Technical Efficiency Allocative Efficiency And The


Is economic efficiency a sound basis upon which to make public policy or legal decisions? In this sophisticated analysis, Richard S. Markovits considers the way in which scholars and public decision-makers define, predict, and assess the moral and legal relevance of economic efficiency. The author begins by identifying imperfections in the traditional definition of economic efficiency. He then develops and illustrates an appropriate response to Second-Best Theory and investigates the moral and legal relevance of economic-efficiency analyses. Not only do virtually all economic, legal, and public policy thinkers misdefine economic efficiency, the author concludes, they also ignore or respond inadequately to Second-Best Theory when analyzing the economic efficiency of public choices and misassess the relevance of economic-efficiency conclusions both for moral evaluations and for the answer to legal-rights questions that is correct as a matter of law. Excerpt from Measurement of Relative Efficiency of Health Service Organizations With Data Envelopment Analysis: A Simulation: A final distinction is that this paper will deal with measure ment of technical efficiency in contrast to price or allocative efficiency. An organization is technically inefficient if it is possible to increase physical outputs without increasing its inputs, or if it can decrease the inputs without decreasing its outputs. Price efficiency - the purchasing of inputs at the lowest price and sale of outputs for the highest price - and allocative efficiency - the use of the correct mix of inputs based on the relative prices are of importance but need not and will not be considered concurrently with technical efficiency. By focusing on the physical inputs and outputs that determine technical efficiency, we can determine if the firm could become more efficient regardless of whether it is efficient with respect to price and allocation considerations. About the Publisher Forgotten Books publishes hundreds of thousands of rare and classic books. Find more at www.forgottenbooks.com This book is a reproduction of an important historical work. Forgotten Books uses state-of-the-art technology to digitally reconstruct the work, preserving the original format whilst repairing imperfections present in the aged copy. In rare cases, an imperfection in the original, such as a blemish or missing page, may be replicated in our edition. We do, however, repair the vast majority of imperfections successfully; any imperfections that remain are intentionally left to preserve the state of such historical works. A Practitioner's Guide to Stochastic Frontier Analysis Using Stata provides practitioners in academia and industry with a step-by-step guide on how to conduct efficiency analysis using the stochastic frontier approach. The authors explain in detail how to estimate production, cost, and profit efficiency and introduce the basic theory of each model in an accessible way, using empirical examples that demonstrate the interpretation and application of models. This book also provides computer code, allowing users to apply the models in their own work, and incorporates the most recent stochastic frontier models developed in academic literature. Such recent developments include models of heteroscedasticity and exogenous determinants of inefficiency, scaling models, panel models with time-varying inefficiency, growth models, and panel models that separate firm effects and persistent and transient inefficiency. Immensely helpful to applied researchers, this book bridges the chasm between theory and practice, expanding the range of applications in which production frontier analysis may be implemented. When Harold Fried, et al. published The Measurement of Productive Efficiency: Techniques and Applications with OUP in 1993, the book received a great deal of professional interest for its accessible treatment of the rapidly growing field of efficiency and productivity analysis. The first several chapters, providing the background, motivation, and theoretical foundations for this topic, were the most widely recognized. In this tight, direct update, these same editors have compiled over ten years of the most recent research in this changing field, and expanded on those seminal chapters. The book will guide readers from the basic models to the latest, cutting-edge extensions, and will be reinforced by references to classical and current theoretical and applied research. It is intended for professors and graduate students in a variety of fields, ranging from economics to agricultural economics, business administration, management science, and public administration. It should also appeal to public servants and policy makers engaged in business performance analysis or regulation. This text presents economic arguments which suggest why market failure is no extensive in this sector and, consequently, why regulation in both financing and provision is necessary. There is full discussion of various problems in the health care sector - output measurement, the definition of efficiency, and the problems of monitoring performance. The reforms of the UK health care sector are discussed in the light of these difficulties and the volume provides an analytical perspective within which the choice of various means of financing and providing health care can be evaluated. A number of chapters compare the UK health care system with alternative systems in Europe and the USA, and an historical perspective of previous UK systems is given. This book provides a concise synthesis of leading edge research in the theory and practise of efficiency measurement in health and health care. Whilst much of the literature in this area is confusing and impregnable, Hollingsworth and Peacock show the logical links between the economic theory underlying efficiency, the methods used in analysis and practical application of measurement techniques including Data Envelopment Analysis and Stochastic Frontiers.
A nalysis. The book outlines which methods are most suitable in which setting, how to specify valid models, and how to undertake a study and effectively disseminate results. The current state of the art is assessed in terms of methods and published applications, and undertakes practical applications of advanced methods, including analysis of economies of scale and scope, variable weightings, specification testing, and estimation of the efficient production of health. Finally, the way forward in efficiency measurement in health is outlined, mapping out an agenda for future research and policy development.

What new theories, evidence, and policies have shaped health economics in the 21st century? Editors Mark Pauly, Thomas McGuire, and Pedro Pita Barros assemble the expertise of leading authorities in this survey of substantive issues. In 16 chapters they cover recent developments in health economics, from medical spending growth to the demand for health care, the markets for pharmaceutical products, the medical workforce, and equity in health and health care. Its global perspective, including an emphasis on low and middle-income countries, will result in the same high citations that made Volume 1 (2000) a foundational text. Presents coherent summaries of major subjects and methodologies, marking important advances and revisions. Serves as a frequently used non-journal reference. Introduces non-economists to the best research in health economics.

This paper investigates the efficiency of domestic and foreign banks in the Central American region during 2002-07. Using two main empirical approaches, Data Envelopment Analysis and Stochastic Frontier Analysis, the paper finds that foreign banks are not necessarily more efficient than their domestic counterparts. If anything, the regional banks that were acquired by global banks in a wave of acquisitions during 2005-07 can keep up with the local institutions. The efficiency of these acquired banks, however, is shown to have dropped during the acquisition year, recovering only slightly thereafter. Finally, it is important to account for the environment in which banks operate, as country-, sector- and firm-specific characteristics are found to have a considerable influence on bank efficiency. The study estimates technical and allocative efficiency using the stochastic translog frontier production function and then relates them to management quality (experience, education, extension and knowledge) of wheat farmers in northern Pakistan. The study provides guidance for policy makers, agronomists and extension agents to improve wheat productivity in the area. The average technical efficiency is 76 percent which is consistent with the previous studies in LDCs. To relate technical inefficiency to the farmer's management quality a two-stage approach is developed which assumes that technical inefficiency depends upon management practices and each management practice in turn is affected by management qualities. To increase technical efficiency farmers need to use improved varieties, good wheat stand and control broadleaf weed. Farmer's knowledge about wheat technology plays a major role in the adoption of the above management practices. To test the robustness of the frontier approach, an alternative approach which involved putting management quality variables directly into the production function (the direct approach) was developed. The only major difference was that in the direct approach, extension contacts are important in increasing productivity, whereas they had no effect in the frontier approach. The average cost-constrained output-maximizing allocative efficiency is 43 percent which is substantially lower than the previous studies in LDCs. Farmers are also scale inefficient—the marginal cost of an input at the constrained output-maximizing input levels was far below the price of wheat. To increase allocative and scale efficiency, farmers need to change the input mix and to increase the scale of operation. None of the management qualities were found to affect allocative efficiency. However, interaction of farmers with the marketing agents play an important role in achieving higher allocative efficiency. The theoretical argument that aggregation of inputs overestimates technical inefficiency is not supported by the results but mis-specification of functional form (use of Cobb-Douglas as opposed to the translog production frontier) produces overestimates of technical inefficiency. This book provides a complete analysis of educational production and costs using the nonparametric technique known as Data Envelopment Analysis (DEA). The book focuses on estimation of technical, allocative and scale efficiency in the public sector characterized by the influence of exogenous socio-economic variables. State of the art DEA models will be presented and fully discussed. Specific education topics important to policy makers including adequacy, technical, allocative and scale efficiency, productivity and environmental costs will be analyzed. To illustrate how these techniques can be applied to school systems worldwide, the authors use data on Australian elementary and high schools to develop nonparametric measures that will help inform current policy debate in Australia. The purpose of the book is to provide a comprehensive analysis of educational production using numerous public sector DEA models. We provide a review of DEA with SAS programming code to estimate technical, scale and allocative efficiency in chapter 2. In chapter 3, we extend the DEA models to control for exogenous factors of production. SAS code is also provided to estimate all public sector models. We use simulated data to illustrate the results. Chapters 4-6 provide a complete analysis of the primary and secondary schools. We analyze input and output oriented models and derive measures of technical, allocative and scale efficiency. We also provide estimates of environmental costs that arise from schools facing different operating environments based on socioeconomic conditions. In addition, we show how DEA can provide insight on adequacy—the minimum cost of providing a pre-defined adequate education. The models presented are consistent with public sector production in general and educational production in particular. We also provide a complete analysis of educational productivity for both primary and secondary schools using state of the art public sector Malmquist measures. The authors use current data on Australian schools to highlight important policy questions related to efficiency and productivity given concerns that schools are not allocatively scarce resources in an economic efficient way. This research focus comes at an important watershed moment in the Australian Federal Governments' current involvement in designing new nationally consistent funding models for both government and non-government schooling sectors with effect from 2014. A new National School Resourcing Standard is proposed to be implemented signaling a move to resource adequacy, school efficiency and value for money dimensions. These standards are consistent with the measures presented and estimated in this book. As a result, the models implemented in this book can serve as the basis to evaluate the funding changes associated with the transition from a 'centralized' to a new 'decentralized' set of school funding arrangements. The Encyclopedia of Health Economics offers students, researchers and policymakers objective and detailed empirical analysis and clear reviews of current theories and policies. It helps practitioners such as health care managers and planners by providing accessible overviews into the broad field of health economics, including the economics of designing health service finance and delivery and the economics of public and population health. This encyclopedia provides an organized overview of this diverse field, providing one trusted source for up-to-date research and analysis of this highly charged and fast-moving subject area. Features research-driven articles that are objective, better-crafted, and more detailed than is currently available in journals and handbooks. Combines insights and scholarship across the breadth of health economics, where theory and empirical work increasingly come from non-economists. Provides overviews of key policies, theories and programs in easy-to-understand language. This book grows from a conference on the state of the art and recent advances in Efficiency and Productivity. Papers were commissioned from leading researchers in the field, and include eight explorations into the analytical foundations of efficiency and productivity analysis. Chapters on modeling advances include reverse directional distance function, a new method for estimating technological production possibilities, a new distance...
function called a loss distance function, an analysis of productivity and price recovery indices, the relation of technical efficiency measures to productivity measures, the implications for benchmarking and target setting of imposing weight restrictions on DEA models, weight restrictions in a regulatory setting, and the Principle of Least Action. Chapters on empirical applications include a study of innovative firms that use innovation inputs to produce innovation outputs, a study of the impact of potential “cooperation” or cooperation among competitors on the financial performance of European automobile plants, using SFA to estimate the eco-efficiency of dairy farms in Spain, a DEA bankruptcy prediction model, a combined stochastic cost frontier analysis model/mixture hazard model, the evolution of energy intensity in nine Spanish manufacturing industries, and the productivity of US farmers as they age. This book explores analytical methods used in transportation economics and policy analysis. Embracing fields of economics such as Industrial Organisation, Welfare Economics, Inequality and Poverty are addressed. The book presents a brief theoretical introduction before evaluating case studies, using the state-of-the-art statistical and econometric techniques. With the healthcare sector accounting for a sizeable proportion of national expenditures, the pursuit of efficiency has become a central objective of policymakers within most health systems. However, the analysis and measurement of efficiency is a complex undertaking, not least due to the multiple objectives of health care organizations and the many gaps in information systems. In response to this complexity, research in organizational efficiency analysis has flourished. This 2006 book examines some of the most important techniques currently available to measure the efficiency of systems and organizations, including data envelopment analysis and stochastic frontier analysis, and also presents some promising new methodological approaches. Such techniques offer the prospect of many new and fruitful insights into health care performance. Nevertheless, they also pose many practical and methodological challenges. This is an important critical assessment of the strengths and limitations of efficiency analysis applied to health and health care. Regardless of where we live, the management of the public sector impacts on our lives. Hence, we all have an interest, one way or another, in the achievement of efficiency and productivity improvements in the activities of the public sector. For a government agency that provides a public service, striving for unreasonable benchmark targets for efficiency may lead to a deterioration of service quality, along with an increase in stress and job dissatisfaction for public sector employees. Slack performance targets may lead to gross inefficiency, poor quality of service, and low self-esteem for employees. In the case of regulation, inappropriate policies can lead to unprecedented disasters. Examples include the decimation of fish stocks through mismanagement of fisheries, and power blackouts through inappropriate restrictions on electricity generators and distributors. Efficient taxation policies minimise the tax bill for citizens. In all of these cases, efficient management is required, although it is often unclear how to assess this efficiency. In this volume, several authors consider various aspects and contexts of performance measurement. Hence, this volume represents a unique collection of advances in efficiency assessment for the public sector by leading researchers in the field. Efficiency in the Public Sector is divided into two sections. The first is titled “Issues in Public Sector Efficiency Evaluation” and comprises of chapters 1-4. The second section is titled “Efficiency Analysis in the Public Sector - Advances in Theory and Practice.” This division is somewhat arbitrary, in the sense there are significant overlapping themes in both sections. However, it serves to separate chapters that can be characterised as dealing with broader issues (Section I), from chapters that can be characterised as focusing on specific theoretical problems and empirical cases (Section II). Part of an ongoing study of the dynamics of firm performance under conditions of disequilibrium caused by technological change, this contains five papers which focus on conditions in India and Sri Lanka and discuss efficiencies and their determinants, efficiency under risk and over time, the formation of frontiers and technical efficiency, and overall technical efficiencies. Includes references. This volume brings together leading scholars to make connections between efficiency and a number of diverse areas of current interest to economists. Included are new results concerning aggregation of technical efficiency, sources of productivity growth in U.S. manufacturing, intellectual property rights, and the determinants of successful mergers. An Introduction to Efficiency and Productivity Analysis is designed as a primer for anyone seeking an authoritative introduction to efficiency and productivity analysis. It is a systematic treatment of four relatively new methodologies in Efficiency/Production Analysis: (a) Least-Squares Econometric Production Models, (b) Total Factor Productivity (TFP) Indices, (c) Data Envelopment Analysis (DEA), and (d) Stochastic Frontiers. Each method is discussed thoroughly. First, the basic elements of each method are discussed using models to illustrate the method’s fundamentals, and, second, the discussion is expanded to treat the extensions and varieties of each method’s uses. Finally, one or more case studies are provided as a full illustration of how each methodology can be used. In addition, all four methodologies will be linked in the book’s presentation by examining the advantages and disadvantages of each method and the problems to which each method can be most suitably applied. The book offers the first unified text of presentations of methods that will be of use to students, researchers and practitioners who work in the growing area of Efficiency/Production Analysis. The book also provides detailed advice on computer programs which can be used to calculate the various measures. This involves a number of presentations of computer instruction and output listings for the SHAZAM, TFPIP, DEAP and FRONTIER computer programs. The study estimated profitability, technical, allocative and economic efficiencies; determined resource-use efficiency and the determinants of technical efficiency in rainfed upland rice production in Osun and Oyo States of Nigeria. Data obtained were analyzed using descriptive statistics, gross margin analysis and the stochastic frontier production function analysis. Results showed that paddy growers in Osun State earned average gross margin/ha of N 34,181.38 while their counterparts in Oyo State received N 25,448.84 with average profit per grower being N 41,132.74 and N 44,476.8 respectively. Results of the stochastic frontier production function analysis showed that land was the most productive resource with elasticity of production of 0.961 and 0.314 for Osun and Oyo States respectively. Results of efficiency measurements showed an average of 90.1% in technical efficiency, 92.0% in allocative efficiency and 83.4% in economic efficiency for Osun State. On the other hand, Oyo State paddy producers recorded an average of 94.3% in technical efficiency, 88.9% in allocative efficiency and 84.0% in economic efficiency. The research focused on technical efficiency in small farm households in Chong M y District- Ha T a y Province in Vietnam. The goal was to find the technical efficiency, allocative efficiency, scale efficiency and scope efficiencies among farms, as well as to investigate how farm characteristics might affect farm efficiencies. Vietnam was selected as the region of study because there is not much study on technical efficiency in this area, especially there is none study about how added enterprises or level of diversification impacts farm efficiencies. The dataset is obtained from two surveys: one was conducted in 2010, and the other was the 2006 Vietnam household livelihood survey. The first survey has 75 respondents, and the second has 81 respondents. The data envelopment analysis (DEA) approach is used to measure technical efficiency, and Tobit regression is used to see how the level of diversification and other farm characteristics affect the farm’s efficiency. The results show that 2010 farms have higher technical efficiency than 2006 farms. Farmers who get higher profit also have higher technical efficiency and other efficiencies. According to regression results, among farm characteristics, age, off-
farm income, education, loan, land and added enterprises have the most effect on farm's efficiencies. In this book the authors explore the state of the art on efficiency measurement in health systems and international experts offer insights into the pitfalls and potential associated with various measurement techniques. The authors show that: - The core idea of efficiency is easy to understand in principle - maximizing valued outputs relative to inputs, but is often difficult to make operational in real-life situations - There have been numerous advances in data collection and availability, as well as innovative methodological approaches that give valuable insights into how efficiently health care is delivered - Our simple analytical framework can facilitate the development and interpretation of efficiency indicators. Despite sending huge sums of money on health every year the African region's burden of disease is persistently high. Most of the countries in the region are lagging behind in achieving the health-related United Nations Millennium Development Goals. The African region's dismal health situation has largely been blamed on weakness pertaining to such factors as health leadership and governance; service delivery; health workforce; medicines, vaccines, and health technologies; health information; and health system financing that have undermined the capacity of health systems of countries in the region to improve population health without wastage of resources. Institutionallising health system efficiency monitoring, as a basis for the design and implementation of appropriate policy interventions, has been proposed as an effective way of curbing wastage of health system inputs. Efficiency of Health System Units in Africa: A Data Envelopment Analysis is the first book of its kind on application of the data envelopment analysis technique to examine the efficiency of health system decision-making units in Africa. The book interfaces lecture notes with research articles and case studies to equip students and practitioners of economics, operations research, management science, and public health with knowledge and skills for undertaking technical efficiency, cost efficiency, and total factor productivity analyses. Softcover version of the second edition Hardcover. Incorporates a new author, Dr. Chris O'Donnell, who brings considerable expertise to the project in the area of performance measurement. Numerous topics are being added and more applications using real data, as well as exercises at the end of the chapters. Data sets, computer codes and software will be available for download from the web to accompany the volume. This book unifies and extends defining and measuring economic efficiency and its use as a real-life benchmarking technique for actual organizations. An accompanying software program written in the open-source Julia language is used to solve the models. The package is a self-contained set of functions that can be used for individual learning and instruction. The source code, associated documentation, and replication notebooks are available online. The book discusses the concept of economic efficiency at the firm level, comparing observed to optimal economic performance, and its decomposition according to technical and allocative criteria. Depending on the underlying technical efficiency measure, economic efficiency can be decomposed multiplicatively or additively. Part I of the book deals with the classic multiplicative approach that decomposes cost and revenue efficiency based on radial distance functions. Subsequently, the book examines how these partial approaches can be expanded to the notion of profitability efficiency, considering both the input and output dimensions of the firm, and relying on the generalized distance function for the measurement of technical efficiency. Part II is devoted to the recent additive framework related to the decomposition of economic inefficiency defined in terms of cost, revenue, and profit. The defines economic models for the Russell and enhanced graph Russell measures, the weighted additive distance function, the directional distance function, the modified directional distance function, and the Hölder distance function. Each model is presented in a separate chapter. New approaches that qualify and generalize previous results are also introduced in the last chapters, including the reverse directional distance function and the general direct approach. The book concludes by highlighting the importance of benchmarking economic efficiency for all business stakeholders and recalling the main conclusions obtained from many years of research on this topic. The book offers different alternatives to measure economic efficiency based on a set of desirable properties and advice on the choice of specific economic efficiency models. The current economic and political climate places ever greater pressure on public organizations to deliver services in a cost-efficient way. Focused on the costs of service delivery, governments across the world have introduced a series of business like practices – from performance management to public-private partnership – in the belief that these will increase the efficiency of their public services. However, both the debate about public service efficiency and the policies and practices introduced to advance it, have developed without a coherent account of what efficiency means in this context and how it should be realized. The predominance of a rather narrow definition of the term – very often focused on the ratio of inputs to outputs – has tended to polarise opinion either for or against efficiency agenda. Yet public service efficiency, more broadly conceived, is an inescapable fact of the public manager’s task environment; indeed in the past, the notion of efficiency was central to the emergence of the field of public administration. This book will recover public service efficiency from the relatively narrow terms of recent debates by examining theories and evidence relating to technical, allocative, distributive and dynamic efficiencies. In exploring the relationship between efficiency and democracy, this book will move current debates in public administration forward by reflecting on the trade-offs between different dimensions of efficiency that public organizations confront. This book represents a milestone in the progression of Data Envelopment Analysis (DEA). It is the first reference text which includes a comprehensive review and comparative discussion of the basic DEA models. The development is anchored in a unified mathematical and graphical treatment and includes the most important modeling extensions. In addition, this is the first book that addresses the actual process of conducting DEA analyses including combining DEA and 1 parametric techniques. The book has three other distinctive features. It traces the applications driven evolution and diffusion of DEA models and extensions across disciplinary boundaries. It includes a comprehensive bibliography to serve as a source of references as well as a platform for further develop ments. And, finally, the power of DEA analysis is demonstrated through fifteen novel applications which should serve as an inspiration for future applications and extensions of the methodology. The origin of this book was a Conference on New Uses of DEA in 2 M anagement and Public Policy which was held at the IC Institute of the University of Texas at Austin on September 27-29, 1989. The conference was made possible through NSF Grant #SES-8722504 (A. Charnes and W. W. Cooper, co-PIs) and the support of the IC Institute. Master’s Thesis from the year 2016 in the subject Business economics - Supply, Production, Logistics, course: Agricultural Economics, language: English, abstract: This study aimed to analyze the technical efficiency of sesame production in Humera area and to identify major factors that cause efficiency differentials of smallholder farmers. The objective of the study is to measure the technical efficiency of smallholder farmers in sesame production. The study was conducted using a cross sectional data collected in 2015/2016-production year from a total sample of 110 households. Cobb-Douglas function was employed to estimate technical efficiency of smallholder farmers in sesame production. The finding of the study indicated that there is inefficiency in the production of sesame in the study area. The estimation of the frontier model with inefficiency variables shows that the mean technical efficiency of farmers is 0.69 (69%). This implies that production of sesame can be increased by 31 percent given the existing technological level. This indicates that the farmers did not using production inputs efficiently in such a way that they give their maximum potential. The estimated stochastic production frontier model together with the inefficiency parameters suggests that any attempt
to strengthen technical efficiency of smallholder farmers in the study area must give due attention to the improvement of the principal causes for efficiency differentials such as education, age, extension contact, credit availability, off farm activities and proximity, which were found to be significant determinants of efficiency level. The negative coefficient of educational status, age, credit availability, extension contact and off farm activities means these factors are important in determining the existing efficiency of farmers positively and significantly. While the positive coefficients of proximity indicate that the increments in these factors increase inefficiency. Given the limited resources in the study area will enable the concerned parties engaged in efforts for improvement of the product and productivity of this part of the community to bring about the desired changes in a cost effective way than trying to inject an investment on the production of sesame. The format of this monograph is three essays, which we arrived at after spending a year writing over one hundred pages of what we even tually realized was a tedious reworking of old material. So we started over determined to write something new. At first we thought this approach might not work as a coherent manuscript, which is why we chose the essay format rather than chapters. As it turns out, there is a common thread—namely the directional distance function, which also gave us our title. As you shall see, the directional distance function includes traditional distance functions and efficiency measures as special cases providing a unifying framework for existing productivity and efficiency measures. It is also flexible enough to open up new areas in productivity and efficiency analysis such as environments and aggregation issues. That we did not see this earlier is humbling; a student at a recent conference raised his hand and asked 'Why didn't you start with the directional distance function in the first place? In deed. This manuscript is intended to make up for our earlier oversights. This monograph contains papers coauthored with Wen-Fu Lee and Osman Zaim and one paper written by two former students, Hiroyuki Fukuyama and Bill Weber. We thank them for their contributions. And another former student, Jim Logan (Logi) read and critiqued the manuscript for which we are grateful. The book‘Economic Efficiency of Maize Production in Jammu Region of J & K State’ provides an overview of the maize production in the state of Jammu and Kashmir in general and sampled districts of Jammu region in particular. The book is designed to throw some new light on the various aspects of status of maize production, Instability in Maize Crop Cultivation, Decomposition, Economics and Impact of Improved Maize Technology, Resource-use Efficiency, Allocative Efficiency, Technical Efficiency, Factors Affecting on Technical Efficiency, costs and returns of maize and Socio-economic Constraints faced by Farmers for growing the Maize crop. In addition, the book provides theory of Production Function and Economic Efficiency. As a case study of maize production in the Jammu region of J & K State, the book provides empirical information about economical analysis of maize crop and is based on the secondary data as well as primary data and factual position prevailing in the farmers field. The book will serve as useful reference to research scholars, students and teachers and will also act as a ready reference for various policy planners of the state and country. The book has considerable importance for the students of agricultural economics and scholars who are interested in this area. The future studies regarding the efficiency of maize production has also been provided. This study focused on the economic efficiency of Kansas farms. The goal was to investigate how they might affect farms and their economic and production performance. Kansas was selected as the region of study for its large agricultural production and distinctive type of multiple-operation farms. Farms in the sample could produce three outputs, crops, livestock and custom work. Inputs for the farms included measures of capital, labor, land and purchased inputs. Production outputs were measured in bushels and tons; input quantities were computed from input expenditures applying an input price index taken from the US Department of Agriculture in real US dollars. The dataset consisted of a 10-year (1998-2007) panel of 456 multi-output farms belonging to the Kansas Farm Management Association (KFMA). Data Envelopment Analysis (DEA) techniques were used to construct a non-parametric efficiency frontier and calculate technical efficiency (TE), allocative efficiency (AE), scale efficiency (SE), and overall or economic efficiency (OE) for each farm and each year. A discretionary input oriented DEA technique was used to assess the effect of capital availability as a farm input and its impact on farms’ efficiencies. Efficiency scores in this problem were compared to the farms’ scores when the level of debt was accounted for as a farm input. Panel data Tobit analysis was applied to the farms’ inefficiency scores to investigate the causality of selected farm characteristics on technical, allocative, scale and overall inefficiencies. For the sampled farms and period, results confirmed that larger farms were more efficient than smaller ones. Farms specializing in livestock products, such as dairy and beef, were reported to be slightly more overall efficient than crop or mixed farms. Some economies of scope were found between custom work operations and crops. Financial structure of the farms was measured using the ratio of total debt to total assets for each farm. According to the results, larger leverage ratios increased all farm efficiencies. The positive effect of debt or capital availability in Kansas farms efficiencies was confirmed. The results of the technical efficiency discretionary DEA model agreed with this finding. Thesis (M. A.) from the year 2012 in the subject Business economics - Investment and Finance, grade: M Sc in Finance and Investment, M ekelle University (Business and economic college), language: English, abstract: This study was conducted in Ethiopian insurance companies in order to measure the technical efficiency using DEA input oriented approach under both constant and variable return versions and Malmquist index output oriented approach in the period 2006-2010. In the first stage, the relative technical efficiency is estimated with data envelopment analysis (DEA) to establish benchmarking company, then, they are ranked according to their technical efficiency. M ann whinney- U test in the second stage was used to determine the factors affecting efficiency. The concept of efficiency concerns is an insurer’s ability to produce a given set of outputs (such as premiums and investment income) via the use of inputs such as administrative and general expenses and financial capital. The insurance company is said to be technically efficient if it cannot reduce its input usage without some corresponding reduction in outputs, given the current state of production technology in the industry. The technical efficiency of Ethiopian insurance companies during the study period was 86.7%, 97.1% and 84.9% in technical efficiency, pure technical efficiency and scale efficiency, respectively. The productivity change shows Ethiopian insurance companies were quite well in efficiency change rather than technological change. It suggested that it is better to employ advanced technology to be efficient in competitive environment. So it is advisable Ethiopian insurance companies are better-off to follow the best practising firms in the industry. The economic implications arising from findings were also considered. Copyright code: 0c5a7ed9782b8e54b0b6c6f3a23144da