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JOURNAL OF ECONOMICS AND ECONOMIC EDUCATION RESEARCH

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LETTER FROM THE EDITOR

We are extremely pleased to present the second edition of the Journal of Economics and Economic Education Research, an official publication of the Allied Academies' Academy of Economics and Economic Education Research, dedicated to the study, research and dissemination of information pertinent to the improvement of methodologies and effective teaching in the discipline of economics with a special emphasis on the process of economic education. The editorial board is composed primarily of directors of councils and centers for economic education affiliated with the National Council on Economic Education. This journal attempts to bridge the gap between the theoretical discipline of economics and the applied excellence relative to the teaching arts.

The Editorial Board considers two types of manuscripts for publication. First is empirical research related to the discipline of economics. The other is research oriented toward effective teaching methods and technologies in economics designed for grades kindergarten through twelve. These manuscripts are blind reviewed by the Editorial Board members with only the top papers in each category selected for publication, with an acceptance rate of less than 25%.

A special invited article written by the President and CEO of the Students in Free Enterprise, Alvin Rohrs, provides an overview of the micro and macro value of the SIFE program for students and faculty alike, both in this country and around the world. SIFE's motto is very appropriate to its mission: "At the micro level SIFE is 'Changing the World' one life at a time."

We are inviting papers for the third edition of the Journal for Economics and Economic Education Research and encourage you to submit your papers according to the guidelines found on the Allied Academies web page at www.alliedacademies.org.

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INVITED ARTICLE

A MACRO AND MICRO LOOK AT SIFE: STUDENTS IN FREE ENTERPRISE

Alvin Rohrs, President and CEO
Students in Free Enterprise

SIFE AT THE MACRO LEVEL

The Inaugural SIFE World Cup was held July 11-13 in London, where the SIFE National Champions from 18 countries competed for the crown of SIFE World Champion - a title won by Drury University for the 4-year division. Butte College, the SIFE USA Champion in the 2-year division, was also announced as the 2-year World Champions since there are not any 2-year divisions outside the U.S. This was a milestone for SIFE in a year when SIFE achieved another milestone - 1000 colleges and universities in 25 countries enrolled in SIFE.

In the United States, over 750 colleges and universities were enrolled in SIFE representing 30% of all colleges and universities and 39% of all four-year universities. The number of schools participating in SIFE in the U.S. has been growing at an average 15% a year and is expected to continue growing at double digit rates.

The primary source of funds to support this effort is the contributions of the Board of Directors - 175 top business leaders.

SIFE AT THE MICRO LEVEL

The macro view of SIFE shows significant growth but the real value of SIFE is best seen at the micro level … at the campuses where SIFE is active and in the communities where those SIFE Teams operate.

What Is A SIFE Team?

A SIFE Team is lead by a faculty advisor, named a Sam Walton Fellow, who recruits a cadre of students to conduct free enterprise education projects throughout their community. The mission of a SIFE Team is teaching others.

What Do SIFE Teams Teach?

Market Economics, Entrepreneurship, Personal Success Skills and Business Ethics. These concepts are embodied in the four main SIFE Judging Criteria. The Criteria is:

How creative, innovative and effective were the students in teaching:	
1.	How free markets work in the global economy.
2.	How entrepreneurs succeed by identifying a market need and then profitably producing and marketing a product or service to fill that need.
3.	The personal, entrepreneurial, communications, technology and financial management skills needed to successfully compete.
4.	Practicing business in an ethical and socially responsible manner that supports the principles of a market economy.

In their educational programs, how effective were the students at:	
5.	Measuring the results of their projects.
6.	Utilizing mass media and the Internet.
7.	Involving non-business majors and utilizing a Business Advisory Board.
8.	Communicating their program through their written report and verbal presentation.

How Do SIFE Teams Teach?

SIFE's learning philosophy is "Tell me and I will forget, show me and I might remember, involve me and I will understand." SIFE Teams determine what audiences they want to target and then develop outreach projects to teach their selected audiences. This process can include acquiring and using materials from other sources or developing the materials themselves. The teams are encouraged to develop and use the most effective and creative teaching methods.

What Motivates SIFE Teams?

The primary motivation for the students and faculty are to see the impact their educational efforts have on those they teach. SIFE also introduces a secondary motivation, which is intercollegiate competition and recognition. SIFE Teams compete with each other to see who is the best at teaching others market economics, entrepreneurship, personal success skills and business ethics.

SIFE Teams compete in the overall competition at regional, national and global competitions, and in several categories of special competitions.

What Do SIFE Students Learn?

The SIFE experience is a unique learning opportunity for SIFE students. SIFE's leadership philosophy is; people support what they help to create. SIFE students learn leadership, teamwork and communications skills. By creating education projects, SIFE students learn and practice brainstorming, project management, marshalling resources, time management, interpersonal communication and public speaking, to list just a few. SIFE is unique among most student organizations because SIFE students receive recognition only by teaching others to succeed and only for the team's effort

How Do Faculty Benefit?

Faculty advisors/Sam Walton Fellows get to become true mentors of the students on the team, improve the lives of those they help reach, improve their community and improve the learning on their campus.

How Can Economic Educators Benefit?

Including the organization of a successful SIFE Team into current economic education activities increases significantly the amount of activities that can be conducted and can increase the quality of those efforts. This is due primarily to the volunteer efforts of the students. This is documented very well in the Larry Dale article; "Student Performance in Economics and Economic Education" (*Journal of Economics and Economic Education Research*, Volume 1, Fall 2000, pg. 44-52.)

At the macro level SIFE is "Changing the World" by involving thousands of students and faculty around the world in teaching economic and business concepts to millions of people in 25 countries.

At the micro level SIFE is "Changing the World" one life at a time.

ECONOMIC EDUCATION ARTICLES

STUDENT PERFORMANCE IN ECONOMICS AND ECONOMIC EDUCATION COURSES IN ARKANSAS AND TEXAS: A COMPARATIVE STUDY

Joel Allen, Lamar University, Beaumont, Texas
Larry R. Dale, Arkansas State University

ABSTRACT

The conventional wisdom is that many students have a perception of economics as both difficult to understand and biased in its predictions. To the extent that this opinion holds true it would translate into a negative attitude toward economics as a subject. The purpose of this study is to determine precisely what student attitudes toward economics are and if those attitudes are changed by formal exposure to the discipline. Further, were there any differences in attitude toward the teaching of economics and where economics belongs in the overall curriculum? Three very different groups of students were examined for this study.

INTRODUCTION

The purpose of this study is to determine precisely what student attitudes toward economics are and if those attitudes are changed by formal exposure to the discipline. Further, were there any differences in attitude toward the teaching of economics and where economics belongs in the overall curriculum? Three very different groups of students were examined for this study.

The first group consisted of in-service classroom teachers in grades Kindergarten through Junior College. These experienced educators were earning graduate credit for advanced studies in economic education. The majority, 87%, had some previous course work in economics or economics for teachers. A sub-group included in-service teachers attending a seminar or noncredit workshop in either Texas or Arkansas was included it the study. These workshops are sponsored by their respective state councils on economic education and by a center for economic education at either Arkansas State University in Jonesboro or Lamar University in Beaumont, Texas.

Group II consists of elementary education majors enrolled in a required course called Economics for Elementary Teachers. The purpose of this course is to provide preservice elementary education majors with some basic background in Economics and instruction in teaching materials and methods relative to economics in the Kindergarten through grade six curriculum.

Group III consists primarily of business students enrolled in a basic principles of microeconomics course. This class primarily served students pursuing a business major along with a few majoring in social studies and engineering. It would seem that the attitudes toward economics could vary dramatically among the three groups of students. They all had a significantly positive attitude toward economics in the curriculum, even though the teacher groups were more positive about its inclusion into the elementary level curriculum.

RESEARCH DESIGN

Eight different groups with five different instructors were the subjects of this study. A total of 306 subjects were included in the study, which was conducted during the Spring and Summer semesters of 1998. Group I consisted of 86 preservice teachers from 18 different school districts in northeastern and central Arkansas. Four different instructors were used in this course. Another 40 teachers, who were workshop participants from Texas, were joined by 52 teachers from Arkansas workshops in economics for teachers. Group II consisted of 26 preservice teachers, taught by Dr. Jerry Crawford, and another 85 preservice teachers taught by Dr. Larry Dale in economics for teachers at Arkansas State University. Group III contained 21 students enrolled in Microeconomics (Principles) and taught by Dr. Crawford.

The students came from varied backgrounds with different majors. The researchers were interested in exploring the values and characteristics that contribute to the attitudes and aptitude of students under these widely varied circumstances. The independent variables examined included; sex, age, occupation, previous courses in economics, previous courses in business, four attitudes toward economics in the curriculum responses, one personal attitude toward economics and thirty questions related to specific cognitive subjects in economics and the curriculum. These were compared against the dependent variable of the difference between the mean pre-course score and post-course test score.

The study included several additional attitudinal factors such as; enjoyment of the course, usability of the information and grade expected. All of the attitude factors were rated on a five-point scale from strongly agree strongly to disagree, with three representing no opinion. A list of twenty-one basic economic concepts was also presented and subjects were asked to identify where these should be placed in the curriculum, if at all. A response of 0 indicated this concept should not be placed at the pre college curriculum, a response of 2 would indicate that the concept could be introduced in the primary grades, a 3 intermediate grades, a 4 grades seven-nine and a 5 at the high school.

RESULTS

First a standard t-test, testing the null hypothesis that the post course scores are equal to the pre-course scores, revealed that statistically significant improvements in the mean score of all three tested groups had occurred. A chi square comparison of the means for the three groups on the TEL suggested no significant difference in their performance. The highest posttest mean (31.41 or 74.8%) was for the In-service teacher group I followed by (30.77 or 73.3%) for the preservice teacher group and (28.46 or 67.8%) for the microeconomics students. This is an important finding since the economic education courses cover less cognitive material than the principles course, because they must include some coverage of curriculum matters. Past studies, conducted by this researcher, indicate that despite less coverage the teacher groups out perform regular principles groups because of the practical nature of the instruction.

When it was discovered that 32% of the microeconomics students had no previous courses in economics, possibly putting them at a disadvantage on this test of combined macro-microeconomics, they were run as a separate group. They had a pre-course mean of 21.22, as compared with 24.06 for those with previous courses, and a post-course mean of 22.02. Both differences proved to be statistically significant so that the two groups were run separately for the remainder of the study.

Personal Characteristics and Attitude Factors

An educational production function that allows for simultaneous determination of cognitive and attitudinal responses were conducted. Cognitive and attitudinal responses are assumed to be simultaneously formed as specified in Grimes ect. (1989). The estimated equation provided a significant F-statistic and acceptable cross-sectional Adjusted R2. Examination of the Adjusted R2 values reveals that both cognitive performance and attitude responses explain a greater proportion of the observed variations in student scores for the teacher groups than for the microeconomics groups. It appears that the learning and attitude formation process involves more complex factors among the group of microeconomics students. That would seem reasonable since the class is less focused and the interest, occupationally and intellectually, more varied among that group which included students from three colleges and 7 degree programs across campus.

The regression analysis also examined the influence of the following independent variables:

Sex

The in-service teacher and microeconomics groups were evenly matched, with females making up 56% of the subjects, which is consistent with the makeup of the general student population. The preservice teacher group, made up of future elementary teachers, was predominantly female at 94%. Sex was not a significant factor in either student performance or attitude toward economics.

Occupation

Occupational status was extremely significant in that educators were more likely to support the use of economics in the curriculum, particularly at the elementary grade levels, than were other occupations. The educators were also more likely to rate specific economic terms as usable at both the elementary and secondary levels. No significant difference in the ratings of teachers from Arkansas and Texas was discovered.

Despite the significant difference in the ratings, a majority of the members of all groups were supportive of the presentation of significant amounts of economic content at the precollege level. No significant difference was discovered in the performance of any occupational group on the standardized achievement tests at the .01 level.

Previous Course Work

Previous course work in economics was highly significant as a predictor of success on the TEL, as would be expected, but courses in other business fields was not significant at the .01 level. Student understanding of economics does not benefit significantly from courses taken in accounting, business computers, and other areas of the general business curriculum.

Attitude Toward Economics in the Curriculum

The three groups universally agreed that all students should have some exposure to economics before graduating from high school, with 91% of all respondents agreeing. The mean response on this question was 4.79 on a five-point scale with 5 representing strongly agree.

The attitudes of the microeconomics students did differ significantly from the teacher groups on the importance of teaching economics in the elementary grades. However, 80% of that group still believed that some economics should be taught prior to the secondary grades. There seems to be a universal recognition that economic subject matter is important enough that all citizens should have a basic understanding of economic concepts and issues.

A standard t-Test, testing the null hypothesis that post-course attitude scores are equal to pre-course attitude scores, determined that attitudes toward economics had proved statistically significant improvements. Not only were people more favorable toward economics as a subject [76.71%] but students came out of the course experience believing that they needed some background in as an individual [63.89%]. They also believed that economics was important in the general curriculum [67.13%] . The teacher groups showed a much stronger gain in favorable attitudes toward economics than the microeconomics group [91.08% compared with 52.66%]. They also were more likely to include economics in the curriculum and at lower grades than were the microeconomics group. If the economic education program is to be successful, it is critical that teachers have a good attitude toward economics .

Attitude Toward the Personal Value of Economics

Students overwhelmingly believed that economics instruction and knowledge had been valuable to them personally [92.34%]. This positive attitude supports the idea that everyone needs some economics instruction. No statistically significant difference was discovered between the attitude rating of high and low achievers on this question.

Attitude Toward Specific Economic Issues

Students were asked to examine a list of economic concepts, from the National Council on Economic Education Framework, and to rate where each concept should be included in the curriculum. The choices included; elementary level (grades K to 6), secondary level (grades 7 to 12), College level, College level (majors only) and none. Less than 3% of the respondents selected the “none” option on any concept so that option was excluded from the study and the table of results (see table 2). A chi square test of significance, at the .01 level, was conducted to determine if there was any significant difference in the way the three groups rated each concept in terms of grade level placement. The teacher groups were much more likely to introduce concepts into the precollege curriculum than were microeconomics students. Since they had been exposed to grade level appropriateness during the course, they were more familiar with the teaching methods and materials available at all level. The in-service teachers had frequently taught some economics in their classrooms making them more accepting of early placement of economics. Interestingly, no significant difference between the pre and post course ratings was indicated. Exposure to economics concepts did not make any of the students more or even less accepting of the role economics should play in the overall curriculum. This is due to the fact that students gave economics an extremely high rating on both the pre and post course survey.

The teacher groups were significantly more favorable to the introduction of all economic terms than were the microeconomics group, especially at the elementary level. The preservice teachers were significantly more likely to introduce the following terms at an earlier age than were the more seasoned in-service teachers; scarcity & choice, productivity, institutions & incentives, supply & demand, income distribution, gross domestic product, trade and inflation. The in-service teachers were more likely to introduce the following terms than were the preserves teachers; opportunity costs & trade offs, economic systems, exchange, markets & prices, market structures, market failures, government, unemployment and exchange rates.

The teacher groups were in relative agreement on most economic topics and differed significant from the microeconomics group on both elementary and secondary level placement of terms and concepts. The micro group stated that ten concepts should not be introduced until the secondary curriculum including; productivity, markets, market structure, income distribution, market failures, GNP, inflation, trade, stabilization and exchange rates.

Trained teachers have a more positive and realistic attitude toward economics in the k-12 curriculum. Their opinions about economics are in close agreement with the placement advice offered by economics expert from the National Council on Economic Education as represent in the Scope & Sequence book.

The difference between teachers in Arkansas and Texas was not significant except on three concepts; Gross Domestic Product, market failures and aggregate supply and demand. Teachers from Arkansas were more likely to attempt those concepts at an earlier point in the curriculum. The Texas teachers' opinions' on those three topics was more in keeping with that of the economics experts. This is a sign that we are teaching the same basic ideas in different center-sponsored programs in these states.

A special survey was conducted with the subset of group I, preservice teachers enrolled in a seminar or workshop, with some interesting results. Table III displays the difference between the Texas and Arkansas Group on these special topics. Arkansas teachers were more likely to include some emphasis on economics in their curriculum, but both groups agreed that they would include the study. The Arkansas teachers were more aware of state requirements in economics instruction. Arkansas has embarked on a statewide campaign and most districts are required to hold workshops in which attendance is mandatory for all faculty. This has proven advantageous in recruitment of teachers for workshops since economics is a significant part of the required social study's curriculum and student testing for grades Kindergarten through eight. Otherwise, there was no significant difference between teacher attitudes on economics in the curriculum. All groups of teachers planned to include more economics in their class lessons as a result of the workshop by an overwhelming 92%

CONCLUSIONS

Studying economics had no statistically significant effect on the attitude of students toward the importance of economics or on their grade level placement in the curriculum. This was primarily because students were very positive in their attitude toward economics on both the pre and post course survey. Evidently all students are becoming more aware of the important role that economics plays in current affairs and have discovered the value of universal economic literacy.

This study does suggest that teachers, and those training to be teachers, have more confidence in the ability of younger students to understand basic concepts than students in the regular principles course. Interestingly, little disagreement was noted over the introduction of most of the basic concepts listed for the secondary curriculum.

This study discovered very little difference in attitude as the result of sex or previous courses taken. It is significant that the main predictor of success on the TEL was the number of previous economics courses taken. Obviously the more economics one is exposed to the more they learn and retain.

The result of the concept placement analysis indicates that the economic education program is helping education majors with the appropriate grade placement of material. Student findings correspond closely with grade placement decisions made by experts as suggested by the Scope and Sequence evaluation of selected economic education experts. Overall, Teachers in both in-service and preservice programs had a good understanding of the grade appropriateness of most concept after completing a course or seminar in economics. Previous studies have shown that this is not true of the general teacher population (Becker, 1983 and Gilliard, 1989). We are making a difference in preparing teachers for the global economy so that they may prepare their students.

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TABLE I
PLACEMENT OF ECONOMICS CONCEPTS IN THE CURRICULUM

Post Course Attitude Survey

CONCEPT	GROUP I			GROUP II			GROUP III		
	K-6	7-12	COLL	K-6	7-12	COLL	K-6	7-12	COLL
SCARC & CHOICE	*52%	26%	17%	*65%	12%	24%	24%	48%	
OPPORT. COSTS & TRADE OFFS	*62%	19%	15%	*56%	22%	6%	6%	56%	31%
PRODUCTIVITY	*44%	31%	23%	*58%	17%	5%	0	57%	23%
ECONOMIC SYS.	41%	12%	4%	*35%	35%	23%	11%	51%	29%
INSTIT. & INC	66%	12%	16%	*76%	5%	5%	23%	52%	11%
EXC MONEY & INTER.	*57%	29%	14%	*47%	29%	11%	17%	47%	22%
MARKETS/ PRICE	*44%	26%	26%	*29%	35%	17%	0	51%	29%
SUPPLY/DEMAND	*48%	30%	19%	*76%	11%	5%	4%	40%	40%
MARKET STRS	*37%	27%	33%	*17%	41%	17%	0	35%	35%
INC DISTRN	*27%	45%	30%	*35%	23%	23%	0	40%	29%
MKT FAILURES	23%	30%	30%	*17%	11%	47%	0	40%	29%
ECONOMIC ROLE OF GOVERNMENT	19%	33%	37%	*17%	22%	51%	0	70%	17%
GDP	*11%	37%	41%	*41%	29%	17%	0	23%	47%
AGGREGATE SUPPLY/DEMAND	11%	30%	12%	*17%	29%	23%	0	16%	45%
UNEMPLOYMENT	*37%	30%	30%	*35%	41%	11%	5%	70%	11%
INFLATION	*27%	37%	23%	*41%	29%	17%	0	47%	29%
MONETARY/ FISCAL POLICY	11%	37%	41%	*5%	52%	17%	4%	16%	51%
TRADE	*48%	19%	27%	*49%	21%	11%	0	51%	28%
EXCHANGE RATES	19%	27%	41%	*17%	35%	23%	0	22%	51%
NATIONAL DEBT	15%	41%	30%	11%	5%	29%	4%	47%	23%

*Significant at the .01 level.

TABLE II
STUDENT RESPONSES

	SEX	OCCUPATION				PREVIOUS ECONOMICS				
	% FEMALE	STUD.	EDUC.	RETL.	MAN/ SER.	0	1	2	3	4& Up
GRP I	56.5%	13%	87%	-	-	31%	45%	20%	-	4%
GRP II	94%	76%	24%	24%	-	75%	19%	6%	-	-
GRP III	56%	81%	-	6%	12%	25%	56%	6%	6%	6%

	PREVIOUS BUSINESS COURSES					ALL STUDENTS SHOULD HAVE BASIC ECONOMICS BEFORE GRADUATION
	0	1	2	3	4 & UP	
	AGREE	NO OPINION			DIS- AGREE	
GRP I	33%	46%	21%	88%	12%	
GRP II	75%	19%	6%	87%	13%	
GRP III	25%	56%	6%	100%	-	

TABLE IIIA
STUDENT OPINIONS ON INCLUSION IN THE CURRICULUM

	ALL ELEMENTARY STUDENTS SHOULD HAVE SOME BASIC ECONOMICS INSTRUCTION			ALL TEACHERS SHOULD HAVE BASIC ECONOMICS BEFORE GRADUATION		
	AGREE	NO OPINION	DISAGREE	AGREE	NO OPINION	DISAGREE
GRP I	88%	-	12%	92%	-	8%
GRP II	87%	-	13%	93%	-	7%
GRP III	80%	-	20%	88%	6%	6%

LESS THAN 10% OF THE RESPONDENTS FELT THAT THEY HAD NOT BENEFITTED FROM INSTRUCTION IN ECONOMICS.

TABLE IIIB
STUDENT OPINIONS ON INCLUSION IN THE CURRICULUM

	COGNITIVE PERFORMANCE		ATTITUDE RESPONSE		PREVIOUS ECONOMICS
	F	ADJUSTED R2	F	ADJUSTED R2	
GRP I	15.622	.506	12.444	.571	
GRP II	18.055	.521	13.899	.603	
GRP III	13.553	.434	9.877	.462	

TABLE IIIC
SPECIAL STUDENT SURVEY

Prior to this conference, which of the following best describes your experience with economics?

Opinion	Texas	Arkansas
1. Never included Economics	8.2%	11%
2. Include little Economics	-0-	2.3%
3. No opinion	-0-	-0-
4. Include some Economics	74.52%	21.3%
5. Include a great deal	8.2%	65.4%

Has this workshop changed your attitude toward including economics in your curriculum?

Opinion	Texas	Arkansas
1. No, No Econ. included	-0-	-0-
2. Some what, some	4.8%	2.1%
3. No opinion	-0-	1.8%
4. Yes, Include some	19.01%	11.14%
5. Yes, Include a great	76.12%	83.6%

Were you aware of state requirements regarding student testing and the teaching of economics?

Opinion	Texas	Arkansas
1. No	11.03%	.98%
2. Some what	21.07%	1.86%
3. No opinion	-0-	1.86%
4. Yes, not to extent	45.83%	22.14%
5. Yes	21.07%	73.16%

DEFINING ECONOMICS

John J. Bethune, Barton College

ABSTRACT

The contemporary definition of the word economics focuses on the concepts of scarcity and constrained choice. This paper questions whether this is an appropriate way to introduce students to the study of our discipline. Beginning with the Greek origins of the word, the meaning of economics is traced through the definition given by seminal contributors to the field, up to contemporary writers. The paper concludes that a reversion to earlier definitions of the subject might be preferable from a pedagogical standpoint.

INTRODUCTION

Since its origins in the early Greek and Sanskrit languages, the word "economics" has been used to define a variety of activities, and its definition has undergone an evolution in meaning. This essay shows how the use of the word has changed over time, and questions whether the current definition adequately conveys an accurate description of the social science known as economics.

ORIGINS AND EARLY USAGE

The Greeks invented the word *oikovouikia*, which combined two words with Sanskirt roots. These are *oikos*, meaning house (or any other kind of dwelling), and *vomos*, which means custom or usage. A related word, *nomos*, comes from *vemu*, which meant possess or manage. Thus, the earliest use of the term that came to be "economics" referred to household management. (This, and what follows in the next paragraph, comes from Liddel and Scott and Lewis.)

By the 5th and 6th centuries, the Greeks were using the word *oikovomia* to indicate the management of an estate. This usage can be traced back to Plato and Aristotle, who used the word to imply something similar to "how we do things at home." Plato also uses the word *oikonomikos* as the opposite of *politikos*, and this was also the title of Xenophon's essay on the duties of domestic life. For these Greek thinkers, managing the household was somehow the antithesis of politics. The Romans carried both of these early words for economics over into Latin, with Cicecro's use of both being the earliest recorded citation.

The word "economy" comes into written English in the late 14th century, as a word to describe household management. The applicability of the word to its current meaning does not arise until much later. With the word "political" appended to the front of economy, the meaning changed from household management to a meaning that encompassed a much broader scope, i. e. to manage the economy. This is how Adam Smith used the term in 1776:

> Political economy, considered as a branch of the science of a statesman or legislator, proposes two distinct objects; first, to provide a plentiful revenue or subsistence for the people, or more properly to enable them to provide such a revenue or subsistence for themselves; and secondly, to supply the state or commonwealth with a revenue sufficient for the public services. It proposes to enrich both the people and the sovereign. (Book IV, 1776, p. 138)

For Smith (1776), the goal of political economy was to direct the economic system towards achieving national wealth. It meant more than simply managing the economy, it implied managing the economy well. Given Smith's interests and reasons for writing *Wealth of Nations*, his definition would seem to fit the task he undertakes.

Writing several decades later, David Ricardo (1911) alters the goal of political economy in a manner that focuses its purpose on the allocation of wealth. He writes: "To determine the laws which regulate the distribution (of the produce of the Earth to rent profits and wages) is the principal problem of political economy." (p. 1) For Ricardo then, the purpose of engaging in political economy was to study distributional issues.

In his principles book, which was published three years after Ricardo's, Thomas Malthus does not provide an explicit definition of political economy, but he has much to say regarding the nature of the discipline. While acknowledging that "the conclusions of Political Economy partake more of the certainty of the stricter sciences than those of most of the other branches of human knowledge," he concludes that "the science of political economy bears a nearer resemblance to the science of morals and politics than to that of mathematics." (p. 1) Malthus (1964) further notes:

> The science of political economy is essentially practical, and applicable to the common business of human life. There are few branches of human knowledge where false views may do more harm, or just views more good. (p. 9)

Of course, most know that Malthus' work led Carlyle to refer to economists as "the dreary professors of a dismal science," but this was due to his conclusions regarding the plight of the poor and its implications, such as "we should make the streets narrower, crowd more people into the houses, and court the return of the plague." When it came to the scientific study of political economy, Malthus was a bit more optimistic.

While Malthus avoided any explicit definition of political economy, John Stuart Mill took the opposite approach. In addressing the subject of inquiry for political economy he states:

> That subject is Wealth. Writers on Political Economy profess to teach, or to investigate, the nature of Wealth and the laws of its production and distribution: including, directly or remotely, the operation of all the causes by which the condition of mankind, or of any society of human beings, in respect to this universal object of human desire, is made prosperous or the reverse. (p. 1)

A popular treatise on economics, that went through five editions during the mid-1800s, was by John R. McCulloch. In it he offers this definition:

> Political Economy may be defined to be the science of the laws Which regulate the production, accumulation, distribution and consumption of those articles or products that are necessary, useful or agreeable to man, and which at the same time possess exchangeable value. (p. 1)

This statement appears in the section on "Production and Accumulation of Wealth," and it seems to parallel the meaning of economics, as offered by Alfred Marshall, in his popular textbook. Marshall writes:

> Political Economy or Economics is the study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being. Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man. (p. 1)

The above definitions, offered by the seminal writers of their time, demonstrate that the subject of political economy, or economics, was considered to be, on the one hand, the study of wealth, and the laws that produced it, and, on the other, the study of human actions.

Later writers of the early 20th century continued to tie the definition of economics to wealth. Typical of textbook definitions were: "Economics is the science which deals with wealth in its most general aspect; namely its value aspect," (Johnson, 1922. 9) and

> Political Economy (economics is the same thing) is the science of wealth. It is the study of how men produce the things they need, divide them, exchange them and use them. (Mitchell, 1932, 3)

MODERN DEFINITIONS

Beginning about this time, the definition of economics began to change more toward the familiar manner of today's usage. The reasons for this change are unclear, though there were both internal movements and external events that may have been influential. Externally, there was the first world war and the Great Depression, while internally, as Schumpeter (1954) has noted, there was a great accumulation of statistical facts, the development of dynamics, and a new relationship between economic theory and statistical methods. (p. 1146)

For whatever reasons, the definition that economists gave for their field began to change during this time period. In a 1939 text, Bruce Knight offered what might be considered a bridge between the old definition and what was to come:

> Economics is the study of social economy with respect to wealth. . . Things which are scarce, in the sense that people will make sacrifices to get or keep them, come to have value. Valuable things are wealth . . . (p. 11)

But the use of "wealth" as an object of inquiry was rather quickly abandoned by the end of the second world war. Textbooks published in 1947 and 1948 defined economics as: "the study of the problems that men face in their attempt to satisfy numberless wants in a world of scarcity," (Waugh, 1947, 9) and "the social science that describes man's efforts to satisfy his wants by utilizing the scarce means provided by nature" (Gemmill & Blodgett, 1948, 3).

The definition of economics was thus transformed during this time from the study of wealth to the study of scarcity. These are some of the modern definitions that we are accustomed to:

1.	"The study of how people choose to use their scarce resources in an attempt to satisfy their unlimited wants" (McEachern, 1997, 2).
2.	"The study of how people allocate their limited resources to satisfy their unlimited wants" (Miller, 1997, 5).
3.	"The science of scarcity . . ." (Arnold, 1996, 6).

Several other contemporary texts do not provide a definition of economics, per se, but the introductory remarks clearly demonstrate that the focus is on scarcity. McConnell and Brue (1996), in their section, "The Economic Perspective," note that "outputs of goods and services must be scarce or limited, and scarcity limits our options and necessitates choices." (p. 9) Similarly, Gwartney and Stroup begin their discussion of "What Economics is About" with a subsection called "Scarcity and Choice."

While the actual focus of economic inquiry, in many respects, has changed very little since the time of Adam Smith, the way we have defined our science seems to have been altered significantly. Where human action was once portrayed in a manner that highlighted the wealth creating aspects of these actions, it is now described as limited and constrained.

Some introductory textbooks do offer alternative definitions to those that focus on limits and scarcity. Tregarthen defines economics as “the study of how people choose among the alternatives available to them,” while Gottheil (1996) offers:

> *Economics:* The study of how people work together to transform resources into goods and services to satisfy their most pressing wants, and how they distribute these goods and services among themselves. (p. 6)

Similarly, Colander (1995) gives us: “The study of how human beings coordinate their wants.” (p. 7) From these three definitions we are given differing foci on either choice, cooperation and distribution, or coordination. But none of these return the definitional focus to wealth or productive management (the earlier meanings).

In contrast to the mainstream texts, authors associated with the modern Austrian School have directed the definition of economics toward individual action. Mises writes:

> *Economics* is . . . the theory of all human action, the general science of the immutable categories of action and of their operation under all thinkable special conditions under which man acts. . . . Economics is not about goods and services; it is about human choice and action. (Mises, 1966, 266 & 494)

And Rothbard adds:

> *Economics*, therefore, is not a science that deals particularly with "material goods" or "material welfare." It deals in general with the actions of men to satisfy their desires, and, specifically, with the process of exchange of goods as a means for each individual to "produce" for his desires. (Rothbard, 1970. 141)

Focusing on other aspects involving the study of economics, beyond the scarcity constraint, would not appear to be necessarily inappropriate. Julian Simon (1981) has gone to great lengths to demonstrate how the concept of scarcity is over-stressed and not particularly relevant from a policy perspective. In *The Ultimate Resource*, he maintains that "a key sign of what we generally mean by scarcity (is) a price that has persistently risen." (p. 17) Yet, the price of most resources that might best fit the economist's definition of scarcity appears to have fallen. He goes on to show how temporary shortages have led to technological advancements that ultimately resulted in lower, not higher, prices. (pp. 43-46) This point is reiterated in *The Resourceful Earth* where Simon and Khan (1984) demonstrate that:

> Throughout history, individuals and communities have responded to actual and expected shortages of raw materials in such fashion that eventually the materials have become more readily available than if the shortages had never arisen. (p.6)

Over time, Simon (1981) has made a persuasive argument that counters extreme views towards resource depletion. The policy implications that result from his analysis (laissez faire) are much more in line with mainstream economic views than those of his opponents, who call for (often draconian) increasing state intervention. To the uninitiated, however, the focus of economics, as it is currently defined, would appear to support policies of active intervention.

CONCLUSION

The principles of scarcity and constrained choice are obviously valid and important concepts in an introduction to, and a study of, economics. What is not obvious is the need to include these limiting aspects of economics in the definition of this, potentially optimistic social science. An understanding of the power of incentives and the virtues of prudence and productivity has led to the creation of an economic system that generates vast amounts of wealth. As was the case historically, the definition of economics should demonstrate this.

I would like to propose the following definition:

"*Economics* - - the science that studies wealth, hope, and prosperity."

Wealth ties the definition to its historical roots and the traditional subject of inquiry. Hope is what economics represents for all those who seek a better life. Prosperity is what results when the subject is properly understood. While this might not say it all, it would seem a good place to start a discussion of alternative definitions.

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A CRITIQUE OF SCHOOL-TO-WORK (STW) INTEGRATION INTO TRADITIONAL EDUCATION SUBJECTS

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ABSTRACT

STW could have been a much more effective educational effort had its proponents better understood the necessary curriculum development and implementation procedures to integrate a non-traditional subject into traditional educational subjects. STW evidently thought it was taking the best socio-political approach for accomplishing effective education integration. It did not envision the need for a comprehensive content body of knowledge or scope and sequence. It also underestimated the need for a more comprehensive inclusion of educational administrators and teachers through unique uniform professional development and involvement programs. Lastly, STW lost a valuable accountability instrument by not developing a normalized evaluation instrument, which could give important feedback to teachers of traditional educational subjects.

School to work has been successful in reinforcing educational school to work and career education programs. It has also developed business education partnerships where none existed before. This falls far short of its stated goals of creating systemic change within education but it has raised the level of dialogue necessary to promote further understanding in this important societal goal of creating a productive and educated workforce. Future federal educational efforts should be able to improve from the STW shortfalls and create a more effective design and implementation methodology.

INTRODUCTION

The need for integration between the world of work and the world of education is not a new or a unique idea. From a theoretical perspective, John Dewey believed that school and work were vitally interconnected (Dewey & Dewey, 1962; Dewey, 1990). The need for a skilled workforce seems to have been heightened in the 1990's due to the difficulty businesses have had filling employment needs due to technological stimulated economic expansion. Recent Bureau of Labor Statistics show that 17% of adults over 25 did not finish high school and only 39.6%, of those who did not complete high school were employed in the first quarter of 1998 (School and Work, 1998). This translates into millions of adults who are not able to contribute to the nations productive capacity. The Executive Director of the nonprofit Jumpstart Coalition for Personal Financial Literacy is quoted as saying "our young adults are leaving schools without the ability to make critical decisions affecting their lives" (Brenner, 1999).

In 1991, the U.S. Department of Labor released the Secretary's Commission on Achieving Necessary Skills (SCANS) report. SCANS was a synthesis of views of business owners, business managers, union officials, and workers on the skills needed in today's changing workplace (What work..., 1991). The Department Of Labor continued its involvement in wanting to influence the educational community through its development, promotion, and involvement in STW. Two pieces of legislation assisted the Department of Labor in promoting its agenda. The first was Goals 2000: Educate America Act (1994) which called for every citizen to be ready for productive employment by the year 2000 (103rd Congress, 1994, March). Then in May 1994, The President of the United States signed into law the School-to-Work Opportunities Act (103rd Congress, 1994, May). While this new law could be viewed as recognition of Dewey's vision and a reaction to today's business needs, it has fallen short of its integration into traditional educational subject areas from a formative and therefore an evaluative effectiveness perspective.

THE OHIO EXPERIENCE

Ohio is divided into twelve regional funding districts, each with an Executive Committee with the main functions of overseeing fiscal, administrative, and program responsibilities. As a member of the Region 9 Executive Committee of the Ohio School to Work effort and as a representative of Higher Education on that committee, the author has participated in the development of the STW for five county areas in Northeast Ohio. As Chairman of the Grants Committee, the author has also overseen the development, awarding and conduct of STW grants since 1996.

The Region 9 Executive Committee has representatives from designated "stakeholder" groups. These represented groups are business, labor, education, community based organizations, higher education, parents and, for the formation period, one student. The Region 9 Executive Committee was faced with a hurried timeline to define our mission, develop our structure, procure a fiscal agent, discover what was already being done in activities, which could complement STW, advertise and hire a Region 9 Director, and develop a request for proposals to dispense several hundred thousands of dollars in school district grants, all in a matter of several months. These details are not to imply that the granted programs were not effective in introducing teachers to STW or that the grant participants did not obtain good information to impart to their students. There have been documented successes in STW within vocational/technical education and career education areas (Filipczak, 1993; Owens, 1995; Hershey, Silverberg & Haimson, 1999). These successes are however are not concept attainment measured. As one strong supporter, the Director of the National Center on Education and the Economy Workforce Development Program based in Washington D. C. stated in defending STW, "We sometimes failed to make the case for contextual learning that maintains a high academic standard. Too many schools got caught up in developing projects and activities without connecting those activities to rigorous academic standards" (Barnicle, 1999). STW has hedged its accountability by claiming that it was not a program but was an approach to education that involved preparing students to enter an ever-changing high skilled work force. This is to be done by combining academic learning with work-based/career education experiences in partnership with the above mentioned stakeholder groups (Partnership Resource Directory, 1996).

STW was designed to create systemic change within the educational system, however, who was ultimately responsible for STW was never clearly explained. Most traditional subject teachers believed STW was a vocational education program trying to infiltrate their subject areas, while may vocational educators thought STW was an attempt to do away with their program. There was also wide spread mistrust of STW from parents, who saw STW as federal/state intrusion into local education in an effort to put work based education over subject based learning and micromanage the education of their children (Steinberg, 1998).

STW EVALUATION

STW, from its outset, did not contain the necessary development patterns to insure its complete acceptance by traditional educational subject teachers and administrators or parent/teacher associations (Vannatta et al. 1998; Mason & Thorn, 1997). The nationally contracted evaluator of STW, in it's 1999 evaluation report, found that job shadowing, work site visitations, and career awareness have been given the most common educational emphasis. It also found that STW could not be evaluated in terms of these job shadowing and work site visitation activities to cause a change in student outcomes (Hershey et al. 1999).

A comprehensive state level evaluation in Wisconsin spoke to the lack of accountability and the difficulty of the ascertaining costs associated with STW as well as citing major problems with the integration of STW in traditional subject areas. Among its findings among school district curriculum directors were that over seventy percent thought STW had no impact on the curriculum, a lack of interest among traditional subject teachers in STW, and an inequitable emphasis of STW for teachers in vocational, technical, and business education. There was a one hundred percent agreement, among school curriculum directors, that STW could not provide reliable data concerning student change in achievement, attendance, or school completion rates (Schug & Western, 1999).

RECOMMENDATIONS FOR FUTURE FEDERAL EFFORTS IN EDUCATION

STW tried to create an educational intervention that would be defined by each regional location chosen to implement the STW idea. It is obvious by the data that the federal designers of STW did not fully understand the process by which to implement change in traditional subject areas, nor does their project contain the necessary elements for creating systemic curriculum change within education. All informal indications are that STW will be phased out by 2001. For future federal/state involvement in a new academic educational effort, the following suggestions may prove to be more effective in promoting change with the educational community.

Develop a concentrated effort to impact preservice teacher education programs within higher education

This need was recognized for STW in Ohio (A Framework ..., 1999). Such an effort would be proactive in assimilating new educational instructional material in traditional subject areas by making all new teacher graduates knowledgeable about the new material content and how it applies to the subject they will be teaching. Integrating new subject material in teacher preservice programs can only be accomplished by making professors in teacher education programs knowledgeable in the new content and instructional methodology. STW placed a person to represent higher education on the regional executive committee. This representation, and subsequent state grants to implement STW, within teacher education programs, has been inadequate in engendering faculty implementation support. New federal/state efforts need to make allowance for greater professorial inclusion and knowledge building within the professorial ranks.

Develop a definitive body of knowledge

Traditional subject teachers instruct from an outline of concepts and principles within their various disciplines. Without a defined concept base, it is extremely difficult for educators to identify concept instruction methodology that creates integration between subjects. It is unrealistic to think that teachers have the time and ability to integrate a new subject with the one they are teaching without a body of knowledge being provided. In the case of STW, job shadowing and business visitations may be a good introduction, but more detailed concept instruction and methodological development is required. A body of knowledge would provide any new federal/state effort with a needed base of reference for dialogue, instruction, and methodology integration.

Provide a scope and sequence for the new educational material

A scope and sequence divides the subject into age and subject appropriate concepts. This allows the program to develop a K-12 approach to integration with traditional educational subjects. The scope and sequence approach also allows for more comprehensive student concept attainment due to the process itself. The student receives new integrated subject material during each school year. Yearly concept instruction provides content repetition and cognitive reinforcement from a variety of traditional subject areas. The scope and sequence also allows teachers to see the progression of content area development from simple, in the early educational years, to increasingly complex in the later learning years.

Develop professional development prototypes to stimulate teacher participation

STW depended mainly on business visitations and job shadowing to promote teacher understanding of the world of work. Teacher business visitations and job shadowing have been used for decades by vocational/career and economic educators. In these instances, STW has only reinforced ongoing professional development programs, it has not created systemic change either in the vocational/career/technical fields or within traditional subject areas. Since STW had no innovative prototype for professional development, it was bound to be used by ongoing programs to further what they were already doing. Any new federal/state educational effort would be wise to design and implement a unique and a creative professional development plan.

Develop and implement an educational administration involvement plan

Any educational initiative needs to involve central administration from the school board through the curriculum coordinator positions. STW was derived and administered from outside the states' departments of education. This resulted in administrative confusion as to who was responsible for the effort and what authority the regional executive committees possessed to implement STW instructional efforts.

Any new federal effort will have to more professionally involve school administrations and see that they are empowered strategically within the new initiative. Curriculum directors and traditional subject area coordinators need to receive specific content and methodology instruction to insure effective subject integration into ongoing instruction. Administrators need to see any educational effort as supplemental and supportive of their current instructional design.

Develop a definitive concept evaluation plan through the use of subject normalized tests

Traditional subject teachers are used to concept testing to ascertain their instructional effectiveness. Any program that does not contain a specific content evaluation instrument is viewed, in many cases, as inferior and looked upon skeptically by teachers and administrators alike. The development of a body of knowledge and scope and sequence will naturally lead to the development of a concept evaluation instrument. The evaluation instrument should be correlated with any student state proficiency exams, for which administrators and teachers are responsible. STW did not envision such an instrument and therefore gave up a valuable accountability instrument to justify its inclusion in academic subject areas. Any new federal/state educational effort should have such an instrument.

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PROGRAM DELIVERY: PERCEPTIONS AND SATISFACTION OF KEY CONSTITUENCIES

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ABSTRACT

Economics is the study of decision making which attempts to balance scarce resources with unlimited wants and needs. This is a basic skill for functioning in society. According to a recent national survey, two-thirds of high school students and one-half of adults failed an economic literacy exam. The need for improving the economic education of our young people is apparent.

The mission of the Idaho State University Center for Economic Education (an affiliate of EconomicsAmerica, the National Council on Economic Education) is to improve the quality and expand the reach of economic education at all levels of public and private education, and the general public. To accomplish this goal, the Center provides services including teacher training, curriculum development, and classroom resources.

This study was designed to evaluate current delivery of Center services and resources. The perceptions and satisfaction levels of key constituencies were collected. These data will be used to align future programs with the needs of K-12 students, teachers, and administrators; EconomicsAmerica coordinators; and advisory board members from the business community.

INTRODUCTION

Fundamentally, economics is the study of decision making which attempts to balance scarce resources with unlimited wants and needs. This definition emphasizes two main points: (1) resources are scarce; and (2) human beings have an infinite number of needs and wants to which those resources must be allocated. Understanding and application of this process is a basic skill for functioning in society as a consumer, producer, saver, investor, and citizen. This body of knowledge is critical not only for decision making in personal and professional settings, but as individuals function in the global economy as well.

Louis Harris & Associates, Inc. conducted one of the most recent research studies designed to describe the status of economic literacy in our country. In this project, 1,010 adults and 1,085 high school students were given a test on basic economic principles. "On average, the adults got a grade of 57%. Among high school students, the average grade was 48%" (Brenner, 1999, p. 5). "Two out of three (64%) adults and half (48%) of all students feel that it is very important for the people of the United States to have a good understanding of economics"… yet, "Two in five (40%) American high School students have not been taught economics in school" (Brenner, 1999, p. 5).

> The goal of economic education is more responsible and effective citizenship through helping students acquire the ability to use economics as independent decision makers confronting problems, personal and social, rather than merely helping them gain knowledge of the facts, concepts and assumptions that comprise part of the discipline. It empowers students to understand their world, make-reasoned decisions, and act appropriately on personal and social issues of significance. (Miller, 191, p. 31)

The National Council on Economic Education (NCEE), EconomicsAmerica, is a major player in the economic education movement. The mission of the NCEE is "to help our nation's schoolchildren develop economic ways of thinking and problem solving to prepare them to participate in and to lead the global economy they will inherit (R. F. Duvall, personal communication, January 12, 2000). This mission is reaffirmed in the program and delivery methods utilized by the NCEE: "(1) set National Standards for Economic Education; (2) develop curriculum K-12; (3) publish teacher materials; (4) offer teachers professional training; and (5) conduct evaluation and research" (R. F. Duvall, personal communication, January 12, 2000). This is the only organization dedicated to economic education that utilizes all five methods.

Centers for Economic Education are the delivery arm of the NCEE. They are typically located on college and university campuses and are dedicated to teacher education, curriculum development, and resource distribution in economic education. These economic programs are designed around a set of twenty-one economic concepts.

"Economic concepts are the bases of economic understanding and reasoned decision making. [The] concepts provide the analytical tools needed to understand and make reasoned decisions about economic issues – both personal and social" (Sanders, Bach, Calderwood, Hansen, Stein, 1993, p. 13). In turn, these "principles of economics bear directly on the ordinary business of life . . . by the time [students] have finished twelfth grade…they should understand basic economic concepts and be able to reason logically about key economic issues that affect their lives as workers, consumers, and citizens, so they can avoid errors that are common among persons who do not understand economics" (National Council on Economic Education, 1997, p. xi).

"After economics was included in the Goals 2000 Education America Act in 1994, the NCEE assembled a coalition of organizations to write voluntary content standards to guide economic instruction in American schools" (National Council on Economic Education, 1997, p. xi).

These standards outline essential principles of economics, why it is important to understand them, and then provide benchmarks of what a student should be able to do with that knowledge.

BACKGROUND

The Center for Economic Education at Idaho State University is affiliated with the NCEE and serves schools and communities in southeast Idaho. Key constituencies include superintendents and principals in 33 member school districts. Within each building (elementary, middle and high school) in each school district, an individual has been identified as an EconomicsAmerica coordinator. This position involves serving as a liaison between the professionals (administrators and teachers) in that building and the ISU Center. The Center also makes use of an advisory board which is made up of volunteers from business, industry, and education. These members offer insight and guidance for planning and delivering economic education programs.

In order to get a school involved in economic education, key constituencies must be informed and actively involved in program planning. Ultimately, "creating curriculum change requires centers to offer programs for teachers that improve their understanding of economics and provide them with quality instructional materials (Dempsey, Meszaros, Suiter, M., 1999, p. 2). "Planning defines what has to be accomplished to deliver useful and intended results (Kaufman, Herman, Watters, 1996, p. 75) and a key component of the planning process is to conduct a needs assessment. "Needs assessment will identify and document problems, identify what should and shouldn't be changed, and recognize opportunities" (Kaufman, Herman, Watters, 1996, p.79).

Minimal research has been conducted at the ISU Center for Economic Education in regard to the needs of the target clientele who are the recipients of economic education services. Therefore, the purpose of this study was to assess key constituencies in order to determine: (1) perceptions of economic education; and (2) levels of satisfaction with specific services offered by the ISU Center for Economic Education.

METHOD

Population

The service area of the ISU Center includes Administrative Regions 5 and 6 in southeast Idaho. Thirty-three schools districts are members of the EconomicsAmerica program. Key constituencies of the ISU Center include K-12 superintendents, principals, EconomicsAmerica coordinators, and advisory board members. These constituencies are the target clientele of Center services.

Sampling Technique

Permission to collect data was received from the Human Subjects Committee at Idaho State University. A list of superintendents and principals was obtained from the Idaho Educational Directory, 1998-1999. The EconomicsAmerica coordinators and advisory board listing was generated from a database maintained in the Center. The total number of desired respondents was 430.

Procedure

The structure of the survey instrument included three sections: (1) Demographics; (2) Perceptions of Economic Education; and (3) Satisfaction with Center Services. Respondents were asked to rate (on a Likert scale from 1 to 5) perceptions of economic education ("not sure" to "strongly agree") and level of satisfaction with Center programs ("not sure" to "very satisfied").

Each of the key constituencies received a mailed survey with a cover letter, explaining the purpose of the research, and a postage-paid return envelope. The respondents' names were not required on the survey, therefore, assuring them of anonymity and confidentiality.

There were 126 constituencies who completed the survey. Response rate was 29%. Data analysis was performed using SPSS 9.0 for Windows.

RESULTS

Demographics

Key constituency data were grouped and summarized as illustrated in Table 1. Fifty-six percent of the respondents (63) were building principals; 22.3% (25) were EconomicsAmerica coordinators; 17.9% (20) were superintendents; and 1.8 (2) were advisory board members.

Table 1
Key Constituencies

Position Title	Frequency	Valid Percent
Principal	63	56.3
EconomicsAmerica Coordinator	25	22.3
Superintendent	20	17.9
Advisory Board	2	1.8
Other	2	1.8
Total	112	100.0
Missing Data	14	
n=126		

Because of the increasing availability of technology-based instruction in the delivery of economic education programs, key constituencies were asked to report the number of technology tools available in their district. The tools counted were: PC format, Mac format, email, Internet and Distance Learning Site. Table 2 summarizes these data as reported by survey respondents. Forth-four percent (53) had 3 technology tools available in their district; 30% (36) had four; 12.5 (15) had only one; 11.7% (14) had all five technology tools; and 1.7% (2) had only two technology tools for delivery of economic education programs.

Table 2
Technology Tools Available in District

Number	Frequency	Valid Percent
Three Resources	53	44.2
Four Resources	36	30.0
One Resource	15	12.5
Five Resources	14	11.7
Two Resources	2	1.7
Total	120	100.0
Missing Data	6	
n=126		

Perceptions of Economic Education

Key constituencies were asked to rate their perceptions of five statements concerning economic education (Likert scale from 1 "not sure" to 5 "strongly agree"). The statement with which respondents most agreed was "all high school students should be required to take an economics course" (mean score = 4.46; sd = .66). The statement respondents least agreed with was "all teachers (K-12) should be required to incorporate economics into their curriculum" (mean score = 3.56; sd = 1.11). See Table 3 for a complete summary of all five statements.

Table 3
Perceptions of Economic Education

Descriptive	N	Min.	Max.	Mean	Std. Dev.

High School students required to take economics	123	1	5	4.46	.66
Economics is a basic skill for all students	123	1	5	4.30	.78
Balance between theoretical and practical economics	124	1	5	4.15	.78
Teachers required to have selected training	124	1	5	3.92	.83
All teachers (K-12) required to teach economics	124	1	5	3.56	1.11

Satisfaction with Center Services

Survey respondents were asked to rate their level of satisfaction with specific services currently provided by the ISU Center. A Likert scale from 1 ("not sure") to 5 ("very satisfied") was utilized. The Center service with which key constituencies were most satisfied was the "monthly newsletter" (mean = 3.18; sd = 1.39). The service with which respondents were least satisfied was "coordinator training" (mean = 2.33; sd = 1.54). Table 4 summarizes constituency satisfaction with 7 major services provided by the Center (means and standard deviations are provided).

Table 4
Satisfaction with Center Services

Descriptive	N	Min.	Max.	Mean	Std. Dev.
Monthly Newsletter	118	1	5	3.18	1.39
Teacher Workshops/Training	119	1	5	2.66	1.54
Curriculum Resource Library	116	1	5	2.59	1.55
Standards for Teaching Economics	115	1	5	2.53	1.49
Site/Building Visits	115	1	5	2.37	1.47
Coordinator Training	116	1	5	2.33	1.54

The means for "level of satisfaction" with specific Center services were recalculated after eliminating the Likert scale anchor 1 = "not sure". Careful review of the completed individual surveys revealed that “not sure” was an indicator of “non-users” of Center services. A summary of these data are illustrated in Table 5.

These new means for "level of satisfaction" with specific Center services were: "curriculum resource library" (mean = 3.98; sd = .59); "monthly newsletter" (mean = 3.95; sd = .55); "coordinator training" (mean = 3.91; sd = .74); "teacher workshops/ training" (mean = 3.83; sd = .83); "standards for teaching economics" (mean = 3.79; sd = .72; and "site/building visits" (mean = 3.74; sd = .72). This is a more accurate reflection of the levels of satisfaction of key constituencies as it includes only those respondents who are knowledgeable of, and utilize, the services provided.

Table 5
Satisfaction with Center Services

Descriptive	N	Min.	Max.	M ean	Std. Dev.
Curriculum Resource Library	62	2	5	3.98	.59
Monthly Newsletter	86	2	5	3.95	.55
Coordinator Training	53	2	5	3.91	.74
Teacher Workshops/Training	70	2	5	3.83	.83
Standards for Teaching Economics	63	2	5	3.79	.72
Site/Building Visits	57	2	5	3.74	.72
Valid N = 31					

DISCUSSION

Demographics

Demographic data indicate that, of those key constituencies who completed the survey, only 11.7% had all five of the basic technology tools assessed by the survey; 12.5% had only one. These data concerning availability of basic technology tools have major implications for the planning and delivery of economic education programs.

Perceptions of Economic Education

It was evident that survey respondents agreed "economics should be a required course for high school students" (M=4.46). Key constituencies also agreed "economics is a basic skill/competency necessary for all students" and that there should be an instructional "balance between 'theoretical' and 'practical' economic education". Most respondents agreed (M=3.92) that "teachers should be required to have selected training/coursework in order to teach economic education curriculum". The statement with which there was least agreement was "all teachers (K-12) should be required to incorporate economics into their curriculum" (M=3.56). These data provide insights into the current perceptions of economic education administrators, EconomicsAmerica coordinators, and advisory board members. These perceptions have strong implications for the focus of future program delivery in economic education.

Evaluation of Specific Services

The following is a listing of "level of satisfaction" with specific Center services in ranked order from "very satisfied to unsatisfied": curriculum resource library, monthly newsletter, coordinator training, teacher workshops/training, standards for teaching economics, and site/building visits. These data accurately reflect the satisfaction of current users of these services. The challenge remaining is to educate and introduce non-users (those who reported "not sure") to Center services and resources.

RECOMMENDATIONS

This baseline study was designed as a formal needs assessment to document current perceptions of economic education and levels of satisfaction with Center services from key constituencies. Analysis of the data has resulted in three recommendations: (1) the Center must take a more active role in generating support for technology-based instruction in economic education; (2) although constituencies agree that economics is a basic skill necessary for all students, the Center must continue to increase awareness that economic education should take place across the curriculum and throughout all grade levels (K-12); and (3) the users of current Center services are "satisfied" with these programs and resources; however, a concerted effort must be made to ensure that all districts are made aware of, and have the opportunity to utilize, these services. The Center must target "non-users" in an attempt to expand its user-base.

REPLICATION OF THE STUDY

This research study should be repeated regularly. Data could be collected on an annual basis at a regular point in the academic year (i.e. early fall or late spring). In this way, progress toward increased satisfaction and commitment to economic education could more accurately be measured across time. This survey could also be utilized throughout the state, by the Idaho Council on Economic Education, to generate a more accurate picture of statewide needs.

RELATED RESEARCH

To provide further insights and more targeted data with which to improve program delivery, detailed questions on each of the unique Center services could be generated. For example, key constituencies could be surveyed concerning their “specific needs in a monthly newsletter." Or, “needs and desires in teacher training” could be assessed. These data could begin to help answer more precise questions concerning the design of each individual component of Center delivery.

As K-12 teachers are the ultimate end-users of economic education services, they should also be surveyed regarding their perceptions and levels of satisfaction. When the classroom door closes, the quality of a program meets the acid test. As economic educators, the keys to influencing the classroom and student knowledge involve teachers with content expertise and high-quality classroom materials. Ultimately, teachers are the constituency who must be committed to economic education and satisfied with economic education programs and services.

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ECONOMICS ARTICLES

THE IMPACT OF TRADE, TECHNOLOGY, IMMIGRATION, AND GLOBALIZATION ON WAGES

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ABSTRACT

Over the past 20 years, worker's wages, especially those in American manufacturing, have been declining. Trade, technological change, immigration, and globalization are the four main factors that are linked to wage inequality. This paper will show, through economic theory and empirical studies, that there is evidence to support the link between free trade, technological change, immigration, globalization, and wage differentials. Though most workers and politicians believe protectionist policies are justified to solve this dilemma, the best course of action is to re-educate and train displaced workers to enable them to participate successfully in the American workforce.

INTRODUCTION

Since the 1970s the wages of less-skilled American workers have fallen in term of real and relative wages compared to more-skilled American workers (Feenstra, 1986). American workers, and those in European countries, like Great Britain, have also seen an increase in earnings inequalities over the past twenty years (*The Economist*, 1998). Few Americans have seen improvements in their living standards over the past twenty-five years. When one allows for inflation, average hourly earnings are lower than in 1973, although taking into consideration increased fringe benefits average annual earnings have risen (1998). The manufacturing industry is the most exposed to the consequences of international competition, whereas non-manufacturing jobs rely on the export of manufactured goods (Cyert, 1987). While imports and exports rose, employment in the manufacturing sector declined by 15 percent (Collins, 1998).

THE RELATIONSHIP BETWEEN TRADE, WAGES, AND EMPLOYMENT

Many people blame free trade with developing countries for wage inequality (Two Tales of Trade, 1997). Free trade or trade liberalization is defined as policies aimed at removing direct barriers to imports. It conforms to three criteria: it is a break with past trade practices, a new direction in trade policy; it is comprehensive, tariff reductions usually affect at least one-third of the total trade volume; and it is politically controversial (Lusztig, 1996). Free trade makes countries specialize in industries where they have a comparative advantage. As trade barriers are lifted, resources are shifted into those industries, and away from less productive ones (*The Economist*, 1998). Expanded trade in manufactures was occasioned by three events:

1.	An abandonment, by developing countries, of protectionist trade and direct investment policies; especially true for the United States in the late 1970s, China in the early 1980s, and Latin America in the mid-1980s.
2.	Because of high rates of investment, an increased manufacturing export capacity, especially in developing countries in East Asia.
3.	Falling transport and communication prices, which encourages trade and multi-national investment (Sachs, 1996).

According to Lee, world output has been growing at an annual rate of four percent since 1950; trade has increased by six percent annually. Trade between rich and poor countries has increased output exported from poor countries from eight percent in 1969 to 18 percent in 1990. These lower trade barriers are coupled with cheaper, quicker transportation and communications, which translates into the easier movement of capital, components, machinery, and even plants. Multinational companies have spread ideas and technology. Companies can manage worldwide operations. Air freight has increased efficiency by reducing the time needed to ship products. Many American-made cars are loaded with Japanese components as well as Japanese-made cars with American components (1997). Imports and exports make up between 10 and 13 percent of the U.S. Gross National Product (GNP), (Collins, 1998).

In her article, Lee writes that Richard Cobden, the nineteenth century British liberal, is the instigator of the increase in the freer trade our economy has been experiencing over the last century. Between 1839 and 1846, Cobden influenced the

British Parliament to repeal the Corn Laws. The Corn Laws were tariffs that were designed to protect British grain, but actually protected rich land barons and hurt the middle and working class for whom bread was a staple. He promoted free trade between France and the United Kingdom with the Cobden-Chevalier Treaty of 1860, which marked the beginning of a 53-year period of economic well being. The results of Cobden's efforts were far reaching. In the second half of the nineteenth century, 15 million people immigrated to the United States. During the 1880s, the United States accepted more immigrants than any previous decade. Capital emigrated also. British money financed railroads in the United States and Argentina, tea gardens in India, and created the economies of Hong Kong and Calcutta. In 1871, London absorbed over $100 million of United States' securities, and in 1893, foreigners sent $3 billion to the United States (1997).

When trade barriers were first lowered in the nineteenth century, global well being improved. Price equilibrium took effect. In comparing Liverpool and Chicago in 1870, grain prices, along with beef, pork, mutton, butter, cotton textiles, tin, copper, hides, and cotton were 60 percent higher in Liverpool than in Chicago. By 1912 Liverpool prices exceeded Chicago's by 10 percent. Farmers in the United States and Canada were just starting out, so Britain could eat more meat and North Americans could wear better clothes (Lee, 1997). The living standards gap between countries began to close also. Ireland and Sweden made great strides from the Great Famine to World War I. All countries grow faster and experience higher living standards because of freer trade. Countries can specialize in their comparative advantage. The global hand promotes earning equality within poor countries. Their living standards rise faster than in richer countries, closing the gap between them (Lee, 1997). Another example of a benefactor of freer trade is Japan. Japan was poor in the 1920s and 1930s, even though it had a strong military. Japan began exporting toys, a low-skill product, then medium-skill electronic goods, and finally went on to high-skill manufactures like luxury cars. Japan exported its textile and toy industries to poorer countries making them richer. Japan now has the second highest per capita income among industrial democracies (Lee, 1997). Lee gives South Korea as another example of the benefits of free trade. South Korea only exported wigs and toys after World War II and eventually moved on to steel, ships, cars, and semiconductors. Annual income went from $87 in 1967 to $10,076 in 1995 (1997). According to Joseph Quinlan, a Dean Witter economist, 1985 marked the turning point with trade. Japan, the United States, and Germany sent a large amount of money abroad to developing countries, mostly in Asia (Lee, 1997).

The debate surrounding free trade has traditionally revolved around two questions: does freer trade result in faster economic growth? And how does freer trade affect income distribution? The answers to these questions are hard to discover because of data limitations. It is difficult to gather data pertaining to total factor productivity, growth, and social conditions for large groups of countries (Edwards, 1997). There is circumstantial evidence linking international trade and wage inequalities. Mainly the timing of United States-developing countries trade in manufactures and the widening of wage gaps in the United States; both beginning in the mid to late 1970s (Sachs, 1996).

It is easy to blame trade for worker's problems. The benefits of trade seem to be spread out more than the losses. A local factory closing or layoff are more obvious than the across-the-board effects of increased consumer spending power because of cheaper imports, or higher productivity resulting from greater competition (*The Economist*, 1998). Trade benefits the American economy as a whole, but may hurt low-skilled, low-wage workers (*The Economist*, 1998). According to Collins, trade has a very small effect on wage inequality as a whole. Only about one-third of the increase in inequality can be attributed to differences between workers, whether in education or gender. Only seven percent of wage inequality can be attributed to trade (*The Economist*, 1998). In another publication, Collins writes that before World War II free trade was the exception, protectionism the rule. This occurred for two reasons: first, custom duties made up a significant share of federal revenues and the view of the American public. Second, protectionism reduced real wages and the standard of living.

Economists take various viewpoints when it comes to the effect of trade on wages and employment. In their book, Litan, Lawrence and Schultze write that if United States' competitiveness has an effect on the American standard of living, it is not due to the trade deficit or higher unemployment. It is due to the requirement of the United States to increase the resources relinquished to obtain a given quantity of imports. Except for 1973-1979, American terms of trade have not had much influence on American living standards (1988). Trade economists argue that trade affects wages through the prices of imports and exports. When taking into consideration comparative advantage, the relative prices of goods that are made in rich countries are forced down by import competition and as a result, will decrease the wages of the least educated workers. Trade theorists believe the mere threat of foreign competition will drive down wages and prices. Labor economists argue that trade affects the labor market through the volume of trade. The import of goods made by low-skilled workers has the same effect as an increase in the number of low-skilled workers, a decrease in wages. Labor theorists argue that as the economy expands and people get richer, they spend less on clothes and more on expensive cars, so a textile worker's wages would be driven down, while a design engineer's would be pushed up (Two Tales of Trade, 1997).

There are two hypotheses, which explain the demand shift toward educated workers. The first states that technological change has been biased in favoring highly skilled, educated workers. The second states that growing international trade with low-wage countries has shifted labor market demand in the United States away from low educated workers (Sachs, 1996). Du Boff continues by writing that as international trade wipes out manufacturing jobs, displaced workers are forced into the lower-paying service industries, such as custodians, taxi drivers, cooks, etc. This drives their wages down. These changes do not always affect just low-skilled workers. Other countries, such as India, the Philippines, and Ireland have an increasing number of skilled workers who work for a third to an eighth of their American counterparts, with better quality and productivity levels (1997). Comparative advantage theory states that some groups will benefit at the expense of others. Demand, for high-skilled labor and technical equipment, will increase, while demand for less skilled labor will fall. This will raise the wages of highly-skilled workers and lower the wages of low-skilled workers (Du Boff, 1997).

TECHNOLOGY, WAGES, AND EMPLOYMENT

The introduction of technology has been called the Third Industrial Revolution. Many economists blame technological advances for the wide wage gap. They argue that technological advances have increased the wages and productivity of the well educated, while leaving the less educated behind (Two Tales of Trade, 1997). According to Lee, since educated workers catch on faster to new technology, the technological revolution dooms the uneducated and untrained (1997). 1974 was a pivotal year, information technology took off and income inequality began to rise. Lower skilled workers saw wages fall before computerization really took off. Earnings had collapsed for low-wage workers by 1984, while computers started infiltrating workplaces between 1983 and 1984 (Lee, 1997). Poll data suggests that a large number of people relate technological change to the erosion of wages and inequalities (Cyert, 1987). *The Economist* argues that advances in technology have benefited the better educated at the expense of less educated workers (1998). According to Cyert, there is little evidence to prove that increasing wage inequality is due to technological changes (1987). Du Boff maintains that there is evidence to support technological changes causing wage inequality. He argues that technology creates a skill mismatch, which eliminated job opportunities for low-skilled workers (1997).

Technological change has two major effects: it transforms the processes by which inputs (including labor and materials) are converted into goods and services, and it enables the production of new goods and services. Process innovation is technological change that improves the efficiency with which inputs are transformed into outputs. Production innovation is the production of new goods and services. The stages of technological change are invention, innovation, and diffusion. An invention is the discovery of a scientific or technological advance and its translation into a working model. Innovation involves the process of advanced development, and diffusion is the period of adoption by users of an innovation. There are several factors that affect the diffusion of technology. First is the uncertainty surrounding the characteristics of new technology and the payoffs from adopting it, and the actual profitability of its adoption. The obstacles blocking the diffusion of technology include costs, product standards, and the availability and evaluation of relevant information. Measuring technological change is difficult. Research and development investment or indices are used to measure the number of patents, publications, and tabulation of technology and productivity growth. The sources of this information include industrially funded research and development, federally funded research and development, and foreign research and development (Cyert, 1987).

Technology affects three areas in the United States economy: the structure and performance, aggregate unemployment, and labor demand. Private non-agricultural employment in manufacturing was 36 percent in 1966, 24 percent in 1985, and is still declining. Imports were 5.1 percent of GNP in 1966 and 11.4 percent in 1986. Exports were six percent of GNP in 1966 and 8.9 percent in 1986 (Cyert, 1987). Aggregate unemployment increased in the 1970s and 1980s, which is attributable to the recessions in 1974-75 and 1981-82, and the increase in the supply of labor due to baby boomers and women entering the workforce. Displaced workers become unemployed because of plant shutdowns, permanent layoffs, and technological change. The demand for labor is determined by the rate of growth of the entire economy. Lags in technological performance can contribute to an erosion in employment and wages (Cyert, 1987).

There are two types of skills affected by technological change. Basic, which includes literacy, problem solving, reasoning, and communication, are skills acquired by workers prior to entering the workforce, through education. Job related skills, which are required by an employer, are necessary to perform a specific skill learned on the job. Job related skills are most affected by technological change (Cyert 1987).

IMMIGRATION, WAGES, AND EMPLOYMENT

Along with freer trade and technological advances comes an increase in immigration. Immigration is more politically controversial than trade and technology, although the argument for free trade and open immigration go hand in hand. When something is imported, it drives wages down in its industry. When more immigrants enter the labor market, the labor supply increases and wages drop (Borias, 1997). He continues by writing that trade and immigration increase the effective labor supply of a particular group. For example, when a car is imported from Japan, not only is a car gained, but also 150 hours of manpower and 230 hours of engineering expertise (1997). Lee points out that immigration is swelling the supply of unskilled workers (1997). In addition, a disproportionate number of immigrants are high school dropouts, which increases the number of unskilled workers and contributes to the decline of relative pay (1997).

Richard Freeman believes that immigration has had probably a larger effect on the market for low-skilled labor than trade. For those in the service industries, like barbers and taxi drivers, immigrants are competition (*The Economist*, 1998). Currently, the United States receives 800,000 legal immigrants and 300,000 illegal immigrants per year (Lee, 1997). The global hand, as compared to Adam Smith's invisible hand, has rearranged the world economy. Jeffrey Williamson describes the effects of the global hand as "capital and labor flowing across national boundaries in unprecedented quantity, resulting in a commodity trade boom" (Lee, 1997).

Beginning in the 1880s, France and Germany instituted trade protectionism and restriction on immigration. In the 1870s riots erupted between Chinese immigrant railroad workers and other immigrant workers because they were being paid $19.50 less per month than the Chinese immigrants. This resulted in the Chinese Exclusion Act of 1882. Between 1907 and 1924, the United States restricted immigration, as did the United Kingdom, Canada, and Australia (Lee, 1997). This downfall of the global hand may have been one of the economic causes for World War I. Germany built up its military, in par, because trade barriers deprived its industry of markets. The lack of immigration opportunities caused Germany to seek out the Ukraine and its colonies (Lee, 1997). After World War I, protectionist measures were implemented again with the Fordney-McCumber and Smoot-Hawley tariffs (Lee, 1997). Under the Smoot-Hawley Act, tariffs reached an average of 54 percent. As a result, exports fell 50 percent between 1928 and 1932 (Lusztig, 1996). Canada retaliated with a mega-tariff in 1930. The United Kingdom passed the Empire Preference in 1932. These measures may have tipped the scale to drop the world into the Great Depression and was a factor in World War II (Lee, 1997).

Immigration affects the labor supply more than trade. Immigration from 1980 to 1995 increased the high school dropout level by 21 percent (Borias, 1997). This raises the skill premium ratio, and is a permanent increase on the labor supply. Immigration may pose a greater long-term challenge to less-skilled labor. Unskilled American workers, in traded goods, can find refuge from competition in non-traded goods or the skill intensive export sectors (Collins, 1998).

GLOBALIZATION, OUTSOURCING, WAGES AND EMPLOYMENT

Globalization is also blamed for the increase in wage inequality. Globalization is defined as a change in goods, services, labor and/or capital available from the rest of the world. These shocks occur because of changes in trade policy, immigration, or in capital flow. The rising skill premium coincides with increased trade with lower developed countries, immigration, and capital flow (Collins, 1998). Du Boff supports Collins' argument by stating that globalized production is a primary cause for the falling living standards of American workers (1997). Du Boff argues that globalization is less of threat to workers than corporate downsizing, deregulation, union busting, and technological changes. For example, because of deregulation, not competition from third world labor, high-paying jobs in the trucking and airline industry were converted into low-wage jobs (1997). Other factors, such as institutional changes like the declining power of unions or contract changes contribute to the increasing wage disparity (Collins, 1998).

Globalization includes trade, immigration, capital mobility, and transmission of technology across national lines. The trade component of globalization includes the ratio of imports and exports to Gross Domestic Product (GDP). The immigration component of globalization includes importing high-skill and low-skill workers. The employment aspect of globalization includes a shift of bargaining power from workers to employees. Although the diffusion of technology erodes the advantage of low skilled American workers have over lesser-developed countries' workers, there is little evidence that points to its effects (Collins, 1998).

Outsourcing is the import of intermediate inputs by domestic firms. It is a feature of globalization and includes the fragmentation of production into discrete activities, which are then allocated across countries (Feenstra, 1996). According to the empirical observations of Feenstra and Hanson, they measure outsourcing as the share of imported intermediate inputs, which are assumed to be low-skill intensive, in the total purchase of non-energy materials. They estimated imported intermediate inputs for a given industry as the value of input purchases from each supplier industry times the ratio of imports to total consumption (imports plus shipments) in supplier industry, summed over all supplier industries. There are two types of intermediate inputs: parts and components, and contract work done by others. When looking at the data observed by Feenstra and Hanson, certain industries, mainly those producing semi-durable goods, show a much higher propensity to outsource than others (Feenstra, 1996). Outsourcing involves the shift from domestic to foreign production of the input. The skill-intensity of production rises within sectors of the economy, as a result of outsourcing (Sachs, 1996).

Manufacturing industries are more susceptible to outsourcing. Feenstra lists two characteristics that make this industry amenable to outsourcing: (1) the production process can be separated into self-contained stages, and (2) production stages vary in the relative intensity with which they use labor or different skill types. This creates a rationale for moving non-skill-intensive activities abroad. For example, manufacturing a pair of shoes or a computer involves the production of many parts, which are later assembled into a final good. Product design and development require workers with at least a college education, the production of components require skilled technicians, while product assembly requires workers with only rudimentary skills (1996). Outsourcing raises the relative demand and earning of high-skilled workers, contributing to a global increase in wage inequality (Hanson, 1998). Wood, Feenstra, and Hanson maintain that outsourcing accounts for 30 to 50 percent of the decrease in unskilled labor's share of wages from 1979 to 1990 (Du Boff, 1997).

THE STOLPER-SAMUELSON THEORY, THE HECKSCHER-OHLIN-SAMUELSON THEORY, AND FACTOR PRICE EQUALIZATION

The Heckscheer-Ohlin-Samuelson (HOS) model along with the Stolper-Samuelson (SS) theory is the most popular framework for analyzing the trade-wage linkage (Sachs, 1996). The SS theory states that a fall in the price of a good, as a result of a tariff, reduces the pay of the type of labor most heavily used in making it (*The Economist*, 1998). It links production prices with wages (Collins, 1998). It was developed in the 1940s and predicts that removing trade barriers would have different effects in different countries. If a country has a large unskilled labor force, its exports will tend to be intensive in skilled labor and skilled workers will gain from more trade. If unskilled labor is more abundant, its exports will be intensive in unskilled labor, so skilled workers will lose. Freer trade would raise the wages of skilled workers and lower wages of the unskilled in rich countries. Even in developing countries similar changes have occurred. In Mexico, the difference between a college-educated worker's pay and unskilled worker rose by one-third between 1987 and 1993 (Trade and Wages, 1996). The theory suggests that freer trade reduces inequality in poorer countries and increases it in richer ones. Poor countries, since they have mostly unskilled labor, should export goods that are intensive in unskilled labor, pushing up its wages. In reality, the poorer countries, who have liberalized trade, have more wage disparity (Trade and Wages, 1996).

What is wrong with the SS theory? There are other factors that drive wages. Growth, capital accumulation, and new technologies have a big effect on distribution of income. High inflation and deep recessions also influence wages. Trade raises the demand for skills. Freer trade will raise the premium paid to skilled workers; this is not predicted by the SS theory. Finally, the China effect; China has millions of unskilled workers and countries with higher-skilled workers compete with China (Trade and Wages, 1996).

The HOS model shows how production, employment, wages, and other variables are determined in an economy producing two goods using two factors of production. The relationship is as follows: a decrease in the price of a less-skill intensive product will be associated with a decrease in the wage of less-skilled labor relative to high-skilled, all else being equal (Collins, 1998). When one analyzes two regions, (the United States and a developing country), two factors of production (low-skilled labor and high-skilled labor), and two goods (one, skill intensive and the other not), HOS theory predicts that, upon an opening of trade between the United States and a developing country, three events will occur:

1.	The United States will export the high-skill-intensive product and import the low-skill-intensive product;
2.	The relative price of the low-skill-intensive product will decline in the United States, the wage of low-skill labor will decline relative to the wage of high-skill labor in the United States, and employment will shift to high-skill-intensive output; and
3.	Firms in both sectors of the United States will raise the proportion of low-skilled to high-skilled workers, in response to the drop in low-skill worker's wages (Sachs, 1996).

As a part of the HOS model, factor price equalization (FPE) identifies conditions under which demand for labor is infinitely elastic. It implies that in an economy fully integrated in the world trading system, nothing domestic will affect wages. Relative wages are set by world factor endowment even if trade is only a small part or no part of the economy. The pay of all workers, even in non-import-competing activities, is determined in the global market. Only when the country specialized in the production of skill-intensive tradeables and produces no unskilled-intensive tradeable does the domestic labor market set wages for unskilled labor (Collins, 1998). This theory runs counter to what most economists believe. In the United States, wage differences among states persisted for decades despite free trade, migration, and capital flows. Around the world, wage differences between workers with similar skills have also persisted for decades (Collins, 1998).

PROGRAMS FOR DISLOCATED WORKERS

Though there are many winners benefiting from free trade, technological advances, immigration, and globalization, but there are also losers. It is difficult to identify the losers. Organized labor used to support trade liberalization. Economic pressures, fierce foreign competition, and the failure of Washington to develop sound economic policies for compensating victims of trade expansion and facilitating their adjustment through educational training to move them into other jobs, drove organized labor against free trade (Collins, 1998). Some concerns are for the difficulties adjusting to structural change and displaced workers, and the decline in relative earning of low-skill workers. Policy responses can take place as assistance programs or educational training (Collins, 1998). Other policy responses include continuing to pursue trade opportunities and leaving the market to adjust for the disparity, continuing to pursue trade opportunities and pursuing comprehensive adjustment policies, maintaining current level of trade, but pursuing no more, and reverting back to protectionism (Coffins, 1998). Lee gives two possible solutions to wage disparity without slapping the global hand. The first is to subsidize unskilled workers as European countries have done in the past (with 19 percent unemployment), and the second is to allow higher wages for skilled workers to be maintained as to encourage unskilled workers to improve their skills (1997).

There are already policies in place to aid displaced workers. Job search assistance aids in retaining and career-development programs, including unemployment insurance (UI). Employment services (ES) maintains a public labor exchange and works closely with the UI system to monitor job search. Collins suggests instead of unemployment insurance, provide employment insurance, which would encourage displaced workers to become quickly re-employed, by providing earnings supplements for a fixed period of time (1998). State and local programs under the Job Training Partnership Act (JTPA) of 1981 include the Private Industry Council (PIC) programs, which provide assessment, testing, counseling, and referral to job search assistance and training services (Collins, 1998). Pell grants and Stafford loans provide need-based financial assistance for post-secondary education. The Worker Adjustment and Retaining Notification (WARN) Act requires firms with over 100 workers to give at least sixty days advanced notice of layoffs likely to last more than six months (Collins, 1998). Workers displaced by foreign trade can apply for Trade Adjustment Assistance (TAA), which was established by the Trade Expansion Act of 1962. This extends unemployment insurance payments for up to one year beyond the usual six month period, as long as recipients take part in a training program (*The Economist*, 1998). Training vouchers, as a part of TAA, pay as much as $10,000 for each of two years (Collins, 1998). Collins believes that programs like TAA can help foster support of an open trading system from those who are the most vocally opposed, such as unionized labor (1998).

Louis Jacobson stresses the importance of finding a job in the same sector as the displaced position to future earnings. Retraining will provide skills that help workers find new jobs in their former economic sectors, and help them maintain a larger portion of their previous income (Collins, 1998).

Government programs cannot alleviate all of the suffering that will exist because of wage inequality and structural unemployment. Cooperation between the public sector (schools preparing youth for the workplace) and the private sector (on the job training opportunities) is vital to alleviate the growing wage gap between skilled and unskilled workers (Collins, 1998).

CONCLUSION

There are many forces that lower the wages of unskilled American workers. They include inadequate investment, labor-force changes, technological changes, international factor mobility, and globalization of the markets for goods and services (Collins, 1998). Increased trade is sometimes included on this list, but the majority of economists agree that free trade is superior to protectionism (Lusztig, 1996). Sachs maintains that there is not a direct link between trade and wage inequality. Some sectors lose from trade, but the economy benefits as a whole. Some workers may lose wages, but most consumers benefit from lower prices (Borias, 1997). Open trade has been shown to spur long term growth and encourages growth in developing countries (1996). The benefits of free trade are widely distributed, while the costs are concentrated. Those bearing the cost of free trade have a greater interest in the issue than those who reap the benefits. Protectionists have an easier time gathering public support than do those who support free trade. Protectionists can point to job loss, business failure, and other general economic problems. Those in support of free trade have to concentrate on more abstract issues such as comparative advantage, economies of scale, and long term growth. Protectionists may also have the support of other rent seekers; one group may support tariffs to benefit another in hope of getting protectionist measures for themselves (Lusztig, 1996). The broader measures of free trade include deregulation to allow foreign ownership of American airlines, shipping or television stations, or recognition of European drug testing regimes, or of foreign professional qualifications (*The Economist*, 1998).

Politicians and union leaders have put trade barriers up as a solution to wage inequality. In fact, import barriers would make Americans, as a whole, worse off. Instead of specialization, American companies would be forced to make goods as cheaply as they could and resources would be wasted on goods that could be bought abroad much cheaper. Everything, as a whole, would be more expensive, and all Americans would pay the price (*The Economist*, 1998). Du Boff writes that trade benefits all countries. In 1996, the Council of Economic Advisors reported that of 79 nationals, those with “open” economies (without restrictive trade rules) enjoyed a much faster rate of GDP growth over twenty years than did those with “closed” economies (1997).

Technological improvements, immigration, and globalization also benefit the economy, as a whole. Many economists believe that a gap in wages may serve an incentive to workers to obtain new skills (Lee, 1997). This challenge can be met by a larger investment in the future by the labor market, which will narrow the gap in the future (Sachs, 1996).

The question of why trade dependence holds down wages is not easily answered. Barriers may be the answer or high rates of investment in immobile assets (human capital and infrastructure). When countries attract physical knowledge assets, they will continue to have work forces that command high wages (Collins, 1998). A possible solution to the wage inequality problem is a combination of trade and capital flows that may eliminate economic separation of workers. Wages will be based on skill and effort, not geography; this would be a positive effect of globalization (Collins, 1998).

Finally, the most important instrument that can be used to alleviate the suffering of displaced workers is maintaining sound fiscal and monetary policies in the United States. This will allow the U.S. to remain competitive in the global marketplace, and raise the overall living standards of all employees, not just those who are highly educated and skilled, by maintaining full employment and low inflation. This can only be accomplished through minimal government regulation, allowing the free market to arrive at equilibrium.

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GETTING THE ECONOMICS WRONG CAN KILL YOU: A PROGRAM FOR DEMARKETING ANTIBIOTICS

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ABSTRACT

The development of antibiotic resistance in many virulent microbes is rapidly rendering modern medicine helpless in the face of life-threatening bacterial infections. Consequently, we are on the threshold of a return to the pre-antibiotic era. The loss of antibiotic potency is a crisis that deserves immediate attention from public policy makers and business theorists. This attention is all the more overdue because current laws and business practices are hastening the development of antibiotic resistance. The cost is being paid in lost lives. This paper shows how existing incentives encourage the pharmaceutical industry and medical practitioners to treat antibiotics as an inexhaustible rather than as an expendable strategic resource. It outlines changes in law and business practice that would extend the lives both of new antibiotics and of the people who depend upon them for survival.

INTRODUCTION

Throughout much of human history, bacterial infections were both deadly and untreatable. But the development and dissemination of antibiotic wonder drugs in the middle third of the 20^{th} Century produced effective new treatments and widespread optimism that humanity had at last defeated its age-old microbial enemies. That optimism was premature. The potency of antibiotics is proving to be an expendable resource. The more we use antibiotics, the more bacteria develop resistance to them. A number of bacterial infections, including deadly diseases such as tuberculosis are becoming untreatable with antibiotics. And many other infections will soon become untreatable. We are, therefore, on the threshold of a return to the pre-antibiotic era. Indeed, in the case of diseases that no longer respond to existing antibiotics, we have already gone back to the future. Thus, in 1992, 13,300 people died from antibiotic resistant infections that were curable in the mid-century antibiotic golden age (Lewis, 1995).

Nor are antibiotics themselves the only medical interventions threatened by resistance. Bacterial infections are a common side effect of virtually all surgical procedures, so those procedures become much more dangerous as treatments for infections become ineffective. And because antibiotic-resistant microbes tend to flourish in environments where antibiotics are widely used—preeminently hospitals—the safety of the entire range of sophisticated medical interventions offered in a modern hospital is being compromised. These developments which seriously threaten the well being of millions call for an energetic response from medical practitioners, pharmaceutical companies, and public policy makers.

The medical community is beginning to respond. Much has been written in the medical literature about this problem (e.g., Levy, 1995), and doctors and hospitals have adopted protocols designed to inhibit the development and spread of resistant bacteria (Stephenson, 1996). But, for reasons we discuss below, medical protocols are unlikely to solve the problem unless they are reinforced by changes in the macromarketing system that distributes antibiotics. And the necessary macromarketing changes are unlikely to occur unless changes are made in the law. This paper will discuss changes in public policy and business practice that could hasten the development of new antibiotics and slow the development of resistance to the new products, topics that have received little attention.

CURRENT MACROMARKETING SYSTEM

For the vast majority of products, a sound macromarketing system must strike a balance between two antithetical societal goals: fostering innovation and making products available to all who desire them (Arrow, 1962). These goals are antithetical because innovation is most likely to occur when there is a prospect of high prices and extraordinary profits, in other words, when the innovating firm will have a monopoly on a new product. On other hand, a product will be most widely disseminated if it is a commodity, sold by a large number of firms in a perfectly competitive market with little or no profit. We balance these competing interests with patent and trademark laws. Patents create an incentive to innovate by granting an initial monopoly on innovative products. But at some point, the patent expires and the product becomes a commodity, sold by a number of firms that compete fiercely on price. As prices fall, more people can afford the product. The innovating firm retains its brand name and any brand equity it has created by being an innovator, but consumers have access to other, generally lower priced brands or to unbranded products. The most important public policy question in this kind of macromarket is the length of the patent. Lengthening the patent will cause innovations to occur more quickly but diffuse through the population more slowly. Shortening the patent period has the opposite effect on innovation and diffusion (Viscusi, Vernon & Harrington, 1998).

It is an axiom of the currently predominant macromarketing system that products should be widely available and widely used. Incentives for a quick and widespread dissemination of new innovations are built into existing law. The innovating firm has a strong incentive to inform the public about its new products and to push their use while its patent is in force. When the patent expires, the innovating firm's extraordinary profits give competing firms a strong incentive to enter the market quickly. The new entrants usually win market share from the established firm by offering lower prices that make the product affordable for a wider public. For radios, grain combines, electric motors, and light bulbs, these arrangements work well. But for antibiotics, they lead ultimately to disaster.

Antibiotics differ from other products in being a scarce and highly expendable resource. Radios don't become less available and effective when others purchase one. Indeed, prices decline, quality improves as more people purchase radios. But with antibiotics availability and effectiveness are reduced when others use the product. Each use of an antibiotic increases the probability that the next use will be ineffectual. And the ultimate cost is paid in lives lost. Here, the societal interest is not, as it usually is, to foster the quick dissemination and widest possible use of a new product. It is to avoid frivolous uses, reserving the product for critical cases and, thus, preserving its potency as long as possible. Expressed in the technical language of economics, the sale and use of antibiotics involve a big negative economic externality, a cost borne by a third party not immediately involved in the transaction: the purchaser of the antibiotic receives a health benefit, the pharmaceutical firm a profit, but third parties must face exposure to the antibiotic resistant microbes that develop when antibiotics are used, and they are deprived of a remedy when illness does befall them.

The two parties that might seem to be best positioned to solve this problem—doctors and pharmaceutical firms—are both inhibited from doing so by a micro/macro dilemma. In their encounters with patients, doctors often face strong pressures to prescribe antibiotics when they know that an antibiotic is not called for, e.g., when the infection is viral, and they often succumb to those pressures. The Center for Disease Control estimates that a third of all antibiotic prescriptions should not have been dispensed (Levy, 1998). Doctors succumb to these pressures because prescriptions keep their customers happy whereas instructions to pay the fee, then go home and get plenty of rest and fluids annoy them. Responding to the incentives they face, many doctors use antibiotics, in effect, as a placebo.

Pharmaceutical firms likewise have a strong incentive to push excessive use of antibiotics. As previously discussed, they have a limited period of patent protection during which they need to encourage the widest possible use of their product if they are to maximize the returns on their research investment. When their patent expires, the antibiotic will have much less value to them. Unsurprisingly, they do strongly encourage aggressive use of new antibiotics. In any case, they would have a difficult time limiting the use of an antibiotic even if, ignoring their financial interests, they wanted to. Doctors strongly resist any encroachment by pharmaceutical firms upon their prescribing prerogatives. Since doctors are unavoidable gatekeepers for the drug companies' products, these companies are unwilling to offend doctors by seeking to control their behavior. Thus, both doctors and pharmaceutical firms face incentives at the micro level that stop them from adequately addressing the macro problem of antibiotic resistance.

AN ALTERNATIVE MACROMARKETING SYSTEM

Given the micro/macro dilemmas that doctors and pharmaceutical companies face within the current macromarketing regime, changes in law will probably be necessary if medical and business practices are to be modified in such a way as to inhibit the development of antibiotic resistance. The precise nature of the changes that should be made may hinge on an important empirical question--whether antibiotics can regain their potency if they are withdrawn from the market for a period of time.

Revitalization and Recycling Option

Biological logic and some empirical evidence suggest that microbes pay a price for becoming resistant to antibiotics. To become resistant they must develop the ability to produce enzymes that either degrade the antibiotic or chemically modify it in such a way as to make it ineffective. If a bacterium has to divert part of its energies from reproduction to defending against antibiotics, it should be less virulent and, thus, less dangerous. It is less dangerous because, given time to gear up, the immune system will defeat most microbes. (Antibiotics merely slow infections long enough for the immune system to gear up for the fight.) If a bacterium sacrifices too much of its reproductive capacity in order to produce enzymes that counteract antibiotics, it may not get far enough ahead of the immune system to produce a severe illness. Unfortunately, it is already clear that some bacteria remain potent enough to kill even with the burden of making enzymes to resist antibiotics.

Another potential weakness of resistant bacteria is that they may depend on the selection pressure of the antibiotic to compete against microbes that are reproductively more potent when the antibiotic is not present, i.e., those that haven't diverted some energy to producing anti-antibiotic enzymes. If the resistant bacteria thrive only when competing bacteria are suppressed by antibiotics, it may be possible to combat them by eliminating the selection pressure on which they depend, i.e., the antibiotic. Indeed, discontinuing the use of a particular antibiotic could produce two benefits: allow nonresistant bacteria (some benign) to recover and compete with those that are resistant, and, over time, restore the potency of the discontinued antibiotic.

Fortunately, there are several broad classes of antibiotics that function in different ways and are made ineffectual by different resistance mechanisms, so it would not be necessary to withdraw all classes of antibiotics at the same time to carry out this revitalization strategy. Each class could be withdrawn from the pharmacological arsenal for some empirically determined interval that would optimally restore its potency. As one class recovered, another could be withdrawn, one would hope in an unending cycle of use and revitalization that would never leave medicine powerless in the face of a bacterial infection.

But while this option is not difficult to conceive, it would be difficult to implement. If it were done by industry agreement, it would violate antitrust laws, so the laws would have to be changed to allow collusion among competitors in this special case. Even if antitrust concerns were dealt with, it is not clear that the pharmaceutical industry would be able to agree on a schedule for withdrawing the various classes of antibiotics from the market. Large firms with product lines that include all the major classes of antibiotics would be in the best position to prosper while one antibiotic class was withdrawn from the market. But even the large firms would squabble over which class should be withdrawn first since a firm's brands are not likely to be equally strong in every class. Small firms that are dependent on one kind of antibiotic would pose a still more serious challenge. Since the continued existence of the company would be at risk were they forced to entirely withdraw from the market over an extended period of time, such companies would resist a voluntary industry agreement. Thus, special compensation for small firms or government regulation would be necessary to pursue this option.

But the discussion of these business and policy options may be moot. Unfortunately, there is some recent evidence that even if the implementation problems could be overcome, a revitalization and recycling strategy may not work. In a recent study conducted in Sweden, Bjorkman, Hughes, and Andersson (1999) found that bacteria may not lose their antibiotic resistance when the selection pressure applied by the antibiotic is removed. These researchers found, as expected, that resistant bacteria were initially less virulent than their nonresistant counterparts. But the resistant bacteria became more virulent over time, *without losing their* *resistance*. After reproducing for about thirty generations in mice, the resistant strains had become at least as virulent as the nonresistant bacteria. And this happened even though the mice were not continually dosed with antibiotics to maintain selection pressure. It also happened with three different antibiotics, streptomycin, rifampicin, and nalidixic acid. And the result was replicated in test tubes. Twenty-six mutant strains were developed in the experiment and only four lost their resistance to the antibiotics as a price of regaining their virulence. If these results hold for other bacteria and antibiotics, they will mean that antibiotics are a nonrenewable resource. It would, therefore, become all the more important both to use them as sparingly as possible and to develop new antibiotics to meet future needs.

Defense Contractor Option

It is prudent to assume that Bjorkman, Hughes, and Anderson's (1999) results will be supported by future research and clinical experience. If they are, our range of options in public policy and business practice will be more limited. We may have to choose just one of two options, either massive government intervention, perhaps on the model of the Defense Department's efforts to produce military equipment, or energizing the private sector by creating an enduring property interest with its inherent incentives. In this section, we discuss the first of these two options, in the next section, the second.

Assuming that antibiotics cannot be revitalized once they lose their potency, two things must happen if we are to preserve our capacity to combat bacterial infections: we must both develop new antibiotics and slow the onset of resistance to the antibiotics we already have. It is not certain that new classes of antibiotics exist and are, thus, discoverable, but if they are, government has shown that it has the capacity to fund and direct massive research projects that aim to achieve well defined goals. It is likely that a government initiative would produce new discoveries were it undertaken. The actual discoveries might well be made by pharmaceutical firms which have much of the expertise in this kind of research, but the research could be underwritten financially by the federal government.

However, judging from the history of defense contracting, any discoveries made in this way would come at a very high price in money and regulation. Participating pharmaceutical contractors would have to learn a new way of doing business, one that emphasized bureaucratic processes designed to ensure that government money was not spent fraudulently. Indeed, much of the money allocated for the project would be spent on compliance with government mandates to provide managerial and accounting controls. Given a sufficiently large financial incentive, some pharmaceutical firms would, no doubt, shoulder the burden of transforming their cultures to meet government rather than consumer demands. But given the high returns on investment that pharmaceutical firms have historically enjoyed, government incentives would have to be very high to induce a change. And the change in culture might have negative side effects on pharmaceutical research in other areas besides antibiotics. Returns on money invested tend to be much higher when firms have a consumer-oriented business model than when they have a government-oriented model. Thus, there are good reasons for preferring the second of the two options mentioned above, the patent and property rights option.

Patent and Property Rights Option

As previously pointed out, under the current macromarketing regime, drug companies have no incentive to preserve the potency of the antibiotics they market. Indeed, the opposite is true. They have strong incentives to encourage the quickest possible adoption and widest possible use of new products so as to get a return on their investment before their patent expires. In other words, because drug companies have only temporary protection of their property rights, they use and abuse the property in ways that are more typical of renters than of owners. If they had a permanent property right, they would market an antibiotic in ways that would extend its life and preserve its potency.

A change in law could create these new incentives and new business practices. At present, drug companies have a 20 year patent on new products they develop, though the effective patent is shorter since part of the patent period is spent testing the product and getting approval to market it. If the law were changed to make the patent perpetual, companies would change their marketing practices in ways that would maximize the useful life of the antibiotic. They would try to preclude its use in trivial cases and preserve it, rather, for use in critical cases, especially cases where life is at risk.

Given the proposed change in law, firms would probably change their marketing practices because a new strategy would be needed to maximize the return on their property. If Bjorkman, Hughes, and Anderson’s (1999) conclusions are borne out--and it appears that they will be (Schrag & Perrot, 1996)--the useful life of an antibiotic may be calculated roughly in terms of a certain number of doses that can be administered before resistance develops and the drug becomes ineffective. At present, the patent holder tries to ensure that the maximum number of those doses occur during limited time when its patent is in force. Under the proposed new law, having a secure right to a return on each effective dose, the company would price and promote the product in such a way as to ensure its use only in critical cases. It would do this because patients would be prepared to pay much more for the product in the critical cases where life or basic health was at stake than in trivial cases. A thousand dollars a dose is a bargain if it saves your legs, eyes, or life. By reserving the product for these critical cases, the company would get a maximum return on each expended dose. (The price would be set to maximize the expected value of each dose sold, so price would be affected by the company's investment opportunities, by its assessment of the pricing strategy's public relations and political consequences, and by its estimate of the likelihood that alternative treatments would be developed over the life of the drug.) The company would also take care to sell the product only in venues where it would be properly used since improper administration of the drug (patients discontinuing treatment before completing a prescribed course) would decrease the total number of effective doses. By setting the price in this way and carefully monitoring how the antibiotic was administered, the company would earn the highest possible return on its investment and, incidentally, would save the maximum number of lives.

While it has many advantages over the defense contractor approach discussed above, the patent-and-property-rights solution for the resistance problem has limitations. The new patent law would affect newly developed but not existing antibiotics. And few fundamentally new antibiotics may remain undiscovered. Properly using those already discovered is, therefore, essential. This problem of existing antibiotics could be solved by making the patent law retroactive, giving the developers of existing antibiotics renewed control and, thus, an incentive to direct each dose to its most valuable use. But a retroactive law would produce a huge windfall for original patent holders while putting the makers of generic drugs out of business. And it would provide no incentive to discover new antibiotics, one of the most important benefits of the new-product law we have proposed. So though it would save lives by reserving existing antibiotics for their highest use, retroactive patent protection would probably be politically unacceptable. (The public might accept government ownership of the patent on existing antibiotics. If a government corporation sought to maximize returns to the treasury, it too could deliver the benefit of saving as many lives as possible.)

The question of what should be done to encourage responsible use of existing antibiotics can be distinguished from the question we have treated--what can be done to ensure that newly discovered antibiotics are properly used. Still, perpetual patents are probably the best way to ensure antibiotics (whether existing or new) are put to their most valued use. If the perpetual patent option is rejected (either for new or existing antibiotics), increased regulation may be the only alternative. The FDA could, for instance, reclassify antibiotics as a Class IV drug (treating them like narcotics). Doctors and drug firms have to justify their practices in dispensing narcotics and are subject to severe penalties if they don't dispense them in appropriate ways. Similar scrutiny of distribution practices and similar penalties for misprescribing would probably result in more responsible use of antibiotics and, thereby, slow the development of bacterial resistance. But this change would be most beneficial if coupled with perpetual patents.

Another limitation of our proposed change is that it provides inadequate protection for the most important innovation--the development of a new class of antibiotics. New antibiotics provide the highest level of protection and the least initial susceptibility to resistance if they use a novel mechanism to inhibit bacteria growth, i.e., if they are a new antibiotic class. Discovering a new class of antibiotics should produce exceptional financial returns because it produces an exceptional public benefit. But innovators who create a new antibiotic class typically don't reap the full return to their innovation. Competitors evade their patent through molecular modification--making small changes that produce a chemically distinct structure but one that still works the same way as the original antibiotic, though sometimes increasing potency, reducing side effects, or providing some other small benefit. Once a competitor has developed a copycat drug in the same class, both companies will push their products as aggressively as possible to capture for themselves the returns on the new antibiotic's limited inventory of potent doses. This attribute and price competition is beneficial in most product markets but not in the antibiotic market. And it can be precluded only if the original innovator has a patent on the entire drug class. As previously noted, a company that owns the class will see that each dose is put it its highest use. Other firms will still make the usual copycat improvements, so long as they are able to patent them. They can license improvements to the firm that holds the class patent, for the useful life of the drug will generally be lengthened by improvements that increase its potency--an important benefit for the company that owns the class--and the willingness of consumers to pay a premium price for the drug will increase as side effects are reduced.

CONCLUSION

The development of antibiotic resistance is rapidly rendering modern medicine helpless in the face of life-threatening bacterial infections. Our rapid return to the pre-antibiotic era is being accelerated by business practices that flow naturally from the current macromarketing regime. A new regime granting indefinite patent protection for novel antibiotics would change the incentives that govern business practice in such a way as to lengthen the effective life of a new antibiotic and, thereby, save human lives. Given the magnitude of the threat, public policy makers should move expeditiously to change current patent law, create new incentives for business and, thereby produce a new macromarketing order for anitbiotics.

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FINANCIAL AND POLITICAL CRISIS OF MALAYSIA

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ABSTRACT

Malaysia was the envy of many other emerging and developing nations after the late 1980's because of its double digit growth in GDP and economic prosperity. Malaysia and its neighbors were called the "Asian Miracle" because of their tremendous growth rate and economic stability. However, all of this came to a sudden halt starting in July 1997 when their currencies tumbled and their stock markets went down with them. Foreign investors started getting out and domestic investors moved their money overseas. Malaysia, who started down the path of free capitalism in the eighties, has now adopted some restrictions and currency controls which the prime minister claims are necessary to get back on track. The purpose of this study is to analyze the current financial crisis and political turmoil that Malaysia experienced from July 1997 to 1999. The study looks at how the financial crisis brought about the political instability in the country and also the friction between the prime minister Mahathir Mohamad and deputy prime minister Anwar Ibrahim. Anwar Ibrahim, who is also the finance minister, was fired from his post because his views concerning economic policy and political freedom are different from that of the prime minister.

INTRODUCTION

What began as a speculative attack on the Thai Baht quickly spread to the Philippines, Indonesia, South Korea, Hong Kong, and Malaysia. Although it also affected Singapore and Taiwan, the impact was much less severe. It was the speed and the severity with which the currencies fell that caught many by surprise. Within a three-month period (July - October 1997), the Thai Baht had fallen close to 40%, the Philippine peso and the Malaysian Ringgit by about 27%, the Indonesia Rupiah by 40%, and South Korean Won by about 35% against the United States (U.S.)

dollar. What began as a speculative attack on currencies quickly turned into a stock market meltdown and triggered a regional banking crisis. It also caused political instability in some countries.

These countries and their central banks attempted to defend their currencies but quickly gave up and chose the alternative of floating their currencies. Many blamed the crisis on contagion. While the contagion argument is a plausible and relevant one, it ignores the many differences among the Asian economies that have suffered. Furthermore, the contagion argument glosses over the underlying macro economic weaknesses that were evident in these countries.

This paper is presented in four sections. Section one is the introduction to the research question and its background. Section two is the literature review. Section three discusses the crisis in depth and what Malaysia has done to get out of it, followed by an update on the crisis and the political situation in Malaysia. Finally, section four provides the conclusion and summary of the study.

LITERATURE REVIEW

The Asian financial crisis seems to have more far-reaching consequences than its two predecessors - the European monetary crisis of 1992-93 and the Mexican peso crisis of 1994-95. It has been approximately two years since the beginning of the financial crisis in the Asian region. Its effects have been felt in parts of Latin America, Europe, and United States (*Houston Chronicle*, October 7, 1998). President Clinton, in his speech at the meetings of the finance ministers of the Asia Pacific Economic Cooperation (APEC) conference in November 1997, called it “a glitch in the road.” More recently however, he called it “the worst financial crisis in half the century” (*The Wall Street Journal*, September 24, 1998). Everyone was more concerned and worried that its effects may be more far-reaching than it was initially thought. In fact, it was predicted that some of these countries would have their worst recessions since World War II. For instance, it was estimated that Indonesia’s Gross Domestic Product (GDP) will drop by a surprising 15 percent in 1998 (Krugman, 1998 a)

The world economy, which grew at approximately 3 percent per year in the 1980's but then slowed to 2 percent in the 1990's, differed significantly from the Asian countries which grew at approximately 8 percent in the 1980's and then 10 percent in the 1990's. With such phenomenal growth rates, these countries were the envy of other developing nations. The “Asian Miracle” became the description for this period of economic growth. During this time period, most Asian countries transformed their pre-industrial (i.e., agriculture based) economies to more industrial-based economies.

Many factors contributed to this transformation. Some of the Asian countries pursued policies to increase the literacy rates in their economy, while others encouraged labor intensive foreign investments (Zaman, 1998). Trade and financial liberations followed as these nations developed, and the standard of living improved in these countries (Krueger, 1997). They pursued aggressive economic policies, which implied higher risk exposure. The success in achieving the rapid growth can be attributed partly to their ability to maintain relatively stable currency exchange rates. The stable currency exchange rates, together with favorable tax codes, were magnets for bringing a large pool of foreign investors into these countries. Investments came in the form of foreign direct investment (FDI) and investments by foreign portfolio managers who managed many international and emerging market funds.

However, the “Asian Miracle” turned into an “Asian Nightmare” by the middle of 1997. Plunging currencies and stock markets put the economies in a deep freeze, making these countries’ survival difficult (Economist, 1998). No one anticipated the Asian financial crisis to be this severe. Though there were a few researchers like Paul Krugman, an economics professor at MIT, who were skeptical of the “Asian miracle,” investors and portfolio managers were too engrossed in the high growth and high returns economies of these nations, to see the warning signs (Krugman, 1998a). Although the entire region had enjoyed decades of strong growth and rising standard of living for its people, they also had some common problems that led to this crisis (Ruben, 1998).

Initially, the impact of the Asian crisis on other economies around the world was down played by many. This was particularly the case with the U.S. economy, which was robust and did not show any signs of slowing down due to this crisis. Most popular press suggested that the impact on the U.S. economy would be minimal (*Houston Chronicle*, March 18, 1998 and *The Wall Street Journal*, April 14, 1998). However, with the continued persistence of the crisis, and the release of recent trade figures, the outlook for the U.S. economy looked less rosy than before. Even Federal Reserve chairman Alan Greenspan remarked that the Asian crisis “has not shown any evidence of stabilization, and we do not know how far it’s going to carry or what its spillover will be” (*The Wall Street Journal*, July 23, 1998).

Bergsten (1997) proposed some remedies for this crisis by spelling out tough structural changes that Asian countries must make in order to stabilize their economies. As an example, he stressed that the Asian economies must undertake steps to reform and strengthen their financial institutions in order to improve transparency and supervision. He also added that the political leaders must eliminate the close relationship between them, the banks, and other commercial entities. Maskooki (1998) looked at the crisis strictly from South Korea’s perspective and analyzed why the crisis took such a toll on the Korean economy. He concluded that

Korea's deregulation of the nation's capital market in the absence of an efficient and globally integrated capital market increased the volatility of their currency.

Litan (1998) suggested that Asia's troubles are not insoluble and the IMF can help "fix" the economies using his remedies. He spelled out a three-step program of *triage, liquidation* or *merger*, and *workouts* for the troubled corporations and banks.

Noland (1998) discussed the origins of the Asian financial crisis, the prospective impact of events in Asia on the U.S. economy, and the implications of these developments for the architecture of the international financial system. He outlined four causes of the crisis: exchange rate misalignment, weak financial institutions, export slowdown, and a moral hazard problem. He also predicted that the events in Asia will reduce the growth rate of the U.S. GDP from 0.5 to 1.0 percent from its current level, over the next two years. Other studies on this Asian crisis include Miller (1998), Tobin (1998), and Sato (1998).

Prior to 1997 other emerging nations looked at the Asian countries as a model for economic success. However, in early 1997 the Asian economies began their meltdown, with collapsing currencies and plunging stock markets. The magnitude of the crisis began to accelerate in July 1997. Table I is a chronology of the crisis that caused panic in Asia from January 1997 to January 1999. Many of the countries had to seek the help of IMF for emergency loans (see Table I). The table also shows the date/event that triggers the currency devaluation and stock market downturns.

Although there are common causes of the financial crisis in many countries around the world, it is the consequence of the crisis on each of these countries that is most important. For instance, Thailand's problems can be attributed to external debt and increasing current account deficits. Thailand's central bank had external obligations of $14.6 billion when the mid-1997 crisis induced it to cease pegging the baht to the dollar (Bardacke and Crawford, 1997).

Malaysia's problems can be summarized by the policies pursued by prime minister Mahathir Mohamed. Malaysia had not put its cheap domestic and foreign labor to good use. For years, it had allocated resources to prestigious projects (i.e., skyscrapers, big highways, and development projects) which, to a large extent, had not contribute to the productivity and performance of the Malaysian economy. The Malaysian financial institutions continued to lend furiously to sustain these projects.

Table I: Chronology of Malaysian/Asian Financial Crisis

Date	*Event/Description*
Jan. 23, 97	*Major South Korean steel maker defaults on loan.*

Table I: Chronology of Malaysian/Asian Financial Crisis

Date	*Event/Description*
Feb. 5, 97	*Thai company (Somprasong) missed payments on foreign debt.*
Mar. 28, 97	*Central bank of Malaysia (Bank Negara) restricts loans to property and stocks to head off a crisis.*
May 14-15, 97	*Baht comes under attack by speculators who decided Thailand's slowing economy and political instability meant it was time to sell. As the crisis started affecting the Philippines, the central bank of the Philippines raises the overnight rate 1.75% points to 13% and dumps dollars.*
July 2, 97	*The bank of Thailand announces a managed float of the baht and calls on the IMF for "technical assistance". This devalues baht by about 15-20%. This triggers for the Asian financial crisis. The Philippines Central Bank defends its peso heavily.*
July 8, 97	*Malaysia's Bank Negara intervenes to defend its ringgit heavily. The Indonesian rupiah starts to fall as Jakarta widens its rupiah trading band from 8 to 12%. July 14, 97. The IMF offers the Philippines $1.1 billion in financial support under the fast track regulations drawn after the 1995 Mexican crisis. Malaysian central bank abandons the defense pf the ringgit.*
July 24, 97	*Asian currency meltdown. The baht, peso, ringgit, and rupiah all fall heavily as confidence in the region deteriorates rapidly.*
July 26, 97	*Malaysian Prime Minister called hedge fund manager George Soros the 'moron' responsible for the attack on the ringgit.*
July 28, 97	*Thailand seeks the help of IMF.*
Aug. 11, 97	*IMF unveils a rescue package for Thailand including loan totaling $16 billion from the IMF and Asian countries.*
Aug. 13, 97	*The Indonesian rupiah comes under severe attack and hit at historic low of 2,582 to the dollar. Central bank intervene heavily.*
Aug. 14, 97	*Indonesia abolishes its system of managing the exchange rate through the use of a band and allows it to float. Rupiah plunge to 2,755.*
Aug. 15, 97	*Speculators attack Hong Kong dollar, overnight interest rates up 150 points from previous day to 8%. Stock market also falls rapidly.*
Aug. 20, 97	*IMF approves a $3.9 billion credit for Thailand. The package now totals $16.7 billion. Brunei adds $0.5 billion to the bailout package, making it $17.2 billion.*
Sept. 4, 97	*Philippines peso drops to record low of 32.43 to a dollar. Malaysian ringgit falls below the 3.0 to the dollar. Government delays multi-billion dollar construction projects.*

Table I: Chronology of Malaysian/Asian Financial Crisis

Date	Event/Description
Sept. 16, 97	Indonesia says it will postpone projects worth 39 trillion rupiah.
Oct. 8, 97	Indonesia says it will ask for IMF help.
Oct. 20, 97	The Hong Kong market suffers its heaviest drubbing ever, where the index plunge almost 24%. The South Korean won also begins to slump rapidly in value.
Oct. 27, 97	After regaining 718 points on Oct. 24, the Hang send index loses another 646 points (6%). The loss ripples through the global market. DJIA posted its single biggest point loss ever, falling 554 point (7.18%). Stock markets in Brazil, Argentina and Mexico saw their biggest single day loss.
Oct. 31, 97	IMF unveils Indonesia's rescue package for about $40 billion, although front-line defense is $23 billion.
Nov. 8, 97	The South Korean stock market dropped, and the currency lost 14% of its value and reached a all-time low of 979.90 against the dollar.
Dec. 4, 97	IMF approves a $21 billion loan for South Korea
Jan. 5, 98	Malaysian ringgit, Thai Baht, Philippines' peso, and Indonesia's rupiah all dropped to new lows against the dollar.
Jan. 7, 98	Malaysian ringgit, Thai Baht, Philippines' peso, and Indonesia's rupiah all dropped to new lows against the dollar.
Feb.10, 98	Southeast Asian currencies skyrocketed against the dollar amid indications the Indonesia may peg the value of its currency to the dollar. Indonesia may set up currency board.
Feb. 16, 98	Asian currencies suffered in the face of growing international resistance to Indonesia's plans to adopt a currency board.
Feb. 19, 98	Latest U.S. monthly report suggest the Asian crisis may start to affect the U.S. economy.
Mar. 4, 98	Malaysian stock market lost almost 4% of its value stemming from the new one of its premier banks have severe financial problems.
Apr. 7, 98	Japanese prime minister admits Japan's economic crisis is one of the worst since World War II.
May 21, 98	President Suharto of Indonesia resigns after 32 years in power following riots
June 12, 98	Japan's economy sinks into a recession.
June 15, 98	Dow Jones falls 2.4 percent following panicky selling in Asia as the weakening yen renews that Asia's economic troubles could spread.

Table I: Chronology of Malaysian/Asian Financial Crisis

Date	*Event/Description*
June 17, 98	*Federal Reserve along with Japan's central bank move into market to bolster yen, giving immediate lift to Japanese currency and U.S. stock market.*
Aug. 20, 98	*Malaysia's central bank's (Bank Negara) governor and his deputy resigned after their differences with the prime minister on the direction of the country's monetary policy*
Sept. 1, 98	*Malaysia imposes currency controls*
Sept. 2, 98	*Malaysia's Deputy Prime Minister and Finance Minister Anwar Ibrahim is sacked after months of economic policy difference with prime Minister Mahathir. He was charged with corruption and sexual impropriety.*
Sept. 9, 98	*Japan cuts interest rates.*
Sept. 14, 98	*Clinton calls it "worst financial crisis in half century."*
Sept. 20, 98	*Anwar Ibrahim was arrested at his house. His supporters marched to demand the Prime Minister's resignation.*
Oct. 17, 98	*Police forcibly broke up a rally of thousands in support in central Kuala Lumpur, capital city of Malaysia.*
Nov. 2, 98	*Anwar Ibrahim trial began.*
Nov. 15, 98	*U.S. Secretary of State Madeleine Albright visits the wife of Anwar Ibrahim.*
Nov. 17, 98	*U.S. Vice President Al Gore support the reform movement during his visit to Malaysia to attend the APEC meeting.*
Jan. 13, 99	*Anwar's charges were amended to mainly corruption, leaving sodomy and sexual impropriety out.*
Jan. 14, 99	*Anwar's case adjourned for holidays, will resume Jan. 26.*
Feb. 4 , 99	*Malaysian government lifted the 12-month ban on the repatriation of foreign investments in the stock market and established a series of exit taxes in its place.*
Feb. 5, 99	*Malaysian government further relaxed some of the capital controls it imposed five months ago to restrict money flowing out of the country and destabilizing the economy.*
Sources:	*Http:/www.cnn.com/world/9801/15/asia.chronology.reut. The Wall Street Journal, Various issues 1997-1999. Financial Times, Various issues 1998-1999.*

South Korea's problem was that its economy was crippled by debt. When the four major corporations which controlled South Korea experienced problems, the entire economy experienced problems. Benefitting from major financial reforms to attract foreign investors, the Philippine's economy joined the fast-growing Asian economy much later than the other countries. However, preexisting foreign debt made this fledgling economy vulnerable to the crisis.

Unlike most of the other Asian countries where financial problems were the major contributors to the crisis, Indonesia's biggest problem was political corruption. The former first family (President Suharto) had controlled vital parts of the economy (i.e., financial institutions, large corporations) and did not allow markets to develop. The lack of market discipline and corruption are the main causes of Indonesia's downfall.

CAUSES OF THE FINANCIAL CRISIS IN MALAYSIA

Although many explanations given for the causes of this crisis, one can identify several main reasons that precipitated the crisis: overvaluation of currencies, competition from Japan and China, current account deficit, and too much foreign debt, moral hazard problem and weak financial institutions, a slowdown of exports, and financial panic.

Like many other Asian countries, Malaysia's official exchange rate policy was one of pegging the ringgit to the U.S. dollar. Its currency became overvalued due in part to the decision of other regimes in the region to adopt fixed exchange rates and the related large capital inflows in the 1990's. This pegging policy worked well until 1997, when it became clear that this currency was severely overvalued. This overvaluation was a harbinger of a crisis in the making as indicated by research in this area. Goldfajn and Valdes (1997) examined whether overvaluation and expectations are predictors of currency crises. Using a simple Consumer Price Index (CPI) adjusted measure of overvaluation, they found that over valuations are good predictors of impending crisis.

The objective of rates pegged to the dollar is logical in that it keeps the domestic currency stable and thereby reduces the currency exposure of domestic importers and exporters. This was an important consideration for Malaysia because its economy is dependent on foreign trade. However, pegged exchange rate systems require careful management to avoid problems which can lead to financial crisis.

There are several problems associated with maintaining pegged rates that have an insidious way of creeping in unnoticed. One problem is that a policy of maintaining a peg reduces domestic policy flexibility -- particularly monetary policy. To maintain a peg, domestic policies must be in line with those of the country to whose currency the domestic currency is being pegged. Deviations would put stress on the pegged rate. If policies have deviated sufficiently to cause underlying economic fundamentals to be very different, the pegged rate becomes vulnerable to a speculative attack.

A second problem is that, as a result of the peg, the domestic currency becomes over or undervalued against other currencies as the peg currency moves. With policy makers focusing attention on movements against the peg currency, appreciation/depreciation against the other currencies often does not get the proper amount of attention. Over time the nation's competitiveness gets eroded which shows up as current account and balance of payments problems.

A third, and perhaps the most insidious, form of problem arises when the domestic currency gets to be overvalued in real terms even though the nominal exchange rate is at, or near, the peg rate (i.e., within the band). This typically happens when domestic policies have been much 'looser' than that of the pegged country. It is this kind of problem that increases a currency's vulnerability to attack

Malaysia faced all of the above mentioned problems. First, over the period 1995 - 1997, the US dollar had appreciated gradually against the Malaysian Ringgit. This had to do with strong economic fundamentals and low inflation rates in the U.S. As such the Ringgit also appreciated against other currencies. This certainly affected the export competitiveness of Malaysia. Part of the increases in current account deficits were probably due to this currency appreciation (Maniam, 1999). The second problem of deviating economic policies was also evident. Countries where the crisis existed undertook policies that were far more expansionary than that of the US. This is particularly evident in the case of average annual M2 growth rate which for the seven year period for Malaysia was 15.5%, compared to 2.14% for the U.S. This means that the annual difference in monetary growth rate was more than 7 times. Obviously with such high level of deviation, exchange rates had to change. However, the fact that nominal exchange rates were maintained near peg levels meant that real exchange rates became overvalued. This is accentuated further by deviations in inflation rates (see Table II).

The average annual inflation rate for Malaysia was 4.00% while it was 2.6% for the U.S.. At these rates, Purchasing Power Parity (PPP) would have required the Malaysian Ringgit to devalue. However because the rates were pegged, the results were overvaluation. To determine the extent of exchange rate deviation from parity, the real exchange rate was computed for Malaysia. This was determined using the standard PPP equation as:

e^*	=	$e_0\,[\,(1 + i_h) / (1 + i_f)\,]$
e^*	=	*The parity exchange rate for 1996.*
e_0	=	*Average exchange rate for 1990.*
i_h	=	*Average annual home country inflation (Malaysia) for 1990 - 1996.*
i_f	=	*Average annual inflation for U.S.*

The percent over- or undervaluation was then computed as: $[(e^* - e_0) / e_0] \times 100$. Using the PPP approach, Malaysia's currency was overvalued by 12.5%. Applying the same approach, it is determined that the currencies of Thailand, Indonesia, Korea,, Hong Kong, and Taiwan were overvalued. Only the currency of Singapore was undervalued. Such overvaluation was a factor in the worsening of the current account balances of many countries, including Malaysia, in the region. Although the extent of the exchange rate overvaluation varied across countries, the need to adjust the current account position of the countries led to expectations of depreciations (against the dollar) in the region as a whole (Roubini, 1998).

Table II: Malaysia's Various Statistics

Year	1991	1992	1993	1994	1995	1996	Avg
Annual M2 Growth Rate (in %)	12	16	17	20	15	21	17
Annual Inflation Rate (in %)	4	5	3	4	3	3	4
Current Account Deficit (% of GDP)	-9.08	-4.06	-10.11	-11.51	-13.45	-5.99	-6.3
Saving-Investment Gap (% of GDP)	-8	-4.7	-5.3	-7.3	-9.5	-5.5	-6.2
Domestic Credit Growth (%)	18.5	16.6	12.3	14.8	29.5	27	19.5

Source: J.P. Morgan, World Financial Markets and Data Stream International

The current crisis can be also attributed to competition from other nations. Schuler (1997) argues that Malaysia (and other Southeast Asian countries) was being squeezed between competition from Japan on one end and China on the other. In the low wage, labor intensive manufacturing sector, China is replacing the Malaysia and other Southeast Asian countries as the country of new capital. Labor cost in Malaysia and other Southeast Asian countries were on the increase and some of them (especially Malaysia and Singapore) even had severe labor shortages. Kwan (1997) analyzed the product composition of exports from these countries and suggested that their exports are very similar to Chinese exports. This was a major disadvantage to Malaysia and others, since they must contend with China's competitive advantage to produce these products. Simultaneously, Japan had become a even larger competitor for Malaysia and other Southeast Asian countries because the yen had depreciated continuously since the mid 1990's making its goods cheaper relative to the Malaysian Ringgit and other Southeast Asian countries' currencies

Another important cause of the crisis was the huge current account deficit of Malaysia. The earlier Table II shows a large and growing current account deficit for Malaysia since 1990. As an example, the 1995 Malaysian current account deficit was 13.45 percent of its GDP, which is significantly higher than the six-year average of 6.3 percent. The other Asian countries have also run relatively large current account deficits since the 1990's. For example, over the 1990's, Thailand had a cumulative current account deficit equal to 36 percent of its 1996 GDP (Bhattacharya, Claessens, and Hernandez, 1997).

Many of the Asian countries, including Malaysia, experienced a huge property boom in the first half of 1990's, typically financed by cheap Japanese Yen borrowing. Larger current account deficits and reliance on short-term capital inflows increased the vulnerability of these economies to external shocks. Also, private foreign borrowing often constituted a major source of external financing. This short-term borrowing in foreign currencies led to a very large accumulation of foreign liabilities (Corsetti, Pesenti, and Roubini, 1998).

As this massive amount of foreign capital flowed into the local financial institutions they became more liberal in their investment and lending practices. Banks extended unsound loans, including a fundamental mismatch between short-term funding, foreign currencies, and lending for long-term projects of questionable merit. To compound the above mentioned problems, the core to all countries in the region is the close link between governments, banks, and corporations. Governments, with the assistance of banks, supported fundamentally unsound investment practices by corporations. The lack of transparency and supervision in the financial systems masked the serious nature and extended the problem. This problem manifested itself in Malaysia in the closing and merging of local banks in the 1997 and 1998. One of the largest problem institutions was Bank Bumiputra Malaysia Berhad. In early 1999, the bank was merged with Bank of Commerce creating Bumiputra Commerce Bank Berhad -- the second largest commercial bank in Malaysia (*Star*, February 15, 1999).

Just as in many other emerging nations, Malaysia's practices of loan classification and provisioning were too "loose and relaxed." There were too many loans to bank directors, managers, and their related businesses with serious credit risk. This problem termed "crony capitalism" was compounded by the excessive ownership of banks by the government or other government involvement. Additionally, local banks had the perception that their operations and practices were backed by government promises of bailout in case of insolvency. As a result of the perceived government backing, foreign banks and investors also began to finance these questionable projects where the project's riskiness was not properly weighted. In short, inadequate supervision of the activities financed by these capital flows, imprudent government intervention, and lack of transparency in the financial institutions were blamed for this crisis (Corsetti, Pesenti, and Roubini, 1998).

Another cause of the crisis was the slow down of exports from Malaysia. As can be seen in Table III, many emerging economies in Asia, including Malaysia, experienced a significant slowdown in merchandise export receipts in 1996. For Malaysia merchandise export growth was only about 6.5 percent in 1996 after an impressive growth rate of 20.3 percent in 1995. With continuous economic growth rate in the early 1990's, the Malaysian economy overheated and the only way for both banks and businesses to keeping paying the bills was to export more. However, the export market began to shrink for two reasons. First, the influx of foreign capital into Malaysia caused its currency to appreciate against the U.S. dollar. Instead of letting the market determine the currency's true value, the government of Malaysia pegged its currency to the U.S. dollar, so that it would remain price-competitive when exporting goods and services. Another reason that caused the export market to shrink was China's devaluation of its currency (Renminbi) in 1994. This made its goods and services more competitive in the world market. Japan's devaluation in 1995 only compounded the problem for Malaysia (Ng, 1998).

The financial panic by the investors was another reason for this crisis, or at least one that accelerated it. When the U.S. dollar started to rise against most of the world currencies, including the Malaysian Ringgit, Malaysian exports became more expensive and less competitive on the world market. It became the opinion of the international banks and traders that the Ringgit would have to be devalued to revive exports. However, the government of Malaysia tried to resist, knowing that devaluation would cripple firms which had borrowed, in dollars, to finance everything from high-rise buildings to growth oriented projects. Knowing that the Malaysian currency would not withstand market forces, traders started selling the Ringgit in the forward market hoping to profit from the devalued Ringgit in the future.

Table III: Merchandise Export (annual percentage growth)

Countries	1995	1996
Indonesia	13.4	9.7
Malaysia	20.3	6.5
Philippines	28.7	18.7
S. Korea	30.3	3.7
Thailand	23.1	0.5

Source: IMF, International Financial Statistics
IMF, World Economic Outlook

The Malaysian government with the help of the Central Bank (Bank Negara) bought Ringgit and sold dollars in an effort to avoid devaluation. However, after the inventory of dollars was sold and these stabilization efforts ceased, foreign investors withdrew capital, local companies hedged hard currency exposure, exporters stopped bringing their export earnings home, and citizens moved their savings abroad (Ruben, 1998). This series of events brought stock prices and land values down sharply around the country and put a severe strain on business. This led to a reduced or negative economic growth of the Malaysian economy.

The U.S. and other developed nations were concerned about this crisis because of its spillover effects into other markets. The U.S., together with the IMF and Asian Development Bank, had been deeply involved in providing assistance to many of the nations in the region (Ruben, 1998). The IMF responded to the crisis by helping Indonesia, Korea, and Thailand arrange economic reform programs intended to restore public confidence in these countries. They also approved some Standard Drawing Rights, sanctioned 26 billion dollars of IMF financial support for reforms in these countries, extended the Philippines existing IMF support program, and intensified its consultations with other members, both within and outside the region, to contain the crisis (IMF, 1998). Malaysia refused the IMF financial package, claiming that they could take care of the crisis without the IMF's assistance. Malaysia did not want the IMF to dictate monetary or fiscal policy and/or force them to make structural changes in the financial system.

POLITICAL CRISIS IN MALAYSIA

The crisis brought many changes and new problems to the region, including political instability in Indonesia, Malaysia, and Thailand. As table I shows, several critical events took place with respect to political instability. First, the Malaysian central bank's (Bank Negara) governor and his deputy resigned over their differences with the prime minister concerning the direction of the country's monetary policy. Second, the prime minister of Malaysia (Dr. Mahathir Mohamad) forced his deputy (Anwar Ibrahim) to resign in light of this crisis and their clash over economic policies and how to "fix the economy" (*Business Week*, 1998). Three weeks later Mahathir used an internal security law to jail Anwar alleging that he had engaged in homosexual acts, which is illegal under Malaysian law and taboo in this conservative, majority-Muslim society. These political events, together with the imposition of capital controls on September 1, 1998 and the pegging of the Ringgit at M$3.80 to U.S.$1 created many uncertainties among foreign investors (*Business Times*, 1998).

The conflict between Mahathir and his deputy Anwar stemmed from their opposing views on how to get the country out of the crisis. Anwar followed the prescription of the IMF, including tight money, prudent fiscal policy, and trying to open up the economy to foreign capital to solve the problems without actually asking the IMF for assistance. Mahathir on the other hand opposed any such move because he did not want foreign intervention and knew Anwar's policies would hurt the common man on the street. Therefore, Mahathir fired Anwar and rejected his IMF-oriented policies and instead imposed currency restrictions. Also, instead of borrowing from the IMF, Malaysia decided to borrow $1.35 billion from a consortium of twelve foreign banks operating in the country (*Financial Times*, December 30, 1998).

Anwar thought that the best solution was to restructure the banks, open up competition, allow foreign capital to come in, and provide support to the economy. However, Prime Minister Mahathir regarded any foreign capital as the problem, not the solution. Hence, Mahathir reduced this dependency while Malaysia restores itself through government support -reflating the economy, cutting interest rates dramatically and protecting the currency by putting controls on it so investors cannot pull their money out.

When Anwar was jailed, his supporters rallied in the streets and demanded the resignation of Mahathir. However, Mahathir was quick to indicate that he would not resign until the economy had been restored to its pre-crisis condition. The U.S. was quick to support the unrest as indicated by the visit of Secretary of State Madeleine Albright with the wife of Anwar Ibrahim. Also, while attending a summit of Asian-Pacific countries, U.S. Vice President Al Gore praised the "reformasi" and reform process. These comments sparked criticism by the general public and the Malaysian government. The reason why the general population was not opposed to the government is that wealth is more evenly distributed in Malaysia (unlike other countries, like Indonesia) and the most people are content with the prosperity of the last decade and unwilling to gamble their material gains by taking to the streets.

Although many nations criticized Malaysia for its currency control and political problems, the government did have their supporters. For instance, Hong Kong officials gave "thumbs up" to Malaysia's selective foreign exchange (forex) controls because it is one of the ways to cushion the impact of a currency crunch (*Star*, January 7, 1999) However, they added, that adopting such an approach should be well timed to avoid exacerbating the regional currency crisis. Professor Krugman, an economist from MIT also supported Malaysia on its currency control, saying that it is a necessary measure for the short run. But, he did warned that Malaysia should not have it in place indefinitely.

In an attempt to reduce the impact of the crisis, stabilize its economy, to gain public confidence, and resume growth, Malaysia has taken some radical, corrective steps. These steps, which included imposing currency restrictions, halting currency trading, and imposing various restrictions on foreign stock investors, seem to be working. As an example, Malaysia recorded a record current account surplus of RM 14 billion in the third quarter of 1998 B up 64.7% from the surplus of RM 8.5 billion posted in the second quarter of 1998. It also saw an upward trend of foreign investors funds during the same period (*Star*, January 8, 1999). Although other trade statistics are encouraging, the long-run impact depends on how Malaysia makes the necessary changes in their financial system and other structural changes.

Discussion and Recent Developments

Although many factors contributed to the crisis in Malaysia which in turn created political instability in the country, Malaysia has been recovering steadily over the past year. Recent data from IMF suggest that the imposition on currency control has not provoked capital flight as previously feared. Many investors are returning to Malaysia, and in early 2000 alone, portfolio capital inflows to Malaysia totaled $1.8 billion. Although currency control did not have any serious short term negative effect, its long term effect is questionable (IMF, 2000).

The stock market (Kuala Lumpur Composite Index) is also recovering quickly and approaching its pre-crisis level in terms of local currency. Main reason for such a quick rebound was the lower interest rate that was put in place and the recovery package introduced in the middle of 1998. Lower interest rates have also eased the burden of debtors and helped banks to get back on track (IMF, 2000).

The economic rebound was also aided by the increase in exports. When the government fixed the exchange rate between the Ringgit and the dollar in September 1998, this led to a trade weighted depreciation of the Ringgit by about 25 percent in real terms compared to the pre-crisis level. This in turn increased their export. In 1999 alone, merchandise exports grew by about 16 percent in U.S. dollar terms giving a trade surplus and a current account surplus for that year (IMF, 2000).

On the other hand, there are signs that recovery in some areas is slow. For instance, recovery in private sector demand has been slower but it has started gaining speed. This slow recovery is in part due to the fact that the property market is still weak and there is excess capacity in most sectors. Similarly corporate restructuring has been slow. In the same token, although Malaysia' real GDP contracted by 7.5 percent in 1998 but then grew by 5.4 percent in 1999, the per capita GDP is still below the pre-crisis level (IMF, 2000).

Overall it is expected that the Malaysian economy will grow by about 6.2 percent in 2000. Imports will pick up causing net export to fall and current account surplus will contract but will still remain in the positive side. Foreign direct investment will again pick up as investors gain confidence in the economy. Only the property market will remain weak for some time because of the excess capacity but is expected to pick in several years.

On the political front, the recent election returned Mahathir's government to power. The main reason that the general public voted to bring Mahathir's government back to power for another term is that they (the general public) are happy with the recovery to date. Except for the property market, all other indicators are pointing to an economy that is growing steadily and the outlook looks bright.

SUMMARY AND CONCLUSION

Many factors, both domestic and foreign, have contributed to the crisis in Malaysia. Domestic factors such as large external borrowing, fixed exchange rates, weak financial systems, the lack of transparency, and the country's overly ambitious investments on questionable projects have contributed to the crisis. Simultaneously, there were large private capital inflows from foreign investors who were searching for high returns. These foreign investors either underestimated the risk or did not assign proper risk to many investments. This contributed significantly to the downward pressure on the currencies. Although the financial crisis in Malaysia was caused by the factors mentioned previously, some of them had a greater impact on the economy than the others.

But recent data suggest that the economy is recovering steadily in most sectors. Since early 1999, main indicators have all been positive. For instance, the GDP has increased, nominal interest rate is much lower, export has increased with a current account surplus, government led financial restructuring has been effective and inflation is lower. Only the property sector is still weak and the corporate restructuring has been slow. On the political side, the political instability that was caused by the crisis have almost disappeared with the return of Mahathir's government back to power for another term.

This situation may also illustrate that strong determined governments can turn a bad situation around without the foreign assistance, in particular the United States or the IMF. While there are many lessons to be learned from Malaysia's economic woes of 1997-1999 and its subsequent recovery, the remaining question is when will the government lift its self-imposed exchange rate control so that market mechanisms will decide the real exchange rate.

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DID AMERICA EVER HAVE A PERIOD OF LAISSEZ-FAIRE CAPITALISM?

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ABSTRACT

American textbooks in civics, history and political science are notorious for lack of economic content, and when it is present for erroneous economic history. Students are told of the era of laissez-faire capitalism, and between the lines that it was a bad thing. Further, that America made positive progress in moving away from it through reform.

To the contrary, this paper is an examination of the economic history:

1	*to show the origins and foundations of the early American system,*
2	*to question whether such an era ever did exit,*
3	*to delineate some of the changes over time, questioning whether they have been "progress"*
4	*to identify some of the major players in the process and their impacts and*
5	*to identify those changes which were gradual and those which were based on key turning points.*

Areas examined include constitutional, judicial, political movements, anti-trust, and the deterioration of private property rights.

INTRODUCTION

Bruno Leoni's 1961 classic, *Freedom and the Law*, begins: "It seems to be the destiny of individual freedom at the present time to be defended mainly by economists rather than by lawyers or political scientists." The statement is remarkable in three ways.

First, Leoni was criticizing those in his own fields, since he was both Professor of Legal Theory and Chairman of Political Science at the University of Pavia, Italy. The second is how well the statement applies in some ways almost 40 years later in America. The third is how much the reverse of Leoni's sentence would have been true 186 years earlier.

In 1775, Adam Smith was probably best known within Scottish Enlightenment circles for his *Lectures on Jurisprudence* (1762, 1766). In these, he added historical origins to John Locke's and Francis Hutchison's use of natural law to morally justify and defend private property rights.

Publication of *An Inquiry Into the Nature and Causes of the Wealth of Nations*, from which we trace the origin of classical economics, was still a year away. Thus, in 1775, mercantilism was ruling British economic thinking for last full unchallenged year, just as Britain was ruling the American colonies for the last full year.

However, by 1775, the American Revolution was already being fought on one front with words, and started on the second in April with lead and iron. The first front was fought by newspaper editors, lawyers, politicians, pamphleteers, gentlemen, farmers, laborers, craftsmen and tradesmen.

Two generalizations might be fair. One is to say the war for American independence began as an effort to preserve traditional individual rights of Englishmen who did not live in England. The other would be the war probably began for the colonists with a rifle in one hand and a newspaper or pamphlet in the other.

Crafting the new government was tricky. Previous attempts at self-governing republics had a dismal records of failures.

What was understood was the unsatisfactory situation of British rule. A remote government, dominated by political interests which used taxation, legislation and the courts in ways perceived as contrary to the interests and rights of the citizenry. British abuses were primarily economic, as the anti-Stamp Act motto (1765) "Liberty, Property and No Stamps"[1] and James Otis's "Taxation with representation is tyranny" [2] indicate. In "The Economic Policy of the Constitution" contained with *Liberty, Property & the Foundations of the American Constitution* (1989 131) William Letwin points out Smith's *Wealth of Nations* was probably scarce in America even after the Paris peace treaty in 1783. The first U.S. printing was not until 1789.

The need for a central, coordinating government was recognized under the Articles of Confederation, but powers were to be strictly limited. The Articles created a Congress, but no national executive or judiciary.

Indeed, Article 2 read, "Each state retains its sovereignty, freedom, and independence, and every power, jurisdiction, and right which is not by this confederation expressly delegated to the United States, in Congress assembled." Thereby, dominion was to rest mainly with the respective state legislatures.

While high school history texts may explain the Constitution as a replacement for the ineffectual Articles of Confederation, Charles Hobson stated in "Republicanism, Commerce and Private Rights" (*Liberty…Constitution* 86-91) the reality was more to do with a system to curb the abuses of the states.

JAMES MADISON

One of the most fortunate events in American history may have been James Madison leaving the Continental Congress in 1783, and spending three years in the Virginia House of Delegates, where he saw the abuses by the states first hand. His correspondents outside Virginia indicated the shortcomings of unlimited republican self-government were wide spread. Madison also wrote regularly to Thomas Jefferson, then minister to France, both about the problems observed, and to ask Jefferson to seek out manuscripts about republics and their histories, especially why they had failed.

James Madison is properly identified as the "Father of the Constitution." The results of his observations, correspondence and research, are in his clear influence in the checks-and-balances system, the Bill of Rights, the limits imposed on Congress in Article I, Section 9, and on the states in Article I, Section 10.

THE CONSTITUTION

Where Madison's legacy has gone awry is in the subsequent interpretations. Federal powers have been enhanced through broad interpretations of the necessary and proper clause and the commerce clause, and even whether the Preamble is enforceable or justiciable. What is missed here is the Article I, Section 1 says, "All Legislative powers *herein granted* shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives." (emphasis added).

The perceived abuses by the British were from laws and taxes of Parliament. The Articles of Confederation were drafted to significantly limit the authority of the Continental Congress. The abuses by the states were acts of the legislatures.

Therefore, Article I, Section 1 can not be given historical interpretation different from its literal meaning. That is, what follows in Article I is a list of powers, which are the only powers Congress has.

As further proof, note Article II, Section 1 does not contain this literal restriction, "The executive Power shall be vested in a President of the United States of America." Likewise, Article III, Section 1 begins, "The judicial Power of the United States, shall be vested in one Supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish."

Over the last two centuries, the interpretation of Article I, Section 1 has come to parallel Articles II and III. As is well known, the common justifications or rationalizations for broad interpretations of the powers of Congress are based on the meaning of Article I, Section 8:

- *the general welfare clause, "Congress shall have the Power To … provide for the general Welfare …"*

- *the commerce clause, "To regulate Commerce with foreign Nations, and among the several States…"*
- *plus the necessary and proper clause, "To make all laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this constitution in the Government of the United States, or in any Department or Officer thereof."*

The "general Welfare" now justifies everything from public assistance to attempts at social engineering. "Commerce" now includes innumerable non-commercial activities, intrastate as well as interstate; and "necessary and proper" has come to have a punctuation period after the word "proper" with minimal regard toward the limitation to the accompanying list of specified areas of authority.

Today, Article I, Section 1 might be read, "The legislative Power shall be vested in a Congress of the United States of America." This is as if the Preamble was justiciable as far as "…promote the general Welfare..." is concerned, with no identification of which definition of general welfare is to be used, be it Karl Marx's or Adam Smith's invisible hand. This broad interpretation is certainly not in keeping with the literal wording of the Constitution. Neither is it in keeping with the historical circumstances within which the framers of the Constitution worked; nor is it in keeping with the way the federal government generally operated in the Jeffersonian-Madisonian portion of the early Constitutional period.

ORIGINAL INTENT?

But, the framers of the Constitution did not intend later generations would be directed in day-to-day details by the deliberations at the Philadelphia convention. The best details on the deliberations, Madison's notes, were not published until 1840, over half a century later, and post humous to every delegate. As Stephen Macedo argues in *The New Right v. The Constitution* (1987 11-13) other than recording votes, no formal minutes are known to exist and informal notes could have been later edited. Even if this was not the case, the framers were not agreed, and since some were more active and vocal than others, which "intent" should be followed? Further, every delegate may not have clearly understood the importance and consequences of each vote, and what was said in a speech may have been more for political consumption or in the form of a wish than a serious proposal.

MR. MARSHALL'S SUPREME COURT

The first chief justice, John Jay (1789-1795), began the process of establishing the independence of the Supreme Court. President Washington sent the draft of a proposed treaty with a request for a legal opinion. Jay sent it back with a reply that that was not the Supreme Court's job. However, it was under the fourth chief justice, John Marshall (1801-1835), the court became of consequence and centralization of power in the federal system.

John Marshall was a Federalist. He was Secretary of State when Federalist president John Adams appointed him chief justice in early 1801, after Adams had already lost the November, 1800 election to Thomas Jefferson.

It was Adams's attempt to fill the judiciary with Federalist appointments that Brought about Marbury v. Madison (1803). What is remembered is Marshall's decision, which denied Marbury his appointment. In the process, judicial review was established, whereby the Supreme Court created the precedent, for itself, of the power to rule a law unconstitutional.

What is sometimes forgotten is the story of how the new Secretary of State, James Madison, avoided sending out Marbury's and others' appointments. It was commonly expected at the time that Marshall would issue a Writ of Mandamus ordering Madison to comply. Jefferson administration officials let it be known that if the Writ was issued, Mr. Chief Justice Marshall would be impeached. This may have not only avoided the Writ of Mandamus; it might also have made Marshall's decision more flexible.

However, John Marshall's personality dominated the court for a third of a century. His opinions lead the court in majority after majority. The influence of Marshall's writings and precedents on future courts is material for an entire book by itself.

He was guided by two beliefs. The first was the need for a strong central government superior in all respects to the states. The second was the need to curb the powers, or otherwise weaken the state governments and "states' rights."

CHECKS-AND-BALANCES

These objectives were not as easy as they may initially appear. Article VI of the Constitution contained the supremacy clause, declaring the Constitution and federal law to be the supreme law of the land. But, while this gave the central government a check on the states, the states also maintained a constitutional check on the over centralization or abuse of power at the federal level. At the Constitutional Convention, as a result of the compromise between the Virginia (large state or House of Representatives) Plan and the New Jersey (small state of Senate) Plan. each state's senators were to be elected by the respective state legislature.

Thereby, the House was always intended to be a populist forum and subject to special interest group influence. However, any bill passed by the House that was not in the best interests of the states or their legislatures could be assumed to be dead on arrival in the Senate. Thus, the states were to maintain their own check on federal power, a sort of Article VI in reverse.

Today's direct popular election of Senators dates from the Seventeenth Amendment, ratified April 18, 1913. What is of consequence, is the destruction of this important element of the checks-and-balances system has resulted in the Senate become a mirror of the House of Representatives and the subordination of the states to an extent not intended by the framers of the Constitution.

The key to Marshallian statism was the precedents established. The opinion in McCulloch v. Maryland (1819) rationalized for the first time a broadest interpretation of the commerce clause. In Gibbons. V. Ogden (1824), an attempt by a state to grant a monopoly, gave the Marshall court all the justification needed to legitimize federal intervention into, and overruling of state laws. Fletcher v. Peck (1810) and Darmouth College v. Woodward (1819) were landmarks in the clarification of contract law. Predictably, in both cases, the Marshall court, via the chief justice's opinion, sided against the states' legislatures. The point can be made the precedents have been of more importance for their influence on later courts than they were for the particular cases involved.

CIVIL WAR

Protectionism and labor supply: the Civil War did not have a pro-literal Constitution verses anti-literal Constitution side. The Union favored statism. Confederate "State's Rights" actually favored state's abuses ala the legislatures under the old Articles of Confederation. As Clint Bolick (*Grassroots Tyranny* 1993) so aptly pointed out: "The very notion of states' rights is oxymoronic. States have powers. People have rights. And the primary purpose of federalism is to protect those rights."

Though some conservative advocates of "states' rights" have attempted to equate their anti-centralization of power position with protection individual rights, Bolick has very convincingly proven their position is merely a shift in the source of the governmental interference and abuse. Indeed, the Confederate Constitution had only 22 differences with that of the U.S., virtually all minor. The Civil War is most important as another turning point in the relationship of economy to government, and thereby the rest of American society, because the broad interpretation-statists won. The war was started over differences in economics.

POPULISM

The first of two successive socialist movements in America, beginning in the last half of the 19^{th} century, served to further and to enhance statism, more by effect than by design. Populism was a picture of contradiction in itself. By 1860, there was a populist cry for government efforts to speed the growth of the railroads, so the entire nation could have access to the benefits of this latest technological wonder. They won, and the taxpayers began to pay for the first of what would become four subsidized transcontinental rail lines.[3]

By the 1870s, the populists were demanding government regulation to halt the abuses of the railroads. Populists had gained control of the state legislatures in Iowa, Wisconsin, Minnesota, and Illinois and were passing bills regulating the railroad rates. The Supreme Court upheld the constitutionality collectively in The Granger Cases: Munn v. Illinois (1877) and Peik v. Chicago and Northwestern R. Co. (1877), but later partially reversed itself in Wabash, St. Louis and Pacific Railway v. Illinois (1886) on the grounds only the federal government, not the states, could regulate interstate commerce. This was later reinforced in the Railroad Commission Cases: Stone v. Farmers' Loan & Trust Co. (1886) and in Chicago, M. & St. P. R. Co. v. Minnesota (1890). So, populism shifted to a national focus in the form of lobbying for the Interstate Commerce Commission. With the quiet backing of railroaders who understood regulatory capture theory, they succeeded in 1887[4].

Populism folded after the disastrous endorsement of "Free Silver" Democrat William Jennings Bryan in the presidential election of 1896. Between the Civil War and the end of the century, the states remained generally unchecked by the Fourteenth Amendment in federal courts. States intervened, regulated on behalf of special interest, granted monopolies and generally abused in economic matters. In effect, the Tanney court's famous Dred Scott v. Sanford (1857), actually a "property right" decision, was reversed in the Slaughterhouse Cases (1873) and Loan Association v. Topeka (1875).

PROGRESSIVISM AND JUDICIAL EROSION

By about 1900, the progressive movement replaced the populists as the leading socialist-statist influence in American politics. Generally, progressivism was more middle class and less of an agrarian revolt than its predecessor; it had more "academic" (and pseudo-intellectual) respectability, and tended to see government less as a means to solving the problems of society and more as the solution itself.

Judicially, the process did not gather much momentum until later in the century when the Supreme Court began to abrogate its constitutional checks-and-balances obligations over a series of cases. Through the early 1920s, with a few exceptions both before and after, the high court applied concepts of "natural and historical law" in the protection of property rights.

This "legal formalism" is most commonly known as "substantive due process" and was a tripartite rule most often applied to challenges of legislation regarding property and contract rights. The three tests were:

- *whether the public benefits were in balance with the costs of the restrictions,*
- *whether the legislation's objectives and the means employed were legitimate, and*
- *a "means-ends test" of whether the objectives would likely be achieved.*

The best known cases implementing substantive due process were Allgeyer v. Louisiana (1897), Lochner v. New York (1905), Adair v. United States (1908), Coppage v. Kansas (1915) and Adkins v. Children's Hospital (1923). The most notable exceptions, where regulatory acts were upheld, were: Muller v. Oregon (1908, working hours for women) and Block v. Hirsch (1921, World War I rent controls).

This had changed by the mid-1920s, as a new weaker test, whether the legislation had fair opportunity to be debated, was introduced: Euclid v. Amber Realty (1926, zoning regulations). The growing influence was the "sociological jurisprudence" of justices Oliver Wendell Homes, Jr. (1902-1939), appointed by Theodore Roosevelt, and Louis D. Brandeis (1916-1939), appointed by Woodrow Wilson. Brandeis had been chief architect of Wilson's progressivist "New Freedom" program.

By 1934, in the New Deal, the court drifted still further from the literal wording, into "non-interpretivism" of the Constitution, replacing it with what is call "judicial restraint" and the weakest test, whether the legislation in question is "not unreasonable." Key cases were Nebbia v. New York (1934, minimum retail price for milk) and West Coast Hotel v. Parrish (1937, minimum wages for women and minors).

The Supreme Court has since acknowledged it is not popularly elected, but the state legislatures and Congress are. Therefore, under judicial restraint, the Court concluded that unless there was a specific reason to question an act of a legislative body, democratically elected representatives should be given a free hand in passing laws, regulations, and taxes: Williamson v. Lee Optical (1955) and Ferguson v. Skrupka
(1963). This is to say, free to legislate unchecked, just as Madison had found in study of the histories of failed republics.

ANTITRUST AND GOVERNMENT GROWTH

As a consequence, Progressive statism had strong, sustained growth in the years before World War I. Weaknesses in the Sherman Anti-Trust Act of 1890 became apparent in the Beef Trust case of 1902, Standard Oil Co. of New Jersey v. United States (1910, fifteen years after John D. Rockefeller had retired), and American Tobacco Co (1911). Theodore Roosevelt used antitrust weakness as partial justification for creating the Department of Commerce and Labor in 1902. In four years, 1909-1913, William Howard Taft's administration brought 44 Sherman Act indictments. Anti-trust was tightened through the Clayton Act modifications of 1914 and partially duplicated through the Federal Trade Commission (1914). Given the outcome of the Microsoft case earlier this year, economists may debate whether anti-trust in this country is industrial planning masquerading as industrial planning, but it is a very real force irrespective of who wins the argument.

Banking crises, first during the Recession of 1893 and then the run on the banks of 1907-1908 provided the stimulus for the Federal Reserve Act of 1913. Upton Sinclair's fictional *The Jungle* was used in the justification of the Food and Drug Administration (1906).

As previously mentioned, direct popular election of the Senate started with the ratification of the Seventeenth Amendment in 1913. Three months before, the Sixteenth
Amendment had been ratified, providing for a federal income tax, and thereby, the ability of the federal government to finance its own growth.

PROGRESSIVISM AND THE CONSTITUTION

Perhaps most overlooked in the progressive era, the Constitution itself was attacked. In 1913, Charles A. Beard wrote *An Economic Interpretation of the Constitution* in which the false assertion was made that the document was drafted along lines of social class, particularly to personally aggrandize the framers' own commercial interests. While Beard admitted verification would have to be left to later historian, the work was largely unchallenged for 30 years. Finally, in 1957, Forrest McDonald published the definitive refutation of Beard's thesis in *We The People*.

The presidential election of 1912 was a contest between two supporters of progressivism. Theodore Roosevelt, unable to regain the Republican nomination from his hand picked successor, William Howard Taft, bolted the G.O.P. and founded the Progressive Party, identified by its bull moose mascot. Taft was to finish third and Roosevelt second, with the victory going to an academic progressive, former history professor, former Princeton University president, New Jersey Governor Woodrow Wilson (1913-1921).

Another candidate in 1912 was Eugene V. Debs of the Socialist Party, who received six percent of the vote, the most of any of his party's candidates. Though it never received more than a few percent of the popular vote, both the major parties came to adopt platform ideas from the Socialist Party. As Milton Friedman had demonstrated (*Free to Choose* 311-312) the 1928 Socialist platform of Norm Thomas became the basis of the New Deal, which began in 1933.

NEW DEAL

The New Deal's influence went beyond the executive and legislative branches. While some aspects of the Roosevelt program were overturned, the New Deal itself was upheld by the Supreme Court in the previously mentioned Nebbia v. New York (1934), Ashwander v. Tennessee Valley Authority (1936), National Labor Relations Board v. Jones & Laughlin Steel Co. (1937) and United States v. F. W. Darby Lumber Co. (1941). The worst case of economic intervention was probably Wickard v. Filburn (1942), in which the court ruled though no commerce was involved, commerce was "affected" and that was sufficient. As Macedo summarized it *(New Right* 51): "The problem with Wickard, of course, is that it sacrifices property rights closely bound up with personal autonomy to a policy rather loosely related to Congress's commerce power." With the court supporting government intervention in the economy under the commerce clause, based on theoretical or indirect effects, governmental powers to regulate become virtually limitless: Kentucky Whip & Collar Co. v. Illinois Central R.R. Co. (1937), United States v. Carolene Products Co. (1938), Ziffrin v. Reeves (1938), United States v. Appalachia Electric Power Co. (1940).

In the post-New Deal years, the Supreme Court has adopted a new pattern. Where Marshall court centralized federal powers over commerce at the expense of the states, subsequent courts supported regulation, or interference, at both the federal and state level.

The largest extension of New Deal socialism was the Great Society of Lyndon Johnson, beginning in 1964, which significantly enlarged Social Security, unemployment, welfare, public housing and urban renewal. New programs were started, the largest and most famous being Medicare, Medicaid and food stamps.

At present, little doubt can reasonably exist that the federal government is generally moving away from property rights protection, while the U.S. Supreme Court is supporting some non-economic rights. In the recent trend, economic rights have diminished, as chronicled by James Bovard (*Lost Rights* 1994). This includes property seizures, diminished privity of contracts, taxation policies, subsidization, land use regulation, water rights regulation, and laxness towards state and local abuses.

The states have utilized the opportunity to abuse, such as the Michigan Supreme Court case, Poletown Neighborhood Council v. Detroit (1981). The negative affects of these may well out-weigh the benefits of industry deregulation of the late 1970s and 1980s.

Alternatively, in non-economic personal freedoms, there have been positions of stronger support for some rights, such as First Amendment free speech in the famous flag-burning case of Johnson v. Texas (1989) and in Ninth Amendment rights of privacy, like Griswold v. Connecticut (1965) and Roe v. Wade (1973). In the executive branch, the deregulation movement also reached into personal liberties with the repeal of the broadcast of "Fairness Doctrine" in 1987, though efforts were made in Congress to reimpose it.

With some validity, the common thinking is the socialism of the political left is the largest threat to economic rights in American society. However, as was pointed out in a 1994 libertarian book review (Powell 9), some prominent conservatives have launched attacks as well. These include Russell Kirk on the Declaration of Independence, Irving Kristol and Jeane Kirkpatrick on Thomas Paine, Robert Bork on individual rights outside of those listed in the Bill of Rights, and Chief Justice William Rehnquist on distinguishing between right and wrong.

Too many other aspects remain to be covered in one short paper. Many of those mentioned above deserve far more space than present practical limitations allow. A "Part II" will have to be left to next year to discuss these.

As examples, they include the destruction of the Jacksonian spoils system. Often depicted as politically corrupting evil, spoils made office holders more responsive. Resulting from the assassination of James Garfield in 1881 and the succession of Chester Arthur, who was so bad, as a sitting president he could not get the Republican nomination in 1884, serious questions can be raised as to whether and how big a favor it was when Senator George H. Pendleton of Ohio introduced the Pendleton Act in 1883. It gave the federal government the civil service system and the public a political, economically uncaring -- due to the altered incentives, unresponsive, entrenched bureaucracy.

A solid case could be made for the Great Depression of the 1930s having been avoidable. Economic historians might talk of the recession of 1929-1930, if the Smoot-Hawley Tariff Act of 1930 had not been passed and the Federal Reserve acted sooner in the banking crisis in 1929 and had not hiked interest rates in 1931.

Another area is in recent American history. In 1995, Senate Bill S-1 banning unfunded federal mandates was passed and signed into law. Previously, Congress has simultaneously both distorted the economic system and further centralized power through the passage of a phenomenal 174 state, local and business spending mandates within the previous 20 years. This was a constitutional question under the Tenth Amendment.

Numerous current kindred issues could also be discussed, as subjectively being less than key economic turning points, but still significant influences. Examples could include technological, transportation and communication innovations, or the linkage of politically popular concerns, such as crime, to diminution of personal rights, including property, under the Second, Fourth, Fifth, Ninth and Fourteenth Amendments.

In turn, the rise and fall of these issues could be linked to taxing and spending patterns, especially including Keynesian autonomous spending, at the federal, state and local levels. An examining of more quantitatively specific effects of civil rights, welfare, retirement, family leave, health care, environmentalism, trade restrictions, et cetera, will eventually have to be done. The final question to be addressed is: what events today can be identified and influenced that will have a major affect in the future?

The need for economic understanding in this area can best be explained by the continuous references by writers in law, history and political science to there having been, and changes subsequent to, an era of "American Laissez-Faire Capitalism." Shays' Rebellion, Hamilton's "Report on Manufactures" justifying protective tariffs, Whiskey Rebellion, Fries' Rebellion, Louisiana Purchase, Homestead Act, Civil War, Reconstruction, ICC, FTC, FDA, New Deal … just when was this era?

ENDNOTES

1 This first appeared in colonial newspapers as "The united voice of all His Majesty's free and loyal subjects in America – liberty, property and no Stamps."

[2] In *Rights of the Colonies* (1764 64) Otis actually said, “No part of His Majesty’s dominions can be taxed without their consent. Thus, “Taxation without representation is tyranny.” is an attributed abbreviation, as is “No taxation without representation.”

[3] A fifth and last, the Great Northern, was built without governmental support. It was also the only one that did not go bankrupt.

[4] How well capture theory worked for the railroads was evidenced by the appointment of Thomas Cooley, a lawyer with years of experience representing railroads as the first commissioner, and by the ICC’s solution to the long-haul, short-haul differential by raising the long-haul rates. Populism was composed of a number of factional groups: People’s (Populist) Party, Greenback Party, Farmers’ (Northern, Southern and Colored) Alliances, Knights of Labor and the Grange movement were the most important.

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RIVAL TOURISM STRATEGIES: AN ECONOMETRIC VIEW

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ABSTRACT

An analysis of the tourism strategies practiced in the United States vs. the Canadian sides of Niagara Falla is analyzed using an econometric model. The main difference in the tourism strategies of the two countries is that the United States side has been more committed to nature tourism while, the Canadian side has offered more "activities". This paper uses an econometric model to suggest future strategies for the United States.

THE DATA AND MODEL

A short survey, designed to not annoy tourists, was administered in October 2000. The sample size for the United States' side is 119 and the Canadian side is 160. Economic, demographic, and satisfaction data was gathered. The econometric model used is specifically indebted to Asgary *et. al's* model (1997) that deals with Mexican-US cross-boarder expenditures in a somewhat parallel manner.

The survey gathered information regarding days stayed, influences on spending, satisfaction, preference of American vs. Canadian side, and the demographic variables of age, sex, education, home region, years of job experience, income, and household size.

The dependent variable is the amount of expenditures by visitors during their stay in the Niagara Falls. The model is based on expenditure models used to analyze tourist cross-boarder expenditures; (See Asgary and Walle, 2001, Asgary *et. al*, 1997, and Agarwal and Yochum,1999). The equation that was developed is:

$$LNEXP = b + b_1 LNINC + b_2 DAY + b_3 SEX + b_4 LNWKEXP + u$$

where:

Ln:	log
LNEXP:	log of US/Canadian dollar expenditure on this visit
LNINC:	log of total household income per year
DAY:	the total number of days stayed in Niagara Falls region
SEX:	male = 1, female = 0
LNWKEXP:	log of the number of years of work experience
u:	error.

The model is a log-linear equation designed to provide the estimated income and work experience elasticity of tourist expenditures. The number of days stayed indicates how much more tourists will spend if their trip is extended for an additional day. Sex is factored in as a dummy variable. The "u" represents the error introduced by variables that are not included and/or cannot be explained by the regression model. The method of Ordinary Least Square was used as the analytic method.

EMPIRICAL RESULTS

Table 1 shows statistical description of United States and Canadian samples. The amount of expenditures and income are in their respective currency, the United States and Canadian dollar. Table 1 reveals that United States visitors spent more money on the average than Canadian visitors did. The standard deviation for expenditures indicates higher variation for American sample than for Canadian. On the average, the Canadian sample is older, has more years of work experience, and stays about half a day longer than those visiting the United States side of the falls.

Table 1
Descriptive Statistics of the Data

	American	Canadian
Variable		MeanSt. Dev.# Obs.MeanSt. Dev.# Obs.
Exp		232281.591274247.379
Inc		51934.4238828.859181735.3113253.379
Female		48%-----9149%---79
Wexp		12.812.68514.410.1379
Days		1.64.77911.95.8679

Notes:
Expc : total amount of expenditures during their stay in respective currency;
Incc : total household income per capita;
Female : percentage of female respondents;
Wexp : number of years of work experience of respondents;
Days : number of days visitors stayed in Niagara Falls;

Tables 2 and 3 show the empirical result of both samples, Canadian and American, using OLS technique. Table 2 shows the empirical finding for the Canadian sample. The estimated income elasticity is .32 which is statistically significant with a T-ratio of 2.0667. Thus, if a tourist to the Canadian side of the Falls has an income that increases by 1% their expenditures will increase by 32%.

Table 2
Regression Analysis for Canadian Sample
Dependent Variable: Log of Expenditure

Variable	Estimated Coefficient	t-value	R^2=0.1921
LNINC	0.31857	2.0667	
DAYS	0.39425	3.5605	
SEX	-0.11947	-0.634	
LNWKEXP	-0.03252	-0.331	
EXP	1.2079	0.7072	

The implications of these results are that Canadian tourists will significantly increase their spending by staying for an additional day. As will be shown, however, if United States tourists stay an extra day the impact is even more significant. In the United States, furthermore, the estimated income elasticity is statistically insignificant. This appears to be the result of the fact that there are a limited number of tourism activities available in the United States and that those that do exist are free (see table 3). The main attraction in the United States is a scenic park that is free (although parking fees are charged). With limited activities available (and the resulting lower levels of spending required), household income ceases to be a determining variable impacting how much the tourists will spend.

Table 3
Regression Analysis for United States Sample
Dependent Variable: Log of Expenditure

Variable	Estimated Coefficient	t-value	$R^2=0.4597$
LNINC	*0.2498*	*1.3647*	
DAYS	*0.877*	*5.5831*	
SEX	*-0.4682*	*-1.6099*	
NWKEXP	*-0.0307*	*-0.2089*	
EXP	*1.5427*	*0.7815*	

Thus, United States tourists tend to be "day trippers" who engage in a self-directed tour. And since there is a beautiful park around the falls, tourists can even bring a picnic lunch and not be forced to spend money on food. Thus, in the United States, there is a minimal economic impact from tourism although the number of tourists is high.

The number of days stayed, of course, impacts total expenditures on both sides of the falls. The Canadian side provided a t value of 3.5605 and the American side t values of 5.5831. Thus, the longer tourists stay the more money they will spend. While this is an obvious conclusion, it is important to extrapolate exactly how much more a tourist will spend if they choose to stay an additional day.

If Canadian tourists stay an extra day, they will spend 39% more based on their total trip expenditures. In the Untied States, tourists will tend to spend about 88% more if they stay an additional day. This increase is significantly higher in the United States because the tourists on the Untied States are less likely to stay overnight in the first place. Under these circumstances, staying "an additional day" makes a much more profound difference in spending. In other words, if Untied States tourists spend an extra day their spending almost doubles while the same level of increased spending is not found in Canada. This is why an additional day being spend by tourists is so vital for the United States tourism industry.

If the United States improves the attractions available, profoundly important additional tourism revenues can be captured because day trippers can be replaced (and/or augmented) by those who spend the night in the region. Since most of the tourism activities in the United States are currently centered around unscheduled self-conducted nature tours of a day-tripping nature, the tourism industry in the United States provides minimal incentives for tourists to stay in the region for any length of time (and spend significant amounts of money). As a result, the economic impact of tourism in the United States remains relatively low.

CONCLUSIONS AND ACTIONABLE SUGGESTIONS

Based on the results of this study, actionable recommendations are made regarding how to boost the tourism industry in the United States. Canada's tradition of providing "activities" has bolstered its tourism industry. Today, with the establishment of casino gambling and its "adult" ambience and reputation, however, alternative tourism opportunities aimed at family and cultural entertainment can provide a lucrative marketing niche for the United States. Family oriented tourist attractions, such as festivals, can increase tourist spending and the tendency for tourists to spend the night in the region. Doing so, incidentally, would mesh with the existing image of the region. Thus, the United States Festival of Lights (held in early winter) is a well-established family activity. Since it take place in winter when the weather is cold and uninviting, however, the festival is able to draw tourists, but not hold them for any length of time or stimulate much economic activity. Nonetheless, the United States can build upon this family-oriented reputation though the establishment of family oriented festivals in the summer months when people can be encouraged to stay longer and spend more.

Further studies with an increased sample size can more precisely explore tourists' expenditures in the region and how spending can be stimulated. Niagara Falls should be (and can be) a strong magnet for significant tourism spending in the United States (as it is in Canada). By targeting upscale tourists looking for family and cultural tourism opportunities, this goal can be achieved.

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