

The Pearson Educational Leadership Series

FINANCING EDUCATION IN A CLIMATE OF CHANGE

TWELFTH EDITION



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To

Dawn Baker Brimley

My parents—Gerald and Margaret Verstegen

Shirley Davis Garfield

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PREFACE

It has been said that the only thing that doesn't change is change itself. Since the publication of the 11th edition of this book, major changes and key events have occurred, and they have influenced the financing of public education. The Great Recession that encompassed the country finally turned around, and revenues for the schools slowly edged upward, if not to prerecession levels. The aftershocks, however, continue to be felt in school budgets, staffing, programs, and class sizes while reverberating across the nation and the globe. Passage of the Affordable Care Act (ACA) brings promises of health insurance coverage to more individuals and their school-age children, while continued expansion of charter schools across the nation offers more choices within the public school system for everyone. Demographics and costs continue to change, as do goals and standards for the nation's schools.

Financing Education in a Climate of Change, 12th edition, reflects these and other changes while retaining its practical tone and superior presentation of finance concepts. It includes the most up-to-date information and material regarding funding education in a postrecession era. Providing readers with firm knowledge of all facets of financing education—along with a number of helpful pedagogical tools such as clear tables and figures, end-of-chapter assignment projects, and key concepts by chapter—this new edition adds information on classic and current topics such as the economics of education, recent court decisions, 50-state tables for key funding provisions, and the ongoing debate about vouchers, tax credits, and charter schools.

This classic school finance book contains three major sections. Chapters 1, 2, and 16 provide the overall context for public education finance, and Chapters 3 through 9 focus on finance provisions and topics such as court cases that affect school funding as well as funding formulas and programs. Attention is given to the financial issues technology brings to the classroom, and the melding of instruction at home, teacher oversight, and accountability in a blended learning format. Topics in school business management are taken up in Chapters 10 through 15, including facilities, transportation, capital outlay, accounting, and auditing. Cross-cutting themes of equity, adequacy, and efficiency are woven throughout the text.

NEW TO THIS EDITION

Financing Education in a Climate of Change teaches future education leaders, policymakers, concerned citizens, and others the basic concepts of school finance. Indeed, the dynamic nature of school finance brings about many changes in a brief period of time. This new edition reflects those great changes and other significant information, including the following:

- **Updated tables, figures, and references** throughout the book reflect new issues and information surrounding school finance as it is influenced by public demand, legislative action, and the courts. These highlight concepts and comparisons in a clear and understandable manner for the reader while using up-to-date research and information.
- **Current 50-state comparison tables** provide readers with contrast, similarities, and other information among all the states along key dimensions in school finance, including the major state finance system, funding for high-cost students (i.e., special education, English language learners, low-income students), funding for transportation, capital outlay, and small/sparse school districts.

- **The evolution of state school finance** has created a “seventh period” in the evolution of public education finance, which is examined, including its antecedents and key features (Chapter 7). This development extends the broader view of funding across time for readers and augments sections of the book related to the “how” and “what” of funding public education.
- **A focus on adequacy** and equity throughout the text includes new sections on adequacy and its influence on the courts and state funding schemes (Chapters 2 and 7).
- **Expanded material and new information** on the following school finance issues is provided:
 - The economic benefits of education, especially as related to a changing economy (Chapter 1)
 - Shifting demographics, including the rise of children in poverty, a new majority-minority in the schools, and changing balances among different groups involved in the education sector (Chapter 2)
 - Updated information on the tax structure for state governments, including taxes for education, in all 50 states, that highlights the public finance side of education support (Chapter 8)
 - The influence of the courts and legislatures on states and local districts, including a comprehensive overview of recent cases restructured into three major “waves” (Chapter 9)
 - The most current information on the volatile church–state issue as well as the continuing evolution of public charter schools, education savings accounts, and vouchers (Chapter 10)
 - Restructuring of Chapters 13 and 14, along with examples of budgetary, accounting, and purchasing procedures for school leaders (Chapters 10, 13, 14)
 - The new salary schedules for teachers, as well as the actual cost of school personnel when benefits are added to salaries (Chapter 15)
 - Issues related to the Common Core State Standards and future funding for elementary and secondary public schools (Chapter 16)
- **New developments in state finance systems** are presented, including the new local funding model implemented to fund education in California (Chapter 7).
- **A focus on students with special needs** provides new information on gifted and talented education, as well as technical and career education, across all 50 states.
- **The federal role** in education is discussed and current information is given on the “Race to the Top” program (Chapter 8).
- **Advances in technology** draw attention to the aspect of educational finance that states and districts need to consider when moving further into the cyber age of technology—such as the costs associated with providing students with their own computers. Emphasis is also placed in some areas to expand the blended learning concept.
- **Budget procedures** focus on the interrelationship between the district and the local school in managing the budget emphasizing the great responsibility associated with controlling large amounts of revenue in various program categories. New procedures are outlined and actual examples of budgetary and purchasing procedures are included in this edition.
- **New ancillary material** is provided for each chapter, including PowerPoint slide presentations and a test bank. This material is available from Pearson’s instructor resource center, at pearsonhighered.com. The Assignment Projects at the end of the chapters are continued

in this edition and can serve as topics for projects, papers, and discussion, and key concepts are highlighted in each chapter.

Financing Education in a Climate of Change is a user-friendly education finance text for graduate students in education administration, public finance, and business administration. The text is also of interest to policymakers and citizens who are concerned with funding schools. It discusses foundational concepts and current issues related to the debate over funding schools, including: Does money matter in producing student outcomes? Where does the money come from and where does the money go? How are high-cost students and districts supported? What are the strengths and weaknesses of the property tax for funding schools? How are charter schools funded and operated? What are the developments of the church–state issue? How have the courts influenced education support?

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Many people were involved in the development and production of this text, and we thank them wholeheartedly. First, we would like to acknowledge the finance scholars, leaders, and experts who provided epigrams that open each chapter. Next, as with previous editions, we are grateful to the reviewers for their excellent suggestions and thought-provoking comments. Importantly, gratitude is expressed to Professor Robert Knoepfel, Clemson University, who carefully, and with attention to the recent research, revised Chapters 11 and 13. We appreciate his diligence and attention to both current practice and the scholarship in the field. Thanks, too, to Pearson editors, Julie Peters, and others: Mary Beth Finch, John Shannon, Lynda Griffiths, and Janet Domingo. Their expertise and assistance are valued.

We deeply regret the passing of Rulon Garfield and thank him for his contributions to the 4th through 10th editions of the text. Continued gratitude is extended to Percy Burrup, who made the foundation of this work possible. His influence still remains.

*Deborah A. Versteegen
Vern Brimley, Jr.*

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1

THE ECONOMICS OF EDUCATION

Education then, beyond all other devices of human origin, is a great equalizer of the conditions of [all]—the balance wheel of the social machinery . . . and, if this education should be universal and complete, it would do more than all things else to obliterate factitious distinctions in society.

—HORACE MANN, 1848

Key Concepts

Human capital, virtuous circle, taxation, equity, opportunity costs, diminishing marginal utility, value added, negative externality, positive externality, free rider, benefit principle, ability-to-pay principle, cost–quality relationship

Education is an investment in human capital—the habits, knowledge, and skills that make individuals more productive. It occurs in various settings—in formal and informal education, on-the-job training, professional seminars, and personally directed study. Through education, we develop literacy, the ability to numerate, and the skills to solve problems. We achieve self-realization, economic sufficiency, civic responsibility, and satisfactory human relationships. These elements are the result of an educated populace and magnify the strength of a nation. The increase in human capital is, in large part, responsible for the remarkable social and economic development of the United States over the more than two centuries of its existence.

As with all investments, it takes resources to create human capital and provide schooling for children, youths, and adults. The most important producer of human capital in the United States is the public education system. Public education is the conduit that transfers resources from the private sector to individuals. The human capital generated in public schools and elsewhere is needed to ensure a dynamic economy, provide an adequate standard of living, reinforce domestic security, and sustain the role of the United States in the world. To achieve these goals, it is imperative that equitable and adequate finances are made available and spent wisely so that the recipients will be able to maximize their human potential and be prepared to be citizens and competitors in the global economy and knowledge society.

Former Chairman of the Board of Governors, Federal Reserve System, Alan Greenspan, said the nation must invest in human capital and that it is “critical that the quality of education in elementary and secondary schools be improved.”¹ He declared:

Even the most significant advances in information and technology will not produce additional economic value without human creativity and intellect. Certainly, if we are to remain preeminent in transforming knowledge into economic value, the U.S. system of education must remain the world's leader in generating scientific and technological breakthroughs and in preparing workers to meet the need for skilled labor. . . . Education must realize the potential for bringing lasting benefits to the economy.²

EDUCATION AS HUMAN CAPITAL

Economists now recognize the importance of investment in education for developing the nation's **human capital**. Early economists such as David Ricardo and Thomas Malthus emphasized the roles of land, labor, and capital in creating economic growth, but gave only passing attention to the economic importance of education.

More recently, economists have emphasized the value of education as a factor in stimulating economic growth. Today, education is popularly referred to as "investment in human capital." Such leaders in the field as John Kenneth Galbraith, Harold Groves, Milton Friedman, Theodore Schultz, Gary Becker, George Psacharopoulos, and Charles Benson have documented the relationship between education and economic growth. They have deplored the waste of the labor force and human resources that automatically accompany inadequate education, regardless of its causes. Schultz has given an excellent definition of human capital:

Human capital has the fundamental attributes of the basic economic concept of capital; namely, it is a source of future satisfactions, or of future earnings, or both of them. What makes it human capital is the fact that it becomes an integral part of a person. But we were taught that land, capital, and labor are the basic factors of production. Thus we find it hard to think of the useful skills and knowledge that each of us has acquired as forms of capital.³

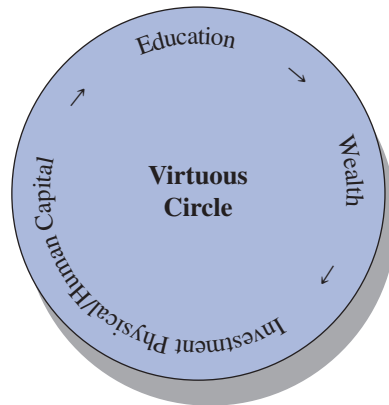
Because human capital has the fundamental characteristics of any form of economic capital and becomes a part of the person who possesses it, such capital deteriorates with inactivity. It does not disappear completely until the death or complete incapacity of the person possessing it. Human capital often needs to be reactivated and updated to lessen its degree of obsolescence or the extent of its inadequacy.

CREATION OF WEALTH AND EDUCATION

Human capital is essential to the creation of wealth. Economists use models to analyze growth that focus on increases in labor, physical capital, and technological progress. Technological progress explains nearly all economic growth and wealth creation, and it relies heavily on increases in human capital. Increasing human capital through quality education is, therefore, vitally important.

Increases in human capital mean that the population includes more educated workers. Educated workers take more pride in their work, are faster and more creative, have more basic job skills, and acquire new skills more rapidly than less educated workers. Put simply, educated workers are more productive. They have less absenteeism, are less likely to shirk their duties, and can adapt to and understand the goals of their employer.

Human capital begets more human and physical capital. People with more education are more likely to continue training, to engage in personally directed studies, and to participate in professional seminars. They are more likely to have children who consume high levels of education. Those who have a college education generally earn nearly four times as much as high school dropouts and consequently have more to invest in physical capital.⁴ Investment benefits society through the greater production of goods and services. Thus education creates a **virtuous circle**—the condition in which a favorable circumstance or result gives rise to another that subsequently supports the first. The more education provided, the more wealth developed; the more wealth created, the more funds available for investment; the more investment undertaken, the more wealth available for investment in physical and human capital.



The wonders of modern technology have been made possible largely because of education. The position the United States holds in technical improvements is the result of an educational system and a society that encourage research, creativity, and practical application. Much of today's wealth is tied to technology, and technology is advanced through education.

Every area of resource—human, physical, and financial—has been improved and refined through education. Even the environment is better appreciated and preserved through education. Methods of mining, lumbering, and other forms of natural resource production and use have been improved through the development of skills and training, and more wealth is produced through better use of resources. Improvements in productivity mean that more wealth is created with a smaller impact on the natural world.

Human capital supports greater productivity in management. As managers and leaders learn about leadership skills, they are able to make better decisions leading to more production, less dissatisfaction among workers, and more efficient accomplishment of the organization's goals. Effective management of labor, capital, technology, and natural resources promotes wealth.

EDUCATION: AN IMPORTANT INDUSTRY

A common and certainly defensible description of education is that it is an industry in the sense that it utilizes money and other valuable resources to develop its product. Although it is the largest industry in the United States, education produces only intangibles in the form of nonmaterial services that are valuable but difficult to measure. It is an industry where extensive data are

readily available to determine the inputs to education, but where no research or empirical study has yet found a satisfactory way to measure—or even to approximate—its total output. In public education, there is no profit motive. Education is usually provided in government schools, which are dependent on the private economy for financial support. The United States is a world leader in education, with approximately 25 percent of its population involved in one way or another. “Citizens of the United States have the highest number of years in formal education of any wealthy country.”⁵ With regard to expenditures, statistics from the U.S. Department of Education show that 7.8 percent of the country’s gross domestic product (GDP) goes toward all educational institutions—an all-time high (see Table 1.1). The United States spends more per pupil on education than any other wealthy country; as a percentage of GDP, however, Denmark, Iceland, Korea, Norway, and Israel spend more.⁶

Historically, education has been the largest public function in the United States—and the country’s biggest business—when viewed in terms of the number of people and dollars of income involved in its operation. The expansion of educational services and the greatly increasing costs of education year after year have had an effect on the nation’s economy. It is not likely that this condition will change.

Education requires resources to provide for the needs of students, teachers, administrators, facilities, equipment, supplies, and property. These resources depend on the private economy. The interconnection between education (providing the human capital to engender economic strength) and the economy (providing funds for education) is a reality. All over the world, educational achievement and economic success are clearly linked. The struggle to raise a nation’s living standard is fought first and foremost in the classroom. Certainly, no one needs to be convinced that education matters. The jobs in industry, in manufacturing, in services, and in the provision of homeland security for a nation require citizens who are well educated.

Interest in the economics of education is said to date back to the time of Plato; numerous economists and educators have given in-depth consideration to this relationship. They have established and documented the fact that increases in education result in increases in productivity and gains in social, political, and economic life. They also support the idea that education costs are necessary and real investments in human capital.

Because educational institutions collectively are the biggest disbursers of public money in the United States, and because education is the greatest contributor to economic productivity, the positive relationship between education and economic growth is real and obvious. Educators and economists have understood this close and interdependent relationship for some time.

For example, Charles S. Benson, a noted education economist, wrote on this topic of the relationship between education and economics. His point of view is summarized here:

Throughout the world, both philosophers and men of affairs appear to have reached consensus on this point: education is a major force for human betterment. Quality of education is intimately related to its financing. How much resources are made available, and how effectively these resources are used stand as crucial questions in determining the degree to which education meets the aspirations that people hold for it.⁷

Today it is a seldom disputed fact that expending adequate funds for education will provide economic dividends to society. Quality education is expensive but it brings commensurate benefits to individuals, families, business and professional people, and social agencies and institutions.

A cursory look at the political and economic philosophies in relation to education adopted by Karl Marx, John Maynard Keynes, John Kenneth Galbraith, Milton Friedman, and Adam Smith illustrates that they all saw the need for and the power of education, even though they recommended different roles for government (and education). Marx said that the central government should have absolute control. Regarding the others, perspectives differed from government assisting in cases of economic depression (Keynes), to more support of the public sector and more government resources being derived from the affluent private sector (Galbraith), to government intervention generally hampering progress (Friedman), to limiting government (Smith). (See Table 1.2.)

Each of these philosophers believed that education was important; their differences involve the *how* and the *what* of education. According to Marx, education should be free to the student,

TABLE 1.1 Total Expenditures of Educational Institutions Related to the Gross National Product, by Level of Institutions: Selected Years, 1929–1930 to 2011–2012

<i>Expenditures for Education in Current Dollars</i>								
Year	Gross Domestic Product (GDP) (in Billions of Current Dollars)	School Year	All Educational Institutions		All Elementary and Secondary Schools		All Postsecondary Degree-Granting Institutions	
			Amount (in Millions)	As a Percent of GDP	Amount (in Millions)	As a Percent of GDP	Amount (in Millions)	As a Percent of GDP
1	2	3	4	5	6	7	8	9
1929	\$103.6	1929–30	—	—	—	—	\$632	0.6
1939	92.2	1939–40	—	—	—	—	758	0.8
1949	267.2	1949–50	\$8,494	3.2	\$6,249	2.3	2,246	0.8
1959	506.6	1959–60	22,314	4.4	16,713	3.3	5,601	1.1
1969	984.4	1969–70	64,227	6.5	43,183	4.4	21,043	2.1
1970	1,038.3	1970–71	71,575	6.9	48,200	4.6	23,375	2.3
1975	1,637.7	1975–76	114,004	7.0	75,101	4.6	38,903	2.4
1980	2,788.1	1980–81	176,378	6.3	112,325	4.0	64,053	2.3
1985	4,217.5	1985–86	259,336	6.1	161,800	3.8	97,536	2.3
1990	5,800.5	1990–91	395,318	6.8	249,230	4.3	146,088	2.5
1995	7,414.7	1995–96	508,523	6.9	318,046	4.3	190,476	2.6
2000	9,951.5	2000–01	705,017	7.1	444,811	4.5	260,206	2.6
2005	12,638.4	2005–06	925,712	7.3	572,135	4.5	353,577	2.8
2010	14,498.9	2010–11	1,153,000	8.0	681,000	4.7	471,000	3.2
2011	15,075.7	2011–12	1,183,000	7.8	700,000	4.6	483,000	3.2

Note: 2010: Data for elementary and secondary education are estimated; data for degree-granting institutions are actual. 2011: Data are estimated by the National Center for Education Statistics based on teacher and enrollment data and actual expenditures for prior years.

Source: U.S. Department of Education Statistics. (2012). *Digest of Education Statistics*, Tables. Retrieved September 2013 from http://nces.ed.gov/programs/digest/d12/tables/dt12_028.asp

TABLE 1.2 Political and Economic Continuum

	Marx	Keynes	Galbraith	Friedman	Smith
Government or Economy	Communist	Government Intervention	Liberal	Conservative	Capitalist
Role of Government	Central government has total control; sets policy and goals in all aspects of society; strong bureaucracy.	Government will help the economy in depression or recession by public works projects, stimulus packages, bailouts, etc. Deficits accumulated will be repaid during good economic times.	Government is a dominant factor in society. Limit overproduction by private sector. Provide affluence for all citizens.	Government interventions have hampered programs. Should reduce bureaucracy because people who are free to choose without bureaucratic influence create a better quality of life.	The invisible hand of competition will run the economy in a natural way. Government should govern only—no government interference in business or trade, just preserve law and order, defend the nation, enforce justice. Least government is best.
Educational Perspective	Free public education, controlled and financed by centralized government. Trains in value system of the government.	“Education is the inculcation of the incomprehensible into the indifferent by the incompetent” and provided by government.	Education is vital for technical advances and growth. Education must be encouraged for future research and development.	Government overgoverns education. Voucher system for education. Education is essential in maintaining free enterprise, political freedom, and open economy.	Education is one of the essential government services to make capitalism work; competition between schools. Local education control, compulsory education at elementary level.
Taxes	Highly graduated progressive tax on income.	Progressive tax to redistribute wealth so the poor can spend more and the wealthy save less.	Public economy is starved; private economy is bloated. Tax the affluent society (private sector) more to provide needed public services, education, etc.	Private economy is starved; public economy is bloated. Tax reform encourages investment in private sector.	Taxes should reflect ability to pay, not be arbitrary; should be convenient and efficient. Needed to provide for essential government services.

	Marx	Keynes	Galbraith	Friedman	Smith
Government or Economy	Communist	Government Intervention	Liberal	Conservative	Capitalist
Property	Abolition of private ownership of property.	Private property essential; however, government is the most important element of a nation's economy.	Private ownership has been oversold through advertising; the affluence of private sector has cheated public needs. Fiscal policy is essential.	People must be free to own and exchange goods. Monetary policy, not fiscal policy, is essential in shaping economic events.	Private property is essential to freedom; if state owns, freedom vanishes.
Vantage Point in History	Reaction to exploitation of workers in the Industrial Revolution. History is determined by economic conditions.	Predicted ruin of Europe's economy because of harsh economic conditions imposed on Germany by the Treaty of Versailles.	Conventional wisdom always in danger of becoming obsolete. Rejects orthodox views of economics. Quality of life, not gross national product, should be the measure of economic achievement.	Freedom is more important than prosperity. However, freedom is the best environment for economic prosperity; monetary policy leads to stability.	Wrote <i>The Wealth of Nations</i> in 1776, but its major impact came in early 1800s. Reaction to British mercantilism; tariffs and limited "free" trade.

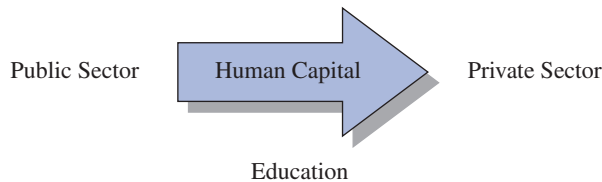
state controlled, financed by taxation, and administered by the central government. It exists to train citizens in the value system of the government. Keynes believed that government had to provide an education, but he was famous for saying that "education is the inculcation of the incomprehensible into the indifferent by the incompetent." Galbraith maintained that education is vital for technical and human advancement and must be supported to a more significant level by the resources that are abundant in the affluent private economy. Friedman saw education as excessively controlled by government; he believed the solution is the individual's freedom to choose which education is most suitable, using a voucher to shop for that education. Smith saw education as one of the essential services of government.

When seeking financial support for the schools, educators must understand the diverse philosophies and communicate across the political spectrum by using concepts that resonate within a particular philosophy. More and more educational leaders understand that all major social forces must not only recognize one another's objectives and circumstances but also work cooperatively to solve one another's problems. Until recent years, educators, economists, and political leaders have been largely indifferent to each other's needs and problems.

A PUBLIC-SECTOR RESPONSIBILITY

Education is produced in the private sector of the economy as well as in the public sector. Government, through **taxation**, produces most educational services consumed in the United States. At the same time, private individuals, companies, and churches sponsor many schools. In certain other countries, education is largely a product of the private sector.

Schools in the private sector operate under a different set of theories and rules than those in the public sector. Some believe they are more responsive to consumer demand because private educational organizations that fail to meet consumer demand see a reduction in pupils, which leads to a reduction in resources available to hire staff, acquire buildings and property, and create endowments. The ability of private schools to meet consumer demand largely determines how much financial support is available for their future operations. The desires, needs, and even whims of potential purchasers are soon met in the private sector, because ignoring them would translate into a loss of revenue and profits. Inefficiency, incompetence, or other internal deficiencies are readily made known and usually lead to changes in schools in the competitive marketplace.

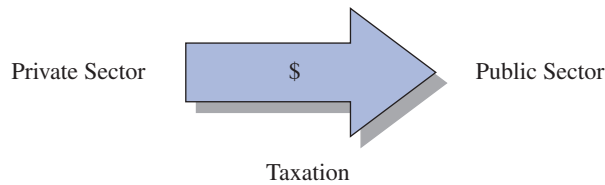


Government institutions, including public schools, do not react as quickly or as obediently to consumer demand, external pressure, and public criticism as their counterparts in the competitive world. Local, state, and federal governments use tax funds to pay for their part of the education pattern. These tax funds are disbursed with little reliance on consumer demand to reject financial decisions. Also, the pluralism built into the U.S. constitutional order may make it more difficult to efficiently allocate resources to education. There is considerable variation from community to community in terms of the quality of the schools, the needs of the students, and the availability of resources. For this reason, states provide guidance and resources to help local districts and schools meet their goals. Allocating economic resources to education is one of the primary responsibilities of local, state, and federal lawmaking bodies. Fortunately, the educational establishment now recognizes that decisions concerning resource allocation are made in the political arena.

In this interacting, cooperating, and sometimes confusing education enterprise, some recipients may receive advantages over others; others may suffer disadvantages. This is inevitable in a process characterized by innate and fundamental differences in student ability, interest, hard work, and desire to learn—as well as differences in the many other factors that make up the U.S. school milieu. In this country's federal system, public education is intended to produce **equity** (fairness) in the treatment of students. Although the terms are often used interchangeably, *equity* and *equality* are not synonyms. Some degree of inequality will exist, but it should be minimized.

ECONOMICS AND SOCIAL PROGRESS

Profits are earned when revenues, generated by sales, exceed costs. Profits are meaningful only in the private sector of the economy. When consumers and producers engage in market transactions, the resulting profits are signals that private firms use to guide their investment, hiring, and strategic decisions. Through the resources generated in the private sector, the public sector, including education, receives the financial resources it requires to operate. Therefore, a system of diverting funds from the private sector to the public sector must exist. The most common system to accomplish this goal—albeit one that is far from perfect—is taxation.



The reliance on taxation to provide funds for education requires a recognition and understanding of the relationship between public education and the field of economics. Educational leaders at all levels cannot continue to give mere fleeting glances and incidental references to fundamental economic theories and principles if they are to be effective in helping solve, or reduce, the complex and persistent problems involved in financing education adequately and equitably. Therefore, some knowledge of economics and its partnership role with education is deemed to be important for school finance students as well as practitioners. For that reason, this book begins with a brief discussion of some of the fundamental principles and concepts of economics that have practical application to the broad field of school finance.

The effects of compulsory school attendance laws, taxation laws, changes in the economy, clamor for improvement in government-sponsored schools, and social pressures can be understood with a basic grasp of economic principles. Because education is vital to the interests of the individual and broader society, the state has the right and the responsibility to provide education opportunities broadly and to ensure that those opportunities are accessed by every child. Parents and guardians have the responsibility to ensure that their children and wards take advantage of the schooling provided by the public.

There are diverse ways of measuring or rating the degree of advancement or upward progress of a society. One way is to apply the economic dimension that attempts to determine the degree or percentage of total human effort that is being diverted to production of the goods and services required for survival, such as food, clothing, and shelter. This measure of human effort is then added to the effort devoted to producing goods and services that make life more comfortable but are not required for survival, such as entertainment, travel, and education. Societies at the low end of the social–progress continuum devote all or nearly all of their efforts to producing essential goods and services. As societies develop economically, the percentage of human effort expended to produce goods and services not required for subsistence increases.

When societies reach the point where all the material requirements for survival are met, production and consumption decisions are devoted to satisfying other desires. Society has no