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International Journal of the Academic Business World

Volume 2 Issue 1

# International Journal of the Academic Business World

## Contents



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## International Journal of the Academic Business World

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# When Newly Public Firms Make Partial Acquisitions

**Joan Wiggenhorn**
College of Business
Florida Institute of Technology
Melbourne, Florida

***ABSTRACT***

*This study focuses on one method that firms use to expand during their first year after their IPO. Over 130 partial acquisitions made by newly public firms from 1992-2001 are studied. A logit analysis shows that, compared to full acquisitions, the target assets are more likely to be owned by a public firm and paid by cash. Partial acquisitions are less likely to be made by internet or tech firms. In general, the market reacts favorably to the announcements and a statistically significant cumulative abnormal return of 3.00% is found for the two day window. However, while the announcement returns are positive, the 12 month and 18 month cumulative abnormal returns are negative showing that the positive response at the announcement was not warranted.*

## Introduction

Newly public firms, in an effort to survive as an independent entity, may feel compelled to grow rapidly and partial acquisitions provide them one way of achieving their goal. This study extends the acquisition literature by examining partial acquisitions made by newly public firms. The belief is that these newly public firms will behave differently due to size, as well as the immediacy of the need to expand. Examining IPOs from 1992-2001 and using the *Wall Street Journal* and *New York Times* indices, this study finds that over 130 partial acquisitions are made by these newly public firms during their first year post IPO.

There are two types of partial acquisitions. In the first type less than 50% of the stock is acquired while the second type involves divestitures or sell-offs of some portion of a firm's assets. The vast majority of partial acquisitions made by newly public firms involve the second type. Full acquisitions require a major commitment not only in terms of the purchase price, but also for the assimilation of the assets and workforce of the target. Newly public firms may view partial acquisitions more favorably than total acquisitions, since only those assets that fit strategically are purchased. Firms that have recently had an IPO, with their large cash inflow and many times rising stock prices, provide a new environment to determine when partial acquisitions are perceived to be value enhancing. In addition to studying under what conditions these partial acquisitions are received favorably by the market, these acquirers are examined one year post-acquisition announcement to determine the how the firm's performance compares to the market.

## Review of the Literature

The literature concerning full acquisitions shows that announcement returns are either negative or not significantly different from zero (Jensen & Ruback, 1983; Asquith & Kim, 1982; Mulherin & Boone, 2000; Weston, Siu &Johnson, 2001). For the first type of partial acquisition, Mikkelson and Ruback (1985) find a positive and significant abnormal return of 1.17 % when a buyer purchases some of the target's stock. The reason most often given for the positive return is the expectation that the bidder will be an effective block holder and improve the corporate governance of the target.

For divestitures or sell-offs, Jain (1985) finds buyers earn a significant 0.34 % the day before the *Wall Street Journal* announcement. Sicherman and Pettway (1987) find that buyers have a significant 0.31 % abnormal return two days before the *Wall Street Journal* announcement. Returns for a two month window depend if the acquisition is related or not. Sicherman and Pettway (1992) find that buyers experience a positive and significant return only when the price is revealed.

Thus, the literature supports the expectation of small positive announcement returns for partial acquisitions. However, the benefits should be especially large for newly public firms that need to grow quickly in order to compete with larger more established firms. Partial acquisitions provide the firm a way to obtain economies of scale without overpaying for an entire firm. Thus, it is important to determine why these firms choose partial acquisition versus full acquisitions.

The next section describes how the sample is obtained. The methodology section includes a logit analysis to

determine those factors which favor a partial acquisition versus a full acquisition, the partial acquisition announcement returns with a cross section analysis, and the long run abnormal returns with a cross section as well. The results and conclusion follow.

## Sample

The original sample of IPOs from 1992 through 2001 is provided by the Securities Data Corporation. The data includes: firm name, ticker symbol, issue date, offer price, filing date, lockup date, the number of days in the lockup period, the number of shares to be locked, the main SIC code, the number of shares issued, the underwriter, the closing price on the first day, and if the firm is backed by venture capital.

By searching the *Wall Street Journal* and *New York Times* indices, using the key word "acquire", each firm is examined for the first year following its IPO to determine if an acquisition announcement is made. Information concerning the size, payment method, and if the target is a public or private firm is also noted. The requirement to be considered a partial acquisition is that either less than 50 % of the target's stock is acquired or only some portion or a single division of the firm's assets are purchased. Only seven of the partial acquisitions involve toeholds, while acquisitions of assets or subsidiaries number one hundred and thirty-one. There were 418 full acquisitions made in the same period.

## Methodology

### Multivariate Logistic Analysis

Since the literature reveals that the returns for full acquisitions are generally negative and the returns for partial acquisitions generally positive, it is important to determine if there are firm characteristics which explain the acquisition type that is chosen. The purpose of the logit is to determine which characteristics make it more likely for a firm to make a partial acquisition. The characteristics considered are either those found to be important in determining the announcement returns of acquisitions or factors that are unique to IPOs and thus newly public firms. These same variables are used in the cross section analysis for both announcement and long run abnormal returns:

*Size:* SIZE is the log of market value at the time of the acquisition announcement.

*Target Organizational Form:* A dummy variable, PUBLIC =1 if the target's assets are those of a publicly held firm, zero otherwise.

*Financing:* A dummy variable CASH =1 for acquisitions paid by cash.

*Acquisition Motive:* A dummy variable SCALE = 1 is used for those acquisitions made for economies of scale, zero otherwise. If the target assets are in a related industry, the motive is economies of scale.

*Venture Capital:* A dummy variable VC = 1 if the bidder had venture capital support prior to its IPO, zero otherwise.

*Technology:* A dummy variable TECH =1 for firms in a technology industry, zero otherwise. TECH includes Loughran and Ritter's (2004) list of tech SIC codes, with an adjustment to include Internet stocks.

*RunPercent:* RUNPCT is the percent change in the stock price from the close of the first day of trading to three days prior to the announcement.

*Tier of Underwriter:* TOPTIER = 1 for those firms with the highest level of underwriter, zero otherwise. The Carter-Manaster ratings from Carter, Dark and Singh (1998) are used to determine underwriter tier level.

*Advisor:* ADVISOR =1 if the underwriter and the acquisition advisor are the same, zero otherwise.

The expectation is that firms are more likely to choose partial acquisitions over full acquisitions when they are smaller in size, are financing with cash, and the target assets are in a related industry. The expectation is that firms are more likely to undertake a full acquisition when the IPOs were done by top tier underwriters, venture capitalists were present before the IPO, the advisor for the acquisition is the same as the underwriter, the firm is in a technology industry, and there has been a large runup in stock price.

Thus, the following logistic regression model is examined:

$$P(Partial/(Full)_j = \alpha + \beta_1 SIZE_j + \beta_2 PUBLIC_j + \beta_3 CASH_j + \beta_4 SCALE_j + \beta_5 VC_j + \beta_6 TECH_j + \beta_7 RUNPCT_j + \beta_8 TOPTIER + \beta_9 ADVISOR + \varepsilon \quad (1)$$

## Announcement Returns

Abnormal announcement returns are calculated using a market adjusted method for days -5 to +5. Since many of the firms are small, an equal weighted CRSP index is used for the market returns because it gives small firms more weight than does an equal weighted index (Mikkelson & Partch 1988). Market adjusted returns are used since both the market model and mean adjusted methods require an estimation period and the time period is too short for many of the events.[1] The event day is the day of the announcement in the *Wall Street Journal* or the *New York Times***.** For each event, the abnormal returns are calculated as:

$$AR_{ij} = R_{ij} - MR_i \quad (2)$$

Where:

$AR_{ij}$ is the abnormal return for acquiring firm in announcement j on day i,

$R_{ij}$ is the actual return for acquiring firm in announcement j on day i, and

$MR_i$ is the return of the CRSP equal weighted index on day i.

The Average Abnormal Return per day ($AAR_{ik}$), the Cumulative Abnormal Returns per firm ($CAR_{jk}$) and the Average Cumulative Abnormal Return ($ACAR_k$) are calculated:

$CAR_j = \Sigma AR_{ij}$ for days $i = 1,2,3$, and acquiring firm in announcement j. (3)

$AAR_i = 1/N \ \Sigma AR_{ij}$ for acquiring firm in announcement $j = 1$ *to* $N$. (4)

$ACAR = 1/N \ \Sigma CAR_j$ for acquiring firm in announcement $j=1$ *to* $N$. (5)

A t-test is performed to determine statistical significance for the abnormal returns.

1 DeBondt and Thaler (1985) and Bradley, Jordan, and Ritter (2003) use market adjusted returns and both DeBondt and Thaler (1985) and Cox and Peterson (1994) find no differences between different methods of calculating abnormal returns.

## Announcement Cross Section Regression

A cross sectional regression analysis is performed to determine what specific factors influence the Cumulative Abnormal Returns ($CAR_j$) for acquisition announcements. The same independent variables from the cross section are used again, plus three additional variables:

*Relative Size: RELSIZE* is the ratio of the target's assets size (as quoted in the news release) to the acquiring firm's size.

*Percent Insider Ownership:* INSIDE measures the percentage of stock that insiders hold after the offering.

*Timing of the Announcement:* A dummy variable, LOCK =1, if the acquisition is before lockup expiration.

### Cross Section Regression Equation

Therefore, the equation becomes:

$$CAR_j = \alpha + \beta_1 SIZE_j + \beta_2 PUBLIC_j + \beta_3 CASH_j + \beta_4 SCALE_j + \beta_5 VC_j + \beta_6 TECH_j + \beta_7 RUNPCT_j + \beta_8 TOPTIER_j + \beta_9 ADVISOR_j + \beta_{10} RELSIZE_j + \beta_{11} INSIDE_j + + \beta_{12} LOCK_j + \varepsilon \quad (6)$$

## Long Run Performance

Another question to be answered is if acquisition activity affects a firm's financial performance, not only in the short run with the announcement returns, but also months later. Previous studies have found long run negative returns (Asquith & Kim,1982; Jensen & Ruback,1983; Loderer & Martin,1992; Agrawal, Jaffe, & Mandelker,1992). To date, the only study (Wiggenhorn, Gleason & Madura, 2007) that has considered the performance of newly public firms after their original acquisition announcements concerns full acquisitions, not partial acquisitions. CARs are determined for the six month, twelve month and eighteen month horizon.

## Long Run Cross Section

In order to determine which variables affect long run returns, a cross section analysis is performed using the same variables as the announcement cross section.

Thus:

$$LRAR_j = \alpha + \beta_1 SIZE_j + \beta_2 PUBLIC_j + \beta_3 CASH_j + \beta_4 SCALE_j + \beta_5 VC_j + \beta_6 TECH_j + \beta_7 RUNPCT_j + \beta_8 TOPTIER_j + \beta_9 ADVISOR_j + \beta_{10} RELSIZE_j + \beta_{11} INSIDE_j + + \beta_{12} LOCK_j + \varepsilon \quad (7)$$

## Results

### Logistic Regression

Table 1 provides results of the logistic regression predicting which firms will make a partial acquisition rather than a full acquisition using various model specifications. All models are significant at the 1% level, as indicated by the Chi Square statistic. Wald statistics show significance for the individual variables.

Firms that make partial acquisitions are more likely to purchase assets from publicly traded firms and to pay with cash as was expected. They are not likely to be in a technology or internet industry, perhaps because those firms require faster growth for survival. Also, firms are less likely to make partial acquisitions when the investment advisors are the same as the lead underwriters for the IPOs. It may be that underwriters may encourage the firm's dependence in the acquisition process hoping that this will ultimately lead to the need for a secondary offering of shares. Somewhat surprisingly, there are no significant differences concerning the size of the firm, the presence of venture capitalists or the reason for the acquisition

**Table 1**
**Logistic Regression**

| | 1 | 2 | 3 |
|---|---|---|---|
| **CONSTANT** | -1.717<br>(10.01)<br>*** | -1.588<br>(9.78)<br>*** | -1.98<br>(87.11)<br>**** |
| **SIZE** | -0.076<br>(.60) | -0.099<br>(1.21) | |
| **PUBLIC** | 1.89<br>(60.12)<br>**** | 1.903<br>(62.11)<br>**** | 1.845<br>(60.89)<br>**** |
| **CASH** | 1.25<br>(26.73)<br>**** | 1.268<br>(27.78)<br>**** | 1.255<br>(27.88)<br>**** |
| **SCALE** | 0.09<br>(.16) | 0.103<br>(.19) | |
| **VC** | 0.122<br>(.25) | | |
| **TECH** | -0.504<br>(3.18)<br>* | -0.500<br>(3.49)<br>* | -0.602<br>(5.68)<br>** |
| **RUN %** | -0.050<br>(.31) | | |
| **TOPTIER** | 0.349<br>(1.86) | 0.356<br>(1.93) | 0.214<br>(.90) |
| **ADVISOR** | -0.624<br>(2.77)<br>* | -0.625<br>(2.82)<br>* | .-0.655<br>(3.20)<br>* |
| **CHI SQ** | 121.62<br>**** | 121.12<br>**** | 117.14<br>**** |

Dependent variable = partial acquisition announcement.
SIZE= log of market capitalization.
PUBLIC =1 if target is a publicly held firm.
CASH =1 if financing is cash.
SCALE =1 if motive is economies of scale.
VC=1 if venture capital is present before the
IPO. TECH =1 if technology or internet firm.
RUNPCT = the percentage change in the stock price from first trading day until three days prior to acquisition announcement.
TOPTIER =1 if underwriter is top tier.
ADVISOR =1 if underwriter from IPO is the same as the investment banker for acquisition.

*significant at .10 level, ** significant at .05 level
*** significant at the .01 level, **** significant at .0001 level

Announcement Abnormal Returns

There are several reasons why higher positive abnormal returns make sense. Newly public firms may feel that they must grow or be swallowed by larger firms. Additionally, these newly public firms may have difficulty absorbing and integrating an entire company. Finally, partial acquisitions generally do not involve multiple bidders or hostile takeovers, so the market may perceive that the firm is not overpaying for the target. Thus, the market recognizes that these partial acquisitions are value enhancing.

**Table 2**
**Announcement CARs**

This table presents the market adjusted Average Cumulative Abnormal Returns (ACARs) calculated using a CRSP equally weighted index. Partial acquisitions include either toeholds with less than 50 percent of the stock being purchased or the purchase of either a subsidiary or specific assets. Day 0 is the day of the announcement in either the *Wall Street Journal* or the *New York Times*. Below the ACARs are the t scores as well as the significance level. The last column shows the ratio of positive to negative ACARs with the generalized z-scores and significance level.

| Days | Mean Abnormal Return | Positive: Negative |
|---|---|---|
| (-1, 0) | 3.00%<br>(4.16)**** | 86:52<br>(4.32)**** |
| (-1, +1) | 2.89%<br>(3.56)**** | 87:51<br>(4.49)**** |
| (-5, +5) | 3.60%<br>(2.77)*** | 83:55<br>(3.81)**** |

**significant at .10, **significant at .05, ***significant at .01, ****significant at .001*

## Cross Section Results

The cross section analysis is done for the window (-1, +0) and the results are in Table 3. The first equation includes all independent variables while the next three are for a reduced sample. Similar to Moeller, Schlingermann, and Stulz (2004), larger firms have lower returns. Also, when target assets are from a publicly traded firm, announcement returns are higher. This somewhat contradicts the findings of Chang (1998) in which acquisitions of privately held firms with stock financing had higher returns. However, this was presumably since a new blockholder would improve corporate governance. Since insiders still hold a significant portion of stock from the IPO, additional governance should not be an issue. Tech acquisitions are negative and significant for all models. This agrees with the findings of Jones, Lanctot and Teegen (2000), but differs from that of Schultz and Zaman (2001), but they only examined internet firms for a much smaller period. Firms that have experienced a larger runup in price following their IPO, a proxy for Rau and Vermaelen's (1998) "glamour" stocks, have higher announcement returns.

Different from the general acquisition literature (see Travlos, 1987; Walker, 2000), the type of payment is not significant, nor is the motive for the acquisition. Also in contrast to the general acquisition literature (Loderer & Martin, 1992), there was no relationship between the relative size of the deal and the abnormal announcement returns.

While Bradley, Jordan, and Ritter (2003) as well as Brav and Gompers (1997) find that venture capital affects the stock price performance of newly public firms, the presence of venture capital has no impact on the announcement returns. The tier of the underwriter does have a negative impact. Previous studies have found that the advisor reputation is significant in IPO underpricing (Loughran & Ritter, 2004), IPO performance (Carter, Dark, & Singh, 1998) and acquiring firm's performance (Rau, 2000).

**Table 3**
**Cross Sectional Analysis for Window (-1, 0)**

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| **CONSTANT** | 0.040<br>(0.57) | 0.036<br>(0.55) | 0.077<br>(2.45)<br>** | 0.085<br>(3.03)<br>*** |
| **SIZE** | -0.005<br>(-0.36) | -0.005<br>(-0.42) | -0.001<br>(-1.84)<br>* | -0.012<br>(-2.54)<br>** |
| **PUBLIC** | 0.032<br>(1.27) | 0.035<br>(1.38)<br>* | 0.023<br>(1.55) | 0.023<br>(1.53) |
| **CASH** | -0.017<br>(-0.66) | -0.021<br>(-0.86) | -0.002<br>(-0.14) | 0.001<br>(0.06) |
| **SCALE** | 0.026<br>(0.97) | 0.028<br>(1.07) | 0.006<br>(0.43) | |
| **VC** | -0.021<br>(-0.89) | | | |
| **TECH** | -0.065<br>(-2.28)<br>** | -0.070<br>(-2.50)<br>** | -0.031<br>(-1.76)<br>* | -0.029<br>(-1.67)<br>* |
| **RUN %** | 0.021<br>(2.40)<br>** | 0.020<br>(2.31)<br>** | 0.022<br>(4.31)<br>**** | 0.022<br>(4.49)<br>**** |
| **TOPTIER** | -0.037<br>(-1.51) | -0.041<br>(-1.71)<br>* | -0.014<br>(-0.92) | |
| **ADVISOR** | 0.003<br>(0.09) | -0.001<br>(-0.04) | -0.014<br>(-0.58) | -0.014<br>(-0.57) |
| **RELSIZE** | 0.017<br>(1.05) | 0.020<br>(1.21) | | |
| **INSIDE** | 0.0004<br>(0.91) | 0.0006<br>(1.20) | | |
| **LOCK** | 0.014<br>(0.57) | | | |
| **N** | 75 | 75 | 136 | 136 |
| **Adj. $R^2$**<br>**F** | 0.080<br>(1.55) | 0.091<br>1.75<br>* | .100<br>2.88<br>*** | .107<br>3.71<br>*** |

The sample consists of 138 partial acquisition announcements.
The CARs are for the two day window (-1, 0).
SIZE= log of market capitalization.
PUBLIC =1 if target is a publicly held firm.
CASH =1 if financing is cash.
SCALE =1 if motive is economies of scale.
VC=1 if venture capital is present before the IPO.
TECH =1 if technology or internet firm.
RUN % = the percentage change in the stock price from first trading day until three days prior to acquisition announcement.
TOPTIER =1 if underwriter is top tier.
ADVISOR =1 if underwriter from IPO is the same as the investment banker for acquisition.
RELSIZE is the ratio of the target size/acquirer size.
INSIDE is the percentage of acquirer shares held by insiders after the IPO.
LOCK =1 if acquisition announced before lockup expiration.

* significant at .10, ** significant at .05
*** significant at .01 , **** significant at .001

Additional variables having no statistically significant impact were the motive for the acquisition, the percentage of insider ownership and if the acquisition was made before the lockup period expired. Thus, the most favor-

able results are for smaller non-tech firms that have had a large price runup and they purchase assets from a publicly traded firm.

## Long Term Performance

The long run CARs are presented in Table 4. Unlike the announcement returns, long run returns are not favorable, indicating that the market is overly optimistic about these acquisitions. The six month return is Ø.Ø3% and not significant while the twelve and eighteen months returns are -4.76% and -16.3%. The eighteen month return is significant at the .Ø5 level. Thus, the longer the time since the acquisition, the worse is the firm's performance.

**Table 4**
**Long Run CARs**

This table presents the market adjusted Average Cumulative Abnormal Returns (ACARs) calculated using a CRSP equally weighted index. The returns use monthly data beginning on the acquisition announcement date. Firms are included only as long as they were listed in CRSP. Number of surviving firms is given in last column.

| Months | Mean Abnormal Return | Number of Firms |
|---|---|---|
| (Ø, 6) | Ø.ØØØ3<br>(Ø.ØØ) | 131 |
| (7, 12) | -Ø.Ø592<br>(-1.39) | 127 |
| (13, 18) | -Ø.Ø837<br>(-2.Ø7) ** | 117 |
| (Ø, 12) | -Ø.Ø476<br>(-Ø.8Ø) | 127 |
| (Ø, 18) | -Ø.163Ø<br>(-2.22)** | 117 |

## Long Term Cross Section

The cross section analysis is presented in Table 5. The full form model for six, twelve, and eighteen months are presented first, and then two reduced form models for the twelve month window. For all models and significant for three models, larger firms experience worse performance. Assets acquired from public firms for cash uniformly result in higher returns. Several factors negatively affect the performance of the acquirers: the presence of venture capital, if the investment advisor and the underwriter are the same, if the acquirer is a tech or internet firm, and if the acquisition is large compared to the size of the acquirer. Finally, initial high price runups lose their luster after the first six months.

## Conclusions

Newly public firms presumably go public to finance their growth. If these firms feel the pressure to expand quickly, they may decide to make either full or partial acquisitions to achieve that growth. In deciding if they should make full or partial acquisitions, this study finds that firms are more likely to make partial acquisitions when the target assets are publicly owned and financed by cash. Technology or internet firms are less likely to make partial acquisitions and keeping the lead underwriter as the investment advisor also discourages partial acquisitions. The size of the firm and the presence of venture capitalists do not appear to have any impact.

The market reacts favorably to the partial acquisition announcements with two day CARs of 3.Ø% and ten day CARs of 3.6%. These returns are noticeably higher than those found in studies of partial acquisitions made by more mature firms. Analyzing the factors that influence these abnormal announcement returns, larger firms in technology industries have lower returns, as do firms that used top tier advisors in their IPOs. Acquisitions by firms that have had a large runup in price since the IPO have higher returns, indicating the presence of a "halo" effect. Partial acquisitions of assets from

**Table 5**
**Long Run Cross Sectional Analysis**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **DEP. VAR.** | (Ø, 6) | (Ø, 12) | (Ø,18) | (Ø, 12) | (Ø, 12) |
| **CONSTANT** | Ø.68Ø<br>(1.83)<br>* | Ø.817<br>(1.8Ø)<br>* | Ø.577<br>(1.Ø3) | Ø.289<br>(1.Ø9) | Ø.1Ø6<br>(Ø.5Ø) |
| **SIZE** | -Ø.134<br>(-2.Ø2)<br>** | -Ø.14Ø<br>(-1.73)<br>* | -Ø.Ø84<br>(-Ø.84) | -Ø.Ø78<br>(-1.83)<br>* | -Ø.537<br>(-1.52) |
| **PUBLIC** | Ø.328<br>(2.46)<br>** | Ø.323<br>(1.97)<br>* | Ø.18Ø<br>(Ø.89) | Ø.315<br>(2.46)<br>** | Ø.318<br>(2.71)<br>*** |
| **CASH** | Ø.272<br>(2.Ø4)<br>** | Ø.218<br>(1.33) | Ø.Ø79<br>(Ø.39) | Ø.278<br>(2.16)<br>** | Ø.248<br>(2.2Ø)<br>** |
| **SCALE** | Ø.Ø8Ø<br>(Ø.57) | Ø.217<br>(1.26) | Ø.Ø91<br>(Ø.43) | | |
| **VC** | -Ø.184<br>(-1.48) | -Ø.263<br>(-1.71)<br>* | -Ø.Ø94<br>(-Ø.5Ø) | | |

| | | | | | |
|---|---|---|---|---|---|
| **TECH** | -0.088<br>(-0.57) | -0.207<br>(-1.09) | -0.282<br>(-1.20) | -0.393<br>(-2.63)<br>*** | -0.314<br>(-2.38)<br>** |
| **RUN %** | 0.155<br>(3.33)<br>**** | 0.083<br>(1.46) | -0.187<br>(-0.27) | | |
| **TOP-TIER** | -0.085<br>(-0.66) | 0.006<br>(0.04) | 0.061<br>(0.31) | | |
| **ADVI-SOR** | -0.623<br>(-3.27)<br>*** | -0.608<br>(-2.60)<br>** | -0.615<br>(-2.13)<br>** | -0.516<br>(-2.68)<br>*** | -0.557<br>(-2.95)<br>*** |
| **REL-SIZE** | -0.187<br>(-2.16)<br>** | -0.251<br>(-2.36)<br>** | -0.259<br>(-1.97)<br>* | -0.092<br>(-1.93)<br>* | |
| **INSIDE** | -0.002<br>(-0.91) | -0.004<br>(-1.33) | -0.002<br>(-0.63) | | |
| **LOCK** | -0.027<br>(-0.18) | -0.151<br>(-0.96) | -0.130<br>(-0.82) | | |
| **N** | 73 | 73 | 73 | 104 | 129 |
| | | | | | |
| **Adj. R2**<br>**F** | .314<br>(3.78)<br>**** | .268<br>(3.23)<br>**** | .132<br>(1.93)<br>** | .251<br>(6.81)<br>**** | .185<br>(6.85)<br>**** |

The sample consists of 138 partial acquisition announcements. The CARs are for the six month, twelve months, and eighteen months for the first three models and for the twelve months for the twelve month window.

SIZE= log of market capitalization.
PUBLIC =1 if target is a publicly held firm.
CASH =1 if financing is cash.
SCALE =1 if motive is economies of scale.
VC=1 if venture capital is present before the IPO.
TECH =1 if technology or internet firm.
RUN % = the percentage change in the stock price from first trading day until three days prior to acquisition announcement.
TOPTIER =1 if underwriter is top tier.
ADVISOR =1 if underwriter from IPO is the same as the investment banker for acquisition.
RELSIZE is the ratio of the target size/acquirer size.
INSIDE is the percentage of acquirer shares held by insiders after the IPO.
LOCK =1 if acquisition announced before lockup expiration.

*significant at .10 , **significant at .05
***significant at .01 , ****significant at .001

publicly traded firms also have higher announcement returns, perhaps reflecting the ability to more accurately price the assets.

However, the market's reaction to these partial acquisitions does not appear to be warranted. At the end of six months, the CARs are not economically or significantly different from zero, and by the end of eighteen months, the abnormal returns are a significant -16%. Smaller firms have higher returns indicating the market's response to their need to expand. Partial acquisitions from publicly traded firms and paid with cash perform better for the first year but not by eighteen months. Having the same investment advisor as the original underwriter results in significantly lower returns. And while not significant in the short run, the size of the assets purchased significantly affects the long run returns with the larger the size, the more negative the returns. Apparently, these newly public firms have difficulty in absorbing large increases in assets at one time. Thus, while the market looks favorably on the announcements of these partial acquisitions, its optimism is not warranted.

## REFERENCES


Agrawal, A., Jaffe, J., & Mandelker, G. (1992). The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance, 47*, 1605-1621.

Asquith, P. & Kim, E. (1982). The impact of merger bids on the participating firms' security holders. *Journal of Finance, 37,* 1209-1228.

Bradley, D., Jordan, B., & Ritter. J. (2003). The quiet period goes out with a bang. *Journal of Finance, 58*, 1-36.

Brav, A. & Gompers, P. (1997). Myth or reality? The long-run underperformance of initial public offerings: Evidence from venture and nonventure capital-backed companies. *Journal of Finance, 52*, 1791-1821.

Carter, R., Dark, F., & Singh, A. (1998). Underwriter reputation, initial returns and the long-run performance of IPO stocks. *Journal of Finance, 53*, 285-312.

Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns. *Journal of Finance, 53*, 773-784.

Cox, D. & Peterson, D. (1994). Stock returns following large one-day declines :

Evidence on short-term reversals and longer-term performance. *Journal of Finance, 49*, 255-267.

De Bondt, W. & Thaler,R. (1985). Does the stock market overreact? *Journal of Finance, 40*, 793-805.

Jain, P. (1985). The effect of voluntary sell-off announcements on shareholder wealth. *Journal of Finance, 40,* 209-224.

Jensen, M. & Ruback, R. (1983). The market for corporate control. *Journal of Financial Economics, 11*, 5-50.

Jones, G., Lanctot, A., & Teegen, H. (2000). Determinants and performance impacts of external technology acquisition. *Journal of Business, 16*, 255-283.

Loderer, C. & Martin, K. (1992). Postacquisition performance of acquiring firms. *Financial Management, 21*, 69-79.

Loughran, T. & Ritter, J. (2004). Why has IPO underpricing changed over time. *Financial Management, 33*, 5-37.

Mikkelson, W. & Partch, M. (1988). Withdrawn security offerings. *Journal of Financial and Quantitative Analysis, 23*, 119-134.

Mikkelson, W. & Ruback, R. (1985). An empirical analysis of the interfirm equity investment process. *Journal of Financial Economics, 14*, 523-553.

Moeller, S., Schlingemann, F., & Stulz, R. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics, 73*, 201-228.

Mulherin, J. & Boone, A. (2000). Comparing acquisitions and divestitures. *Journal of Corporate Finance, 6,* 117-139.

Rau, P. (2000). Investment bank market share, contingent fee payments, and the performance of acquiring firms. *Journal of Financial Economics, 56,* 293-324.

Rau, P. & Vermaelen, T. (1998). Glamour, value and the post-acquisition of acquiring firms. *Journal of Financial Economics, 49,* 223-253.

Schultz, P. & Zaman, M. (2001). Do the individuals closest to Internet firms believe they are overvalued? *Journal of Financial Economics, 59,* 347-381.

Sicherman, N. & Pettway, R. (1987). Acquisition of divested assets and shareholders' wealth. *Journal of Finance, 42*, 1261-1273.

Sicherman, N. & Pettway, R. (1992). Wealth effects for buyers and sellers of the same divested assets. *Financial Management, 21*,119-128.

Travlos, N. (1987). Corporate takeover bids, methods of payments, and bidding firms' stock returns. *Journal of Finance, 42*, 943-963.

Walker, M. (2000). Corporate takeovers, strategic objectives, and acquiring-firm shareholder wealth. *Financial Management, 29,* 53-66

Weston, J., Siu, J., & Johnson, B. (2001). *Takeovers, restructuring, & corporate governance,* Saddle River, N.J.: Prentice-Hall.

Wiggenhorn, J., Gleason, K.,& Madura, J. (2007). Going public to pursue acquisitions. *Quarterly Review of Economics and Finance* 47: 331-351.

# Online Features of the Top 100 U.S. Retailers' Websites

**Tulay Girard**
Penn State Altoona
**M. Meral Anitsal**
Tennessee Tech University
**Ismet Anitsal**
Tennessee Tech University

***ABSTRACT***

*This paper describes a study in which 49 web site features of the top 100 U.S. retailers were analyzed and compared. These features were classified into six categories--product, distribution, promotion, price, company, and customer service. Each online feature was dichotomously coded based on whether or not it had been implemented on the web sites. The analysis involved mean comparisons of the revenues, earnings, and number of stores between the two groups of retailers' web sites that contained the features and those that did not. The findings indicate that the retailers implementing the key features on their web sites achieved significantly higher earnings than those that did not implement them. The number of stores was also found to be significantly different between the two groups. Results are discussed and suggestions for future research are presented.*

## Introduction

According to the latest report released by the U.S. Census Bureau, online retail sales in the United States reached three percent of overall U.S. retail sales in the fourth quarter of 2006 (http://www.census.gov/mrts/www/ecomm.html). Although this percentage of the estimated online U.S. retail sales seems small, online retailing is becoming much more important as online sales are growing by an annual rate of 25 to 30 percent. The growing importance of online business-to-consumer retailing is the result of the increased number of online users, which in turn stimulates online sales. This trend also stems from the increased number of broadband or wireless connections by Internet users. According to a recent report released by e-Marketer, there were approximately 250 million broadband households worldwide at the end of 2006, and 54.6 million of these households resided in the U.S. (Macklin 2007). The growth of broadband adoption is encouraging e-tailers to use more interactive multimedia in their web site promotions. Well-designed, user-friendly web sites help increase consumer satisfaction with online purchase experiences. A recent study conducted by Allurent, reported that 82 percent of shoppers were less likely to return to a site where they had a frustrating shopping experience. About a third of the shoppers stated that a frustrating experience when shopping online would also make them less likely to shop at the retailer's physical store (http://www.e-tailing.com/newsandviews/facts.html). Likewise, a 2003 nationwide survey of customer experience for a cross-section of 1,100 Internet users conducted by Genex/Synovate found that 65 percent of e-shoppers indicated that they would not shop on a poorly designed web site, and 30 percent indicated that an inferior site would also keep them away from the retailer's bricks-and-mortar store (Genex 2003).

In today's competitive online marketplace, effective implementation of web site tools and content is an ongoing challenge, even for large retailers. Although many academic studies identified attributes that make web sites more attractive and lead to greater usability (Tan and Wei 2006; Yeung and Lu 2004; Rosen and Purintan 2004), no research study could be found that investigated the role that key online features might play in determining the objective business performance measures such as revenues, profits, and number of stores. With this gap in mind, the authors first identified key online features in the literature that enable large retailers (i.e., Wal-Mart, Target) to satisfy online shoppers. Second, they analyzed the 100 top retailers' web sites, i.e., Wal-Mart and Home Depot, listed in *Stores* magazine to see if the retailers implement these key features. Third, the authors compared the performance measures such as revenues, profits, and number of stores of e-tailers that implement these features to those of e-tailers that do not. These findings yielded valuable insights for retailers and academics with regard to which of the online

key features play a significant role in retailer's business performance.

The next section presents relevant literature that identifies online features which contribute to effective web design and evaluation. Methodology, data analysis and results sections are followed by discussions and suggestions for future research.

## Literature Review

With the understanding that web sites are crucial elements of Internet marketing strategy, most research studies have focused on identifying and understanding the relationships among content, functionality and customer loyalty to a web site (Mithas et al. 2007) and accessibility and popularity of web pages (Yen 2007), and have focused on how attributes such as control, convenience, creativity, convergence, and community may help e-tailers differentiate their web sites from the competition (Freedman 2007). These research studies have provided valuable insights into which web site features are most effective for increasing traffic and building loyalty. For example, Mithas et al. (2007) found that information-oriented web sites create stronger customer loyalty with good web site content than do transaction-oriented web sites. Transaction-oriented web sites create stronger customer loyalty if they have good functionality. Mithas et al. (2007) also found that transaction-oriented web sites scored higher on average for customer loyalty than information-oriented web sites.

Because relevant, useful content is a key feature of effective web sites, shoppers' ability to find information is another important content-related feature. Yen (2007) stated that the availability of information for retrieval in an efficient and effective manner is a critical success factor for e-commerce web sites. Web site structure and organization influence information retrieval, which may be operationalized as web site accessibility and popularity (Yen 2007). In addition, retailers may provide special offers and product and brand variety to give customers incentives for returning to their web sites (Katerattancakul 2002). To make it easier for shoppers to find relevant information about products, promotions, and store locations, web sites may provide site maps, search engines, and store finder features.

Freedman (2007) pointed out the importance of offering functionality for transactions, which comprises *control* functions that enable shoppers to search for and customize products, and *convenience* functions that simplify online shopping by accepting preorders for new products (i.e., books) that are not yet on the market, allowing shoppers to return an item to the nearest store, and showing not only recently viewed products on every web page as the shopper continues to browse the site, but also shopping cart contents, itemized balances and running totals.

The *creativity* function enables up-selling or cross-selling of substitute or complementary products by providing recommendations when items are placed in the shopping cart. As Internet users' adoption of broadband connectivity increases, the use of multimedia such as streaming videos by e-tailers is becoming more prevalent. The *convergence* function involves the ability to "see a product larger or from different angles, change its color, check out specs and options, view an interactive buying guide, read articles and reviews, browse among similar products, [and] show the item to a friend via e-mail" (Freedman 2007, p. 34). Lastly, the *community* function enables blogs, community boards, and "refer/e-mail a friend" features that support social networking. Fry (2006) noted that Web 2.0, second-generation web site technologies, is changing the way consumers experience the Internet. With interactive tools such as AJAX, tagging, and other forms of instantaneous consumer feedback, e-tailers promote social networking and collaboration. These new technologies recreate the in-store experience, encourage customer feedback, and use viral marketing in order to spread the word about products and brands (Fry 2006).

Katerattancakul (2002, p. 6) declared that "In the highly competitive Internet commerce environment, the companies that offer the best customer experiences are the ones that will gain trust from customers and are more likely to succeed." To increase trust in their web sites, retailers encrypt personal and financial information through SSL, or secure socket layer, which can be identified with a lock icon at the bottom of an Internet browser's window.

While numerous studies have identified online features that make web sites effective, other studies have attempted to categorize these features for evaluating a web site's quality. Donthu (2001) identified two major groups—site-related and vendor-related factors. Site-related factors include *ease of use* (i.e., search and site map), *aesthetic design* (i.e., multimedia and color graphics), *processing speed* (i.e., online processing and interactive responsiveness), and *security* (i.e., personal and financial information). Vendor-related factors include *competitive value* (i.e., price comparison, shipping cost, price match policy), *clarity of ordering* (i.e., order cancellation, tracking, delivery time, return policy), *corporate and brand equity* (i.e., company information, products/services

on the site), *product uniqueness* (i.e., distinctiveness of product/service offerings and variety), and *product quality assurance* (i.e., product safety information, customer reviews).

When shoppers visit a retailer's web site, they typically look for information on a specific subject or product/service, or engage in a transaction such as purchasing products or services. A web site should meet the strategic objectives of a firm with regard to its marketing mix and product positioning. To effectively market the products or services, the design, content, and function of the web site should support these objectives and allow web site activities to meet them. Drawing from the extant literature (Donthu 2001; Katerattancakul 2002; Fry 2006; Freedman 2007; Mithas et al. 2007), the key online features were categorized into six groups: product/service, price, promotion, distribution, company, and customer service (Table 1).

## Method

The performance data were gathered from the annual report of top 100 U.S. retail companies in *Stores* magazine, published by the National Retail Federation (Schulz 2005). In a list by descending order, the report provided their 2004 revenues, earnings, and number of stores. The web sites of the retailers in the list were analyzed by the authors based on 49 web site attributes drawn from the literature on effective web design (Table 1). Each of the 49 variables on the web site of the top 100 retailers was coded dichotomously by examining whether these web sites contained the attributes. If the attribute existed on the web site, that variable was coded as "1" and if not, it was coded as "2".

## Analysis and Results

Table 2 shows the frequencies of the most common and most uncommon online features on the 100 top U.S. retailers' web sites. The most common features were company information, careers, site map, contact information, privacy policy, store finder, and charitable contributions. The most uncommon features included supplier testimonials, price comparisons, free samples, customer reviews, product safety information, price match policies, and alliance links or information. The most common and uncommon features will be discussed later in the paper with a comparison of the significant mean differences in their implementation in the groups of e-tailers that use the online features on their web sites under the four marketing mix categories and those e-tailers that do not.

**Table 1**
**Online Feature Categories on the Top 100 U.S. Retailer Web Sites**

| Product | Distribution | Promotion | Price | Company | Customer Service |
|---|---|---|---|---|---|
| Site map | Store finder | Gift cards | Shipping cost | About us | Contact us |
| Search | Shopping cart | Company | Price match | Careers | Privacy policy |
| Learning | Encryption | credit card | policy | Charitable | Email signup |
| center | Return policy | Coupons | Price comparison | contributions | Credit reports |
| Wish list | Delivery time | Special offers | | Investor info. | Cust. service info. |
| Gift registry | Order tracking | Store card | | Supplier info. | Login |
| Product | Cancel order | Rebates | | Subsidiaries | 1-800 number |
| safety info. | Free shipping | Sweepstakes | | Affiliate prog. | Register |
| Customer | | Free samples | | Alliance links | Cust. account |
| reviews | | | | Supplier | Cust. feedback |
| | | | | testimonials | Int'l web sites |
| | | | | | Newsletter |
| | | | | | Shopping tips |
| | | | | | FAQ |

**Table 2**
**Most Common and Uncommon Online Features on the Top 100 U.S. Web Sites**

| Most Common | | | Most Uncommon | | |
|---|---|---|---|---|---|
| Feature on Retailer's Web Site | Exists | Does not Exist | Feature on Retailer's Web Site | Exists | Does not Exist |
| About us | 97 | 3 | Alliance links | 18 | 82 |
| Careers | 97 | 3 | Price match policy | 10 | 90 |
| Site map | 94 | 6 | Product safety information | 10 | 90 |
| Contact us | 93 | 7 | Customer reviews | 5 | 95 |
| Privacy policy | 90 | 10 | Free samples | 4 | 96 |
| Store finder | 90 | 10 | Price comparison | 2 | 98 |
| Charitable contributions | 78 | 22 | Supplier testimonials | 0 | 100 |

Tables 3 through 8 present the percentages, the average revenues, earnings, and number of stores in 2004 of the two groups. Using an independent samples t-test, the investigators compared the 2004 revenues, earnings, and number of stores of the two groups. Mean scores for all the categories are reported; however, the comparison of means test was not performed in any category with fewer than 20 data points.

The results in Table 3 indicate that most of the retailers' web sites had Site Map (94%) and Search (73%) under the *product* category. However, the majority of the retailers did not have Customer Reviews (95%), Product Safety Information (90%), Registry (79%), or Wish List (67%) on their web sites. Half of the retailers had a Learning Center on their web sites. The 2004 earnings of the retailers that had Registry were significantly greater ($1.297 billion) than earnings of the retailers that did not have Registry ($246 million) on their web sites (p=0.05). However, the number of stores in 2004 of the retailers that did not have the Registry feature was significantly higher (1,707) than for retailers that did have Registry (935) on their web sites (p=0.05).

The results in Table 4 indicate that the majority of the retailers had Store Finder (90%), Shopping Cart (66%), Encryption (60%), and Return Policy (58%) under the *distribution* category. However, the majority of the re-

**Table 3**
**Product Related Online Features on the Top 100 U.S. Retailer Websites**

| Product | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| Site map | 94 | 6 | 19,378 | 3,143 | 509,572 | 228,737 | 1,635 | 151 |
| Search | 73 | 27 | 15,278 | 26,853 | 589,624 | 195,580 | 1,619 | 1,347 |
| Learning ctr. | 50 | 50 | 27,048 | 9,759 | 660,338 | 363,536 | 1,504 | 1,587 |
| Wish list | 33 | 67 | 19,219 | 18,002 | 875,667 | 297,364 | 1,338 | 1,648 |
| Registry | 21 | 79 | 29,035 | 15,577 | **1,297,114** | **246,185** | **935** | **1,707** |
| Product safety | 10 | 90 | 97,105 | 9,659 | 1,224,931 | 411,184 | 1,375 | 1,565 |
| Customer reviews | 5 | 95 | 5,130 | 19,102 | 137,714 | 517,736 | 842 | 1,583 |

Note: Bold items are significantly different at p = 0.05 based on the results of independent sample t-test.

**Table 4**
**Distribution Related Online Features on the Top 100 U.S. Retailer Websites**

| Distribution | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| Store finder | 90 | 10 | 19,564 | 7,96 | 531,646 | 197,320 | 1,566 | 1,361 |
| Shopping cart | 66 | 34 | 24,712 | 6,158 | **621,959** | **198,184** | 2,175 | 1,887 |
| Encryption | 60 | 40 | 25,654 | 7,528 | **679,639** | **181,037** | 1,570 | 1,510 |
| Return policy | 58 | 42 | 26,755 | 6,870 | **684,392** | **172,640** | 1,488 | 1,625 |
| Delivery time | 49 | 51 | 19,418 | 17,429 | **737,367** | **203,596** | 1,569 | 1523 |
| Order track | 49 | 51 | 29,563 | 7,682 | **763,778** | **170,762** | 1,599 | 1,494 |
| Cancel order | 36 | 64 | 36,097 | 8,451 | **713,832** | **357,911** | 1,818 | 1,393 |
| Free shipping | 32 | 68 | 22,885 | 16,295 | 847,010 | 302,673 | **2,415** | **1,136** |

Note: Bold items are significantly different at p = 0.05 based on the results of independent sample t-test.

tailers did not offer Free Shipping (68%), Order Cancellation (64%), Order Tracking (51%), or Delivery Time Information (51%) on their web sites.

The 2004 earnings of retailers that had the Shopping Cart ($621 compared to $198 million), Encryption ($679 compared to $181 million), Return Policy ($684 compared to $172 million), Delivery Time ($737 compared to $203 million), Order Tracking ($763 compared to $170 million), Order Cancellation ($713 compared to $357 million) were significantly greater than earnings of the retailers that did not have these features on their web sites (p=0.05). The number of stores in 2004 of the retailers that offered Free Shipping was significantly higher (2,415) than for retailers that did not offer Free Shipping (1,136) on their web sites (p=0.05).

The results in Table 5 indicate that the majority of the retailers offered Gift Cards (67%) on their web sites under the *promotion* category. However, the majority of the retailers did not offer Free Samples (96%), Sweepstakes (80%), Rebates (77%), Store Card (76%), Special Offers (75%), Coupons (74%), or Company Credit Cards (60%) on their web sites. The 2004 earnings of the retailers that offer the Company Credit Card ($932 million) were significantly greater than earnings of the retailers that did not offer the Company Credit Card ($198 million) on their web sites (p=0.05).

The results in Table 6 indicate that the majority of the retailers did not have the three *price* category features on their web sites—Price Comparison (98%), Price Match Policy (90%), and Shipping Cost Information Before Checkout (53%) on their web sites. None of the performance data significantly differ between the retailers that did and did not have these features (p=0.05).

The results in Table 7 indicate that the majority of the retailers provided About Us (information about the company) (97%), Career Opportunities (97%), Charitable Contributions (78%), Investor Information (73%), and Supplier Information (50%) on their web sites under the *company* category. However, the majority of the retailers did not offer Supplier Testimonials (100%), Alliance Links (82%), Affiliate Programs (74%), or Subsidiaries (72%) on their web sites. Half of the retailers did provide Supplier Information (50%). The number of stores of the retailers that provided Charitable Contribution (1,801), Investor Information (1,941), and Supplier Information (2,099) on their web sites was significantly greater than for retailers that did not provide those features (640, 475, 992, respectively) on their web sites (p=0.05).

The results in Table 8 indicate that the majority of the retailers provided Contact Us (contact information) (93%), Privacy Policy (90%), Email Signup Option (75%), Credit Reports (74%), Customer Service Information (71%), Login (70%), 1-800 Number (68%), Register (68%), FAQ (frequently asked questions) (65%), and Customer Account (64%) on their web sites under the *customer service* category. However, the majority of

**Table 5**
**Promotion Related Online Features on the Top 100 U.S. Retailer Websites**

| Promotion | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| Gift cards | 67 | 33 | 23,562 | 7,931 | 595,348 | 289,121 | 1,431 | 1,778 |
| Co. credit card | 40 | 60 | 20,629 | 16,919 | ***932,592*** | ***198,854*** | 1,324 | 1,693 |
| Coupons | 26 | 74 | 33,937 | 12,946 | 364,150 | 545,239 | 2,240 | 1,302 |
| Special offer | 25 | 75 | 47,244 | 8,790 | 1,014,023 | 302,157 | 2,161 | 1,341 |
| Store card | 24 | 76 | 34,455 | 13,335 | 135,244 | 615,033 | 1,620 | 1,522 |
| Rebates | 23 | 77 | 18,782 | 18,290 | 846,834 | 389,131 | 1,549 | 1,545 |
| Sweepstakes | 20 | 80 | 16,460 | 18,890 | 654,108 | 459,578 | 1,699 | 1,507 |
| Free samples | 4 | 96 | 78,759 | 15,889 | 2,251,195 | 410,724 | 4,397 | 1,427 |

Note: Bold items are significantly different at p = 0.05 based on the results of independent sample t-test.

retailers did not have International Web Sites (72%), Newsletters (72%), Shopping Tips (72%), or Customer Feedback (65%) on their web sites. The number of stores of the retailers that provided Charitable Contribution (1,801), Investor Information (1,941), and Supplier Information (2,099) on their web sites was significantly greater than those of the retailers that do not provide those features (640, 475, 992, respectively) on their web sites (p=0.05 level).

## Discussion

Based on a review of the literature, the authors identified and categorized 49 online features into six groups—product, distribution, promotion, price, company, and customer service. They then analyzed the 100 top U.S. retailers' web sites for whether or not they offered these features. The 2004 performance data including revenues, earnings, and number of stores of these top 100 U.S. retailers were tested for significant between-group differences.

The results presented in Table 3 suggest a possible relationship between Gift Registry feature and higher earnings. Gift Registry not only makes shopping more convenient for family and friends to purchase the items registered, but also enables up-selling or cross selling when visitors are browsing on the web site. The online features—Shopping Cart, Encryption, Return Policy, Delivery Time, Order Tracking, and Order Cancellation Policy—listed under *distribution* category in Table 4 correlated significantly with company earnings in Table 5. Offering a company credit card also correlated significantly with earnings. This feature may help reduce customer anxiety regarding identity theft in addition to boosting online sales volume.

The sample sizes for other *promotion*-related options were small, which negatively influenced the statistical power of the test. In general, positive effects of these features on earnings were still apparent. As shown in Table 8, *customer service*-related features such as Credit Reports, 1-800 Numbers, and Frequently Asked Questions significantly correlated with higher levels of revenues, earnings and number of stores. These findings are consistent with the suggestion made by Katerattancakul (2002) in that the successful retailers may be the ones that gain trust from customers by easing the burden of searching and finding information on their web sites. These sites not only provide the necessary information, but also remind customers that they can be reached by traditional means when the customers need help.

In Tables 3, 4, 7, and 8, the significant differences in the number of stores associated with Gift Registry (935 compared to 1,707), Free Shipping (2,415 compared to 1,136), Charitable Contributions (1,801 compared to 640), Investor Information (1,941 compared to 475), Supplier Information (2,099 compared to 992), and Credit Reports (1,925 compared to 466) also deserve attention. These findings suggest that the greater the number of stores a retailer has, the more exposure they

**Table 6**
**Price Related Online Features on the Top 100 U.S. Retailer Websites**

| Price | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| Shipping cost | 47 | 53 | 30,381 | 7,782 | 681,777 | 293,687 | 1,438 | 1,641 |
| Price match | 10 | 90 | 22,236 | 17,977 | 1,059,952 | 431,249 | 1,078 | 1,598 |
| Price comparison | 2 | 98 | 9,574 | 18,584 | 184,860 | 507,188 | 2,788 | 1,520 |

provide for the retailer to consumers, which may create more awareness of the retailer in the public domain.

Further research is necessary to understand the relationship between the number of stores and the above features. For example, Free Shipping is a feature that is offered by online retailers. A retailer may need to reach a critical number of physical stores to make this feature cost-effective. Unlike the research that focuses on what customers prefer to see and experience on a web site, this research explores which online features are correlated with retailers' success factors such as revenues, earnings and number of stores. However, it does not attempt to establish causality. Further investigation is needed to fully understand these relationships.

## Limitations

This study utilized secondary data provided by publicly-held companies. The analysis does not include many mail-order and web-based privately-held companies that are not required to disclose performance data. In addition, the study analyzed secondary data that were not collected as part of an experimental design. Therefore, no control factors were established that would allow the authors to build a theory.

However, this study of the top 100 retailers' web sites and financial data provides important insights about regarding the relationships among these factors that deserve further testing. One should keep in mind that

**Table 7**
**Company Related Online Features on the Top 100 U.S. Retailer Websites**

| Company | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| About us | 97 | 3 | 18,825 | 4,790 | 498,254 | 546,707 | 1,585 | 260 |
| Careers | 97 | 3 | 18,892 | 2,598 | 504,964 | 274,928 | 1,532 | 1,963 |
| Charit. contr. | 78 | 22 | 21,758 | 6,509 | 567,697 | 252,870 | **1,801** | **640** |
| Invest. info | 73 | 27 | 19,561 | 15,274 | 412,765 | 1,066,629 | **1,941** | **475** |
| Supp. info. | 50 | 50 | 29,007 | 7,801 | 732,751 | 260,400 | **2,099** | **992** |
| Subsidiaries | 28 | 72 | 32,416 | 12,954 | 468,469 | 513,012 | 1,457 | 1,580 |
| Affil. prog. | 26 | 74 | 24,686 | 16,196 | 862,659 | 351,663 | 2,081 | 1,358 |
| Alliance link | 18 | 82 | 21,595 | 17,703 | 707,033 | 449,843 | 1,847 | 1,479 |
| Supplier testimonials | 0 | 100 | - | 18,404 | - | 499,421 | - | 1,546 |

Note: Bold items are significantly different at p = 0.05 based on the results of independent sample t-test.

**Table 8**
**Customer Service Related Features on the Top 100 U.S. Retailer Websites**

| Customer Service | Percent of Retailers | | 2004 Revenues ($1,000,000) | | 2004 Earnings ($1,000) | | Number of Stores | |
|---|---|---|---|---|---|---|---|---|
| Feature | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist | Exists | Does Not Exist |
| Contact us | 93 | 7 | 19,384 | 5,376 | 521,832 | 149,807 | 1,437 | 2,993 |
| Privacy policy | 90 | 10 | 19,944 | 4,540 | 534,837 | 167,399 | 1,517 | 1,802 |
| Email signup | 75 | 25 | 14,940 | 28,793 | 601,904 | 196,852 | 1,410 | 1,954 |
| Credit reports | 74 | 26 | **23,175** | **4,822** | 551,476 | 19,424 | **1,925** | **466** |
| Customer service info. | 71 | 29 | 22,848 | 7,522 | 569,913 | 303,968 | 1,542 | 1,554 |
| Login | 70 | 30 | 23,363 | 6,831 | 610,528 | 209,578 | 1,328 | 2,052 |
| 1-800 number | 68 | 32 | **24,729** | **4,962** | **659,180** | **149,180** | 1,524 | 1,591 |
| Register | 68 | 32 | 23,821 | 6,891 | 609,991 | 227,604 | 1,361 | 1,938 |
| Customer account | 65 | 35 | 22,069 | 11,595 | 559,814 | 386,966 | 1,526 | 1,582 |
| FAQ | 64 | 36 | **25,568** | **5,651** | **654,161** | **160,183** | 1,469 | 1,681 |
| Customer feedback | 35 | 65 | 33,209 | 10,432 | 593,788 | 448,743 | 1,737 | 1,442 |
| International websites | 28 | 72 | 24,248 | 16,131 | 961,655 | 311,394 | 1,886 | 1,413 |
| Newsletter | 28 | 72 | 18,707 | 18,286 | 876,744 | 371,618 | 1,748 | 1,466 |
| Shopping tips | 28 | 72 | 17,852 | 18,618 | 696,874 | 419,101 | 1,112 | 1,714 |

Note: Bold items are significantly different at p = 0.05 based on the results of independent sample t-test.

there may be other significant factors that affect retailers' performance. As such, this study does not attempt to formulate or test any hypotheses. Although post hoc theorizing does not substitute for the "necessary process of theory refinement, revision, and reformulation", preliminary observations from the environment create the opportunity for developing and testing hypotheses (Pedhazur and Schmelkin 1991, p.185) in future studies.

## REFERENCES


Donthu, Naveen (2001). "Does Your Web Site Measure Up?" *Marketing Management, 10* (4), 29-32.

Genex (2003). "Survey: Web Site Design Affects Consumer Sales." *Business Wire*. Published in June 13, 2003. Retrieved May 1, 2007 from http://www.shop.org/research/SRO7/SRO7Execsumm.asp

Genex (2003). "Survey: Good Website Design Drives Online Purchasing." Published in September 15, 2003. Retrieved May 1, 2007 from http://goliath.ecnext.com/comsite5/bin/comsite5.pl?page=description&item_id=0199-3201779&purchase_type=ITM

Freedman, Lauren (2007). "The Five C's of Web Merchandising." *Multichannel Merchant, 1* (March), 34-35.

Fry, David (2006). "Web 2.0." *Multichannel Merchant, 1* (Dec.), 26.

Katerattanakul, Pairin (2002). "Framework of Effective Web Site Design for Business-to-Consumer Internet Commerce." *INFOR, 40* (1), 57-71.

Macklin, Ben (2007). "Broadband Worldwide 2005-2010." *eMarketer™ Report. March 22, 2007.*

Mithas, S., Ramasubbu, N., Krishnan, M S, and C. Fornell (2007). "Designing Web Sites for Customer Loyalty Across Business Domains: A Multilevel

Analysis." *Journal of Management Information Systems, 23* (3), 97-127.

Rosen, Deborah E and Elizabeth Purinton (2004). "Website Design: Viewing the Web as a Cognitive Landscape." *Journal of Business Research, 57* (7), 787-794.

Schulz, David P. (2005), "The Nation's Retail Power Players 2005." *Stores* (July), S2-S19.

Tan, Gek Woo and Kwok Kee Wei (2006). "An Empirical Study of Web Browsing Behaviour: Towards an Effective Website Design." *Electronic Commerce Research and Applications: Web-Enabled Business and Customer Value, 5* (4), 261-271.

The E-tailing Group. "Bad Online Experience Threatens Brick and Mortar Store" available at: http://www.etailing.com/newsandviews/facts.html. Accessed on 4/28/07.

Yen, Benjamin P-C (2007). "The Design and Evaluation of Accessibility on Web Navigation." *Decision Support Systems, 42* (4), 2219.

Yeung, W. Lok and Ming-Te Lu 92004). "Gaining Competitive Advantages through a Functionality Grid for Website Evaluation." *The Journal of Computer Information Systems, 44* (4), 67-77.

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# Is There Uniformity in the Education Requirements of State Boards of Accountancy to Sit for the Uniform Certified Public Accountant Exam?

**Richard B. Griffin, Ph.D., CMA**
Professor of Accounting
The University of Tennessee at Martin
**B. Wynne Griffin, M.S. in Accountancy, CPA**
Manager
PricewaterhouseCoopers
**Robert L. Putman, Ph.D., CPA**
Professor of Accounting
The University of Tennessee at Martin

***ABSTRACT***

*This paper examines the state, district, and territorial boards of accountancy educational requirements to sit for the Uniform Certified Public Accountant (CPA) Exam. This study undertakes an examination of general education, accounting and business related courses, at both the bachelor and graduate level, required by the various accountancy boards to sit for the exam. The authors obtained the educational requirements from state, district, and territorial web sites as of May 12, 2007. The objective of this paper is to compare existing educational requirements to those presented in the 2005 "Rules 5-1 and 5-2 Exposure Draft" by National Association of State Boards of Accountancy (NASBA).*

## Introduction

The National Association of State Boards of Accountancy, the American Institute of Certified Public Accountants, and Thomson Prometric offer the Uniform CPA Exam representing the Boards of Accountancy which have final licensing authority. "The AICPA is responsible for developing and scoring the Examination, NASBA for the National Candidate Database, and Prometric, a part of The Thomson Corporation, for examination delivery at authorized test centers." (The Uniform CPA Examination, 2007) The name of the certifying exam for the 54 boards, which include states, district, and territorial boards of accountancy of the United States, Uniform CPA Exam, suggest all accountants wishing to become Certified Public Accountants by examination are having their accounting and business related knowledge evaluated on an equal basis. This hypothesis suggests that there should be a minimum level of education and knowledge being evaluated equally. The authors found that the minimum level of education required to sit for the exam by one board of accountancy is a high school education, while most other boards require a minimum of a bachelor's degree plus other criteria.

The data for this research has been gathered via the various internet web sites of the 54 boards of accountancy and the NASBA web site. Per the NASBA web site, there have been two exposure drafts issued, the first in 2004 and the second in 2005. These exposure drafts offer guidance suggesting the minimum uniform educational requirements to sit for the CPA exam. "NASBA's mission is to enhance the effectiveness of state boards of accountancy." This paper examines the academic course work as recommended by the 2005 exposure draft. Coursework in this draft is divided into three categories: general education, accounting, and business. (NASBA, 2005).

## General Education Requirements

Only two boards require subject areas outside of business related courses to sit for the CPA Exam. One of these boards requires candidates to have taken college Algebra. The other board requires candidates to complete 3-semester hour courses in 8 out of 10 subject areas. It was also noted for this board that Humanities is 1 of the 10 areas in which students can use to meet the requirements to sit for the Exam. Outside of these cases there are no specific general education requirements,

other than those built into the degrees as set by the colleges and universities.

## Accounting Education Requirements

NASBA's second category is accounting coursework. Table 1 compares NASBA's suggested requirements to those of the various boards of accountancy. If the "NASBA" column in the table is blank, the course in the "Accounting Topics" column is an accounting course which is required by at least one board of accountancy that would be credited towards the 30 upper division or graduate hours recommended by NASBA (NASBA,2005). Graduate accounting courses, which are the equivalent of an introductory financial or managerial accounting course at the principles level, are not counted in the upper division or graduate hours. The first topic in Table 1, Financial Accounting and Reporting for Business Organizations, 30 (55.56 percent) of the 54 boards require course work in this field but only 8 (14.81 percent) of the 54 require a minimum of 6 semester hours. The other 22 boards requiring coursework on this topic only require study in the area and do not specify a minimum number of hours.

If a board requires coursework in one of other accounting topics listed in the "NASBA" column, the required course work has been determined to meet the minimum requirements by NASBA for that accounting topic. After discovering that only 55.56 percent of the boards require Intermediate Accounting, the number and percentages were not considered surprising for Auditing, Taxation, and Management Accounting. The boards that require Management Accounting are split in their terminology as to whether the topic required is referred to as Management Accounting or Cost Accounting. However, the number and percentages for the area of Governmental and Not-for-Profit appear surprisingly low to the authors. NASBA, in the 2005 exposure draft, defines upper division coursework as coursework taken in the junior or senior year. (NASBA, 2005) Only 1 of the 54 boards went as far as to define it that way. The remaining 53 boards did not define upper division accounting coursework or indicate that they are require any accounting courses taken after Principles or Introductory Accounting courses. Seven boards required at least 30 upper division hours of accounting with 1 board requiring 33 hours and another requiring 36 hours of accounting.

While only 7 boards require at least 30 hours of upper division accounting in Table 1, it can be determined from Table 2 that 18 boards require at least 30 total hours of undergraduate accounting. Table 2 shows that 22 boards (40.74 percent) require 24 hours of accounting. It is also noted that 24 hours of accounting, in 2004, was the average number of total hours of accounting required in undergraduate accounting program's baccalaureate degree possessing AACSB accounting accreditation (Griffin and Putman, 2004).

**Table 1**
**Comparison of NASBA's Accounting Requirements and the Boards of Accountancy**

| Accounting Topics | NASBA | BOARDS (54) | |
|---|---|---|---|
| | | Number | Percent |
| Financial Accounting and Reporting for Business Organizations | 6 SCH | 30 | 55.56 |
| Financial Accounting and Reporting for Government & Not-for-Profit | 2 SCH | 6 | 11.11 |
| Assurance Services (e.g., auditing and attestation) | 3 SCH | 31 | 57.41 |
| Taxation | 3 SCH | 29 | 53.70 |
| Management Accounting | 3 SCH | 27 | 50.00 |
| Accounting Information Systems | 3 SCH | 5 | 9.26 |
| Ethical and Professional Responsibilities | 3 SCH | 2 | 3.70 |
| Advanced Accounting | | 5 | 9.26 |
| Theory | | 2 | 3,70 |
| Introductory Accounting | | 3 | 5.56 |
| Accounting Research | | 1 | 1.85 |
| Accounting Electives | | 4 | 7.41 |
| At least 30 upper division and/or graduate semester hours in accounting | 30 SCH | 7 | 12.96 |

**Table 2**
**Minimum Accounting Education in Total Semester Hours for Licensure as a Certified Public Accountant**

| Accounting Education (Semester hours that must be completed) | Number of Boards | Percent |
|---|---|---|
| 38 | 1 | 1.85 |
| 36 | 3 | 5.56 |
| 33 | 3 | 5.56 |
| 30 | 11 | 20.37 |
| 27 | 4 | 20.37 |
| 24 | 22 | 40.74 |
| 21 | 2 | 3.70 |
| 20 | 1 | 1.85 |
| 18 | 1 | 1.85 |
| 15 | 2 | 3.70 |
| 12 | 2 | 3.70 |
| 3 | 1 | 1.85 |
| 0 | 1 | 1.85 |
| Totals | 54 | 100.00 |

In reviewing the accounting education requirements, there are discrepancies between how boards view undergraduate coursework and graduate coursework. In evaluating specified education requirements, some boards do not distinguish between undergraduate and graduate courses in determining whether the requirements have been met. Ten boards reduce the number of hours necessary to meet the requirement if the course work being used for accounting is all at the graduate level. NASBA proposes 20 graduate accounting hours. However, if a combination of undergraduate and graduate courses is used, some boards treat the coursework as if all of the courses were undergraduate courses. Others will multiply the graduate courses by a factor of either 1.5 or 1.6 to convert these courses to undergraduate coursework equivalency. The 1.5 factor is implied by NASBA by it proposing an accounting education requirement of 30 upper division or 20 graduate hours of accounting courses. However, most boards actually use the 1.6 factor to convert graduate coursework.

**Table 3**
**Comparison of Business Requirements of NASBA and The Boards of Accountancy**

| Business Topics | NASBA | BOARDS (54) | |
|---|---|---|---|
| | | Number | Percent |
| Legal &Regulatory Environment of Business and/or Business Law | 3 SCH | 13 | 24.07 |
| Economics | 6 SCH | 6 | 11.11 |
| Quantitative Methods and Analysis | 3 SCH | 1 | 1.85 |
| Principles of Management and/or Organizational Behavior | 3 SCH | 4 | 7.41 |
| Strategic Management | 3 SCH | 0 | 0.00 |
| Finance and Financial Management | 3 SCH | 6 | 11.11 |
| Information Technology | 3 SCH | 5 | 9.26 |
| Marketing | 3 SCH | 3 | 5.56 |
| Ethics | 3 SCH | 3 | 5.56 |
| Algebra | | 1 | 1.85 |
| Statistics and Probability | | 6 | 11.11 |
| Information Systems | | 1 | 1.85 |
| International Environment | | 1 | 1.85 |
| Humanities | | 1 | 1.85 |
| Oral Communication | | 1 | 1.85 |
| Written Communications | | 1 | 1.85 |
| Oral and Written Communications | | 4 | 7.41 |
| Business Electives | | 3 | 5.56 |
| Accounting Courses not used to meet accounting requirement | | 11 | 20.37 |
| At least 36 upper division hours in business | 36 SCH | 1 | 1.85 |

## Business Education Requirements

The third NASBA category of coursework is Business. While 44 (81.48 percent) of the boards require business courses, Table 3 reveals that only 1 state requires the NASBA proposed 36 upper division hours (NASBA, 2005). The Uniform Commercial Code (Business Law) is required more than any other course. As also shown in Table 3, most boards do not specify the business related courses to be taken. In fact, no board requires candidates to take Strategic Management as proposed by NASBA. In addition, 11 boards (25.00 percent of the 44 boards requiring business related courses) allow candidates to use accounting courses not used to meet the accounting requirement as courses to meet the business education requirement. Most of those boards which do not allow candidates to count Principles or Introductory Accounting as an accounting requirement specify Accounting Principles can be used to meet the business requirement. Although NASBA does not have stand alone course requirements in business related communications or research, it does indicate these topics should be integrated throughout the education curriculum.

While only 1 board requires at least 36 hours of upper division business course in Table 3, there is a total of 6 boards in Table 4 requiring at least 36 hours of undergraduate business education. Also, Table 4 shows that 24 hours of business education (40.74) or greater is the normal business related education board requirement. There are 10 boards that do not specify any business education requirement. However, of these ten boards, 9 require at least a bachelor's degree and 1 at least an associate's degree.

## Minimum Education

The push for Boards of Accountancy to require 150 hours to become a Certified Public Accountant began over 15 years ago. Table 5 shows the minimum number of hours of education necessary to become a CPA in states, districts, and territories. Forty-four boards require 150 hours before licensure and this total reaches 45 boards if the "Bachelor's Degree + 30 hours" is added. This represents 83.33 percent of the boards. Either a bachelor's degree or 120 hours is required by 6 boards representing 11.11 percent of the boards. Two boards (3.70 percent) of the boards only require an Associate's Degree or 60 hours of college education. Finally, there is one board that only requires a high school diploma for licensure.

**Table 4**
**Minimum Business Education for Licensure as a Certified Public Accountant**

| Business Education-Minimum Semester Hours Required | Number | Percent |
|---|---|---|
| 53 | 1 | 1.85 |
| 48 | 2 | 3.70 |
| 39 | 1 | 1.85 |
| 36 | 2 | 3.70 |
| 33 | 1 | 1.85 |
| 32 | 1 | 1.85 |
| 30 | 3 | 5.56 |
| 27 | 3 | 5.56 |
| 24 | 22 | 40.74 |
| 21 | 1 | 1.85 |
| 18 | 2 | 3.70 |
| 12 | 2 | 3.70 |
| 9 | 2 | 3.70 |
| 0 | 10 | 18.52 |
| Totals | 54 | 100.00 |

**Table 5**
**Minimum Education to Obtain a Certified Public Accountants License**

| Education | Number | Percent |
|---|---|---|
| 150 hours | 43 | 81.48 |
| Bachelor's Degree + 30 hours | 1 | 1.85 |
| Bachelor's Degree | 4 | 7.41 |
| 120 hours | 2 | 3.70 |
| Associate's Degree | 1 | 1.85 |
| 60 hours | 1 | 1.85 |
| High School Diploma | 1 | 1.85 |
| Totals | 54 | 100.00 |

Table 6 examines only those boards requiring 150 hours for awarding the CPA license. Of the 45 boards requiring 150 hours for licensure, 19 of these boards (42.22 percent) do not require the 150 hours to be completed in order to sit for the exam. Ten of these boards only require a Bachelor's Degree or 120 semester hours of education in order to sit for the exam. One additional board waives the 150 hour requirement when a candidate has been awarded a Bachelor's Degree and has scored at least 1200 on the verbal and quantitative parts of the Graduate Record Exam (GRE). The other eight boards allow a candidate to sit for the exam at various time periods before completing the 150 hour education requirements. More disturbing to the authors was that of the

19 boards allowing a candidate to sit before achieving the 150 hours, only one addressed what minimum accounting and business education requirements must be completed at the time of sitting for the exam.

**Table 6**
**Minimum Education to Sit for the Certified Public Accountants License where Boards Require 150 hours to Award the Certificate**

| Education | Number | Percent |
|---|---|---|
| 150 must be completed | 26 | 57.78 |
| Bachelor's or 120 hours | 10 | 22.22 |
| Bachelor's + 1200 on verbal and quantitative portion of GRE | 1 | 2.22 |
| 150 hours completed within 6 months of taking the exam | 1 | 2.22 |
| 150 hours completed within 180 days of taking the exam | 1 | 2.22 |
| 150 hours completed within 120 days of taking the exam | 2 | 4.44 |
| 150 hours completed within 100 days of taking the exam | 1 | 2.22 |
| 150 hours completed within 60 days of taking the exam | 3 | 6.67 |
| Totals | 45 | 100.00 |

## Other Differencies Between Boards

Other differences between boards include the number of hours of internship time that can be counted. Whether pass/fail courses can be counted is another issue. There are also differences in allowing College Level Examination Program ("CLEP") exams and, if allowed, how much credit can be earned towards the total education requirement. The issue of whether correspondence and internet courses are allowed varies between the boards. Also, some boards limit the amount of credit which can be earned in one subject area. Finally, there is the issue of CPA review programs and whether these count towards meeting the education requirement.

## Conclusion

The 150 hour requirements to sit for the CPA exam and the move to Computer Based Testing ("CBT") have prompted changes in the CPA exam itself. However, while this has affected accounting curricula in colleges and universities along with the general movement in undergraduate education to 120 hours (Griffin and others, 2007), there is little evidence that boards of accounting are concerned with the overall education of their candidates. In fact, one state board of accounting has different requirements for accounting education based not upon a candidate's amount of experience but upon the amount of education. Surprisingly, if a candidate has 150 hours of education the accounting education requirement is greater than if the same candidate only has an Associate's Degree or Bachelor's Degree. The authors find little evidence of that Boards of Accountancy are working towards being uniform in their individual education requirements in the CPA licensure process.

## Further Study

One interesting future study would be to examine reciprocity between boards of accountancy in respect to their different education requirements. Another would be to analyze the number of certificates being awarded in states by comparing education requirements and examining the requirements for sitting for the exam in terms of residency.

## REFERENCES

Griffin, Richard B. and Putman, Robert L., "The Accounting Major in AACSB Schools Possessing Accredited Accounting Programs," Published in Conference Proceedings of the International Academy of Business and Public Administration Disciplines, Tunica, Mississippi, May, 2004.

Griffin, Richard B., Edd Joyner, Ernest Moser and Bob Putman, "An Overview of Undergraduate Accounting Education in AACSB Accredited Accounting Programs," Journal of Business and Economic Perspectives, Vol. XXXIIII (Fall/Winter 2007) No. 2, pp.???. (forthcoming).

NASBA's Education Committee Task Force Framework, "UAA Education Rules 2005 Exposure Draft," Nashville, Tennessee, 2005.

| Appendix<br>Web Sites | |
|---|---|
| **Name of Organization** | **Web Site** |
| The Uniform CPA Examination | http://www.cpa-exam.org/cpa/computer_faqs_1.html |
| National Association of State Boards of Accountancy | http://www.nasba.org/nasbaweb/NASBAWeb.nsf/WPHP?OpenForm |
| Alabama State Board of Public Accountancy | http://www.asbpa.state.al.us/ |
| Alaska State Board of Public Accountancy | http://www.dced.state.ak.us/occ/pcpa.htm |
| Arizona State Board of Accountancy | http://www.accountancy.state.az.us/ |
| Arkansas State Board of Public Accountancy | http://www.state.ar.us/asbpa/ |
| California State Board of Accountancy | http://www.dca.ca.gov/cba/ |
| Colorado State Board of Accountancy | http://www.dora.state.co.us/Accountants/ |
| Connecticut State Board of Accountancy | http://www.ct.gov/sboa/site/default.asp |
| Delaware State Board of Accountancy | http://dpr.delaware.gov/boards/accountancy/index.shtml |
| Florida Board of Accountancy | http://www.state.fl.us/dbpr/cpa/index.shtml |
| Georgia State Board of Accountancy | http://www.sos.state.ga.us/plb/accountancy/ |
| Hawaii Board of Public Accountancy | http://www.hawaii.gov/dcca/areas/pvl/boards/accountancy |
| Idaho State Board of Accountancy | http://www2.state.id.us/boa/ |
| The Illinois Board of Examiners | http://www.illinois-cpa-exam.com/ |
| Indiana Board of Accountancy | http://www.in.gov/pla/bandc/accountancy/ |
| Iowa Accountancy Examining Board | http://www.state.ia.us/government/com/prof/account/home.html |
| Kansas Board of Accountancy | http://www.ink.org/public/ksboa/ |
| Kentucky State Board of Accountancy | http://cpa.ky.gov/ |
| State Board of CPAS of Louisiana | http://www.cpaboard.state.la.us/ |
| Maine Board of Accountancy | http://www.state.me.us/pfr/olr/categories/cat01.htm |
| Maryland State Board of Public Accountancy | http://www.dllr.state.md.us/license/occprof/account.html |
| Massachusetts Board of Registration in Public Accountancy | http://www.state.ma.us/reg/boards/pa/default.htm |
| Michigan Board of Accountancy | http://www.michigan.gov/cis/0,1607,7-154-35299_35414_35451-113531--,00.html |
| Minnesota State Board of Accountancy | http://www.boa.state.mn.us/ |
| Mississippi State Board of Public Accountancy | http://www.msbpa.state.ms.us/ |
| Missouri State Board of Accountancy | http://pr.mo.gov/accountancy.asp |
| Montana State Board of Public Accountants | http://www.discoveringmontana.com/dli/bsd/license/bsd_boards/pac_board/board_page.asp |
| Nebraska State Board of Public Accountancy | http://www.nbpa.ne.gov/ |
| Nevada State Board of Accountancy | http://www.state.nv.us/boards/accountancy/ |
| New Hampshire Board of Accountancy | http://www.nh.gov/accountancy |
| New Jersey State Board of Accountancy | http://www.state.nj.us/lps/ca/nonmedical/accountant.htm |
| New Mexico State Board of Public Accountancy | http://www.rld.state.nm.us/accountancy/index.html |
| New York State Board of Public Accountancy | http://www.nysed.gov/prof/cpa.htm |
| North Carolina State Board of CPA Examiners | http://www.nccpaboard.gov/Clients/NCBOA/Public/Static/index.html |
| North Dakota State Board of Accountancy | http://www.state.nd.us/ndsba/ |
| Accountancy Board of Ohio | http://www.state.oh.us/acc/ |
| Oklahoma Accountancy Board | http://www.state.ok.us/%7Eoab/ |
| Oregon State Board of Accountancy | http://boahost.com/index.lasso |

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|---|---|
| Pennsylvania State Board of Accountancy | http://www.dos.state.pa.us/bpoa/accbd/mainpage.htm |
| Rhode Island Board of Accountancy | http://www.dbr.state.ri.us/divisions/accountancy |
| South Carolina Board of Accountancy | http://www.llr.state.sc.us/POL/Accountancy/ |
| South Dakota Board of Accountancy | http://www.state.sd.us/dol/boards/accountancy/acc-home.htm |
| Tennessee State Board of Accountancy | http://www.state.tn.us/commerce/boards/tnsba/ |
| Texas State Board of Public Accountancy | http://www.tsbpa.state.tx.us/ |
| Utah Board of Accountancy | http://www.dopl.utah.gov/licensing/accountancy.html |
| Vermont Board of Public Accountancy | http://www.vtprofessionals.org/opr1/accountants/ |
| Virginia Board for Accountancy | http://www.boa.state.va.us/ |
| Washington State Board of Accountancy | http://www.cpaboard.wa.gov/ |
| West Virginia Board of Accountancy | http://www.wvboacc.org/ |
| Wisconsin Accounting Examining Board | http://drl.wi.gov/boards/acc/index.htm |
| Wyoming Board of Certified Public Accountants | http://cpaboard.state.wy.us/ |
| District of Columbia Board of Accountancy | http://dcra.dc.gov/dcra/cwp/view,a,3,q,599875,dcraNav_GID,1694,dcraNav,%7C33437%7C.asp |
| Guam Board of Accountancy | http://www.guamboa.org/ |
| Puerto Rico Board of Accountancy | http://www.estado.gobierno.pr/contador.htm |
| Virgin Islands Board of Accountancy | http://www.dlca.gov.vi/cparequirements.htm |

# Ethical Awareness and Consumption Behavior: An Exploratory Comparison Between Environmental and Fair Trade Issues

**Dawn H. Pearcy**
Associate Professor, Marketing
Eastern Michigan University

***ABSTRACT***

*The purpose of this exploratory study is to examine consumers' awareness of both environmental and Fair Trade issues and to examine their associated purchase behaviors. In addition, the study compares the relationship between ethical awareness and ethical purchase behavior across these two ethical issues in a sample of American consumers. The sample was composed of undergraduate marketing students enrolled at a large, Mid-western university. One-hundred five respondents completed a self-administered survey which assessed their awareness and purchase behaviors with respect to environmental and Fair Trade issues. Based on a typology developed in previous research, the survey participants were categorized based on their responses as either "caring and ethical", "cynical and disinterested", "confused and uncertain" or "oblivious". When considering each ethical issue, the largest percentage of the respondents was categorized as "oblivious". Fifty-nine percent of the respondents fell into this category with respect to Fair Trade issues, while 45% of the respondents were categorized in this group with respect to environmental issues. Further comparisons were then made between the categories of respondents on the two ethical issues and managerial implications were discussed.*

## Introduction

Over the last two decades or so, ethics and corporate social responsibility have become increasingly fundamental in the business realm. Some attribute this development to heightened media attention, pressure from special interest groups, and demands of consumers and other stakeholders (Anonymous 2007, Barnes and McTavish 1983). Business Ethics Magazine's 100 Best Corporate Citizens list highlights the premise that corporate success is no longer solely defined by shareholder return. In addition to profits, the magazine ranks firms based on their actions with respect to community, corporate governance, diversity, employee relations, products, the environment, and human rights (Anonymous 2006). In an era characterized by far too many corporate ethical crises, firms that are being considered successful are those who not only seek superior financial outcomes, but also consider the well-being of their suppliers, consumers, employees, and the environment.

Corporate social responsibility (CSR) has been conceptualized quite broadly and has been defined in many different ways. One definition of CSR is "the managerial obligation to take action to protect and improve both the welfare of society as a whole and the interest of organizations (Davis and Blomstrom 1975, p. 6). While a number of definitions of CSR have been advanced, the basic premise is that "companies are expected to behave in a manner that is beneficial, or at least not detrimental, to a larger group of stakeholders beyond those immediately impacted by their products or services" (Basil and Weber 2006, p. 61).

Ethics in business refers to adhering to the law as well as following organizational policies, professional and association codes, and norms regarding what is considered "right" (Sauser 2005). Bendixen, et al. (2007) asserted that the concept of ethics in business has been interpreted in many different ways, thereby blurring the distinction between business ethics and corporate social responsibility. However, to clarify the concepts Bendixen, et al. (2007, p. 5) further noted, "while certain aspects of social responsibility may be discretionary – such as donations to charitable institutions – and therefore their non-fulfillment cannot be regarded as "wrong" or unethical", other aspects of social responsibility are clearly based on obligatory standards of behavior which, if isolated, can certainly be labeled as unethical" (Carroll 1981).

Sen and Bhattacharya (2001) noted that socially responsible behavior encompasses a number of different initiatives including: community support, diversity, employee support, product safety, the environment, and overseas labor practices. While each initiative is important, the focus of this paper is the environment and Fair Trade practices, as growing emphasis on ethics and CSR ap-

pear to be focused heavily in these areas (Anonymous 2007). Purchasing products which are environmentally friendly is sometimes referred to "green consumption" (Carrigan, et al. 2004). Environmentally friendly refers to goods, services or practices considered to inflict little harm on water, air, plants, animals, or the climate (www.wikipedia.org 2007). Carrigan, et al. (2004) noted that "green" consumption not only involves the consumer's rejection of goods that were produced under circumstances which harm the natural environment or animals, but also positive purchasing decisions such as buying environmentally friendly products or recycling.

"Fair trade is a trading relationship (between buying entities and suppliers, producers, or growers), based on dialogue, transparency, and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South" (International Federation for Alternative Trade [IFATT] 2006, p. 22).

A fundamental element of Fair Trade is the integration of ethical principles into the consumer decision-making process (Hira and Ferrie 2006). The concept of Fair Trade appeals to a segment of consumers who believe that ethical principles are inextricably tied to the production process. These consumers' assessment of the attractiveness of an offering transcends simple price and quality considerations and includes the ethical consequences of how the product was produced (Hira and Ferrie 2006).

## Purpose

Now more than ever, marketers are focusing on ethics and corporate social responsibility in an attempt do "the right thing" and to enhance corporate success (including increased sales). Given firms' increasing efforts in these areas, it is vital to investigate the extent to which firms' adoption of ethical/socially responsible behaviors is related to consumers' purchase behavior. Therefore the purpose of this exploratory study is to examine consumers' awareness of both environmental and Fair Trade issues as well as to examine their associated purchase behaviors. It is important to examine the relationship between ethical awareness and ethical purchase behavior because previous research has revealed mixed results with respect to this relationship. In other words, there is a lack of definitive evidence which supports the notion that heightened awareness of ethical issues in marketing translates into ethical consumption behavior (see Titus and Bradford 1996; Carrigan and Attalla 2001). This study draws on the work of Carrigan and Attalla (2001) and categorizes consumers according to the extent to which their awareness of ethical issues relates to ethical purchase behavior.

Until fairly recently, consumers and academicians had devoted far more attention to environmental issues in marketing and "green" consumerism than Fair Trade issues. While much academic research on Fair Trade consumption behavior has been conducted in the European market (e.g., Grankvist and Lekedal 2007; Alexander and Nicholls 2006; Carrigan, et al. 2004), much remains to be discovered about American consumers' purchase behaviors in this area. Given these disparities in academic research, the present study also compares the awareness-purchase behavior relationship between these two ethical issues in a sample of American consumers.

In order to examine the topics of interest, an overview of the existing literature is presented. This is followed by an explanation of the research methodology and a discussion of the results. The paper concludes with a discussion of managerial implications and limitations of the research.

## Literature Overview

### Consumer Awareness of Ethical/CSR Issues

Clearly today's consumer has access to a myriad of information sources, thereby promoting more informed purchase decision-making. According to Alexander and Nicholls (2006), consumers appear to have become more interested in obtaining authentic and reliable information about the background of purchased products in their quest for "ethical consumption". Specifically, information such as country of origin and the procurement strategy of the retailer have become more important to a growing number of consumers for certain product categories (see Balabanis and Diamantopoulos 2004; Davidson, et al 2003). Additional research suggests that consumers are interested in ethical behavior issues throughout the supply chain and would be more discerning in their purchases if they had more access to information about firms' ethical and socially responsible activities and practices (Simon 1995).

Conversely, when asked if access to additional information about ethical/CSR issues and practices would assist in the purchase decision-making process, some respondents said it would make minimal difference, while others stated it would introduce confusion into the

buying situation (Carrigan and Attala 2001). Carrigan and Attala concluded that in some instances, having so much information can actually detract from consumer choice, given the necessity of consumers to concurrently consider additional trade-offs such as price, quality, and other factors in the purchase decision (Carrigan and Attala 2001).

### The Relationship between Consumer Awareness and Actual Purchase Behavior

Reports of consumers' increasing interest in obtaining information related to ethics/CSR issues are encouraging. However, contradictory research exists with respect to consumers' inclination to support or reject ethical and unethical practices of firms irrespective of their awareness levels (Carrigan and Attalla 2001). For example, Boulstridge and Carrigan (2000) noted that although the consumers surveyed had socially responsible attitudes, only 20 percent had actually patronized a particular business within the prior year because of its involvement with a "good cause". Boulstridge and Carrigan (2000) concluded that ethics/CSR is not a central criterion in consumers' purchase decision. In addition, Joergens' (2006) study of European consumers supported this notion and found little evidence to support the fact that ethical issues impact apparel purchase decisions. Rather, consumers' personal needs were found to be more important than ethical issues (Joergens 2006). Finally, Creyer and Ross (1997) revealed that consumers considered the ethical behavior of the firm as a relevant criterion in the purchase decision and that American consumers rewarded firms' ethical behavior through patronage and the willingness to pay a premium for products produced under "ethical" circumstances (Creyer and Ross 1997). However, Creyer and Ross (1997) also found that consumers would still patronize firms that engaged in unethical practices, but only if their products were offered at a lower price.

Carrigan and Attalla (2001) cited previous research which suggested that information concerning ethical and unethical behaviors on the part of firms has an unbalanced influence on consumer attitudes. This means that firms' vices negatively impact consumers' attitudes more than virtues enhance them (Skowronski and Carlston 1987, Reeder and Brewer 1979). Therefore, it might be expected that consumers avoid purchasing products from firms who engage in unethical behavior, but they do not necessarily patronize firms that engage in ethical practices (Carrigan and Attalla 2001). This premise was at the core of Carrigan and Attalla's (2001) study and they endeavored to find out if awareness of ethical issues actually translated into ethical purchase behavior.

Carrigan and Attalla (2001) conducted a qualitative study using two discussion groups of five participants. Despite the fact that respondents had knowledge that a particular company utilized poor employment practices, none had boycotted the company and they indicated they would still purchase the firm's products. This suggested that ethical awareness in this instance did not impact purchase behavior. The respondents in the study also indicated they would purchase a different product from a firm that had a reputation for paying low wages. In addition, the respondents indicated they would not be willing to pay a price premium of 10-15 percent for the same product if it were produced in a more socially responsible manner except to ensure the ethical treatment of animals (Carrigan and Attalla 2001). Finally, Carrigan and Attalla (2001) found that the respondents did not actively seek out information on ethical issues in the marketing of products; rather they simply relied on product labeling.

With respect to ethical awareness and ethical purchase intentions, Carrigan and Attalla (2001) asserted that four types of consumers exist. Carrigan and Attalla (2001) characterized the first group of consumers as "caring and ethical". These consumers are highly aware about ethical issues and have high ethical purchase intentions. The second category of consumers was labeled "cynical and disinterested". This group of consumers possesses high levels of ethical awareness; however their ethical purchase intentions are low. Carrigan and Attalla (2001) referred to the third category of consumers as "confused and uncertain". These consumers possess low awareness about ethical issues, yet they have high ethical purchase intentions. The last category of consumer was labeled "oblivious". This type of consumer has low ethical awareness and low ethical purchase intentions. While this categorization appears to be useful, Carrigan and Attalla (2001) made no attempt to place their study participants into these categories. The present research extends their work by doing so through assessment of the respondents' ethical awareness and ethical purchase behavior (rather than intentions).

## Methodology

### The Questionnaire

The survey was developed by the researcher and was based on a number of issues examined in the Carrigan and Attalla (2001) study. The self-administered survey was composed of two demographic questions (gender and age), nine items intended to assess "ethical awareness of environmental issues", nine items intended to

assess "ethical awareness of Fair Trade issues", six items intended to assess "green purchase behavior" and six items to assess "Fair Trade purchase behavior". Each construct was evaluated on a 5-point Likert scale. Some sample items include: "I actively seek out information on environmental (fair trade) issues" (1 = strongly disagree, 5 = strongly agree), "I use the Internet to become informed about environmental (fair trade) issues" (1 = strongly disagree, 5 = strongly agree), "How would you rate your overall awareness of ethical issues related to the environment (fair trade)?" (1 = not aware at all, 5 = highly aware), and "How much influence does a company's record on the environment (fair trade practices) have on your purchase decision?" (1 = none, 5 = very substantial).

### Sample

The data were collected from students enrolled in three different undergraduate marketing courses at a large, Mid-western University. Therefore, the respondents constituted a convenience sample. A total of 105 completed surveys were collected. Fifty-two percent of the sample was male. The respondents' ages ranged from 19 to 50, with a mean of 24.5 years old (S.D. = 6.11).

### Reliability Analysis

In order to assess the scale reliabilities, a two-step procedure was employed. First, each set of items intended to assess the constructs was subjected to factor analysis. Then, each set of items was evaluated to assess its reliability as indicated by Cronbach's alpha (Cronbach 1951). According to Nunnally (1967) a coefficient alpha of .7 or greater is acceptable in terms of scale reliability.

Each of the nine items intended to measure "environmental awareness" loaded on one factor. The factor loadings ranged from .56 to .84 and the factor explained 47.3% of the variance in the data. The 9-item scale proved to be reliable with a Crobach's alpha of .85. The six items intended to assess the "green purchase behavior" construct loaded highly on one factor (ranging from .72 to .84). The factor explained 64.4% of the variance in the data. The 6-item scale proved to be reliable with a Cronbach's alpha of .89.

Each of the nine items intended to measure "Fair Trade awareness" loaded highly on one factor, with factor loadings ranging from .63 to .86. The factor explained 59.6% of the variance in the data. The scale was also found to be reliable, with a Cronbach alpha of .91. "Fair Trade ethical purchase behavior" proved to be uni-dimensional, with each of the six items loading highly on the factor (ranging from .79 to .86). The factor explained 63.7% of the variance in the data. Finally, this scale was also found to be reliable, with Cronbach's alpha = .89.

## Results

### Descriptive Statistics

A comparison between environmental and Fair Trade issues on both awareness and purchase behavior was conducted. T-tests revealed a significant difference between awareness of Fair Trade and environmental issues (means = 2.63 and 3.01 respectively, t = -4.52, p <.0001). However, there were no significant differences between green purchase behavior and Fair Trade purchase behavior (means = 2.73 and 2.79 respectively, t = -.442, p = .44).

The number of purchases made by the respondents within the past year that were influenced by the company's environmental record ranged from zero to 100 (mean = 8, S.D. = 15.47). The number of purchases influenced by the company's Fair Trade record ranged from 1 to 100 (mean = 6.25, S.D. = 15.88). Thirty-one percent of the respondents indicated that they hadn't made a single purchase that was influenced by the company's environmental record, whereas 45.2% of the respondents indicated that they hadn't made a purchased that was influenced by the company's Fair Trade record over the past year.

**Table 1**
**Categorization of Respondents According to Carrigan and Attalla's (2001) Typology--Green Issues**
**n = 105**

| | | Ethical Awareness of Environmental (Green) Issues | |
|---|---|---|---|
| | | **High** | **Low** |
| **Green Purchase Behavior** | **High** | Caring and Ethical 29% | Confused and Uncertain 9% |
| | **Low** | Cynical and Disinterested 17% | Oblivious 45% |

**Table 2**
**Categorization of Respondents According to Carrigan and Attalla's (2001) Typology--Fair Trade Issues**
**n = 105**

| | | Ethical Awareness of Fair Trade Issues | |
|---|---|---|---|
| | | **High** | **Low** |
| Fair Trade Purchase Behavior | High | Caring and Ethical **21%** | Confused and Uncertain **9%** |
| | Low | Cynical and Disinterested **11%** | Oblivious **59%** |

## Discussion

On average, the number of purchases respondents made which were influenced by the firm's environmental record was slightly higher than purchases influenced by the firms' Fair Trade record (8 vs. 6.5). Keeping in mind that respondents were not asked to limit their responses to a particular product category (therefore *all* purchases over the preceding year were to be considered), those figures are quite dismal. In addition, substantial numbers of respondents indicated that they made no purchases within the preceding year that were influenced by the environmental or Fair Trade records of a firm. This finding supports previous research which suggests that in general, ethics/CSR is not a central criterion in consumers' purchase decision. While the mean for awareness of environmental issues was significantly higher than that of Fair Trade issues, this awareness didn't clearly translate into ethical purchase behavior, given both the mean for green purchase behavior and Fair Trade purchase behavior were quite low.

It is not surprising that on average, respondents reported higher levels of awareness of environmental issues because there has been longer standing emphasis in this area than Fair Trade in the US. The focus on environmental issues can be traced back to early 20th century efforts to save the American Bison (www.wikipedia.org). While Fair Trade has been popular in Europe since the 1940's, Massachusetts-based Equal Exchange, a worker-owned Fair Trade cooperative only introduced Fair Trade products to the US market in the mid-1980's. Therefore, relative to environmentally friendly endeavors, Fair Trade is an emerging practice in the US.

A somewhat larger percentage of the sample fell into the "caring and ethical" category when it came to the environment versus the Fair Trade (29% and 21% respectively). Once again, this supports the notion that consumers are more aware of environmental issues and behave accordingly. This might be attributed, at least in part to the ease of information access. For example, "green" campaigns such as "Earth Day" are promoted on a widespread basis and through various mainstream media. However, in the US, information pertaining to Fair Trade issues is not as readily available.

The data further revealed that 17% of the sample fell into the "cynical and disinterested" category on environmental issues, while 11% were placed in this category with respect to Fair Trade. This finding is somewhat encouraging in that only a relatively small percentage of respondents is highly aware of the issues, yet fails to engage in ethical purchase behavior. One might surmise that these respondents either do not care about these ethical issues; they fail to recognize the connection between their personal behaviors and these ethical issues or they are aware of the ethical issues related to the environment and Fair Trade, but there are other purchase criteria (such as price or convenience) that supersede their desire to make ethical purchase decisions.

The "confused and uncertain" category contained the smallest percentage of respondents of all groups when considering both environmental and Fair Trade issues (9% each). Carrigan and Attalla (2001, p. 572) used the label "confused and uncertain" to describe consumers who "would like to shop ethically, but remain bewildered by the lack of guidance and contradictory messages about corporate ethical behavior". Interestingly, the present study examined actual purchase behaviors rather than purchase intentions, therefore respondents in this category engage in green and Fair Trade consumption behavior despite the fact that their ethical awareness of issues in these areas is low. This finding is somewhat difficult to explain. However, one possible explanation is that respondents in this group might have developed a preference for a particular brand based solely on the merits of the product itself such as taste, quality, value, aesthetics, etc. and the product just happens to be a "green" or fairly traded product. Although, the respondent is not highly aware of the ethical issues and his/her actions are not directed by them, he/she might have now "learned" to prefer this brand and by default has become a consumer of a "green" or Fair Trade product.

The final category identified by Carrigan and Attalla (2001) was "oblivious". With respect to environmental and fair trade issues, this category contained 45% and 59% of the respondents respectively. For both ethical issues, this category contained the largest percentage of respondents. This means that the majority of the respondents reported low levels of ethical awareness and low ethical purchase behaviors. As with the "cynical and disinterested" category, a possible explanation for the prevalence of this type of consumer is that they simply do not care about green and Fair Trade ethical issues. Alternatively, as Carrigan and Attalla (2001) noted, this type of consumer might not be unconcerned about the environment or fair pay to suppliers, he/she might lack the information necessary to make an ethical purchase decision, or his/her life might be too busy to take these issues into consideration when making purchase decisions.

## Managerial Implications

Despite the fact that some previous research suggests that ethical awareness does not guarantee ethical purchase behavior, marketers should not be discouraged. The findings of this exploratory study demonstrate that a segment of highly aware consumers who also engage in ethical purchase behaviors exists. In fact, this group of respondents was the second largest group in the study. Clearly, there is potential to grow this particular segment. Marketers must meet the challenge of creating more informed (potential) customers who engage in ethical purchase behavior, based on this information. Carrigan and Attalla (2001) found that consumers are passive when it comes to obtaining information concerning ethical issues in marketing. Therefore, marketers of green and fairly traded products should simplify the information gathering process for consumers. If consumers do not actively seek out information on ethical issues, firms must find a way to creatively bring their messages to the consumer. In addition, marketers must ensure that they are using the most effective medium or media to reach (potential) customers.

While not the central focus of the present research, the data indicated that the most prevalent source that respondents used to become informed about both green and Fair Trade issues was "traditional" media (TV, print ads, billboards, or radio). This finding might be surprising to some in an era characterized by the proliferation of the Internet. This is particularly important to firms that sell fairly traded products, as "traditional" media are used only sparsely to promote these ethical issues. The primary source of Fair Trade information appears to be labeling and some other forms of in-store materials. Given one of the principles of Fair Trade is the producer's adoption of sustainable environmental practices, retailers of fairly traded products might also want to consider promoting the environmentally friendly nature of their products. In doing so, these retailers have the potential to benefit from capturing a segment of consumers who are already aware of and interested in "green" issues. These marketers should make consumers aware that Fair Trade involves more than paying a fair and equitable wage to international suppliers, but also involves important environmental issues as well.

In addition to increasing awareness about green and fair trade issues, marketers must also keep in mind that green and fairly traded products are competing with a myriad of products in the marketplace. Marketers must recognize that green and fairly traded products are typically more expensive than comparable "conventional" products and as with *any* product; marketers must "sell" the value of the product, emphasize its benefits and clearly justify price premiums. Marketers cannot rely solely on the product being "green" or fairly traded to appeal to consumers.

## Limitations

The use of a convenience sample in this exploratory study limits the generalizability of the results. Further, as Carrigan and Attalla (2001) noted, it is possible that age impacts one's ethical perspective. Eighty percent of the sample was 25 years of age or younger; therefore the findings might have been quite different if a broader range of demographics were included in the research. In addition, only awareness of ethical issues was examined and no attempt was made to ascertain *why* the respondents engaged or did not engage in ethical purchase behavior.

## REFERENCES

Alexander, A. and Nicholls, A. (2006). Rediscovering consumer-producer involvement: A network perspective on fair trade marketing. *European Journal of Marketing*, 40(11/12), 1236-1253.

Anonymous (2007). Increasing demand for ethical shopping: but do we know quite what that means? *Strategic Direction*, 23(3), 23-25.

Anonymous (2006). Business Ethics Magazine Lists 100 Best Corporate Citizens for 2006," *Business Credit*, 108(6), 53.

Balabanis, G. and Diamantopoulos, A. (2004). Domestic country bias, country-of-origin effects, and consumer ethnocentrism: a multidimensional unfolding

approach. *Journal of the Academy of Marketing Science*, 32(1), 80-95.

Barnes, J.G. and McTavish, R. (1983). Segmenting industrial marketers by buyer sophistication. *European Journal of Marketing*, 18, 16-33.

Basil, D. and Weber, D. (2006). Values motivation and concern for appearances: the effect of personality traits on responses to corporate social responsibility. *International Journal of Nonprofit and Voluntary Sector Marketing*, 11(1), 61-72.

Bendixen, M.; Abratt, R.; and Jones, P. (2007). Ethics and Social Responsibility in Supplier-Customer Relationships. *Journal of Applied Management and Entrepreneurship*, 12(1), 3-18.

Boulstridge, E. and Carrigan M. (2000). Do consumers really care about corporate responsibility? Highlighting the attitude-behavior gap. *Journal of Communication Management*, 4(4), 355-368.

Carrigan, M.; Szmigin, I.; and Wright, J. (2004). Shopping for a better world? An interpretive study of the potential for ethical consumption within the older market. *The Journal of Consumer Marketing*, 21(6), 401-417.

_____and Attalla, A. (2001). The myth of the ethical consumer – do ethics matter in purchase behavior? *The Journal of Consumer Marketing*, 18(7), 560-577.

Carroll, A.B. (1981). Business and Society, Boston: Little, Brown and Company.

Cronbach, L. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16 (October), 297-334.

Cryer, E. and Ross, W. (1997). The Influence of Firm Behavior on purchase intention: do consumers really care about business ethics? *Journal of Consumer Marketing*, 14(6), 421-433.

Davidson, A. Schroder, M. and Bower, J. (2003). The importance of origin as a quality attribute for beef: results from a Scottish consumer survey. *International Journal of Consumer Studies*, 27(2), 91-98.

Davis, K. and Blomstrom, R. (1975). Business and Society: Environment and Responsibility, New York: McGraw-Hill.

Grankvist, G. and Lekedal, H. (2007). Values and eco- and fair-trade labeled products. *British Food Journal*, 109(2), 169-181.

Hira, A. and Ferrie, J. (2006). Fair Trade: Three Key Challenges for Reaching the Mainstream. *Journal of Business Ethics*, (63), 107-118.

http://en.wikipedia.org/wiki/Environmentally_friendly, accessed 4/20/07 http://en.wikipedia.org/wiki/Environmentalism#History, accessed 4/21/07

IFAT (2006), "Fair trade in Europe 2005: facts and figures on fair trade in 25 European countries," available at: *www.ifat.org*.

Joergens, C. (2006). Ethical fashion: myth or future trend? *Journal of Fashion Marketing and* Management, 10(3), 360-371.

Nunnally (1967), *Psychometric Theory*, New York: McGraw-Hill.

Reeder, M. and Brewer, M. (1979). A schematic model of dispositional attribution in interpersonal perception. *Psychological Review*, 86, 61-79.

Sauser, W.I. (2005). Ethics in business: answering the call. *Journal of Business Ethics*, 58(4), 345-357.

Sen, S. and Bhattacharya (2001). Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, 38(2), 225-243.

Simon, F. L. (1995). Global Corporate Philanthropy: a strategic framework. *International Marketing Review*, 12(4), 20-37.

Skowronski, J. and Carlston, D. (1987). Social judgment and social memory: the role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of personality and Social Psychology*, 52, 689-699.

Titus, P. and Bradford, J. (1996). Reflections on consumer sophistication and its impact on ethical business practice. *Journal of Consumer Affairs*, 30(1), 170-195.

# Testing for Important Factors for Business Innovation Success

**Tor Guimaraes**
Tennessee Technological University

## ABSTRACT

*Free trade and global competition forces companies to adopt new technologies to redesign business processes, improve products, and support other organizational changes necessary for better performance. The literature on strategic leadership, competitive intelligence, management of technology, and specific characteristics of the company's change process propose their importance in successfully implementing business innovation. While these factors may indeed be important to enhance company competitiveness, the existing literature contains limited empirical evidence supporting their relationship to successfully implementing business innovation. A field test with a relatively large sample has been used to test an integrated model of these relationships. The results provide clear evidence about the importance of strategic leadership, competitive intelligence, management of technology, and specific characteristics of the company's change process to the success of business innovation. The items used for measuring the main constructs provide further insights into how managers should go about developing these areas within their organizations.*

## Introduction

While many business organizations have derived substantial benefits from innovation, success implementing the required changes is far from assured, with many organizations also reporting disappointing results due to missed objectives, unexpectedly high costs, and turmoil caused by the changes. Besides the continuous need for organizations to re-invent themselves and for developing new products and services (O'Sullivan, 2003), over the past decade the main emphasis worldwide has been on improving quality. To satisfy their need for innovation, many companies have adopted Total Quality Management (TQM) or similar quality improvement methodologies which call for a continuous effort to improve products, processes, and operations to better satisfy customer needs. The required changes may also call for employee empowerment in decision making, a team approach to identify, prioritize targets for improvement, including changes to organization values and culture. Although there has been a significant amount of success with TQM, managers have realized that in many cases there is need for more dramatic improvements in productivity, competitiveness and profitability. This can be accomplished by major paradigm shifts which focus on value-added activities as well as other underpinnings for successfully implementing the concept of Business Process Reengineering (BPR) (Caccia-Bava, Guimaraes & Guimaraes, 2005; Goll & Cordovano, 1993; Teng, Grover & Fiedler, 1994).

Essentially, BPR amounts to making radical changes to one or more business processes affecting the whole organization. It also requires a cross-functional effort usually involving innovative applications of technology. BPR differs from TQM in two important respects. First, while TQM is focused on continuous improvement, an incremental performance improvement approach, reengineering was founded on the premise that significant corporate performance improvement requires discontinuous improvement - breaking away from the outdated rules and fundamental assumptions that underlie operations. Second, reengineering makes a significant break with previous performance improvement approaches by requiring a high level of state-of-the-art information technology awareness among the entire reengineering team prior to, rather than after, the definition of process changes or improvements (Cypress, 1994). Some technologies (i.e. imaging systems and expert systems) can provide substantial opportunities for the redesign of business processes (Guimaraes, 1993; Guimaraes, Yoon & Clevenson, 1997). With BPR, rather than simply eliminating steps or tasks in a process, the value of the whole process itself is questioned (Gotlieb, 1993). In conformance with TQM principles, the focus of change is also market driven (Guimaraes & Bond, 1996).

Regardless of the change methodology being employed the factors important to innovation success or failure are many, but most authors would agree that the change process has to bear certain characteristics. Many researchers have looked to improvements in strategic leadership as critical to developing an organization environment conducive to innovation (Waldman, Ramirez, House, & Puranam, 2001; Williams, 2004). To help define and prioritize important problems and opportunities to the

organization, many have proposed Competitive Intelligence (CI) programs as important to company success (Tarraf & Molz, 2006; duToit, 2003; Vedder & Guynes, 2002; Guimaraes & Armstrong, 1998). Further, effective Management of Technology (MOT) is thought to be a critical requirement for successfully implementing most modern business changes (Beattie & Fleck, 2005). While these propositions are exceedingly important, the existing literature contains little empirical evidence supporting them. As called for in the study by Guimaraes & Armstrong (1998), while the constructs being studied are well established, much can be done for empirically testing these propositions. Particularly useful might be testing an expanded integrated model of the factors potentially important to effective implementation of business change. This field test was undertaken to accomplish these objectives.

## Theoretical Background and Proposed Hypotheses

### Implementing Business Change

The dependent variable in this case is the degree of company effectiveness in implementing business change. Regardless of the methodologies employed, to derive benefits from strategic opportunities and address problems, companies have to implement changes to their business processes, products, and/or to the organization itself. Their ability to effectively implement these changes has a dramatic impact on organization performance and business success (Guimaraes & Armstrong, 1998). The practitioner and academic literature propose that to manage change effectively organizations need to: 1. Be in touch with their markets, customers, competitors, new products, etc; 2. Have adaptive leadership which promotes innovation; 3. Manage technology effectively in supporting the necessary changes; and 4. Follow some basic prescriptions while implementing the change process. Each one of these are correspondingly represented by the independent variables in this study which are discussed next.

### Company Competitive Intelligence

To keep in touch with what is going on in their markets, managers are increasingly recognizing the importance of competitive intelligence and knowledge as a key asset (Tarraf & Molz, 2006; Anonymous, 2005; duToit, 2003; Vedder & Guynes, 2002; Darling, 1996). With the increase in business competition, company survival and success is now determined by its rate of learning. If it is faster than external changes, the organization will experience long term success (Darling, 1996). Ironically, even though as much as 68% of U.S. companies have an organized approach to providing information to decision makers (Westervelt, 1996), acccording to Ettorre (1995), probably less than 10 percent of American corporations manage the CI process well, and effectively integrate the information into their strategic plans. The antecedents and consequences of competitive intelligence dissemination has been studied by Maltz & Kohli (1996). Competitor Analysis (CA) was proposed by Ghoshal & Westney (1991), and other approaches useful for companies to collect information from competitors were addressed by Heil & Robertson (1991). The importance of organization intelligence to financial performance has also been demonstrated. Companies with well established CI programs on the average showed earnings per share of $1.24, compared to those without CI programs which lost 7 cents (King, 1997).

The literature contains many examples of benefits that can be derived from CI. Among these are improved competitive edge (Editors, 2004; duToit, 2003; McCune, 1996; Sawka, 1996; Westervelt, 1996) and improved overall company performance (Davison, 2001; Guimaraes & Armstrong, 1998; Babbar & Rai, 1993), two essential company goals that can be brought about with effective application of competitive intelligence. More specific benefits of CI include: uncovering business opportunities and problems that will enable proactive strategies (Ellis, 1993; Westervelt, 1996); providing the basis for continuous improvement (Babbar & Rai, 1993); shedding light on competitor strategies (Harkleroad, 1993; Westervelt, 1996); improving speed to markets and supporting rapid globalization (Baatz, 1994; Ettorre, 1995); improving the likelihood of company survival (Westervelt, 1996); increasing business volume (Darling, 1996); providing better customer assessment (Darling, 1996); and aiding in the understanding of external influences (Sawka, 1996). Benefits such as these provide the basis for firms to better understand the potential impact of the proposed changes and the means by which they can be infused into the company's fabric. Based on the above discussion, we propose the following hypothesis: **H1: Company CI effectiveness is directly related to effectiveness implementing business change.**

### Strategic Leadership

There is a substantial body of knowledge proposing the importance of effective leadership as an ingredient to successful organization change (Waldman, et al., 2001). There are many types of leadership (i.e. formal/informal, based on specific skills, social status, etc) arising from the circumstances in which leaders/followers find themselves.

However, for the purposes of this study the relevant construct is company strategic leadership. Pawar & Eastman (1997) proposed transactional strategic leadership as one operational within an existing organizational system or culture instead of trying to change it. It attempts to satisfy the current needs of followers by focusing on exchanges and contingent reward behavior. It pays close attention to exceptions or irregularities and takes action to make corrections (Bass, 1985; Burns, 1978). Conceptually similar to the cultural maintenance form of leadership described by Trice & Beyer (1993), transactional leadership acts to strengthen exiting organization processes, structures, strategies, and culture.

The second form of strategic leadership is transformational or "charismatic" leadership (Pawar & Eastman, 1997). According to Waldman et al., (2001) the leader articulates "a vision and sense of mission, showing determination, and communicating high performance expectations" (p.135). The followers reply with confidence in the leader and strong admiration or respect. Also they identify with the leader's vision and with the organization itself, creating a high level of collective cohesion. This cohesion and the leader's expressions of confidence in the followers' ability to attain the vision produce, in turn, a heightened sense of self-efficacy (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Further, charismatic leaders are likely to show persistence and enthusiasm in pursuing goals and be demanding of others through the communication of high performance expectations (Kanter, 1983; Trice & Beyer, 1993). There is evidence that charismatic leadership at the top executive level is important for company performance (Day & Lord, 1988; Hambrick & Finkelstein, 1987; Yukl, 1998). Katz & Kahn (1978) argued that while charismatic leadership may be more relevant to situations where organization change is important, both transactional and transformational (charismatic) leadership are potentially important at the strategic level, that it is particularly important as a means of mobilizing an organization to meet the demands of its environment. Bass (1985) viewed transactional and charismatic leadership as being somewhat complementary in that both could be displayed by the same individual leader. Similarly, Trice & Beyer (1993) acknowledged that both maintenance- and innovation-oriented leadership could be shown by a given leader over time. Based on the above discussion a second hypothesis is proposed: **H2: Strategic leadership is directly related to effectiveness implementing business change.**

## Management of Technology (MOT) To Support Business Change

As business competitiveness increases, many business organizations have used technology for redesigning business processes, provide new products and services, and improve the organization work environment. Many authors have proposed the importance of a wide variety of technologies to support business innovation (Li-Hua & Khalil, 2006; Khalil & Ezzat, 2005). Computer Telephony Integration has been touted as a powerful tool to improve the relationship with customers (McCarthy, 1996). The effects of computer technology on organization design, intelligence and decision making have long been of interest to researchers (Huber, 1990). The use of computers for data mining and warehousing is seen as essential for decision support (Anonymous, 1995). Friedenberg & Rice (1994) and Guimaraes et al., (1997) have proposed Expert Systems as viable implementation vehicles for business change because they are effective in capturing and distributing knowledge and knowledge processing capability across an organization. The list of technologies available to support the necessary business changes is endless. For business changes requiring technology, without effective MOT the change implementation processes would be severely hindered and in many cases rendered impossible. Based on the above discussion the following is proposed **H3: MOT effectiveness is directly related to effectiveness implementing business change.**

## Important Characteristics of the Change Process

A survey of the literature on business change management reveals several pre-requisites for successfully implementing business change such as conformity to company objectives, employee and department participation in the change process, customer input, reasonably balancing risk taking with cost benefit analysis, monitoring progress, and communication regarding the change process. In other words, how change is implemented is an important determinant of success. Specifically, as proposed by Guimaraes & Armstrong (1998), the important characteristics of the change process enumerated above are expected to influence the company's ability to change its products, processes, and its organizational structure and culture. Thus, we have: **H4: The extent to which the change process bears the desirable characteristics will be directly related to company effectiveness implementing business change.**

## Study Methodology

This section provides an overview of the field-test procedure used and a brief description of the sample supporting this study. A description of how the variables were measured, the data analysis procedures, and the discussion of the study results are presented later.

### Data Collection Procedure

This field test used a mailed questionnaire to collect data from the Internal Auditor Director (IA) of each company. IAs were chosen as respondents because, from a corporate perspective, they are most aware of the problems and activities throughout the company. Furthermore, the group is relatively homogeneous, a characteristic that strengthens internal validity of the data collection instrument used in the study. We felt that a survey of top managers who are directly responsible for strategic leadership, or of managers directly involved with specific projects implementing organizational changes, would have greater likelihood of bias. After some rewording of a few questions following the input from a small pilot test involving four IA's, the questionnaire was distributed by mail to the IAs of 1000 organizations randomly selected from a list of approximately 4,000 members of an Internal Auditors Association. The sample represents a wide variety of organizational settings, (i.e. small as well as large companies), from several industry sectors. Participation was voluntary, and the cover letter assured confidentiality of the responses and that only summary information from the participants would be published. The survey was accompanied by a published report from a previous study on the topic (as a courtesy to prospective respondents) and by a postage-paid envelope addressed for direct return to the researchers.

### Sample Description

Through the procedure just described, 1000 IAs were selected to participate in the study and 294 returned the questionnaire in time for data analysis. Nine questionnaires were thrown out due to missing data. The remaining 285 usable questionnaires provide a response rate which is acceptable for studies of this type (Teo & King, 1996) and consistent with past experience with mailed surveys (Igbaria, Greenhaus & Parasuraman, 1991; George & Barksdale, 1974). Nevertheless care was taken to assess the representativeness of the sample. Chi-square tests were used with a sample of non-respondents to check for the possibility of non-response bias. The results of this test support the conclusion that based on company size (gross revenues) and primary industry sector the companies in the sample are quite similar to those in the total population. The sample composition in terms of company gross revenues and primary industry types are presented in Tables 1 and 2.

**Table 1**
**Company Industry Sectors**

| Industry Sectors | No. of Companies | % |
|---|---|---|
| Manufacturing | 93 | 33% |
| Financial Services | 24 | 8% |
| Communications | 21 | 7% |
| Health Care | 21 | 7% |
| Transportation | 19 | 7% |
| Banking | 18 | 6% |
| Wholesalers | 16 | 6% |
| Merchandising | 15 | 5% |
| Retailers | 15 | 5% |
| Mining | 13 | 5% |
| Utilities | 12 | 4% |
| Insurance | 10 | 4% |
| Government | 8 | 3% |
| Other | 0 | 0% |
| Total | 285 | 100% |

**Table 2**
**Company Gross Revenues**

| Gross Revenues | No. of Companies | % |
|---|---|---|
| Less than $100M | 0 | 0 |
| $101M-$300M | 4 | 1 |
| $301M-$500M | 8 | 3 |
| $501M-$700M | 23 | 8 |
| $701M-$1B | 31 | 11 |
| $1B-$2B | 45 | 16 |
| $2B-$5B | 47 | 16 |
| $5B-$10B | 71 | 25 |
| Over $10B | 57 | 20 |
| Total | 285 | 100 |

### Variable Measurement

Effectiveness Implementing Business Changes represents the company's ability to alter its business practices in the desired manner. It was measured by the respondents rating the effectiveness of the firm in changing four areas to address strategic problems and opportunities: products, processes, organization structure and organization culture. This was done in comparison with the closest com-

peting organizations and using a seven-point Likert-type scale ranging from 1 extremely lower than average), 2 much lower), 3 somewhat lower), 4 average), 5 somewhat higher than average), 6 much higher), and 7 extremely higher). The ratings for the four areas were averaged to produce a single measure for effectiveness in implementing business changes.

Strategic Leadership represents the ability of the top management team to provide leadership when the organizational environment requires change. Environments perceived as highly uncertain (requiring major changes) tend to be perceived as risky, where wrong decisions could be costly. Such environments probably generate a high degree of stress. Charismatic leadership would tend to reduce stress and generate confidence, and perhaps show how uncertainty can be turned into a vision of opportunity and success (Bass, 1985). While charismatic leadership may be more relevant to situations where organization change is of major importance, both transactional and transformational (charismatic) leadership are potentially important at the strategic level. Further, Bass (1985) viewed transactional and charismatic leadership as being somewhat complementary in that both could be displayed by the same individual leader. The same items proposed by Waldman et al., (2001) were used to measure the two types of strategic leadership: It was assessed by asking the respondents to rate the extent to which their top managers in general exhibit the particular behavior when compared to managers of main competing organizations. Transactional leadership: 1. Takes actions if mistakes are made. 2. Points out what people will receive if they do what needs to be done. 3. Reinforces the link between achieving goals and obtaining rewards. 4. Focuses attention on irregularities, exceptions, or deviations from what is expected. 5. Rewards good work. Charismatic leadership: 1. Shows determination when accomplishing goals. 2. I have complete confidence in them. 3. Makes people feel good to be around them. 4. Communicates high performance expectations. 5. Generates respect. 6. Transmits a sense of mission. 7. Provides a vision of what lies ahead.

Characteristics of the Change Process is defined as the degree to which companies promote "desired" change process activities. It was assessed by asking the respondents to rate the importance or focus that the company places on ten areas of change process characteristics. These consisted of all significant changes must conform to company objectives, all affected departments participate in the change process, individual employee input is considered important, customers input is considered important, business partners input is considered important, ability to balance risk taking with cost/benefit, clearly defined measures to monitor progress, change objectives and progress are clearly communicated, responding quickly to required change, and responding effectively to required change. The same seven-point Likert-type scale was used, and the overall rating of characteristics of the change process for each firm was determined as the average of the ten areas.

MOT Effectiveness In Supporting Business Change is the extent to which the company's needs for technology while implementing business change have been met. It was measured by asking the respondents to rate this for the overall company and in four specific areas: technology leadership in the industry, knowledge of how to get the best technology, effectiveness with which technology has been used over the years, and effectiveness in using technology in comparison with main competitors. The respondents were asked to use the same seven point scale described above. The measure for MOT effectiveness in supporting business activities is the average of the ratings for these five items.

## Construct Validity

Several precautions were taken to ensure the validity of the measures used. Many of the recommendations by Carmines & Zeller (1979) were followed. To ensure content validity, a thorough survey of the relevant literature was undertaken to understand the important aspects of each major variable and its components, and not neglect important dimensions of any variable. To further reduce the possibility of any non-random error, the main source of invalidity (Carmines & Zeller, 1979, p. 15), a group of five practitioners from different companies with extensive experience in managing business change reviewed the questionnaire for validity (measuring the phenomena intended), completeness (including all relevant items), and readability (making it unlikely that subjects will misinterpret a particular question). Some questions were reworded to improve readability; otherwise, the items composing each major variable remained as derived from the literature.

As proposed by Carmines & Zeller (1979), "construct validation focuses on the extent to which a measure performs in accordance with theoretical expectations" (p.27). To ensure construct validity, the theoretical relationships between the constructs should have been previously established, and these relationships hopefully have been empirically supported by different studies over time. As discussed earlier, the theoretical underpinnings of this study are relatively well established, with most of the items in each construct having been addressed before by several authors. Second order factor analyses on the

two types of strategic leadership (transactional and charismatic leadership) indicate that they can be combined into a single factor. Thus, the subsequent multivariate analysis used the combined factors.

## Construct Reliability

Since many of the measures used are new, it was deemed important to re-test their reliability. Carmines & Zeller (1979) identified four basic methods to assess a measure's reliability (re-test, alternative-form, splithalves, and the internal consistency methods) and discussed their strengths and limitations. The main advantage of the internal consistency method is that it requires a single test, in lieu of splitting or repeating of items. "By far the most popular of these reliability estimates is given by Cronbach's alpha" (p. 44) which "in most situations provides a conservative estimate of a measure's reliability" (p. 45). The authors go on to say "that although more complex computationally, alpha has the same logical status as coefficients arising from the other methods of assessing reliability."

Several authors have proposed different acceptable levels of reliability coefficients. For example, Nunnally (1978) suggested a coefficient of Ø.5Ø or higher would suffice. Srinivasan (1985) and Magal, Carr & Watson (1988) contended that when using a not validated data gathering instrument in exploratory research, a reliability coefficient of Ø.5 or higher is acceptable. Van de Ven & Ferry (198Ø) posited that in this type of research even a value of Ø.4 or higher will be sufficient. In our case, the reliability coefficients of all the factors were higher than Ø.7Ø, which was proposed by Peterson (1994) as useful for more rigorous studies. As Table 3 indicates, the internal consistency reliability coefficients (Cronbach's alpha) for the scales used in this study are all well above the level of Ø.5Ø acceptable for exploratory studies of this type (Nunally, 1978).

**Table 3**
**Correlations Between Major Variables**

| | Mean | Std Dev | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| **1. Implementing Change** | 4.17 | 1.53 | (.71) | | | | | |
| **2. Competitive Intelligence** | 3.34 | 2.11 | .58** | (.86) | | | | |
| **3. Transactional Leadership** | 4.Ø2 | 1.1Ø | .32** | NS | (.82) | | | |
| **4. Charismatic Leadership** | 3.15 | 1.99 | .38** | .4Ø** | NS | (.85) | | |
| **5. Management of Technology** | 4.26 | 1.16 | .31** | NS | .26** | .2Ø** | (.91) | |
| **6. Change Process Features** | 3.73 | 1.46 | .44** | .33** | .25** | .35** | .19** | (.93) |

Numbers in parentheses (diagonally) are Cronbach's alpha reliability coefficients.
NS means not significant,
* means p<.Ø5,
** means p< .Ø1

## Data Analysis Procedures

The average and standard deviation for each item in the questionnaire were computed. Confirmatory factor analyses for the items in each main variable were conducted as the basis for their validation and as a prerequisite for assessing their internal reliability through the Cronbach's alpha coefficients presented within parentheses in Table 3. To test the proposed hypotheses, Pearson's correlation coefficients between the major study variables were computed and presented in Table 3. To detect any possible difference between the two strategic leadership types as determinants of business innovation success, they were processed separately in this analysis. Because of the possibility of collinearity among the independent variables, a stepwise multivariate regression analysis was conducted to assess the extent to which each independent variable incrementally contributes to explaining the variance in the dependent variable. In this case the two leadership types were combined since they both were found to be significant determinants of business innovation success and such combination was deemed valid by a second or-

der factor analysis. The multivariate regression analysis results are presented in Table 4.

**Table 4**
**Results of Multiple Regression Using Stepwise Method**

| Dependent Variable: Effectiveness Implementing Change | Incremental R Squared | Significance Level |
|---|---|---|
| **Independent Variables*:** | | |
| **1. Strategic Leadership** | .33 | .00 |
| **2. Change Process Features** | .16 | .00 |
| **2. Competitive Intelligence** | .09 | .03 |
| **4. Management of Technology** | .05 | .04 |
| **Total Variance Explained** | **.63** | |

* In the sequence in which they entered the regression equation.

## Results

Table 3 lists the means and standard deviations for the main research variables. As a group, in comparison with their main competitors, the companies in the sample are thought to be performing above average in the areas of implementing business change, and management of technology. On the other hand, on the average the companies in the sample are thought to be performing below average in the areas of charismatic leadership, competitive intelligence, and having the specific characteristics of change process needed for success in business innovation. The relatively large standard deviations indicate significant differences along all the major variables from company to company.

### Results From Hypotheses Testing

To test the proposed hypotheses, Pearson's correlation coefficients were computed and presented in Table 3. All four independent variables show a direct relationship to success in business innovation, as defined in this study. Thus, based on our sample, all four hypotheses are found significant at the 0.01 level or better. Because of the possibility of collinearity among the independent variables, a stepwise multivariate regression analysis was conducted to assess the extent to which each independent variable incrementally contributes to explaining the variance in the dependent variable. These results are presented in Table 4. In combination, the results provide clear evidence about the importance of strategic leadership, competitive intelligence, management of technology, and specific characteristics of the company's change process to the success of business innovation.

## Conclusions

The results provide strong evidence regarding the importance of strategic leadership, competitive intelligence, management of technology, and specific characteristics of the company's change process to the success of business innovation regarding products, business processes, organization structure, and organization culture. Given the importance of effectively implementing business innovation in these days of hyper competitiveness, it behooves top managers to do whatever they can to improve their companys' in the areas of strategic leadership, competitive intelligence, management of technology, and characteristics of the process used to implement the necessary changes.

In the area of strategic leadership, several implications can be derived from this study. Charismatic leadership (showing determination while accomplishing goals, inspiring confidence, making people feel good around you, communicating expectations for high performance, generating respect, transmitting a sense of mission, and providing a vision of what lies ahead) is on average and as a whole relatively scarce in industry today, and judging by its nature it should be difficult to develop. Nevertheless, managers must try, particularly in high clockspeed industry sectors (Guimaraes, Cook, & Natarajan, 2002) requiring continuous innovation. Also apparently important for successful business innovation but less scarce that charismatic leadership, transactional leadership (taking action if mistakes are made, pointing out what people will receive if they do what needs to be done, reinforcing the link between achieving goals

and obtaining rewards, focusing attention on deviations from what is expected, and rewarding good work) by its nature should be easier to develop. Pawar & Eastman (1997) proposed that transactional leadership is more relevant within an existing organization environment instead of one attempting to implement changes. Katz & Kahn (1978) argued that charismatic leadership may be more relevant where organization change is important, but that both types of strategic leadership are potentially important. Our results indicate that for successful business innovation both types of leadership are important.

Regarding CI, there are also some major implications from this study results. To improve their CI programs, managers need to consider the collection of market intelligence based on the six areas addressed in this study: the traditional industry competitors, emerging competitors, traditional customer needs and wants, non-traditional customer needs and wants, relationships with business partners, and new product or service development. The importance of any one of these areas may be relatively higher or lower, and in some cases some of these sources may be irrelevant, depending on the company's specific industry sector, line of business, products, and processes being considered. Good performance in these areas, whenever applicable to the company's industry sector and lines of business, are likely to lead to more effective implementation of business changes. Also, before embarking in major programs of change such as TQM and/or BPR, which are supposedly market driven, the implications for company strategic competitiveness from these changes should be validated with CI information, rather than superficial guesswork by top managers or BPR consultants more focused on the change process instead of the strategic reasons for change. At the very least, the market reaction must be carefully considered by any team charged with projects involving significant changes to business processes, products, and/or the organization itself. As our sample indicates, on average companies are performing below average in this area most important to successful business innovation.

To improve technology management while implementing business innovation, managers must look at company performance in terms of its technology leadership position in its main industry sectors, knowledge of how to get the best technology available, effective use of specific technologies, and benchmarking the use of specific technologies against the company's main competitors or best-in-class target organizations. An important requirement to accomplish these objectives is the clear definition of the more important technologies necessary to support the company's main products and business processes, and technologies which will enable the structural and cultural changes considered important to improve company competitiveness. Another important requirement is management recognition that the implementation of each of the various technologies deemed important to the organization are dependent on specific success factors. The success factors for the various technologies have been identified and discussed elsewhere (Guimaraes, Igbaria & Lu, 1992; Guimaraes & Igbaria, 1997; Yoon, Guimaraes, & Clevenson, 1998; Yoon, Guimaraes, & Clevenson, 1995; Yoon, Guimaraes & O'Neal, 1995; Udo & Guimaraes, 1994) and are considered beyond the scope of this paper.

Last, top managers must ensure that their companys' change process bear the desirable characteristics studied here: all significant changes must conform to company objectives, all affected departments participate in the change process, individual employee input is considered important, customers input is considered important, business partners input is considered important, managers ability to balance risk taking with cost/benefit, the existence of clearly defined measures to monitor progress, that clearly defined measures to monitor progress exist, that change objectives and progress are clearly communicated, and that the change management team respond quickly and effectively to required change. These guidelines must be widely disseminated and enforced by project managers responsible for significant business changes.

## Study Limitations and Research Opportunities

Based on an extensive survey of the relevant literature, this study is a first attempt at empirically testing the importance of strategic leadership, competitive intelligence, management of technology, and specific characteristics of the company's change process for the success of business innovation. While the tested model represents an integration of several constructs which in the past have been studied separately, this model needs to be expanded further to include other factors potentially important to effective implementation of strategic business change. Another important contribution from further research could be the identification and empirical testing of variables which moderate the relationships between the independent variables and success in business innovation. Perhaps the use of a path analytic modeling technique would be applicable in this case. The results should provide valuable information on the extent to which strategic leadership can positively influence the effective use of technology and CI programs for companies to improve their business competitiveness while ensuring that the

change process follow prescribed guidelines suggested in this study.

## REFERENCES


Anonymous. (1995). Data mining a new weapon for competitive advantage. Software Quarterly, 2 (4), 15-19

Anonymous. (2005). Competitive intelligence underutilized. *The Information Management Journal, May/June*, 10.

Baatz, E. B. (1994, Sept. 15). The quest for corporate smarts. *CIO,* 48-58.

Babbar, S., & Rai, A. (1993). Competitive intelligence for international business. *Long Range Planning, 263*,103-113.

Bass, B.M. (1985). *Leadership and Performance Beyond Expectations*. New York: Free Press

Beattie, J.S., & Fleck, J. (2005). New perspectives on strategic technology management in small high-tech companies. Proceedings from IEEE International 2005: *Engineering Management Conference*.

Burns, J. M. (1978) *Leadership*. New York: Harper & Row.

Caccia-Bava, M., Guimaraes, C.K., & Guimaraes, T. (2005). Empirically testing determinants of hospital BPR success. *International Journal of Health Care Quality Assurance*, 18(7), 552-563.

Carmines, E., & Zeller, R. (1979). *Reliability and Validity Assessment*. Beverly Hills, CA: Sage.

Cypress, H. L. (1994, February). Reengineering. *OR/MS Today,* 21 (1),18-29.

Darling, M. S. (1996). Building the knowledge organization. *Business Quarterly*, 61(2), 61-66.

Davison, L. (2001). Measuring competitive intelligence effectiveness: Insights from the advertising industry. *Competitive Intelligence Review*, 12 (4), 25-38.

Day , D.V., & Lord, R.G. (1988). Executive leadership and organizational performance: suggestions for a new theory and methodology. *Journal of Management*, 14, 4593-464.

du Toit, A. (2003). Competitive intelligence in the knowledge economy: What is in it for South African manufacturing enterprises? *International Journal of Information Management*, 23, 111-120.

Editors. (2004, March/April). Competitive intelligence and records managers. *The Information Management Journal*, 4.

Ellis, J. R. (1993). Proactive competitive intelligence: Using competitive scenarios to exploit new opportunities. *Competitive Intelligence Review*, 4(1), 13-24.

Ettorre, B. (1995). Managing competitive intelligence. *Management Review*, 84(10),15-19.

Friedenberg, R., & Rice, A. (1994, August 3). Knowledge re-engineering as a BPR strategy. Working Notes of the AAAI-94. *Workshop on Artificial Intelligence in Business Process Reengineering*, Seattle, WA, pp. 21-26.

George, W. & Barksdale, H. (1974, Oct.). Marketing activities in the service industries. *Journal of Marketing*, 38(4) 65-70.

Ghoshal, S., & Westney, D. E. (1991, Jan.). Organizing competitor analysis systems. *Strategic Management Journal*, 12 (1)17-31.

Goll, E. O., & Cordovano, M. F. (1993, Oct.). Construction time again. *CIO,* 15, 32-36.

Gotlieb, L. (1993). Information technology. *CMA Magazine,* 67(2), 9-10.

Guimaraes, T. (1993). Exploring the determinants of imaging systems success. Proceedings from: *26th Hawaii International Conference on System Sciences*, 4, 558-567.

Guimaraes, N., & Armstrong, C. (1998). Exploring the relation between competitive intelligence, IS support and business change. *Competitive Intelligence Review*, 9(3), 45-54.

Guimaraes, T., & Bond, W. (1996). Empirically assessing the Impact of BPR on manufacturing firms. *International Journal of Operations & Production Management*, 16(8), 5-28.

Guimaraes, T., Cook, D., & Natarajan, N. (2002). Exploring the importance of business clockspeed as a moderator for determinants of supplier network performance. *Decision Sciences*, 33(4), 629-644.

Guimaraes, N., & Igbaria, M. (1997). Client/server system success: Exploring the human side. *Decision Sciences*, 28(4), 851-876.

Guimaraes, N., Igbaria, M., & Lu, M. (1992). Determinants of DSS success: An integrated model. *Decision Sciences*, 23(2), 409-430.

Guimaraes, T., Yoon, Y., & Clevenson, A. (1997). Empirically testing ES success factors in business process reengineering. *International Journal of Production Economics,* 50, 245-259.

Hambrick, D.C., & Finkelstein, S. (1987). Managerial Discretion: A Bridge between Polar Views of Organizational Discretion. In L.L. Cummings & B.M. Staw (Eds.) *Research in Organizational Behavior,* Greenwich, CT: JAI Press, 9, 369-406.

Harkleroad, D. (1993). Sustainable growth rate analysis: Evaluating worldwide competitors ability to grow profitability. *Competitive Intelligence Review*, 4(2/3), 36-45.

Heil, O., & Robertson, T. S (1991, Sep.). Toward a theory of competitive market signaling: A research agenda. *Strategic Management Journal*, 12(6), 403-418.

Huber, G. P. (1990, Jan.). A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making. *Academy of Management Review*, 15(1), 47-71.

Igbaria, M., Greenhaus, J.H. & Parasuraman, S. (1991). Career orientations of MIS employees: An empirical analysis. *MIS Quarterly*, 15(2),151-169.

Kanter, R.M. (1983). *The Change Masters*. New York: Simon & Schuster.

Katz, D., & Kahn, R.L. (1978). *The Social Psychology of Organizations*. (2nd ed.) New York: Wiley.

Khalil, T.M., & Ezzat, H.A. (2005). Management of technology and responsive policies in a new economy. *International Journal of Technology Management*, 32(1,2), 88.

King, M. (1997, March 10). Corporations take snooping mainstream. *Indianapolis Business Journal*, 17(2), 1-4.

Li-Hua, R., & Khalil, T.M. (2006). Technology management in China: A global perspective and challenging issues. *Journal of Technology Management in China*, 1 (1), 9.

Magal, S.R., Carr, H.H., & Watson, H.J. (1988), Critical success factors for information center managers. *MIS Quarterly*, 12(3), 413-425.

Maltz, E. & Kohli, A. K. (1996, Feb.). Market intelligence dissemination across functional boundaries. *Journal of Marketing Research*, 33(1), 47-61.

McCarthy, V. (1996). CTI lets you coddle customers at lower cost. *Datamation,* 42(13), 46-49.

McCune, J. C. (1996). Checking out the competition. *Beyond Computing*, 5(2), 24-29.

Nunnally, J.C. (1978). *Psychometric Theory*. New York: McGraw-Hill.

O'Sullivan, A. (2003). Dispersed collaboration in a multi-firm, multi-team product-development project. *Journal of Engineering and Technology Management*, 20, 93-116.

Pawar, B.S., & Eastman, K.K. (1997). The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Academy of Management Review*, 22, 80-109.

Peterson, R.A., (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21, 381-391.

Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1,107-142.

Sawka, K. A. (1996). Demystifying business intelligence. *Management Review*, 85(10), 47-51.

Srinivasan, A. (1985). Alternative measures of system effectiveness: Associations and implications. *MIS Quarterly*, 9(3), 243-253.

Tarraf, P., & Molz, R. (2006). Competitive Intelligence at Small Enterprises. S.A.M. Advanced Management Journal, l 71 (4),24-34.

Teng, J.T.C., Grover, V., & Fiedler, K. D. (1994, Spring). Business process reengineering: Charting a strategic path for the information age. *California Management Review,* 36(3), 9- 31.

Teo, TSH & King W.R. (1996). Assessing the impact of integrating business planning and IS planning. *Information and Management*, 30, 309-321.

Trice, H.M. & Beyer, J.M. (1993). *The Cultures of Work Organizations*. Englewood Cliffs, JN: Prentice-Hall.

Udo, G.., & Guimaraes, N. (1994). Empirically assessing factors related to DSS benefits. *European Journal of Information Systems*, 3(3), 218-227.

Van de Ven, A. & Ferry, D., (1980). *Measuring and Assessing Organizations*. Wiley, New York.

Vedder, R.G., & Guynes, C.S. (2002). CIOs' Perspectives on competitive intelligence. *Information Systems Management*, 19(4), 49-56.

Waldman, D.A., Ramirez, G.G., House, R.J., & Puranam, P. (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44(1),134-143.

Westervelt, R. (1996). Gaining an edge: Competitive intelligence takes off. *Chemical Week*, 158(25),29-31.

Williams, S.D. (2004). Personality, attitude, and leader influences on divergent thinking and creativity in organizations. *European Journal of Innovation Management*, 7(3),187-204.

Yoon, Y., Guimaraes, T., & Clevenson, A. (1995). Understanding the factors important to expert systems success. *Technology Management*, 2(3),1-14.

Yoon, Y., Guimaraes, T., & Clevenson, A. (1998). Exploring ES success factors for BPR. *Journal of Engineering and Technology Management*, 15, 179-199.

Yoon, Y., Guimaraes, T., & O'Neal, Q., (1995). Exploring the factors associated with expert systems success. *MIS Quarterly*, 19(1),83-106.

Yukl, G.A. (1998). *Leadership in Organizations*. (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.

# Accounting for Derivatives at Financial Institutions: FAS 133 and IAS 39

**Adena T. LeJeune**
Louisiana State University at Alexandria, and
Northcentral University
**Dixie L. Clark**
Louisiana State University at Alexandria

***ABSTRACT***

*Financial institutions use derivative instruments to hedge against risks. These derivatives can be complex leading to complicated accounting requirements. In the U.S., Financial Accounting Standard 133 is the main standard governing accounting for these instruments. On an international level, International Accounting Standard 39 is the applicable document. The two standards are similar, although there are a few significant differences. Both of these standards attempt to improve financial reporting by making financial statements more transparent. However, both standards have been subjected to harsh criticisms, and the complexity of FAS 133, which was the first implemented, has been associated with several accounting scandals. As financial institutions become more adept at applying derivative accounting requirements, there may be changes in risk management practices.*

## Introduction

Financial institutions, as financial intermediaries, face many types of risks including interest rate risk, market risk, and foreign exchange risk. In an effort to manage risk, financial institutions of all sizes use derivative instruments to hedge risk related to their assets and liabilities thereby reducing the value of their net worth at risk (Saunders & Cornett, 2006). A derivative is an instrument whose value is based on the value of some other item that has variable value over time (Baker, Lembke, & King, 2005). Although some investors use derivatives for speculative purposes, financial institutions often participate in derivatives for the purpose of hedging, or reducing, risks.

Derivative instruments come in many varieties from simple to complex. Depending on the type of derivative, accounting for these instruments can be complicated. This paper will discuss accounting for derivatives from the perspective of financial institutions. In the U.S., Financial Accounting Standard No. 133 is the prominent authority on derivatives accounting. On an international scale, International Accounting Standard 39 is the authoritative source. These two standards will be examined in terms of relevancy to financial institutions, history, strengths, weaknesses, and current trends.

## Relevancy

According to a study by DeMarzo and Duffie (as cited in Ronner & Blok, 2001), accounting standards have a large impact on the risk management behavior of companies. They assert that managers strive for reduced profit variability to achieve reduced wage variability. Therefore, if hedging details are not disclosed, managers are motivated to hedge all exposures for the purpose of reducing variability. Conversely, increased disclosure requirements for hedging transactions will lead to a reduction in hedging as the hedging transactions will impact profit. Additional evidence indicates that hedging can increase perceived firm value if it leads to a smooth upward trend in earnings (Bodurtha & Thornton, 2002). With this in mind, it is evident that any industry heavily involved in hedging activities will be impacted by the application of FAS 133 and/or IAS 39. The financial sector is such an industry.

The International Swaps and Derivatives Association (as cited in Corman, 2006) reports that over 90 percent of the world's largest companies use derivatives to hedge risk. Banks, and other financial institutions, are significantly involved in the use of derivatives. Banks are end users of derivatives as well as sellers of derivatives such as interest-rate swaps, foreign currency swaps, and forward contracts (Park, 2005). The regulations of FAS 133 and IAS 39 affect not only the accounting department at banks and other companies that hedge, but also reach treasury, risk management, purchasing, legal, and other departments involved in financial contracts (Rozsypal, Woods, & Dolan, 2001). Furthermore, because a bank's minimum capital requirements are based on the balance sheet, accounting for derivatives can affect capi-

tal requirements and alter the cost of regulatory capital (Blackwell, 2004).

Since the implementation of FAS 133 in 2001, many companies have struggled with its application. In 2005, 57 companies restated their earning due to errors in hedge accounting, an increase from 27 in 2004 and 13 in 2003 (Glass Lewis & Co. as cited in Corman, 2006). Financial institutions restating prior year earnings during 2006 include Colonial BancGroup Inc. (Davis, 2006a), Bank of America Corp. (Davis, 2006b), and SunTrust Banks, Inc. (Davis, 2006c). Freddie Mac and Fannie Mae, the giants of the mortgage market, have also faced FAS 133 difficulties. In these cases not only were restatements necessary, but the incorrect accounting rose to the scandal level resulting in the fall of top management at both entities (Pollock, 2005). To avoid restatement and scandal, financial institutions seek to understand and properly apply FAS 133 and, when applicable, its international counterpart IAS 39. Their relevance to the industry is evident.

## History

### FAS 133

Prior to the issuance of FAS 133, financial derivatives were traditionally accounted for using historical cost accounting. Since many financial derivatives did not require an initial cost, the only presentation was a note in the financial statements. These notes did not reveal the companies' true exposure (Abhayawansa & Abeysekera, 2005). The only accounting guidance for derivatives to emerge before FAS 133 was found in Financial Accounting Standard No. 52, *Foreign Currency Translation* (FAS 52) and Financial Accounting Standard No. 80, *Accounting for Futures Contracts* (FAS 80), as well as a few Emerging Issues Task Force (EITF) consensuses. This piecemeal guidance left many derivatives as off-balance sheet items and allowed inconsistent accounting treatments (Park, 2005).

Spurred by several big derivatives losses in 1994, the Securities and Exchange Commission (SEC), the General Accounting Office (GAO), and members of Congress began to call for the development of a new accounting standard (Park, 2005). In November 1994, the Financial Accounting Standards Board (FASB) announced its intention to introduce a new model of accounting for derivatives that did not allow banks to defer unrealized gains or losses on derivatives used to hedge loans, securities, and other holdings. This announcement drew immediate opposition because it required reporting changes in the fair value of derivatives without offsetting changes in the fair value of the underlying assets or liabilities. Users of derivatives complained that this would increase the volatility of banks' earnings and capital (Park).

The potential problem of volatility due to reporting changes in the fair value of derivatives directly to income, led to the development of hedge accounting (Finnerty & Grant, 2002). Hedge accounting is based on the assumption that the gain or loss on a derivative used as a hedge will be in the opposite direction from and of similar magnitude to the gain or loss on the hedged item. Therefore, it is illogical to report changes in the fair value of the derivative to current income if changes in the underlying asset or liability's fair value are not currently reported. Hedge accounting addresses this problem by allowing the firm to recognize the gain or loss from the derivative in the same period as the risk being hedged (Christian, 2005).

After considering the criticisms of its first announcement and the merits of hedge accounting, the FASB released an exposure draft on accounting for derivatives in June 1996 (Park, 2005). The exposure draft was based on six conclusions that became the cornerstones of FAS 133. First, derivative instruments represent rights or obligations that meet the definitions of assets or liabilities. Second, fair value is the only appropriate measure for derivative instruments. Third, the balance sheet should only report items that are assets or liabilities. Fourth, since derivatives are assets or liabilities, they should be reported on the balance sheet. Fifth, for derivatives designated and effective as hedges of fair values or cash flows, special hedge accounting is appropriate. Sixth, for derivatives not designated and qualifying as hedges, changes in fair value should be reported in current earnings (Ronner & Blok, 2001).

The provisions of the exposure draft were consistent with these conclusions. Under the exposure draft all derivatives were to be reported at fair value as assets or liabilities (Park, 2005). For derivatives used as hedges, the reporting of the gains or losses depended on the type of hedge. For derivatives qualifying as a fair-value hedge, gains or losses were to be reported in earnings but offset against corresponding gains or losses on the hedged items. For derivatives qualifying as a cash flow hedge, gains and losses were to be reported in other comprehensive income and included in earnings when the hedged item affected earnings. Those derivatives that hedge a foreign currency exposure of a company's net investment in a foreign corporation would have gains or losses included in other comprehensive income to the extent

the hedge is effective. Any gains or losses on derivatives not designated as hedges were to be reported directly in earnings (Park; Christian, 2005).

Due to strong opposition to the exposure draft, the FASB delayed issuing the standard and solicited additional public comments. Finally, in June 1998, the FASB approved and issued FAS 133 with the exposure draft requirements still intact. FAS 133 has been amended several times. Financial Accounting Standard No. 137, *Accounting for Derivative Instruments and Hedging Activities—Deferral of the Effective Date of FASB Statement No. 133—an amendment of FASB Statement No. 133* (FAS 137), delayed the effective date of FAS 133 from June 15, 1999 to June 15, 2000. FAS 138 also amended FAS 133 to ease implementation difficulties (Park, 2005).

FAS 133 was amended again in 2006 when the FASB issued Financial Accounting Standard No. 155, *Accounting for Certain Hybrid Financial Instruments: an amendment of FASB Statements No. 133 and 140* (FAS 155). Prior to FAS 155, FAS 133 required companies to identify derivatives embedded in other instruments. If an embedded derivative existed companies were required to bifurcate the host instrument and the embedded derivative and account for the derivative portion under FAS 133 requirements. Under FAS 155, entities are allowed to elect to measure financial instruments with an embedded derivative at fair value (Williams & Carcello, 2006). This election will simplify accounting for these hybrid instruments. To assist entities in implementing FAS 133 the FASB established a consultative body, the Derivatives Implementation Group (DIG), to help its staff address questions regarding FAS 133 (Rozsypal et al., 2001).

## IAS 39

Prior to IAS 39, International Accounting Standard No. 25 (IAS 25) regulated accounting for derivatives. All financial assets were initially recognized at historical cost. Subsequent revaluation for assets depended on classification as current or long-term. Current investments could be accounted for using lower-of-cost-or-market, mark-to-market, or portfolio accounting. Long-term investments could be reported using amortized costs, revalued amounts, or lower-of-cost-or-market. All liabilities were reported at amortized cost (Gebhardt, Reichardt, & Wittenbrink, 2004).

In the absence of specific rules, a best-industry practice was developed by the banking industry. It was based on the distinction between trading activities and banking (book) activities. All trading book assets and liabilities, including derivative instruments, were measured at fair value with changes immediately recognized in net income. Banking book financial assets and liabilities were reported at amortized cost. Derivative instruments in the banking book were treated as off-balance sheet contracts (Gebhardt et al., 2004).

In an attempt to move International Accounting Standards beyond traditional cost based systems of accounting, the International Accounting Standards Board (IASB) issued IAS 39, *Financial Instruments: Recognition and Measurement*. IAS 39 requires companies to report their derivative portfolios at fair value and to fully document and explain the hedging strategies behind these portfolios in a methodical manner (Kruger, 2005). Like FAS 133, IAS 39 attempts to minimize volatility by allowing hedge accounting in certain circumstances.

The IASB had the advantage of drawing on the U.S. experience with FAS 133 when developing IAS 39, which is now applicable in all European Union countries. The derivatives rules of IAS 39 are similar in intent to FAS 133, but there are some significant differences. IAS 39 offers a choice between hedge accounting or a fair value option. The fair value option allows companies that do not qualify for hedge accounting, due to an inability to prove hedge effectiveness, to elect to mark both sides of the hedge to market. If the hedge is effective, very little volatility will result because changes in the fair value of the derivative will be offset by changes in the fair value of the underlying asset or liability. FAS 133 as originally issued offers no similar option. Although the amendment in FAS 155 adds a fair value option for some embedded derivatives, there is still no U.S. equivalent for the type of offsetting fair value accounting allowed under IAS 39 (Wood, 2006).

Another difference lies in the qualifications for hedge accounting. While both standards require substantial documentation to use hedge accounting, the U.S. version offers a shortcut method for testing and documentation. IAS 39 has no equivalent provision (Wood, 2006). In both standards, companies must designate exactly which risks are being hedged by which derivatives. However, IAS 39 gives companies more flexibility in these designations (Wood). Furthermore, IAS 39 allows some macro hedging, designating pools of assets to be hedged rather than specific assets. This is forbidden under FAS 133 (Wood).

## Strengths

The greatest strength of both FAS 133 and IAS 39 is their focus on preventing hedging calamities. Both seek to avoid situations where investors are caught off-guard by huge losses on previously undisclosed derivatives by requiring increased disclosure, documentation, and demonstration of hedge effectiveness. Requiring derivatives to be reported on the balance sheet at fair market value reduces off-balance sheet transactions and gives a more realistic picture of the risk situation (Will, 2002). Transparency is increased by requiring companies to state whether the objective for each derivative is hedging or speculative. Overall, corporate governance is improved by requiring a process for tracking and reporting derivatives' market values, offsetting risk position, and hedge effectiveness, and by requiring that the hedged item be explicitly identified and that the ineffective portion of a hedge be disclosed (Kruger, 2005; Will). Furthermore, these two standards have reduced the inconsistencies that previously existed, in both the U.S. and Europe, in accounting for derivatives.

Possible positive effects of improved standards include 1) more reliable and transparent information, 2) reduction of uncertainty in financial statements, and 3) improved monitoring of risk-management strategies (Park, 2005). A special report issued by Moody's Investors Service Inc. in 2001 (as cited in Park) contends that FAS 133 will give financial statement users a better understanding of firms' use of derivatives and hedging transactions. The report goes on to assert that financial statement users are capable of seeing through any increase in earnings volatility caused by the new requirements that is not reflective of real economic consequences.

## Weaknesses

The introduction of both FAS 133 and IAS 39 was met with criticism and resistance. One of the greatest concerns was the introduction of volatility into the income statement. This concern is partially alleviated by the inclusion of hedge accounting and, in the case of IAS 39, the fair value option. However, a concern remains that because not all derivatives will qualify for hedge accounting, volatility will enter the income statement and damage investors' perceptions when the underlying economic reality of the company has not changed (Kruger, 2005).

Other criticisms, some of which are related to the volatility issue, have been levied at FAS 133. Pollock (2005) documents many of the criticisms brought against FAS 133 by financial risk managers. FAS 133 requires market value accounting for only one side of what are actually two-sided positions. It treats positions with identical net cash flows differently. It requires the appearance of micro hedging of specific items, while the reality is macro hedging of combined balance sheet risks where the real risk is the relationship between assets and liabilities. It requires direct debits and credits to the owners' equity section of the balance sheet and can cause over or understatement of capital. It requires the deferral of certain realized cash losses. It moves accounting farther away from cash flows than it already was. It diverts organizational effort from responsible management to complex bookkeeping tasks, and it places more importance on documentation than the substance of the transaction. Finally, it makes financial performance more difficult to evaluate (Pollock). With the exception of those concerns relating to micro hedging, most of these criticisms also apply, to some degree, to IAS 39.

Another weakness in these two standards is the possibility that entities will reduce the use of derivatives in hedging activities to avoid earnings volatility and the burden of sustaining hedge accounting (Park, 2005). A survey conducted by Treasury & Risk Management (T&RM) in 2001 found that almost one in five respondents said their company had reduced its use of derivatives as a result of FAS 133 (Knox, 2001). In a worse case scenario, derivatives accounting may drive companies away from prudent hedging policies and into policies that do not maximize shareholder value (Ronner & Blok, 2001). However, while the use of FAS 133-unfriendly instruments did decline in volume immediately following the standard's implementation, their usage rebounded very strongly soon after implementation. This seems to indicate that new practices are being developed and managers are becoming more comfortable hedging under FAS 133 (Kruger, 2005).

Another weakness in FAS 133 and IAS 39 is their complexity and the high cost of compliance. A 2001 survey of more than 200 finance executives conducted by the Association for Financial Professionals (as cited in Osterland, 2001, and Park, 2005) found that two-thirds of respondents felt that FAS 133 had imposed an excessive burden on reporting companies. In contrast, only 25 percent indicated that FAS 133 was beneficial in disciplining risk management activities. Complying with the complex requirements of FAS 133 has come at a high cost. T&RM's survey (as cited in Knox, 2001) asked respondents about FAS implementation costs, excluding staff time, through 2001 . Thirty-six percent reporting having spent less than $25,000, but 11 percent reported costs of $100,000 to $249,999, 8 percent reported

spending $250,000 to $749,999, and 4 percent spent $750,000 or more.

Overall, FAS has received poor reviews. A survey conducted by *National Mortgage News* (as cited in Pollock, 2005), reported that 86 percent of respondents said financial statements are less clear as a result of FAS 133. Eighty-nine percent indicated the costs outweigh the benefits. Ninety-seven percent found the rules too complex while 63 percent called for it to be withdrawn or replaced. The average letter grade assigned to FAS 133 was a D-. Likewise, IAS 39 has received negative feedback. Seventy-one percent of participants at a 2006 Association of Corporate Treasurers reported that IAS 39 has made company accounts more confusing (IAS 39, 2006).

## Current Trends

Given the many weaknesses of FAS 133 and, to a lesser extent, IAS 39 in conjunction with the desire of management to avoid volatility, there will continue to be pressure on the standard-setting bodies to change (Bodurtha & Thornton, 2002). At least some change is certain to occur as the FASB and the IASB continue to work toward convergence of their respective standards. Evidence of these convergence efforts are seen in the issuance of FAS 155, which introduced a limited version of the fair value option found in IAS 39. The recent issuance by the FASB of FAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities,* which offers a one-time election to report certain financial instruments, including some derivatives, at fair value with changes reported in net income, is another step toward eliminating the differences between U.S. and international standards (Wilson & Marshall, 2007).

Until further change occurs, there will be increased demand for derivative instruments that qualify for hedge accounting (Bodurtha & Thornton, 2002). In addition to the derivative instruments themselves, infrastructure to support proper accounting for derivatives is developing ( Rozsypal et al., 2001). Derivatives users must develop procedures for assessing whether a contract is a derivative or contains an embedded derivative as part of the approval process, reviewing new hedging strategies to ascertain whether they qualify for hedge accounting, documenting new hedge relationships, valuing derivative instruments and hedged items, and assessing hedge effectiveness. Although FAS 133 has been in effect for several years, companies are still struggling to build and perfect this infrastructure as evidenced by the continuing trend of restatements.

As entities adapt to hedging under FAS 133 and IAS 39, financial statement users are also adapting how they interpret earnings. Standard & Poor's, Moody's, and Fitch Ratings, the three major ratings agencies in the U.S., have said they focus on an operating income number that is adjusted to exclude the impact of FAS 133 instead of net income including FAS 133 effects (Will, 2002). Comprehensive income is also becoming more widely used as a performance measure (Ronner & Blok, 2001). Since comprehensive income includes both net income and changes reported directly to equity, it is a broader measure of performance. Others are suggesting the presentation of multiple perspectives, as opposed to a single set of accounting rules, as the best way to present economic reality (Pollock, 2005).

## Conclusion

FAS 133 and IAS 39 have significantly changed accounting for derivatives in the U.S. and the EU. Both of these standards attempt to improve financial transparency by requiring all derivatives to be reported on the balance sheet at fair market value. However, changes in fair market value can lead to earnings volatility. To reduce volatility, instruments that met certain requirements can be reported using hedge accounting. Hedge accounting allows the reporting of gains or losses on derivatives to be delayed until the offsetting changes in the underlying asset or liability are reported.

The complexity of properly applying hedge accounting has led to several financial statement restatements. These restatements have involved several large financial institutions. As both issuers and end users of derivatives, financial institutions are particularly susceptible to the complexities of the new derivatives reporting and, therefore, should be especially vigilant in developing systems to properly apply the new rules. In spite their many weaknesses, FAS 133 and IAS 39 are based on an attempt to improve financial reporting and prevent massive losses from off-balance sheet derivatives from taking investors and creditors by surprise. While continuing to advocate for improvements in the standards, financial institutions should join in the spirit of enhanced disclosure and find ways to effectively communicate the economic reality of their hedging activities to financial statement users.

## REFERENCES

Abhayawansa, S. & Abeysekera, I. (2005, December). IAS 39. *Financial Management,* 22-23. Retrieved June 7, 2007, from the Business Source Complete database.

Baker, R. E., Lembke, V. C., & King, T. E. (2005). *Advanced Financial Accounting* (6th ed.). Boston: McGraw-Hill Irwin.

Blackwell, R. (2004, November 17). OFHEO: Fannie Mae is at fault, not FAS 133. *American Banker, 169,* 10. Retrieved June 7, 2007, from the Business Source Complete database.

Bodurtha, Jr., J. N., & Thornton, D. B. (2002). FAS 133 option fair value hedges: Financial engineering and financial accounting perspectives. *Journal of Derivatives, 10*(1), 62-79. Retrieved June 8, 2007, from the Business Source Complete database.

Christian, C. (2005). Accounting for derivatives at Fannie Mae. *Bank Accounting & Finance, 19*(1), 13-48. Retrieved May 31, 2007, from the Business Source Complete database.

Corman, L. (2006, May). Lost in the maze. *CFO, 22,* 66-70. Retrieved June 7, 2007, from the Business Source Complete database.

Davis, P. (2006a, January 6). Colonial joins the crowd restating for derivatives. *American Banker, 171,* 19. Retrieved June 7, 2007, from the Business Source Complete database.

Davis, P. (2006b, February 23). FAS 133 restatements: Now Bank of America too. *American Banker, 171,* 19. Retrieved June 7, 2007, from the Business Source Complete database.

Davis, P. (2006c, March 1). SunTrust adjusts—upward—for FAS 133. *American Banker, 171,* 19. Retrieved June 7, 2007, from the Business Source Complete database.

Finnerty, J. D., & Grant, D. (2002). Alternative approaches to testing hedge effectiveness under SFAS No. 133. *Accounting Horizons, 16*(2). Retrieved June 8, 2007, from the Business Source Complete database.

Gebhardt, G., Reichardt, R., & Wittenbrink, C. (2004). Accounting for financial instruments in the banking industry: conclusions from a simulation model. *European Accounting Review, 13*(2), 341-371. Retrieved June 18, 2007, from the Business Source Complete database.

IAS 39 causes continued concern. (2006, June). *Accountancy, 137*, 77. Retrieved June 7, 2007, from the Business Source Complete database.

Knox, L. (2001). Life under the thumb of FAS 133. *Treasury & Risk Management, 11*(9), 49-51. Retrieved June 7, 2007, from the Business Source Complete database.

Kruger, J. (2005). Shaping hedges. *Accountancy, 136*(1348), 76-77. Retrieved June 7, 2007, from the Business Source Complete database.

Osterland, A. (2001, July). Life under FAS 133. *CFO, 17*, 71. Retrieved June 7, 2007, from the Business Source Complete database.

Park, J. (2005). The economic consequences of FAS-133 for bank holding companies. *Bank Accounting & Finance, 18*(6), 19-48. Retrieved June 7, 2007, from the Business Source Complete database.

Pollock, A. J. (2005). FAS 133: What is accounting truth? *Journal of Applied Corporate Finance, 17*(3), 102-106. Retrieved June 7, 2007, from the Business Source Complete database.

Ronner, A. & Blok, M. (2001). Hedging foreign currency exposure: Consequences of FAS 133. *Journal of Applied Finance, 11*(1), 23-34. Retrieved June 7, 2007, from the Business Source Complete database.

Rozsypal, J. J., Woods, J., & Dolan, M. T. (2001). Beyond adoption: Refining strategy and infrastructure. *Institutional Investor, 35*(9), 25-29. Retrieved June 7, 2007, from the Business Source Complete database.

Saunders, A. & Cornett, M. M. (2006). *Financial Institutions Management* (5th ed.). Boston: McGraw-Hill Irwin.

Will, F. (2002, June). Derivatives and hedging: an analyst's response to US FAS 133. *Corporate Finance, 211*, x-xii. Retrieved June 7, 2007, from the Business Source Complete database.

Williams, J. R. & Carcello, J. V. (2006, April 15). FASB Statement No. 155, Accounting for Certain Hybrid Financial Instruments: an amendment of FASB Statements No. 133 and 140. *GAAP Update Service, 6,* 1-4. Retrieved June 7, 2007, from the Business Source Complete database.

Wilson, A. C. & Marshall, B. (2007, May). How the fair value option will simplify accounting for some hedging transactions. *CPA Journal, 77*, 32-33. Retrieved June 6, 2007, from the Business Source Complete database.

Wood, D. (2006). The grass may look greener, but each side has problems. *Treasury & Risk Management, 16*(3), 48-50. Retrieved June 7, 2007, from the Business Source Complete database.

# So How Complex Is Our Current U.S. Income Tax System?

**Jack R. Fay, Ph.D., CPA**
Professor of Accounting
Pittsburg State University
**Melvin L. Roush, Ph.D., CPA**
Associate Professor of Accounting
Pittsburg State University

***ABSTRACT***

*Many people would agree that the U.S. income tax system is complex. The current Internal Revenue Code is close to 66,000 pages in length. Many of those pages may be described as adding volume rather than complexity, but many of them also add complexity. The massive size of the Code also adds complexity. Some tax credits and some itemized deductions have been eliminated during the past 20-25 years, but overall the tax rules have become more voluminous and more complex. For example, the 2007 Form 1040 has 14 different income items listed. If that is not sufficiently complex, the Form 1040 also includes a line for "other income."*

*This paper examines the complexity of the current tax system by comparing the current tax laws with income tax laws that existed in 1924. The paper is not a history of US income tax, but it relies on and includes a fair amount of historical information. Many areas of income tax laws are considered, including capital gains taxes, deductions and tax credits. Potential reasons for the complexity of the tax code are also presented and discussed.*

## Introduction

Should our U.S. income tax system be abolished? Should it be replaced with a so-called "Fair Tax?" With a National Sales Tax? With a Value-Added Tax? With a combination of taxes other than an income tax?

If the income tax system were eliminated, would the Internal Revenue Service and its thousands of employees lose their jobs? Would hundreds of thousands of tax people who work for accounting firms, law firms, and tax preparation businesses, such as H & R Block and Jackson Hewitt, lose their jobs? If the income tax system were to be replaced by a different tax system, what would be the total effect on the net tax revenues received by the federal government?

Would it be practical for the U.S. Congress and the current administration to even consider changing the entire tax system at a time when so much turmoil is transpiring within the federal government, with a relatively unpopular president and an unpopular Congress and with a very thin line between the Democrat majority and Republican minority in Congress? Would it be practical to tackle such a huge endeavor of transforming the tax system at a time when we are bogged down in the Iraq war, reorganization of Afghanistan, and troubles in other "hot spots" of Iran, North Korea, Pakistan, Venezuela and other places? Could a change in the tax system take precedence over such contemporary issues of medical care reform, immigration issues, wiretapping, possible breaches of the U.S. Constitution, and torture tactics? Would the top leaders of Congress and the administration be currently more interested in changing the tax system than working on political campaigns for their respective Congressional and Presidential elections?

The authors think that the correct answers to all of the above questions would be a resounding "No." If there is no chance for a major change in the tax system in the foreseeable future, what options do we have? It would be either the "status quo" or making some movements toward simplifying our current tax laws (rather than making them even more complicated). Even though the authors think that the status quo choice is most likely the option that the federal government will pursue with possibly some minor changes in the next couple of years, the authors would like to see some significant simplifications of current tax laws. To be fair, there is a slight chance for such simplification to occur. Currently, the current chairman of the U.S. Senate Finance Committee and the current chairman of the U.S. House Ways and Means Committee are working on some proposals for major tax changes, but it is very unlikely that those proposals would pass through Congress and the President during 2008.

To give readers some perspective of how complicated our tax rules have become, the authors have chosen to make comparisons between income tax laws that existed

in the U.S. in 1924 versus the complexity of current tax laws.

## Taxation in 1924

In 1924 Andrew W. Mellon, the U.S. Secretary of the Treasury, wrote that a major problem of the federal government was to fix tax rates which will bring in a maximum amount of revenue to the U.S. Treasury and at the same time bear not too heavily on the taxpayer or on business enterprises. Mellon indicated that a sound tax policy must take into account three factors. He wrote: "It must produce sufficient revenue for the Government; it must lessen, so far as possible, the burden of taxation on those least able to bear it; and it must also remove those influences which might retard the continued steady development of business and industry on which, in the last analysis, so much of our prosperity depends."

Mellon had some excellent viewpoints concerning the Treasury's tax policy for the country. He opined that a permanent tax system should be designed not just for a few years nor for the effect it would have on any given class of taxpayers, but it should be fashioned for a long period of time and with an ultimate goal of enhancing the prosperity of the country as a whole. He believed that tax policy should be based on economic, rather than political considerations. In other words, tax policy should be established on non-partisan and business factors and not on politics. Mellon felt that if a taxation system (or a revision of a tax system) rewarded a particular class of taxpayers or punished another, the traditions of freedom, justice and equality of opportunity (the distinguishing characteristics of our American civilization) would disappear and class legislation with many evils would arise.

Adam Smith in his Wealth of Nations stated that people should have to pay income taxes in proportion to their respective abilities. Mellon agreed that the principle of taxation based on the "ability to pay" is sound; but he indicated that such a maxim has practical limitations. For instance, he thought that excessive taxes can be serious deterrents to the initiative and energy of the people.

Mellon contended that despite a common belief otherwise, higher rates of taxation do not necessarily create larger revenue for the government and that more revenue may often be obtained by lower tax rates. His belief was that higher tax rates progressively bring in less revenue to the government because taxpayers with high incomes will try to avoid high taxable incomes by as many ways as are available to them. This is a credible point but how much more the high-income taxpayer will spend in an effort to reduce taxable income when the tax rates are higher versus when they are lower is questionable. Theoretically, it makes sense but verifying the proposition would be extremely difficult. Mellon compared his theory with the idea that businesses often can increase revenues by lowering the prices of their products. This may make economic sense, but such generalizations may not be totally correct and are difficult to verify.

An important point to mention here is the fact that during this period of time (1924-1925) following World War I in which Mellon was discussing federal income taxes, the federal government had a very significant amount of surplus funds in comparison to our current huge deficit. This difference could (or should) have a major impact upon making tax policies (at least in the short run). Mellon did indicate that in consideration of any proposal of a reduction of taxes, the federal government should always be assured that such a reduction would not deprive the U.S. Treasury of sufficient revenue with which to properly operate its business of carrying on necessary activities for the general public and to take care of the public debt. He stated that any reduction must come out of surplus revenue.

A final point in relation to general tax policy is the fact that Mellon said that high taxation means a high price level and high cost of living. In his viewpoint a tax reduction would result in an immediate savings to the individual or property directly affected.

Andrew Mellon in November, 1923, proposed to the Acting Chairman (William R. Green) of the House of Representatives Committee on Ways and Means a revision of the federal income tax system with four major changes: (1) a 25% reduction in the tax rates on earned income; (2) a reduction of the normal tax rates from 4% to 3% and 8% to 6%; (3) a decrease in the surtax rates; and (4) changes in the tax laws to emphasize simplicity and clarity, to eliminate methods of tax avoidance, and to provide a more satisfactory method of determining tax liability. Mellon believed strongly that taxation on earned income (wages, salaries, and professional services) should be taxed more lightly than on incomes derived from businesses or investments. He believed that earned income is uncertain and limited in duration (due to sickness, death, or old age) while income from businesses and investments generally continues. Related to this belief, Mellon proposed that all income under $5,000 should be considered to be earned income.

Mellon also made an interesting recommendation concerning capital gains and capital losses. In 1924 the capital gains were taxed at 12 ½% (compared to 2007

rates of 10% and 5%), but there was no limit on the deductions for capital losses (compared to a $3,000 annual limit for individuals from 1972-2008). Mellon proposed that there be a limited deduction of 12 ½ % on capital losses to match the 12 ½% tax rate on capital gains. He stated that, ideally, it would be even better not to recognize either capital gains or capital losses for income tax purposes. Whether this would have been feasible then, or would be in current times in relation to a sound fiscal policy, is questionable. There is no question that such a tax provision would significantly simplify tax reporting.

According to Roy G. Blakey in the September, 1924 issue of The American Economic Review, the most significant features of the Revenue Act of 1924 were as follows:

1. Refunds or rebates of 25% on the taxes levied on their 1923 tax returns.

2. Normal income tax rates of 2% on the first $4,000 of net income, 4% on the next $4,000, and 6% on any excess above $8,000.

3. A surtax starting at 1% on net income between $10,000 and $14,000 and increasing to a maximum of 40% on net income exceeding $500,000.

4. A personal exemption for a married couple filing jointly or head-of-household of $2,500; $1,000 exemption for a single person.

5. "Earned income" to be taxed at 25% less than other types of income.

6. Net capital losses not to reduce income taxes by more than 12 ½% of such losses.

7. Corporate income tax of 12 ½% of net income.

8. Estate tax ranging from 1% to a maximum of 40% (on taxable estate exceeding $10,000,000).

9. Gift tax with the same tax rates and exemption amounts as the estate tax.

10. A Board of Tax Appeals was established to provide unbiased consideration of disputed income and estate taxes – this Board was independent of the Bureau of Internal Revenue and the Treasury Department.

An interesting item in the Tax Act of 1924 was the repeal or reduction of many excise taxes. It repealed the excise taxes on candy, certain sports and travel products, certain furnishings and fixtures, entertainment and sports admissions costing less than 50 cents, inexpensive jewelry, telephone and telegraph messages, soft drinks, and certain vehicle bodies. Excise taxes on tires and inner tubes were reduced by 50%. The heavy taxes on tobacco and the manufacture of tobacco were not changed. Such tax repeals, of course, significantly simplified the federal tax system.

In the 1923-1924 period almost all the discussion concerning tax changes related to income items, such as reducing tax rates, eliminating or reducing surtaxes, eliminating many excise taxes, deciding which types of income should be taxed and at what rates, making changes to estate and gift taxes, etc. There were almost no discussions related to exemption amounts, tax credits, and tax deductions. At that time the rules on exemptions, credits, and deductions were very simple.

Exemptions have been included in tax calculations since 1913, but for many years the married couple's exemption amount was not necessarily double the value of a single person's exemption. Exemptions for dependents, which for many years were smaller amounts than personal exemptions, came into existence in 1917. The exemption amounts (personal versus dependent) were not given equal amounts until 1944. Additional amounts to personal exemptions for blindness and/or old age were initiated in 1944 and continued until 1986. At that time these additional exemption amounts became part of the standard deduction amounts. A filing status for calculating income tax was not introduced until 1948. There were only two categories: married filing jointly and single. The head of household status began in 1952, and the surviving spouse status started in 1954.

A few tax deductions were initiated in 1913, which included state and local taxes, business expenses, casualty and theft losses, and personal interest expense. The charitable contribution deduction began in 1917. Incidentally, the state sales tax deduction was eliminated in 1987 and then brought back in 2005. The personal interest deduction was eliminated in 1991. The standard deduction option was not introduced until 1944. There were a few tax credits that were initiated during 1923-1931 to reduce the statutory tax rate. Other tax credits were legislated during the periods of 1934-1943, 1946-1950, 1974, 1981, and in 2000-2001. Some of these tax credits were specific dollar amounts, sometimes they were percentages of the tax, and sometimes they were special reductions of the tax rate. Ad-

ditional taxes (surcharges) were assessed in 1917, 1940, 1942-1943, and 1968-1970.

Minimum taxes were not introduced until 1970, and the alternative minimum tax (AMT) began in 1979. Long-term capital gains began receiving tax rates lower than ordinary rates in 1922. Table 1 shows the statutory tax rates on long-term capital gains from 1913 to 2010 (assuming that the next U.S. Congress and President do not change the rates in 2009 and 2010). Withholdings for income taxes actually began in 1913 but were discontinued in 1916, and then were reinstated in 1943. Income averaging did not exist until 1964 and then it was eliminated in 1987. Income averaging was brought back into existence in 1998 but only for farmers. A final tax tidbit is that inflation indexing for tax bracket boundaries and exemption amounts was introduced in 1985 (the alternative minimum tax does not have inflation indexing) and still exists.

## Taxation in 2008

So how complex is our U.S. federal income tax system in 2008? The authors believe that just about 100% of taxpayers would say that over 60,000 pages of Internal Revenue Code tax laws (IRC) are about as complex as you can get! The IRC, most people would argue, is incomprehensible, unruly, and out of control. The authors think there are many reasons why we have such a complex income tax system.

One of the reasons is that there is so much jealousy among the three branches of the federal government (legislative, administrative, and judicial). Such jealousy has been in existence for years and years and has caused much fighting (to the detriment of the general public) among members of the three government branches. It would be utopian if this competition would cease, but that is extremely unlikely to happen. In relation to income tax laws, the Congress (the legislative branch) generally prefers to write the tax laws in great detail rather than passing on authority and control to the administrative branch (primarily the Internal Revenue Service) to make tax law regulations, rules and interpretations in relation to U.S. tax laws, and to leave it up to the federal courts (judicial branch) to make too many of their own interpretations of the tax laws.

Another reason for the current complexity, in the authors' opinion, is that the vast majority of U.S. senators and representatives have legal backgrounds. These people tend to write in such a fashion that their statements and laws are rather verbose and complex. Some of the detailed writings are necessary, of course, to minimize conflicts and misinterpretations.

A third reason why the authors think our tax laws are so comprehensive and so specific is due to the fact that whenever Congress writes and passes new laws, there are always many tax attorneys, accountants, and others who sit in their offices trying to figure out how they can get around the new tax laws (loopholes). Of course, it is a responsibility of such professionals to minimize their clients' tax liabilities – to legitimately find ways to circumvent specific tax rules. However, when these people discover loopholes, then Congress (or in some cases, the Internal Revenue Service) must pass new provisions to close the loopholes. In other words, there is an ongoing battle of the brains in regard to tax laws. The authors think there may be many more reasons for our current tax complexity problems, but the three reasons given above are probably the most important reasons and should suffice for the readers of this discussion.

Where are we now in 2008 as far as federal income tax law complexity is concerned? Besides the fact that the current Internal Revenue Code is close to 66,000 pages in length and despite the fact that some tax credits and some itemized deductions have been eliminated during the past 20-25 years, the tax rules have become more voluminous. On the 2007 Form 1040, there are 14 different income items listed as well as a line for "Other Income" for items which are not specifically listed. The readers should keep in mind that there is a tax law that states all income amounts are taxable unless specifically excluded by law. Actually, there have been very few changes in the listing of income items on the Form 1040 during the past 20-25 years.

Then there are 13 lines for adjustments for adjusted gross income (AGI). These adjustments reduce income in order to obtain the AGI. Some of the adjustments, such as moving expenses, contributions to self-employed and employee retirement plans, penalties on early withdrawal of savings, and alimony paid, have been on Form 1040 for a very long time. Some of the other adjustments for AGI are relatively new, such as educator expenses; certain business expenses of reservists, performing artists, and fee-basis government officials; health savings account deduction; one-half of self-employment tax; self-employed health insurance deduction; student loan interest deduction; tuition and fees deduction; and domestic production activities deduction.

Because of indexation provisions relating to the standard deduction amounts, fewer taxpayers (relatively speaking) use itemized deductions as the standard de-

**Table 1**
**Statutory Tax Rates on Long Term Capital Gains Income: 1913 to 2010**

| Year | Maximum tax rate on ordinary income (%) | Maximum statutory tax rate on long-term capital gains income (%) | Holding period for long-term capital gains treatment (years) |
|---|---|---|---|
| 1913-1921 | 7-77 | 7-77 | |
| 1922-1933 | 24-73 | 12.5 | 2 |
| 1934-1937 | 63-79 | 18.9-23.7 | 1 |
| 1938-1941 | 79-81.1 | 15 | 1.5 |
| 1942-1951 | 82-94 | 25 | Ø.5 |
| 1952-1953 | 92 | 26 | Ø.5 |
| 1954-1963 | 91 | 25 | Ø.5 |
| 1964-1967 | 7Ø-77 | 25 | Ø.5 |
| 1968 | 75.3 | 26.9 | Ø.5 |
| 1969 | 77 | 27.5 | Ø.5 |
| 197Ø | 71.8 | 3Ø.2 | Ø.5 |
| 1971 | 7Ø | 32.5 | Ø.5 |
| 1972-1975 | 7Ø | 35 | Ø.5 |
| 1976 | 7Ø | 35 | Ø.5 |
| 1977 | 7Ø | 35 | Ø.75 |
| 1978 | 7Ø | 33.8 | 1 |
| 1979-198Ø | 7Ø | 28 | 1 |
| 1981 | 7Ø | 2Ø | 1 |
| 1982-1983 | 5Ø | 2Ø | 1 |
| 1984-1986 | 5Ø | 2Ø | Ø.5 |
| 1987 | 38 | 28 | 1 |
| 1988-199Ø | 28 | 28 | 1 |
| 1991-1992 | 31 | 28 | 1 |
| 1993-1996 | 39.6 | 28 | 1 |
| 1997 | 39.6 | 2Ø | 1.5 |
| 1998-2ØØ1 | 39.6 | 2Ø | 1 |
| 2ØØ2 | 38.6 | 2Ø | 1 |
| 2ØØ3-2Ø1Ø | 35 | 15 | 1 |

Source: "The Labyrinth of Capital Gains Tax Policy," by Leonard E. Burman. Brookings Institution Press, Washington, D.C. 1999.

duction amounts have increased. For the taxpayers who have taken advantage of itemizing on Schedule A, they have found many changes in regard to itemized deductions over the years but, not necessarily, more complex. Medical and dental expenses have been essentially the same with one major change in relation to the limits of the deduction. Deductible taxes have generally been the same other than some changes related to sales tax deductions. Interest deductions have not significantly been changed except for the elimination of interest on personal credit cards, limitations on home mortgage interest, and the addition of qualified mortgage insurance premiums. The lines on Schedule A for gifts to charity have essentially stayed the same, but over the years the

IRS has passed many new rules and regulations for determining proper contribution deductions. Laws relating to casualty and theft losses have changed very little over the years other than the addition of 10% of AGI reduction rule. During the past 20 -25 years there have been many modifications of job expense and certain miscellaneous expense deductions but only a few major changes (such as the 2% of AGI reduction). A major change in relation to the deductible amount of the total itemized deductions occurred about 20 years ago when Congress established limits on the total deduction based on AGI. Similar limits were also set upon personal and dependency exemption deductible amounts, which are based on AGI.

One of the authors of this paper, Professor Fay, has been preparing tax returns for individuals and businesses for over 40 years. He has vivid but not pleasant memories of when it was necessary to prepare a list of all medical expenses separately (amounts paid and the recipients) and the same for charitable contributions. Making such lists was very time consuming and created a tremendous amount of paper work for the IRS to process. Fortunately, those requirements were eliminated many years ago.

After the calculation of the Taxable Income (TI) and the regular tax, the taxpayers are then possibly required to add two or three other taxes, such as the alternative minimum tax and penalties related to over contributing to retirement accounts or making improper early withdrawals from retirement accounts. Next the taxpayers have the possibility of reducing their total tax with tax credits, which reduce the tax dollar for dollar. During the past 20-25 years there have been many additions and eliminations of tax credits. Currently, the most commonly used tax credits include the following: credit for child and dependent care expenses, credit for the elderly or the disabled, residential energy credits, foreign tax credit, and some relatively new credits (such as education credits, child tax credit, and retirement savings contributions credit).

After all the credits are subtracted from the regular and alternative tax (if any), an amount is reached (could be called net tax before other taxes and payments). To that tax figure, other taxes (such as self-employment tax, unreported social security and Medicare tax, additional tax on IRAs and other qualified retirement plans, advance earned income credit payments, and household employment taxes) are added to obtain the total tax. Subtracted from the total tax is the sum of payments (which include federal income tax withheld, estimated tax payments made during the tax year and amount applied (if any) from the previous year's tax return, earned income credit, excess social security withheld, additional child tax credit, and amount paid with request for extension to file). After the total payments amount is subtracted from the total tax, an amount overpaid or underpaid is created (the authors have never heard of a case where the amount came out to zero, assuming there is a total tax and total payments!).

If the tax has been underpaid, of course, the taxpayer owes money (and may be subject to an estimated tax penalty). If the tax has been overpaid, the taxpayer must choose to receive all of the refund, apply all of the refund to the next tax year, or receive part of the refund and apply part of it to the next tax year. There used to be a few other options of what to do with a refund, but those choices were eliminated many years ago.

## Conclusion

The purpose of this paper is not to discuss the politics of taxation nor is it concerned with whether or not we should continue the current tax cuts, eliminate the current tax cuts, expand tax cuts, contract tax cuts, or rearrange the tax cuts for certain groups of taxpayers based on their income. The primary focus of this paper is to compare the complexity of current tax laws versus those of an earlier time (1923-1924) in order to give a general picture of where we presently stand with our U.S. income tax system. As stated in the introduction of this paper, the authors do not think, at least in the short run, that it is feasible or practical in a very political year to even consider a national sales tax, "fair tax," or any other new tax system to replace our current income tax system. As it can easily be seen in the above comparison of 2007 income tax laws versus 1923-1924 tax laws, we have reached an almost pinnacle of complexity. Something definitely needs to change, but the authors think that only a stab at simplifying some income tax provisions can be practical at the present time.

## REFERENCES

_____. *Basic Concepts of the Federal Income Tax*. http://staff.jccc.edu/swilson/business-math/fit.htm. (13 February 2008).

_____. Fact Sheets: Taxes - History of the U.S. Tax System. http://www.treas.gov/education/fact-sheets/taxes/ustax.shtml. (16 January 2008).

_____. Form 1040 U.S. Individual Income Tax Return - 2007. http://www.irs.gov/pub/irs-pdf/f1040.pdf. (16 February 2008).

_____. Income Tax in the United States. http://en.wikipedia.org/wiki/Income_tax. (16 January 2008).

_____. Schedule A (Form 1040 – Itemized Deductions - 2007). http://www.irs.gov/pub/irs-pdf/f1040sab.pdf. (16 February 2008).

_____. Tax Facts – Historical Data. Tax Policy Center, Urban Institute and Brookings Institution. January 16. http://www.taxpolicycenter.org/taxfacts/index.cfm. (16 January 2008).

Blakey, R. G. 1924. The Revenue Act of 1924. The American Economic Review 14 (3): 475-504.

Dalrymple, M. Bush's Tax Commission Rejects Overhaul. Apnews/.irvon.com. (17 October 2005).

Fay, J. R., M. R. McKinnis, and M. Brown. 2004. So When Did Federal Income Taxation Begin in the United States? October 18. International Academy of Business and Economics Annual Conference, Las Vegas, Nevada.

Mellon, A. W. 1924. Taxation, the People's Business. New York: Macmillan.

# Fiscal Adjustment Through Tax Policy Reform: Key Issues

**Charles L. Vehorn**

***ABSTRACT***

*In developing and emerging market countries, fiscal adjustment can often be an exceedingly unpleasant experience for both the country's economic policymakers and its citizens. Many countries pursuing misguided economic policies (policies that result in ever-growing fiscal deficits) must eventually undertake some type of fiscal adjustment to put their economies back on the path of sustainable economic growth. Unfortunately, successful fiscal adjustment is not guaranteed. Could the lack of success have been caused by the policymakers' selection of policies that doomed the fiscal adjustment from the start? Some researchers have argued that fiscal adjustments are longer lasting if the government relies primarily on policy shifts that reduce expenditures, rather than policies that increase revenue. Others have argued that sequencing of reforms and the initial conditions are more important determinants of successful fiscal adjustment, rather than whether the policy changes take place mainly on the expenditure side or mainly on the revenue side.*

*The purpose of this paper is to review and assess the details of fiscal adjustment on the revenue side – specifically the reform of tax policy – to explore whether raising tax revenue is a more complex than a straightforward policy decision to reduce expenditures. While political hurdles are encountered in any type of fiscal adjustment policy, since some vested interest groups will end up losing their preferences, potentially more hurdles could be encountered on the revenue side. This is due, in part, to the long process of policy implementation that begins with the decision of how to raise revenues, through the drafting of the law, and finally to the actual implementation of the new legislation.*

*Lessons from developing and emerging market countries indicate that policymakers can achieve a successful fiscal adjustment through revenue-raising measures if they clearly define the goals of tax reform, align the specific reforms to address the current economic situation of their country, and carefully design the new tax laws. In the last 20-30 years, many countries have successfully reformed their tax systems by adopting a value-added tax (VAT), which satisfies the revenue raising needs in a simplified fashion.*

## Introduction

During the last few decades many countries have undertaken some type of fiscal adjustment to put their economy on a path of sustainable growth. Some have succeeded while others have not. Why? Was it the policy makers' selection of policies that doomed the fiscal adjustment from the start? Alesina, Perotti, and Tavares (1998) have argued that fiscal adjustments are longer lasting if the government relies mostly on expenditure reductions rather than revenue increases. Other economist would argue that the sequencing of reforms (Toye, 2000) and the initial conditions are important determinants of the success of fiscal adjustment.

The purpose of this paper is to survey the details of fiscal adjustment on the revenue side, specifically increasing taxes, to demonstrate that raising tax revenue is far more complex than a straightforward policy decision to reduce expenditures. While political hurdles are encountered in any type of adjustment policy, since some vested interest groups will end up losing their preferences, more hurdles are encountered on the revenue side. This is due, in part, to the long process of policy implementation that begins with the decision of how to raise revenues, through the actual drafting of the law, and finally to the implementation of the new law.

Policymakers in most countries are inclined to make incremental changes to tax laws, but by doing so broad inefficiencies often remain. It usually takes a crisis or other critical event before public opinion opens the door for major tax policy change. The event could be economic, such as a balance of payments crisis, or it could be political. When this happens, the vested interest groups that had been instrumental in blocking major tax policy reforms lose some of their political influence, although only momentarily. But this window of opportunity may be wide enough to enact comprehensive tax reform.

The next three sections discuss the goals of taxation, the structure and level of taxation across countries, and the design of tax legislation, respectively. The final section presents conclusions.

## Goals of Taxation

Are the goals of taxation the same whether a country is developed or developing? Clearly developed countries have more resources to make use of advanced technologies, including information technology, so that tax policies can be more nuanced.[1] But the basic goals found in public finance textbooks – efficiency, equity, revenue adequacy, and administrative ease – are relevant to both developed and developing countries. Differences exist in how the trade offs among these goals are determined, and how the goals are translated into legislation. In many cases, applying these goals successfully to developing countries requires a thorough understanding of the problems the country faces.

The way a country raises revenue could seriously hinder economic development and growth. Thus, it is important to establish a neutral and equitable tax system. Since taxes can distort economic behavior, reducing the efficient allocation of resources, a standard goal is to make the tax system as neutral as possible. In developed countries neutrality may require that all sources of income be taxed at a similar rate, e.g., the corporate income tax rate should be nearly the same as the highest marginal personal income tax rate; the capital gains tax rate should be similar to the tax rate on income from wages and rent.[2] In developing countries, the goal of neutrality can be applied more easily to the taxation of goods, whether domestically produced or imported.[3] Wide distortions between customs duties and domestic indirect taxes can lead to smuggling and a culture of rent-seeking whereby domestic producers spend considerable resources keeping their products protected instead of using those resources to improve the quality of their products and the service they provide to their domestic customers.

A second goal to strive for is equity in the tax system, using two criteria – horizontal and vertical equity. Horizontal equity is achieved when people similarly situated in terms of economic resources are treated equally under the tax laws. One example of horizontal equity being violated is the case of two people with the same income, but one earns that income solely from wages, which are subject to withholding of tax by the employer, while the other earns half of the income in wages and half in interest, which is taxed at a lower rate.

Vertical equity requires that those with more resources be treated differently from those with relatively few economic resources, i.e., treating unequals unequally. This treatment is the basis for a progressive tax system. In developed countries, where there is more of a reliance on direct taxation, a progressive rate structure on income taxes provides the opportunity to create a more equitable system. Unfortunately, many countries with statutory progression in rates do not have effective progression in actual revenue collected. If the tax code is riddled with numerous tax loopholes (e.g. exemptions, deductions, etc.) that only the relatively wealthy can take advantage of, then vertical equity will be eroded, as the rich escape paying their "fair share."

In developing countries with less reliance on personal income taxation, the goal of equity is still relevant. The perception of unequal treatment could reduce the credibility of the government's revenue raising policies and erode public support. In countries where the tax collecting process involves face-to-face contact with tax officials, equity norms may be undermined if these officials are seen as treating taxpayers differently than the law stipulates.

A third goal is to raise an adequate amount of revenue to finance public expenditures, yet avoid becoming trapped in a situation of unsustainable debt. Governments have essentially four ways to finance their expenditures: government revenue (mainly by taxation), internal borrowing, external borrowing, and printing money. The latter three sources if pursued excessively can lead to macroeconomic instability. Taxation can enhance macroeconomic stability if the policies are formulated with care and implemented diligently. Burgess and Stern (1993) argue that fiscal correction (both on the tax side and the expenditure side) is seen as essential for long-term macroeconomic stability.

The fourth goal, administrative ease, is important to both taxpayers and tax officials. Unnecessarily complicated laws with numerous technical exceptions raise compliance cost for taxpayers and burden tax officials with time-consuming tasks to administer the exceptions. It is crucial to enact legislation that can be properly administered, especially in developing countries, which lack the appropriate skill mix in their tax administrators. Many technical assistance projects are undertaken with a key objective to build the institutional capacity of the tax administration.

1 More nuances provide flexibility in the tax code, but the downside is that it introduces more complexity, which raises taxpayer compliance costs and opens the door to creative "tax planning" activity.

2 However, for developing countries, capital gains taxation may be well beyond the current scope of tax handles.

3 The optimal tax literature would attach a specific tax rate to each good (or class of goods), but attempts to apply this would create considerable administrative problems for developing countries.

## Structure and Level of Taxation

If a government relied on only one tax, it would be taking on undue risk since the probability of a sudden decrease in revenue is not zero (e.g., an exogenous event that decreases taxpayers' ability to pay that one tax). Governments realizing this, create a tax system with multiple taxes and multiple bases – income (wages), domestic consumption or production (e.g., oil), foreign trade, wealth and property. Income taxes can be levied on individuals or corporations; while taxes on consumption can be levied on general sales (turnover tax or value-added tax (VAT)) or on specific commodities (excises). Too many small taxes can become a nuisance for taxpayers and raise collection costs; not enough large taxes can prevent the government from obtaining its revenue target. Furthermore, a government relying on a few taxes would have to set rates relatively high to produce the desired revenue, but those rates would put the country at a competitive disadvantage vis-à-vis its neighbors.[4] Thus, it is important for countries to enact the right mix of taxes, which depends on the specific circumstances in a country – economic, geographical, cultural, and political, to name just a few.

Most countries have direct taxes (personal and corporate income), indirect taxes (sales, turnover, VAT, or excises), and trade taxes; but reliance on social security, property, and wealth taxes is much stronger in developed countries than in developing countries.

*Direct Taxes* – Income taxes are applied to a relatively large base, which theoretically allows a country to have a low rate to reach its revenue target. However, the government must have access to information on income received. In developed countries, information sharing on wages, interest income, dividends, capital gains, along with some deductions (interest paid); and withholding at the source (primarily on wages) provides the underlying architecture to build a personal income tax on self-assessment. If a taxpayer understates his or her income, computer matching will pick up the understatement and a notice of additional taxes due will be generated by the IT system.[5] Corporate taxes, which are also based on self-assessment, have become exceedingly complex in developed countries. Yet the corporate income tax in developed countries raise only about one-fourth of the revenue raised by the personal income tax (Tanzi and Zee, 2001).

Developing countries, on the other hand, are at a level of information technology that at best allows for a minimal amount of information sharing. Corporations and the government may have the capacity to provide the tax administration with data on wages, but a large share of economic activity (farming, sole proprietorships) cannot be captured readily – in part because these entities may not even keep accounting books; and information on capital income earned is almost nonexistent. In formulating tax policy, it is important for developing country policymakers to understand that the tax officials are not as fully equipped as those in developed countries in implementing direct taxation, and thereby design policies that are consistent with the country's particular circumstances.

*Domestic Indirect Taxes* – A tax base almost as broad as income is consumption, which normally takes two forms: a general tax or an excise taxes on specific commodities. The rise of the modern VAT, adopted first by France in 1984, illustrates that more and more countries are increasing their reliance on indirect taxation.[6] Currently, the VAT has been implemented in 120 countries, comprising 70 percent of the world's population (Ebrill, Keen, Bodin, and Summers, 2001). The tax initially was confined to developed countries that repealed their cascading turnover taxes for the VAT, with its cross-checking mechanism. A basic VAT is less complicated to administer than income taxes, which makes it appealing to developing countries that want to raise the level of domestic taxation.

*Trade Taxes* – If a country has difficulty in capturing income and domestic consumption, then its only option is to tax commodities before they enter the country. Heavy reliance on customs duties, however, provides incentives for smuggling and rent seeking with face-to-face contact between customs officials and importers. It also reduces the quick flow of goods into the country, which can impede economic growth.[7]

4 A major worldwide tax reform occurred in the 1990's when a few developed countries maintained revenue neutrality by lowering income tax rates and broadening the base. Other countries followed this reform in a bandwagon effect, to remain competitive internationally.

5 Some countries do not require self-assessment by the majority of taxpayers. Instead these countries employ a scheduler system, called pay-as-you-earn (PAYE), where the tax withheld is a final withholding so the taxpayer is not required to file an annual tax return, thus simplifying the system.

6 See Alan Tait (1988) for a comprehensive discussion of VAT policy and administration.

7 One way to speed up the flow of goods through customs is to contract out to pre-shipment inspection (PSI) companies. The customs duties are assessed at the point of shipment, thus eliminating the opportunity for face-to-face contact between the country's customs officials and importers.

Table 1 illustrates the differences in the level and structure of taxation between developed and developing countries, for two time periods. The earlier period (1985-1988) is based on data from the International Monetary Fund (IMF) in 1989 computed by Burgess and Stern; the later period (2000-2005) was updated from the same data source by the author.[8]

First notice the level of taxation in developed countries was almost 75 percent higher (revenues as a percent of GDP) than developing countries – 31.2 percent versus 18.1 percent in the early period. By the later period that gap closed considerably so that the level of taxation in developed countries was only 54 percent higher than developing countries.

With respect to specific taxes, reliance on income and profit taxes remained relatively stable during the two periods. However, in the early period developed countries relied more heavily (by about 80 percent) on goods and services taxes than did developing countries, but relative reliance changed by the later period as developing countries closed the gap so that developed countries' reliance was only 24 percent higher. Since the 1990s a surge of VAT implementations occurred, mainly in transition economies, African economies, and small island economies. During this period 76 countries implemented the VAT (Ebrill, Keen, Bodin, and Summers, 2001).

Reliance on trade taxes in the early period was over 7 times higher in developing countries than in developed countries, which collect less than 1 percent of GDP from trade taxes. By the later period developing countries had steadily reduced reliance, but so had the developed countries. In contrast, a large gap in the opposite direction existed for social security taxes where developed countries in the early period collect 8.9 percent of GDP, almost 7 times higher than the 1.3 percent of GDP collected by developing countries. By the later period, however, both had increased reliance on this tax, with the gap shrinking so that developed countries reliance was nearly 3.5 times higher that of developing countries.

The pattern that emerges is one where the least developed countries relied most heavily on trade taxes. As these developing countries became more developed, they shifted to domestic indirect taxes, reducing their reliance on trade taxes following a world-wide trend to promote more trade. Both developed and developing countries also increased their reliance on social security taxes

8 The range in years is necessary because countries do not report useable data to the IMF for every year.

## Design of Legislation

As developing and emerging market countries changed the composition of their tax structure, new laws had to be implemented. Translating the principles of tax policy into a viable implementation depends heavily on the design of the tax laws. A well-designed law should meet four criteria: understandability, organization, effectiveness, and integration (Thuronyi, 1996). A tax law is understandable if it is easy to follow, provides the reader with the rationale for the tax, and minimizes the use of technical jargon. The organization criterion is broader than just the organization of the specific tax law, but refers to how well the specific tax law coordinates with other laws. Effectiveness encompasses how well the law is administered. If the specific tax law is consistent with the legal system and the drafting style of the country, it is said to be an integrated law.

In order to achieve a well-designed tax law, a country must, of course, pay attention to the principles of taxation, previously discussed. While drafting legal provisions that conform to these principles is extremely important, it is also necessary to focus attention on the process of tax law design to ensure the law's effectiveness and acceptability (Gordon and Thuronyi, 1996).[9] If the Finance Ministry of a country establishes an ongoing task force to review changes and challenges in the economy, the government is better prepared to modify the law to meet changing economic conditions. This task force should be interdisciplinary in its membership. Taxation cuts across legal, accounting, administrative, and economic fields. The views of professionals in these fields can be of critical importance in drafting well-designed legislation. Problems in many countries arise when there is a lack of coordination among these professionals. However, with ongoing consultation, the details of implementation can be developed so that they conform to the direction established by the general policies agreed to at the highest levels of government.

This ongoing task force should conduct studies in at least three areas: revenue estimating, current situation, and comparative law. Tax laws are designed to yield the amount of revenue that is necessary to finance the government's provision of public goods. If this revenue is not realized, it could be due to faulty estimates; or it could be due to some unintended effects of the law.

9 It is also important to focus on the administration of the law, but the details of tax administration and the various alternative ways of organizing tax collection are beyond the scope of this paper (see for example Vehorn and Brondolo, 1999).

For example, a provision may unintentionally create a loophole upon which taxpayers quickly capitalize. If the task force is monitoring revenue yield and the current situation among taxpayers, it can limit the damage of revenue leakage by proposing revisions to the law or

**Table 1.**
**Tax Revenue for Selected Developed and Developing Countries by Type of Tax**
**(Percent of GDP)**

| Tax Type | 1985-1988 | | 200-2005 | |
|---|---|---|---|---|
| | Developed | Developing | Developed | Developing |
| **Income and Profits** | 10.96 | 5.51 | 10.46 | 5.12 |
| **Payroll** | n.a. | n.a | 0.02 | 0.32 |
| **Property** | 1.11 | 0.45 | 0.55 | 0.42 |
| **Goods and Services** | 9.43 | 5.21 | 8.34 | 6.75 |
| **International Trade** | 0.72 | 5.13 | 0.13 | 3.25 |
| **Other** | 0.10 | 0.45 | 0.18 | 0.38 |
| **Sub Total** | 22.32 | 16.75 | 20.57 | 16.69 |
| **Social Contributions** | 8.90 | 1.30 | 9.45 | 2.75 |
| **Total** | 31.22 | 18.05 | 30.02 | 19.44 |

Source: IMF Government Finance Statistics Yearbook (1989), from Burgess and Stern (1993), and IMF Government Finance Statistics Yearbook (2006), Table W4.

Note: The total number of developed and developing countries from Burgess and Stern is 21 and 82, respectively; and the total number of developed and developing countries for 2006 is (the same) 21 and 45, respectively. (Data were not available for all 82 developing countries.)

changes in administrative rules that close the loophole. The task force should also be aware of how tax laws in neighboring countries are being drafted and administered. Understanding the experience of other countries can point to directions for improvements as well as uncovering problems that other countries face. The task force could then be proactive in proposing ways to avoid these problems.

*An Example: The VAT* – In order to make the goals and design of tax legislation more concrete, we consider selected examples of one tax, the VAT, and illustrate ways to make the VAT more administratively feasible. An important design decision is the threshold amount – the total taxable supply of the person.[10] Those with taxable supply above the threshold must register and pay VAT; and those below the threshold amount are not required to register, but may do so if they wish. If the amount is too high, many businesses will be exempt, causing cries of inequity from the taxable persons and a lower revenue yield than what it would have been if the threshold had been reduced. If the threshold is too low, then too many businesses must register causing administration complexities for tax officials and compliance problems for the small traders who may not be able to understand the VAT requirements. A solution is to set the initial threshold high and implement the VAT with a relatively small set of registered taxpayers, but draft the law in a way that allows the tax authorities to alter the threshold amount as the situation changes (Williams, 1996). Then as tax administrators gain knowledge in the proper workings of the VAT, it becomes administratively feasible to lower the threshold gradually to bring more taxpayers into the VAT net. For those taxpayers not required to register, a presumptive tax could be implemented to reduce the concerns of inequity.

10 The "person" or "taxable person" is the VAT term commonly used to describe the taxable entity.

A second example is the number of positive VAT rates, which some argue should be more than one (plus the zero rate) in order to introduce some progressivity into the tax. Higher rates for a few luxuries, it is argued, will ensure that those consuming such luxuries will pay a greater proportion of that consumption in taxes than the normal consumer pays for non-luxury items. However, multiple rate VATs have been shown to cause confusion about the purpose of the tax; and to create administrative complexities that may cost more in time and effort than the extra revenue yielded (Williams, 1996). A design solution is to select one rate for the VAT, which may result in some regressivity, but link the VAT with excise taxes on luxuries to address the progressivity issue. It could also be argued that indirect taxes are ill suited for redistributive purposes (Ebrill, Keen, Bodin, and Summers, 2001). It would be better to craft expenditure policies for redistribution, since it is less difficult on the expenditure side to target socially desirable programs to the poor or nearly poor, using various eligibility criteria. A progressive indirect tax is not well targeted because it provides a lower rate to anyone who consumes the commodities with the lower rate, regardless of their income status.

A third example is the repayment of excess VAT credit. When a taxable person purchases capital goods, VAT is paid on the purchase; but the amount of tax collected on outputs sold (in the month that the capital goods were acquired) may be less than the amount of tax paid on inputs. Since taxpayers must pay the VAT on a monthly basis, fairness and symmetry should require the tax administration to provide this taxpayer a refund on a monthly basis. However, tax administrations have concerns about paying timely excess credits. One reason is the risk of fraud, a taxpayer may claim excess credits and then go out of business when the refund is received. Tax officials need time to audit claims of excess credits to minimize the opportunity for fraud, but it is not administratively feasible to audit every refund request. In recent years, the balance that has been struck between the ideal of prompt payment and practical reality of the need for cautious review of claims for excess credit has been that exporters would receive prompt payment of excess credits, but that other taxpayers would be allowed a carry forward for up to six months. If after six months additional VAT credits were outstanding, the tax administration would provide the taxpayer with a refund (Ebrill, Keen, Bodin, and Summers, 2001).

## Conclusions

In order to undertake fiscal adjustment, countries have three basic options – reduce government expenditures, increase revenues (through taxation or borrowing), or do some mix of both. This survey focused on the necessary steps to increase tax revenue. Lessons from developing and emerging market countries indicate that reforming the architecture of tax policy involves focusing on the country's tax goals, the structure that best fits the country's current economic and technological situation, and the design of the law. It is also important to focus on administration of the law. [11] A sound approach is first to develop a comprehensive reform strategy that prevents revenues from collapsing further, while making the appropriate trade-offs with other tax policy goals. Second, since many countries undergoing a fiscal adjustment are not equipped to handle the technology demands of income taxation, their current situation can be best exploited by increasing reliance on domestic indirect taxes (usually the VAT) and reducing reliance on customs duties, which appears to be the trend from the available data. Finally, successful fiscal adjustment requires careful design of the new tax laws.

## REFERENCES


Alesina, A. Perotti, R. and Tavares, J. (1998). The political economy of fiscal adjustment. *Brookings Papers on Economic Activity, I*, 197-260.

Burgess, R. and Stern, N. (1993). Taxation and development. *Journal of Economic Literature, 31*, 762-830.

Ebrill, L., Keen, M., Bodin, J. P. and Summers, V. (2001). *The Modern VAT*. Washington, DC: International Monetary Fund.

Gordon, R. K. and Thuronyi, V. (1996). Tax legislative process. In V. Thuronyi (Ed.), *Tax Law Design and Drafting*, Washington, DC: International Monetary Fund.

Tait, A. A. (1988). *Value Added Tax: International Practice and Problems*. Washington, DC: International Monetary Fund.

Tanzi, V. and Zee, H. (2000). Tax policy for emerging markets: Developing countries. Working Paper WP/00/35. Washington, DC: International Monetary Fund.

Thuronyi, V. (1996). Drafting Tax Legislation. In V. Thuronyi (Ed.), *Tax Law Design and Drafting*. Washington, DC: International Monetary Fund.

Toye, J. (2000). Fiscal crisis and fiscal reform in developing countries. *Cambridge Journal of Economics, 24*, 21-44.

Vehorn, C. and Brondolo, J. (1999). Organizational options for tax administration. *Bulletin for International Fiscal Documentation*, *53*, 499-512.


11 Future research on this issue would be useful.

Williams, D. (1996). Value-added tax." In V. Thuronyi (Ed.), *Tax Law Design and Drafting*, Washington, DC: International Monetary Fund.

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