Allied Academies International Internet Conference

2003

Allied Academies Internet Conference

Proceedings

Affiliates

Academy of Accounting and Financial Studies Academy of Commercial Banking and Finance Academy for Economics and Economic Education Academy of Educational Leadership Academy of Entrepreneurship Academy of Free Enterprise Education Academy of Information and Management Sciences Academy of Organizational Culture, Communications & Conflict Academy of Marketing Studies Academy of Strategic Management Academy of Legal, Ethical and Regulatory Issues Academy for Studies in International Business Academy for Case Studies

Academy of Strategic e-Commerce

Academy of Accounting and Financial Studies Journal Journal of Commercial Banking and Finance Economics and Economic Education Research Journal Academy of Educational Leadership Journal Academy of Entrepreneurship Journal Journal of Entrepreneurship Education Academy of Information and Management Sciences Journal Journal of Organizational Culture, Communications & Conflict Academy of Marketing Studies Journal Academy of Strategic Management Journal Journal of Legal, Ethical and Regulatory Issues Journal of International Business Research Journal of Case Studies Journal of Strategic E-commerce

Allied Academies, Inc. An International Non Profit Association of Scholars and Practitioners

PO Box 2689, Cullowhee, NC 28723 Voice 828-293-9151; FAX 828-293-9407 www.alliedacademies.org

Journals

Volume 5

2003

Proceedings of the Allied Academies Internet Conference

2003

Jo Ann and Jim Carland Co-Editors Western Carolina University

The Proceedings of the Allied Academies Internet Conference are published by the Allied Academies, Inc., PO Box 2689, Cullowhee, NC, 28723.

Allied Academies is an international, non-profit association of scholars whose purpose is to support and encourage the exchange of knowledge.

Copyright 2003 by the Allied Academies, Inc.

Proceedings of the Allied Academies Internet Conference

Table of Contents

ACCULTURATION, GENDER AND THE HOUSEHOLD: A CROSS CULTURAL STUDY Charlotte A. Allen, Stephen F. Austin State University Gopola Ganesh, University of North Texas	1
TO SURVEY OR NOT TO SURVEY: HOW TO ASK THOSE QUESTIONS Charlotte A. Allen, Stephen F. Austin State University	3
A SIMPLE EXPLANATION OF THE NATIONAL INCOME ACCOUNTS Wendy A. Campione, Northern Arizona University Max E. Jerrell, Northern Arizona University James N. Morgan, Northern Arizona University	5
THE RELATIVE VALUATION ROLES OF EQUITY BOOK VALUE AND NET INCOME IN ASSESSING THE FINANCIAL HEALTH OF COMMERCIAL BANKS Chia I Chen, Nova Southeastern University	7
FUNDING A COLLEGE EDUCATION: PIECING TOGETHER CURRENT TAX INCENTIVES, FUTURE TAX SAVINGS, AND THE INTERACTION WITH FINANCIAL AID Ellen D. Cook, University of Louisiana at Lafayette	9
THE ACCURACY OF THE CONSUMER PRICE INDEX MARKET BASKET AS A MEASURE OF RURAL CONSUMPTION Thomas A. Dukes, Christian Brothers University Sarah T. Pitts, Christian Brothers University Rob H. Kamery, Christian Brothers University	. 11
A RESEARCH STUDY INVESTIGATING HOW ACCURATELY THE CPI MARKET BASKET MEASURES RURAL HOUSEHOLD CONSUMPTION Thomas A. Dukes, Christian Brothers University Sarah T. Pitts, Christian Brothers University Rob H. Kamery, Christian Brothers University	. 17

AN EMPHASIS SHIFT TO RURAL POPULATION GROWTH: RURAL-URBAN MIGRATION AND THE CONSUMER PRICE INDEX
THE RETIREMENT DECISION 29 Michael D. Evans, Winthrop University
 FINDING AND VERIFYING ALL SOLUTIONS OF A SYSTEM OF NONLINEAR EQUATIONS USING PUBLIC DOMAIN SOFTWARE
WTO/GATT TRADE ROUNDS: PAST AS PROLOGUE
THE EUROPEAN ECONOMIC MONETARY UNION AND EURO: GENERAL FRAMEWORK AND PERFORMANCE 43 Balasundram Maniam, Sam Houston State University Neslihan Guzeltepe, Sam Houston State University Hadley Leavell, Sam Houston State University
STRATEGIES TO COUNTERACT THE EFFECTS OF LOST INTELLECTUAL PROPERTY PROTECTION: THE CASE OF PATENT EXPIRATION
AN ANALYSIS OF THE LEADER IN THE CONTAINERIZED DISTRIBUTION MARKET
TQM AND PRODUCTIVITY AS APPLIED TO A BUSINESS
MARLIN FIREARM'S STRATEGY IN THE LATE 1970s: A STRATEGIC ANALYSIS (REVISITED)

CAN IBM REGAIN THE MARKET LEAD IN THE IT INDUSTRY?
THE BRAZILIAN OPPORTUNITY: THE INTRODUCTION OF GIFT-WRAP INTO THE MARKET 73 Sarah T. Pitts, Christian Brothers University Kristin O. Prien, Christian Brothers University Rob H. Kamery, Christian Brothers University Frank E. Hood, Mississippi College
AN ABBREVIATED EMPIRICAL STUDY OF THE DIFFERENCES IN CHARISMA, ETHICS, PERSONALITY, AND MACHIAVELLIAN CHARACTERISTICS OF MALE AND FEMALE MARKETING STUDENTS
 EMPLOYER-SPONSORED HEALTH INSURANCE: EFFECTS ON EMPLOYERS AND EMPLOYEES
OBJECT CLASS HIERARCHY DESIGN
THE RISE OF ADAM SMITH AND THE DECLINE OF MERCANTILISTS AND PHYSIOCRATS: MID-18 TH CENTURY ECONOMIC CHANGES
INSIGHTS TO TEACHING GENERATIONS X AND Y BUSINESS STUDENTS
ACCOUNTING STUDENTS' FUNDAMENTAL FINANCIAL REPORTING KNOWLEDGE

page	v

THE INFORMATION CONTENT OF CORPORATE EVENTS: TAKING STOCK OF THE INTRA-INDUSTRY PERSPECTIVE
WHY SHOULD CREDIT RE-RATINGS HAVE SPILLOVER EFFECTS? A RATIONALE BASED ON DISCRETE RATINGS AND IMPLICIT CLAIMS
EVALUATING ENTREPRENEURIAL PERCEPTIONS: TRMPC AND NSU IN SOUTHEAST VIRGINIA
WAGES AND VOLUNTARY LABOR TURNOVER: COMPARING IT WORKERS WITH OTHER PROFESSIONALS
INTERNATIONAL DIPLOMACY AND ETHICS: RELEVANCE FOR COMMERCE
PLAYING CATCH-UP WITH MUTUAL ASSENT IN BUSINESS TRANSACTION IN CYBERSPACE
THE DIMENSIONS OF COUNTRY OF ORIGIN CONSTRUCT: COUNTRY AND ETHNIC IMAGE
INDEX OF AUTHORS

ACCULTURATION, GENDER AND THE HOUSEHOLD: A CROSS CULTURAL STUDY

Charlotte A. Allen, Stephen F. Austin State University caallen@sfasu.edu Gopola Ganesh, University of North Texas ganesh@cobaf.unt.edu

ABSTRACT

This study investigates the impact of acculturation on the responsibility of household chores among an immigrant population compared to benchmark standards for country of origin and country of destination. Results of the study are analyzed along with a discussion of the implications and limitations of the research for marketing and cross-cultural research.

Acculturation has been a topic of research in the areas of anthropology, sociology, and psychology for many years. It has only been in the last two decades that marketing has begun to seriously study the effects of one culture on another culture, especially in the context of first generation immigrants in the USA. There have also been studies that dealt with cultural and sub cultural differences in purchase and consumption behavior; however, there is hardly any research on the effect of acculturation on household chores. Does acculturation change who in the household performs the chores? Or does the culture from the country of origin override the effects of the culture of destination? Or perhaps is there some mixture of results between the country of origin and country of destination?

There are many unanswered questions besides "who is going to do the dishes" or "who is going to the grocery store" in regard to this issue. These questions need to be addressed and answered by marketers due to the growing number of immigrants who purchase products or those who influence the purchase of products. As more immigrants move into our society, an understanding of consumer behavior across the different cultures becomes more and more necessary. This understanding can provide marketers with the information needed to effectively target first generation immigrants with tailored products and marketing programs.

TO SURVEY OR NOT TO SURVEY: HOW TO ASK THOSE QUESTIONS

Charlotte A. Allen, Stephen F. Austin State University caallen@sfasu.edu

ABSTRACT

The primary subject matter of this case concerns survey research. Secondary issues include questionnaire design, research objectives, bias, and ethical considerations in marketing research. This case has a difficulty level of three (appropriate for junior level) to four (appropriate for senior level). This case is designed to be taught in one class hour and is expected to require no outside preparation by students.

Do you need a case on marketing research, but do not need anything to do with statistics? Do you want an interactive case that will generate a lot of discussion? To Survey or No To Survey is the case for you. It is designed to be used in a marketing research section of a Principles of Marketing class or in a Marketing Research class itself. This case follows the career of Ann Horton, the new Director of Marketing Research at a large metropolitan hospital. Ms. Horton is presented with a finished customer satisfaction survey by William Whedon, who is in charge of Public Relations. He has to have her approval to administer the survey and is impatient to find out the results of the survey to include in a new marketing brochure for the hospital. Should Ms. Horton approve the survey or not?

This case deals with bias in survey research that can occur when questionnaires are designed. How does one find the bias in how surveys are worded or presented? This case will allow students to critique the proposed survey and try to spot any biases that may occur in the survey or how the survey is administered. There is also an interesting ethical question of what should Ms. Horton's actions be in this situation.

A SIMPLE EXPLANATION OF THE NATIONAL INCOME ACCOUNTS

Wendy A. Campione, Northern Arizona University wendy.campione@nau.edu Max E. Jerrell, Northern Arizona University max.jerrell@nau.edu James N. Morgan, Northern Arizona University james.morgan@nau.edu

ABSTRACT

Undergraduate economics students often struggle to understand the National Income Accounts. The concept that gross domestic product (GDP) can be decomposed in alternative ways - based upon value added by industry or based upon factor income components – and that both the sum of value added and the sum of factor incomes must equal GDP, is often particularly hard for students to grasp.

In this paper we present a description of these two alternative decompositions of GDP. Using only equations involving introductory algebra and diagrams, we develop a model for a simplified three good, two factor, economy which illustrates both the factor income and sum of value added approaches to GDP. By including the factors in the values added equations and including the industries in the factor equations, it becomes clear how the two approaches to national income accounting are related. We feel that this method of presentation gives students a better understanding of the National Income Accounting and provides an appreciation for the relationship between the factor income and value added approaches to GDP.

THE RELATIVE VALUATION ROLES OF EQUITY BOOK VALUE AND NET INCOME IN ASSESSING THE FINANCIAL HEALTH OF COMMERCIAL BANKS

Chia I Chen, Nova Southeastern University chenc@nova.edu

ABSTRACT

The paper investigates whether, for the valuation of equity, the balance sheet increases in importance and the income statement decreases in importance, as the financial health of a commercial bank becomes weak. The research question is based on the premise that the main role of the balance sheet is to provide information about liquidation value to help creditors make loan decisions. The study uses the equity valuation model, and develops two hypotheses. Hypothesis H_1 is that the coefficient on and incremental explanatory power of equity book value increase and the coefficient on and incremental explanatory power of net income decrease as the financial health of commercial banks becomes weak. Hypothesis H_2 is that, for non-bankrupt commercial banks, the explanatory power of equity book value is higher than the explanatory power of net income. Thirty-two banks are selected from S & P 500 commercial banks. The financial health of the banks is measured by their senior debt ratings, from AAA to D. Data on the senior debt rating, the equity book value, the net income, and the market value of equity are collected from S & P Compustat Database. Descriptive statistics, correlation analysis, ANOVA test, and the t-test are used to examine the hypotheses. Results are consistent with the hypothesis H_2 . But, the results from testing H_1 are mixed.

FUNDING A COLLEGE EDUCATION: PIECING TOGETHER CURRENT TAX INCENTIVES, FUTURE TAX SAVINGS, AND THE INTERACTION WITH FINANCIAL AID

Ellen D. Cook, University of Louisiana at Lafayette edcook@louisiana.edu

ABSTRACT

With the average cost of a college education rising to \$18,273 at private institutions (up 5.8 per cent from last year) and \$4,081 at four-year public institutions (up 9.76 percent from last year), planning for funding a college education has become increasingly vital. Estimates from the U.S. Department of Education indicating that the average cost of four year tuition will be up to \$60,000 and \$200,000, respectively, by the year 2007 lend support to the need for early planning.

Recent changes and additions to the Internal Revenue Code have fulfilled Congress' intention to "maximize tax benefits for education and provide greater choices for taxpayers in determining which tax benefits are most appropriate for them (H.R. Conf Report)." The interaction of the various education incentives such as qualified tuition plans, Coverdell education savings accounts, and the Hope and Lifetime Learning credits make planning to maximize tax benefits an extremely complex undertaking. Further complicating the overall planning process is the impact of various funding alternatives and tax incentives on eligibility for federal financial aid of which a record \$90 billion was awarded last year. Strategies for making all of the pieces fit will be explored in the paragraphs that follow.

Thomas A. Dukes, Christian Brothers University Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

Accuracy and objectivity are essential characteristics of scientific research. The accuracy of research projects is enhanced when valid, accurate measuring instruments are used. The purpose of this paper is a preliminary investigation into the accuracy of a widely used measuring device, the Consumer Price Index (CPI). Specifically, the accuracy of the CPI, especially as a measure of rural household consumption.

INTRODUCTION

The Rural Consumer Marketbasket (RCM) consists of four components: shelter, utilities, clothing, and food. Differences between the RCM and the Consumer Price Index (CPI) market basket may be analyzed by using three criteria: (1) total market basket expeditures, (2) relative importance of market basket components, and (3) average expenditure amounts for the individual items comprising the two market baskets. Statistically significant rural-urban differences should exist for each of the three criteria investigated. Additional findings should be analyzed which examine the relationships of nine household characteristics and their effects on total market basket is an accurate or inaccurate measure of rural household consumption.

The need for the research, hypotheses to be tested, and research objectives are presented in this paper. Presentations of both rural area and CPI background information are needed to prepare a foundation for further research.

BACKGROUND INFORMATION ON RURAL AREAS

A rural area is a "place" containing a population of 2,499 or less (U.S. Bureau of the Census, 1970). A "place" is a geographic area with specified political boundaries, such as a county, city, or a township (U.S. Bureau of the Census, 1970). Data from the *1970 Census of Population* indicated that 53,886,996 Americans lived in rural areas (U.S. Bureau of the Census, 1970).

Although this number appears large in absolute terms, how large is the rural population in relation to the urban population? How is the rural population distributed among different states and geographic regions? Is the rural population growing at a different rate than the urban population? These questions are answered in this paper.

RURAL POPULATION MAGNITUDE

In 1979, 26.5 percent of the U.S. population lived in rural areas (U.S. Bureau of the Census, 1979). Neither the total population nor the rural population is divided equally among the nation's

50 states or four geographic regions. The South contains the largest portions of both the total U.S. population and the nation's rural population (U.S. Bureau of the Census, 1979).

In nine states, 50 percent or more of the total state population resided in rural areas in 1970. Five of these states are in the South: (1) West Virginia (61 percent rural), (2) Mississippi (56 percent rural), (3) North Carolina (55 percent rural), (4) South Carolina (52 percent rural), and (5) Arkansas (50 percent rural) (U.S. Bureau of the Census, 1970). The four remaining states with rural population percentages greater than 50 percent are Alaska, Vermont, North Dakota, and South Dakota.

The following statements can be made regarding the size and distribution of the rural population in the U.S.: (1) although urban residents outnumber rural residents, over one-fourth of all Americans live in rural areas, and (2) rural households are not evenly distributed throughout the country but are concentrated in the South. Rural populations are not static. Following an sixty-year trend of population decline, rural areas are exhibiting signs of reversing their losses in population (Heiman, 1978).

RURAL POPULATION GROWTH

Research studies indicate that rural areas are growing faster than either cities or their suburbs (Heiman, 1978). Although migration to large cities continued from 1970 to 1975, percentage increases in rural population were greater than percentage increases for urban or surburban populations (Seneker, 1975). This trend would appear to indicate that individuals who are moving prefer the small towns and villages to larger cities.

The South as a whole gained more than five million people from 1970 to 1975 (Anonymous, 1979). Southern states showing the largest percentage increases in their total populations during the same period of time were West Virginia, North Carolina, and Arkansas (Anonymous, 1979). Each of these three states is predominantly rural.

Preliminary examination of U.S. population migration data supports the following points: (1) rural areas are growing more rapidly than urban or suburban areas, and (2) Southern states which are predominantly rural are making the largest population gains.

The state of Arkansas was selected for research primarily because of growth trends of rural areas in the state. In Arkansas, the Ozark and Ouachita mountain regions are estimated to have experienced a net gain of more than 39,000 individuals from 1970 to 1975 (Slater & Littman, 1978). Not only is Arkansas' rural population larger than the national average, rural areas in the state are growing rapidly.

Accurate measurements of changes in living costs can aid economic planners in formulating policies for the orderly growth and development of rural areas. Data generated by cost-of-living measurements are useful for projecting revenue, allocating resources, and developing budgets. One tool frequently used by economic planners to accomplish these tasks is the CPI.

THE CONSUMER PRICE INDEX

Each month the Department of Labor's Bureau of Labor Statistics computes the CPI (Anonymous, 1976). Approximately 130,000 price quotations are used to compute the CPI. The price data represent the current amounts paid for a variety of goods and services. The bundle of goods and services priced each month is referred to as the "market basket." The CPI represents the current year market basket price as a percentage of a base year market basket price. The number generated is widely used as an economic indicator by industry and by federal, state, and local governments.

In 1974, the Commissioner of Labor Statistics estimated that approximately one-half of the people in the U.S. are directly affected by changes in the CPI (Shiskin, 1974). Some of these effects are felt in the form of cost-of-living escalators, retirement pension adjustments, Social Security

benefit changes, utility rate change requests, or school lunch price changes. These effects are felt by both rural and urban residents.

The CPI, however, was not designed to be used as a national cost-of-living index. The CPI was originally designed to measure changes in the cost of living for urban shipyard workers during World War I (U.S. Department of Labor, 1966). Although the method of calculating the index has remained basically unchanged since its inception, the index has been revised many times.

CPI REVISIONS

Consumption patterns in the U.S. have changed greatly since the 1920s. Items included in the market basket have been periodically updated to reflect consumption changes.

The relative importance of different components in the market basket has also changed with time. Relative importance figures are used as weighting factors in computing a final CPI number (Slater, 1978). Relative importance refers to the percentages of income spent on each of eight market basket components.

For example, housing expenditures accounted for a greater proportion of income in 1973 than in 1963; therefore, price increases in the cost of housing were weighted more heavily in the 1973 CPI than in the 1963 CPI (Slater, 1978).

Periodically, the coverage of the CPI has been expanded to add more segments of the population. Coverage refers to the numbers and types of consumers used as a database in computing the index. Although the CPI covered 73.5 percent of the U.S. population in 1972, coverage of the index is limited to urban consumers (Moore & Stewart, 1972). The Bureau of Labor Statistics is aware of the CPI's restricted coverage; however, economic and budgetary considerations in compiling the index have prohibited expanding the coverage of the index to include rural areas (Shiskin, 1974).

RESEARCH NEED

Rural areas in Arkansas and the South are growing. Accurate economic measurement tools can facilitate planned, orderly growth. The CPI is used by rural planners even though the index is designed to cover only urban areas.

Assessment of the CPI market basket's accuracy in measuring rural consumption can result in several benefits. First, if the CPI market basket as presently constructed is an accurate measuring device for rural consumption, there would be little justification for expanding coverage of the index to include rural residents. Economic planners could continue using the present CPI as a tool for rural planning. Second, if differences exist in either the items consumed by rural households or in the component weights of a rural market basket, then a more accurate measuring instrument should be constructed to measure the effect of these differences.

OBJECTIVES

The goal is to investigate the accuracy of the CPI market basket as a measure of rural consumption. Accuracy should be assessed by constructing an RCM. The RCM should be based solely on consumption data from rural areas. Differences between the RCM and the CPI market basket should be analyzed using three criteria: (1) total market basket expenditures, (2) relative importance of market basket components, and (3) average expenditure amounts for individual market basket items.

First, the total expenditures for the RCM should be compared to total CPI market basket expenditures. The difference in the total market basket expenditures should be analyzed. The purpose of this measurement is to determine if the lack of rural coverage affects the accuracy of the CPI market basket in reflecting rural expenditures.

Second, relative importance values for the components of the RCM should be developed and compared to CPI market basket relative importance values. Differences in the relative importance of market basket components should be analyzed.

Third, average expenditure amounts for individual items in the RCM should be compared to the average expenditure amounts for individual items in the CPI market basket. This comparison should determine if the CPI market basket accurately reflects rural consumption for individual items.

HYPOTHESES

Each of the following null hypotheses is related to a specific research objective.

HOI: There are no statistically significant differences in total market basket expenditures between rural and urban households.

HO2: There are no statistically significant differences between the relative importance of the components in the RCM and the CPI market basket.

HO3: There are no statistically significant differences in the average expenditures for individual items in the RCM and the CPI market basket.

Acceptance of these hypotheses should indicate that the CPI market basket is an accurate measure of consumption in rural areas. If one or more of the hypotheses are rejected, the CPI market basket should not be considered to be an accurate measure of consumption in rural areas. In all cases, data from rural areas should be tested against data from urban areas gathered during the same time span.

CONCLUSION

Research into rural consumption patterns will add to the body of knowledge regarding market segmentation theory. Business firms have historically segmented markets by size of area. If rural residents consume differently than urban residents, geographic segmentation may be justified. Investigation into rural consumption patterns and the formation of a rural market basket will generate data useful to marketing planners. If the magnitude and direction of consumption differences between rural and urban areas can be ascertained, specific marketing strategies can be developed for rural areas.

REFERENCES

Anonymous (1979, September 22). Population: Back to the land, *Economist*, 49-50.

Anonymous (1976). The search for a better measure of living costs. Nation's Business, (5) 65-68.

Heiman, G. (1978). Where Americans are moving now. Nation's Business, (2), 42-46.

Moore, G. & M. Stewart (1972). New developments in labor statistics. *Monthly Labor Review*, (3), 3-5.

Seneker, H. (1975). Big city, small city--more people choose latter. House and Home, (9), 22-48.

Shiskin, J. (1974). Updating the consumer price index: An overview. *Monthly Labor Review*, (7), 3-8.

- Slater, C.M. & M.S. Littman (1978, July 5). Population growth slows: Shift to open spaces speeds up in the 1970's, *Commerce America*, 19-25.
- Slater, C.M. (1978, March 13). Broadened consumer price index provides better gauge of inflation. *Commerce America*, 20-23.
- U.S. Bureau of the Census (1979). Statistical abstract of the United States (One Hundredth Edition).
- U.S. Bureau of the Census (1970). Census of population: 1970, 1, Characteristics of the population, Part 1, United States summary.
- U.S. Department of Labor, Bureau of Labor Statistics (1966). The consumer price index: History and techniques, *Bulletin 1517*.

Thomas A. Dukes, Christian Brothers University Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

The fixed market basket used by the Consumer Price Index (CPI) is designed to measure changes in the prices paid by urban households. Consumption differences between rural and urban households could affect the accuracy of CPI price measurements for rural areas. The objective of this paper is to determine how accurately the CPI market basket measured rural household consumption. The procedures used to collect and to analyze the data needed to accomplish this objective along with the limitations of these procedures are also presented.

INTRODUCTION

The CPI market basket reflects urban household consumption. Before rural consumption could be compared to urban consumption, a means of measuring rural consumption was needed. The Rural Consumer Marketbasket (RCM) was developed to meet this need.

INTERVIEW PROCEDURES

All data were collected over a three-and-a half month period. A combination of personal interviews and household purchase diaries was used to gather the data. All interview sessions were conducted between noon and dusk. Each interview consisted of two sessions. During the initial session, the purpose of the study was explained and cooperation was obtained. The interviewer completed the first page of the questionnaire via personal interview. One week later, the interviewer returned to pick up the diary purchase pages which had been completed by the respondents.

Research was conducted under the auspices of a university in Arkansas. Business cards with the numbers of the College of Business were presented as verification of this affiliation. Respondents were requested to call collect if verification was desired, and six inquiries resulted.

At the time of the second visit, the clothing and food purchase diaries were examined for incorrect or missing information. Illegible writing was decoded, and the respondent was thanked for participating in the study. During both interview sessions, the confidentiality of the respondents' replies was stressed. In no cases were the names of any individuals coded with questionnaire responses. If a respondent refused to answer a question, the response "not reported" was recorded.

QUESTIONNAIRE DESIGN

The three-page questionnaire was designed to gather data concerning rural household consumption. Information on expenditures for food, clothing, shelter, and utilities was obtained. Data were also gathered on nine household characteristics that affect the consumption of these items. The questionnaire was structured and non-disguised.

The questionnaire was designed to be completed by the interviewer during the face-to-face interview. Entries for the address and type of dwelling were designed to aid the interviewer in locating specific households. The race of the head of the household was also entered. A code number was assigned to each questionnaire. This number, which was repeated on each page, was used to keep track of the number and location of the various households surveyed.

The length of time the respondent lived at the present address was obtained by asking question number one. Although question number one was not needed for analysis, the question was included as a means of "breaking the ice" by asking an easy-to-answer question. The type of housing ownership was determined by question two. Question number three was designed to determine the amount spent for shelter each month, and question number four determined the amount spent on utilities each month. Utilities included payments for electricity, gas, propane, and butane, but did not include telephone, water, or sewerage payments.

Household income data were gathered by question number five. "Household income" was defined as the combined incomes of all household members 14 years and older. Income data covered the 12-month period of January to December. The amount of income before taxes was utilized. Wages, salaries, net income from businesses and farms, retirement payments, and transfer payments were considered as components of income.

The ages, sex, and number of individuals that comprised each household were gathered by question number six. Question number seven was used to determine the occupation of the head of the household. The categories used to classify occupations were obtained from the *1970 Census of Population* (Bureau of the Census, 1970, p. 105). The occupation in which most earnings were received during 1980 was utilized. The number of wage earners in the household was determined by question number eight, and the age of the head of the household was determined by question number nine.

The clothing purchase diary was designed to be completed by the respondent. The items purchased and the prices paid for each item were recorded under five headings: men's (16 years and older) wear, women's (16 years and older) wear, boys' (2-15 years of age) wear, girls' (2-15 years of age) wear, and infants' (under 2 years old) wear. The age breakdowns for each category were identical to the breakdowns used for the CPI market basket (Bureau of Labor Statistics, 1978, p. 22).

Instructions for completing the clothing purchase diary were given verbally during the initial interview and were also printed on the top of the diary page. Written examples were provided on the clothing diary page to aid the respondent in completing the clothing purchase diary. Additional copies of the clothing purchase diary were left with the respondent to provide additional space for recording clothing purchases.

The BLS has determined that 90 days is the maximum time frame for accurately remembering apparel purchases (Bureau of Labor Statistics, 1978, p. v). This time frame was not exceeded by any of the rural households surveyed. Since January 1 was utilized as the beginning date for the clothing diary, several households reported clothing purchases for shorter time spans.

Weighting factors were developed to adjust clothing consumption data for households which reported clothing purchases for fewer than 90 days. The 90-day period January 1 to March 30 was divided into 12 weeks. For example, clothing purchase diaries picked up on January15 contained only two weeks or one-sixth of a household's clothing expenditures for the entire survey period. Therefore, clothing consumption was weighted by a factor of six.

SAMPLE DESIGN

The universe from which the sample was selected was limited to six counties in central Arkansas: Conway, Faulkner, Perry, Pope, Van Buren, and Yell. The geographic area surveyed was restricted by time and cost restraints.

Each county in the universe was subdivided into townships. Any township containing less than 2,500 inhabitants was classified as a rural township. Of the 133 townships in the universe, 128

townships were classified as rural (Bureau of the Census, 1970, pp. 5-99). Approximately 17,717 households were located in the rural townships (Bureau of the Census, 1970, pp. 99-112). A complete and up-to-date listing of all rural households in the universe was not available. A listing of the 128 rural townships was used as the sampling frame. The sampling units were rural townships, and individual households within each township comprised the sampling elements. In order to make certain the sampling units selected were representative of rural townships in the population, a stratified random sample was selected. All rural townships in the universe were ranked by population and divided into three strata.

The number of inhabitants in a township was used to stratify the sample because the size of place (i.e., rural or urban area) was a major characteristic of interest. Each of the strata listed in Table 2 contained approximately the same proportion of the total rural population. This procedure reduced bias that could have resulted from selecting a few "large" rural townships or several "small" areas. The number of strata selected was limited to three to help reduce travel time and expense. More numerous strata with smaller class intervals would have required selecting more townships because many of the townships in the universe contained fewer than 200 inhabitants.

Within each stratum, the townships were ranked by population and numbered. A table of random numbers was then used to select townships randomly from each stratum. Once a township was selected, detailed county maps illustrating individual dwellings were used to identify dwelling locations in each township.

Using the southern boundary of each township as a starting point, every third household was marked on the county maps. The number three was chosen randomly from numbers one through nine. By selecting every third house, a data collection procedure for not-at-homes was also devised. If a given house was not occupied at the time of the survey, the house next door on the right was approached. If that house was not occupied, the house on the other side of the original sampling element was approached. If all three houses were unoccupied during the initial survey attempt, the entire procedure was repeated at a different time and date.

If the second attempt at collecting data was not successful, the household was classified as a not-at-home. Abandoned and obviously vacant dwellings were not considered as sampling elements. If individuals refused to cooperate, the questionnaire was tabulated as a refusal and sampling started over with the third following house.

The sampling procedures discussed were used to select 210 rural households. In each of the three strata, 70 households were surveyed. The equal division was utilized because approximately equal proportions of the population were contained in each stratum. The 210 households surveyed accounted for approximately 1.18 percent of the total number of rural households in the universe. This sample proportion is approximately 39 times greater than the .03 percent sample used by the BLS in compiling the nationwide Consumer Expenditure Survey (Bureau of Labor Statistics, 1977, p. vi).

Care was taken to ensure representativeness of the sample. The effects of urbanization on consumption patterns were reduced by selecting counties that had a history of being predominately rural. In each of the selected counties, the majority of the population lives in rural areas, and rural residents have comprised the population majority for at least 50 years (Bureau of the Census, 1970, pp. 99-112). A preliminary statistical analysis of selected demographic characteristics of the six counties in the universe revealed that a high degree of homogeneity existed within the universe. Based on the statistical analysis, the sample size of 210 rural households was both adequate and representative for the purpose of the research conducted.

DATA ANALYSIS

All data collected by the questionnaires were computer coded using an online terminal. The Statistical Package for the Social Sciences (SPSS) computer programs were utilized to tabulate and to analyze the data. Data analysis was conducted in four stages.

Stage one determined if the sample was representative of the rural population from which it was selected. Sample data on selected demographic characteristics were compared to census data for the universe from which the sample was drawn. Differences between the sample and the universe were analyzed for statistical significance.

Differences between total RCM expenditures and total CPI market basket expenditures were investigated in stage two. Comparisons were based on CPI data published in the *CPI Detailed Report* for the period January 1 through March 30.

Stage three of the analysis dealt with comparing the component weights of the CPI market basket to the component weights of the RCM. The *CPI Detailed Report* was also used as the basis for comparison (Bureau of Labor Statistics, 1978, p. 119).

Differences between the individual items contained in the RCM and the CPI market basket were investigated in stage four of the statistical analysis. Data supplied by the BLS was used as the basis for comparison in stage four.

TOTAL MARKET BASKET EXPENDITURE ANALYSIS

Rural household expenditure amounts for food, clothing, shelter, and utilities were used to compute average expenditure amounts for each of the respective components. The food and clothing categories were further subdivided into the classifications listed in Appendix C. The variance for each category was calculated using the SPSS computer package.

By adding together each of the average family expenditure amounts for each component included in the RCM, a total expenditure amount was computed for the RCM. This sum was compared to the CPI total market basket expenditure amount for January 1 to March 30. Differences in the total expenditures of the two market baskets were tested for statistical significance by the T-test.

The RCM sample was drawn entirely from rural areas, and the CPI market basket sample was drawn from urban areas. Therefore, the two samples are independent of one another. Independence and common variance are two assumptions necessary for the T-test to be applicable (Klecka, Nie & Hull, 1975, p. 93). Common variance was tested using the "F" value generated by the SPSS package. If common variance was not indicated, the T-test with pooled variance estimate was utilized.

INDIVIDUAL ITEM ANALYSIS

Each item in the RCM was compared to its appropriate counterpart in the CPI market basket. If a counterpart was not indicated, the average expenditure amount was tested against the value of zero. Depending upon the variance, statistical significance was based on either the T-test or the T-test with pooled variance estimate.

CONCLUSION

The methodology discussed in this paper had several purposes. First, data were needed so that rural consumption could be measured and compared to urban consumption. Second, a means for gathering the needed data had to be devised. Third, procedures for analyzing the data gathered were necessary. The different sections of this paper explained what data were needed, how the data were gathered, and how the data were analyzed. The limitations of the methodology employed were also presented.

REFERENCES

Klecka, W., N. Nie & H. Hull (1975). SPSS primer. New York: McGraw-Hill.

Maslow, A.H. (1954). Motivation and personality. New York: Harper and Brothers, 38-43.

- U.S. Bureau of the Census (1979). Statistical abstract of the United States (One Hundredth Edition).
- U.S. Bureau of the Census (1970). Census of population: 1970, 1, Characteristics of the population, Part 1, United States summary.
- U.S. Bureau of the Census (1970). *Census of Population: 1970, 5, Arkansas*, Table 33, General Characteristics of County Subdivisions: 1970, 99-112.
- U.S. Bureau of the Census (1970). Census user's guide.
- U.S. Department of Labor, Bureau of Labor Statistics (1977). Consumer expenditure survey: Diary survey, July 1972-June 1974, *Bulletin 1959*.
- U.S. Department of Labor, Bureau of Labor Statistics (1978). Consumer expenditure survey: Interview survey, 1972-1973, *Bulletin 1997*.
- U.S. Department of Labor, Bureau of labor Statistics (1966). The consumer price index: History and techniques, *Bulletin 1517*.

AN EMPHASIS SHIFT TO RURAL POPULATION GROWTH: RURAL-URBAN MIGRATION AND THE CONSUMER PRICE INDEX

Thomas A. Dukes, Christian Brothers University Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

The topics of rural-urban migration and the Consumer Price Index are presented in this paper. Demographic researchers have investigated rural-urban migration for many years. Prior to 1975, however, research emphasis was placed on the problems associated with rural residents moving to urban areas. In 1975, research emphasis shifted to rural population growth.

INTRODUCTION

Changes in the Consumer Price Index (CPI) directly affect any rural residents, including retirees. Yet, the CPI does not include rural residents in its database. The index was not designed to be a national cost-of-living indicator, but it is often used as one.

The CPI utilizes a fixed market basket which ignores geographic consumption differences. Marketing research and consumer behavior literature indicate that geographic location is an important determinant of consumer behavior.

RURAL-URBAN MIGRATION LITERATURE

Calvin Beale was the first researcher to document that rural areas were growing faster than urban areas (Beale, 1975). Census data and Social Security statistics were used by Beale to identify counties experiencing population increases. He found that the areas experiencing the greatest growth rates were areas that were entirely rural, that is, not adjacent to urban areas (Beale, 1976).

Beale's research findings are significant for several reasons. He was the first researcher to publish empirical evidence that rural areas were increasing in population. His research also provided evidence that the rural population increases were not caused by urban sprawl. Beale theorized that the rural "turn-around" was not a temporary phenomenon, but a new trend in American population migration and distribution.

Research published by Johnson and Purdy (1980) supported Beale's theory that rural population increases were not temporary. Based on preliminary projections for the 1980 Census, Johnson and Purdy (1980) predicted that increasing rural population was a definite trend.

The rural consumption data analyzed were generated by a sample of rural households. The counties from which the sample was selected are located in the Ozark and Ouachita regions of Arkansas. As documented by Morrison and Wheeler (1976), these regions were experiencing rapid growth.

Morrison and Wheeler investigated Beale's evidence that the increases in rural populations were not due to urban sprawl. They confirmed that the areas experiencing the most rapid population growth are not adjacent to metropolitan areas (Morrison & Wheeler, 1976). Morrison and Wheeler (1976) specifically identified the Ozark and Ouachita regions of Arkansas as high-growth rural

areas. Research by Ellis recognized Arkansas as second only to New Mexico in the rate of rural population growth (Ellis, 1975).

A research study by Clawson (1976) indicated that economic reasons are important factors for rural growth. By surveying new residents in rural areas, Clawson discovered that many of the new residents had moved to rural areas to seek better living conditions.

Clawson (1976) did not measure differences in the total market basket prices between rural and urban areas, but differences in the components of living costs were found to exist. Although not supported by empirical evidence, Clawson (1976) suggests that lower housing costs in rural areas are offset by higher transportation costs caused by increased travel distances.

Of note is Clawson's (1976) finding that a significant portion of new rural residents receive pensions. Additional evidence supporting this finding was published by Tucker. Tucker's (1976) research indicated that many of the new rural residents were retirees returning to their hometowns.

In a related article, Rainey (1976) stressed that retirees are an important but not exclusive source of new rural residents. Hamilton (1971) found that the market basket component weights for retirees differed significantly from other urban consumers. Retirees, however, are not the only individuals moving to rural areas, and the reasons why individuals migrate to rural areas are as varied as the people who move.

In a 1970 study, Dillman (1979) investigated the living preferences of urban residents. He found that approximately one-half of the people living in cities of 50,000 or more would prefer to live in a rural area (Dillman, 1979). Decentralized manufacturing processes, earlier retirement possibilities, and increases in disposable incomes were all given as important reasons for preferring rural living (Dillman, 1979). A widely held belief among urban residents is that the cost of living is lower in rural areas (Dillman, 1979). The housing cost component is especially perceived as being lower.

Research conducted by Deaton supported evidence of this belief. Deaton (1979) surveyed new rural residents and sought to determine why people moved to rural areas. His research concluded that new rural residents were seeking increases in real wage levels (Deaton, 1979). Deaton (1979) concluded that new residents in rural areas have moved seeking a lower cost of living. A 1979 study by Shaffer (1979) supports Deaton's research findings.

A summary of literature discussing the rural-urban migration trend is presented in an article by Schwaryweller. After surveying the available research, Schwaryweller presents the following points relevant to this paper: (1) Retirees are an important source of the population growth in rural areas. (2) Economic reasons are important to rural migration. (3) New rural residents believe that the cost of living is lower in rural areas (Schwaryweller, 1979).

COST OF LIVING RESEARCH LITERATURE

The cost of living is not the same in all areas of the U.S. As the size of a metropolitan area changes, the cost of living also changes (Haworth & Rasmussen, 1973).

In order to compare living costs in different urban areas, the Bureau of Labor Statistics developed the Family Budget Program. Hypothetical market baskets were constructed to represent lower, intermediate, and higher standards of living. The market baskets were then priced in selected metropolitan areas across the country. The resulting data were intended to provide a basis for comparing living costs and real income levels between urban areas (Sherwood, 1975).

Using data generated by the Family Budget Program, McMahon and Melton (1978) found that the cost of living varied greatly among states and among counties within each state. These researchers concluded that the cost of living tends to increase as the size of a metropolitan area increases (McMahon & Melton, 1978).

The Family Budget Program and the CPI utilize "fixed" market baskets, that is, identical market baskets priced in each geographical area. The validity of using fixed market baskets has been questioned by Mattila (1976). His research findings suggest that the primary cause for

variation in urban living costs is the difference in the items consumed rather than the size of the metropolitan area. Research by Adams added evidence to this viewpoint. Adams (1977) found that as the degree of urbanization changed, lifestyles and consumption patterns also changed.

Although the CPI market basket is priced in different geographic regions, the items contained in the market basket remain fixed. Sherwood (1975) found that the total price of the CPI market basket varied little from the total price of the Family Budget market basket. The CPI has been recommended as a replacement for the Family Budget Program (Watts, 1980).

The Family Budget Program has not been the only price index targeted for replacement by the CPI. In January 1977, the Farm Living Index (FLI), a subgroup of the prices paid by farm families for family living items, was replaced by the CPI (Houck & Smaciarz, 1977). This action reflects the U.S. Department of Agriculture's view that the economic and social differences between family life on the farm and family life in urban areas had dwindled sufficiently to make a separate index unnecessary (Houck & Smaciarz, 1977). Adoption of the CPI significantly reduced data collection and handling costs within the Department of Agriculture's Total Prices Paid Index (TPPI). The TPPI was used to compute the parity prices paid for farm products (Houck & Smaciarz, 1977).

Houck and Smaciarz sought to determine if the total price of the CPI market basket differed significantly from the FLI market basket price. The indices were compared for a ten-year period, 1965-1975. Little difference in the market basket prices was observed (Houck & Smaciarz, 1977). Rural areas, however, are not comprised entirely of farm families. A majority of the rural population is either retired or dependent on the city for a source of income (Walters, 1978). Marketing research indicates that rural farm families and rural families do not have the same consumption patterns (Engel, Blackwell & Kollat, 1978). Part of the difference in consumption patterns may be caused by geographic mobility.

Individuals who relocate consume differently than non-mobile residents (Berkman & Gilson, 1979). New rural residents with geographic mobility are the primary cause for the large increases in rural population. Research findings suggest that cost of living differences between geographic areas encourage population migration (Berkman & Gilson, 1979).

Hoch investigated the differences in the cost of living between rural and urban areas. Hoch concluded that wage rates for similar tasks increased as the size of a population area increased. However, he theorized that the rate of wage increase was not as great as the cost of living increases associated with living in an urban area. The differences in the rates of increase between wages and living costs created a disequilibrium in favor of rural areas (Hoch, 1979).

Simply stated, in an urban area the gains from wages are more than offset by increased living costs. As American business firms have decentralized and moved to rural areas, the wage differential between rural and urban areas has decreased. Hoch (1979) believed that this decentralization was primary cause for rural population increases.

Hoch measured the rural prices for an urban market basket, but he did not develop a rural market basket. Measurement of rural-urban cost of living differences is greatly simplified by using a fixed market basket. Use of a fixed market basket, however, assumes that rural households consume the same items in the same proportions as urban households.

Much of the criticism of the CPI centers around the use of fixed component weights and fixed market basket items. In 1980, the Commissioner of Labor Statistics admitted that the CPI has serious shortcomings as a cost-of-living indicator (Norwood, 1980).

CONCLUSION

Rural areas are experiencing a population resurgence. Arkansas is one of the rural areas growing rapidly. Many of the new rural residents have moved seeking lower costs of living. Some evidence exists to confirm or deny the claim of lower rural living costs. Evidence does exist that

REFERENCES

- Adams, R.J. (1977). The degree of urbanization and its impact on consumer behavior. Unpublished doctoral dissertation, University of Georgia.
- Beale, C.L. (1976). Further look at non-metropolitan population growth since 1970. American Journal of Agricultural Economics, 58(12), 953-958.
- Beale, C.L. (1975). Revival of population growth in nonmetropolitan America. U.S. Department of Agriculture. *Bulletin ERS-605*, (6).
- Berkman, H.W. & C.C. Gilson (1979). *Consumer behavior: Concepts and strategies*. California: Dickenson Publishing Company, Inc.
- Clawson, M. (1976). Economic implications of the recent population shift toward rural areas. American Journal of Agricultural Economics, 58(12), 963-966.
- Deaton, B.J. (1979). Rural employment and rural-urban population shifts: Discussion. American Journal of Agricultural Economics, 61(12), 973-974.
- Dillman, D.A. (1979). Residential preferences, quality of life, and the population turnaround. *American Journal of Agricultural Economics*, 61(12), 951-952.
- Ellis, W.N. (1975). New ruralism: The post-industrial age is upon us. Futurist, (10), 202-204.
- Engel, J.F., R.D. Blackwell & D.T. Kollat (1978). Consumer behavior (Third Edition). Hinsdale, IL: Dryden Press, Inc.
- Hamilton, W.C. (1971). A consumer price index for retired state employees residing in a selected *urban area*. Unpublished doctoral dissertation, Louisiana Tech University.
- Haworth, C.T. & D.W. Rasmussen (1973). Determinants of metropolitan and cost-of-living variations. *Southern Economic Journal*, 22(10), 183-188.
- Hoch, I. (1979). Settlement size, real income, and the rural turnaround. American Journal of Agricultural Economics, 61(12), 953-959.
- Houck, J.P. & M. Smaciarz (1977). Using the consumer price index as part of the index of prices paid by farmers: An evaluation. *American Journal of Agricultural Economics*, 59(11), 731-737.
- Johnson, K.M. & R.L. Purdy (1980). Recent metropolitan population change in fifty-year perspective. *Demography*, 17(2), 57-70.
- Mattila, P. (1976). Metropolitan living costs, labor costs, and regional variation: Comment. Southern Economic Journal, 25(4), 744-748.
- McMahon, W.W. & C. Melton (1978). Measuring cost-of-living variation. *Industrial Relations*, (10), 331-335.
- Morrison, P.A. & J.P. Wheeler (1976). Rural renaissance in America: The revival of population growth in remote areas. *Population Bulletin*, 31(10), 2-26.
- Norwood, J.L. (1981). Two consumer price index issues: Weighting and homeownership. *Monthly Labor Review*, (3), 56-63.
- Norwood, J.L. (1980). The CPI controversy. Labor Law Journal, 18(3), 131-133.
- Rainey, K.D. (1976). Forces influencing rural community growth. American Journal of Agricultural Economics, 58(12), 959-962.
- Schwaryweller, H.K. (1979). Migration and the changing rural scene. *Rural Sociology*, 44(Spring), 7-23.
- Shaffer, R.E. (1979). Rural employment and rural-urban population shifts: Discussion. American Journal of Agricultural Economics, 61(12), 975-976.
- Sherwood, M.K. (1975). Family budgets and geographic differences in price levels. *Monthly Labor Review*, (4), 8-12.

- Tucker, J. (1976). Changing patterns of migration between metropolitan and non-metropolitan areas in the U.S.: Recent evidence. *Demography*, 13(11), 435-443.
 Walters, C.G. (1978). *Consumer behavior: Theory and practice (Third Edition)*. Homewood, IL:
- Walters, C.G. (1978). *Consumer behavior: Theory and practice (Third Edition)*. Homewood, IL: Richard D. Irwin, Inc.
- Watts, H.W. (1980). Special panel suggests changes in BLS family budget program. *Monthly Labor Review*, (12), 8-10.

THE RETIREMENT DECISION

Michael D. Evans, Winthrop University evansm@winthrop.edu

CASE DESCRIPTION

Time value of money is the primary subject matter of this case. Students are asked to apply time value of money techniques in a retirement planning scenario. Thus, they will be able to see a practical application of present and future value concepts. The case is appropriate for the first undergraduate course in financial management. It can also be used in a graduate survey course. The case is designed to be covered in one 50-minute class period and will likely require 2-3 hours of outside student preparation. Familiarity with a financial function calculator could significantly reduce students' preparation time.

CASE SYNOPSIS

Jim Abbott, an Executive Vice President of Bank USA, has just learned that his employer has entered into merger discussions with a large bank conglomerate. If the deal is consummated, Jim will be required to relocate and will likely have a change in his job responsibility and reporting relationship. Jim and his wife Mary have recently completed the construction of a multi-million dollar home on the lake. They are extremely active in the community so the prospects of relocating are unappealing. Accordingly, they've scheduled a meeting with Rick Johnson and Mike Davis of Wealth Management, Inc. to assess their finances and to determine if Jim is in position to retire one year from now if the merger is effected.

CASE

Jim Abbott started his career with Bank USA in 1970 as a Management Trainee. He had a natural affinity for banking and quickly moved up through the ranks. He served as a Branch Manager for several years and achieved substantial annual increases in branch deposits, loans and profitability. Jim was labeled as an up-and-comer.

He was promoted to City Executive. In this position, Jim was responsible for all branch activity in Charlotte, NC. A few years later, he was promoted to Regional Executive where he managed all branches in the Piedmont Region of North Carolina. Jim possessed a unique combination of analytical and people skills. He moved through a series of management positions at Bank USA's headquarters. Ultimately, Jim was named Chief Risk Officer. In this position, he reported directly to the Chairman of Bank USA.

Jim's income increased substantially over the years. He now earns a base salary of \$300,000 per year. In addition, he participates in two management incentive programs -- short-term and long-term. Each results in an annual bonus dependent on the attainment of corporate goals adopted by the Board of Directors. Bank USA has been very successful in meeting corporate goals. Accordingly, it has not been uncommon for Jim to receive annual bonuses totaling \$3-400,000. Jim has the option to defer some or all of the bonuses. This is an annual election. In the early years, he deferred bonuses. More recently, he received bonuses in the current year in order to pay for the construction of his house. Jim has elected to defer \$25,000 of the bonus to be received six months from now. The remainder will be used for construction related costs, home furnishings and new cars. His residence has a market value of \$2.5 million. There is no mortgage balance.

Jim also participates in various stock option and employee stock purchase programs. He has acquired a substantial number of shares of Bank USA and has options to acquire additional shares.

He participates in both qualified and nonqualified retirement plans. The qualified plans include a regular retirement plan and a company savings plan (401(k)). Bank USA makes 100% of the contribution to the regular retirement plan. Jim will receive a retirement benefit based on the accumulated account balance. The company will contribute \$18,000 to Jim's account one year from now. Jim contributes 8% of his base salary to the company savings plan. The company matches the first 6% of his salary dollar for dollar. Contributions are made to the company savings plan at the end of each calendar quarter. These monies will be rolled to an IRA at retirement and will continue to enjoy tax-deferred compounding.

Bank USA has a non-qualified deferred compensation plan for its executives. Executives can elect to defer some or all of the their annual bonuses to this account. Interest is credited annually at a rate of prime +2%. Since this is a non-qualified plan, plan assets can be reached by creditors of Bank USA. The bank has taken steps to minimize exposure of plan assets to creditors. The bank also has a supplemented executive retirement plan (SERP). The bank makes 100% of the contribution to this plan. The bank will contribute \$12,000 to the plan next year. \$3,000 will be contributed quarterly beginning three months from now. Jim has participated for several years. Unfortunately, Jim cannot roll the assets of either the deferred compensation plan after retirement. These amounts will be taxable in the year received. He will take a lump sum distribution from the SERP at retirement. Jim will be required to pay taxes at his marginal tax rate on the distribution. The bank will withhold income taxes. The balance will be invested along with other personal investments and will have an 8% expected rate of return.

Rick and Mike believe 8% is a realistic rate of return assumption given their twenty-year investment time horizon. They note that the historic rate of return for the stock market is approximately 11%. Jim and Mary are not overly risk averse. Accordingly, a 70% allocation to stocks is planned for personal investments. This allocation may be reduced in later years. However, a more balanced allocation of 60% stocks and 40% bonds would also be expected to achieve the "conservative" 8% rate of return assumption over a period of years.

Mary has not worked outside of the home. She and Jim have raised three children. Each of the children has established their own household and has begun a career.

Over the years, the bank has acquired a number of other banks. It has transformed itself from a regional power to one of the largest financial institutions in the nation. Accordingly, the complexity of Jim's job has increased exponentially. Not only is Jim required to assess larger credit risks, he's also responsible for the detailed review of the loan portfolio of potential bank acquisitions. Bank USA also increased its international operations. Jim must travel extensively.

Jim has grown tired of the travel and the increase in job-related stress. He's beginning to think that this may be a good time to retire. He and Mary are in reasonably good health. They've accumulated personal and retirement assets. Why not retire and devote more time to their passion? Sailing!

Jim scheduled an appointment with Rick Jackson and Mike Davis of Wealth Management, Inc. The firm, established in 1983, specializes in providing comprehensive financial planning services to high income, high net worth individuals. Specifically, they market their services to corporate executives and small business owners. Rick and Mike are both CPAs and Certified Financial Planners. They are also experienced investment advisors.

Jim was a client of Rick and Mike at their former employer, a major CPA firm. When the two principals started their own firm, Jim took his business to their new company. Now he challenged Rick and Mike to assess his retirement prospects and review his investments. Rick and Mike will be paid a fee of \$10,000 for their analysis and continued assistance during the upcoming year. This fee will be paid from the Abbotts' existing cash balance.

Rick and Mike explained to Jim that the following steps needed to be undertaken in order to assess Jim's ability to retire one year from now.
- Determine a retirement income need in today's dollars.
 Identify all relevant sources of retirement income.
- Compute the amount of required capital at retirement.
- 4. Compute the amount of required capital at retirement.
- 5. Compare capital required to capital available.
- 6. Develop appropriate strategies in the event of a shortfall.

Jim was instructed to bring the most recent statement for all personal and retirement accounts. Rick and Mike learned the following.

Table 1 Investment Assets Jim and Mary Abbott		
Balance		
\$692,300		
850,000		
915,000		
265,000*		
375,000		
468,000		

* \$25,000 will be added to this account in six months.

After reviewing Jim and Mary's expenditures over the past year and anticipated lifestyle after retirement, a pre-tax retirement income goal of \$300,000 in today's dollars was established. Jim and Mary are in reasonably good health. Their life expectancy is 21 years. Inflation is expected to average 3% over this period. Accordingly, their annual income goal will be \$309,000 at retirement. This amount will increase by 3% annually thereafter.

The Social Security Administration has projected that Jim and Mary will receive a monthly social security benefit of \$2,600 beginning on Jim's planned retirement date one year from now. This benefit will increase annually at the assumed inflation rate of 3%. The Abbotts are concerned after reading recent articles that suggest that the Social Security system may become insolvent during their retirement years. Accordingly, they've asked Rick and Mike to assess their ability to retire with and without the Social Security benefit.

Jim and Mary are in the 40% tax bracket. This is not expected to change after retirement. Jim is a knowledgeable investor and not overly risk averse.

Rick and Mike follow a top-down approach to fundamental analysis. They note that the economy has been weak the last few years. Consumer confidence is low and businesses have cut back on capital spending. The broad stock market averages have declined over 20% in each of the last two years despite a series of interest rate cuts by the Federal Reserve. The President and Congress are working on an economic stimulus package.

Rick and Mike believe the economy is near the bottom of the economic cycle. Accordingly, they are optimistic regarding the stock market over the intermediate and long term. Their analysis suggests that the stock market as a whole should generate an average annual return of 10% over the planning period. This is substantially below the unusually high returns of the 90s, but is in line with historical long-term performance.

After a careful review of the Abbotts' investments and target asset allocation, the following expected rates of return were estimated. It was decided that an 8% discount rate should be used for all present value calculations.

Table 2 Expected Rates of Return (ROR)Jim and Mary Abbott			
Account	ROR (%)	Compounding	
Regular Retirement Plan Company Savings Plan SERP Deferred Compensation Plan Company Stock Other Personal Investments Cash (10% of total) Bonds (20% of total) Stocks (70% of total)	6 8 4 8 6 8	Semi-annual Semi-annual Quarterly Monthly Annual Annual	

Jim and Mary also inquired about borrowing against the equity in their home. They note that they have few itemized deductions and wonder if this is an effective tax strategy. They are considering borrowing \$100,000 at 7% for 15 years.

Having gathered the appropriate data, it's time for Rick and Mike to roll up their sleeves. It's important that their analysis be complete and accurate. After all, the quality of the Abbotts' retirement years is now largely in their hands.

FINDING AND VERIFYING ALL SOLUTIONS OF A SYSTEM OF NONLINEAR EQUATIONS USING PUBLIC DOMAIN SOFTWARE

Max E. Jerrell, Northern Arizona University max.jerrell@nau.edu Wendy A. Campione, Northern Arizona University wendy.campione@nau.edu James N. Morgan, Northern Arizona University james.morgan@nau.edu

ABSTRACT

Economic models are often stated as systems of nonlinear equations, for example general equilibrium models, game theory models, and macroeconomic models. A critical issue is whether the model has a solution and is the solution unique. Interval arithmetic is an arithmetic that operates on intervals rather than point values. It can be used to find all solutions of a system of nonlinear equations over a specified region. We present arguments demonstrating that this arithmetic is capable of determining existence and uniqueness. We then use a public domain software package on several simple economic examples to demonstrate the technique.

WTO/GATT TRADE ROUNDS: PAST AS PROLOGUE

William J. Kehoe, University of Virginia wjk@virginia.edu

ABSTRACT

This research examines the process and outcomes of trade rounds. The examination includes a review of each General Agreement on Tariffs and Trade (GATT) trade round, its period of activity, objectives, and contributions. Then, the paper examines the World Trade Organization's Ministerial Conferences and reviews their objectives. Finally, the research reviews the status of the WTO's Doha Round and considers a question of whether the GATT experience will be prologue to successful WTO trade discussions.

INTRODUCTION

On January 1, 1995, a new multilateral trade organization emerged on the world's stage, the World Trade Organization (WTO). Its prime objective is to strengthen the world trading system and, in this regard, it aspires to be more effective than the General Agreement on Tariffs and Trade (GATT), the organization it replaced. As stated succinctly on its website (WTO About, 2003), "the World Trade Organization is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business."

OBJECTIVE OF THE RESEARCH

At this time now, the WTO is involved in a round of trade discussions. These discussions, formally titled the Doha Development Agenda but known popularly as the Doha Round, initiated in November 2001 at a WTO Ministerial Conference in Doha, Qatar and hope to conclude by January 2005 (The Economist, 2003a; WTO Doha, 2001; WTO Doha, 2003). The Doha Round opens "against long odds" with support of the United States working with the European Union and other countries (Zoellick, 2002). Prior to Doha, the world trading nations participated in eight rounds of trade talks under the GATT.

The objective of this research is to examine multilateral trade negotiations by reviewing previous GATT trade rounds as a way of underpinning an understanding of the WTO's Doha Round. The examination of GATT includes a review of each GATT round, its period of activity, objectives, and contributions. Then, the paper examines the WTO Ministerial Conferences and reviews their objectives. Finally, a review of the status of the Doha Round and a question of whether the GATT is prologue to the success of present WTO trade discussions.

GATT AND THE WTO

The General Agreement on Tariffs and Trade (GATT) is an ad hoc, provisional organization created in the late 1940s after the world trading nations failed to implement an International Trade Organization (Cooper, 1994; Kehoe, 1998). The GATT operated from 1947 until the emergence of WTO on January 1, 1995. Upon the creation of the WTO, the GATT no longer exists as an organization, but continues as an agreement updated in the Uruguay Round (discussed below).

GATT organizationally now is an agreement administered by the WTO. It deals primarily with trade in goods. Three other agreements in the WTO, a General Agreement on Trade in Services

(GATS), an Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and an Agreement on Trade-Related Investment Measures (TRIMs) involve respectively services, intellectual property, and investment issues in world trade (Kehoe, 1998; Denis, 2003). In summary, the World Trade Organization administers four agreements - the GATT, the GATS, the TRIPS, and the TRIMs as well as providing a forum for trade negotiations, mediating trade disputes, monitoring national trade policies, providing technical assistance and training for developing countries, and cooperating with other international organizations (Kehoe, 1998; WTO and GATT, 1998; Denis, 2003; WTO About, 2003).

The World Trade Organization currently has 145 member countries (WTO About, 2003). Decision-making in the WTO is by consensus among the 145 countries. When consensus is not possible, decisions carry on a two/third majority vote on a one-country, one-vote basis. Voting is necessary on an interpretation of a trade agreement or to waive an obligation of a member. Voting occurs also in situations to amend provisions of an agreement, to admit a new member to the organization, and/or to accept provisions of a trade round, as in the case of the Doha Round (WTO Decisions, 2003). Similarly, under GATT, voting occurred for much the same reasons.

OVERVIEW OF THE GATT ROUNDS

The GATT conducted eight rounds of multilateral trade negotiations from 1947 to 1993. While some of the rounds took extra time, most eventually had successful conclusions with a reduction in tariffs and solidifying rules governing world trade solidified (Pitroda, 1995). The GATT rounds provided a venue, a process, and an atmosphere that facilitated multilateral trade negotiations. Naming each round either for the place where a round's discussions initiated or for an individual whose actions encouraged a particular round.

The focus of earlier GATT rounds primarily was about reducing tariff levels in the world, while later rounds were about a wide range of trade issues. Issues included trade in services; the protection of intellectual property through international rules for the protection of patents, trademarks, and copyrights; issues of agriculture subsidies; development and implementation of anti-dumping codes; and trade dispute settlement procedures. The GATT rounds reviewed here are in chronological order. Research by Kehoe (1998) and the WTO/GATT Chronology (1998) underpin the discussion of the GATT rounds presented below.

GATT's first round of multilateral trade negotiations, the Geneva Round, was in three parts from April to October 1947, February to March 1948, and August to September 1948. The first part of the round involved the world's trading nations attempting to develop an International Trade Organization. The twenty-three nations charged with developing an ITO charter engaged in multilateral trade negotiations during the period April to October 1947. While the ITO did not become an entity due to the failure of national legislatures to ratify its charter, the nations charged with drafting the charter were in a setting for trade discussions. These discussions resulted in 20 tariff reduction schedules being negotiated affecting an estimated \$10 billion in world trade evolved (The Roots of the WTO, 1998). The second part of GATT's first round occurred when delegations from 53 countries met in Havana, Cuba to consider the ITO draft charter. At that time, the contracting parties held their first formal discussions following the creation of the GATT. The third session of the round was in Geneva in August/September, 1948, following the relocation of the GATT Secretariat from Lake Placid, NY to Geneva, Switzerland.

Thirteen countries participated in the second GATT round, the Annecy Round, hosted at Annecy, France in April to August 1949. Discussions primarily were about reductions in tariffs. The round's results were in 5000 tariff concessions offered and the inclusion of ten additional countries in GATT. During this round the United States announced that the ITO charter would not be ratified by the U.S. Congress, which meant that the International Trade Organization would not be a realty, thereby leaving the GATT as the world's only multilateral trade organization.

From the continent, GATT moved to Torquay, England for its third round of trade negotiations from September 1950 to April 1951. Thirty-eight countries participated in the Torquay Round, where the focus continued on seeking tariff reduction agreements.

The GATT returned to Geneva, Switzerland for its fourth round of trade negotiations from January to May 1956. Twenty-six countries participating in the Geneva Round agreed to approximately \$2.5 billion in reductions of tariffs.

Honoring U.S. Secretary of State Douglas Dillon, the GATT's Dillon Round in September 1960 to July 1962 focused primarily on a particular area of the world, Europe. Early in the round, GATT participants negotiated a single schedule of Common External Tariff concessions for the European Economic Community. Then, the round turned to developing further worldwide tariff reductions. Results negotiated were approximately 4400 tariff concessions involving \$4.9 billion in trade.

Named in honor of U.S. President John F. Kennedy, the Kennedy Round from May 1964 to June 1967 had 50 countries participating. The round is notable for adoption of an across-the-board linear method of tariffs reduction, abandoning the traditional product-by-product approach used in earlier rounds. A Code on Anti-Dumping was developed during the round and a 50% cut in tariff levels in many areas of trade resulting in approximately \$40 billion in tariff concessions.

From September 1973 to November 1979, ninety-nine countries participated in the Tokyo Round of trade negotiations. Among areas in which agreements were reached were subsidies and countervailing measures, import licensing procedures, government procurement procedures, a revision of the anti-dumping code, and policies concerning trade in meat, dairy products, and civil aircraft. Tariff reductions of more than \$300 billion were realized as the result of the seventh round, including a 35% reduction mutually between the U.S. and the European Community and a 40% reduction by Japan on U.S. imports to Japan (McKinney, 1991). Additionally, enacted was an agreement on liberalizing international trade in textiles, the Multifabric Agreement. This agreement superseded an earlier short-term agreement on international trade in fabrics in place since 1961.

The agenda for the final GATT round, September 1986 to December 1993, formed at a GATT ministerial meeting at Punta del Este, Uruguay in fall 1986. At that meeting, GATT ministers initiated the eight round, the Uruguay Round, on September 20, 1986 with 117 participating nations.

Planned to take approximately four years, among areas selected for negotiation during the Uruguay Round were tariffs, non-tariff barriers, protection of intellectual property and trade of counterfeit goods, trade-related investment measures, agriculture subsidies, safeguards, tropical products, natural resource products, and textiles and clothing. Additionally, the agenda included a review of GATT articles, examination of the GATT dispute settlement procedures, the functioning of the entire GATT system, and a review of the Tokyo round's agreements.

Serious issues inhibited the Uruguay Round's progress. A global recession caused governments to impose import duties to protect jobs threatened by foreign competition, thereby causing an unpleasant environment for discussing trade issues (Sutherland, 1993). A major issue of contention was agriculture, an area of national sensitivity for some countries. Given its sensitivity, the GATT Rules of Conduct did not consider trade in agriculture, and many countries had independent policies for agriculture trade and subsidies (Clark, 1993).

Another difficult issue was protection of intellectual property. The United States favored protection, with other nations resisting regulations. Developed and developing countries took opposing positions. Developed countries favored intellectual property protection by the GATT. Developing countries argued that intellectual property is a concern of the World Intellectual Property Organization and not of the GATT.

On December 15, 1993, GATT ministered concluded discussions and signed a final GATT agreement on April 15, 1994 in Marrakech (Hage and Impoco, 1994). The Uruguay Round cut tariffs on a wide variety of goods, provided enhanced protection for patents and copyrights (Bowen, 1993), and became the basis for the World Trade Organization established on January 1, 1995.

WTO MINISTERIAL CONFERENCES

The GATT sponsored eight rounds of multilateral trade discussions bringing nations together to facilitate trade. At the conclusion of the eight round, the GATT gave way to the emergence of the WTO. Today, headquarters of the WTO is in Geneva, Switzerland.

A General Council manages the WTO and is its second highest-level decision-making body, meeting regularly to carry out the functions of the WTO with the authority to act on behalf of the WTO Ministerial Conference, the highest-level WTO authority. The WTO Ministerial Conference meets every two years (WTO General Council, 2003; WTO Organization, 2003). Thus far, there have been four WTO ministerial conferences beginning in 1996 in Singapore, with a fifth conference upcoming during September 2003. Below is a brief review of the ministerial conferences.

World Trade Organization members from 120 countries as well as countries acceding to the WTO participated in the First WTO Ministerial Conference in Singapore from December 9 to 13, 1996. During the Conference, WTO Ministers examined the performance of the WTO during the first two years of activity and reviewed the progress on the implementation of the Uruguay Round Agreements. (WTO Singapore, 1996)

The Second WTO Ministerial Conference was in Geneva, Switzerland between May 18 to 29, 1998. This conference reviewed the work of the WTO, including a continued review of progress under the Uruguay Round agreements. The following statement reflects a particular concern voiced at the conference (WTO Geneva, 1998). "We remain deeply concerned over the marginalization of least-developed countries and certain small economies, and recognize the urgent need to address this issue which has been compounded by the chronic foreign debt problem facing many of them."

Protests in the streets at the Third WTO Ministerial Conference in Seattle, Washington November 30 to December 3, 1999 brought an early adjournment. It is at this conference that the WTO considered the need for a formal round of trade discussions and made ready for the decisions to be taken at Doha at its next ministerial conference (WTO Seattle, 1999)

The Fourth WTO Ministerial Conference in Doha, Qatar from November 9 to 14, 2001 authorized the Doha Development Agenda, known popularly as the Doha Round of trade negotiations. A declaration of the Fourth Ministerial Conference (the Doha Declaration) provided a mandate for negotiations on a range of subjects in the Doha Round, including issues concerning the implementation of present trade agreements in the world. The Doha Round's negotiations will take place in the WTO's Trade Negotiations Committee and/or its subsidiaries (WTO Doha, 2001; WTO Trade Negotiations Committee, 2003). A very public aspect of the Fourth WTO Ministerial Conference was China's request for membership. China's WTO application was approved at Doha on November 10, 2001. China became the 143rd WTO member on December 11, 2001 (WTO China, 2001).

The Fifth WTO Ministerial Conference will be in Cancun, Mexico on September 10 to 14, 2003. A primary agenda item likely will be a review of progress in negotiations and other work under the Doha Development Agenda/Doha Round (WTO Cancun, 2003). The conference particularly will focus on trade in agriculture, given that the Doha Round failed on March 31, 2003 to agree to agriculture negotiating modalities (WTO News, 2003)

THE DOHA ROUND

The Doha Round, formally the Doha Development Agenda, was authorized on November 14, 2001 and is scheduled for completion by January 1, 2005. The Doha Round is an important undertaking for world trade because it is a multilateral gathering of trading nations rather than a bilateral meeting of nations two at a time. There are significant reasons why multilateral trade negotiations are preferred to bilateral negations. First, one may posit that multilateral trade negations are more efficient than nations attempting bilateral meetings about trade. Put simply, bilateral

negotiations, while easier than multilateral, have a "dubious trade-enhancing impact" than do multilateral trade discussions (The Economist, 2002b). Second, multilateral discussions enable participants from developing nations to have somewhat greater influence than if a developing nation is in a bilateral trade discussions with a more developed country (The Economist, 2003b). Third, global trade negotiations enable politically sensitive issues in world trade a venue for presentation in a global context rather than in a national or regional context. Fourth, multilateral negotiations allow issues a packaging approach so that unpopular issues from a member nation's domestic-policy viewpoint present in a package with more economically and politically attractive issues (Trade Rounds' Advantages, 1998).

During the Doha Round, participating countries will be introducing various proposals for consideration by WTO member countries. The United States, for example, is offering a proposal to eliminate all tariffs on manufactured goods by the year 2015, eliminating an estimated US\$18 billion in tariffs that American consumers pay each year (Andrews, 2002; King, 2002). Other countries likely will offer similar proposals for consideration during the round. (Doha Agenda, 2003).

How is the Doha Round unfolding? Is it harmonious or are contentious issues inhibiting progress? Recall, as discussed above, in the GATT's Uruguay Round that agriculture significantly inhibited progress. It appears that agriculture once again is problematic. During a March 31, 2003 meeting, WTO member failed to agree to a framework for agriculture trade reform. The desired framework involved establishing "modalities" or targets for achieving the objectives for negotiations in trade of agriculture. WTO Director General Supachai Panitchpakdi expressed disappointment about the failure to agree on agriculture negotiating modalities and encouraged government toward compromise on the issues involving agriculture (WTO News, 2003).

Compromise on issues involving agriculture is a key to successful progress in the Doha Round. Otherwise, world trade may be "deadlocked in Doha" and the world nations may begin to focus on "trade-diverting bilateral or regional trade deals" (The Economist, 2003b). Hopefully, a spirit of compromise abounds and the Doha Round will conclude successfully on schedule conclude by January 1, 2005.

PAST AS PROLOGUE

In GATT, the world trading nations had a provisional organization that made possible a venue for multilateral trade discussions. In the WTO, the world hopefully has a permanent organization to facilitate continued development of multilateral trade as well as providing a venue for trade discussions. If this occurs, the past success of the GATT will be prologue to an equally successful future for trade under the WTO.

However, for the WTO, significant obstacles stand against a past as prologue setting. For one, many countries believe the WTO is too powerful and impinges on their national sovereignty. Other countries do not want to abide by ever increasing WTO rules. Yet, other countries dislike having bureaucrats in Geneva attempting to serve as an overarching policy body for trade. These and other complaints, both real and perceived, give rise to some member countries and non-member countries being in opposition to the WTO. Whether or not the past is prologue may rest in how well the WTO addresses its critics and articulates its benefits.

Critics of the WTO argue that it is a dictatorial tool of the rich and powerful, destroys jobs, and ignores the concerns of health, the environment and development. The critics can be vocal and, at times, disruptive, as in the case of the protests during the Seattle Ministerial Conference (Knapp, 1999; Korten, 1999; Lefevre and Newman, 1999). The following quote (Knapp, 1999) by a Seattle protestor perhaps illuminates some of the feelings against the WTO. "The WTO aims to eliminate what they are calling non-tariff trade barriers. A lot of those trade barriers are actually hard-won environmental and food safety protections."

In discussions with its critics, the WTO identifies ten common misunderstandings about its goals policies. A list of the misunderstandings is available on the WTO website together with WTO

responses to each of the misunderstandings (WTO Misunderstandings, 2003). The common misunderstandings about the WTO include:

- 1. The WTO dictates policy to countries around the world.
- 2. The WTO is an advocate of free trade at any cost.
- 3. In the WTO, commercial interests take priority over development.
- 4. In the WTO, commercial interests take priority over the environment.
- 5. In the WTO, commercial interests take priority over health and safety.
- 6. The WTO destroys jobs and causes poverty to worsen.
- 7. Smaller countries are powerless in the WTO.
- 8. The WTO forces weaker countries to join.
- 9. The WTO is a tool of powerful lobbying organizations.
- 10. The WTO is undemocratic in concept and actuality.

Supporters of the WTO argue that it is an important entity for advancing international comity and trade. Rather than a world of bilateral trade arrangements, the WTO facilitates multilateral trade agreements that benefit consumers exponentially by lowering duties and tariffs. Benefits of the WTO include the following (WTO Benefits, 2003):

- 1. The WTO helps to promote peace by promoting trade among nations
- 2. The WTO provides a process to handle trade disputes constructively
- 3. The WTO rules make life easier for businesses and consumers
- 4. The WTO advocates free trade and free trade reduces the cost of living
- 5. The WTO enables a wider choice of product and services for the world's consumers
- 6. In advocating free trade, the WTO facilitates increases in incomes
- 7. In advocating free trade, the WTO stimulates economic growth
- 8. The basis principles of the WTO make life more efficient
- 9. Through membership in the WTO, governments are shielded from trade lobbyists
- 10. The WTO system encourages good government.

CONCLUSION

An article in The Economist (2002a) noted "the WTO and its predecessor the General Agreement on Tariffs and Trade helped to boost global trade by encouraging countries to lower their tariff barriers in successive rounds of trade negotiations." At the First WTO Ministerial Conference in Singapore, the WTO affirmed its vision and commitment to fostering global trade in the following statement (WTO Declaration, 1996). "In pursuit of the goal of sustainable growth and development for the common good, we envisage a world where trade flows freely. To this end, we renew our commitment to:

- A fair, equitable and more open rule-based system;
- Progressive liberalization and elimination of tariff and non-tariff barriers to trade in goods;
- Progressive liberalization of trade in services;
- Rejection of all forms of protectionism;
- Elimination of discriminatory treatment in international trade relations;
- Integration of developing and least-developed countries and economies in transition into the multilateral system; and
- The maximum possible level of transparency."

The GATT, a creation of the Atlantic nations (Bergsten, 1994), served the world effectively for decades. The WTO is a creation of 129 member nations of the GATT (WTO and GATT, 1998). Its origins are geocentric; it is of the world and for the world. Given its origins, one may posit that the WTO better will embrace the nations of Latin America and the Asia-Pacific than did the GATT. Particularly China, a nation that in 1995 was the second largest recipient of foreign direct investment in the world (Tse, Pan and Au, 1997), and whose "emergence is seen as the economic event of the

decade" (Czinkota and Ronkainen, 1997, p. 831), needs to be welcomed in the global trade arena. As noted above, approval of China's WTO application at Doha on November 10, 2001 enabled China to become the 143rd member of the WTO on December 11, 2001 (WTO China, 2001).

So, will the past be prologue to a better future for world trade? In considering this question, reflection on a statement by a former WTO Director General Michael Moore is instructive (Moore, 1999). "The real question we should ask ourselves is whether globalization is best left unfettered, dominated by the strongest and most powerful, the rule of the jungle, or managed by an agreed system of international rules, ratified by sovereign governments." The WTO provides the mechanism and venue for developing and implementing an agreed system of international rules. The past indeed is prologue, or so it seems!

REFERENCES

- Andrews, Edmund L. (2002). "U.S. to Seek to Abolish Many Tariffs," *The New York Times*, 151(November 26), C1 and C12.
- Bergsten C. Fred (1994). "APEC and World Trade: A Force for Worldwide Liberalization," *Foreign Affairs*, 73(May/June), 20-26.
- Bowen, Brent (1993). "The World Trade Picture," *The Wall Street Journal*, December 16, A10.
- Clark, Lindley H., Jr. (1993). "The GATT Struggle Continues," *The Wall Street Journal*, March 16, A27.
- Cooper, Helene (1994). "U.S.'s Slow Action on World Trade Pact Mirrors Treatment of Failed 49 Accord," *The Wall Street Journal*, August 29, A6.
- Czinkota, Michael R. and I. A. Ronkainen (1997). "International Business and Trade in the Next Decade: Report from a Delphi Study," *Journal of International Business Studies*, 28(Fourth Quarter), 827-844.
- Denis, Jean-Emile (2003). "Making International Marketing Decisions Under WTO Rules," *Thunderbird International Business Review*, 45(2), 185-210.
- Doha Agenda (2003). <u>http://www.wto.org/english/tratop_e/dda_e/dda_e.htm</u>
- Hage, David and J. Impoco (1994). "Are the Trade Wars Over?" U.S. News and World Report, January 3, 54.
- Kehoe, William J. (1998). "GATT and WTO: Facilitating Global Trade," Journal of Global Business, 9(16), 67-76.
- King, Neil (2002). "Ú.S. Seeks Tariffs Cuts Among WTO Members," *The Wall Street Journal Online*, November 26, 1-2.
- Knapp, Don (1999). "Activists to WTO: Put People over Profits," *Cable News Network*, November 29, 1999, <u>http://www.cnn.com/US/9911/29/wto.seattle.02/</u>
- Korten, David (1999). "Taking on the Corporate and Financial Rulers," A Journal of Positive Futures, <u>http://www.futurenet.org/events/wtodec3.html</u>
- Lefevre, Greg and Lucia Newman (1999). "Clinton Arrives to Aftermath of WTO Protest," *Cable News Network*, December 1, 1999, <u>http://www.cnn.com/1999/US/12/01/wto.04/</u>
- McKinney, Joseph A. (1991). "How Multilateral Trade Talks Affect the U.S.," *Baylor Business Review*, 8(Fall), 24-25.
- Moore, Michael (1999), "The WTO Is Not a World Government and No One Has Any Intention of Making It One," WTO Press Release 155, November 29, 1999, <u>http://www.wto.org/english/thewto_e/minist_e/min99_e/english/press_e/pres155_e.htm</u>
- Pitroda, Salis S. (1995). "From GATT to WTO," *Harvard International Review*, 16(Spring), 46-47 and 66-67.
- Sutherland, Peter (1993). "The Importance of Free Trade," Hemispheres, (November), 21-26.
- The Economist (2002a). "Weighing Up the WTO," *The Economist*, November 23, 72.
- The Economist (2002b). "Fast Track to Doha," The Economist, August 3, 10.
- The Economist (2003a), "Special Report World Trade," The Economist, March 29, 63-64.

The Economist (2003b). "World Trade: Deadlocked in Doha," The Economist, March 29, 13-14. Trade Rounds' Advantages (1998). http://www.wto.org/2 2 b wpf.html Tse, David K., Yigang Pan, and Kevin Y. Au (1997). "How MNCs Choose Entry Modes and Form Alliances: The China Experience," Journal of International Business Studies, 28(Fourth Quarter), 779-805. WTO About (2003). http://www.wto.org/english/thewto e/whatis e/whatis e.htm WTO Benefits (2003). http://www.wto.org/english/thewto e/whatis e/10ben e/10b00 e.htm WTO Cancun (2003). http://www.wto.org/english/thewto e/minist e/min03 e/min03 e.htm WTO China (2001). http://www.wto.org/english/news e/pres01 e/pr252 e.htm WTO Declaration (1996). http://www.wto.org/english/thewto e/minist e/min96 e/wtodec e.htm WTO Doha (2001). http://www.wto.org/english/thewto e/minist e/min01 e/min01 e.htm WTO Doha (2003). http://www.wto.org/english/tratop e/dda e/dda e.htm WTO General Council (2003). http://www.wto.org/english/thewto e/gcounc e/gcounc e.htm WTO Geneva (1998). http://www.wto.org/english/thewto e/minist e/min98 e/min98 e.htm WTO Misunderstandings (2 0 0 3)) . http://www.wto.org/english/thewto e/whatis e/10mis e/10m00 e.htm WTO News (2003). http://www.wto.org/english/news e/pres03 e/pr336 e.htm WTO Organization (2003). http://www.wto.org/english/thewto e/whatis e/tif e/org1 e.htm WTO Seattle (1999). http://www.wto.org/english/thewto e/minist e/min99 e/min99 e.htm WTO Singapore (1996). http://www.wto.org/english/thewto e/minist e/min96 e/min96 e.htm WTO Negotiations Trade Committee (2003). http://www.wto.org/english/tratop e/dda e/work organi e.htm WTO/GATT Chronology (1998). http://www.wto.org/whats new/chrono.htm WTO and GATT (1998). http://www.wto.org/wto/about/facts6.htm

Zoellick, Robert (2002). "Unleashing the Trade Winds," *The Economist*, December 7, 27-29.

Balasundram Maniam, Sam Houston State University maniam@shsu.edu Neslihan Guzeltepe, Sam Houston State University gba_bxm@shsu.edu Hadley Leavell, Sam Houston State University fin whl@shsu.edu

ABSTRACT

The European Monetary Union and the creation of the monetary Euro impacted the countries in the Union, as well as, the rest of the world. The purpose of this study is to examine the Euro's performance in international markets and a comparison with the U.S. dollar. In the first part, a brief history and structure of the European Monetary Union is given. In the second part an analysis is made of the domestic and international use of different currencies in the market. Finally, the paper focuses on the comparison of the U.S dollar and the Euro, exchange rate fluctuations, and the arguments about the future of the exchange rate between them.

STRATEGIES TO COUNTERACT THE EFFECTS OF LOST INTELLECTUAL PROPERTY PROTECTION: THE CASE OF PATENT EXPIRATION

John A. Pearce II, Villanova University john.pearce@villanova.edu

ABSTRACT

Since patents provide intellectual property protection for companies that invent essentially any processes or products, they influence the financial success of a wide range of firms. In industries with high levels of innovation, this influence reaches the level of criticality for firms with expiring patents because their profit streams can run dry as quickly as they began when the patented products were first introduced. This paper is discusses strategies to forestall the impact of the competition that accompanies patent expiration and to extend the profitability of the product, thereby increasing the rewards for innovation.

Three options are proffered in this paper that managers and scholars can consider in their search for strategies that have been successfully implemented by patent-sensitive firms, and that are adaptable to the requirements of other industries: preemptive launching a generic product, layering innovations, and creating me-too patentable tweaks. To illustrate the value and broad potential of these strategies, each option is presented with examples of its successful implementation in the pharmaceutical industry.

WHEN PATENTS EXPIRE

A patent permits a company to enjoy a period of limited competition and high profitability as consequences of its investments in the development of intellectual property. Patent protection prevents competitors from marketing exact copies. When a patent expires, however, lower priced versions of the formerly patented item can be introduced by rivals. Research in 18 industries discloses that within the first year after patent expiration, an average of 17.2 generics producers enters the market (Grabowski & Vernon, 1992). The number increases to 25.1 after two years. The principal consequences for the expired patent holder are that its product can lose market share and considerable profitability in a matter of days or weeks.

Fortunately, for the holders of expiring patents, innovative strategists in differing industries have created strategies to forestall their loss of profits. The first strategy is based on the release of a generic version of the product before the patent expires. The second strategy involves the use of patents on improvements to the base product to extend the market position of the firm. The third strategy calls for the originator to replace a patent expiring product with a patentable near clone, thus facilitating the company's cannibalization of its own market share and monopolistic profits.

Patents confer the right to exclude all but the patent holder from making, using, offering for sale, and selling an invention. This right allows firms to protect from direct competition any new process, machine, manufacture, composition of matter, or innovation of another invention. To qualify for a patent, the invention must meet the criteria of novelty, usefulness, and must not be obvious. When the innovation meets these qualifications, a patent is approved. In the US, patents are granted by the United States Patents and Trademarks Office and provide protection for 17 years from the date the application was filed. Other countries have their own patent processes, requirements, and enforcement schemes, and they vary in their protected periods from 10 to 20 years

Infringement on a patent occurs when a competitor's product violates the patent protection without permission of the patent holder. In cases of infringement, the patent holder may use the

federal court system to request an injunction that stops the competitor and makes it subject to damage claims. Patent infringement is a major source of international conflict. While most nations have patent laws, their enforcement varies widely despite international agreements designed to prevent the theft of intellectual property rights. Research suggests that patent violations by Asian companies annually cost U.S. pharmaceutical firms more than \$500 million (Magnier, 1992).

When patent protection expires, the entry of low priced generic competition poses new challenges for the patent holder. Generics are characteristically offered at significantly lower prices because their manufacturers have not incurred the high levels of R&D and marketing costs that are associated with the initial introduction of a product. Because of their price advantage and therapeutic equivalence, generics quickly gain market share at the expense of the originators. Consequently, revenues from products rapidly deteriorate after their patent expiration.

COMPETITION IN THE PHARMACEUTICAL INDUSTRY

Generic drugs are bioequivalent to the brand name products. They challenge the brandname, patent-originating products for market dominance once the patent has expired. They meet the same standards for purity and strength as the brand name products that they imitate. Pharmaceutical firms that specialize in the production of generic products enter the marketplace only after their generic versions receive approval by the Food and Drug Administration (FDA) and after patents on the brand name product expire. The first generic product approved receives 180 days of marketing exclusivity, a time period in which no other generic producers may enter the market. Production of generic pharmaceuticals appeals to firms because of their ability to quickly capture a large share of established product markets.

Growth in the generic share of the global pharmaceuticals market also increases the benefits of entry. Between 1984 and 2002, the generic share of prescription units grew from 19% to 47% (PhRMA, 2002). The global market for all drugs also is expanding at 8% annually which further encourages entry by competitors after patent expiration (Rouhi, 2002).

Until the mid-1980's, most drug companies retained their monopoly position long after their U.S. patents had expired. Except in the case of extremely popular drugs with great profit potential, the cost to generic firms of duplicating the patent holder's original research and development efforts was considered too great to justify the financial returns in a competitive market. However, when the Drug Price Competition and Patent Restoration Act, also known as Waxman-Hatch Act, was passed in 1984, the regulatory barriers to generic drug firms were greatly reduced. Thereafter, generics companies were able to get FDA approval with far less R&D, and less involved clinical trials, than had previously been required. Specifically, generics firms need only to invest in replicating already invented chemical molecules and to pass a bioavailability test, which measures the level of the drug in the human body over time but not its effects. As a result, the average cost of gaining a patent for a generics firm was reduced to 1/18th as much as for the brand name pharmaceutical firms that continue to face the far more extensive requirements which force them to spend 16% of their total revenue on R&D (Bae, 1997).

Brand-name drugs have an average of 11.4 years on the market under patent protection (PhRMA, 2002). This period of monopolistic protection is judged by the government as sufficient to allow the patent holder to recoup the \$100 million R&D investment and 12 year time commitment that is incurred on average by the innovating firm in producing a new drug. Once a brand-name manufacturer loses patent protection for a profitable and popular product, generic substitutes almost completely capture the market because they are typically priced 25% to 70% lower than their brand-name equivalents (Kowalczyk, 2001). Thus, the "lost" revenues for the brand-name drug companies are substantial. The experience of Bristol-Meyers Squibb typifies the dramatic impact that generic products can have on competition after patent expiration. BMS's medication Glucophage, which had sales over \$2 billion in 2001, had its patent expire in January of 2002. Within one month, more than 85% of that drug's market share had been taken by generic alternatives.

THREE STRATEGIES TO COUNTERACT THE LOSS OF INTELLECTUAL PROPERTY PROTECTION

To combat such "losses" of revenues, a drug company may seek to optimize its profits by introducing its own generic form prior to its drug's patent expiration. The plan of the patent holder is to trade some short-term profit maximization for net gain in the longer-term. A generic substitution strategy can enable the patent-holder to increase it overall profits at the expense of generic firms and may even dissuade generic manufacturers from entering the post-expiration market.

Brand-name pharmaceutical companies have the unique ability to produce a generic version of a patented brand-name drug before the expiration of the patent. They approach customers with an offer to supply a generic version of their own patented drug at a substantial price reduction for a contract period that extends beyond the patent expiration date. Customers are attracted because such contracts make irrelevant any concerns that they have about the availability or quality of a future competitor's generic substitute. Despite its short-term revenue forfeiture, the brand name firm is also pleased. It maintains a higher-than-generic price for a set period following patent expiration when the likely alternative is to lose customer accounts altogether. For example, Upjohn succeeded in maintaining control of 90% of the generic market for its patented drug Xanax by introducing its own generic substitute one month before the Xanax patent expired (Yang, 1994). Syntex had similar success by introducing its own generic version of its patented drug Naproysn two months before its patent expired.

Research shows that the strategy of investing in preexpiration initiatives enjoys international popularity. Comanor and Schweitzer (1995: 188) summarize the collective analysis: "Early introduction of the generic product definitely benefits the patentee by raising its profits both before and after the patent on the brand-name product expires ..." Apparently concurring with this conclusion, several pharmaceuticals firms have elected to pursue strategies that include active participation in the generics market, including American Home Products that competes through its Lederle Laboratories, Bayer A.G. through its 28.3% share of Schein Pharmaceuticals, Novartis A.G. through its Azupharma and Geneva Pharmaceuticals, and Schering-Plough through its Warrick Pharmaceuticals.

The second pre-expiration strategy of pharmaceutical manufacturers involves layering patents one upon another by patenting innovations on a base product to maintain an exclusive marketplace position. The result is an enhanced product that enjoys a restrictive market that is guaranteed by additional grants of FDA exclusivity. In addition to patent protection, the FDA also grants periods of marketing exclusivity. Extended protection may be obtained from the FDA in recognition of significant innovations to an already patented product, including alterations in active ingredients, strength, dosage form, route of administration, or conditions of use. A significant innovation is one that requires new clinical studies to be conducted to gain FDA approval. For example, in 1996, Astra Zeneca obtained three years of exclusivity based on the patenting of a preservative added to the drug Diprivan. This exclusivity delayed the approval of a generic version submitted by Sicor.

Utilizing the third preexpiration strategy, in 2002, Forest Labs abandoned its antidepressant drug Celexa, even though it had two years of patent protection remaining. Its 2,300 sales representatives were retrained to promote Lexapro, which is nearly identical in chemical composition to Celexa. In its first six months on the market, Lexapro grabbed 10% of the \$8 billion and fast growing antidepressant market. Lexapro is a "me-too" drug, i.e., a slight modification on an existing drug that allows its maker to seek a new commercial patent to replace sales lost when the initial patent expires (Shook, 2003). This highly successful strategy of Forest Labs was different from the layering of patents because the company's intent was not to extend the life cycle of the base

product (the classic definition of product development) but rather to replace the original product with a "new" drug that would begin a new lifecycle of its own (i.e., innovation).

Schering-Plough used an identical strategy. In early 2002, it "tweaked" the chemical composition of Claritin, the \$1.8 billion prescription antihistamine drug for allergy relief enough to secure a patent for a new drug. Called Clarinex, the new product was introduced because Schering-Plough's patent on Claritin expired later in the year, which would have opened it to attack from cheaper, generic rivals. In 2001, AstraZeneca Plc also found success with the strategy when it launched Nexium, a reformulated version of its top-selling ulcer medication Prilosec, just prior to Prilosec's patent expiration. AstraZeneca cannibalized its own market by directly encouraging current users and their physicians to switch to the new substitute product. The company even gave Nexium the same nickname that it had used to market Prilosec - "the purple pill."

RECOGNIZING THE POTENTIAL OF PRE-EXPIRATION STRATEGIES

This paper illustrates the use of three strategies to forestall the effects of patent expiration in the pharmaceutical industry. However, the paper provides only examples, not archetypes, since each strategy is applicable to any industry where products are protected by patents. Thus, the need is for clever strategists who can adapt the strategies of the preemptively launching a generic product, layering innovations, and creating me-too patentable tweaks to the unique requirements of their industries, thereby forestalling the impact of competition, extending the profitability of a product, and increasing the rewards for the creation of intellectual property.

REFERENCES

- Bae, Jay P. (1997). "Drug patent expirations and the speed of generic entry." *Health Services Research*, 32(1), 87-101
- Comanor, W.S. and S.O. Schweitzer (1995). "Pharmaceuticals." In *The Structure of American Industry*, W. Adams and J. Brock, eds. Englewood Cliffs, NJ: Prentice-Hall, pp. 177-96.
- Grabowski, H.G. and J.M. Vernon (1992). "Brand loyalty, entry, and price competition in pharmaceuticals after the 1984 Drug Act." *Journal of Law and Economics*, 35(2), 331-350.
- "Industry Profile 2002." (2002). *PhRMA*. 1-102. http://www.phrma.org/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/publications/p
- Kowalczyk, L. (2001). "Consumer Group sues over price of cancer drug." *Boston Globe*, May 10, A1.
- Magnier, M. (1992). "U.S. Gains in Effort to Protect Intellectual Property in Asia." *Journal of Commerce*, February 3, 1-3 A.
- Ranii, D. (2001). "Generic drugs face legal hurdles." Tribune Business News, September 29, D1.
- Rouhi, A.M. (2002). "Generic Tide is Rising." *Chemical and Engineering News*, September 23, 37-51
- Shook, D. (2003). "Forest Labs: Feeling No Pain." BusinessWeek Online, March 24.
- Yang, C. (1994). "The Drugmakers vs. the Trustbusters." Business Week, September 5, 67-68.

AN ANALYSIS OF THE LEADER IN THE CONTAINERIZED DISTRIBUTION MARKET

Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Kristin O. Prien, Christian Brothers University Kprien@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

CSX is a transportation company committed to being a leader in the railroad, inland water, and containerized distribution markets. This unique rail-intermodal service (the movement of trailers or containers by rail and at least one other mode of transportation) reflects CSX's commitment to move greater quantities of goods faster and more efficiently. CSX's intermodal logistics network will combine the door-to-door convenience of trucks with the long-haul economy of rail service, providing customers with cost- efficient service. This paper studies CRX from a historical perspective. CSX has taken measures to increase shareholder value by repurchasing 60 million outstanding shares of common stock (Rowe, 1995). This repurchase along with the issuing of \$248 million in Series B notes has increased the value of the firm by the financing of capital expenditures such as new locomotives and station equipment.

INTRODUCTION

Technology and innovation remain two of the main goals CSX has established for each of its business units. CSX will expand the already existing technology groups in each of its three main entities. CSX Transport and the barging entity American Commercial Lines have developed Road Railers. These look like conventional trailers but come equipped with both rubber tires and detachable steel wheels so they can ride directly on the rails or on a highway. This continues to be the most efficient link from rail to barge, and a major step in competing with the trucking industry.

CSX would like to become the transportation industry's largest logistics firm by providing the most efficient shipping service. Plans call for additional service destinations through partnerships with other shipping firms. Also, CSX is in the final stage of a merger with Conrail. Pending the Surface Transportation Board's review of the proposed merger, CSX will increase operational efficiency by being able to designate an entire train for a certain commodity. This will lower future labor costs by up to ten percent because fewer labor hours are needed to load one commodity. CSX will improve all station facilities and rail lines. Becoming the transportation leader in the railroad industry requires a certain level of technology implementation. Mapping and positioning systems should be installed in all trains to ensure the highest level of safety.

CUSTOMER SERVICE AND QUALITY CONTROL

The railroads have experienced a decline in the level of service they offer. Delays and equipment failure have resulted in CSX losing major contracts such as Quaker Oats. The Conrail merger should open new rail lines and prevent lengthy delays. A new customer service training program will be established for all agents at CSX. They will learn about specific commodities and the requirements that are needed to ship each commodity. Agricultural commodity shippers will benefit from CSX's grain elevators and silos.

The existing management should be replaced by managers from any industry with a record of high performance in struggling companies. CSX will now have the necessary focus on daily operations that it has lacked for several years.

RAILROAD INDUSTRY ASSESSMENT

Operating and financial statistics suggest that the railroads are in the fourth stage of the industrial life cycle, since the industry is experiencing a slow but steady decline. The railroad's "glory days" lasted from the mid-nineteenth century to the late 1950s. If asked today about railroad transportation, many analysts would state that it is a dying industry, void of any new technologies to survive in the twenty-first century. Despite some analysts' views, the railroads still dominate the transportation industry in the amount of freight and high bulk/weight commodities shipping. The percentage of inter-city freight traffic is larger on the railroads than any other carrier. It is not volume of shipping that concerns companies like CSX, but the relatively low returns they experience year after year. The trend in low returns is a direct result of increasing competition. To compete with the trucking lines and air cargo carriers, the rail companies like CSX are pricing services below what it costs to provide the service.

A HIGHLY COMPETITIVE INDUSTRY

Within the transportation industry there are many substitutes for rail service. Depending on the shipment, the customer may choose among the trucking, air-cargo, and barging industries for service. By creating partnerships and merging with companies that may be substitutes, CSX has created a unique logistics-based company able to provide customers an alternative means of shipping their products efficiently. In an effort to reposition itself in the industry, CSX announced it will merge with Conrail Inc. CSX is currently awaiting a final review and approval by the Surface Transportation Board (STB), for the Conrail merger. Like the deregulated airline industry, all mergers and acquisitions must be approved by a federal regulatory agency. Although deregulated, the railroads must conform to certain regulations regarding antitrust laws. Due to these regulations, the Conrail merger has been delayed pending STB reviews. CSX projects total benefits from the merger to be approximately \$550 million annually, based on the realization of cost savings from operating efficiencies, facility consolidations, and new traffic volumes earned by enhanced service. The merger agreement calls for Conrail shareholders to receive a combination of cash and CSX shares valued at approximately \$8.4 billion which is equivalent to \$92.50 per Conrail share. This figure is also determined by the forty percent diluted shares of Conrail's common stock. CSX will commence a cash tender offer at \$92.50 per Conrail share for an aggregate of about 17.9 million shares of Conrail common and preferred stock.

CONRAIL INTEGRATION PLAN AND COMPETITION

The reason this merger will be successful for both companies is that the merger will yield new, competitive services that neither railroad can now offer on its own (Anderson, 1998). These new services include faster schedules, more frequent and reliable service, and improved equipment. Moreover, the creation of a single-line route along the Atlantic corridor will provide a cost-effective and environmentally superior intermodal alternative to truck traffic along I-95 and other north-south interstate highways (Anderson, 1998). Since CSX and Conrail both operate on some of the same routes in the eastern area, there will be major reductions in the length of haul and traffic, reducing the overhead costs. The cost savings by the company may then be passed along to the customer. The merger partners are willing to agree to grant competitive access to other rail companies in areas where CSX/Conrail are the only operators. Therefore, shippers will continue to enjoy two-railroad

CSX AND THE RAILROAD INDUSTRY

It has already been stated that the railroad industry is moving more freight than ever before. However, the industry as a whole is experiencing a decline in the percentage share of freight shipped. In 1929 railroads had 74.9 percent of the freight shipping market, whereas trucks had only 3.3 percent. By 1988, the percent share for railroads had fallen to 37.0 percent, and trucks increased to 25.2 percent. Poor service and delays have contributed to the decline in the railroads' market share. Also, the rail industry primarily ships high bulk/weight commodities that yield low returns. As the railroad equipment such as tracks, signals, engines, and cars become older, maintenance costs will increase. This creates an inherent cost disadvantage relative to the main competitors-- trucks. The infrastructure built by the railroads costs millions of dollars per year to maintain, while the highway infrastructure for trucks is paid for by the government. The industry is also labor intensive. In 1997, labor and fringe benefits cost \$1.963 billion in CSX's rail division. Operating revenue was \$4.989 billion. The railroad industry's labor costs currently stand at approximately 50 percent of their operating revenue. The cost per rail employee is 53 percent greater than that of trucking employees. CSX's comparative returns do not appear promising. When compared with the Standard and Poor's Railroads and the S&P 500, CSX is ranked last. Of the three divisions at CSX, only CSX Transportation is expected to have a better-than-average traffic mix and generate the bulk of earnings and cash flow. CSX must work on improving the profitability of the Intermodal and Barging segments. CSX has waited too long to begin the process of modernizing and upgrading its facilities and equipment. Much of the equipment utilized by railroads is ten to fifteen years old or older. Inflation has multiplied purchase prices of locomotives and cars only a few years old. Losing contracts over the past ten years, CSX has lost the confidence of some important shippers. United Parcel Service changed to Norfolk Southern, and Quaker Oats will not use CSX. Losing a large contract to a competitor should have been a signal for CSX management to improve operations.

NETWORK PROBLEMS

It is an extremely difficult process to manage a one-lane railroad when vehicles move in different directions on the same track at different speeds in different sized units. Any conflicts along the network of tracks can create a major problem. A delay at one station can affect many trains and shipments, thus directly affecting customer service. Network problems may occur as a result of outside factors such as natural disasters, strikes, and low shipment times. If the coal miners went on strike, then CSX's earnings would be affected by up to 20 percent, depending on the length of the strike.

OPERATIONAL EFFECTIVENESS

It has already been stated that little if any focus has been placed on daily operations. In a company that is struggling to stay ahead of competition, an operational approach is crucial. The years 1990 through 1993 were disastrous for CSX. There was a net loss of over \$2 million in 1992, then a year of close to zero net income.

The company searched for any way to makeup for certain losses, including large write-offs. These losses were due to delays such as weather, equipment failure, and labor strikes. Management could have prevented some of these losses by diversification. Booming auto shipments might have offset coal strikes, thus CSX would not necessarily have lost revenue.

CUSTOMER SERVICE

The railroads have been slow to address the needs of the customer. This is a reason for the decline in overall shipping market share. CSX employees must be trained in specific commodities in order to provide the best service possible. The implementation of a tracking system would resolve many shipping errors.

Railroads have always moved more freight than any other mode of transportation. However, the percentage share of shipments has dramatically decreased. Trucks are able to provide shippers with faster service to any area of the country. Railroad shipments must be unloaded at the station and reloaded onto a truck. This adds time and delays for the shipper.

IMPLEMENTATION OF NEW TECHNOLOGIES

CSX should appoint an information technologies manager at the executive level. This manager will coordinate an implementation team responsible for choosing the right technology for the specific needs of the company. This team will visit other railroads to see what computer systems are used for customer service, billing, dispatching trains, and traffic safety. Suppliers of railroad equipment should be brought into the technology team to ensure their equipment/parts/ products will be compatible with CSX's new systems. These suppliers and distributors are often the best source of information on the latest technological trends in the industry and competitor inside news. Any new network system should be able to be linked to current business partners' computer networks. This will provide customers with the fastest tracking and information service possible.

ACQUISITION OF LIKE INDUSTRIES

In addition to the appointment of an information technologies executive, there needs to be a manager or consultant skilled in corporate mergers and acquisitions. Any new acquisition should complement the CSX/Conrail network. CSX should only merge with or buy companies that are directly related to the rail industry. This new consultant should first study the purchase of a railroad track supplier. This will greatly increase CSX's position over its competition because every railroad must order new track. Another company CSX should merge with is American Signal Company, maker of rail signals and wires.

CONCLUSION

CSX will remain a leader in the railroad and transportation industries. The Conrail Merger will prove to be the best strategy for long-term growth and increased profits. Also, the merger will provide CSX with the necessary financing for an overall improvements and expansions in its rail service. CSX will also experience increasing profits from labor cost reductions, and increased sales/service. The recent commitments to customer service and quality control will be the focal point for the "new" CSX. This is not surprising considering the fact that the image of the railroad industry has been tarnished by derailment and concern from outdated equipment (Longman, 1992). However, CSX will also be waging a war against its main competitor, the truck. In order for CSX to effectively compete with the trucking industry it must implement several key strategies. These include adopting the latest technological breakthroughs relevant to the industry, establishing global partnerships and joint ventures with ground-air cargo carriers, and increasing market share and name recognition through an aggressive advertising campaign. Also, the elimination of ineffective management and management styles is necessary for CSX's future growth. There must be a focus on daily operations. Also, company leaders should realize that certain shippers have formed groups like the Washington, D.C. based Alliance for Rail Competition, which is studying ways to

restructure the industry through regulation (Palmeri, 1998). Furthermore, executives at CSX need to establish goals for stock price levels, net income, and sales.

Intermodal transportation will provide CSX customers with the most cost-effective shipping service. Intermodal trains that carry trailers lower the amount of goods that are damaged by eliminating the amount of different shippers. Customers will be pleased with the CSX representatives who are trained in specific commodities. CSX has the ability to ship almost any commodity at a lower cost to the customer than the trucking industry. Overall, the future for CSX will be determined by management's willingness to implement several critical strategies and provide the stockholders with a higher return on equity.

REFERENCES

- Anderson, J. (1998, March). The CSX/Conrail intergration: An Evolution, not a revolution, *New Directions: CSX Corporate Magazine*.
- Andrew, K. (1987). *The concept of corporate* strategy *(Third Edition)*. Homewood, IL: Irwin Publishing, Inc.
- Ansoff, H. (1984). *Implementing strategic management (First Edition)*. Englewood Cliffs, NJ: Prentice-Hall Publishing, Inc.
- Longman, P. (1992, September). Blood on the tracks: Overworked railroads are wreaking havoc, *BusinessWeek*.

Palmeri, C. (1998, March). Spending their way out of trouble, Forbes, 161.

Rowe, A. (1995). *Strategic management: A methodological approach (Fourth Edition)*. Dallas, TX: Addison-Wesley Publishing, Inc.

TQM AND PRODUCTIVITY AS APPLIED TO A BUSINESS

Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Kristin O. Prien, Christian Brothers University Kprien@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

Total Quality Management (TQM) is defined as the practice of improving an organization at every level in order to improve areas such quality, customer service, and productivity as it relates to the ratio of output to input (such as the ratio of employees to the amount of goods that are produced). These are not easy tasks for any firm to accomplish. When attempting to achieve these goals, it is important for management to institute a systematic plan to resolve any problems that it may be facing as an organization. Arkansas Precast Corporation's (APC) most significant problem is its failure to have in place a strategic plan that achieves TQM and productivity. A result of this failure is the existence of the problems detailed within this paper.

INTRODUCTION

Arkansas Precast Corporation (APC) was founded in 1968. It is located in Jacksonville, about ten miles north of Little Rock. APC is engaged solely in the manufacture of precast architectural concrete. The precast architectural concrete market includes relatively large commercial and institutional building projects. Such projects are undertaken all over, but are primarily located in metropolitan areas. Thus, it is necessary for APC's market area to be large. APC has shipped its products to Massachusetts, New Mexico, South Dakota, Georgia, and nearly every state in between.

WEAKNESSES

As a whole, APC has extremely poor intercompany communication and relationships. As a result of the time constraints placed on both departments and the sometimes unrealistic expectations each department has for the other, the production department is often dissatisfied with the amount of work that the engineering department delivers, especially when considering the salaries of engineering department employees. The production department appears to not hide these feelings of dissatisfaction from the engineering department, resulting in a relationship that is often quarrelsome.

The engineering department is not receiving enough time when a job is assigned to complete the necessary drawings for production. In the process of APC winning a job bid from a customer, the builders wait until the last possible minute to award a job in the hopes of lowering the bids that it is receiving. Once the job is given to the engineering department, they are expected to produce drawings for production in a short time frame. The engineering department is too understaffed and overloaded with work to meet this expectation.

Production workers often begin their process with incomplete drawings that can lead to significant errors. As a result of the engineering department not being able to release drawings soon enough, the production department often begins its process with incomplete drawings.

DEMING'S PLAN

In his plan for improvement, the manager is ignoring the importance of several of the points in Deming's (1986) 14-point plan. One of the most important points in Deming's (1986) plan is to drive out fear. When combined into one plan, all of the changes that the manager is proposing will foster fear rather than drive it out. Employees are going to wonder why he is changing so many things at once and what they have been doing wrong for so long that requires the whole process to change. The new manager is going to significantly strike at his department's morale. He should, in an effort to eliminate this fear, take every opportunity in his reorganization to communicate with his department about the changes that are taking place and obtain their feedback regarding the problems they face and solutions that he proposes to implement.

It was Deming's (1986) experience that the removal of fear should be among the top of his fourteen points because of its effect on nine of the other points. In his plan, the manager needs to make sure he covers these nine points:

- · Break down barriers between staff areas.
- · Improve constantly and forever every process for planning, production and service.
- Institute training on the job.
- · Institute a vigorous program of education and self-improvement for everyone.
- Cease dependence on mass inspection.
- End the practice of awarding business on the basis of price tag alone. Instead, minimize total costs by working with a single supplier.
- Eliminate numerical quotas for the work force and numerical goals for management.
- Remove barriers that rob people of pride of workmanship. Eliminate the annual rating or merit system.
- · Eliminate slogans, exhortations, and targets for the work force (Scherkenbach, 1988).

There are four remaining points in Deming's (1986) plan that also need to be addressed by APC's management in their goal of achieving TQM and productivity:

- Create constancy of purpose for improvement of product and service.
- Adopt and institute leadership.
- Adopt the new philosophy.
- Put everybody in the company to work to accomplish the transformation.

The following is an analysis of APC's system and its problems according to Deming's (1986) points: Break down barriers between staff areas. One of the most significant problems within APC is the relationship between engineering and production. Nowhere in his plan is the manager working on that relationship. He implies that if production can simply have the drawings ready for their process in a more timely fashion then all will be well. That may alleviate most of the discord between the two departments, but it will not solve the problem. As stated in *Total Quality and Productivity Management in Healthcare Organizations*, Total Service Quality Management cannot be limited to one department within an organization (Omachonu, 1991).

Until both departments begin to meet on a consistent basis with like-minded goals to create plans to improve APC as a whole, little success will be achieved. The current problem is the timeliness of drawings arriving at production. In his efforts to solve this problem, the manager may create more problems between the two departments. For example, as the manager stated, if he implements his plan there will be downtime for engineers and drafters as they wait for the next assignment. The production department is definitely going to resent not having this same benefit, and yet again there will be discord between the two departments.

For each problem that the manager solves within his department alone, without acknowledging outside departments, another problem will develop. If, however, engineering and

production establish team leaders to meet with each other and constantly work at improving the situation, the relationship between the departments could significantly improve and productivity as a whole would increase. "The obvious challenge is to get everyone involved in the innovation, everyone recognizing that they each have something to contribute and they can do so in an atmosphere of mutual respect" (Scherkenbach, 1988). If the manager makes changes within his department alone and does not acknowledge the needs of the company as a whole, his plan may hurt the department and company more than it will help.

Improve constantly and forever every process for planning, production and service. Continuing with the above established problem between engineering and production, it is important for both departments to constantly work together to improve the company. Once the current problems within the system have been resolved, it is the responsibility of management to continue working towards constant improvement. The new manager should consider consulting with other departments within APC to set up quality assurance teams consisting of people company-wide. This will enable the manager to get production's feedback on how quickly they are getting drawings from engineering and how error-free those drawings are. It will also enable the manager and the accountant to review the cost of outside consultants or an increased staff of engineers and drafters. Long-term, it could be proven that the outside consultants were less expensive to the company rather than the cost of hiring, educating, and training of a larger staff of engineers and drafters. Over time, continued teamwork and brainstorming of ideas will constantly improve the processes of the company.

Institute training on the job. As established in the manager's case outline of APC, training engineers and drafters for the work that APC does is not an easy task. It requires years of on-the-job experience in addition to a college-level education. The manager has attempted to create time for training of new staff in his plan; however, he assumes that his plan will work and there will be time for such training. While his plan does outsource more projects, the field continues to increase and the consultant's availability continues to decrease. The manager needs to recognize that if the company is successful it will always be busy. Time for experienced engineers and drafters to train new employees is something that the new manager needs to constantly provide.

Institute a vigorous program of education and self-improvement for everyone. This continues from the above point regarding constant on-the-job training. The manager needs to make sure that he is not only training and improving the education of new hires, but also of his current staff. Without constant improvement, the engineering department will begin to stagnate and not produce acceptable quality work, forcing production to falter. It is far easier for APC to continue to educate and improve its employees than it would be to hire and train new ones. One study showed that "businesses that were operating below their expected labor productivity levels had significant increases in productivity growth after implementing new employee training programs" (Dessler, 1997).

APC's first objective should be to determine what its training needs are. The training of employees should not be limited just to the engineering department but should include the entire company. Once it has been determined what kind of training the employees need, APC must determine how to implement the training. It could be that more experienced engineers, drafters, and production workers could train the newer employees; however, it should not be forgotten that employees should receive training at all levels and on a constant basis. APC needs to be prepared to send its employees to job-specific training, whether that means attending courses at a local college that provides continuing education for professionals or if it means sending employees to conferences in their field (engineering, drafting, etc.) that provides training seminars.

APC should not simply offer training to its employees and let the issue take care of itself, but should instead constantly evaluate and modify its training methods as necessary. According to Dessler (1997), there are four categories to measure training outcomes: reaction, learning, behavior, and results. First, APC should evaluate the reaction of its employees to the training. Did the employees find the training to be useful and do they feel they gained some benefit from the training,

or was it a waste of their time? Secondly, there should be some method for APC to actually test the knowledge that the employees should have learned in their training. It is not beneficial to APC or its employees if the employees are not learning the material they are being trained on. Thirdly, APC needs to evaluate the effect of the training on its employees' behavior. Training should make employees feel confident in the work they are producing and that confidence should be evident to management. Additionally, if APC decides to implement training on improving relations between production and engineering, such as conflict management training, the results of this training on the behavior of the employees should be obvious. Lastly, APC needs to determine what the final results are of the training that has been provided. When determining the needs of a training program, APC should have established specific results (goals) that the training is to achieve. At the end of training sessions, APC needs to take time and analyze how many of its goals were achieved by the training. Training will be ineffectual if it is not constantly measured and modified to fit APC's needs.

Most importantly, even if the engineers and drafters receive training on a consistent basis, management must not inhibit the use of new knowledge that is acquired. Omachonu (1991) stated, "Training typically deepens the knowledge a person has about a subject, but if obstacles remain to using that knowledge, it remains untapped." For example, training could be established for the engineers and drafters in the computer technology field. Computer technology has dramatically improved in recent years, especially in the creation of software programs that assist with engineering drawings. Management should constantly provide training for the engineers and drafters of APC on this new technology and provide them with the tools necessary to use the knowledge. Computer technology alone can speed up the process of getting drawings out to production.

The manager should always take time to investigate and implement plans that improve the knowledge of his department. He also needs to make sure that APC's top management is involved in his department's success by insisting that they support his need for constant training and employee improvement within the department. Cease dependence on mass inspection. This point is essentially being ignored in the new manager's plan. The engineers should not be spending their time checking the drafters' work; if the drafters are not able to produce the drawings based on what they have been given by the engineers, then that issue needs to be addressed. Inspection of the final product does nothing more than point out what is wrong with the product and not what is wrong with the process. The engineers could be working on other assignments to give to the next available drafter.

Philip Crosby also believed that prevention should be emphasized over checking and inspection. It was his belief that it is wasteful to spend time inspecting work that has already been completed (Omachonu, 1991). If the manager is uncomfortable with the idea of handing over the responsibility of a job from an engineer to a drafter, the engineer and drafter could meet periodically during the drafter's process to make sure everything is progressing along correctly. It would be more efficient to meet in the middle of the project to review its status; if it is inspected once the drafter is finished and an error is detected, it could put the drafter back at the starting point, thus doubling the time it takes for a job assignment to be completed. "When a product leaves the door of a supplier, it is too late to do anything about its quality" (Deming, 1986).

In connection with this scenario and the problem of a lack of communication with the production department, it would be beneficial to include a production manager in the meetings between the engineers and the drafters. At this point, perhaps production could receive portions of the drawings so that it may begin the project with little or no error. While this does not meet with production's request to have complete drawings in a faster time frame, it does meet them at least halfway. They would not be unsure of the production process if they had with the engineers and drafters periodically to make sure everything for a job assignment is progressing well. Additionally, if the drafter was exposed more to the production process, they may be able to prevent errors that would result in the final product.

CONCLUSION

APC could achieve TQM if it were to address its system's problems by implementing a strategic TQM and productivity plan. APC needs to focus on its leadership, intercompany communication, dependence on consultants, and its hiring, training, education, evaluation, and compensation procedures for employees. APC's top management should be working with the manager as well as with managers in other departments to develop a strategic plan, such as Deming's (1986) 14-point plan, to achieve TQM and the productivity they desire.

REFERENCES

- Deming, W. (1986). *Out of the crisis*. Cambridge, MA: Massachusetts Institute of Technology Center for Advanced Engineering Study, Massachusetts Press.
- Dessler, G. (1997). Human resource management. London, UK: Prentice Hall Publishers.
- Omachonu, V. (1991). *Total Quality and Productivity Management in Healthcare Organizations*. Norcross, GA: Institute of Industrial Engineers and the American Society for Quality Control.
- Scherkenbach, W. (1988). The Deming route to quality and productivity: Road maps and roadblocks. Washington, DC: Mercury Press/Fairchild Publications.

MARLIN FIREARM'S STRATEGY IN THE LATE 1970s: A STRATEGIC ANALYSIS (REVISITED)

Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Kristin O. Prien, Christian Brothers University Kprien@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

Marlin's strategic future plans for expanding its product line are contingent upon the fulfillment of the most pressing problem: the realization that the company is undercapitalized and must go public with its stock. Financially, the company is not in a position to do this. Debt service is poor, working capital is rapidly shrinking, and the company's total assets are decreasing. ROI in 1966 was 9.7 percent, and in 1969, 1.6 percent.

INTRODUCTION

The firearm industry is traditional and has changed little over the years. Marlin appears to be the most conservative and least innovative company of the top four firearm manufacturers. The company spends too much time in getting a new design of firearm on the market. The claim is that research and development takes about five years. Competitors are able to get similar design firearms on the market before Marlin can, thus forcing Marlin to postpone plans to market their firearm until more changes can be made or high quality firearms at less cost and at a competitive advantage can be gained. Competitors utilizing foreign labor are able to market. Marlin's manufacturing plant is in the Northeast, which contributes to high wages and costs due to unionized labor and weather, respectively.

The company views itself as a high quality firearm producer. Because of its manufacturing process, it produces fewer models than competitors. Rimfire rifles are Marlin's highest percentage of the market for shoulder arms, but center fire rifles appear to be rapidly increasing. The company president states that there is no need to diversify now, but the company should plan to project another image for the future: that of a sporting goods manufacturer rather than just a firearms producer. The present balance sheet will not allow the company to diversify into areas such as ammunition, handguns, telescopes, and hunting clothing. This should be a long-range goal.

A new plant afforded only a moderate increase in overall volume. The president still insists in having hand-fitted stocks and actions, thus slowing down the production process in the long run. The plant is presently nonunion and competitive with wages, but the Northeast is highly unionized, especially in the manufacturing industries. A push for unionization would prove to be devastating financially for Marlin. Production does not appear to be efficient. Overhead costs for manufacturing are extremely high, again possibly due to plant location.

Based on a 15 percent return of warranty cards on the sale of firearms, the vice president of sales stated that he was confident as to the profile on the average Marlin customer, but 15 percent is a small, biased sample. This is much too narrow. Improvement is needed on customer identification. Advertising also appears to be narrowly identified. Marlin stated that 60 percent of customers are under age 30. Again, this is based only on a 15 percent survey of Marlin gun owners.

STRATEGY

Marlin's strategy is to market firearms that are "made in the right way." Like its competitors, the company is concerned with high quality items such as walnut stocks, solid steel forging, and precision engineering. However, Marlin insists on hand fitting many of its parts, slowing down the production process, which in turn slows down the marketing of the finished product.

Only about 1 percent of production is being sold abroad. The company states restricted gun laws limited sales. Competitors are able to sell abroad. Marlin's sales were directed toward "young male factory workers." This target market was based on the vice president of sales' information determined by warranty cards returned on about 15 percent of unit sales. As the company's financial condition improves, advertising will be directed toward the youth market. The company recognizes that foreign imports will cut into its market and, therefore it must influence and inform young hunters about the craftsmanship of Marlin Firearms.

The industry is not concerned with product change, and Marlin is in line with industry thinking. Model changes are expensive and infrequent. Market research is unsystematic and involves feedback from sales personnel and friends in the firearms industry. Marlin stresses "quality above all else," and the company's sales force gathers information for the two-man marketing research department concerning desired product changes. Changes involve style, shape of stock, and other very minor items.

The rimfire rifle received the highest percentage of sales for the market: 24 percent at the end of 1967. Nine models are offered in this line, moderately priced compared to the industry average. Four centerfire models are offered at a price that is relatively expensive but competitive with other firms. There are two models of shotguns, one inexpensive, the other very expensive (over \$300). The strategy in marketing these firearms appears to be concerned with rimfire, but centerfire rifles are rapidly expanding. The company exhibits very little concern about shotguns.

PROBLEMS AND RECOMMENDATIONS

Marlin's objectives are not clear and well stated. They lack a sense of direction. Too much emphasis is being placed on the method (firearms) rather than the objective. The present objective is to provide a high quality firearm made in the American tradition. It is recommended that the company begin to view itself as a producer of sporting goods. Goals and plans are not systematic. The company fights "brush fires as they occur." For example, the plant was at near capacity in 1966, and a new plant was built in 1969. The company should have planned for increased capacity rather than wait to encounter the situation and then solve it. It is recommended that the company begin establishing long term goals. Marlin does not plan for the future. It is recommended that the company appoint a long range planning department director. Once objectives are mutually established, it is recommended that they be communicated throughout the firm at all levels. These recommendations can be established with a minimal amount of cost to the company and should be implemented immediately.

FINANCIAL SITUATION

The company exhibited steady growth in sales until 1969. Management states that the plant relocation and changeover contributed to a drop in profit. Marlin has a relatively low inventory turnover ratio. This indicates slow moving items or obsolescence (even though a new plant has been built). Accounts receivable is high at \$1.2 million. The collection period was extremely high for 1969. Overall, cash flow and the financial situation is rapidly growing worse. It is recommended that Marlin discontinue immediate plans of going public with its stock. The company is not able to do this financially.

It is recommended that Marlin tighten its collection policies. Small sales to retailers can have the stipulation of a discount if paid within an acceptable time (for example 2 percent for 10 days, net 30). This would help to improve the cash flow. The current ratio is adequate, but steady in decrease. The acid test ratio indicates that the company will have problems paying bills if decrease in sales continues. The debt to net worth ratio exhibits a dangerous situation. This means that there is a very low net worth in relation to sales. The debt to net worth ratio has been high in previous years and is still increasing. The company would be a high risk for a short term loan.

It is recommended that the company must improve its cash flow in order to merit a short term loan. Costs must be cut. It is recommended that the shotgun line (two models) be temporarily discontinued in order to improve the cash flow. See Exhibit I for the ratio analysis.

PRODUCTION

The company's incentive system is probably inadequate. A split exists between those workers with straight wages and those on incentive pay. The incentive pay system is a method to motivate production employees to earn extra compensation. The inventory turnover is low. It is recommended that the incentive pay system be gradually phased out. Coworkers, in the Marlin tradition, should be more concerned with quality of work produced rather than quantity. A tradeoff would exist if the pay incentive system is phased out and wages raised accordingly.

It is recommended that only one production shift be run until inventory is at an acceptable level. The partial shift should be combined with the regular shift if at all possible. For the short run it is recommended that the plant close for an additional amount of time, possibly two weeks. In the long run, once Marlin's cash situation improves, it is recommended that two eight-hour shifts be implemented. It is recommended that Marlin reduce the work-in-process by utilizing the new facilities and technology without forsaking quality. This can possibly be achieved by the gradual elimination of the incentive pay system. It is recommended that sales forecasts be provided and used by the production department in order to help eliminate waste and keep production costs in line with the budget. The overhead rates on manufacturing costs need to be reduced immediately. By operating only one shift, overhead costs such as lights and utilities could be reduced. Testing and engineering are a major overhead expense. Fewer testers and inspectors should be used in the production process. Most of the work is piecework, so workers tend to take pride in their work. Errors will be reduced. Fewer testers given increasing responsibility will help to lessen the inflated overhead costs of inspecting.

ADVERTISING

Advertising appears to be costly and ineffective. Magazine advertisements in *Outdoor Life* and *Sports Afield* are not reaching a broad enough market. It is recommended that advertising expenditures in this media be cut back and reduced, but not eliminated. Trade journal advertising should be gradually increased, thus reaching a broader market. Cooperative advertising is not feasible now; it is recommended that more than one sponsor be considered in the long run once the profit picture improves. The advertising budget is meager, but costs can be cut by eliminating color full-page spreads in monthly sporting magazines. As the budget allows, more advertising should be directed toward non-sporting men's magazines. Advertising tends to cater to those under thirty based on the return of warranty cards. "Typical" customer profile is contradictory between the market advertising is trying to reach and the profile of the typical Marlin owner who is highly conscious of technical features and buys a gun for hunting or target practice. Marlin advertising would appeal to the collector rather than a sportsman who purchases a firearm for hunting or target practice. It is recommended that advertising be directed to a wider group and stress functional quality and workmanship as opposed to "decorative conversation pieces."

RESEARCH AND DEVELOPMENT

There are major problems with research and development. It is recommended that research and development be separated and independent of sales and production. Sales and production should provide the necessary input relevant to problems concerning research and development. They should not dictate what is to be done. Market research/product development is dictated by a few executive personnel who are basing their decisions on product change or development on feedback and other unreliable and unsystematic methods. The head of product development has the knowledge and experience with product change and product development in the industry. A major problem with research and development is the span of time it takes for a product change to reach the market: an average of five years. Competitors are able to come out with a similar design or product change, thus forcing Marlin to devise more product changes to remain competitive. Most changes are only minor ones in design or appearance. It is recommended that product changes be kept to a minimum and that specific target dates for the completion of the change be established and kept on schedule. In Marlin's present situation, these changes must be kept to a minimum because of the costs involved. It is recommended that Marlin discontinue product change planning for the pump-action shotgun. There are only two models of shotguns that make up 1 percent of the shoulder arms market. That which is saved by temporarily discontinuing this line could be applied toward product changes in the top selling line: rimfire.

OVERALL RECOMMENDATIONS

Immediate attention is needed concerning the company's financial situation. The company must cut costs and reduce product lines rather than undertake the planned expansion to improve its cash flow. Production personnel may have to be laid off in order to accomplish this. Sales growth and expanding the product line should not be the chief objective of the company. Avoiding financial ruin should be.

The company should begin to view itself as a manufacturer of sporting goods rather than a producer of firearms. Again, this should be long range. Few of the other firms in the industry are currently marketing hunting clothing and leisure equipment. This could be a possibility for the company.

The company has an overall image/identity problem. Advertising is trying to portray an image of a high quality firearm that stresses quality above all else. However, the rimfire model is comparably priced with other firms' models in the industry. The centerfire rifle is one of several cheaper models. The shotgun runs from two extremes: one model is very inexpensive while the other is listed along with two other firms as being the most expensive. It is recommended that Marlin continue to stress quality but gear advertising toward those who are cost-conscious.

Many of the personnel have been with Marlin for years. This has also created a problem. New ideas are non-existent. What few creative ideas that are brought in by sales representatives are stifled in product development, which appears to be controlled by the vice president of sales and the president. It is recommended that each department of the company be responsible and accountable for its own tasks. For example, product development cannot make decisions concerning needed changes without the consent of the sales staff that Marlin considers the marketing research department. Departments should be run separately.

CONCLUSION

Marlin's financial downturn has been gradually building due to a variety of factors, most notably poor management. If departments and divisions are allowed to do their jobs without intervention, new ideas may flow. Based on the financial data available, it appears that the company is headed toward bankruptcy. The company's problems are many and cannot be solved quickly. Costs must be cut to a minimum in order to improve the cash situation. This involves postponing product changes and plans to increase the product line, which would definitely send the company deeper into debt. Within one year, if the profit and overall financial picture gives no indication of reversal, the company should consider selling out to another company or agreeing to a merger.

REFERENCES

- Ackerman, R., J. Rosenblum & H. Uyterhoeven (1977). *Strategy and organization: Text and cases in general management*. Homewood, IL: Richard D. Irwin, Inc. 235-254.
- Anthony, R. & J. Reece (1975). *Management accounting: Text and cases*. Homewood, IL: Richard D. Irwin, Inc., 345-372.
- Duncan, D., C. Phillips & S. Hollander (1972). *Modern retail management: Basic concepts and practices*. Homewood, IL: Richard D. Irwin, Inc., 78-90.
- Eckhouse, R., R. Moor, R. Murdick & T. Zimmer (1976). Business policy: A framework for analysis (Second Edition). Columbus, OH: Grid Publishing, Inc., 255-267.
- Hughes, G. (1973). *Demand analysis for marketing decisions*. Homewood IL: Richard D. Irwin, Inc., 7-10.
CAN IBM REGAIN THE MARKET LEAD IN THE IT INDUSTRY?

Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Kristin O. Prien, Christian Brothers University Kprien@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

IBM has been involved in virtually every facet of computing, offering hardware from mainframes to PCs, software, networking services and financing. In spite of all this, there is a large investment risk associated with IBM. There is a constant risk of finding additional growing businesses to add to IBM's portfolio in an effort to offset any declining or stagnant businesses that are already in IBM's portfolio. If IBM can return to its former customer focus orientation and channel its efforts to increase shareholder wealth and increase its product and service base, IBM could exhibit the ability to again become the market leader.

INTRODUCTION

IBM entered the computing market with its Automatic Sequence Controlled Calculator in 1944. The Mark I was followed by a series of products in the 1950s that helped establish the future of IBM and the computer industry. In 1952, Thomas Watson, Jr., became the president of IBM. Watson envisioned the future of computers and pushed IBM to meet the challenge. Under his leadership, revenue grew from \$900 million to \$8 billion. One of Watson's greatest moves for IBM was the unbundling of the components of hardware, services, and software that were previously sold in packages. This move gave birth to the multi-billion dollar industry that exists today (Carroll, 1993). Throughout the 1960s and 1970s, IBM introduced many products that helped transform the computer industry. The 1960s saw the introduction of IBM's System/360, which allowed customers to upgrade portions of the computer without having to incur the great expense of replacing the entire computer.

THE INDUSTRY

Information Technology (IT) is a significant productivity engine which not only is continuing to drive into its historical markets, but is also taking aim at a broad based technological future. Revenue for the worldwide IT market grew at 9 percent annually through 2001. Revenue for the time period 1997-1999 was expected to grow from \$801 billion to \$1,039 billion, an addition of approximately \$80 billion in revenue annually (Jones, 1999). According to Salomon Smith Barney's January 1999 industry analysis report, this growth is broad-based, with all major product and service sectors expected to participate as well as consumer participation, both directly and indirectly, driving it.

Can IBM meet the challenge? The industry's largest IT customers are cautiously hopeful that IBM can meet the challenge. One high level IT executive from an East Coast Fortune 10 company was quoted as stating: ... Gerstner deserves credit for crystallizing a direction for a company of IBM's size to go in, but I cannot build a career on a road map and a slogan. They have to deliver all the pieces that add up to some clear value-add for online enterprises. They have those

pieces on paper, but it is their game to lose (Scannel, 1998). IBM is focusing on specific business segments such as personal computing, Internet strategy, services (total solutions) and customer service, software, partnerships and management changes.

PERSONAL COMPUTING

The emergence of the PC was almost pure serendipity, a succession of happy accidents. The genius of IBM management was that it was able to let this happen. IBM, through a series of agreements with third parties, began to lose control of its end customers. IBM enthusiastically embraced its agreements with third parties but failed to recognize that it still needed to control the end-users.

The rapid growth of the PC has been an outstanding success, but it left IBM with a number of problems. First, the open architecture of the PC makes IBM reliant on outside suppliers. Had IBM planned its strategy in this market with its usual meticulous manner, there would have been a greater degree of IBM control. Instead, IBM lost the faster market growth and competitive position that it could have had.

The second problem IBM faces in the personal computing business segment is its position in the price war. As the market became less buoyant, dealers who were independent of IBM's control started a price war that was beneficial to no one, least of all IBM. This price war began as a shakeout of those dealers who could not make the grade and who, with liquidity problems, began to liquidate their stocks. More significantly was IBM's discounting structure whereby the dealer is encouraged to sell the last few machines at a heavy discount in order to reach the next price break and obtain a better price on all their purchases. While this strategy looked good on paper, loading in stock to create pressure on retailers is a standard consumer goods marketing technique. The end buyers wanted the IBM logo but were increasingly persuaded that Compaq, which was not so heavily discounted in the price war and was more profitable to the retailer, was a better deal (Mercer, 1987).

The most devastating effect of the price war was the shift it caused from quality of customer support to price. IBM had built a large part of its reputation on its customer service ability. The price war removed this high level of customer service and was responsible for a large portion of the damage that was done to IBM. Market research illustrates that buyers want, above all else, a higher quality of support and are less interested in marginal cost savings. While this is true, it was and is easy for a dealer to sell a lower price product and confuse the customer on what he/she is actually receiving. IBM sacrificed its customer service for so long in the price war, that it barely noticed when its competitors came in the market at comparable prices with the offer of better and more competent customer service. Not until Gerstner's arrival did IBM turn its focus back to offering strong customer service support for its PC business segment.

INTERNET STRATEGIES

The key mission of IBM's software division is helping customers exploit E-Business opportunities (Weil, 1998). A large part of IBM's future rests on its participation in the Internet and E-Business revolution that is sweeping through the IT industry. There is much opportunity in this field for qualified solution providers. A significant amount of revenue is being directed to IBM's Consulting and Service Divisions, which saw an addition of \$8 billion in 1998 to its services backlog which totals approximately \$50 billion (Jones, 1999). IBM is projecting that over the next four years close to \$600 billion will be spent on E-Business/E-Commerce solutions. Hardware is projected to account for 28 percent of this amount, IT services 58 percent and software 14 percent (Weil, 1998). Because of its large size and many business components, IBM is one of few firms capable of offering customers a total solution that incorporates all the necessary hardware and software services.

The Internet is presenting one of the biggest opportunities for IBM to recover from its poor performance and participation in the growing IT industry. IBM's mission on this front is to combine its strength in computing and networks with the worldwide reach of the Internet. Their goal is to create secure Net-based environments where buyers can meet sellers and transact business in confidence. To further this goal, IBM has been rolling out its products and services in this area in the form of business solutions for small, startup companies. IBM will assist a small company in marketing its product on the Internet and taking orders securely from customers. This helps the small company get its start and helps to move IBM to the forefront of the Internet business (Cook, 1998).

E-Business was a familiar idea for Gerstner. His eleven years of experience at American Express introduced him to electronic business. To lead the E-Business challenge, Gerstner hired Irving Wladawsky-Berger to be the general manager of IBM's Internet division. According to Wladawsky-Berger, the Internet is another of the once-per-century revolutions that have transformed commerce and communications (Cook, 1998).

SERVICES

Part of IBM's restructuring process is to build up its Global Services business segment. IBM's overall valuation is in line with that of other multi-billion dollar IT service providers (DeLamarter, 1986). Contributing to this valuation is the speed with which IBM is completing its assignments. The size of the Global Services' segment is \$49 billion. Its 1998 third quarter revenues were \$5.8 billion (Weil, 1998). These figures are evidence that IBM is receiving a high degree of customer satisfaction. The Global Services segment is also providing IBM with a sales channel for the company's software and hardware.

IBM's plan is to provide its customers with one-stop shopping for their E-Business/E-Commerce applications. Surveys are revealing that customers are tired of dealing with growing IT complexity. At the same time, customers recognize the necessity to invest in complex IT applications to benefit their business. IBM owns all the ingredients necessary to provide a solution for this complex problem--hardware, "open" system software, middleware to link key subsystems, applications software, and over 160,000 skilled experts who design and implement the solutions (DeLamarter, 1986).

This new emphasis on services transformed the way IBM is doing business. Before Gerstner took over as CEO, IBM was selling its own products exclusively and service was included in the price. Under Gerstner's direction, IBM now mixes and matches products and services from other companies with its own. IBM is mixing with areas such as banking, transportation, and health care. In doing so, IBM is developing expertise in each industry making IBM irreplaceable to the businesses that it assists.

SOFTWARE

One of IBM's most important focuses is to concentrate on software for IBM's line of servers. These servers serve the purpose of controlling desktop PCs on corporate networks and the Internet. In essence, IBM is seeking to bypass Microsoft's system and applications software that runs on 80 percent of the world desktop PCs (Weil, 1998). IBM's software business is approximately the same size as Microsoft's, but revenue in the past came largely from mainframe business which is a seriously declining market (Cook, 1998).

In 1995, Gerstner launched IBM into the world of networked desktop computing by acquiring Lotus Development. IBM wanted Lotus Notes for its powerful communications capabilities in a networked world. The acquisition has proved to be an enormous success for IBM. There were 1.6 million Notes users when IBM purchased the company. There are now 20 million with four million of those being added just in the fourth quarter of 1997. To further their presence

in the software market, IBM also purchased Tivoli Systems in 1996. Tivoli is a manufacturer of software designed to manage distributed computing systems. A third of IBM's software revenue came from network computing software (Cook, 1998).

Cooperating and competing with Microsoft has been the heart of IBM's software strategy since Gerstner's takeover. Gerstner approved the advent of a new and independent software business. The first order of business under this set up was to put IBM's key software products on its competitors' platforms, specifically Windows NT. This strategic move puts an end to the competition that began in the early 1990s after Microsoft abandoned joint development efforts for graphical operating systems. IBM now has more Windows-based products in its lineup than any other competitor, including Microsoft (Scannel, 1998).

For year-end 1998, software revenue on a worldwide basis totaled \$135 billion which is up 13.6 percent (Jones, 1999). According to Salomon Smith Barney's January 1999 industry report, IBM holds an 11 percent worldwide share of this market, with operating margins estimated to be 23-24 percent. The company's software revenue is further anticipated to grow faster than the company's overall growth rate. Beginning in 1999, non-mainframe software assumed an even greater importance in the IBM software revenue mix. In recent years, relatively slow growing mainframe software accounted for as much as two-thirds of the company's software sales (Weil, 1998).

FUTURE DIRECTION OF IBM

IBM still remains on shaky ground as it strives to regain the number one market position. A series of poor management decisions could easily destroy the recovery that IBM has been making since Gerstner's arrival. One strategy that IBM is taking to help its multimedia business succeed is to bring in executives from outside the computer industry. For years IBM was closed to company and industry outsiders. Many believe that this strategy is one of the main factors of IBM's downfall. Furthermore, Gerstner has focused on improving IBM's customer service in an effort to make IBM the industry leader.

IBM has been involved in virtually every facet of computing, offering hardware from PCs to mainframes, software, networking, services, and financing. It is among the top five PC companies; it is the number three UNIX systems company and the number four disk drive company, and it is in the top three of software companies (Niles, 1999). In spite of all of this, there is a large investment risk regarding IBM. The mainframe business segment still suffers from slowing growth. There is also a constant risk of finding additional growing businesses to add to IBM's portfolio in an effort to offset any declining or stagnant businesses that are already in its portfolio.

One of the greatest mistakes that IBM made in the last twenty years was to ignore its customers and their needs. IBM had been so successful for many years that it began to take for granted its customer base. In order for IBM to regain its place as the market leader, it must show its customers that they are its first concern. Additionally, company objectives and policies must be identified, appraised, and reformulated to guide the development of alternate solutions to some of the problems it is facing.

CONCLUSION

IBM is in the process of rebuilding itself to become the market leader; it does not plan to enter the retail business in any form as this might place it in competition with its customers. Essentially, IBM is offering applications (solutions), value-added tools and via its services arm it is encouraging its customers to outsource tasks such as system design, management and operation, and system integration and maintenance (Weil, 1998). In a return to customer focus, efforts to increase shareholder wealth and plans to increase its product and service base, IBM has the ability to become the market leader. IBM's participation in the IT industry over the next two to three years will prove whether or not it has weathered the storm or merely staged a false recovery.

REFERENCES

Carroll, P. (1993). Big blues: The unmaking of IBM. New York, NY: Crown Publishers.

- Cook, W. (1998, February). Men in blue, U.S. New & World Report, 44-47.
- Cowen, S. (1999, January). Investment ideas for private clients of SG Cowen, SG Cowen Focus List, 4.
- DeMarter, R. (1986). *Big blue: IBM's use and abuse of power*. New York, NY: Dodd, Mead & Company.
- Jones, J. (1999, January). December quarter expectations: U.S. and Europe IT strength offsetting Asia, *Salomon Smith Barney*, 4-9.
- Mercer, D. (1987). *The global IBM: Leadership in multinational management*. New York, NY: Dodd, Mead & Company.
- Niles, D. (1999, January). International Business Machines: Downgrading to LTA due to valuation and hardware performance, *BancBoston Robertson Stephens*, 2-3.

Scannel, E. (1998, October). The world's oldest start-up start-up, InfoWorld, 1-3.

Weil, U. (1998, November). Transformation-macro analysis of the new IBM, *Industry Bellwether*, 3-7.

THE BRAZILIAN OPPORTUNITY: THE INTRODUCTION OF GIFT-WRAP INTO THE MARKET

Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Kristin O. Prien, Christian Brothers University Kprien@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu Frank E. Hood, Mississippi College

ABSTRACT

Cleo Inc., a Memphis, Tennessee manufacturing company, specializes in the printing and distribution of gift-wrap. Cleo's products are highly seasonal as Christmas sales represent over 70% of annual sales. Accordingly, due to limited production capacities, it is necessary for Cleo to manufacture to forecast as opposed to manufacturing to actual customer orders. This results in excessive year-end inventories. Inventories of converted product (packaged in small rolls) and of large rolls of printed product exist following each shipping season. These inventories are currently sold off over the next six months at or below cost to discount brokers or stores. This paper discusses marketing Cleo's gift-wrap to Brazil.

INTRODUCTION

Cleo Inc. is the largest producer of gift-wrap in the U.S. with a market share in excess of 40%. CSS, a publicly owned company located in Pennsylvania, owns Cleo along with two small manufacturing companies. The other companies are also located in Pennsylvania and specialize in the manufacturing of ribbons and bows. Cleo sales in 1999 exceeded \$140 million. This is up from \$120 million in 1998.

Based on the availability of these inventories, Cleo investigated the possibilities of exporting this excess inventory to improve profitability over the existing year-end discounting. If Cleo could find a market that used gift-wrap paper at a different time of the year or had other market opportunities that it could exploit, a profit could be made. Canada is the only country to which Cleo exports product, and Christmas is the major holiday for which the product is used.

BRAZILIAN HOLIDAYS

Carnival, a five-day festival preceding Ash Wednesday, is the most famous holiday in Brazil. It is marked by street parades, samba and bloco dancing, parties, drinking, costumes, conga drums, and music. Some people spend months preparing costumes for this event. No indication of gift-wrap usage was noted in the research for this holiday.

Triddentes Day (April 21) commemorates the death of Joaquim Jose da Silva Xavier, a local dentist and nationalist who died in the struggle for independence. Brazilians also celebrate the June Festivals (*Festas Juninas*) that consist of local fair activities. Easter, Labor Day (May 1), Independence Day (September 7), Memorial Day (November 2), and Republic Day (November 15) are all holidays celebrated in Brazil. On Christmas Eve, Brazilians eat big meals and exchange gifts. Only those gifts from *Papal Noel* (Father Noel) are opened on Christmas Day. All other gifts are exchanged the day before Christmas.

Cleo discovered that it is not customary for individuals in Brazil to wrap gifts at home. All gifts are wrapped at the time of purchase as an added service to the customer. Accordingly, the market for gift-wrap in Brazil is not the individual consumer but the retail store used by consumers.

ECONOMIC ACTIVITY

Until recently, Brazil's economy was one of boom and bust; however, its development has been determined in succession by the world demand for sugarcane, rubber, and coffee. The country began a drive to develop its vast resources and to industrialize its economy. Nevertheless, Brazil is still primarily an agricultural country with severe economic problems. The reforming administration in its first year (1986) spurred economic growth, but an inflation rate of more than 4,000% per year prevailed in the first months of 1994. Former finance minister Fernando Enrique Cardoso initiated the plan with a new currency in July 1994, set at parity with the U.S. dollar. Sustained selling of the real (Brazil's dollar) on the currency markets early in 1995 exerted pressure on the national economy and raised new fears of inflation. The world financial community has cooperated in rescheduling interest payments on Brazil's foreign debt.

Below are significant population and economic statistics for Brazil:

Population Statistics

- Population: 162,661,214 (July 1996 est.)
- Population growth rate 1.16% (1996 est.)
- Distribution of population:
 - 0-l4 years: 31% (male 25,286,287; female 24,422,897)
 - 15-64 years: 65% (male 52,232,435; female 53,094,724)
 - 65 years and over: 4% (male 3,072,720; female 4,552,160)
- Ethnic divisions: Caucasian (includes Portuguese, German, Italian, Spanish, and Polish) 55%, mixed Caucasian and African 38%, African 6%, Other (includes Japanese, Arab, and Amerindian) 1%

Principal industries are textiles, shoes, chemicals, cement, lumber, iron ore, tin, steel, aircraft, motor vehicles and parts, and other machinery and equipment. The value of Brazil's exports (including coffee, soybeans, iron ore, processed foods, machinery, vehicles, and vegetable products) is the highest in South America, although drought and fluctuating world prices can significantly alter the annual trade balance. Moreover, due to its diverse economy and lack of restraint in spending by government officials, Brazil has become one of the world's largest debtor nations.

Brazil has the longest road network in Latin America as well as the most automobiles, trucks, and buses. Among the busiest seaports are Santos, Vitoria, Rio de Janeiro, Paranagua, and Recife. Rivers are major avenues of transportation, especially in the interior; topography has hindered the development of an inland rail network. Media technology in Brazil offers an extensive telephone network. There are 1,223 AM broadcast stations and 151 short-wave stations. Brazil has the world's fourth largest television broadcasting system.

CHANNELS OF DISTRIBUTION

The import permit is the single most important document required for importing goods into Brazil. An import permit must be obtained from SECEX by the importer for all but a very limited number of products. Besides the import permit, the following documents are required:

- 1. Commercial invoice (including notarized declaration of origin)
- 2. Bill of Lading or Airway Bill

- 3. Inspection or Sanitary Certificates
- 4. Proforma invoice

As a MERCOSUR member, Brazil applies a common external tariff ranging from 0-20% for most goods. Brazil also assesses the following taxes and fees on imports:

- 1. Union fee (2.2% CIF value)
- 2. Brokerage fee (1% import duty)
- 3. Warehouse tax (1% import duty)
- 4. Fees for handling charges (\$20-\$100)
- 5. Administration commission (\$50)
- 6. Import license fee (\$100)
- 7. Additional port tax (3% CIF)
- 8. Merchant Marine renewal tax (25% ocean freight charges)

The Brazilian Customer Protection Code requires that product labeling provide the consumer with correct, clear, precise, and easily readable information about the product's quality, quantity, composition, price, guarantee, shelf-life, origin, and risks to the consumer's health and safety.

With over 150 million potential consumers, a highly diversified economy, and GDP of U.S. \$447 billion, the potential for doing business in Brazil is noteworthy. However, until the country achieves greater market and economic reforms, most opportunities are likely to center around specific sectors and projects. Closed markets and heavy government involvement marked Brazil's economic development. Import substitution policies, combined with high levels of international borrowing, created high rates of growth and industrialization during the 1960s and 1970s, but ultimately resulted in long-term economic problems, including high inflation, foreign debt problems, and non-competitive industries. In 1990, the Brazilian government instituted significant market liberalization efforts, which included reducing trade and investment barriers. Import duties declined from over 100% to a maximum of 35%, with an average of 14%. After additional federal and state taxes, however, the final cost of an import is often 90% above the CIF value of the product.

MODES OF ENTRY

Cleo examined six modes of entry. The first mode of entry was exporting. Although exporting could offer benefits by avoiding the cost of manufacturing in the host country and incurring economies of scale, the cost of shipping such low-cost, bulky items combined with high tariffs rendered this an unlikely method. Licensing was also considered; however, the product (wrapping paper) does not lend itself well to licensing (i.e., such as intangible property, including patterns, formulas, and proprietary processes). Franchising was considered. Cleo wrapping paper does not have brand name recognition, so franchising would not necessarily be successful. More costly modes of entry considered include FDI, acquisition, and strategic alliances. Of these three, FDI was ruled out due to the high cost and high degree of risk. Of the remaining two modes of entry, strategic alliance appeared to be the most promising for Cleo's business plan. A strategic alliance could offer the benefit of the local partner's market knowledge, shared cost, and risk. Acquisitions, on the other hand, would provide the largest and fastest initial expansion of any mode of entry.

BRAZIL IN THE WORLD PACKAGING MARKET

Brazil is the ninth largest economy in the world with a GDP that represents about 10% of that of the U.S. (Anonymous, 1996). Brazil holds a dominant position to the rest of Latin America, although the per capita income is smaller than that of Argentina and Chile.

According to the World Packaging Organization (WPO), South America represents 4% of the total world packaging demand. This figure is probably underestimated since Brazil alone accounts for almost 3% of the total demand and Brazil's GDP represents about half of that of the region.

The Brazilian packaging industry was estimated in 1996 at U.S. \$10.8 billion, or 4.9 metric tons, which was the equivalent to 1.4% of GDP. The Brazilian packaging industry was estimated to produce 5.3 million tons of paper, for a total value of U.S. \$12 billion in 1997. The industry is expected to grow 50% by 2005, totaling eight million metric tons of paper, for a total value of U.S. \$418.5 billion. These projections are based on the current situation for most products and do not take substitutions into consideration. However, the increasing penetration of PET and aluminum beverage cans have been taken into account. In comparison, packaging sales totaled \$114 billion in the U.S. (1996) and \$95 billion (in U.S. dollars) in Europe (1994).

Especially in Brazil, investigating factors that will cause an impact on the future thus provide an insight into the future trends and scenarios is a complex task. Brazil's history is marked by contrasts between the rich and the poor, culture and violence, employment and slavery, dependence and self-support. Thus, the question posed is: What past events will shape the future? In order to answer this question, Cleo must place the current Brazilian environment under scrutiny so that it can get a precise idea of the habits and typical attitudes of Brazilian consumers, as well as of the working mechanisms of retail distribution channels, packaging industry transformations, environmental issues, and the internationalization of Brazil's economy.

Packaging is typically a product that derives from demand. Although not a product in itself, it is a fundamental complementary element in promoting product consumption. Packaging is vital and irreplaceable to the consumer products industry, if not the very source of product differentiation. Sometimes, the package is the product.

RECOMMENDATIONS AND CONCLUSIONS

The initial concept of shipping prepackaged Cleo gift-wrap to Brazil proved to be an unacceptable approach based on the culture in Brazil. Gift-wrap in Brazil is typically provided as part of the service when consumers purchase gifts. Accordingly, Brazilians do not purchase gift-wrap for home use. Therefore, utilizing excess gift-wrap following the year-end from Cleo is not a viable option.

It became apparent that one option did exist. During the manufacturing process, large rolls with 44,000 linear feet of gift-wrap are printed. Following each season, an inventory of this non-converted product is available. This could be converted to rolls that typically have 200 linear feet per roll. This is the size that is typically used in the retail industries both in the U.S. and Brazil.

This could be a viable project if Cleo recognizes that the project is a long-term commitment. The pro forma statement indicates that at the end of the fifth year, a 10% return on gross sales is possible. Cleo must recognize that this is an optimistic plan based on two factors. The average selling price for a roll of gift-wrap in Brazil is \$6.09. The range in price is from \$3.05 to \$9.14 per roll. Cleo's pricing for the same product would be \$7.50 per roll. Risk exists for Cleo; unfortunately, only experience will help the company establish a viable pricing matrix in Brazil. Cleo must recognize that low or no margins may exist on this product for up to three years. Typical of any international expansion, Cleo must be in it for the long run.

Probably a better mode of entry into this market is utilizing an acquisition or strategic alliance: over 84 printing companies in Brazil have been identified that have the potential to be involved in this alliance. Two major factors may improve the profit potential. Import taxes would be less if large 44,000 foot printed rolls were sent to Brazil to be converted into wrapping paper. The value of this product would be less, which is the basis for taxation and fees. Additionally, the labor rates are less in Brazil than in the U.S. The technology used by Cleo to convert paper to rolls

is very low. It is a labor-intensive product following the printing process. Therefore, overall cost of production will be lowered and Cleo would have the potential for higher profits.

The port of entry should be in Sao Paulo. This is the major population area in Brazil and over 35.8% of Brazilian GDP is in this city. Cleo's initial distribution and selling should be focused in this city, which should minimize start up selling expenses.

It is anticipated that Cleo should be able to take advantage as a "first-mover" into this market. A lowering of trade barriers is very possible. If Cleo were already in the market, it would reap the rewards of this trend and have a head start on other potential import companies. Additionally, Cleo should consider this as an opportunity to establish a hub operation for entry into other South American countries. Thus, Cleo should consider this a viable long-term project that has associated risks and opportunities.

REFERENCES

Ackerman, R., J. Rosenblum & H. Uyterhoeven (1977). *Strategy and organization: Text and cases in general management*. Homewood, IL: Richard D. Irwin, Inc. 235-254.

Anonymous (1996). Brazil in the world: International comparisons, Gazeta Mercantile.

- Anthony, R. & J. Reece (1975). *Management accounting: Text and cases*. Homewood, IL: Richard D. Irwin, Inc., 345-372.
- Duncan, D., C. Phillips & S. Hollander (1972). *Modern retail management: Basic concepts and practices*. Homewood, IL: Richard D. Irwin, Inc., 78-90.
- Eckhouse, R., R. Moor, R. Murdick & T. Zimmer (1976). Business policy: A framework for analysis (Second Edition). Columbus, OH: Grid Publishing, Inc., 255-267.
- Hughes, G. (1973). *Demand analysis for marketing decisions*. Homewood, IL: Richard D. Irwin, Inc., 7-10.

AN ABBREVIATED EMPIRICAL STUDY OF THE DIFFERENCES IN CHARISMA, ETHICS, PERSONALITY, AND MACHIAVELLIAN CHARACTERISTICS OF MALE AND FEMALE MARKETING STUDENTS

Mike Rayburn, The University of Tennessee mrayburn@utm.edu John Overby, The University of Tennessee joverby@utm.edu Kevin Hammond, The University of Tennessee khammond@utm.edu

ABSTRACT

Developing a corporate culture that encourages ethical behavior and discourages unethical behavior has become a major concern for organizations. However, in discussing business ethics, the sex of the offender is often ignored. This paper explores the relationship between gender and the willingness to engage in unethical business behavior. If females tend to be more ethical, this has important ramifications for placing them in executive positions in organizations. Determining an ethical profile of marketing majors will also suggest how much emphasis to place on ethics in the classroom.

Because of the growing trend for females to assume top executive positions, this study compares academic achievement, Machiavellian levels, Type A or Type B personality traits, ethical orientation, and charisma of female and male students. Female students report higher academic achievement, but male students are statistically more charismatic than female students. However, female respondents are more ethical. There is no significant difference in the Machiavellian score and Type A/B personality between female and male respondents. Higher academic achievers have higher Machiavellian scores while Type A personalities are more ethical, but are less charismatic.

INTRODUCTION

One of the most significant trends in the last two decades has been the increase of women in the workforce. With the population of female marketing students growing, it is also important to study whether they differ in personal characteristics from their male counterparts. The majority of past studies have focused on the personal characteristics of male executives because of the small number of females in corporate positions. However, this single gender approach is no longer relevant. It is important to study the impact of more females assuming managerial roles and the implications on the image of the organization.

To assess this impact, this paper also investigates the correlation between gender and Machiavellian orientation, Type A or B personality, and level of charisma. Employees having a high Machiavellian orientation have the potential for disrupting an entire organization. These individuals see what they can get away with but not to the point of becoming obvious to others who are in a position to retaliate. The Machiavellian personality has no loyalty to the organization and mainly approaches all situations from a self-interest perspective. Thus, Machiavellian orientation represents a significant variable that affects an organization and the people interacting with individuals possessing that orientation. Marketing has traditionally been considered a high stress profession because of its up-or-out environment and time pressures for financial reports, audits, and tax returns. Type A individuals continually feel the need to prove themselves and often channel their ambitions into an area that is important to them at the moment. These individuals set increasingly more difficult goals; ambitions are pushed higher and higher, always beyond their reach. Increased competition places a premium on charismatic marketers who have enhanced ability to attract and keep clients. Thus, there appears a strong correlation between Type A traits and charisma.

HYPOTHESES AND METHODOLOGY

The data for this study was obtained from 58 undergraduate marketing majors at two medium-size universities located in the mid-west and mid-south. Completing the questionnaire was voluntary and anonymous; it took approximately twenty-five minutes to complete.

The survey instrument included 77 questions. The degree of Machiavellianism is measured using the MACH IV scale developed by Christie and Geis (1970) and included 20 questions (Hunt & Chonko, 1984). The 27-item ethical scenarios section of the questionnaire was adopted and expanded from the 1991 Whipple and Wolf study. The 20-item Type A/B personality section of the questionnaire was taken from the Jenkins Activity Survey. The 10-item charisma section of the questionnaire scale items, the respondents were asked to answer in a Likert format. The A/B personality section of the questionnaire was answered by choosing one of three different responses and then putting the value for that response in the appropriate blank. The charisma section of the questionnaire was answered by choosing one of two responses for each question and summing the responses.

Formally, the following hypotheses stated in null form are tested in the study:

Ho1: There is no difference between male and female students as to their academic achievement, Machiavellism, Type A/B Personality, ethics, and charisma.

Ho2: Marketing students who have a high level of academic achievement will have no difference in their Type A/B Personality, Machiavellism, ethics, and charisma than marketing students who have a low level of academic achievement.

Ho3: Marketing students who have a high level of Machiavellism will have no difference in their academic achievement, Type A/B Personality, ethics, and charisma than marketing students who have a low level of Machiavellism.

Ho4: Marketing students who have a Type A personality will have no difference in their academic achievement, Machiavellism, ethics, and charisma than marketing students who do not have a Type A Personality.

Ho5: Marketing students who are highly ethical will have no difference in their academic achievement, Type A/B Personality, Machiavellism, and charisma than marketing students who have a low level of ethics.

Ho6: Marketing students who have high charisma will have no difference in their academic achievement, Type A/B Personality, Machiavellism, and ethics than marketing students who have a low level of charisma.

To test these hypotheses, the Mann-Whitney U test was used.

RESULTS

There were 32 female students and 26 male students, for a total 58 respondents included in the survey results. The results for the test of hypothesis 1 are shown in Table 1. The statistics indicate a significant difference in the academic achievement (GPA) for female and male students (p=0.005) with females reporting higher GPAs. There is no significant difference in the Machiavellian score and Type A or B personality between female and male students. There is a significant difference (p=0.0015) in the ethical perceptions between female and male students with females being more ethical. However, male students are statistically more charismatic than female students (p=0.055).

Table 1 Test for Differences in GPA(Academic Achievement), Machiavellianism, A/B Personality, Ethics, and Charisma Between Males and Females		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Academic achievement (GPA)	-2.7810	0.0054
Machiavellianism	1.4833	0.1380
A/B Personality	-1.2395	0.2152
Ethics	-3.1814	0.0015
Charisma	1.9171	0.0552

Table 2 illustrates the results for the test of hypothesis 2. The statistics indicate that respondents which are higher academic achievers (GPA \geq 3.00) have a higher Machiavellian score, have a Type A personality, and are more ethical. There is no statistical difference in charisma score between low and high academic achievers.

Table 2 Test for Differences in Machiavellianism, A/B Personality, Ethics, and Charisma by GPA (Academic Achievement)		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Machiavellianism	1.9171	0.0552
A/B Personality	1.9395	0.0524
Ethics	3.6529	0.0003
Charisma	-0.7108	0.4772

The statistics for the test of hypothesis 3 shown in Table 3 indicate that students with high Machiavellianism scores achieve more academically and tend to have a Type A personality are not statistically significant different at the 0.1 level. However, students with high Machiavellian scores

are more ethical at the p=0.001 level. There is no difference in charisma between marketing students with low and high Machiavellian.

Table 3 Test for Differences in GPA(Academic Achievement), A/B Personality, Ethics and Charisma By Machiavellianism		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Academic achievement (GPA)	-1.4528	0.1463
A/B Personality	-1.4967	0.1345
Ethics	-3.2295	0.0012
Charisma	1.0139	0.3106

The results for the test of hypothesis 4 are shown in Table 4. The statistics indicate that students which have a Type A personality have achieved more academically (p=0.072), have higher Machiavellianism scores (p=0.013), and are more ethical (p-0.073). There is no difference in charisma between marketing students having Type A or Type B personalities.

Table 4 Test for Differences in GPA(Academic Achievement), Machiavellianism, Ethics and Charisma By A/B Personality		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Academic achievement (GPA)	-1.7964	0.0724
Machiavellianism	2.4499	0.0143
Ethics	-1.7950	0.0726
Charisma	-0.5228	0.6011

Test results of hypothesis 5 are shown in Table 5. Individuals which are more ethical have achieved more academically (p=0.001), have higher Machiavellian scores (p=0.002), and tend to have a Type A personality (p=0.015). Also, individuals which tend to be more ethical (p=0.023) are less charismatic.

Table 5 Test for Differences in GPA(Academic Achievement), Machiavellianism, AB Personality, and Charisma By Ethics		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Academic achievement (GPA)	3.3453	0.0008
Machiavellianism	3.0499	0.0023
A/B Personality	2.4192	0.0156
Charisma	-2.2648	0.0235

Table 6 illustrates results for the test of hypothesis 6. Individuals which scored low on the charisma scale tend to have achieved more academically (p=0.067). Also, students which scored high on the charisma scale tend to have Type A personality (p=0.057). There is not any statistically significant difference in the level of Machiavellian score and ethical scores between those individuals who scored low or high on the charisma scale.

Table 6 Test for Differences in GPA(Academic Achievement), Machiavellianism, AB Personality, and Ethics By Charisma		
Column 1	Column 2	Column 3
Variable	Z Score	P-Value
Academic achievement (GPA)	1.8329	0.0668
Machiavellianism	0.0466	0.9629
A/B Personality	-1.9003	0.0574
Ethics	1.0424	0.2972

CONCLUSIONS

This study has corroborated previous research reporting that males and females may differ in the characteristics of ethical behavior, levels of Machiavellianism, Type A or B Personality, and charisma. The results of this study indicate that female marketing students possess higher ethical judgment than their male counterparts. Previous research supports this finding. Also, females have achieved more academically as indicated by their GPA. It was expected that male respondents would have Type A personalities; however, there is no difference in the Type A or B personality between female and male respondents. Male marketing students in this study are more charismatic than their female counterparts. As more women enter the workforce, there may be conflicts between the females and males over ethical issues. However, when soliciting or keeping clients, males may have the advantage because of their charisma.

The study also found that the higher achievers were more Machiavellian oriented. This finding supports the Machiavellian theory and previous research. Also, as expected, the higher academic achievers tend to have a Type A Personality. However, there was no difference in charisma between high and low achievers. In the marketing field, it is frequently necessary to work accurately for long hours under intense pressure; this may fit the Type A profile.

A surprise finding of the study is that the more Machiavellian-oriented marketing students were the more ethical. Previous theory on Machiavellianism does not support this finding. Machiavellian managers are theorized to be deceitful, manipulative, detached, but not ethical. This area of the study needs to be further studied.

The Type A Personality orientation are more Machiavellian, which was an expected result. This is an important finding because Type A individuals are easier to identify in organizations but the Machiavellian-oriented individual is hard to identify. Also, the Type A orientation is more intelligent, which is supported by previous research. In most organizations, the Type A Personality will be promoted to higher organizational positions due to their work ethic. If this individual is also more Machiavellian, then he will have less loyalty to his subordinates and an overall cool detachment to the management process.

This study identified important differences between male and females marketing students. With the number of women rapidly increasing in the marketing field, studies of this nature will assist in understanding the differences which will occur between employees. These differences could result in disputes in the workplace. Marketing managers need to be aware of these difference in order to respond in an appropriate positive manner when conflicts arise.

EMPLOYER-SPONSORED HEALTH INSURANCE: EFFECTS ON EMPLOYERS AND EMPLOYEES

Jennifer Shiflet, Sam Houston State University gba_bxm@shsu.edu Santhi B. Maniam, University of Texas Medical Branch sbmaniam@utmb.edu Hadley Leavell, Sam Houston State University fin_whl@shsu.edu Balasundram Maniam, Sam Houston State University maniam@shsu.edu

ABSTRACT

On average, nearly 11% of the gross payroll or \$5,415 is spent on medically related benefits per employee according to a United States Chamber of Commerce Survey in 2003 (U.S. Chamber of Commerce, 2003). The costs to both the employer and employee are constantly rising and debates are ongoing from conference rooms to Congress. Clearly, health insurance is an important area for employer spending and the employee.

This study will discuss the different factors facing employers and employees in medicalrelated insurance matters. Both employers and employees should be aware the variety of health plans and the possible problems impacting this critical choice.

OBJECT CLASS HIERARCHY DESIGN

Gerald P. Marquis, Tennessee State University gmarquis@tnstate.edu Santosh S. Venkatraman, Tennessee State University svenktra@yahoo.com

ABSTRACT

The identification of object classes and the relationships between them is at the heart of the *Object-Oriented Analysis (OOA).* This research describes a technique to help business systems analysts to identify object classes and their relationships to one another. The development of a rigorous approach to the analysis of object-oriented systems will be helpful to developers since it has been found that OOA required significantly greater mental workload across both experienced and novice analysts. When the relationships between object classes are established, the class structure can be visualized as a network of object classes joined by a set of inheritance relations and/or collaboration relations. The methodology is tabular and designed to promote a mutual understanding of the problem by both the user and the analyst. This is a data driven approach for the identification of object classes and the hierarchical relationships between them. Users can easily understand and answer questions as to what information a particular entity requires. When a data item has been identified as being required in multiple entities the likelihood of the need for an inheritance structure is identified. It is reasonable to assume that a user will understand what data is needed for various entities in their business functions whereas the idea of data inheritance from one object class to another object class in their environment will be more difficult to comprehend. This paper presents a methodology that will guide the business systems analyst in the design of the object class hierarchy needed to solve a business problem. Further, the use of this proposed technique will make object-oriented analysis more "user friendly" and aid in the communication process between the user and the designer. This will, in turn, aid information systems professionals to deliver systems that better meet the user's needs.

THE RISE OF ADAM SMITH AND THE DECLINE OF MERCANTILISTS AND PHYSIOCRATS: MID-18TH CENTURY ECONOMIC CHANGES

Timothy Wardlow, Christian Brothers University Sarah T. Pitts, Christian Brothers University spitts@cbu.edu Rob H. Kamery, Christian Brothers University rkamery@cbu.edu

ABSTRACT

The mid-18th century was a time that saw the birth of new economic systems. The mercantile system of the previous 250 years was being attacked by new movements in economic thought. One of the chief critics of mercantilism was Adam Smith who, with the publication of his greatest work, drastically changed modern economic theory and created a science out of what was once a philosophy of merchants. This paper will explore the rise of mercantilism and its principles and detail the criticisms of Adam Smith toward mercantile doctrine.

INTRODUCTION

This paper will discuss the origins of mercantilism through an exploration of the times preceding it. The onset of international commerce created a new class of merchants who explored economics to ensure their own well being. The merchants developed a strong sense of nationalism and in an attempt to create a strong state, developed the mercantile principle of wealth as existing in the form of specie. To accumulate specie, mercantilists developed the balance of trade principle. The mercantile system thus developed from a strong sense of nationalism, which led to a desire for the accumulation of gold and silver, further leading to the balance of trade doctrine, enabling said accumulation.

The paper will also address Smith's comments on mercantile doctrine. In *An Inquiry into the Nature and Causes of the Wealth of Nations*, Smith explores the importance of gold and silver accumulation that is embedded in the tenets of mercantilism. Smith, through his analysis of mercantile arguments in favor of specie accumulation, will ultimately find such arguments in error. By his analysis of mercantile principles, Smith proves to be one of mercantilism's greatest critics. He advocates against specie accumulation and the necessity of a favorable balance of trade, two doctrines that are at the heart of mercantile thought.

THE RISE OF MERCANTILISM

"Mercantilism is the name given to some 250 years of economic literature and practice between 1500 and 1750" (Landreth, 1976). Mercantilism was the result of the developing commercial class, the merchants. "What has made it possible to speak of mercantilism is the appearance in a number of countries of a set of theories which explained or underlay the practices of statesmen for a considerable time" (Roll, 1974). Niehans (1990) states, however, that "mercantilism was not a system, but rather an unsystematic assortment of arguments, measures, and ideas with wide differences from one country to another." It is true that mercantilism lacks the established doctrine that many other systems have built upon, but there is a set of beliefs and tendencies common to most mercantile writers. The era of mercantilism began with the ending of the Dark Ages. At the end of the Dark Ages, the self-sufficient manors of the feudal system gave way to the growth of great nations governed by a centralized state. The onset of international trade and exploration was also crucial in the demise of the manor. Society no longer had to rely on merely what it could make but could now draw on resources from across the globe. The shift from isolated manors to interdependent trading nations was the central catalyst for mercantilism.

As trade began to flourish, the localized manor began to disappear and the market system took root. "Production of goods for the market became more important, and land, labor, and capital began to be bought and sold in markets" (Landreth, 1976). As society began to look outside the manor for resources, the development of foreign commerce put the last nail in the coffin of feudalism. Roll (1974) states, "Another powerful factor is to be found in the maritime discoveries which led to a very great expansion of foreign commerce." With the development of commerce and markets, farmers and producers could go beyond the markets of their own land and into foreign lands which further destroyed the self-reliant system. The onset of foreign commerce brought with it a new sense of foreign competition. The development of nation-states changed the perspectives of rulers from internal concerns to external concerns. Nations began to fight for the resources of far off lands. This sense of national competition gave rise to the first defining principle of mercantilism, a strong sense of nationalism.

Nationalism was an essential part of mercantile thought. The reason for the mercantilists' concern over the strength of their nation was self-motivated. Merchants needed strong national governments to protect their interests as they traveled over seas. "The building-up of nation-states [was] put in the forefront, and monetary, protectionist, and other economic devices [were] regarded merely as instruments to this end" (Roll, 1974). Trade and production were devices to use to strengthen the nation. "The single most important concern of mercantile writers was that the nation's resources be used in such a manner as to make the state as powerful as possible both politically and economically" (Ekelund & Hebert, 1975). As the merchants gained wealth, they also gained power and prestige enabling the mercantilists to influence the actions of government. "Those responsible for government accepted mercantilist notions and fashioned their policy accordingly" (Roll, 1974). The mercantilists made economic policy just one more tool in the nation's arsenal. In exchange for their loyalty, the wealthy merchants were well rewarded by their political allies. The mercantile governments enacted bills protecting domestic goods from competition abroad. Governmental interference was also needed to protect their domestic industries in the foreign markets. As Roll (1974) states, "The efforts of the merchants and companies to achieve control over the distant areas with which they traded were seldom sufficient. They had to be supplemented by the exercise of the power of the states... The links between the trading interest and the state were thus still further tightened; and the concern of state policy became increasingly concentrated of problems on trade."

The principle that the wealth of a nation was the gold and silver contained in the nation's vaults became an essential part of mercantile doctrine. The wealth of a nation was needed to fund foreign wars, and thus in order to develop a strong world power, the accumulation of large amounts of gold and silver was necessary. The mercantilists' obsession with gold and silver became their "basic belief...that it was necessary to accumulate gold and silver through foreign trade in order to foster national wealth and power" (Staley, 1989). The governments of this era were largely influenced by the mercantilists and developed policies in order to keep large amounts of specie in the country. "Richard II, in a reply to a complaint about the shortage of money, included in the Navigation Act of 1381 a prohibition of the export of gold and silver" (Roll, 1974). The governmental restriction on the export of specie is congruent with the belief of "the early mercantilists [who] recommended that the export of bullion be strictly prohibited. Later writers suggested that exporting bullion might lead to an improvement in overall trade balances if the bullion was used to purchase raw material for export goods" (Landreth, 1976). This statement

establishes the mercantile belief in a balance of trade, which replaces the belief in a complete prohibition on specie exportation.

Mercantile doctrine included the principle that there exists a balance of trade between commercial nations. This doctrine has at its root the "assumption that the total wealth of the world was fixed" (Landreth, 1976). If this is true, then in any transaction where a person gains wealth, it is at the expense of the opposing party. "The mercantilists carried this reasoning over to trade between nations, concluding that any increase in the wealth and economic power of one nation was necessarily at the expense of other nations. Thus the mercantilist emphasized international trade as a means of increasing the wealth and power of a nation and, in particular, focusing on the balance of trade between nations" (Landreth, 1976).

"One's own balance of payments surplus and the deficit of one's rivals thus became the primary objectives of economic policy, to be achieved by all sorts of import restrictions, duties, bounties, subsidies, and regulation" (Niehans, 1990). The tools used by governments to protect their favorable balance of trade were numerous, but their goal was the same, to ensure that no more wealth left the nation than was coming in and to allow for the entry of more wealth than was exiting. Mercantilists believed that "[p]rotective duties should be placed on manufactured goods from abroad, while importation of cheap raw material, to be used in manufactures of foreign competitors, those merchants who controlled the domestic manufactures had a monopoly. Furthermore, if they ensured the importation of cheap raw materials, they also ensured a higher profit margin, further showing how governments supported the merchants.

SMITH'S CRITICISMS OF THE MERCANTILE SYSTEM

Smith dramatically changed the general economic views of his time with his criticisms of mercantilistic principles. Smith begins his criticism by discussing the value of gold in relation to the mercantile nations. He states that "for some time after the discovery of America, the first inquiry of the Spaniards, when they arrived upon any unknown cost, used to be if there was any gold or silver to be found in the neighborhood?" (Smith, 1999). The Spanish, who possessed gold mines, desired to increase their stock of gold through the exploration of other lands. Gold was their primary motivation and all other resources were superfluous. Smith further explores gold's role as a measure of value and medium of exchange by comparing the Spanish to the Tartars. Smith states that, "Among the Tartars, as among all other nations of shepherds, who are generally ignorant of the use of money, cattle are the instruments of commerce and the measures of value. Wealth, therefore, according to them, consisted in cattle, as according to the Spaniards it consisted in gold and silver. Of the two, the Tartar notion, perhaps, was the nearest to the truth" (Smith, 1999). In this statement, Smith downgrades the mercantilist notion that gold is the primary source of wealth. Here Smith gives cattle higher value than gold, perhaps due to the numerous uses of cattle when compared to the primary use of gold as merely a medium of exchange.

The Wealth of Nations also expresses the views of modern mercantilists. Smith paraphrases Locke by writing that "Money...is a steady friend, which, though it may travel about from hand to hand, yet if it can be kept from going out of the country, is not very liable to be wasted and consumed. Gold and silver, therefore, are, according to him, the most solid and substantial part of the movable wealth of a nation, and to multiply those metals ought, he thinks, upon that account, to be the great object of its political economy" (Smith, 1999). This statement reestablishes the mercantile belief that the exportation of specie should be prevented to allow for the accumulation of specie. "In consequence of these popular notions, all the different nations of Europe have studied, though to little purpose, every possible means of accumulating gold and silver in their respective countries" (Smith, 1999). The outright prohibition of the exportation of gold and silver was a short-lived method for the accumulation of precious metals, which gave way to the balance of trade principle. The favorable balance of trade principle was met with the same amount of criticism from

Smith as the exportation prohibition. Smith (1999) states that, "The attention of government was turned away from guarding against the exportation of gold and silver to watch over the balance of trade as the only cause which could occasion any augmentation or diminution of those metals. From one fruitless care it was turned away to another much more intricate, much more embarrassing, and just equally fruitless." Smith's criticism, however, is not derived from the ineffectiveness of the practices in the accumulation of gold and silver. The criticisms have as their source Smith's rejection of the belief that gold and silver are the sources of a nation's wealth; "Upon every account, therefore, the attention of government never was so unnecessarily employed as when directed to watch over the preservation or increase of the quantity of money in any country" (Smith, 1999).

Smith also establishes the role of money as a medium of exchange and details the role that it plays in comparison with other goods. "It is not because wealth consists more essentially in money than in goods that the merchant finds it generally more easy to buy goods with money than to buy money with goods; but because money is the known and established instrument of commerce, for which everything is readily given in exchange, but which is not always with equal readiness to be got in exchange for every thing. The greater part of goods, besides, are more perishable than money, and he may frequently sustain a much greater loss by keeping them" (Smith, 1999). Smith also shows the limits of money in comparison to other valuable goods. "Goods can serve many other purposes besides purchasing money, but money can serve no other purpose besides purchasing goods. Money, therefore, necessarily runs after goods, but goods do not always or necessarily run after money. The man who buys does not always mean to sell again, but frequently to use or to consume; whereas he who sells always means to buy again" (Smith, 1999). Money is just a means to an end. It is a tool society must utilize in order to perform commerce more efficiently.

Smith attacks the necessity of holding large amounts of gold and silver within a nation's borders. Smith believes "that the quantity of gold and silver is in every country limited by the use which there is for those metals," and "to attempt to increase the wealth of any country, either by introducing or by detaining in it an unnecessary quantity of gold and silver, is as absurd as it would be to attempt to increase the good cheer of private families by obliging them to keep an unnecessary number of kitchen utensils" (Smith, 1999). The very notion that an abundance of gold and silver is both useless and absurd flies in the face of mercantile thought. Smith continues by dismissing the notion that foreign wars are funded by specie. "Fleets and armies are maintained, not with gold and silver, but with consumable goods. The nation which, from the annual produce of its domestic industry, from the annual revenue arising out of its lands, labour, and consumable stock, has wherewithal to purchase those consumable goods in distant countries, can maintain foreign wars there" (Smith, 1999). Smith uses as his example the last war fought by England before the publication of his book to emphasize that gold and silver were not sufficient to finance the massive undertaking that is war, and the "enormous expense of the late war, therefore, must have been chiefly defrayed, not by the exportation of gold and silver, but by that of British commodities" (Smith, 1999). If the accumulation of gold and silver are not the tools with which nations finance war, then "commodities...the annual produce of the land and labour of the country...the ultimate resources which enable us to carry on the war" must be the true source of wealth within a nation (Smith, 1999).

Smith methodically destroys the principles that lie at the heart of mercantile thought. He eliminates the necessity of gold in the maintaining of a strong nation state and the financing of foreign wars. Smith also establishes the commodities of a nation as the true source of a nation's wealth. Smith further proves that the mercantile economic practices of prohibiting the exploration of specie and the balance of trade doctrine are both absurd and unnecessary. Smith, through his analysis of mercantile principles, proves to be mercantilism's greatest critic.

CONCLUSION

This paper has illustrated the many economic changes that occurred during the 18th century. Mercantilism was slowly being replaced. It was a system obsessed with the accumulation of gold and silver, which was seen as a necessary component in the building of a strong nation. This nationalism, fueled by the believed necessity of specie stores, led to the prohibition of gold and silver exportation punishable by strict laws. The prohibition was later replaced with regulations to encourage a favorable balance of trade, the next key mercantile doctrine. Whatever the policy, the goal remained the same, the accumulation of large amounts of gold and silver to be used in times of national defense.

Mercantilism saw its end with the publication of *The Wealth of Nations*. Smith presents in his book a detailed analysis of the mercantile system. Smith examines the mercantile notion of gold and silver as the only sources of wealth and concludes that such a notion is preposterous. Smith further examines the mercantilists' attempts to accumulate large amounts of gold and silver and concludes that these too are preposterous. In his criticisms, Smith irrevocably condemns the mercantile system in favor of a system in which commodities are deemed the true wealth of a nation and are allowed to flow freely within and without.

REFERENCES

- Ekelund, Jr., R. & R. Hebert (1975). *A history of economic theory and method*. New York City, NY: McGraw-Hill Book Company, 30.
- Landreth, H. (1976). *History of economic theory: Scope, method, and content*. Boston, MA: Houghton Mifflin Company, 19-21.
- Niehans, J. (1990). *A history of economic theory: Classic contributions, 1720-1980.* Baltimore, MD: The Johns Hopkins University Press, 19-20.
- Roll, E. (1974). A history of economic thought. Homewood, IL: Richard D. Irwin Inc., 55, 57, 61-62, 69.
- Smith, A. (1999). The wealth of nations: Books IV-V. London, England: Penguin Books, 6, 11, 13-17, 19, 21.
- Staley, C. (1989). A history of economic thought: From Aristotle to Arrow. Cambridge, MA: Basil Blackwell Inc., 9.

INSIGHTS TO TEACHING GENERATIONS X AND Y BUSINESS STUDENTS

Carol L. Bruneau, The University of Montana Carol.Bruneau@business.umt.edu MaryEllen Campbell, The University of Montana Maryellen.Campbell@business.umt.edu

ABSTRACT

Through the years, teaching has often been noted as being a "noble profession." With the challenges of teaching generations X and Y many business professors are beginning to appreciate why others consider teaching such a noble profession. Generations X and Y have become a challenge not only in the workplace, but in educational institutions. Many who teach often attest to the fact that these students are different from the ones they taught a decade ago. Today's business students often do not comprehend or retain material covered in class. They are focused on practicality to such an extent that they often become fixated on memorizing only what will be covered on the test to the exclusion learning.

For business professors who have been in the field for a number of years, it is easier to blame Generations X and Y students for their lack of understanding than it is to accept responsibility for ineffective pedagogical technique. Could it be that these generations are so different in their ability to access and acquire information that they need to have pedagogy tailored especially to them? The authors think this might be a strong possibility. In fact, it is the authors' belief that the continued use of traditional teaching methods is the reason so many professors find Generations X and Y such a challenge.

This research attempts to deal with why the old ways of teaching just do not produce the same results with students as they once did. In this paper, the authors examined values of Generations X and Y through a survey of undergraduate marketing students' attitudes toward various teaching methods. Based on the results of their survey, the authors propose that there are specific methodologies which are more effective than others in motivating business students to learn and to retain information. Specifically, the study found that students were more motivated to learn when marketing classes were personal, interactive, stimulating and practical (Bruneau & Campbell, 2002). Using this framework, the authors identify students' preferences for specific teaching techniques and suggest how to incorporate the results of these data into the classroom.

ACCOUNTING STUDENTS' FUNDAMENTAL FINANCIAL REPORTING KNOWLEDGE

Marianne L. James , California State University, Los Angeles mjames2@exchange.calstatela.edu Carol Blaszczynski, California State University, Los Angeles cblaszc@exchange.calstatela.edu

ABSTRACT

A financial accounting assessment instrument was administered to 196 students enrolled in two sections of intermediate accounting and four sections of the second accounting principles course between Fall 2002 and Spring 2003. Overall, students who had completed more than one accounting principles course performed better on the pre-course knowledge test than did students who had completed only one accounting principles course. However, the percentage of correct responses to some items was low—the characteristics of a multiple-step income statement and the number of income statement years presented in an annual report. Recommendations are presented for remedying these low mastery knowledge aspects.

INTRODUCTION

Financial reporting scandals have renewed the focus of financial statement users, preparers, auditors, and governmental agencies on the importance of truthful and high quality financial reporting. The Sarbanes-Oxley Act of 2002 has numerous provisions that aim at preserving and enhancing the integrity of financial statements.

Because accounting is "the language of business," accounting courses typically are required core courses in business schools, and all students majoring in business-related fields typically must complete one or two principles courses and one managerial accounting course. The National Business Education Association's (NBEA) *National Standards for Business Education* (2001) describe the role of accounting as "an essential aspect of every business institution and organization" (p. 2). They further emphasize the value of accounting to future business persons in that those who "...understand basic accounting principles will more knowledgeably manage their companies' financial resources." (p. 2) The standards still further emphasize that "As citizens, future parents, and investors, these students will be better prepared to make the economic decisions that will impact their communities--such as passing a referendum to build new schools--and to make the financial decisions that will affect their own economic futures." (p. 2) Kerby and Romine (2003) identified the pressing need for a more financially knowledgeable public.

Standard No. 3 (NBEA, 2001) focuses on the importance of understanding financial statements. An understanding of financial statements requires knowledge of basic financial accounting and reporting concepts. Yet, some studies suggest that financial statement users generally are not knowledgeable about financial reporting. Perhaps this signals some lack of knowledge regarding fundamental financial accounting and reporting concepts.

This study investigated the fundamental knowledge of business majors who had already completed at least one principles of accounting course about some key aspects of financial accounting and reporting.

LITERATURE REVIEW

Francisco and Kelly (2002) conducted a follow-up study to Albrecht and Sacks' (2000) landmark work comparing perceptions of college students and accounting professionals.

Practitioners and professionals rated critical thinking as a top skill, while accounting majors rated it fourth and non-accounting majors rated it seventh. Furthermore, Bonk and Smith (1998) observed, "Perhaps embedding creative and critical thinking concepts directly into the accounting curriculum will provide the foundation for rebuilding accounting programs around the generative and evaluative skills required for the global business environment." (p. 263)

According to Bruer (1993), floundering learners possess sketchy domain-specific knowledge. Hill and others (1996) studied the linkage between positive transfer of learning from the first to the second accounting courses. Bookkeeping skill mastery in the beginning course was strongly positively associated with second course exam performance. Basu and Cohen (1994) developed a financial analysis report for a second principles course to enhance critical thinking and soft skills. As a result of positive student feedback, the project is now a course requirement.

A review of the literature yielded no study that examined financial reporting mastery of students as measured by a pretest in the second and third accounting courses. Thus this study attempts to fill part of the gap in the literature.

RESEARCH QUESTIONS

Three research questions were posited:

- What is the fundamental knowledge of accounting students who have already completed the first principles of accounting course?
- What is the fundamental knowledge of accounting students who have already completed more than one principles of accounting course?
- Is there a significant difference between accounting and non-accounting students at identical progress levels?

METHODOLOGY

A questionnaire was developed to assess students' fundamental knowledge of financial reporting aspects. The questionnaire was administered on the first day of class as a pre-course assessment in two sections of Intermediate Accounting and four sections of Principles II during the Fall 2002 and Winter and Spring 2003 terms. One-hundred and ninety-six students completed the assessment.

The questions addressed several aspects of financial reporting including the accounting basis used, overall content of annual reports, years presented, the role of note disclosures, identification of financial statement items, and the usefulness of accounting.

RESULTS

This section presents information regarding the demographics of the students including major, age group, gender, working status, the number of accounting courses already completed, and academic standing.

Of the 196 students who completed the questionnaire, 38% were accounting majors, and 62% were non-accounting business majors. The most common non-accounting business major was computer information systems.

The students were asked to indicate the age group to which they belong. Twenty-three percent indicated that they were less than 21 years old, 42% that they were between 21 and 25 years old, 22% that they were between 26 and 30 years old, 10% that they were between 31 and 35 years old, and 3% that they were more than 35 years old. The students were also asked to indicate their gender, and 40% indicated that they were male and 60% that they were female.

The students were asked to indicate their academic standing, and 26% indicated that they were sophomores, 51% that they were juniors, 15% that they were seniors, and 8% were graduate students. Sixty-two percent of the students indicated that they were currently working.

The students were asked to indicate the accounting courses that they had already completed. Their responses to this question were classified dichotomously, with 65% of the students indicating that they had completed only one financial accounting course, and 35% indicating that they had completed at least two financial accounting courses.

One-hundred and ninety-six participants answered the knowledge assessment questions. Of those, 128 had completed only one accounting course, and 68 had already completed at least two accounting courses classes. The mean percentage correct was calculated separately for each of these two groups.

The students were asked to indicate how many comparative income statements typically were presented in an annual report. The choices given were 1, 2, 3, 4, and 5 years. Only 11% of the students who had already completed one accounting course identified "3" as the correct number of income statement years, while 28% percent of those who had completed more than one accounting course correctly answered this question.

The students were asked to identify the role that the notes to the financial statements play. Twenty-eight percent of the students who had completed one accounting course and 47% of those who had completed at least two accounting courses correctly identified the financial statement notes as "an integral part of the financial statements."

The students were asked to choose the statements that are included in a set of financial statements. Twenty-five percent of the students who had completed only one accounting course and 50% of those who had completed at least two accounting courses identified all four required financial statements--the balance sheet, income statement, statement of cash flows, and retained earnings statement.

The students were asked to indicate the basis of accounting that can be used in the U.S. for financial reporting. Thirty-seven percent of those who had completed one accounting course and 40 percent of those who had completed at least two courses correctly identified accrual accounting as the one acceptable basis for financial reporting.

The students were asked to choose the appropriate characteristics of a multiple-step income statement. Only 11% of the students who had competed one accounting course and 25% of those who had already completed at least two accounting courses correctly identified "shows the gross margin on sales" as the characteristic of a multiple-step income statement.

The students were asked to identify the characteristic of an asset. Fifty percent of the students who had completed one accounting course and 57% who had completed two accounting courses correctly identified "future economic value" as the key characteristic of an asset.

Students were asked to choose which of a number of transactions gives rise to a current liability. Sixty-six percent of the students who had completed one accounting course and 78% who had completed two accounting courses correctly identified "wages owed to employees" as a current liability.

The students were asked to identify the effect of expenses on the accounting equation. Only 24% of the students who had completed one accounting course and 25% of the students who had completed at least two accounting courses identified "decreases stockholders' equity" as the correct response.

ANALYSIS OF FINDINGS

The majority of the students, both at the principles and the more advanced level, were unable to identify "3" as the correct number of income statement years. The most common incorrect answer was "1" year, with 58 of the students choosing that answer. A likely reason for this misconception is that students typically are exposed to only one-year presentations in textbooks.

The most common incorrect answer regarding the financial statement notes was to consider them supplemental. This may be due to the fact that students do not have a lot of exposure to notes and do not often review notes in conjunction with the financial statements.

With regard to a complete set of financial statements, the most common error was to exclude the retained earnings statement. In addition, some students included the cost of goods manufactured statement as a required statement.

Overall, the majority of the students did not identify "accrual accounting" as the correct financial reporting basis. The most common incorrect and, in fact, the most common answer was "either cash or accrual accounting." This incorrect response may be partially due to the everyday importance of cash.

Regarding the effect of expenses, the most common incorrect answer was that it decreases revenues.

DISCUSSION

Potential remedies for the lack of knowledge demonstrated by students follow. Instructors should emphasize the comparative nature of financial statements. The importance of note disclosures must be included in class discussions--particularly since there is more information presented in notes. More emphasis should be placed on the retained earnings statement. Unfortunately, some principles textbooks ignore this fundamental financial statement. Accrual accounting is the cornerstone of financial reporting, the only acceptable method in the U.S. This concept must be reinforced to help financial statement users understand/assess earnings management.

SUMMARY AND CONCLUSIONS

Students who had already completed more than one accounting course performed better on the pre-class knowledge test. Still, in several areas, such as characteristics of a multiple-step income statement and the number of income statements presented in a typical annual report, the percentage of students who were able to correctly identify the criteria was disappointingly low.

The results of the study indicate that exposure to more accounting classes improves performance. In addition, students who had correctly identified the number of years of income statements also performed better on several other aspects. Perhaps this result may indicate that increased exposure to annual reports improved knowledge in this aspect.

REFERENCES

- Albrecht, W. S., & Sack, R. J. (2000). Accounting education: Charting the course through a *perilous future*. American Accounting Association.
- Basu, P., & Cohen, J. (1994). Learning to learn in the accounting principles course: Outcome assessment of an integrated business analysis project. *Journal of Accounting Education, 12* (Fall), 359-374.
- Bonk, C. J., & Smith, G. S. (1998). Alternative instructional strategies for creative and critical thinking of the accounting curriculum. *Journal of Accounting Education*, *16*(2), 261-293.
- Bruer, J. T. (1993). *Schools for thought: A science of learning for the classroom*. Cambridge, MA: The MIT Press.

- Francisco, B., & Kelly, A. (2002). Beyond Albrecht and Sack: A comparison of accounting professionals and college students. Retrieved June 27, 2003, from http://www.aicpa.org/download/career/edu/Beyond_Albrecht_Sach.pdf
- Hill, M. C., Stratton, R., & Edwards, J. D. (1996). Transfer of learning in the introductory accounting course sequence. *The Accounting Educators Journal*, 8(Spring), 27-50.
- Kerby, D., & Romine, J. (2003). Ideas for the accounting classroom. *Business Education Forum*, 57(30), 30-32,59.
- National Business Education Association. (2001). National standards for business education: What America's students should know and be able to do in business. Reston, VA: Author.
THE INFORMATION CONTENT OF CORPORATE EVENTS: TAKING STOCK OF THE INTRA-INDUSTRY PERSPECTIVE

Sanjay Rajagopal, Montreat College srajagopal@montreat.edu

ABSTRACT

This paper presents results from research pertaining to the industry-wide transfer of information from a diverse set of corporate events. Early studies in this area date back to the late 1970s and early 1980s, but the literature indicates that interest in this area of research became more widespread in the 1990s, and the subject remains a fruitful area of study even today. This paper organizes into six categories the results of the bulk of the intra-industry studies in finance. More importantly, though, it discusses several methodological issues involved in conducting such research. Finally, it highlights areas of conflicting evidence that are therefore potential candidates for further research.

INTRODUCTION

Following the development of the Capital Asset Pricing Model (CAPM) in the 1960s and 1970s, applied research in finance trained much attention through the 1980s on the use of "event study methodology" to assess the information content of various corporate events, such as stock splits and equity offerings. For the most part, this research focused on documenting the equity valuation implications for the firm *directly affected* by the event of interest. A few studies in this decade, however, sought to widen the scope of enquiry into the information content of firm-specific events by attempting to measure the effects of such events on the stock prices of *rival* firms. Beginning in the early 1990s, interest in this "intra-industry" perspective gained momentum, and, the sustained stream of research seen since then indicates that interest has not yet ebbed; the study of industry-wide information transfers remains a fruitful area of research.

The current paper has three objectives: *First*, it seeks to present the results pertaining to the diverse events that have been studied from the intra-industry perspective with the view of impressing upon the reader the fact that many events have valuation effects that are more far-reaching than traditionally understood. *Second*, the survey seeks to stimulate new ideas for further empirical work in the area of information transfer. *Third*, for the benefit of such research, it highlights numerous methodological issues involved in conducting intra-industry studies.

ANTICIPATING SPILLOVER EFFECTS

In general, a development at an individual firm could have implications for its competitors in the same resource and product markets because the event may (1) reflect changes in the profitability of the industry as a whole, or (2) suggest competitive shifts within the industry. Thus, research dealing with intra-industry effects is grounded in the idea that firms within an industry are likely to compete in the same resource and product markets. As such, their values will be affected similarly by a set of common factors, or differentially by a set of firm-specific factors. That is, if an event at one firm (the "originating" firm) is perceived by the market to have been occasioned by an industry-wide factor (such as a decline in market demand), the valuation effects of that event would be in the same direction for the originating and rival firms. On the hand, the firms being placed in a competitive setting, if the market ascribes the event to a firm-specific factor (such as a management problem or law suit), the valuation effect of the event would be of an opposite sign for the originating firm and its competitors (see, for example, Szewczyk (1992)). This paper will demonstrate that according to existing studies, a diverse set of events appears to possess industry-wide implications.

CATEGORIES OF CORPORATE EVENTS

It is possible to place the existing intra-industry studies into the following six topical categories:

- Earnings releases and forecasts;
- Bankruptcy announcements;
- Capital structure adjustments;
- Dividend changes, initiations, and omissions;
- Corporate takeovers, mergers, and restructuring; and
- Miscellaneous events

The last category includes studies on labor union strikes, bond rating changes, stock splits, layoffs, and announcements of R&D expenditures. Most categories include multiple studies on approximately the same topic, and the results of these studies do not always agree. Therefore, may of these areas are potential subjects for further research.

REFERENCES

Szewczyk, S. H. (1992). The Intra-Industry Transfer of Information Inferred from Announcements of Corporate Security Offerings. Journal of Finance, 47, 1935-45.

WHY SHOULD CREDIT RE-RATINGS HAVE SPILLOVER EFFECTS? A RATIONALE BASED ON DISCRETE RATINGS AND IMPLICIT CLAIMS

Sanjay Rajagopal, Montreat College srajagopal@montreat.edu

INTRODUCTION

Recent studies have empirically examined the industry-wide ramifications of bond downgrades, and have documented the existence of revaluation effects on the rivals of firms that experience an adverse credit re-rating (see, for example, Caton and Goh (2003), Akhigbe *et al* (1997); Schweitzer *et al* (1992)). These studies make a valuable contribution to the literature on the information content of bond rating changes, by demonstrating that bond downgrades appear to signal information even for a subset of firms that do not experience the rating change. The present note supplies for one gap in that evolving literature, by developing systematically a *rationale* for the *a priori* expectation that bond downgrades will have industry-wide effects.

OVERVIEW

This paper's argument for the possible effect of a bond rating change on the stock prices of industry rivals rests on the following four elements:

- an issue's rating being a measure of its default risk *relative* to all other issues (those within and outside its industry);
- the inability of a scheme of discrete rating classes to reflect the precise differences in the probability of default between issues;
- the notion that even if a rating change is prompted by firm-specific factors, it may signify a change in the *competitive* position of rivals; and
- the assumption that investors could perceive the re-rating as stemming from altered industry prospects.

RELATIVE DEFAULT RISK

Agency ratings indicate *relative rather than absolute* levels of default risk. As Moody's (1990) states, its rating scheme is intended to provide investors with a "simple system of gradation by which relative investment qualities of bonds may be noted". While a firm's industry affiliation does help determine the original rating for its issue, rating agencies may have cause to revise their estimates of the investment risk attached to that industry's issues. Industry-specific factors that affect the risk of default can then precipitate rating changes for debt issues within that industry. To the extent that rating agencies are found to be credible sources of information, this implies that it is possible for some rating changes to convey new information about industry prospects.

DISCRETE RATING CLASSES

But why do some, and not *all*, issues within the affected industry come to be re-rated? This phenomenon may owe itself to the fact that *discrete* rating classes are used to reflect the probability of default, which is a *continuous* variable. As new information arrives, some issues may become

SHIFTING COMPETITIVE POSITION

One may contend, on the basis of the foregoing discussion, that bond re-ratings for individual firms can be caused by changes in the industry's financial prospects, and the rating event can therefore be relevant to rivals. But a bond rating change for one firm may also be informative to another firm for a quite different reason: the latter may glean from it information with regard to its own competitive position in the industry. With a downgrade of its bond issue, for instance, a firm may be perceived as a weaker or less efficient industry rival. The converse would apply to an upgrade. Altman (1984), and Lang and Stulz (1992) anticipated a similar effect in the case of their studies of corporate bankruptcy.

STAKEHOLDER THEORY

The stakeholder framework suggested by Cornell and Shapiro (1987) also provides a reasonable basis for expecting the re-rating of a firm's bonds to have an impact on the stock prices of rival firms. A firm can be viewed as issuing implicit claims to its stakeholders, a group that includes the firm's customers, workers, and suppliers. Customers might expect technical support, advise, servicing, and replacement parts; having to change products on account of a defunct manufacturer would therefore be costly. Workers might view the firm as an entity in which they invest their human capital, and from which they receive some measure of support and job security. Again, switching firms would impose costs on employees, especially those with highly specialized skills. Similarly, suppliers might not consider it worthwhile investing time and resources in developing a relationship with a firm with bleak financial prospects.

When a firm's debt is downgraded, its stakeholders may suspect a reduction in the payout on implicit claims because of firm-specific problems, and do business with rival firms. Potential customers, for instance, might not buy an expensive piece of machinery if they fear that specialized after-sales service or replacement parts will be unavailable in the future. Even if the downgrading is seen as proceeding from a deterioration in the prospects for the industry as a whole, stakeholders in both the re-rated and rival firms may place less value on implicit claims. In either case, one can expect the stock prices of rival firms to be affected on account of the investors' anticipation of stakeholder reaction and the consequent impact on cash flow.

INVESTOR PERCEPTIONS

Finally, the impact of a bond rating change on the stock prices of industry rivals is a function of investors' perceptions; it is possible for some rating changes not prompted by revisions in industry prospects to nevertheless be perceived by investors as indicators of altered industry-wide expectations. This error can be expected to be an increasing function of the degree of uncertainty at the macroeconomic and firm levels. Consider, for instance, the potential reluctance of creditors to roll-over maturing debt upon the arrival of adverse information about the issuing firm. Short-term borrowing, in particular, leaves firms vulnerable to excessive liquidations (see, for example, Diamond (1991; 1993), and Barclay and Smith (1995)). If the downgrading of one firm's debt is seen by creditors as indicative of problems at other firms in the industry, the latter may experience difficulties in refinancing their maturing debt.

REFERENCES

- Akhigbe, A., J. Madura, and A. M. Whyte (1997). Intra-Industry Effects of Bond Rating Adjustments. *Journal of Financial Research*, 20, 545-561.
- Altman, E. (1984). A Further Investigation of the Bankruptcy Cost Question. *Journal of Finance*, 39, 1067-1089.
- Barclay, M. J., and C. W. Smith (1995). The Maturity Structure of Corporate Debt. *Journal of Finance*, 50, 609-631.
- Caton, G. L., and J. Goh (2003). Are All Rivals Affected Equally by Bond Rating Downgrades? *Review of Quantitative Finance and Accounting*, 20, 49-62.
- Cornell, B., and A. C. Shapiro (1987). Corporate Stakeholders and Corporate Finance. *Financial Management*, 16, 5-14.
- Diamond, D. W. (1991). Debt Maturity Structure and Liquidity Risk. *Quarterly Journal of Economics*, 106, 709-737.
- Diamond, D. W. (1993). Seniority and Maturity of Debt Contracts. Journal of Financial Economics, 33, 341-368.
- Lang, L. H., and R. M. Stulz (1992). Contagion and Competitive Intra-Industry Effects of Bankruptcy Announcements: An Empirical Analysis. *Journal of Financial Economics*, 32, 45-60.

Moody's Investor Service (1990). Moody's Bond Record, New York.

Schweitzer, R., S. H. Szewczyk, and R. Varma (1992). Bond Rating Agencies and their Role in Bank Market Discipline. *Journal of Financial Services Research*, 6, 249-263.

Denise-Margaret Thompson, Norfolk State University dmthom@nsu.edu

ABSTRACT

Wealth is created by individuals who start and persist in their endeavors because of both the existence and the perception of entrepreneurial opportunities. Many educational institutions as change agents in their localities and regions use their research, scholarship and outreach functions to actively engage with entrepreneurial and potentially entrepreneurial individuals. Together they produce economic transformation through knowledge creation, knowledge and technology transfer, continuous education and lifelong learning. Education and entrepreneurship contribute to economic growth and community development by creating jobs, building businesses, and re-shaping industries leading to wealth creation. Given demographic forecasts for the U.S., wealth creation among minority communities assumes critical importance for local, regional and national economic development. Efforts to understand how targeted individuals perceive or misperceive entrepreneurial opportunities will provide useful information for supporting economic development efforts.

This inductive case study evaluates a cohort of Tidewater Regional Minority Purchasing Council (TRMPC) members' perceptions of opportunity, growth barriers, and services provided by agencies in the Tidewater area, including that of the Entrepreneurship Center at Norfolk State University (NSU). We examine their self-reported perceptions of general growth opportunities in their industry; potential opportunities for their specific businesses; barriers to growth for their businesses; and remedies for addressing barriers to growth. The results suggest that these entrepreneurs perceive opportunities for their industry and specific businesses as positive. While they perceive capital acquisition to be their major growth barrier, they perceive remedies and services provided by agencies including NSU's Entrepreneurship Center as neutral to negative in addressing their major barriers to growth.

Research results suggest areas for further should inform both public policy efforts at the macro-level as well as the efforts of entrepreneurship centers, business incubators and other educational institutions at the micro-level in providing program support to nascent and practicing entrepreneurs. Recommendations can be formulated to ensure systematic and more powerful institutional engagement, targeted more specifically for intended audiences.

Key Words: entrepreneurship, opportunity perception, minority entrepreneurship, barriers to business growth,

WAGES AND VOLUNTARY LABOR TURNOVER: COMPARING IT WORKERS WITH OTHER PROFESSIONALS

James Morgan, Northern Arizona University James.morgan@nau.edu Wendy Campione, Northern Arizona University Wendy.campione@nau.edu Max Jerrell, Northern Arizona University Max.jerrell@nau.edu

ABSTRACT

There is a body of literature suggesting that a new labor contract between employer and employee is emerging which places less value on loyalty and long term employment relationships. Some have argued that the use of computing technology contributes to this by making skills more common and transferable across organizations, thereby encouraging organizations to hire away the skilled workers of their competitors. Concern about voluntary job change specifically among IT professionals was heightened during the IT boom of the late 1990s.

This study examines monthly employment, wage, and job change data from 1998 through the beginning of 2001. IT professionals were compared to other technical and managerial workers. In addition, IT workers employed in the computer services industry (the sector which includes software companies and IT consulting firms) were examined as a distinct subgroup of IT workers. IT professionals who changed jobs were found to have gained a small wage premium, while other professional workers did not benefit from job change. In addition, voluntary job change rates were found to be high for IT professionals in the computer services industry, while IT professionals in other industries were no more likely to change jobs than other professional workers.

INTERNATIONAL DIPLOMACY AND ETHICS: RELEVANCE FOR COMMERCE

Bernard J. O'Connor, Eastern Michigan University boconnor@emich.edu

Diplomats are not guided by any international code of ethics beyond that determined by their individual States. In the United States, for example, two Executive Orders (EO 11222 and EO 12834) constitute the basis for fostering "integrity in all official actions." Their provisions determine the ethical norms by which government employees are regulated. Most countries, at least in the Western world, have enacted legislation with the same intent. Naturally, inconsistencies among the various texts dealing with ethical observance are prevalent. That fact suggests to this presenter/author that an effort should be made by the international community to formulate and ratify a code of ethics designated specifically for diplomatic representatives. The proposal is all the more significant for two additional reasons.

First. National legislation does not distinguish diplomatic personnel form other strata of government service. The unique challenges confronting diplomats have yet to receive attention from either scholars or the designers of law and political policy. An international code of ethics for diplomats would resolve that deficiency.

Second. Diplomats are not a monolithic category of government officials. Their ranks include the residential staff of embassies assigned by State Departments throughout the world, together with special envoys, delegates to conferences and participants in projects to prepare diverse international agreements. The general term 'diplomat' embodies an extensive constituency of roles and of responsibilities. Again, current national legislation does not consider the possibility of ethical obligations proper to each.

The matter of the ethical dimension of diplomacy has contemporary significance. Since the advent of rhetoric surrounding pre-invasion Iraq, the impression created both by President Bush in this "Remarks to the Nation" on March 17, 2003, as well as by the media (e.g. U.S. News & World Report), is that diplomacy has failed. This presentation/essay refutes that deduction and verifies that while 'ad hoc diplomatic negotiations' may have failed, residential diplomacy is still viable and successful in its endeavors. Moreover, residential diplomacy is also an excellent context from which to derive a series of ethical principles. Principles here selected typify the very kind which could become foundational for a potential international code of ethics for diplomats. Indeed, the concept is not so far fetched. Diplomatic Relations. A companion document, the 1963 Vienna Convention on Diplomatic Relations. A companion document, the 1963 Vienna Convention on Consular Relations, deals with an associated mechanism for international engagement, the consulate. It is of interest that neither document, although widely circulated and discussed, ever makes reference to the significance of ethics. But the fact that diplomacy's function and structure can be the theme of international Conventions, definitely indicates that a parallel agreement pertinent to ethics is well within reason and advisability.

Since ethics is meant to permit moral knowledge to modify moral behavior, it is necessary to relate the ethical principles proposed in this essay to a concrete situation. The one chosen is that of international business. Given that modern communications technology has become highly efficient, commerce has achieved an unprecedented level of transnationalism.

Experts both in the academic pursuit of diplomacy and in international law and political processes concur that reliance upon embassies has not only increased, but that it is entirely a matter of sheer common sense that this should be the case. This presentation demonstrates that overlapping interests between residential diplomacy and international commerce means that developments in the arena of one influences the evolution of the other. Consequently, ethical principles appropriate to

diplomacy will inevitably and profoundly impact how businesses elect to perform in foreign countries. Examples pertain, for example, to employment philosophy, labor rights, trade regulations, investment procedures and the safeguard of intellectual property. Should the ethical implications of residential diplomacy become clearly and coherently articulated, this range of examples would attain an enhanced capacity for the continual reform and redefinition of goals and strategies.

The core of this presentation/essay involves six potential ethical principles which might be recommended for inclusion in an eventual international code. The six are:

- 1. The necessity of search for common ground
- 2. Facilitation of legal and humane contact networks
- 3. Endorsement of a labor philosophy in which workers are not a commodity
- 4. Exercise of intent to develop economic relations
- 5. Enables a venue for input on behalf of reform
- 6. Stands as witness to unqualified integrity

A brief consideration of the first of the six will illustrate the remainder.

Adam Watson, commenting upon the importance for diplomacy of truth telling in the Report process, describes how residential diplomats must resist every pressure for Groupthink. And diplomats, he states, must likewise probe every avenue to find common ground for cooperative development and as a barrier against the emergence of conflict. Fidelity to the ethical principle of search for common ground means that embassy officials (e.g. the Environment, Science and Technology Officer) should promote adherence to standards advanced by the international community. It is, for instance, in keeping with common ground/common good interests to insist that businesses seeking to establish branch offices in a receiving State should be vigilant of anti-pollution requirements, as well as regulations pertinent to the movement of hazardous wastes, to protection of the ozone layer and restrictions on the trade and transport of endangered species. Again, each of the six proposed principles may be analyzed in a comparable manner. Diplomatic ethics and the thrust of international commerce exchange a mutuality of benefits which ultimately shapes the protection of overall society.

PLAYING CATCH-UP WITH MUTUAL ASSENT IN BUSINESS TRANSACTION IN CYBERSPACE

Donavan Ropp, California State University, Bakersfield dropp@csub.edu Brian McNamara, California State University, Bakersfield bmcnamara@csub.edu

ABSTRACT

This paper addresses the evolutionary operational processes of the "acceptance" prima facie features as related to new approaches of "acceptance" and the formation of contracts in today's world. The issues, in this instance, really compare and address the concepts of <u>acceptance</u> from a "classical approach" of traditional Common Law, including Uniform Commercial Code (UCC) Article 2 principles that have been in practice for the past forty years, with concepts that are in vogue today as to acceptance and consummating business transactions in a more advanced technology driven Knowledge Age.

INTRODUCTION

Arthur Corbin, former Professor of Law at Yale Law School and the premiere 20th Century philosopher of the law of contracts states "The underlying purpose of law and government is human happiness and contentment, to be brought about by the satisfaction of human desires in the highest practicable degree. It has been found that this end can best be attained, in cases where there are conflicting human interests and desires, by establishing a judicial and administrative system that acts with a reasonable degree of uniformity." Corbin continues that ".... the field of law that is classified and described as the law of contracts attempts the realization of reasonable expectations that have been induced by the making of a promise." With this said, Corbin also recognized that under no system of law that has ever existed are all promises enforceable, and that reasonableness is no more absolute in character than is justice or morality.

These understandings of fundamental standards continue to be a guide for 21st Century practices relating to the formation of contracts through the *prima facie* ingredient of "acceptance." The traditional approach is that <u>promises</u> become binding when there is a meeting of the minds, <u>mutual assent</u>, and consideration is exchanged. In the mutual assent *prima facie* category, the operational process is that an <u>offeror</u> makes an <u>offer</u> to an <u>offeree</u>. The offer essentially gives the offeree the immediate power to legally bind and create a new legal relationship between the offeror was under a legal liability to the power of the offeree. With the acceptance power initiated by the offeree, the new legal relationship is created with the offeror and offeree owing each other various legal rights and duties as enumerated by the accepted offer. So it was at King's Bench in common law England; so it was under the common law in the American colonies; so it was through more than two centuries of jurisprudence in the United States of America; and so it is today. (1)

This paper addresses the evolutionary operational processes of the "acceptance" *prima facie* features as related to new approaches of "acceptance" and the formation of contracts in today's world. The issues, in this instance, really compare and address the concepts of <u>acceptance</u> from a "classical approach" of traditional Common Law, including Uniform Commercial Code (UCC) Article 2 principles that have been in practice for the past forty years, with concepts that are in vogue today as to acceptance and consummating business transactions in a more advanced technology driven Knowledge Age. Today's areas of active change in the contract "acceptance" arena seems to focus on such topics as Shrink-Wrap and Click-Wrap Agreements, E-Signatures,

Electronic Data Interchange transactions, provisions of The Uniform Computer Information Transactions Act (UCITA), and provisions of the Uniform Electronic Transfer Act (UETA). The application of this research is to determine the impact of these new topics on the traditional approaches of classical "mutual assent" and "acceptance" theory and the power of creating new legal relationships in business transactions through such contracting.

E-COMMERCE DEPARTURES FROM TRADITIONAL CONTRACTUAL PRACTICES

Shrink-Wrap Agreements: Acceptance of the formation of a contract in this instance is simply the act of the licensee (the purchaser or customer of the vendor) unwrapping and opening a software package. More specifically, for the past decade, plus, it is the practice of the software industry to impose standardized licensing terms on mass-market purchasers by enclosing a printed copy of the license that is viewable from within a clear plastic wrap that is sealed around the software package. The term "shrink-wrap" refers to the cellophane-wrapped boxes that software products are packaged in. This "shrink-wrap" process typically provides that the act of opening the software package constitutes an acceptance of the license on a "take-it-or-leave-it" (accept-or-return) basis. These licenses are unsigned agreements between the purchaser of a software program and the manufacturer that specify the conditions for use of the software. Once the package is broken the consumer is bound to the licensing terms. Realistically, this action resembles the performance requirement of a unilateral contract where the licensee immediately assents to terms and conditions and accepts the said provisions as an executory contract by opening and using the software product.(2)

Obviously, these shrink-wrap agreements are not negotiated terms and conditions between the licensors and licensees, but, instead, are blanket boilerplate provisions imposed on the individual licensees. Shrink-wrap conditions often limit the customer's rights of use of the software as well as the customer's rights against the licensor/seller, such as unfavorable limited warranties or limited damages recoverable for defects. Other covenants of the license may deny the right to sue the licensor and force arbitration proceedings instead, or apply numerous laws that are extremely favorable to the vendor and unduly detrimental to the customer. If blatant enough, courts will refuse to enforce such shrink-wrap agreements, calling them adhesion contracts if customers are unlikely to read or understand terms that are unconscionable or violate public policy. In some situations, courts have invalidated shrink-wrap agreements as a post-negotiation attempt to unilaterally impose additional but unfavorable terms on the buyer since the licensee was not aware of negative provisions of the license until after the opening the software package when the agreement was actually consummated.

Aside from the discussion above, shrink-wrap agreements are generally enforceable and automatically obligate the licensee contractually to the stated terms. These agreements are enforceable if drafted carefully and clearly, are displayed conspicuously to permit review by the customer, and do not deviate substantially from software industry norms. The fact is that shrink-wrap agreements are so common that they constitute a "usage of trade" that sets a precedent for interpreting similar licenses. (3)

The shrink-wrap agreement process is expanding beyond software products to include such items as DVDs and electronic accessories. Its relatively new appearance as a method of customer acceptance for licenses and agreements has become a routine method of conducting business transactions throughout several industries in the mass marketing and distribution of products. Even though the shrink-wrap concept of acceptance is a creation of the so-called "E-Contracting" world, most of the legal issues and remedies as associated with the *prima facie* "acceptance" element may be addressed through traditional common law contract theory, Restatement (Second) of Contracts, Uniform Commercial Code, and even through regulations of governmental agencies (the Federal Trade Commission for example), such as warranties, boilerplate terms and conditions, battle of the forms, opportunity to inspect, right to return merchandise, contracts of adhesion and unconscionable

clauses, added terms and materially altered terms, fair methods of competition, the mailbox rule, and whatever is reasonable under the same or similar circumstances.

As to current shrink-wrap court cases in the United States, the most dramatic issue being addressed by many interests within the business community is pertaining to a judgment delivered in the Bowen v. Baystate Technologies (January 28, 2003) case. The U.S. Court of Appeals, the Federal Circuit, essentially granted software manufacturers the right to include "reverse engineering" prohibitions in shrink-wrap agreements. This case involves a specific provision in a shrink-wrap license agreement that prohibits "reverse engineering" by licensees and users. The impact of this provision could have potentially unprecedented influence as to future dealings with business transaction associated with intellectual property topics, such as software and trade secrets. It would allow software manufactures to protect their unregistered intellectual property interest from being scrutinized through reverse engineering techniques by their customers and competitors simply by making the requirement a provision of a shrink-wrap agreement. It would essentially force a nondisclosure type agreement with all its customers without going through the formal process of intellectual property protection of patents, copyrights, or trademarks. In other words, in some instances, trade secrets and other unregistered products would have the same protection of a patent without going through the process. There are possible Constitutional issues (Article I, Section 8) as to intellectual property rights and, additionally, provisions under copyrights that would challenge the right to use the fair use doctrine. Business competitors will be concerned about fair methods of competition. The issues of this case are important enough to the business community to be considered for U.S. Supreme Court review. (4)

CLICK-WRAP AGREEMENTS (ALSO KNOWN AS "CLICK-ON" AGREEMENTS AND "CLICK" AGREEMENTS)

Click-Wrap agreements are similar to shrink-wrap licenses. Shrink-wraps have evolved into the Click-Wrap agreements that are encounter while operating a computer. This occurs when a buyer, completing a transaction on a computer, is required to indicate his or her assent to be bound by the terms of an offer by clicking on a button that says "I Agree." The user clicks on an icon that states "I Agree" or similar phrase of assent. For example, use of the software or access to a Web site is often prevented unless the user clicks affirmatively "I Agree" during software installation or before accessing Web site content. More specifically, when setting up a new computer or when installing a new program, the user generally is faced with an agreement to which the user is given the choice of agreeing or not agreeing with the contents. The program will not open unless consent by clicking on the box containing the words "I Agree" or similar wording to the terms on the agreement is given.

Click-Wraps are generally enforceable under the same standards applicable to Shrink-Wraps (SEE above), as long as the agreements meet basic requirements regarding the user's opportunity to review the terms and conditions and manifest assent to be bound. Most court in the United States enforce Click-Wrap Agreements if it appears the provisions of agreement provide users with adequate notice and require users to manifest assent. The issue in this instance is the essential balance between facilitating online business and ensuring that users are not bound by contracts of which they had no knowledge. Even with this assurance, be aware that both Click-Wrap and Shrink-Wrap agreements, under certain instances, may be vulnerable to invalidation as unconscionable or as adhesion contract. (5)

E-SIGNATURES (ALSO KNOW AS "ELECTRONIC SIGNATURES" AND "DIGITAL SIGNATURES")

In the realm of acceptance relating to the formation of E-contracts, the E-Signature may not be an issue because the transacting parties have a pre-existing relationship and the parties have

means of determining who the other party is when E-contracting. The vendor in such cases has access to a good bit of information about the potential purchases including name, address, credit card numbers, and other information. One means of verifying that the person on the other side of the transaction is the person he purports to be is to use a passwords.

Today, there are numerous technologies that allow electronic documents to be signed. These include digital signatures and alternative technologies that permit verification of the authenticity of the signature and record sent through the Internet. One highly technical approach is use of the asymmetric cryptosystem where a third party private cybernotary (a so-called Certification Authority) certifies the validity through complex encryption algorithmic processes. Cybernotaries already are available, but they do not operate within any existing legal framework because they are so new. (6)

Another variation on a theme of signature technology, known as *signature dynamics*, involves capturing a sender's signature using a stylus and an electronic digitizer pad. This information is then placed in an encrypted *biometric token* attached to the document being transmitted. To verify the authenticity of the signature, the recipient of the document compares the measurements of the signature with the measurements of the token. Additionally, technological innovations now under way will allow an E-signature to be evidenced by an image of one's retina, fingerprint, face or DNA that is scanned by a computer and then matched to a numeric code. In the future, these scanned images and the numeric code are registered with security companies that maintain files on an accessible server that can be used to authenticate a transaction.

CONCLUSION

For now E-Contracts and the effect on the common law on future business transactions will be a wait-and-see proposition. As to the overall progress of the evolution of the common law change process, it is alive and well and performing at an extraordinary speed in addressing issues between technology advancement and the role of law, itself, in keeping up with the fast pace of consummating business transactions in a global economy with some stability and predictability in the system. The early trends are in and they appear to be exciting and promising. This is a success story. The relevant issue is, can these trends be sustained and expanded? We believe the definitive answer is: an educated business community will demand it. The true issues of the future will be related to jurisdiction, legal, and business transaction harmonization, and resolution of these differences among trading partners in the global economy. There areas will be covered in future research.

NOTES:

- 1. Corbin, Arthur (1952). *Corbin On Contracts*, West Publishing. Information derived from the last two pages is from the thoughts of Arthur Corbin. This text is one of the most outstanding works ever written about contracts and the role of the common law.
- 2. Procd, Inc. v. Zeidenberg, 86 F3d 1447 (7th Cir. 1997).
- 3. A.I.G. Uru. Compania de Sequros, S.A. v. AAA Cooper Transportation, decided June 19, 2003, 11th Cir.
- 4. Bowers v. Baystate Techs, 320 F.3d 1317 (2003)
- 5. DeJohn v. TV Corp. Int'l, 245 F.Supp.2.d 913 (2003)
- 6. Maitland, Kalton, "Something for Your E-Signature," Vision Estates Gazette, www.reedbusiness.com/comprop.htm

THE DIMENSIONS OF COUNTRY OF ORIGIN CONSTRUCT: COUNTRY AND ETHNIC IMAGE

Costas Hadjicharalambous, Long Island University/C.W. Post Campus chadji@liu.edu Michael Chattalas, Wagner College mchattal@wagner.edu

ABSTRACT

Drawing from various research traditions in political science, social psychology, anthropology and sociology, and after examining the concepts of ethnocentrism, stereotyping, national character, and enemy research, the paper develops the argument that treating the country of origin as a unidimensional construct is inadequate. The basic premise of the study is that the "country of origin" construct has two dimensions, (a) attitudes toward the source country, "country image" and (b) attitudes toward its people, "ethnic image". Whereas both dimensions influence product evaluations originating from a specific country, country evaluations would be expected to vary depending on the product type.

Using a between-subjects experimental design in which country and ethnic images are manipulated, the study finds empirical support for the two dimensions of country of origin product evaluations: attitudes toward countries ("country image") and attitudes toward their peoples ("ethnic image"). The impact of each of the two dimensions of the country of origin construct on different type of products (hedonic- utilitarian) is also examined. Interestingly, the analysis showed that while "country image" affects the evaluation of hedonic products, "ethnic image" has no significant effect on the evaluation of utilitarian products. This implies that favorable judgments about a nation's people matter more for hedonic than utilitarian products.

The study's results have many managerial implications for multi-national corporations (MNCs). Furthermore, there are critical consequences for governments and industries concerned with strategic efforts to market specific nations. MNCs that engage in a high level of global sourcing may incorporate the findings on country and ethnic image when they choose their manufacturing locations. A company that sells hedonic products should choose to locate in nations with positive ethnic image. Companies that produce utilitarian products should select to locate in nations with a favorable country image. Of course, the ideal location would be countries that enjoy both factors on a positive scale.

INDEX OF AUTHORS

Allen, C		
Blaszczynski, C		. 97
Bruneau, C		
Campbell, M		. 95
Campione, W	5, 33,	111
Chattalas, M		119
Chen, C		7
Cook, E		9
Dukes, T	11, 17	', 23
Evans, M		. 29
Ganesh, G		1
Guzeltepe, N		. 43
Hadjicharalambous, C		119
Hammond, K		. 78
Hood, F		. 73
James, M		. 97
Jerrell, M	5, 33,	111
Kamery, R 11, 17, 23, 49, 55, 61, 0	67, 73	5, 89
Kehoe, W		. 35
Leavell, H	43	5, 85
Maniam, B	43	5, 85
Maniam, S		. 85
Marquis, G		. 87
McNamara, B		115
Morgan, J	5, 33,	111
Overby, J		. 78
O'Connor, B		113
Pearce, J		
Pitts, S 11, 17, 23, 49, 55, 61, 0	67, 73	5, 89
Prien, K		
Rajagopal, S		
Rayburn, M		. 78
Ropp, D		115
Shiflet, J		
Thompson, D		
Venkatraman, S		
Wardlow, T		. 89