

The Market Reaction Associated With SFAS No.8 And SFAS No.52: Did Investors Recognize Differential Economic Content Of Translation Gains And Losses?

Grace Gao, West Virginia University, USA
David L. Senteney, Ohio University, USA

ABSTRACT

This study uses the SFAS No.52 functional currency designation as a proxy for the varying economic content of Temporal Method translation gains and losses to refine tests of the market reaction to SFAS No.8 and subsequent foreign currency translation policy events. We observe that dollar functional currency MNEs having by definition a relatively greater degree of short-term cash flow exposure are more negatively impacted by accounting policy events beginning with the SFAS No.8 Exposure Draft and extending through the SFAS No.52 Exposure Draft than are local currency functional currency firms having by definition a relatively lesser degree of short-term currency exposure. Our results are consistent with intuition suggesting that local currency functional currency firms are negatively impacted only by the adverse earnings implications of largely unrealized translation gains and losses induced by SFAS No.8; a condition subsequently alleviated by SFAS No.52. Dollar functional currency firms, on the other hand, are negatively impacted by the earnings effects of floating exchange rates on near-term entity cash flows and the largely realized translation gains or losses taken to income under SFAS No.8; a condition unchanged by SFAS No.52. We conclude that investors did discern the differential degree of MNEs currency exposure relative to the Temporal Method, and that the SFAS No.52 functional currency designation was a relatively important source of information concerning the assessment of the exchange rate exposure of the U.S.-based MNEs.

INTRODUCTION

We refine prior tests of the equity security price impact of foreign currency translation policy events based upon information regarding the differential economic content of MNEs SFAS No.8 temporal method translation gains and losses disclosed in financial statements following upon U.S.-based MNEs adoption of SFAS No.52,¹ but which may have been obtained from more costly private sources at the time of the currency translation policy deliberations. The results suggest that dollar functional currency (DFC) MNEs were significantly more negatively affected by SFAS No.8 than local currency functional currency (LCFC) and both functional currency (BFC) MNEs. This study concludes that investors did recognize the differential effect of fluctuating currency exchange rates upon MNEs' short-term cash flows and the accompanying firm-specific

¹. *Statement of Financial Accounting Standard No.8* (Financial Accounting Standards Board, 1975) (SFAS No.8) prescribed the temporal method of translating foreign currency denominated financial statements for all U.S.-based multinational enterprises (MNEs). However, one uniform translation method is unlikely to be appropriate for all MNEs considering the varying degree to which their underlying cash flow patterns are affected by fluctuating currency exchange rates. *Statement of Financial Accounting Standard No.52* (Financial Accounting Standards Board, 1981) (SFAS No.52) allows management to choose, based upon the criteria set forth in SFAS No.52, the method of translation that they believe most consistent with the affect of fluctuating foreign currency exchange rates upon the underlying cash flow patterns of the entity through its functional currency designation and provides investors with an indication regarding the extent to which firms' cash flows are impacted by fluctuating currency exchange rates. Bartov and Bodnar [1996,1995], Soo and Soo [1996], and Aggarwal [1978] provide discussions of the disparity arising from calculating translation gain or loss on monetary terms for MNEs with no immediate transaction exposure economic and the varying content of translation gains and losses resulting from applying the temporal method uniformly to all firms.

variation in the degree to which SFAS No.8 translation gains and losses were likely to be realized, supporting the use of the SFAS No.52 functional currency designation as a basis for differential accounting treatment for translation gains and losses of economic content (i.e., inclusion in periodic income for translation gain or loss with short-term transactional implications, and deferral for translation gain or loss with no short-term economic content).²

The remainder of the paper is presented in four sections. Summaries of the functional currency distinction and prior research and are presented in the first section. Second, the sample MNEs and empirical method are described. The third section presents and discusses the results. Concluding remarks are contained in the last section of the paper.

RESEARCH MOTIVATION

Weaknesses of the SFAS No.8 Uniform Approach: Remedial Effects of SFAS No.52

The objective of SFAS No.52 is to prescribe methods of translating foreign currency denominated financial statements that produce consolidated financial statements consistent with the impact of currency exchange rate fluctuations upon an entity's cash flows. In contrast, the objective of SFAS No.8 was to prescribe a uniform method of translating foreign currency denominated financial statements and assumes that all firms have a net monetary asset or liability exposure.³ Critics of SFAS No.8 (E.g., Griffin and Castanias [1987] and Aggarwal [1978]) asserted that the SFAS No.8 uniform Temporal Method (i.e., essentially monetary/nonmonetary) approach to currency translation added unwarranted volatility to earnings (among other adverse effects). Per SFAS No.8, the translation gain or loss taken to income is based upon the net monetary position of the foreign subsidiary irrespective of whether none or all of the firm-specific monetary assets and liabilities bear exposure to currency fluctuations. Bartov and Bodnar [1996, p.401] observe that the Financial Accounting Standards Board (FASB) identified the widespread belief that the assumed exposure of a net monetary asset or liability position underlying SFAS No.8 so misrepresented the currency exposure of most firms that it produced financial statement results which were not consistent with economic reality as the primary impetus for the issuance of SFAS No.52.

The essence of SFAS No.52 is managements' communication of the near-term entity cash flow impact of floating currency exchange rates; its designation of the functional currency for each foreign subsidiary.⁴ A foreign

². The relevant literature shows a substantial disparity of results regarding the security price impact of SFAS No.8 and events leading to SFAS No.52. One explanation for this situation is that an important variable describing the equity security price response to foreign currency translation policy events is not considered in the extant literature. We propose that one such variable is the firm-specific impact of floating exchange rates on entity cash flows (i.e., the currency exposure basis) and use the SFAS No.52 management functional currency designation as a proxy. We expect that MNEs with near-term cash flows relatively unaffected by fluctuating exchange rates (i.e., a net investment exposure basis) are negatively impacted only by the incremental earnings volatility from unrealized or noneconomic translation gains and losses included in income following upon SFAS No.8; a condition alleviated under SFAS No.52. Consequently, negative share price effects resulting from SFAS No.8 are not likely to be large for these MNEs. However, we expect that MNEs with short-term cash flows relatively more affected by floating exchange rates (i.e., a more approximate net monetary exposure basis) are negatively impacted by the incremental earnings volatility resulting from the impact of fluctuating currency rates on entity cash flows (i.e., realized translation gain or loss). As this is an economic condition unchanged by SFAS No.52, we expect that negative share price effects associated with SFAS No.8 are larger for these firms. Explicitly controlling for potentially confounding effects of investors differential assessment of the degree of cash flow impact of fluctuating exchange rates may provide a clearer picture than the current literature depicts of the equity security price impact of SFAS No.8 and the transition to SFAS No.52.

³. SFAS No.8 prescribed the Temporal Method of translating foreign currency denominated financial statements which is essentially the monetary/nonmonetary approach to translation under which monetary assets and liabilities are translated at the exchange rate in effect at the balance sheet date (i.e., the current rate). Because all other assets and liabilities are translated at their respective historical rates (i.e., gain or loss is deferred), the Temporal Method translation gain or loss is based upon the net monetary position of the MNE. The primary exceptions are inventory and marketable equity securities which may be translated at the current rate if valued at market rather than cost. An MNE with a net monetary asset exposure is long in the foreign currency and will have translation gains (losses) resulting from relative currency appreciations (devaluations). On the otherhand, an MNE with a net monetary liability exposure is short in the foreign currency and will have translation losses (gains) resulting from relative currency appreciations (devaluations).

⁴. Recent evidence presented by Bartov and Bodnar [1992] suggests that dollar functional currency U.S.-based MNEs

subsidiary's functional currency is the primary currency in which it expends and receives cash.⁵ The functional currency will be either the dollar or the local currency for U.S.-based MNEs.⁶ Through its functional currency designation, managements are selecting methods of translation and disposition of gains and losses that are consistent with underlying economic circumstances surrounding each of its foreign subsidiaries.⁷

Evidence presented by Soo and Soo [1994] and Collins and Salatka [1994] suggests that SFAS No.52 improved financial reporting of MNEs by not recognizing in periodic earnings unrealized translation gains and losses. The more fundamental issue, however, rather than being the financial statement disposition of the translation gain or loss appears to be the net asset or liability position which bears currency exposure (i.e., the basis upon which the translation gain or loss is calculated). Consequently, questions naturally arise regarding whether equity securities investors were cognizant of the varying currency exposure position of MNEs during the currency translation policy deliberation events used as the basis for examining the economic consequences of SFAS No.8.

Prior Research on SFAS No.8 and Related Currency Translation Policy Events

Ziebart and Kim [1987] (from now on ZK) examine the U.S.-based MNE equity security price effects associated with 10 accounting policy events beginning with the date of issuance of the SFAS No.8 Exposure Draft (December 31, 1974) and extending through the date of the issuance of the SFAS No.52 Exposure Draft (August 28, 1980). They expect to find a general negative equity share price effect associated with the issuance of the SFAS No.8 Exposure Draft and SFAS No.8 (events one through three) attributable to the costly hedging of noneconomic translation gains and losses included in income under SFAS No.8. They expect to find a general positive equity share price effect associated with information regarding possible changes in accounting for translation of foreign currency denominated financial statements attributable to the (1) removal of translation gains and losses from the income statement, and (2) mitigation of incentives for management to hedge noneconomic gains and losses.⁸

are significantly smaller in terms of capitalized equity value than local currency functional currency MNEs. This result tends to support the contention that managements' choice of functional currency is an indicator distinguishing between fundamentally different sets of cash flow patterns with differential floating exchange rate effects. In addition, DFC MNEs appear to be the minority, comprising about 20% of U.S.-based MNEs.

⁵. SFAS No.52 asserts that the functional currency for a subsidiary is a matter of fact (SFAS No.52, para. 39), although it may not be readily apparent. It provides a list of indicators which may be helpful in identifying the primary currency in which the subsidiary receives and expends cash. Some of these indicators are (SFAS No.52, para. 42): (1) cash flow indicators; (2) sales price indicators; (3) sales market indicators; (4) expense indicators; (5) financing indicators; and (6) intercompany transactions and arrangements indicators.

⁶. We recognize that the local currency could be a third currency, other than that of the subsidiary's immediate economic environment, and refer to the local currency generally for ease of exposition.

⁷. When management designates the local currency as the functional currency for a particular subsidiary it is saying that, in its assessment, its exchange rate exposure is long-term in nature and exchange gains and losses are not likely to be realized until disposition of the subsidiary (i.e., it is the net investment that is exposed rather than a net monetary position). Consequently, SFAS No.52 indicates that the current rate method of translation is to be employed and attendant translation gains and losses are carried forward cumulatively in equity until disposition of the subsidiary. When management selects the dollar as the functional currency for a subsidiary it is communicating that the primary currency in which the subsidiary expends and receives cash is the dollar. In addition, it is saying that its exchange rate exposure is short-term in nature and that translation gains and losses are likely to be realized in cash in the near-term due to the nature of the items for which gain or loss is recognized (i.e., current items are going to be converted to cash in the coming twelve months by definition). Consequently, SFAS No.52 prescribes that the temporal method of translation is to be used and that resulting translation gains and losses are included in current earnings.

⁸. The ZK study, as well as the Salatka (discussed subsequently) study, do not consider that all firms may not be uniformly affected by the foreign currency translation policy events examined. One important reason is that entity cash flows are not uniformly affected by fluctuating currency exchange rates; a consideration which is at the heart of the SFAS No.52 functional currency designation. The ZK study does consider the pre-SFAS No.8 translation method, and Salatka considers the year of adoption of SFAS No.8, either or both of which may reflect the impact of floating exchange rates on entity cash flows. However, we believe that the functional currency designation is a more direct measure of the effect of fluctuating exchange rates on entity cash flows.

Using weekly cumulative standardized abnormal equity security returns for 287 U.S.-based MNEs, ZK report finding a significant equity share price effect for seven of the 10 accounting policy events examined. While the issuance of SFAS No.8 and the Financial Accounting Standards Board's vote not to reconsider it (events two and three) are associated with significantly negative share price effects as expected, the remaining results are mixed. The proposed technical change to SFAS No.8 (event 6), the invitation to comment on changes to SFAS No.8 (event 7), and the issuance of the SFAS No.52 Exposure Draft (event 10) are associated with significantly positive share price effects that they attribute to the removal of translation gains and losses from income. The announced sponsorship of foreign currency translation research (event 5) and the announced tentative changes to SFAS No.8 (event 9) are associated with significantly negative share price effects, contrary to their expectation.

Salatka [1989] examines the impact of sixteen accounting policy events leading to the issuance of SFAS No.8 upon the equity security share prices of 223 U.S.-based MNEs.⁹ The events begin with *Accounting Research Study No.12*¹⁰ (Accounting Principles Board, 1972) (ARS No.12) (June 30, 1972) and extend through the announcement that the FASB will not reconsider SFAS No.8 (April 29, 1976). Using portfolio cumulative average abnormal returns and portfolio cumulative average abnormal return differences (p.48), Salatka tests the null hypothesis that these returns and return differences are zero for three groups of MNEs: (1) early adopters of SFAS No.8; (2) late adopters of SFAS No.8; and (3) control firms. Contrasted with the results reported by ZK, Salatka's Table 5 (p.50) indicates that cumulative average abnormal returns and cumulative average abnormal return differences significantly differing from zero are sparse. The most notable security price reaction is to (his) Event 12, the release of the SFAS No.8 Exposure Draft. Both early and late adopter portfolio returns and control-firm adjusted early and late portfolio returns are significantly less than zero at the 95% confidence level. Returns cumulated over all 16 events are significantly less than zero only for the portfolio of early adopting firms.

This Study: A Refinement of Prior SFAS No.8 Event Research

We hypothesize (under the alternative) that systematic differences exist in the security price response to the 10 accounting policy events considered individually based upon managements' SFAS No.52 functional currency designation. The SFAS No.52 functional currency designation is used as a proxy for the degree to which MNEs net currency exposure basis corresponds to the (approximate) net monetary asset or liability position prescribed by SFAS No.8. By integrating the SFAS No.52 functional designation with research regarding the equity security price response to currency translation policy events we are providing insight as to whether investors were cognizant of the differential currency exposure bases of MNEs at the time of the SFAS No.8 currency translation policy events.¹¹

⁹. Two of the seventeen accounting policy events examined by Salatka are also examined by ZK. The two common events are (1) the issuance of the SFAS No.8 Exposure Draft (December 31, 1974), and (2) announcement that the board will not reconsider SFAS No.8 (April 29, 1976). The two research studies report different results for these two accounting policy events which may be attributable to differences in the methods employed, providing part of the motivation for this study. ZK observe no significant security price decline associated with the SFAS No.8 Exposure Draft, whereas Salatka reports abnormal returns which are significantly less than zero for the accounting policy event. ZK report a negative security price impact associated with the announcement that the FASB will not reconsider SFAS No.8, while Salatka observes no abnormal returns which are significantly less than zero.

¹⁰. ARS No.12 (June 30, 1972) first addresses translation of foreign currency denominated financial statements under floating exchange rates and encourages use of the temporal method. As SFAS No.1 addresses disclosure practices under floating exchange rates, the ARS No.12 preference for the temporal method carried over to SFAS No.8.

¹¹. Prior research has examined (1) the impact of differential firm characteristics upon U.S.-based MNEs timing of adoption of SFAS No.8 (Salatka) and SFAS No.52 (Ayres), and (2) the equity security price response to SFAS No.8 (Salatka) and SFAS No.52 (ZK) accounting policy events. Hypotheses regarding the impact of managements' SFAS No.52 choice of functional currency upon the equity security price response to foreign currency related accounting policy events remain unexamined. Because the economic content of the translation gain or loss included in periodic income is likely an important variable in describing the equity share price affect associated with foreign currency translation policy events, it is important to adequately consider this factor in making inferences regarding the economic impact of related policy events.

Sample Firms and Firm Specific Data

The firms used in this research are identified as U.S.-based MNEs subject to the *Statement of Financial Accounting Standard No.14* (Financial Accounting Standards Board, 1976) geographic segment disclosures (treatment firms) from the *Compustat* Geographic Segment files.¹² To classify firms as to their SFAS No.52 functional currency designation, we require that statement regarding their functional currency choice appear in the footnote explaining their adoption of SFAS No.52.¹³ The firms must have the requisite equity security return data in the *Center for Research on Security Prices* Daily Master files for the periods required. Two hundred and eight U.S.-based MNE firms satisfy all three of these criteria.¹⁴

Construction of Portfolio Returns Series

We use three adjusted weekly portfolio return series to investigate potential differences in the U.S.-based MNE equity security price response to accounting policy events regarding accounting for translation of foreign currency denominated financial statements based upon differences in managements' designated functional currency.¹⁵ One portfolio return series is constructed for each of the following three functional currency choices: (1) local currency functional currency; (2) dollar functional currency; and (3) both local currency functional currency and dollar functional currency. Each return series begins 56 weeks preceding the SFAS No.8 Exposure Draft (the first accounting policy event examined) and extends through the week following the SFAS No.52 Exposure Draft (the last accounting policy event examined).¹⁶

¹². A firm is identified as an MNE if it has foreign operations constituting 10% or more of consolidated sales, identifiable assets, or operating income. ZK use the *World Dictionary of Multinational Corporations* to identify the U.S.-based MNEs used in their study. Salatka identified the U.S.-based MNEs employed in his study by their SFAS No.8 translation gains and losses from the *Value Line* data tape.

¹³. The footnote disclosure explaining firms' adoption of SFAS No.52 is found in the annual report for one of the years 1981, 1982, or 1983. We require an unambiguous statement from management regarding its functional currency designation because it is not possible to unambiguously infer the functional currency designation using other approaches.

¹⁴. ZK used 287 U.S.-based MNEs and Salatka employed 223 U.S.-based MNEs. Because their studies and our study use the same criterion (i.e., that the firms be multinational, excluding our more stringent functional currency disclosure requirement) to identify the firms employed we are reasonably confident that they are virtually the same set of MNEs. Although we may make comparisons of our results with the other studies, we note that differences in results may be attributable to differences in the firms used.

¹⁵. First, we subtract from the daily return of each sample MNE the average daily return for the size decile to which that firm belongs. The daily equal weighted-average size decile returns are calculated including none of the firms identified as MNEs from the *Compustat* Geographic Segment files. Differencing returns in this manner uses the size decile portfolio as a control portfolio and, beyond controlling for size effects, cancels the return effects common to both sets of firms. The differenced returns reflect only the impact of firm specific factors. Second, we cumulate the daily size portfolio differenced returns of each sample MNE to obtain weekly return series for each sample firm. Third, each of the sample MNEs is assigned to one of the three functional currency portfolios. Fourth, for each functional currency portfolio, equal weighted-average weekly return series are constructed.

(1) Size-Adjustment of Daily Security Returns:

$$SIZDIF_{is} = MNE_{is} - DECILE_{ms}$$

where,

$$DECILE_{ms} = \frac{1}{N_m} \sum R_{is}, R_{is} \notin GEOSEG$$

m = the index for the ten size deciles,

SIZDIF_{is} = the ith sample MNE size-adjusted security return for trading-day s,

DECILE_{ms} = the daily return of mth size decile calculated without including any firm identified as having foreign operations satisfying the SFAS No.14 ten percent criterion,

¹⁶. The beginning and ending points of the return series and the use of weekly returns (discussed subsequently) are as employed by ZK. Each of the three weekly portfolio return series is 344 weeks in length (i.e., t=1,...,344).

(1) Construction of Weekly Series:

$$WEEKLY_{it} = \sum_{s-5}^s RET_{is}$$

WEEKLY_{it} = weekly security return for sample MNE i,

$$DECILE_{ms} = \frac{1}{N_m} \sum R_{is}, R_{is} \notin GEOSEG$$

i = the index for sample of MNEs (satisfying functional currency criterion),

s = the index for trading days,

m = the index for the ten size deciles,

SIZDIF_{is} = the ith sample MNE size-adjusted security return for trading-day s,

MNE_{is} = the daily security return for sample firm i ($= \frac{Price_{is} - Price_{is-1} + Dividend_s}{Price_{is-1}}$),

DECILE_{ms} = the daily return of mth size decile calculated without including any firm identified as having foreign operations satisfying the SFAS No.14 ten percent criterion,

GEOSEG = the set of firms satisfying the SFAS No.14 ten percent criterion,

MNE = the set of sample firms employed (MNE ⊂ GEOSEG).

(2) Construction of Functional Currency Portfolio Return Series:

$$LCFC_t = \frac{1}{N_{LCFC}} \sum_{i=1}^{i=N_{LCFC}} WEEKLY_{it} \forall i \in LCFC$$

$$BFC_t = \frac{1}{N_{BFC}} \sum_{i=1}^{i=N_{BFC}} WEEKLY_{it} \forall i \in BFC \quad DFC_t = \frac{1}{N_{DFC}} \sum_{i=1}^{i=N_{DFC}} WEEKLY_{it} \forall i \in DFC$$

LCFC_t = week t equal weighted-average return for LCFC portfolio,

DFC_t = week t equal weighted-average return for DFC portfolio,

BFC_t = week t equal weighted-average return for BFC portfolio.

The Multivariate Regression Model

We use the multivariate regression model discussed in Binder [1985] to estimate the cumulative average

excess returns associated with the 10 accounting policy events shown in Table 1. The multivariate regression model, shown in Equation (1) through Equation (3) below, regresses weekly returns on weekly returns for the three functional currency portfolios onto an equal-weighted market portfolio using ten sets of qualitative variables to parameterize the cumulative average abnormal returns associated with the 10 accounting policy events. The abnormal return cumulations are carried out using techniques discussed in Salinger [1992].

$$LCFC_t = \alpha_0 + \alpha_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} A_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} A_{10} \cdot EVENT_{10jt} + \chi_t$$

$$DFC_t = \beta_0 + \beta_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} B_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} B_{10} \cdot EVENT_{10jt} + \psi_t$$

$$BFC_t = \gamma_0 + \gamma_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} \Gamma_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} \Gamma_{10} \cdot EVENT_{10jt} + \omega_t$$

Legend for Multivariate Regression Model: Equation (1) -- Equation (3)

LCFC_t, DFC_t, BFC_t = week t security return for LCFC, DFC and BFC portfolios,

MARKET_t = week t security return for market portfolio,

α₀, β₀, γ₀ = ordinary least-squares (OLS) intercept estimates,

α₁, β₁, γ₁ = OLS systematic risk measure,

A_k, B_k, Γ_k = week t abnormal returns for LCFC, DFC and BFC portfolios,

EVENT_{jkt} = j+1 dimension vector of qualitative variables,

χ_t, ψ_t, ω_t = regression residuals with zero means and constant variances.

We use Equation (1) through Equation (3) to test the hypotheses shown in Equation (4) regarding the equality of cumulative abnormal returns for each accounting policy event across the three functional currency return portfolios. Specifically, we test the null hypothesis that the sums of the coefficients concerning each accounting policy event are equal across the functional currency portfolios.

Hypotheses Tested Using Equation (1) -- Equation (3)

Foreign Currency Translation Policy Events *Considered Individually*

$$\sum_{t=t-j}^{t=t} A_{jk} = \sum_{t=t-j}^{t=t} B_{jk} = \sum_{t=t-j}^{t=t} \Gamma_{jk} \quad \forall k \in [1, \dots, 10]$$

H01_k: We hypothesize (in the null) that the cumulative abnormal equity security returns (j+1 cumulations per individual event) associated with each of the ten foreign currency translation policy events *considered individually* are equal across the three functional currency portfolios. The null hypothesis is tested two times per event; one test for each cumulation. The total number of tests of the null hypothesis is twenty (i.e., two hypotheses per event multiplied by ten events).

RESULTS

Our general results support the contention that (1) the functional currency portfolio return series were differentially impacted by foreign currency translation accounting policy events, and (2) DFC MNEs were more negatively and persistently impacted than the other functional currency portfolios. Consistent with the results reported by Salatka, the most pronounced difference we find is for the SFAS No.8 Exposure Draft.

Abnormal Returns Over Ten Policy Events Cumulatively

Table 1 and Table 2 show the abnormal return cumulations over the entire 10 accounting policy event period and the related F-tests of the null hypothesis regarding the equality of the cumulative average abnormal returns across the three functional currency portfolios. Table 1 shows that the dollar functional currency portfolio has negative cumulative average abnormal returns that are significantly less than zero at the $\alpha=0.05$ confidence level for all 10 accounting policy events for the one week and two week cumulation periods. The LCFC and BFC portfolios show no abnormal return cumulations which are consistently different from zero at the $\alpha=0.05$ confidence level. Table 2 shows the results of F-tests of the null hypotheses that the cumulative abnormal returns are jointly equal. The null hypothesis is rejected over all ten accounting policy events for the one week and two week cumulation periods.

Table 1

Abnormal Returns Cumulated Over All Ten Foreign Currency Translation Accounting Policy Events ^{a b c}

Panel A: Local Currency Functional Currency Firm Portfolio (Equation 1)										
Cumulation	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10
CAR[0,0]	-0.02254 (-1.317)	-0.01711 (-0.720)	-0.01585 (-0.548)	-0.02061 (-0.618)	-0.02794 (-0.749)	-0.01731 (-0.422)	-0.00693 (-0.156)	-0.01937 (-0.408)	-0.00974 (-0.193)	-0.01873 (-0.352)
CAR[-1,0]	-0.02204 (-1.966)†	-0.01388 (-0.883)	-0.00705 (-0.366)	-0.00179 (-0.080)	-0.01914 (-0.765)	-0.00057 (-0.021)	0.00857 (0.286)	-0.00173 (-0.054)	0.01308 (0.385)	0.00526 (0.146)
Panel B: Dollar Functional Currency Firm Portfolio (Equation 2)										
Cumulation	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10
CAR[0,0]	-0.07127 (-3.213)†	-0.05979 (-1.940)	-0.07621 (-2.033)†	-0.09694 (-2.242)†	-0.11165 (-2.309)†	-0.10705 (-2.014)†	-0.11312 (-1.964)†	-0.13241 (-2.151)†	-0.12386 (-1.893)	-0.13548 (-1.963)
CAR[-1,0]	-0.08673 (-4.124)†	-0.06942 (-2.351)†	-0.08267 (-2.286)†	-0.08314 (-1.984)†	-0.11301 (-2.407)†	-0.10279 (-1.986)†	-0.11647 (-2.074)†	-0.13622 (-2.264)†	-0.13944 (-2.185)	-0.14264 (-2.113)
Panel C: Both Local Currency and Dollar Functional Currency Firm Portfolio (Equation 3)										
Cumulation	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10
CAR[0,0]	-0.0378 (-1.634)	-0.04157 (-1.292)	-0.01005 (-0.257)	-0.00791 (-0.175)	0.00107 (0.021)	-0.01831 (-0.330)	0.01999 (0.332)	-0.00043 (-0.007)	0.01208 (0.177)	-0.02370 (-0.329)
CAR[-1,0]	-0.04384 (-1.841)	-0.04221 (-1.263)	-0.01314 (-0.321)	-0.01387 (-0.293)	-0.01691 (-0.318)	-0.02965 (-0.506)	0.00264 (0.042)	-0.00594 (-0.087)	-0.01472 (-0.204)	-0.04325 (-0.566)

a: The values shown in Table 1 are the OLS parameterizations of the functional currency portfolio cumulative average abnormal returns (i.e., corresponding to ΣA_k , ΣB_k , and $\Sigma \Gamma_k$, in Equation (1), Equation (2), and Equation (3) in the text and repeated below) cumulated over all ten accounting policy events (i.e., $\Sigma \Sigma A_k$, $\Sigma \Sigma B_k$, and $\Sigma \Sigma \Gamma_k$, in Equation (5)). Moving from left to right, the columns in Table 1 indicate the cumulative average abnormal return for each respective functional currency portfolio as of the event shown for each cumulation period per policy event. For example, the cumulative average abnormal return for Event 2 is the cumulative average abnormal return for Event 1 and Event 2 (for a fixed cumulation period per event). Similarly, the cumulative average abnormal return for Event 10 is the cumulative average abnormal return for Event 1 through Event 10 (for a fixed event cumulation period). The cumulations are accomplished through the design of the $EVENT_{jkt}$ vector using techniques discussed in Salinger [1992].

Table 1 Continued ...

$$LCFC_t = \alpha_0 + \alpha_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} A_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} A_{10} \cdot EVENT_{10jt} + \chi_t$$

$$DFC_t = \beta_0 + \beta_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} B_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} B_{10} \cdot EVENT_{10jt} + \psi_t$$

$$BFC_t = \gamma_0 + \gamma_1 \cdot MARKET_t + \sum_{t=t-j}^{t=t} \Gamma_1 \cdot EVENT_{1jt} + \dots + \sum_{t=t-j}^{t=t} \Gamma_{10} \cdot EVENT_{10jt} + \omega_t$$

b: The rows shown in each functional currency panel of Table 1 reflect the two cumulation periods per policy event indicated by the j+1 vector $EVENT_{jkt}$ shown in Equation (1) through Equation (3). The first index in the CAR row indicator reflects the beginning week of the cumulation window. The second week in the row indicator represents the ending week for the cumulation period. The ending week is always the week of the accounting policy event. The beginning week takes five values indicating up to five week cumulation periods. CAR[0,0] indicates a one week abnormal return cumulation. The first index in the row indicator corresponds to the index j in Equation (1) through Equation (3) in the text.

c: † indicates that the cumulative abnormal return is significantly different at the $\alpha=0.05$ confidence level employing two -tailed t-tests. The null hypothesis that the cumulation is equal to zero is not formally stated.

Table 2
Tests of Joint Hypotheses of Equality of Cumulative Abnormal Returns Across Functional Currency Portfolios by Informaton Event

Cumulation	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10
CAR[0,0]	7.5965† (0.0005)	3.1058† (0.0452)	4.6392† (0.0099)	5.7989† (0.0031)	6.2697† (0.0020)	4.8395† (0.0081)	6.6771† (0.0013)	6.2782† (0.0020)	5.7426† (0.0033)	4.7972† (0.0084)
CAR[-1,0]	7.1143† (0.0009)	2.6818 (0.0690)	3.4940† (0.0308)	2.9405 (0.0533)	3.3443† (0.0357)	2.9490 (0.0529)	4.0146† (0.0184)	4.0751† (0.0173)	4.4115† (0.0124)	3.6122† (0.0274)

Table 2 Continued ...

†: The null hypothesis that the cumulative average abnormal returns shown in Table 1 are equal across the functional currency portfolios is rejected at the $\alpha=0.05$ confidence level using two-tailed f-tests. The null hypotheses to which the f-statistics shown in Table 2 relate are formally stated in Equation (5) shown in the text and below.

$$\sum_{k=1}^{k=k} \sum_{t=t-j}^{t=t} A_{jk} = \sum_{k=1}^{k=k} \sum_{t=t-j}^{t=t} B_{jk} = \sum_{k=1}^{k=k} \sum_{t=t-j}^{t=t} \Gamma_{jk} \quad \forall k \in [1, \dots, 10]$$

H0_{2k}: We hypothesize (in the null) that the cumulative abnormal equity security returns (j+1 cumulations per individual event) associated with each of the ten foreign currency translation policy events *considered cumulatively from event one through event k* are equal across the three functional currency portfolios. The null hypothesis is tested five times per event; one test for each cumulation. The total number of tests of the null hypothesis is fifty (i.e., five hypotheses per event times ten events).

a: Probability values for the f-statistics are shown in parentheses below the related f-statistic.

b: As in Table 1, the columns of Table 2 correspond to the accounting policy events. Moving from left to right, the columns in Table 2 indicate the f-statistics resulting from tests of the null hypothesis regarding the equality of the cumulative average abnormal return for each respective functional currency portfolio as of the event shown and for each cumulation period per policy event. For example, the f-test for Event 2 tests the null hypothesis that the cumulative average abnormal return for Event 1 and Event 2 (for a fixed cumulation period per event) are equal across functional currency portfolios. Similarly, the f-test for Event 10 tests the null hypothesis that the cumulative average abnormal return for Event 1 through Event 10 (for a fixed event cumulation period) are equal across functional currency portfolios.

c: As in Table 1, the rows shown in each functional currency panel of Table 2 reflect the five cumulation periods per policy event. As previously, the first index in the CAR row indicator reflects the beginning week of the cumulation window. The second week in the row indicator represents the ending week for the cumulation period. The ending week is always the week of the accounting policy event. The beginning week takes five values indicating up to five week cumulation periods. CAR[0,0] indicates a one week abnormal return cumulation. The first index in the row indicator corresponds to the index j in Equation (1) through Equation (3) in the text.

Our study investigates the effectiveness of the SFAS No.52 functional currency choice as an indicator of the impact fluctuating currency exchange rates have on the underlying cash flow patterns of U.S.-based MNEs. Employing equity security returns as a proxy for investors assessment of prospective investment related cash flows, we test for systematic differences in the equity security price response to foreign currency translation policy events based upon the SFAS No.52 functional currency choice. While we expect LFC MNEs to be negatively affected by the economic costs associated with noneconomic translation gains and losses included in income under SFAS No.8, these negative effects should dissipate during the transition from SFAS No.8 to SFAS No.52. We expect that DFC MNEs will be negatively impacted by the costs associated with hedging and the impact of fluctuating foreign currency exchange rates on entity cash flows. However, these negative effects of floating currency exchange rates should not dissipate during the transition from SFAS No.8 to SFAS No.52.

Our general results confirm these expectations. Consistent with Salatka (and contrary to ZK), we find that all MNEs were negatively but not significantly impacted by the SFAS No.8 Exposure Draft. In addition, we observed that DFC MNEs were the most negatively effected by the SFAS No.8 Exposure Draft. The negative abnormal returns persisted over the entire period from the SFAS No.8 Exposure Draft to the SFAS No.52 Exposure Draft for DFC MNEs, but appear to dissipate for LCFC MNEs.

The implication of our results is that the functional currency choice is an effective indicator of the cash flow impact of fluctuating foreign currency exchange rates. Our results are timely and relevant because they provide justification for differential accounting treatments based upon differences in underlying circumstances as a matter of policy. The evolution of accounting for the translation of foreign currency denominated financial statements from SFAS No.8 into SFAS No.52 characterizes a less rigid notion of uniformity in which comparability of financial statements arises from similar accounting principles applied to similar sets of underlying economic circumstances, rather than all companies employing one method. Our results provide initial justification for using cash flow effects as a criterion for realizing/deferring other gains and losses, such as those related to marketable equity securities.

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