the larger the impending earnings surprise, or the expectations gap, the more quantitative ("hard") and earnings-related is the warning. Thus, it appears that the form and content of the warning is chosen by managers to match the seriousness of the expectations gap. Furthermore, the "harder" the warning, the more pronounced is investors' reaction to it, namely the quicker is the closure of the expectations gap.

Finally, turning to investors' reaction to warnings, we find that with respect to bad news firms (disclosing negative earnings surprises), the combined investor reaction to the warning and the subsequent earnings announcement is significantly more negative than investors' reaction to the earnings announcement of the no warning firms. A further examination of this counterintuitive finding, given the prevalence of claims concerning the benefits of voluntary disclosure, suggests that warnings tend to be issued by firms whose earnings decline is permanent, while transitory earnings disappointments more often go unwarned. This leaves us with a final, intriguing question: if alerting investors to an earnings surprise is as beneficial as often claimed (e.g., it decreases transaction costs, deters

litigation), why is it that so many firms (about half our sample) do not warn investors of an impending earnings surprise? Warnings are obviously not costless. We conjecture that one such cost of warning lies in the possibility that investors will read into the warning more than managers intended to. While warnings are generally limited to the forthcoming earnings announcement, they may raise investors concerns about long-term competitiveness and economic viability. This is consistent with our finding of the pronounced negative investors' reaction to warnings.

The above findings extend our knowledge of discretionary managerial disclosure. The empirical investigation of such disclosures was until recently restricted to quantitative earnings forecasts (e.g., Pownall and Waymire 1989, Lev and Penman 1990, Frankel et al. 1990, and a survey by King et al. 1990). While yielding interesting insights, the scope of this research is quite restricted, since only about 5 - 10 percent of public corporations release quantitative earnings forecasts, and these firms tend to be non-representative (e.g., relatively large). Given the substitutability between earnings forecasts and other types of communications, the study of managerial disclosure should obviously extend beyond earnings forecasts. This is indeed the trend in recent research. For example, Skinner (1994) considers all earnings-related announcements made by a randomly selected sample of 93 NASDAQ firms, and finds, among other things, that managers tend to disclose "bad news" more often than "good news." He conjectures that warnings are mainly aimed at mitigating the threat of shareholder litigation. Francis et al. (1993) compare patterns of stock returns and types of disclosures made by defendant firms in shareholder litigation with a control sample of "at risk" firms that were not sued by investors. They conclude, among other things, that defendant firms made more disclosures than control firms, and that the release of an early warning does not appear to be an effective deterrent to litigation. Lang and Lundholm (1992) examine analysts' evaluations of firms' disclosure quality, and report that large firms, above-average performers, and those frequently issuing securities, are characterized by a higher-than-average quality of disclosure. We focus in this study on a specific, important disclosure situation -- an impending and large earnings surprise -- and analyze all (earnings as well as non-earnings related) public disclosures preceding the surprise as well as their market consequences.

The order of discussion is: Section I outlines the sample selection procedures and Section II describes the characteristics and types of managerial warnings. Section III presents the results of a multi-response logit analysis aimed at identifying attributes associated with the frequency and type of disclosures. Section IV examines investor reaction to warnings, while Section V provides explanations to these reactions. Section VI concludes the study.

I. Sample Selection and Its Characteristics

We focus on managers' disclosure behavior when facing a large earnings surprise. Accordingly, the sample was selected by ranking the firms on the 1992 COMPUSTAT quarterly tape by their earnings surprise, relative to analysts' forecasts, in the fourth fiscal quarter of the years 1988, 1989 and 1990.[2] These three years were chosen for sample generality with respect to economic conditions: 1988 was characterized by significant increases in corporate earnings (e.g., the average return on equity of all manufacturing corporations was 16.1 percent in 1988 vs. 12.8 percent in 1987), while 1989 and 1990 were characterized by earnings decreases (average return on equity ratios of 13.6 and 10.7 percent, respectively for all manufacturing corporations).[3] From each year's ranking of firms by their earnings surprise, we selected the companies with surprises (both positive and negative) larger than one percent of the stock price. This yielded a total sample of 622 firms, of which 186 had positive earning surprises ("good news firms") and 436 had negative surprises ("bad news firms"). Firms involved in corporate control changes (e.g., mergers, acquisitions, divestitures) around the earnings announcement are problematic for this study, since stock price reactions to control change announcements are generally very large and may swamp the reaction to the discretionary disclosures (warnings) examined here. Furthermore, managers involved in control changes may exhibit a different disclosure behavior than in "normal times." We, therefore, eliminated from the sample 57 firms that

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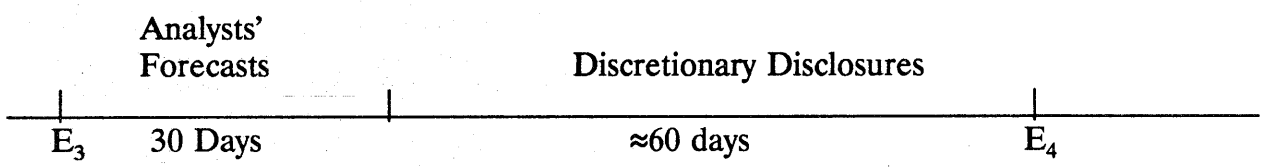
[2] The fourth quarter of each year was chosen because it had by far the largest number of analysts' forecasts on the IBES detail tape. Also, previous research indicated that roughly half the discretionary disclosures made by firms were released in the fourth quarter (e.g., McNichols 1989).

[3] Data obtained from the Economic Report of the President, January 1993, p. 451.

had change of corporate control announcements during the examined interval (specified below). The sample thus consists of 565 firms, of which 171 are good news and 394 are bad news firms.

The measurement of the earnings surprise, the length of the disclosure observation interval, and the various stock return windows used in this study are depicted on the following time line:



E_3 and E_4 denote the earnings announcement dates for the third and fourth fiscal quarters of a sample firm, respectively.[4] We split the interval between these two earnings announcements into two: a 30 calendar day interval subsequent to the E_3 announcement, used for collection of analyst forecasts of E_4 earnings, and the remaining interval up to the E_4 announcement (typically extending over 60 calendar days) for collection of managers' voluntary disclosures. Analysts' fourth quarter earnings forecasts were obtained from IBES detail tape. The 30-day interval for collecting analyst forecasts was specified so that our earnings surprise measure for E_4 will be based only on updated forecasts, namely those made by analysts after observing E_3.[5] Since some analysts predict primary EPS while others predict fully diluted EPS, we measured the E_4 earnings surprise (reported EPS before extraordinary items minus forecasted EPS) for a sample firm by first computing the surprise for each analyst (using either primary or diluted EPS), and then averaging the individual

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[4] The earnings announcement dates were those on the NEXIS file from which we collected corporate disclosures. In a few cases these dates were different from the Compustat dates.

[5] The objective here is that the earnings surprise measure will not be contaminated by "stale forecasts," namely those made prior to the third quarter earnings announcement. Of the sample firms, 49% had one analyst forecast during the 30 day period; 21% had two forecasts; 12% had three analysts forecasts; and the remaining firms had four or more analysts' forecasts. Given the relatively large number of earnings surprises based on one analyst forecast, we replicated all our tests with an alternative surprise measure -- seasonal random walk (i.e., fourth quarter earnings minus year-ago fourth quarter earnings, divided by stock price). In general, we did not find significant differences between results based on analysts' forecasts and those derived from random walk surprises.

surprises to obtain an average earnings surprise for a sample firm. Each firm's earnings surprise was deflated by the stock price at the end of the third quarter.

Table 1 presents descriptive statistics for our sample which contains firms from most of the 2-digit SIC codes on COMPUSTAT. The mean earnings surprise of the good news firms is about 3 percent of stock price (3.8 percent for the random walk surprise), while the mean surprise for the bad news firms is -7.4 percent (-5.6 percent for random walk).[6] The median surprises are lower than the means, indicating the existence of large (positive and negative) earnings surprises in the sample. Note that the mean and particularly the median earnings surprises based on analysts' forecasts (AF) are close to the random walk (RW) mean and median surprises (the correlation between the two surprise measures is 0.70). This suggests that our study is not sensitive to the way the earnings surprise is measured.

The mean and median annual sales growth rates of the good and bad news firms (over a three-year period ending with the earnings surprise) are very close -- 11 and 12 percent per year at the mean -- and are positive for both groups of firms, indicating that the bad news firms were not particularly poor performers in terms of sales. The sample firms (NYSE and AMEX companies) are somewhat larger at the median than the NYSE and AMEX Industrial COMPUSTAT population: the sample (both good and bad news firms) mean and median market capitalizations are $1,403 and $421 millions, respectively; while the 1992 COMPUSTAT mean and median market capitalizations (for end of 1990) are $1,438 and $185, respectively. Within the sample (Table 1), the bad news firms are larger at the mean than the good news firms, yet the median sizes of the two groups are close. The systematic risk (beta) of the bad news firms (mean = 1.14) is close to that of the good news firms (mean = 1.08), and both are only slightly higher than the population mean beta of one. Thus, with respect to both size and risk, our sample of large-surprise firms does not differ much from the COMPUSTAT population. Finally, in Table 1, the mean and median market-adjusted stock returns for the three windows examined in Section IV are all significantly different from zero and their sign conforms with that of the earnings surprise.

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[6] These mean price-deflated earnings surprises are fairly large. For example, a three percent negative earnings surprise when considered permanent by investors, will cause a 45 percent stock price decrease for a firm with a Price/Earnings multiple of 15 (assuming the multiple does not change by the earnings announcement).

II. Types of Disclosures

Most studies on discretionary managerial disclosure were limited to a small subset of corporate communications, typically earnings forecasts. We consider in this study all public disclosures made by the sample firms within the specified window: from the 31st day after the announcement of third quarter earnings (E_3) to the fourth quarter (E_4) earnings announcement (see time-line above). This, relatively narrow disclosure window (typically of 60 calendar days) was mandated by the focus of our study -- the disclosures of managers facing a large earnings surprise. Obviously, managers realize that they are going to surprise investors only as they approach the earnings announcement date. The collection of managerial disclosures was done by retrieving from the NEXIS Wires file all corporate announcements made through the various news wire systems and other means.[7] Each firm's disclosures were classified into the following eight disclosure types, grouped into three categories:

I. Earnings or sales forecasts

1. Point estimates of fourth quarter sales or earnings.
2. Range estimates of sales or earnings.
3. Qualitative disclosures about sales or earnings.

II. Other operating information

4. Miscellaneous operating data: asset writeoffs, gains on asset sales, load factors, order backlog, etc.
5. Announcements of capital expenditures, new products, major contracts, joint ventures, etc.
6. Shareholder payouts, mainly dividend changes and stock repurchases.

III. Nonoperating or no-information

7. Nonoperating announcements, typically appointments of officers and board members, community services, etc.

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[7] NEXIS also reports managerial disclosures made through conference calls with analysts. However, we were unable to ascertain the completeness of this coverage. We, of course, miss disclosures which were made privately to investors. However, given that it is illegal to disclose privately value-relevant information, this omission is probably of negligible importance. Private disclosures made to lenders or bond raters are also not included in our study.

8. No discretionary disclosures made during the examined window.

Disclosure types 1 - 3 consist of explicit forecasts of fourth quarter sales or earnings. These are the most specific ("hard") releases concerning the forthcoming earning announcement. Disclosure types 4 - 6 provide indirect or partial information about earnings, including announcements of components of earnings or asset writeoffs, as well as information on load factors and order backlogs. Monthly realized sales data (particularly for retailers) also fall into this category. Type 5 disclosures pertain to the long-term: notably capital expenditures, new products and joint ventures, while type 6 announcements (shareholder payouts) provide signals with respect to future earnings. Type 7 disclosures (e.g., new board members) appear to have no direct relevance to the forthcoming quarterly outcome and are therefore grouped with the no disclosure category (No. 8).

Some sample firms made multiple disclosures during the examined window. For each of these firms we identified the "primary disclosure," which is the highest-ranked disclosure type in the above one to eight ranking (i.e., the most quantitative, earnings-related disclosure).[8] This primary disclosure was the one examined in most of the tests that follow, since it is not obvious how to aggregate and weigh multiple disclosures (e.g., is a type 1 disclosure more or less relevant than two disclosures of, say, type 4 and type 6?). We thus ignore some disclosures in our tests, yet this omission does not seem serious. Table 2 presents the distribution of the number of multiple disclosures made by the sample firms, classified by the "primary disclosure."[9] Thus, for example, for the six good news firms that released a point estimate of earnings or sales (top line in Table 2), five firms (83.3%) did not make announcements of any other type during the examined window, while one firm (16.7%) made an additional disclosure (to the primary one). No firm in this category made

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[8] For example, if a given firm made during the disclosure window the following three announcements: election of a new board member (type 7), a planned capital expenditure (type 5), and a point estimate of fourth quarter earnings (type 1); the latter, type 1 announcement is the primary disclosure.

[9] Table 2 data do not include multiple announcements for disclosure type 5 (e.g., capital expenditures, new products, etc.). These disclosures were numerous for many sample firms and it was infeasible to code all of them and analyze them further (e.g., determine market reaction to each one). As a practical expedient, we considered the type 5 disclosure closest to the earnings announcement as the primary disclosure (if the firm did not release higher-ranked disclosures).

more than two disclosures. It is obvious from Table 2 that for the majority of sample firms the primary disclosure was the only one made during the examined window (except for type 5 disclosures), hence, not much information seems to be lost by our focus on the primary disclosure.

Special items, such as restructuring charges and asset writeoffs, pose a potential problem in our study. Corporate restructuring was prevalent during the examined period, 1988-1990, and firms tend to announce restructuring charges during the fourth fiscal quarter, the focus of our analysis. It is, therefore, likely that our sample includes a large number of disclosures relating to restructuring. Since such disclosures may be atypical (e.g., mostly negative news), as may be the market reaction to them (e.g., a positive reaction to a large asset writeoff), we conducted our entire analysis first on the total sample, and then on the subsample that excludes firms with special items. These items were identified by the COMPUSTAT category of Special Items (data item No. 32), which includes adjustments for prior years, significant nonrecurring items, results of discontinued operations, profit or loss on sale of assets, and writedowns or writeoffs. A "special item firm" was identified as one for which total special items exceeded 10 percent of fourth quarter total expenses (before special items), when the special item's balance was a debit, or 10 percent of total revenues (before special items) when the balance of special item was a credit. Nine good news firms (out of 171) and 58 bad news firms (out of 394) fall into the category of "special item firms." Recall that our earnings surprise measure, which underlies the selection of the sample firms, is based on EPS before extraordinary items. Thus, all the "below the line" special charges and transitory items are excluded from our sample, while the above selection procedure captures the large "above the line" special items.

Table 3 reports on the disclosure behavior of the sample firms: it classifies the primary disclosure frequencies of the firms by type of disclosure. The numbers in parentheses refer to the subsample excluding large special item firms. It is evident that disclosure of quantitative ("hard") estimates of forthcoming sales or earnings (disclosure types 1 and 2), is a rare phenomenon even among firms soon to surprise investors: only 5.8 percent and 8.7 percent of the good and bad news firms, respectively, disclosed such information. The disclosure frequency is higher when qualitative earnings or sales estimates

(type 3) are included: 9.4 and 21.1 percent of the good and bad news firms, respectively, provided either quantitative or qualitative earnings/sales information. When special item firms are excluded (numbers in parentheses), the disclosure frequencies are largely unchanged. Thus, in conformity with Skinner's (1994) findings (based on a random sample, contrasted with our large-surprise sample), the disclosure frequencies of our firms are skewed toward bad news firms: the difference between the good and bad news firms' disclosure frequencies of earnings/sales estimates (9.4% vs. 21.1%) is statistically significant at the 0.01 level (two-tail t-test). The disclosure asymmetry toward bad news firms holds also for type 4 releases: earnings components, writeoffs, load factors, etc. This is the category with the largest number of special items, yet even after the exclusion of firms with large special items the disclosure frequency of bad news firms is double that of the good news firms (9.8% vs. 4.9%).

Finally and notably, roughly half our large-surprise firms did not disclose any operating information (types 7 and 8) prior to the earnings announcement. It is clear from this prevalence of "silent firms" that warning investors of an impending surprise is deemed costly by a considerable number of firms, a finding we will return to in Section V.

III. Attributes of Disclosing and Nondisclosing Firms

The data in Table 3 indicate a considerable variability in disclosure behavior, in particular the fact that roughly half the sample firms did not disclose any operating information prior to surprising investors. This raises the question of what attributes distinguish between firms that warn investors of the impending earnings surprise and those that keep silent? In contrast with most of previous research on discretionary disclosure which considered the choice to be dichotomous -- disclose or not disclose -- we allow for a wider choice.[10] Managers obviously choose from a large menu of disclosure types, such as point estimates of earnings, range estimates, or a statement on changes in order backlog and operating capacity. Operationally, we distinguish among the three major disclosure

[10] King et al. (1990, pp. 120-121) note the limitation of disclosure research: "Regarding Stage C decisions on form, timing, and horizon issues, using samples of point and range annual forecasts precludes generalizing to other types of management forecasts (e.g., quarterly forecasts or more qualitative projections)."

categories in Table 3 -- earnings/sales forecasts, other operating information, and no information -- and examine the following question: what factors (attributes) are associated with the specific disclosure choices made by managers? Following is a set of hypothesized factors to be examined empirically.

1. Size of earnings surprise

It is widely believed that managers wish, in general, to align investors' expectations with the forthcoming financial report, in order to decrease investors' transaction costs, avoid large stock price fluctuations, and shield analysts from embarrassment.[11] Accordingly, we expect that the wider the expectations gap, the "harder" (quantitative) and more directly related to earnings will the discretionary disclosure be. Stated differently, in order to close (or substantially narrow) a large expectations gap, the disclosure will have to be specifically related to forthcoming earnings (or sales), and preferably be quantitative, whereas the closure of a relatively small expectations gap might require only the release of a statement of last month's sales or information about the change in capacity utilization. Obviously, managers will be reluctant to issue a quantitative earnings forecast, which can be ex-post verified and lead to loss of reputation and even litigation, unless the expectations gap (information asymmetry) is large.

Indeed, Table 4 indicates that the mean and median earnings surprise decrease monotonically as one moves from firms issuing earnings-related estimates, through those releasing general operating information, to the non-disclosing firms. The earnings surprise decrease is more pronounced for the bad news firms than for the good news ones.[12] Thus, it appears that "hard" warnings are used to close large expectations gaps, a conclusion

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[11] See Ajinkya and Gift (1984) and King et al. (1990) for elaboration on the motives and evidence related to this expectations alignment ("expectations adjustment") hypothesis; in particular, the argument that such an expectations adjustment reduces investors' transaction costs arising from asymmetric information. However, this may not be the only reason for disclosure. For example, several CEO's indicated in private conversations with the authors that another important disclosure objective is to "avoid embarrassing our analysts" by surprising them. Analysts' ill feelings and loss of confidence in management as a result of such surprises (particularly disappointments) apparently impose a heavy cost on firms.

[12] When the earnings surprise is measured by seasonal random walk, the decreasing pattern in Table 4 holds for the bad news firms, but not for the good news ones.

consistent with the mean stock return reaction around the warning -- the closing of the gap -- also reported in Table 4. For both the good and the bad news firms, the mean reaction to the earnings/sales forecasts is substantially larger (in absolute terms) than the mean reaction to the release of operating information (e.g., 5.37 vs. 2.04 percent, respectively, for the good news firms). Significance tests for differences in Table 4 data are conducted in the multivariate analysis, reported in Table 5.

2. Prior prospective statement

The existence of a previously released prospective statement is also expected to affect the disclosure decision. Such a statement creates a legal liability to "correct" or "update" investors' expectations:

> Those courts that have considered the issue generally have concluded that rule 10b-5 [of the Securities Exchange Act of 1934, prohibiting fraudulent conduct in connection with the purchase or sale of securities] requires issuers to correct statements that they later learn were materially misleading at the time they were made.... Commentators generally have accepted that rule 10b-5 imposes on issuers a duty to correct, and on occasion have suggested issuers have a duty to update as well.... statements that by their terms purport to continue to be valid beyond the date they were disseminated. (Rosenblum, 1991, pp. 301, 302, 304, emphasis ours).

Thus, when managers issued in the past prospective statements which are still outstanding (i.e., reflected in investors' expectations), there is a legal liability and consequently strong incentives for managers to warn investors of a large earnings surprise. No warning in such cases may be construed as failure to correct or update the earlier statement.

We searched for the existence of previous prospective statement by reading for each sample firm disclosing type 1 through 3 messages (i.e., releases that can be considered as correcting previous forecasts) the NEXIS file for the three fiscal quarters preceding the one whose earnings are exmined in this study. An earnings or sales forecast (quantitative as well as qualitative) concerning the fourth quarter earnings, made during the first three fiscal quarters, was designated as a "prior prospective statement." Note that we define as a prior prospective statement only disclosures of types 1 to 3 (i.e., earnings/sales-related forecasts), since other disclosures (e.g., on new products or joint ventures) are made routinely by many

firms and hardly qualify as a prospective statement which creates a liability to "correct" or "update." Of the sample firms, 13 percent of the good news firms and 22 percent of the bad news firms, respectively, had prospective statements. The distribution of these statements across disclosure types accords with the duty to correct expectation: 25.0 (30.1) percent of the good (bad) news firms issuing types 1 - 3 disclosures had a prior forecast, whereas only 11.3 (17.7) percent of the good (bad) news firms not disclosing information (types 7 - 8) had a prior forecast. Warning investors ahead of the earnings announcement thus appears to be associated with the prior release of a forecast.

3. Industry and regulatory status

High tech firms, particularly at the early stage of operations, appear to be exposed to a larger-than-average risk of shareholder lawsuits.[13] Among the reasons for the prevalence of shareholder lawsuits against high tech firms is probably their relatively high risk, leading to large price fluctuations and potential losses to investors. The aggressive accounting techniques sometime used by such firms (e.g., front loading of gains from long-term contracts, excessive capitalization of software development costs) may also contribute to litigation exposure. Given the high litigation exposure, high tech companies may be motivated to disclose more than firms in other industries in order to fend off investors' suspicion and litigation.

Regulated firms (e.g., utilities, banks) provide to regulators, and thereby indirectly to the general public, a considerable amount of operating information. Such information is often more detailed and released more timely than quarterly financial reports. It can, therefore, be expected that regulated firms encounter less information asymmetry with investors than other companies, and will therefore engage in a lower level of discretionary disclosure.

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[13] O'Brien and Hodges (1991) report that close to 30 percent of shareholder lawsuits during 1988-91 were filed against high tech companies, while these companies constitute only about 10 percent of the Industrial COMPUSTAT firms (and also about 10 percent of the firms in our sample). Also, the Treadway Commission on Fraudulent Financial Reporting (1987) suggests that a firm's membership in a high tech industry should be considered by auditors a warning signal for financial reporting problems.

4. Firm size and risk

Firm size was found in previous studies (e.g., Lang and Lundholm 1992) to be associated with the frequency and quality of corporate disclosure. Economies of scale in disclosure (e.g., large firms are more likely to be covered by the media than small ones) may contribute to a tendency of large firms to disclose more than small ones. Furthermore, large firms are more exposed to litigation (having "deeper pockets") than small ones, and hence may disclose more to deter litigation. Volume of trade may also be associated with disclosure. Other things equal, the larger the volume of trade the larger the potential damage claim by shareholders alleging that they purchased the stock at an inflated price. Hence, firms with a large volume may disclose more to deter litigation. Financial analysts are known to vigorously demand information from managers. It can, therefore, be expected that the larger the number of analysts following the firm, the larger the amount of discretionary information disclosed by it. As is well known, size, volume, and number of analysts are highly correlated. Accordingly, we included only one of these variables in each iteration of the following analysis. Finally, high risk firms tend in general to experience large price fluctuations, and might therefore be motivated to disclose more frequently than low risk firms to smooth price changes and perhaps also deter litigation.

The association between firms' disclosure (warning) behavior and the above factors and attributes is examined by a multi-response logit model (see, Amemiya 1981), where the dependent variable (response) is the 3-way categorization of disclosure: earnings/sales forecasts (types 1 - 3), operating information (types 4 - 6), and no-disclosure (types 7 - 8). The independent variables are the factors and attributes outlined above. To examine the significance of the "previous prospective statement" variable (no. 2 above), a 2-way logit analysis was used, since firms whose primary disclosure was of type 4 - 6 were not searched for previous prospective statements. The reason: it can hardly be expected that, say, a joint venture announcement or a dividend change qualify as "corrections" of previous forecasts. Table 5 presents estimates of the multi-response logit analysis for the good and the bad news firms (we comment in the text on a combined good/bad analysis).

For the good news firms, firm size and the existence of a prior prospective statement are significantly associated with disclosure type (the latter variable is only marginally

significant: p-value = 0.11). The coefficient signs are positive, as expected, indicating more frequent and specific disclosures as firm size increases, and more disclosure when a prior forecast exists. For the bad news firms, more attributes are statistically significant, in Table 5, all having the expected coefficient sign: the size of the earnings surprise, the existence of a prior forecast, firm size, operating in a high tech industry, and being a regulated firm.[14] Considering the earnings surprise variable, the data in Table 4 (mean and median surprises) and the 3-way analysis in Table 5 thus suggest that managers choose the type of disclosure (direct earnings/sales forecast, operating information, or no-disclosure), in part at least, according to the severity of the expectations gap.[15]

Running the logit analysis on the combined sample of good and bad news firms, adding to the independent variables a disclosure dummy (0 for good news and 1 for bad news firms), yielded practically identical results to those in Table 5. Size of earnings surprise (p-value = 0.00), existence of prior forecast (p-value = 0.03), firm size (p-value = 0.00), high tech firm (p-value = 0.03), regulatory status (p-value = 0.00), and the disclosure dummy (p-value = 0.05), were found to have the expected sign and are statistically significant. The positive coefficient of the disclosure dummy is consistent with Table 3 findings that bad news firms disclose more than good news firms.

When the multi-response analysis reported in Table 5 was run on the sample firms excluding those with large special items (9 firms with good news, 58 with bad news), the only change occurred for the "prior forecast" independent variable. While this variable became more statistically significant for the good news firms (p-value = 0.07), it lost its significance for the bad news firms (p-value = 0.53 vs. 0.09 in Table 5). Apparently, most of the warnings "correcting" or "updating" previous forecasts were made by firms with large special items (e.g., reporting restructuring charges, asset writeoffs, etc.). When we replicated the multi-response analysis, measuring the earnings surprise by a seasonal random walk (fourth

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[14] The negative coefficient sign of the earnings surprise is due to the fact all the surprises in this group are negative.

[15] When we ran the multi-response analysis with volume (average of log monthly number of shares traded, divided by shares outstanding), or with the number of analysts following (from IBES), substituting for firm size, each of these variables was statistically significant for both good and bad news firms at the 0.05 level.

quarter EPS minus the preceding year's fourth quarter EPS, divided by price), results are virtually identical to those reported in Table 5. The only notable change is that the regulation variable is now significant (p-value = 0.03) for the good news firms too.

Overall, then, the size of the earnings surprise, the existence of a previous forecast, membership in a high tech or in a regulated industry, and firm size, appear to be the most consistent disclosure attributes. With respect to inferences concerning the earnings surprise variable, one should recall that our sample is nonrandom, rather it is composed of firms experiencing relatively large surprises.

IV. The Market Consequences of Warnings

Researchers have advanced various conjectures concerning the objectives and benefits of discretionary disclosures, such as signaling managerial quality (Trueman 1986), adjusting investors' expectations to reduce transaction costs (King et al. 1990), and deterring shareholder litigation (Skinner 1994). However, the evidence on the validity of such objectives is still scarce.[16] Since many of the disclosure benefits presumably affect the firm's shareholders (e.g., if warnings deter litigation and if litigation is costly to shareholders, then warnings should have a favorable effect on market values), an analysis of the capital market consequences of discretionary disclosures may shed light on the validity of the hypothesized objectives of disclosure. Furthermore, a market analysis may explain the intriguing finding (Table 3) that half our large-surprise firms did not disclose any operating information prior to the earnings release.

Our examination of investors' reaction to warnings is conducted over three stock return windows:

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[16] In fact, available evidence fails to provide convincing support for most of the conjectured benefits; see, for example, Pownall and Waymire (1989) on the managerial quality signaling hypothesis, and Francis et al. (1993) on the litigation deterrent argument. However, as is generally the case, such "rejections" of hypotheses are rarely conclusive. For example, to fully test the hypothesis that warnings deter litigation, one has to consider the effect of warnings on the sizes of settlements reached and on court decisions, in addition to the effect on the number of lawsuits filed (examined in Francis et al., 1993). This, however, is very difficult since reliable data on settlements of shareholder litigations are sparse and less than 10 percent of such lawsuits reach a court decision.

(i) The long window: spanning from the 31st calendar day after the third quarter earnings announcement (see time line in Section I) through the second trading day after the fourth quarter earnings announcement (E_4+2 days). This window encompasses all the discretionary disclosures made by the firm within the observation window as well as the fourth quarter earnings announcement.

(ii) The combined warning + earnings window: includes five trading days around the release of the "primary disclosure" (i.e., the highest ranked discretionary disclosure of types 1 through 6, see Section II), plus five trading days around the fourth quarter earnings announcement. This window reflects the combined reaction to the most value-relevant warning and to the earnings announcement. This combination is called for by the obvious interaction between the two disclosures (i.e., a warning preempts, to some extent, the reaction to the earnings announcement). Comparing the combined returns of disclosing and non-disclosing firms poses a problem, since the latter (i.e., firms with disclosure types 7 - 8) do not have a "primary disclosure" return. Accordingly, in order to compare an equivalent 10-day return window for disclosing and non-disclosing firms, we added to the latters' five-day earnings announcement return the average, firm-specific five-day return (drift) over the disclosure observation period ending two days before the fourth quarter earnings announcement.[17] Consequently, the combined window for each sample firm, disclosing as well as non-disclosing, is of 10-day length.

(iii) The earnings announcement window: five trading days (-2 through +2) around the fourth quarter earnings announcement (E_4).

The cumulative market-adjusted returns (the firm's raw return minus the corresponding CRSP equally weighted market return) were computed over the three windows for each sample firm.

To examine investors' reaction to warnings we cross-sectionally regressed, separately for good and bad news firms, market-adjusted returns on four independent variables: (i) an

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[17] The mean five-trading day drift for the non-disclosing/good news firms was 0.30 percent, and for the non-disclosing/bad news firms was -0.53 percent.

intercept warning dummy: 1 for firms making disclosure types 1 - 6, and 0 for non-disclosing firms (disclosure types 7 - 8), (ii) a slope warning dummy: the disclosure dummy in (i) times the fourth quarter earnings surprise, (iii) the price-deflated earnings surprise, and (iv) firm size, measured as the log of total market value of the firm at the beginning of the fourth quarter. (The regression equation is presented in Table 6). The first two independent variables in the regression reflect the act of warning, while the latter two variables, which are generally associated with stock reaction to announcements, were incorporated in the regression to mitigate the missing variable problem (e.g., the warning variable may be significant because it proxies for firm size). Given the three stock return windows specified above, three cross-sectional regressions were run for the good news and for the bad news firms. Regression estimates are presented in Table 6.

For the "long window" regressions (top row in each panel), the only statistically significant variable is firm size, for the good news firms. When we focus on investors' reaction to specific disclosures, results are more revealing. Thus, for the "combined window" regressions (i.e., reaction to the warning and to the subsequent earnings disclosure), the earnings surprise coefficient (b_1) is statistically significant for both the good and bad news firms (and size is again significant for the good news firms). Furthermore, the intercept disclosure dummy (coefficient b_2) has a negative and statistically significant coefficient (P-value is 0.04) for the bad news firms. Thus, the act of warning investors of an impending earnings disappointment is associated with a lower stock return. We will further examine below this counterintuitive finding.

The earnings announcement regression (bottom row in each panel of Table 6) yields insignificant coefficients for all variables in the good news firms' analysis. However, for the bad news firms (Panel B), both the earnings surprise, b_1, and the disclosure slope dummy, b_3, coefficients are highly significant. The opposite sign of these coefficients reflects the preemption effect of the warning (noted by Skinner 1994): while for the no-warning firms the earnings surprise coefficient is 0.172, for the warning firms it is -0.074 (the sum of the coefficients 0.172 and -0.246).

To examine the robustness of these findings, we replicated Table 6 regressions limiting the warnings to the "hardest" disclosures, namely types 1 - 3. Results are essentially

identical to those reported in Table 6. We also replicated the regression analysis with the earnings surprise variable, UE_{it}, measured by a seasonal random walk, rather than against analysts' forecasts. Again, results are unchanged from those reported in Table 6. Finally, we replicated the regression analysis on the subsample of firms excluding those with large special items. Once more, there was no significant change in the findings.

Given the unexpected finding (Table 6, panel B), that the release of a warning by bad news firms is associated with a lower combined return (around the warning and the earnings announcement), we decided to reexamine this outcome by a different methodology -- a matched sample design. Specifically, each disclosing firm was matched with a non-disclosing mate by two matching criteria: the extent of earnings surprise and firm size. Controlling for these variables allows one to focus on the incremental reaction to the warning since, in general, earnings surprise and size are strongly associated with investors' reaction to announcements.[18] The matched sample design, contrasted with the earlier regression analysis, also provides a direct estimate of the differential returns to disclosing and non-disclosing firms.

Table 7 presents mean and median market-adjusted returns of the bad news firms that warned investors prior to the earnings announcement and those that did not issue a warning.[19] Note that the size of the earnings surprise of the two groups is almost identically matched at both the mean and median, while firm size is closely matched at the median, but less so at the mean (warning firms are somewhat larger than no warning firms). While the return differences between warning and no warning firms over the "long" and the "earnings announcement" windows are statistically insignificant (largely consistent with the regression analysis in Table 6); the differences for the "combined window" (warning + earnings announcement) returns, reported in the second column from the right in Table 7,

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[18] See, for example, Foster et al. (1984) for evidence on the association between investors' reaction to earnings surprise and firm size.

[19] For the good news firms the matched pair analysis did not yield statistically significant results, and therefore the data are not presented in Table 7. The only significant difference is for the five-day return reaction around the earnings announcement: 0.005 vs. 0.020, for disclosing and non-disclosing firms, respectively. This difference is apparently due to the preemption effect of the voluntary disclosure.

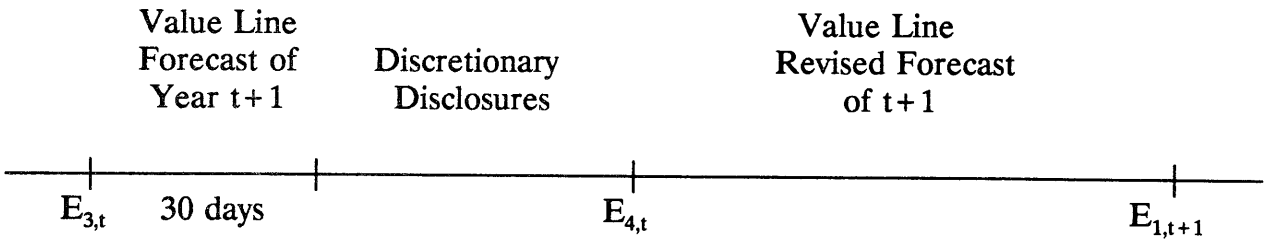
are significant. The direction of difference is consistent with that of the regression analysis: for example, for warning firms defined as those releasing the "hardest" disclosures (types 1 - 3, Panel A), the mean (median) market-adjusted return is -6.2 (-7.0) percent, while the combined mean (median) returns of the matched no warning firms is only -2.0 (-2.4) percent. The differences in both the means and medians are statistically significant (p-values: 0.01 and 0.08). When disclosing firms are defined more broadly as those releasing disclosure types 1 - 6 (panel B), the return differences are in the same direction (lower for warning firms) but somewhat smaller in magnitude: -4.2 vs. -2.0 percent at the mean. While the mean difference is statistically significant, the median difference is not.

V. Explaining Investor Reaction

Both the regression and the matched sample analyses indicate that for bad news firms, the release of a warning not only preempts, to some extent, the subsequent earnings announcement, but is associated with a lower combined (warning plus earnings announcement) return relative to no warning firms. What explains this counterintuitive finding (counterintuitive, because warnings are widely believed to be beneficial to the firm and its investors)? One possibility is that the larger negative return of the warning firms is related to "special items" announcements, given that a relatively large number of the bad news firms issued such warnings (e.g., of asset writeoffs and restructuring charges). This, however, is not the case, since our analysis shows that for the subsample of firms excluding those with large special items, the "combined window" returns of the warning firms (warning types 1 - 3) is -5.7 percent vs. -1.6 percent for the no-warning firms (the difference is significant at a p-value of 0.01, two-tail t-test). Another possible explanation for the apparent negative reaction to warnings is that the no warning firms released disclosures which were not recorded by our information search. For example, it is possible that some of our "no warning firms" communicated negative pre-earnings information via conference calls to financial analysts. While we cannot of course rule out such a possibility, it does not appear to explain our findings. Specifically, if the no warning firms released during the examined interval information which was not captured by our search, then their long-window returns (from -60 to +2 days around the earnings announcement) should have been close

to the combined window return of the warning firms. This, however, is not the case: the mean long window return of the no warning firms (Table 7, Panel A) is only -3.3 percent vs. -6.2 percent mean "combined window" return for the warning firms (the difference is significant at p-value = .15, by a two-tail t-test).

What then explains the more pronounced negative investor reaction to warnings, relative to no warning? A possible explanation is that managers tend to issue a warning when they perceive the forthcoming earnings disappointment to be permanent, while transitory disappointments go largely unwarned. To examine this explanation one needs a measure of earnings permanence other than the market reaction, which we try to explain here. We chose the revision in Value Line's forecast of next year's annual earnings around the fourth quarter's disclosures as the measure of permanence of the earnings surprise. Specifically, as indicated by the following time line, we collected for the sample firms in Panel A of Table 7 the Value Line forecasts of fiscal t+1 earnings made after fiscal t third quarter earnings announcement, $E_{3,t}$, and the revised fiscal t+1 forecasts made after fiscal t fourth quarter earnings were released, $E_{4,t}$. Thus, we record the revision in the forecast of t+1 earnings around the disclosures examined in this study -- the discretionary releases (warnings) as well as the fourth quarter earnings announcement. The revision is measured for each firm as the later forecast minus the earlier forecast, divided by the absolute value of the earlier forecast.



If, as we conjectured, warnings tend to be issued for permanent earnings disappointments (and if the degree of permanence is reflected in the extent of forecast revisions), then Value Line's revision of the earnings forecasts of warning firms will be larger than the forecast revision of the no warning firms. This is indeed the case as evidenced by the following data:

	Forecast Revision	
	Mean	Median
Warning firms (N=54)[20]	-0.876	-0.300
No warning firms (N=54)[20]	-0.420	-0.143
P-value	0.13	0.10

Both the mean and median forecast revisions of the warning firms (-0.876 and -0.300) are larger than the mean and median revisions of the no warning firms (-0.420 and -0.143). The differences, however, are only borderline significant (by the two-sample non-parametric test): p-values of 0.13 and 0.10 for the mean and median, respectively.[21] The evidence is thus supportive of the explanation provided above for the more negative investor reaction to warnings, in terms of the relative permanence of the earnings disappointment.

However, the above findings based on Value Line's forecast revisions are not strong enough to preclude other explanations for the more pronounced negative reaction to warnings. One such explanation is that investors read into the warning more than managers intended to. While a warning generally relates to the forthcoming earnings announcement, it may open a Pandora box by raising concerns about firm competitiveness and long-term viability. This may account for the pronounced negative investors' reaction to warnings recorded above.[22] This conjectured overreaction to warnings may provide a clue to the intriguing question raised earlier: if discretionary disclosure, and warning of earnings disappointments in particular, are as beneficial as often claimed in the literature, why do not

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[20] In Panel A of Table 7 there are 64 matched pairs of firms. We could not find Value Line forecasts for 10 pairs, hence data on forecast revisions are based on 54 pairs.

[21] When very large forecast revisions (below -1.00) are eliminated from the sample, we lose 14 warning firms and 4 no-warning firms. The difference in the mean forecast revisions of the remaining firms (-0.232 for warning, and -0.140 for no-warning) is statistically significant (two sample t-test) at the 0.06 level.

[22] A case in point is Apple Computer's June 9, 1993 warning that "second half results could fall short of expectations and year-earlier profits." The 10.6 percent drop in Apple's stock price on that day (bringing down Compaq's stock as well) was in part due to analysts' concerns with Apple's long-term competitiveness, obviously extending beyond the 1993 second half earnings. This is made clear by analysts' pronouncements on the day of warning (reported by Reuters, and derived by us from NEXIS, June 9, 1993). For example: "Apple Computers Inc. loses too many battles in the computer price war.... The Macintosh is not as distinctive as it was, they are going to have to cut prices much more aggressive.... The price war is not going to go away any time soon because there are still too many competitors offering products at cut-rate prices."

all firms warn investors before releasing disappointing earnings?[23] There are obviously costs to such warnings, as reflected in the negative market reaction recorded above, leading many firms to refrain from warning investors.

VI. Concluding Remarks

We examine in this study the disclosure behavior of managers facing large earnings surprises, by observing all corporate communications made public over a 60-day interval preceding the earnings announcement. With respect to the frequency and type of communication, we find that roughly half the sample firms did not provide any operating information prior to surprising investors, while less than ten percent provided quantitative point or range estimates of earnings or sales. The remaining sample firms provided some kind of operating information prior to surprising investors. Bad news firms (whose earnings were below analysts forecasts) released significantly more discretionary disclosures than good news firms.

Regarding the attributes of firms engaged in pre-surprise disclosure; for the bad news firms, the likelihood of warning and "hardness" of message increases with the size of the earning surprise and with firm size. Additionally, firms that during the previous year released a forecast as well as high tech firms, are more likely to issue warnings. For good news firms, the existence of a prior forecast and firm size are associated with a higher likelihood of issuing a pre-surprise disclosure. With respect to the choice of disclosure type (e.g., an earnings forecast or an operating capacity report), the size of the earnings surprise (expectations gap) appears as an important determinant of disclosure. The larger the impending surprise, the more quantitative ("hard") and earnings-related is the warning.

Regarding investors' reaction to warnings, when the combined reaction to the warning and the subsequent earnings announcement is compared with the corresponding earnings reaction for the no warning firms, an unexpected result emerges for the bad news firms: the combined return of warning firms is significantly more negative than the return of no

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[23] Recall our findings (Table 3) that roughly half the large-surprise firms did not disclose any operating information prior to the earnings announcement.

warning firms. Based on an examination of Value Line's forecast revisions around the warnings, it appears that warnings tend to be issued when the earnings disappointment is permanent, which in turn is consistent with the more negative returns observed for warning firms relative to "silent" ones. However, at this stage additional conjectures to the differential investor reaction cannot be ruled out, such as that investors attach to a warning long-term implications extending beyond the forthcoming earnings. This "cost" of warning provides a possible clue to our finding that about half the large-surprise sample firms refrain from warning investors.

Table 1

SAMPLE DESCRIPTIVE STATISTICS

"Good News Firms" Are Those With Fourth Quarter Earnings Larger Than Analysts' Forecasts, While "Bad News Firms" Are Those With Earnings Below Analysts' Forecasts

	Good News Firms (N = 171)			Bad News Firms (N=394)		
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Mec
Earnings Surprise (AF)[1]	0.0292	0.0308	0.0182	-0.0737	0.1386	-0.0
Earnings Surprise (RW)[1]	0.0377	0.0678	0.0184	-0.0560	0.1967	-0.0
Annual Sales growth[2]	0.106	0.149	0.077	0.123	0.244	0.0
Size (Market capitalization in $ millions)	1,146	1,753	381	1,515	4,140	436
Beta	1.08	0.39	1.08	1.14	0.36	1.14
Market-Adjusted Returns:[3]						
Long window	0.0374*	0.1582	0.0250**	-0.0620*	0.1693	-0.07
5-day warning	0.0310*	0.0761	0.0193**	-0.0280*	0.0960	-0.01
5-day earnings	0.0198*	0.0870	0.0096*	-0.0142*	0.0741	-0.01

[1] AF indicates an earnings surprise based on analysts' forecasts, while RW indicates a seasonal random walk earnings surprise. earnings surprise is computed as actual minus predicted EPS, divided by beginning-of-quarter stock price.

[2] Computed over a 3-year period ending with the examined quarter.

[3] "Long window" returns are cumulated from the 31st day after the third quarter earnings announcement through the 2nd day after fourth quarter announcement. "5-day warning" returns are cumulated from -2 through +2 days around the primary voluntary disclos "5-day earnings" are returns cumulated around the fourth quarter earnings announcement. All returns are market-adjusted returns, wl are computed as the stock's raw return over the interval minus the corresponding CRSP equally-weighted market return.

*, ** = statistically significant, one-tail t-test, at the 0.01 and 0.05 levels, respectively.

Table 2

FREQUENCY OF MULTIPLE DISCLOSURES

For Each Disclosure Type, We Present Below the Frequency of Sample Firms Making One, Two, or More Disclosures During the Examined Interval

Type of Primary Disclosure	N	% With One Disclosure Only	% With Two Disclosures	% With More Than Two Disclosures
		Good News Firms		
1	6	83.3	16.7	0
2	4	100.0	0	0
3	6	50.0	33.3	16.7
4	9	55.6	44.4	0
5[1]	29	-	-	-
6	20	90.0	10.0	0
7[1]	62	-	-	-
8	35	-	-	-
Total	171			
		Bad News Firms		
1	14	64.3	21.4	14.3
2	20	70.0	10.0	20.0
3	49	67.3	26.6	6.1
4	52	80.8	15.4	3.8
5[1]	58	-	-	-
6	26	96.2	3.8	0
7[1]	103	-	-	-
8	72	-	-	-
Total	394			

[1] The frequencies in this table do not include disclosure types 5 and 7 (the latter considered by us as nondisclosure) which were generally numerous.

Table 3

DISCRETIONARY DISCLOSURES CLASSIFIED BY TYPE OF INFORMATION

Classification of Discretionary Disclosures Made By All Sample Firms (N=565) During a 60-Day Interv Prior to Announcing Fourth Quarter Surprises. For Firms That Released Multiple Disclosures Within th Interval, This Table Reports The Primary Disclosure, Namely That Which Ranks Highest In The One T Eight Disclosure Type Ranking in the Table (I.e., The Most Quantitative, Earnings-Related Disclosure Good News Firms Are Those Disclosing Earnings Above Analysts' Expectations, While Bad News Firm Are Those Whose Earnings Fell Below Analysts' Expectations. Numbers in Parentheses Refer to th Subsample of Firms Excluding Those with Large Special Items.

Disclosure type		Good News Firms		Bad News Firms	
		N	%	N	%
I.	Earnings or sales forecasts				
	1. Point estimates of EPS or sales	6 (6)	3.5 (3.7)	14 (12)	3.6 (3.6)
	2. Range estimates of EPS or sales	4 (4)	2.3 (2.5)	20 (14)	5.1 (4.2)
	3. Qualitative disclosures about EPS or sales	6 (6)	3.6 (3.7)	49 (43)	12.4 (12.8)
	Subtotal	16 (16)	9.4 (9.9)	83 (69)	21.1 (20.6)
II.	Other operating information				
	4. Earnings components, write-offs, load factors, backlogs, etc.	9 (8)	5.3 (4.9)	52 (33)	13.2 (9.8)
	5. Capital expenditures, new products, contracts, etc.	29 (27)	17.0 (16.7)	58 (51)	14.7 (15.2)
	6. Shareholder payouts	20 (19)	11.7 (11.7)	26 (22)	6.6 (6.5)
	Subtotal	58 (54)	34.0 (33.3)	136 (106)	34.5 (31.5)
III	Nonoperating or no-information				
	7. Non-operating information	62 (59)	36.2 (36.4)	103 (93)	26.1 (27.7)
	8. No disclosures made	35 (33)	20.5 (20.4)	72 (68)	18.3 (20.2)
	Subtotal	97 (92)	56.7 (56.8)	175 (161)	44.4 (47.9)
	Total	171 (162)	100% (100%)	394 (336)	100% (100%

Table 4

TYPE OF DISCLOSURE, SIZE OF EARNINGS SURPRISE AND INVESTOR REACTION

Mean and Median Earnings Surprises (Actual Minus Predicted EPS Scaled By Price), and Market Reaction For Three Disclosure Categories

	Good News Firms				Bad News Firms			
	N	Surprise Mean	Surprise Median	Investor Reaction[4]	N	Surprise Mean	Surprise Median	Investor Reaction[4]
Earnings/Sales-related forecasts[1]	16	0.0303	0.0250	0.0537	83	-0.1064	-0.0408	-0.0530
Operating information[2]	58	0.0316	0.0185	0.0204	136	-0.0754	-0.0310	-0.0001
No disclosure[3]	97	0.0275	0.0180	----	175	-0.0568	-0.0255	----

[1] Disclosure types 1 - 3 in Table 3
[2] Disclosure types 4 - 6 in Table 3
[3] Disclosure types 7 - 8 in Table 3
[4] Mean five-day market-adjusted return around primary disclosure.

Table 5

DISCLOSURE ATTRIBUTES

Multi-Response Logit Analysis: Dependent Variable Is the Disclosure Type: In the 3-Type Analysis, the Dependent Variable Takes Three Values: Earnings/Sales Forecasts (Types 1 - 3), Operating Information (Types 4 - 6), and No Disclosure (Types 7 - 8). In the 2-Type Analysis, the Dependent Variable Takes Two Values: Earnings/Sales Forecasts (Types 1 - 3) and No Disclosure (Types 7 - 8). The Independent Variables Are The Attributes Defined in Footnotes. The Values Of The Estimated Response Coefficients And Their 2-Tail P-Values of Asymptotic T-Statistics (In Parenthesis) Are Presented In The Table. Good and Bad News Firms Refers To The Subsamples Of Firms With Positive And Negative Earnings Surprises, Respectively.

Independent Variable	3-TYPE CATEGORIZATION Good News Firms	3-TYPE CATEGORIZATION Bad News Firms	2-TYPE CATEGORIZATION Good News Firms	2-TYPE CATEGORIZATION Bad News Firms
Intercept 1	-4.889 (0.00)	-3.945 (0.00)	-1.851 (0.29)	-3.677 (0.00)
Intercept 2	-2.790 (0.00)	-2.235 (0.00)	-------	--------
Earnings Surprise	4.573 (0.36)	-3.194 (0.00)	5.865 (0.55)	-3.274 (0.01)
Prior Forecast	--------	--------	1.106 (0.11)	0.568 (0.09)
Firm Size	0.336 (0.00)	0.356 (0.00)	0.010 (0.96)	0.375 (0.00)
Risk (ß)	0.373 (0.48)	0.160 (0.63)	-0.448 (0.65)	0.424 (0.38)
High Tech	0.132 (0.83)	0.697 (0.03)	0.002 (0.99)	1.132 (0.03)
Regulation	-0.338 (0.39)	-0.795 (0.00)	0.234 (0.75)	-0.873 (0.04)
No. of Observations	171	394	113	258
Chi-Square	11.82 (0.04)	49.84 (0.00)	2.79 (0.83)	34.29 (0.00)

Variable definition:

Earnings surprise: Reported fourth quarter EPS (before extraordinary items) minus analysts' forecast of EPS, deflated by stock price at the beginning of the fourth quarter.

Prior forecast: 1 if the firm issued a prospective (quantitative or qualitative) statement of types 1 - 3 about fourth quarter earnings or sales during the three quarters preceding the one examined in this study. 0 for no prior prospective statement.

Firm Size: Log of total market value of the firm at the beginning of the fiscal quarter examined here.

Risk: The stock's ß, generally estimated over 60 months (at least 36) prior to the quarter examined.

High tech: 1 when the sample firm belongs to: Drugs (SIC codes 2833-2836), R&D Services (8731-8734), Programming (7371-7379), Computers (3570-3577), Electronics (3600-3674); and 0 otherwise.

Regulation: 1 when the firm belongs to: Telephone (COMPUSTAT 4-Digit SIC numbers 4812-4813), TV (4833), Cable (4841), Communications (4811-4899), Gas (4922-4924), Electricity (4931), Water (4941), Financial firms (6021-6023, 6035-6036, 6141, 6311, 6321, 6331); and 0 otherwise.

Table 6

MARKET REACTION TO WARNINGS

Coefficient Estimates (and P-Values of T-Test in Parentheses) of Regressions of Market-Adjusted Returns on Disclosure-Related Variables:

$$MARET_{it} = a + b_1*UE_{it} + b_2*DISC_{it} + b_3*(UE*DISC)_{it} + b_4*SIZE_{it} + \epsilon_{it}$$

Panel A: Good News Firms

Long Window Market Adjusted Returns
(from 60 days before earnings announcement through two days after it)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	0.115	0.779	-0.023	-0.700	-0.015	0.06
p-value*	(.03)	(.13)	(.51)	(.33)	(.07)	

Combined Window Market Adjusted Returns
(5 days around earnings plus 5 days around the warning)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	0.051	0.412	0.012	-0.202	-0.006	0.04
p-value	(.03)	(.07)	(.43)	(.52)	(.07)	

Short Window Market Adjusted Returns
(5 days around earnings announcement)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	0.017	0.219	-0.014	-0.121	-0.001	0.01
p-value*	(.39)	(.28)	(.30)	(.67)	(.77)	

* Of two-tail T-test.

Continued

Table 6 (continued)

Panel B: Bad News Firms

Long Window Market Adjusted Returns
(from 60 days before earnings announcement through two days after it)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	-0.060	0.128	-0.013	0.006	0.001	0.01
p-value	(.08)	(.21)	(.50)	(.96)	(.80)	

Intermediate Window Market Adjusted Returns
(5 days around earnings plus 5 days around the warning)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	-0.031	0.157	-0.020	-0.060	0.003	0.06
p-value	(.06)	(.00)	(.04)	(.33)	(.26)	

Short Window Market Adjusted Returns
(5 days around earnings announcement)

Coefficient	a	b_1	b_2	b_3	b_4	adj. R^2
Coefficient Estimate	0.001	0.172	-0.003	-0.246	-0.002	0.07
p-value	(.97)	(.00)	(.66)	(.00)	(.40)	

$MARET_{it}$ = market adjusted returns for each of the three return windows examined.
UE_{it} = the earnings surprise scaled by share price.
$DISC_{it}$ = warning dummy: 1 for firms disclosing types 1 - 6, and 0 for firms with types 7 - 8.
$SIZE_{it}$ = log market value on the beginning of the fourth fiscal quarter.

TABLE 7

RETURNS TO WARNING AND MATCHED NO-WARNING FIRMS

Mean And Median Market-Adjusted Returns Over Three Windows For Warning And No-Warning Firms, Matched By Earnings Surprise And Firm Size.

Panel A: BAD NEWS FIRMS
Disclosure = Types 1 - 3

	N	Earnings Surprise	Size ($ millions)	Market Adjusted Returns: Long Window	Market Adjusted Returns: Combined Return	Market Adjusted Returns: 5-day Earnings
Means						
Warning Firms	64	-0.080	1031.0	-0.053	-0.062	-0.008
No Warning Firms	64	-0.079	802.0	-0.033	-0.020	-0.019
P-value: T-test[1]		.97	.43	.53	.01	.36
P-value: Wilcoxon Rank-Sum[2]		.95	.69	.43	.00	.78
Medians						
Warning Firms	64	-0.032	385.3	-0.086	-0.070	-0.021
No Warning Firms	64	-0.030	294.8	-0.059	-0.024	-0.021
P-value: Difference in Medians		.72	.72	.48	.08	.99

Panel B: BAD NEWS FIRMS
Disclosure = Types 1 - 6

	N	Earnings Surprise	Size ($ millions)	Market Adjusted Returns: Long Window	Market Adjusted Returns: Combined Return	Market Adjusted Returns: 5-day Earnings
Means						
Warning Firms	110	-0.063	1991.1	-0.056	-0.042	-0.008
No Warning Firms	110	-0.062	1029.5	-0.030	-0.020	-0.019
P-value: T-test[1]		.92	.13	.23	.04	.17
P-value: Wilcoxon Rank-Sum[2]		.73	.50	.33	.05	.43
Medians						
Warning Firms	110	-0.030	599.3	-0.064	-0.034	-0.015
No Warning Firms	110	-0.028	524.3	-0.059	-0.024	-0.022
P-value: Difference in Medians		.42	.59	.79	.28	.42

[1] Two sample t-test (two tail) of difference in means between warning and no warning firms.
[2] Wilcoxon's rank-sum test for identical populations.

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