



Kuram ve Uygulamada Eğitim Yönetimi
Educational Administration: Theory and Practice
2022, Cilt 28, Sayı 4, ss: 46-60
2022, Volume 28, Issue 4, pp: 46-60
www.kuey.net



The Case Study Benefits for Teaching Business and Economics Students in Universities and Colleges

Minwir M. Al-Shammari ^{1*}, Dinh Tran Ngoc Huy ²

Abstract	
<p style="text-align: center;">Article History</p> <p>Article Submission 27 September 2022</p> <p>Revised Submission 05 November 2022</p> <p>Article Accepted 26 November 2022</p>	<p>In recent years, lecturers and trainers in universities get familiar with case study methods; for instance, applying this method in teaching Business and Economics students at universities and colleges is becoming among hot academic concerns. Several innovative teaching methods have been discussed, and among them, the case study method has been used and applied effectively in classrooms. The paper used qualitative analysis with analytical, explanatory, and inductive approaches. This study analyzes the benefits and conditions of applying two case study modeling methods in teaching: a) analyzing an industrial facility location and b) enhancing bank management compatibility. The case study can transfer global values from global cases to local firms. Case study methods have other merits such as attractiveness, up-to-date calculation, typical and representative, suitable for learning based on a full background knowledge system sound for learners to understand and remember theoretical knowledge. Finally, the paper discusses some educational issues for schools, such as positive teaching methods.</p> <p>Keywords: Case Study; Teaching Method; Universities and Colleges</p>

^{1*} Professor, Department of Management and Marketing, University of Bahrain, Sakhir, Bahrain, malshammari@uob.edu.bh

² Professor, Department of Banking, International University of Japan, Minamiuonuma, Japan, Dtnhuy2010@gmail.com

Introduction

As the business world evolves, changes are required in business networks and people's skill sets to best deal with future uncertainties (Weenk, 2019). Many university teachers and lecturers in Bahrain and Vietnam have applied case study methods to teach and train students with practical solutions. Modern teaching methods at the university level are being implemented to promote the positivity of the cognitive process and technologize teaching methods. These methods require lecturers to impart knowledge and teach students how to create and find new knowledge. Lecturers are not merely information providers but people who apply modern technologies and methods to actively guide students in self-directed learning and research through textbooks, documents, and problems in life.

Educational programs must meet the challenges of accelerating change and complexity in today's business and technology environments. Graduating students who are well-equipped with holistic business and economics skills such as problem-solving, critical thinking, and creativity are essential to meet the market needs and the expectations of their employers. Experiential learning and internships provide opportunities to develop such skills and address real problems in a business context (Brymer & Newman, 2016). Effective methods for experiential learning, such as case analysis, enable students to grasp relevant experience, reflect effectively and transform knowledge, supplemented by conceptual frameworks (Ozelkan & Rajamani, 2006; Weenk, 2019).

This paper analyzes two modeling-based case study methods and discusses teaching goals, conditions, aspects, and benefits to improve teaching quality.

Literature review

The case study is a method and activity of in-depth analysis of a specific situation, thing, or event, different from large-scale surveys and statistics. Over the years, in business and management schools, case teaching has been used quite widely, providing students with actual context and increasing their problem-solving skills. Several studies have been conducted on the role of case studies in teaching business and economic courses, e.g., Gerring (2004), Al-Shammari (2005), Lapoule (2018), Corman and Beck (2019), Hoang and Huy (2021), Le and Nguyen (2021), Huong et al. (2021), and Al-Shammari (2022)

Gerring (2004) argued that cases in the teaching process could understand different situations differently.

Al-Shammari (2005) surveyed undergraduate business students in a business process re-engineering (BPR) course. The study found that case analysis helped students solve business problems, make connections from one part of the course, sort relevant and irrelevant material, and assume greater responsibility for personal learning and learning the cross-functionality of business.

Lapoule (2018) explored how the pedagogical case study method can bridge the gap between teaching and research. Based on an initial survey of 1,057 university academics, the results revealed the existence of five major groups of academics with varying degrees of the link between the two topics. They demonstrated the variations in pedagogical case study's contributions to classroom teaching and scholarly research for each subgroup.

Corman and Beck (2019) indicated that project-based prompts, problem-based prompts, and heuristics used in asynchronous online discussions could help promote creativity. Hai et al. (2021) argued that it is better to change teaching methods to enhance school students' creativity, for instance, with the management case study method. Huong et al. (2021) added that innovative approaches are needed in teaching at universities and colleges.

Hoa et al. (2021) introduced an economic case study as an example in this study. Besides, Hoang and Huy (2021) mentioned that using English as a foreign language in university case studies is encouraged more. This note was also raised by Huong et al. (2021) and Le and Nguyen (2021).

Al-Shammari (2022) investigated students' learning experiences in a supply chain management (SCM) course at a university in Bahrain. The study found that the case study helped improve team-building and interpersonal skills, sharing ideas with colleagues, learning the cross-functionality of business, and being emotionally engaged in learning.

Methodology

Decision Analysis of an Industrial Facility Location

This case uses a mathematical Linear Programming (LP) model to analyze industrial facility location alternatives. A steel bar stock wholesaling company specializing in imported assorted steel stock must soon add a new warehouse to supply increased customer demand. The company now has two warehouses providing four clusters of customers. L3 and L4 have been proposed as two location alternatives, each with monthly capacities of 12,000 pounds. The actual monthly accommodations for existing Warehouses 1 and 2, the minimum demand for each customer cluster, A, B, C, and D, and the transportation and handling costs per pound for supplying the needs are shown in Table 1. Which location (L3 or L4) will have the lowest monthly transportation and handling costs if only one warehouse is built?

Table 1. Capacities, Demands, and Transportation Casts

Warehouse	Customer Cluster (\$)				Monthly Capacity (Pounds)
	A	B	C	D	
Warehouse 1	0.10	0.10	0.15	0.20	12.00
Warehouse 2	0.10	0.10	0.10	0.20	12.00
Proposed Location 3	0.15	0.15	0.10	0.10	12.00
Proposed Location 4	0.20	0.10	0.15	0.15	12.00
Monthly Customer Demand (Pounds)	10.00	8.00	12.00	6.00	

A. Assume that the proposed Warehouse L3 (first alternative) will be combined with existing Warehouses 1 and 2 and formulate a linear programming model.

Define the decision variables:

X_1 = number of pounds of steel to be shipped from warehouse / to Customer Cluster A per month.

X_2 - Number of pounds of steel to be shipped from the warehouse to Customer Cluster B per month.

X_{12} = number of pounds of steel to be shipped from Warehouse L3 to Customer Cluster D per month.

Formulate the objective function

Minimize $Z = .10X_1 + .10X_2 + .15X_3 + .20X_4 + .10X_5 + .10X_6 + .10X_7 + .20X_8 + .15X_9 + .15X_{10} + .10X_{11} + .10X_{12}$

Formulate the constraints

$$X_1 + X_2 + X_3 + X_4 < 12,000$$

Warehouse 1 Capacity

$$X_5 + X_6 + X_7 + X_8 < 12,000$$

Warehouse 2 Capacity

$$X_9 + X_{10} + X_{11} + X_{12} < 12,000$$

Warehouse 2 Capacity

$$X_1 + X_3 + X_9 > 10,000$$

Customer Cluster A Requirements

$$X_2 + X_6 + X_{10} > 8,000$$

Customer Cluster B Requirements

$$X_3 - X_7 + X_{12} \geq 12,000 \quad \text{Customer Cluster C Requirements}$$

$$X_4 + X_8 + X_{12} \geq 6,000 \quad \text{Customer Cluster D Requirements}$$

Solve the LP model using the computer. The results are:

$$X_1 = 10,000 \quad X_2 = 2,000 \quad X_3 = 0$$

$$X_4 = 0 \quad X_5 = 0 \quad X_6 = 6,000$$

$$X_7 = 12,000 \quad X_8 = 0 \quad X_9 = 0$$

$$X_{10} = 6,000 \quad X_{11} = 0 \quad X_{12} = 6,000$$

$$Z = \$ 3,600$$

B. Assume that proposed warehouse L4 will be combined with existing Warehouses 1 and 2 and formulate the problem:

The objective function is

$$\text{Minimize } Z = .10X_1 + .10X_2 + .15X_3 + .20X_4 + .10X_5 + .10X_6 + .10X_7 + .20X_8 + .20X_9 + .10X_{10} + .15X_{11} + .15X_{12}$$

The constraints will stay the same as in No.3 above.

The solution to this new LP model is:

$$X_1 = 10,000$$

$$X_4 = 0 \quad X_7 = 12,000$$

$$X_{10} = 6,000$$

$$X_2 = 2,000$$

$$X_3 = 0$$

$$X_{12} = 6,000$$

$$Z = \$ 6,000$$

Comparing the results given in A and those in B, one can notice that Warehouse location L3 is preferred over warehouse location LA. The total monthly costs for L3 (\$3,600) are less than for LA (\$ 6,000)

Enhancing Management Compatibility of the MB Bank in Vietnam

Military Bank (MB) has made very positive contributions to the overall achievements of the banking industry, deserving of its position as one of the leading joint-stock commercial banks of the Vietnamese banking system. It contributes to helping State Bank stabilize the market and successfully implement monetary policy. This case will build an econometric model to analyze bank performance factors and propose solutions. It establishes a correlation among macroeconomic factors using an econometric model to study the impacts of macroeconomic factors in Vietnam, such as GDP growth, inflation, interest rate, and the exchange rate of Military Bank (MB) and stock price. Figure 1 shows us that Y has a positive correlation with GDP growth. Next, based on scatter Figure 2, Y (MB stock price) has a slightly negative correlation with inflation (CPI). Figure 3 shows that MB stock price (Y) and VNIndex have positive correlations.

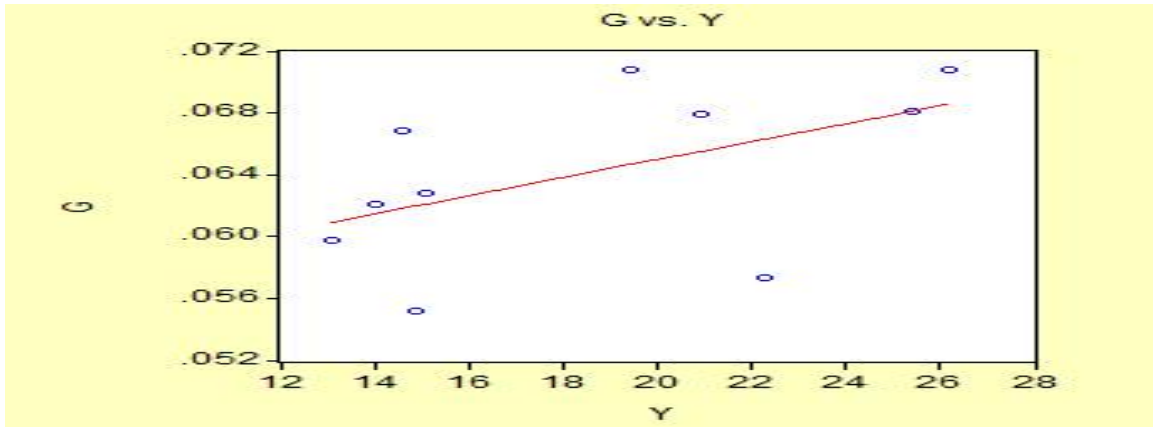


Figure 1. MB stock price (Y) vs. GDP growth in Vietnam (G)

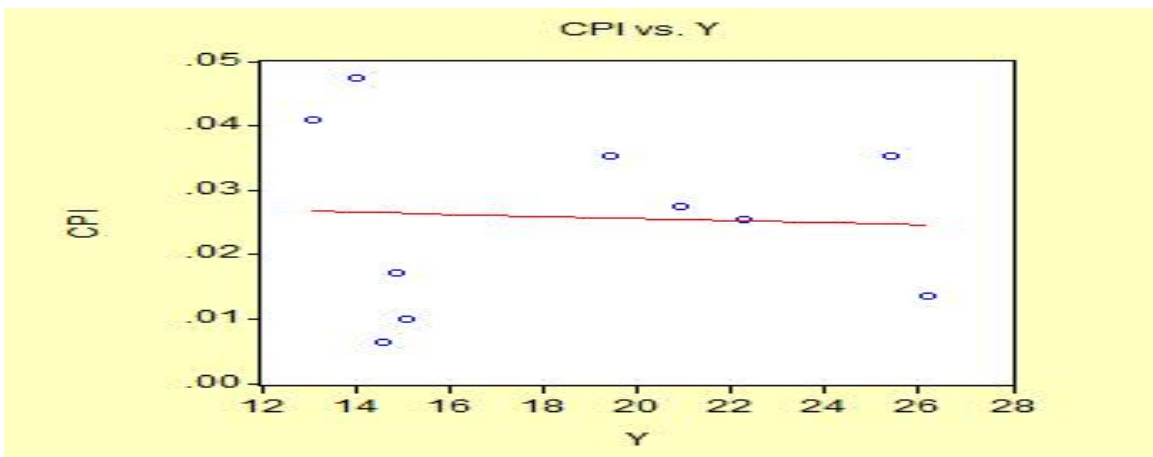


Figure 2. MB stock price (Y) vs. Inflation (CPI)

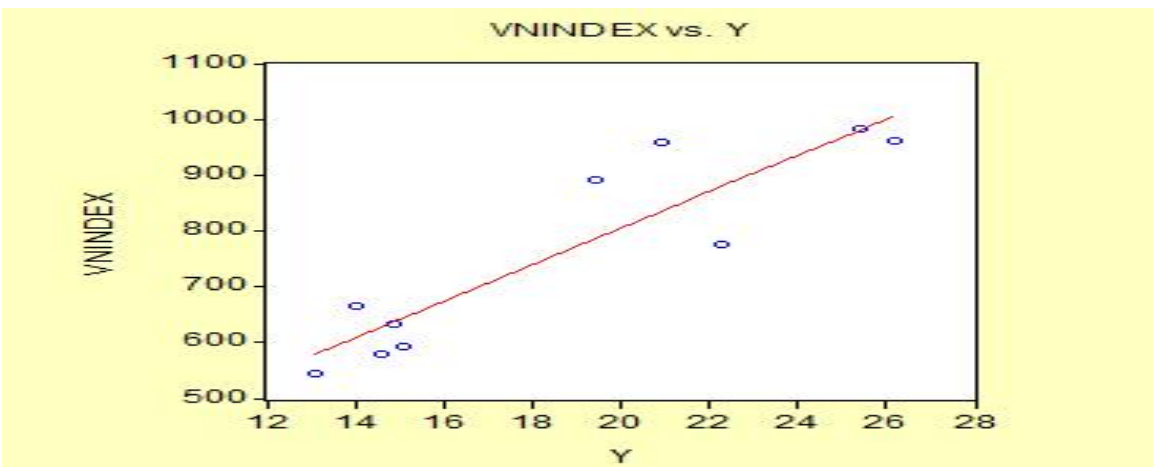


Figure 3. Y vs. VN Index

Table 2 shows the covariance matrix among eight (8) macroeconomic variables. MB stock price (Y) negatively correlates with the risk-free rate and lending rate but positively correlates with the

exchange rate (EX. Rate) and GDP growth. Hence, an increase in inflation may slightly negatively impact MB stock price.

Table 2. The covariance matrix for seven macroeconomic variables

	Y	G	CPI	VNINDEX	R	RF	EX_RATE	SP500
Y	21.7052	0.0126	-0.0035	708.1502	-0.0187	-0.0337	1592.78	1170.402
G	0.0126	2.77E-05	-3.50E-06	0.5755	-1.49E-05	-3.33E-05	1.7205	0.9344
CPI	-0.0035	-3.50E-06	0.00017	0.3221	-2.10E-05	-2.79E-05	0.6276	0.6764
VNINDEX	708.1502	0.5755	0.3221	28031.78	-0.5341	-1.418	75361.46	46087.69
R	-0.0187	-1.49E-05	-2.10E-05	-0.5341	5.25E-05	2.93E-05	-0.6489	-0.7586
RF	-0.0336	-3.33E-05	-2.79E-05	-1.418	2.93E-05	0.0002	-4.028	-2.5297
EX_RATE	1592.783	1.7205	0.6276	75361.46	-0.6489	-4.028	335144	122334.5
SP 500	1170.402	0.9344	0.6764	46087.69	-0.7586	-2.5297	122334.5	78286.05

Regression Model and Main Findings

This section shows the relationship between eight macroeconomic factors and public debt.

Scenario 1. A regression model with two variables and results of running EViews (Table 3)

Therefore, $Y = 456.6 * g - 11.4 * CPI - 10.4$, $R^2 = 0.26$, $SER = 4.76$

(286.3) (114.4) (18.8)

Dependent Variable: Y

Method: Least Square

Date: 02/01/20 Time: 17:55

Sample: 1 10

Included Observations: 10

Table 3. A regression model results with two macro variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
G	456.6081	286.3885	1.5943	0.1549
CPI	-11.4178	114.4604	-0.0997	0.9233
C	-10.4055	18.8194	-0.5529	0.5975
R-squared	0.2688	Mean dependent var		18.5950
Adjusted R-squared	0.0601	S.D. dependent var		4.9108
S.E. of regression	4.7612	Akaike info criterion		6.2022
Sum Squared resid.	158.6871	Schwarz criterion		6.2930
Log-likelihood	-28.0111	F-statistic		1.2873
Durbin-Watson stat.	1.3226	Prob. (F-statistic)		0.3341

Scenario 2. A regression model with six macro variables and results of running EViews (Table 4)

$$Y = -199.8 * G - 96.07 * CPI - 152.8 * R + 0.03 * VNINDEX + 2.36 * Rf - 0.001 * EX_RATE + 55.5,$$

$$R^2 = 0.94, SER = 1.9$$

$$(160.6) \quad (48.5) \quad (102.6) \quad (0.007) \quad (59.1) \quad (0.001)$$

The results show that MB stock price positively correlates with GDP growth and negatively correlates with inflation in Vietnam. It is highly positively affected by the GDP growth rate.

Dependent variable: Y

Method: Least Square

Date: 02/01/20 Time: 17:57

Sample: 1 10

Included Observations: 10

Table 4. A regression model results with six macro variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
G	-199.8986	160.6465	-1.2443	0.3017
CPI	-96.0746	48.5098	-1.9805	0.1420
R	-152.8409	102.6482	-1.4889	0.2332
VNINDEX	0.0312	0.0073	4.2639	0.0237
RF	2.3628	59.0846	0.3399	0.9706
EX_RATE	-0.0013	0.0017	-0.7537	0.5057
C	55.5564	35.3203	1.5729	0.2138
R-squared	0.9499	Mean dependent var		18.5950
Adjusted R-squared	0.8498	S.D. dependent var		4.9108
S.E. of regression	1.9028	Akaike info criterion		4.3205
Sum Squared resid.	1.8623	Schwarz criterion		4.5324

Log-likelihood	-14.6029	F-statistic	9.4910
Durbin-Watson stat.	2.7270	Prob. (F-statistic)	0.0460

Step 3: Case questions

Question 1: Discuss factors that affect bank performance.

Question 2: Propose solutions to improve better bank management.

Goals and Conditions for Applying the Case Study Method

The goals and requirements for using the case study approach are summarized in Table 5.

Table 5. Goals and conditions of Using the Case Study Method

Goals	Conditions
1. Maximize students' ability, creativity, and independence.	<p>In the teaching stage, lecturers need to focus on and support students in promoting their psychological functions, independence, and creative thinking abilities by creating conditions for students to discuss and present their ideas, views, and thoughts on political, economic, and social issues.</p> <p>Guide and explain to students to clearly understand the process of knowledge reproduction and the teaching methods of lecturers. From there, orient students to apply themselves in the learning and research process to meet the requirements of the lecturers.</p>
2. Improve students' capabilities of doing research.	Cooperation between schools and research institutes, firms, and scholars to increase scientific research products for students.
3. Improve analytical and writing skills and presentation skills for students.	Increase time for discussion in groups and presentations, invite experienced managers and researchers to join in discussion with students
4. Maximize the effectiveness of the case study method for students.	<p>Investment to improve facilities and school infrastructure for studying, researching as well as for physical activities of students</p> <p>Encourage lecturers to use software and modern technological means for teaching.</p> <p>Also, we need to use objective evidence, information, and data in the case study method.</p>

This paper has presented an example of two case study teaching methods using quantitative and qualitative methods, including synthesis, explanation, and inductive approaches. The first case used a mathematical Linear Programming (LP) model to analyze industrial facility location alternatives. The second case used reliable internet data and used ordinary least square (OLS) regression with supported EViews to establish a correlation among macroeconomic factors by using an econometric model to analyze the impacts of macroeconomic factors such as gross domestic product (GDP) growth, inflation, interest rate, the exchange rate on Military Bank (MB) stock price.

Results

Teaching Aspects of the Case-based Modeling Approach

This subsection explains the approach adopted for teaching modeling as a case study problem-based approach. The teaching approach used involves the following major groups of aspects:

Demonstration aspects

- Tell students what they will learn and how to help them solve problems.
- Discuss the fundamental theoretical underpinnings of the problem-based learning process.
- Explain the components of a model, assumptions to be met, and the types of problems it can solve. Components of mathematical models are decision variables, objective functions, and constraints.
- Illustrate an introductory problem in the class to enhance students' understanding of the discussed mathematical model.

Experimental aspects

- Provide an opportunity for students to practice and experiment with formulating and problem-solving real-world cases by themselves. These cases are real-world applications taken primarily from recent Journals such as Management Science, Decision Sciences, and Interphases.
- Emphasize problem formulation as one of the essential problem-solving steps. Allow students ample time to formulate problems and look at and analyze the results. Students who cannot correctly design mathematical models cannot possibly solve them.
- Students can use typical quantitative analysis software packages in a computer lab. Some packages are command-driven, such as LINDO and Lotus 1-2-3, whereas others are menu-driven, such as QSB, OR COURSEWARE, and MANAGEMENT SCIENTISTS.

Project Aspects

- Divide the class into study groups of three to four students and introduce a project assignment to each group. Students can analyze a real-life case (in public or private organizations), formulate the problem, and recommend the best possible solution(s).
- Using real-world project works illustrates that students may reencounter problems of this type after finishing the class. Teaching students only concepts, methods, and problem-solving techniques do not guarantee successful teaching without real-world problem-based learning.
- Request study groups to hand in their projects by a designated date. Each group must deliver an oral presentation in class on the formulation of the model and their significant results and suggestions.

Practical Aspects

- The inadequate algebraic and statistical knowledge possessed by some students sometimes slows down the teaching process in the class.
- The limited number of PC terminals in the computer lab makes it very difficult to give each student a chance to work individually on a computer terminal.
- Students who face personal, emotional, or medical problems may fail to submit assignments and group projects on time.

Benefits of using the case study method

- Using the case study methods brought at least the following benefits:
- Improve students' creativity and independence in giving personal comments and analytical ideas.

- Improve students' ability to make suggestions and problems solving.
- Stimulate learners' participation in real problems to study more effectively through group discussion.
- Learners can use evidence, data, and information to answer case questions.
 - Help students brainstorm and have better qualitative analytical skills.
 - Help students make estimation and quantitative models to answer practical business problems.
 - Help learners discuss, share experiences, and propose economic policies.
 - Provide high application and practical features.
 - Transfer global values from global cases to local firms.
 - Attractiveness and suitability are based on a complete knowledge system for learners to understand and remember theoretical knowledge.

Discussion

The paper analyzed two data sets through linear programming and regression analysis. The LP was used to analyze the industrial facility location using LINDO software. The regression analysis was conducted using EViews; Therefore, we see the impacts of 6 macro factors, with the new variable: exchange rate USD/VND (EX_RATE). The analysis shows that MB stock price (Y) negatively correlates with GDP growth, inflation, exchange rate, and lending rate. In contrast, it positively correlates with the risk-free rate, VNINDEX, and exchange rate. We also recognize that GDP growth and lending rate, then CPI has the highest impact on MB stock price, while the exchange rate slightly impacts the stock price.

Huong et al. (2021) argued that it is time we need innovative approaches to teaching methods at our universities and colleges. Teachers and students must be more creative in the case study teaching method. Teachers and educators need to provide background information on the main subject in the Case Study and can change learning and teaching styles with E-learning solutions (Huy et al., 2021). Students need to obtain situation and context analysis skills and quantitative skills in case teaching at schools to achieve learning goals better. Innovative teaching methods adopted by teachers can actively change students' learning mode from passive knowledge acquisition to active, and thus, enhance interaction between teachers and students and allow knowledge acquisition and practicing of necessary skills via training. So, students can practice skills, apply learned knowledge, form capacity, and improve their personalities and qualities.

The fundamental skill requirements in an academic program are generic higher education skills, ranging from leadership issues to interpersonal skills and attributes (Chan et al., 2017). Kordova and Frank (2014) called for more empirical results and reflections on the possible practices and methods to combine substance knowledge and generic skills in higher education curricula. The skills needed by students of Business and Economics programs are knowledge of fundamentals and generic skills (Basnet, 2000; Rahman and Qing, 2014). Therefore, it is necessary to strengthen students' skills in group discussions and increase interaction between teachers and students to promote the development of students' social competence. In addition, teachers must add interdisciplinary, integrated learning topics to help students develop their ability to solve complex problems.

Conclusion

The paper presented cases and examples from the business field to connect theory with practice and learn based on problems and case studies. The educational approach used in teaching problem-solving skills has been explained. The paper has concentrated on using models as a powerful tool for solving economics and management science problems. The article has detailed information on several aspects of the applied teaching approach.

Based on the above analysis, we suggest using the case study method in business and economics schools. Schools need to support teachers and encourage them to combine teaching methods and scientific research results related to the subject. They should orient students to have learning methods associated with scientific research related to their profession.

Schools must create better connections with institutes, research centers, production, business establishments, and business and socio-economic organizations to combine research and transfer scientific results. They must organize more physical activities for students combined with research, maximize their ability, creativity, and independence, and improve students' learning attitudes. Schools need to invest in facilities and materials for teaching, scientific research, learning, and physical activities of lecturers and students to improve the quality of education and training.

Future Research

This paper helps future research to enhance the robustness of case study methods for teaching students to sin other majors such as social sciences, history, manufacturing, and technology management.

References

- Ahmad, N., & Ramzan, M. (2016). Stock Market Volatility and Macroeconomic Factor Volatility. *International Journal of Research in Business Studies and Management*, 3(7), 37-44.
- Al-Shammari, M. (2005). Assessing the Learning Experience in a Business Process Re-engineering Course (BPR) at the University of Bahrain. *Business Process Management Journal*, 11(1), 47-62.
- Al-Shammari, M. M. (2021). An exploratory study of experiential learning in teaching a supply chain management course in an emerging market economy. *Journal of International Education in Business*, 15(2), 184-201. <https://doi.org/10.1108/jieb-09-2020-0074>
- Alavi, S., Habel, J., Guenzi, P., & Wieseke, J. (2017). The role of Leadership in Salespeople's Price Negotiation Behavior. *Journal of the Academy of Marketing Science*, 46(4), 703-724. <https://doi.org/10.1007/s11747-017-0566-1>
- Anh, P. T., Huy, D. T. N., & Loan, B. T. T. (2020). Analysis of a Financial Model for Converting Industrial Waste Tires into Clean Energy for Environment Protection-A Model in Developing Countries. *Wseas Transactions on Environment and Development*, 15, 447-454.
- Brymer, R., & Newman, W. (2016). An experiential supply chain management field study: effectively bridging the gap between classroom and practice. *Journal of Higher Education Theory and Practice*, 16(6), 48-56.
- Dat, P. M., Mau, N. D., Loan, B. T. T., & Huy, D. T. N. (2020). Comparative China Corporate Governance Standards After Financial Crisis, Corporate Scandals, and Manipulation. *Journal of security & sustainability issues*, 9(3), 931-942.
- Gerring, J. (2004). What Is a Case Study and What Is It Good for? *The American Political Science Review*, 98(2), 341-354.
- Ha, T. T. H., Khoa, N. B., Huy, D. T. N., Nhan, V. K., Nhung, D. H., Anh, P. T., & Duy, P. K. (2019). Modern corporate governance standards and the role of auditing cases in some Western European countries after the financial crisis, corporate scandals, and manipulation. *International Journal of Entrepreneurship*, 23(1S).
- Hac, L. D., Huy, D. T. N., Thach, N. N., Chuyen, B. M., Nhung, P. T. H., Thang, T. D., & Anh, T. T. (2021). Enhancing risk management culture for sustainable growth of Asia commercial bank - ACB in Vietnam under mixed effects of macro factors. *Entrepreneurship and Sustainability Issues*, 8(3), 291-307.
- Hai, N. T., Huy, D. T. N., Hoa, N. T., & Thang, T. D. (2021). Educational Perspectives on differences between Management Case Study and Economics and Finance Case Study Teaching in Universities. *Design Engineering*, (7), 12022-12034.
- Hang, N. T., Tinh, D. T., Huy, D. T. N., & Nhung, P. T. H. (2021). Educating and training the labor force Under Covid 19; Impacts to Meet Market Demand in Vietnam during Globalization and Integration Era. *Journal for Educators, Teachers, and Trainers*, 12(1), 179-184. <https://doi.org/10.47750/jett.2021.12.01.023>
- Hang, T. T. B., Nhung, D. T. H., Hung, N. M., Huy, D. T. N., & Dat, P. M. (2020). Where Beta is going—case of Viet Nam hotel, airlines, and tourism company groups after the low inflation period. *Entrepreneurship and Sustainability Issues*, 7(3).
- Hieu, L. T., Hương, D. T., Huy, D. T. N., Dung, M. N. T. P., & Trung, N. D. (2021). Identifying learners' behavior from videos affects the teaching methods of lecturers in Universities. *Design Engineering*, 11146-11157.

Hoa, N. T., Huy, D. T. N., Le Thi Thanh Huong, N. D., & Trung, N. T. D. (2021). Analysis of Case Teaching Method in Universities-An Economic Case Study in Pyrolysis Project. *Design Engineering*, (7).

Huong, L. T. (2021). Marketing strategy based on competitor analysis - A case in Vietnam Medicine Sector. *Revista Gestão Inovação E Tecnologias*, 11(3), 103-111. <https://doi.org/10.47059/revistageintec.v11i3.1919>

Huong, L. T. T., Huong, D. T., Huy, D. T. N., & Thuy, N. T. (2021). Education for students to enhance research skills and meet demand from the workplace- Case in Vietnam. *Elementary Education Online*, 20(4).

Hoang, N. T., & Huy, D. T. N. (2021). Determining factors for educating students for choosing to work for foreign units: Absence of self-efficacy. *JETT*, 12(2), 11-19.

Huy, D. T. N. (2021). Banking sustainability for economic growth and socio-economic development-case in Vietnam. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(2), 2544-2553.

Huy, D. T. N. (2012). Estimating Beta of Viet Nam listed construction companies groups during the crisis. *Journal of Integration and Development*, 15 (1), 57-71.

Huy, D. T. N. (2015). The Critical Analysis of Limited South Asian Corporate Governance Standards After Financial Crisis. *International Journal for Quality Research*, 9(4), 741-764.

Huy, D. T. N., An, T. T. B., Anh, T. T. K., & Nhung, P. T. H. (2021). Banking sustainability for economic growth and socio-economic development – case in Vietnam. *Turkish Journal of Computer and Mathematics Education*, 12(2), 2544-255.

Huy, D. T. N., Dat, P. M., & Anh, P. T. (2020). Building An Econometric Model of Selected Factors'Impact on Stock Price: A Case Study. *Journal of Security & Sustainability Issues*, 9, 77-93.

Huy, D. T. N., Hang, N. T., Trang, P. T. H., & Ngu, D. T. (2021). Discussion on Case Teaching Method in a Risk Management Case Study with Econometric Model at Vietnam Listed Banks-Issues Of Economic Education for Students. *Review of International Geographical Education Online*, 11(5), 2957-2966.

Huy, D. T. N., & Hien, D. T. N. (2010). The backbone of European corporate governance standards after the financial crisis, corporate scandals, and manipulation. *Economic and Business Review*, 12(4), 1.

Huy, D. T. N., Le, T. H., Thang, T. D., Hoa, N. T., & Hue, L. T. (2021). Discussion on E-learning solutions for students-and issues of technology application in the classroom. *Design Engineering*, (7), 11432-11443.

Huy, D. T. N., Loan, B. T., and Anh, P. T. (2020). Impact of selected factors on stock price: a case study of Vietcombank in Vietnam. *Entrepreneurship and Sustainability*, 7(4), 2715-2730. [https://doi.org/10.9770/jesi.2020.7.4\(10\)](https://doi.org/10.9770/jesi.2020.7.4(10))

Huy, D. T. N., Nhan, V. K., Bich, N. T. N., Hong, N. T. P., Chung, N. T., & Huy, P. Q. (2021). Impacts of internal and external macroeconomic factors on firm stock price in an expansion econometric model-a case in Vietnam real estate industry. In Ngoc Thach, N., Kreinovich, V., Trung, N. D. (Eds), *Data Science for Financial Econometrics. Studies in Computational Intelligence*. Hoboken, US: Springer. https://doi.org/10.1007/978-3-030-48853-6_14

Lapoule, P., & Lynch, R. (2018). The case study method: exploring the link between teaching and research. *Journal of Higher Education Policy and Management*, 40(5), 485-500. <https://doi.org/10.1080/1360080X.2018.1496515>

- Le, K., & Nguyen, M. M., (2021). Aerial bombardment and educational attainment. *International Review of Applied Economics*, 34(3), 361-383.
- Le, K., & Nguyen, M. M., (2021). Educational and political engagement. *International Journal of Educational Development*, 85, 102441.
- Le, K., & Nguyen, M. M., (2021). In-utero Exposure to Rainfall Variability and Early Childhood Health. *World Development*, 144,105485.
- Nga, N. T. P., Trung, N. D., Thu, B. T., Huy, D. T. N., & Van Thanh, T. (2021). Relationship Between Competitor-Based Marketing Mix Strategies and Production Activities in Manufacturing and Renewable Energy Companies. *Advances in Mechanics*, 9(3), 1367-1378.
- Nguyen, T. H., Nguyen, V. H., & Huy, D. T. N. (2021). Transforming the University Management Model in the Concept of Digital Transformation. *Revista Geintec-Gestao Inovacao E Tecnologias*, 11(3), 380-387.
- O'Keeffe, A., Ozuem, W., & Lancaster, G. (2015). Leadership marketing: an exploratory study. *Journal of Strategic Marketing*, 24(5), 418-443.
- Ozelkan, E., & Rajamani, D. (2006). An effective framework for teaching supply chain management. Proceedings of 2006 Annual Conference & Exposition, 11-180. doi:10.18260/1-2--1435
- Phuong, N. T. T., Huy, D. T. N., & Van Tuan, P. (2020). The evaluation of impacts of a seven-factor model on NVB stock price in the commercial banking industry in Vietnam-and roles of Disclosure of Accounting Policy In Risk Management. *International Journal of Entrepreneurship*, 24, 1-13.
- Thi Ngu, D., Huong, D. T., Huy, D. T. N., Thanh, P. T., & Dongul, E. S. (2021). Language teaching application to English students at master's grade levels on history and macroeconomic-banking management courses in universities and colleges. *Journal of Language and Linguistic Studies*, 17(3), 1457-1468.
- ThiHoa, N., Hang, N. T., Giang, N. T., & Huy, D. T. N. (2021). Human resources for schools of politics and international relations during globalization and EVFTA. *Ilkogretim Online*, 20(4), 2448-2452. <https://doi.org/10.17051/ilkonline.2021.04.281>
- Tinh, D.T., Thuy, N.T., & Huy, D.T.N. (2021). Doing Business Research and Teaching Methodology for Undergraduate, Postgraduate, and Doctoral Students-Case in Various Markets, Including Vietnam. *Elementary Education Online*, 20(1), 1414-1418. <https://doi.org/10.17051/ilkonline.2021.01.148>
- Trung, N. D., Huy, D. T. N., Van Tuan, P., & Huong, D. T. (2021). Ict and digital tech effects on marketing strategies and choosing competitor affecting on business operation-A case in hotel and entertainment sector. *Design engineering*, 6, 8437-8449.
- Van Tuan, P., Huy, D. T. N., Trung, N. D., & Hoa, N. T. (2021). Marketing Strategies for Tourism and Digital Tech Applications in the Tourism Industry-A Case of Och Tourism Corporation in Vietnam. *Design engineering*, 7, 13938-13950.
- Weenk, E. (2019). *Mastering the Supply Chain: Principles, practice, and real-life applications*. London, UK: Kogan Page Publishers.