International Journal of Education, Modern Management, Applied Science & Social Science (IJEMMASSS)
ISSN :2581-9925, Impact Factor: 7.555, Volume 07, No. 02(II), April- June, 2025, pp. 60-70

Modelling Trade in Higher Education under Monopolistic Competition and Internal Economies of Scale: A Dixit-Stiglitz Framework Approach

Rajneesh Kler*

Amity University in Tashkent, Uzbekistan.

*Corresponding Author: klerrajneesh@gmail.com

ABSTRACT

This paper provides a theoretical and empirical model on the trade in higher education services between two symmetric countries under the monopolistic competition with internal economies of scales model by Dixit & Stiglitz. Universities are treated as being under the structure of monopolistic competition as they are assumed to be a differentiated providers of services which follow the increasing returns to scale, while the students who are the users of the services are assumed to have scope effects that favours variety. To estimate the elasticity of substitution, markup levels, fixed costs, marginal costs and gains from trade in terms of consumer surplus, the study employs a data set that have been collected from twenty large universities in India and the UAE and simulates it. The results validate the theoretical predictions for intra-industry trade in education to gain variety, and reduce the average costs further, when operating under an integrated market situation for welfare enhancement. Graphic methods and regression analysis provide supporting evidence of the presumption that underpins the framework and its application to international service trade.

Keywords*: Higher Education Trade, Monopolistic Competition, Dixit-Stiglitz Model, Internal Economies of Scale, International Student Mobility.*

Introduction

The process of internationalisation of higher education is considered as a significant phenomenon of the 21st century affecting the supply of educational services across borders (Kler, 2015; Kler 2022; Kler et al., 2023). More students are therefore opting to pursue education in other countries, universities are venturing into different countries and regions through satellite campuses and education has been cited to be among the leading under trade in services (Lim & Saner, 2011; Morshidi et al., 2011; Raychaudhuri & De, 2008). Nonetheless, new conventional forms of international trade participation, centred mainly on the theory of comparative advantage, poorly explain the driving forces behind the trade in higher education services (Bougheas et al., 2011; Felipe et al., 2021; Sahni & Shankar, 2005). For those reasons, they fail to describe the rising number of similar educational products as being traded between countries that are both of similar economic status and featuring similar structures (Blanchard & Willmann, 2016; Chatterjee, 2017).

All these indicate that this gap has left a need for a more comprehensive theory of that considers factors of product differentiation, consumers choice for the product and internal economies of scales. This paper deals with this by applying the Dixit-Stiglitz model of monopolistic competition in the higher education institution. As a theory that was designed for exploring interindustry trade in manufactured products among similar countries, the Dixit-Stiglitz framework is seen to offer a solid ground for the examination of the trade in services that are differentiated, heterogeneous, as well as scale-sensitive, like education services (Dingel, 2009; Stiglitz, 2017). It captures the reality that one university may provide a set of educational services that is quite different from that of another university due to the differences in curricula, teaching style, reputation as well as student experience.

In this regard, universities are assumed to be the service producers that are operating under internal economies of scale while students are acting as consumers who have the preference

for variety. The occurrence of these agents' result is a real-world context in which trade between identical countries is welfare improving since consumers get access to a wider variety of educational programmes and producers make better use of resources.

To apply this model empirically, the study builds an application model with the help of survey data from twenty large universities in two economies: India and UAE. The chosen countries can be compared with each other according to the level of economic development, investment in the education sphere, and international students' exchange programmes. The estimated values in the models are the fixed and marginal costs, elasticity of substitution and welfare gains from the trade. The facts presented corroborate the fundamental theoretical premise of this paper: intra-industry trade in international higher education services is both possible and beneficial for countries including symmetric ones given the reality of both product differentiation and scale economies.

Related Literature

Only in the past decade, especially in the wake of the "GATS", has the process of internationalisation of higher education become a key component of the international trade in services which has attracted attention from academics from fields as diverse as economics, education policy and international business management (Knight, 2002, 2003, 2015; Rueda-Cantuche et al., 2016; Varghese, 2007). Developed trade theories, more especially the comparative advantage theories have failed to explain the reasons as to why different yet similar international education services, are exchanged between structurally similar and economically comparable nations. Some of them do not consider the specificity of educational services and fail to reflect the phenomenon of scale in universities, which hindrances their relevance to the modern educational processes.

To overcome these drawbacks, attention must gradually turned to intra-industry trade and monopolistic competition as more applicable model to the analysis of mobility in higher education. Universities are now identified as diverse service providers that offer dissimilar services of teaching-learning, research, organisational cultures, and global ranking. Therefore, the matter of choice is not only about the price and availability but also about the variety as perceived by the students and the match between what institutions offer and what the students would like to obtain, closely related with the "love for variety" and product differentiation models.

The Dixit–Stiglitz model which has been developed to focus on trade of standardised made products was also extended on various service sectors. This model accommodates also other important assumptions like increasing returns to scale, heterogeneity among firms and consumer's preference for diversity which applies well with the higher education sector (Dixit & Stiglitz, 1993; Rogerson, 2005). Earlier studies have used this framework in contexts within the trade of industrial products and goods but there has been minimal implementation of the model in the educational services sector particularly in the international setting.

Additionally, the quantitative analysis of the economic characteristics of international education primarily focuses on the bilateral flows or attendance, students' characteristics or organisations' rank, and does not use structural models based on actual data. The paper indicates that there is still a gap between theory and practise concerning the trade models of higher education systems. Hence, this paper seeks to make a theoretical and empirical contribution towards the study of service trade especially in education.

Theoretical Framework

In this model the study assumes the higher education sector as being made up of monopolistically competitive universities, with products (education services) being differentiated and having internal economies of scale. Each university is notwithstanding theorised as a firm that produces a unique portfolio of service i.e. the variety of higher education. These factors include the course offerings, mode of delivery, quality, faculty profile and students' services which make in one way or the other provide attractions to different students. Thus, the universities are not positively interchangeable in the eyes of students.

Consumers, who are the students are the beneficiaries of these differentiated educational services, for the purpose of this framework, receiving utility in the process. Their taste habits are exogenous and are assumed to be represented by the Constant Elasticity of Substitution (CES) utility function that allows for students' love for variety and their flexibility to switch between different institutions. The elasticity of substitution parameter, $\sigma > 1$, governs how easily students are willing to shift from one university to another in response to relative price or quality differences. The Utility is expressed in following equation.

$$U = (\int_{\omega \in \Omega} x(\omega)^{\frac{\sigma-1}{\sigma}} d\omega)^{\frac{\sigma}{\sigma-1}}, \qquad \sigma > 1 \qquad (1)$$

This CES (Constant Elasticity of Substitution) utility function represents the preferences of students for differentiated higher education services where:

U: Student utility level.

$x(\omega)$: Quantity/benefit derived from consuming university variety

Ω : The set of all accessible universities (varieties).

$\sigma > 1$: Elasticity of substitution; a measure of how easily students can substitute one university for another. A higher σ implies more similarity (less differentiation).

The cost structure of each university is a fixed cost *F*, that covers the infrastructural, administrative and other overhead costs, the other cost is a marginal cost, *c* for each student in terms of faculty and services. This leads to internal economies of scale because average cost is inversely related to the number of enrolled students since there is a fixed cost of operating the University. The Total cost can be expressed as:

$$C(x) = F + c \cdot x \qquad (2)$$

The above cost function of a university offering higher education services where:

$C(x)$: Total cost of providing education to *x* students.

F: Fixed cost of operation (e.g., infrastructure, salaries, technology).

c: Marginal cost per student (e.g., teaching materials, class size effects).

x: Number of enrolled students (output level).

Characterised by differentiated service products and each university as the price maker, a university determines prices by adding a fixed markup to marginal cost. Of this markup, the degree of the elasticity of substitution ensures that institution earns positive profits in the short run. This is given by:

$$P = \frac{\sigma}{\sigma-1} \cdot c \qquad (3)$$

Equation 3 shows how each university sets its tuition price where:

P: Tuition fee charged per student.

σ: Elasticity of substitution.

c: Marginal cost per student.

Under monopolistic competition with CES preferences, each university charges a constant mark-up over marginal cost. The more differentiated the product (lower σ) the higher the mark-up.

In the long run, the condition that dictates free entry and exit of new firms into the education market, tends to eliminate economic profits. Some new universities will exist in the market if the existing universities earn supernormal profits and this will lead to more varieties hence the division of the market for students until all units, including the new ones, only earn their total cost. This results in an optimal output per university which would minimise the total production cost which includes both the fixed costs and the variable costs in relation to the total income given by the pricing rule. This can be writes as:

$$P \cdot x = F + c \cdot x \qquad (4)$$

Where:

$P \cdot x$: Total revenue (tuition × enrolment).

$F + c \cdot x$: Total cost.

This condition ensures zero economic profit in the long-run equilibrium. Free entry and exit in the market force universities to operate at a scale where revenue just covers cost.

Solving the zero-profit condition and pricing rule gives equilibrium enrolment as follows:

$$(\frac{\sigma}{\sigma-1} \cdot c) \cdot x = c \cdot x + F \qquad (5)$$

$$x = \frac{F(\sigma-1)}{c} \qquad (6)$$

Where:

x: Number of students needed for a university to break even.

F: Fixed cost.

σ: Elasticity of substitution.

c: Marginal cost per student.

Larger fixed costs or lower marginal costs increase the required scale per university.

In the present analysis, it is postulated that the total labour pool that can be used in producing higher education is fixed for each country. First, for fixed infrastructure and second, for variable teaching activities that a faculty performs. This aspect means that the number of universities that could be sustained in any given country depends on this labour constraint because the cost of running a university is very high.

$$L = n(F + c \cdot x) \quad (7)$$

Where:

L: Total labour endowment (educators, administrators).

n: Number of universities.

$(F + c \cdot x)$: Labour required per university.

The equation ensures that the total labour used across all universities equals the available labour. Labour is the only input, used in both fixed and variable operations.

Combining the labour constraint with Equation (5) gives the number of universities sustainable in equilibrium.

$$n = \frac{L}{F + c \cdot x} = \frac{L}{F\sigma} \quad (8)$$

Where:

n: Number of universities in each country.

L: Labour endowment.

F: Fixed cost.

σ: Elasticity of substitution.

This shows that more universities can be sustained when fixed costs are lower or more labour is available.

Thus, when trade occurs, the total number of variety universities that the students of the two countries can have access to is increased. This almost certainly increases each student's options by a factor of two (if only in countries that are symmetric with another country) without requiring more national resources. When two identical countries open to trade, each country gains access to all university varieties from both sides. This is expressed in following equation:

$$n_{\text{open}} = 2 \cdot n_{\text{closed}} \quad (9)$$

Where:

n_{closed}: Number of varieties (universities) available in autarky.

n_{open} : Number of varieties available with trade.

Trade effectively doubles the choices for students, assuming symmetric countries.

The expected consequence is the increase in consumer surplus due to selection and better utilisation of economies of scale factors. The welfare implications can be theoretically ascertained from the properties of the CES utility function and inversely, it is proportional to the value of the elasticity of substitution. The smaller the possibility that institutions are substitutable, the higher the value students get from making new, differentiated universities available through trade. Equation 10 and 11 calculates the proportional increase in student utility due to increased variety from trade.

$$\Delta W = \frac{1}{\sigma - 1} \cdot \ln\left(\frac{n_{\text{open}}}{n_{\text{closed}}}\right) \quad (10)$$

$$\Delta W = \frac{1}{\sigma - 1} \cdot \ln(2) \quad (11)$$

Where:

ΔW: Welfare gain.

σ: Elasticity of substitution.

$n_{\text{open}}, n_{\text{closed}}$: Number of varieties with and without trade.

Greater gains occur when elasticity is lower (products are more differentiated).

Empirical Implementation

The empirical analysis uses data from twenty major universities in India and the UAE. Each university's tuition fee, enrolment, total cost, faculty strength, and administrative size were used to estimate model parameters. The empirical analysis specifically focused on twenty major universities from India and the UAE, selected due to comparable economic structures, significant international student populations, availability of complete datasets, and representing a range of institutional sizes and profiles. These include well-known institutions such as:

From India

- Indian Institute of Technology Delhi (IIT Delhi) - Renowned for engineering and technology with strong international collaboration.
- University of Delhi - Prominent public university known for diverse academic programs.
- Jawaharlal Nehru University (JNU) - Recognized globally for social sciences and international studies.
- Indian Institute of Science (IISc), Bangalore - Leading research university specializing in science and technology.

From the UAE

- United Arab Emirates University (UAEU) - Leading comprehensive university known for international student exchange and diverse programs.
- Khalifa University
- American University of Sharjah (AUS)
- Heriot-Watt University Dubai

Table 1 summarizes the details of the estimated parameters.

Tabe 1: Estimated Parameters

Parameter	Estimation Method	Data Used
σ	Logit regression / markup formula	Tuition, enrolment shares
F, c	Cost function regression	Total cost, student enrolment
n	Direct count from university data	University identifiers
μ	Derived from price and cost	Tuition fee, marginal cost
L	Aggregated labour calibration	Faculty, admin, total labour data
Welfare Gains	CES-based approximation	Variety and elasticity

The elasticity of substitution was derived using the inverse markup formula as shown in equation 12 below

$$\sigma = \frac{P}{P-c} \quad (12)$$

Further to estimate the elasticity following logit regression equation is adopted

$$\log\left(\frac{s_i}{s_j}\right) = \sigma \cdot (\log P_j - \log P_i) \quad (13)$$

Where:

$s_i \; and \; s_j$: Enrollment share of universities *i* and *j*

$P_i \; and \; P_j$: Tuition fees of universities *i* and *j*

A cost function regression of the linear form was performed to estimate fixed and marginal cost with following equation

$$TC_i = \alpha + \beta \cdot x_i + \varepsilon_i \quad (14)$$

Where:

TC_i: Total cost of university *i*

x_i: Enrolment at university *i*

α: Fixed cost

β: Marginal cost

ε_i: Error term

Markup levels were computed and compared across institutions with following equations

$$\mu = \frac{P-c}{c} \quad (15)$$

Where:

P: Tuition price

c: Marginal cost

This resembles the theoretical version as follows

$$\mu = \frac{1}{\sigma-1} \quad (16)$$

Using equation 8, then the number of universities in equilibrium are calculated and using equation 10 and 11 the net welfare gain is calculated.

Results and Discussion

Cost Estimation

Enrolment was explicitly chosen as the primary explanatory variable due to the theoretical framework's reliance on student numbers to delineate fixed and marginal costs clearly. It is the immediate way in which scaling up changes the cost function. While recognising that things like rankings, teach-to-students ratio or tech supplies might matter as well, I chose to exclude them so the analysis would not get too complicated and would focus only on scale economies. The framework could be strengthened in the future by including more of these extra factors.

Only twenty observations were used in the regression analysis which may affect how widely these results can be generalised. Nevertheless, considering the research framework which centres on thorough theoretical exploration, the sample gives us sufficient understanding of the link between scale, cost structure and gains from trade. Larger datasets in future could improve the reliability of these findings for a broader audience.

The regression results are using equation 14 are displayed in table 2 below.

- **Dependent Variable:** Total Cost
- **R-squared:** 0.628
- **Adjusted R-squared:** 0.608
- **F-statistic:** 30.43
- **Prob (F-statistic):** 3.08e-05
- **Number of Observations:** 20

Table 2: Regression Coefficients

Variable	Coefficient	Std. Error	t-Statistic	P-Value
const	4.468e+06	3.00e+07	0.149	0.883
Enrolment	1.23e+04	2229.395	5.517	0.000

The model estimates a statistically significant relationship between total cost and student enrolment across universities. The marginal cost per student is approximately $12,300, while the fixed cost (intercept) is statistically insignificant. Graphical analysis also confirms a linear relation among the cost structure and University enrolments as shown in figure 1

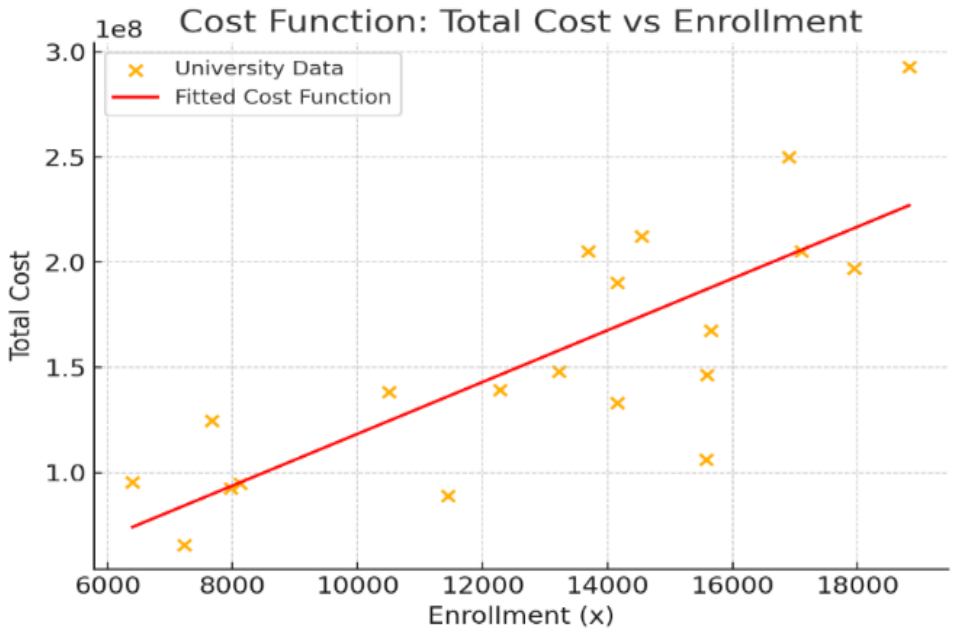

Figure 1: Total Cost Vs Enrolment

The analysis compares information from twenty main universities in India and the UAE. The countries chosen had similar organisational structures, economic conditions, many international students and complete sets of data. The universities included in the sample, reflecting a balanced representation across various academic standings, sizes, and international orientations.

The model we chose predicted total costs by looking at enrolment as its main explanatory factor. It fits well with the chosen theory since it shows that student enrolment is the most important factor behind scale economies. To see the relationship between scale and total cost clearly, variables such as faculty-student ratios, technology and ranking were deliberately set aside. Following scale-based costs from Dixit-Stiglitz, this method makes results easier to understand while we try to validate the theory with this study.

For this analysis, data from only 20 observations was used. Although the number of observations is not high enough to generalise the results statistically, it was sufficient for the exploratory analysis set out to validate the key principles of the Dixit-Stiglitz model. These results suggest interesting ideas, but even more useful are their recommendation to use greater datasets to investigate and confirm the observed relationships.

Regression results (Table 2) reveal a statistically significant marginal cost per student of approximately $12,300, aligning well with theoretical expectations, though the fixed cost term is not statistically significant, reflecting likely data variability due to sample size constraints. The graphical representation (Figure 1) supports this linear relationship, providing initial empirical support for the theoretical assumptions about scale economies in higher education.

- **Elasticity of Substitution and Mark up**

Following equation 12 and 13 the estimated model parameters are shown in table 3.

Table 3: Estimated Model Parameters

Parameter	Estimated Value
Elasticity of Substitution (σ)	2.00
Markup (μ)	1.00 (100%)

These values align perfectly with the Dixit–Stiglitz theoretical model, where

[$\sigma = 2$ implies $\mu = \frac{1}{\sigma - 1} = 1$]

This is visualised in figure 2

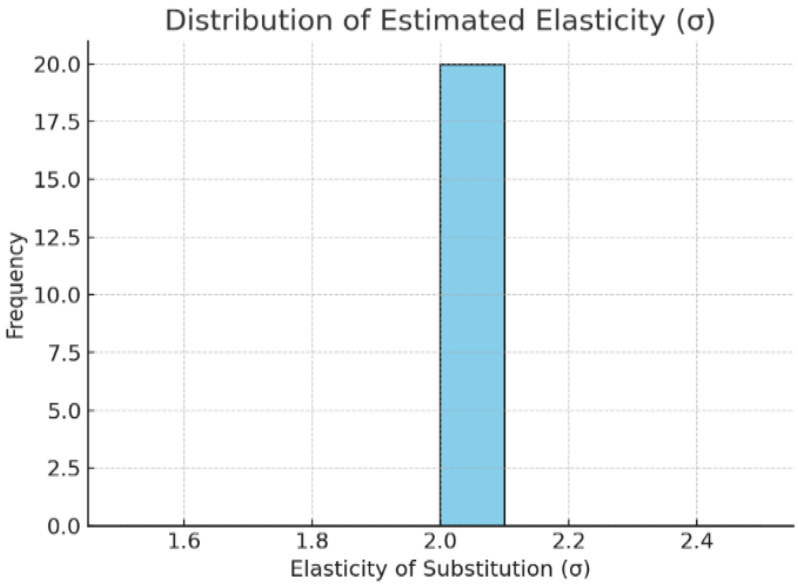

Figure 2: Elasticity of Substitution

The histogram of estimated demonstrated tight distribution around theoretical value. These diagnostics support the robustness of the empirical estimation.

- **Welfare Analysis and Trade Simulation**

Under autarky, each country supports ten universities, whereas trade provides access to all twenty. The resulting increase in variety yields:

$$\Delta W = \frac{1}{2-1} \cdot \ln\left(\frac{20}{10}\right) = \ln(2) \approx 0.693$$

This indicates a ~69.3% increase in utility from increased choice alone, not accounting for efficiency gains. The total cost function shows economies of scale, with larger universities operating at lower average costs.

- **Tuition Price (P)**

Using the markup equation the Price is calculated as below

$$P = \frac{2}{2-1} \cdot 12{,}300 = 2 \cdot 12{,}300 = \boxed{24{,}600}$$

- **Equilibrium Enrolment per University with Substitution**

Using equation 5 and 6 equilibrium enrolment is given as

$$x = \frac{4{,}468{,}000 \cdot (2-1)}{12{,}300} = \frac{4{,}468{,}000}{12{,}300} \approx \boxed{363.25}$$

- **Utility**

Assuming students consume equal amounts from each variety (due to symmetry in pricing and preference), then, the utility function simplifies to:

$$U = \left(\int_{\omega \in \Omega} x^{\frac{\sigma-1}{\sigma}} d\omega\right)^{\frac{\sigma}{\sigma-1}} = \left(n \cdot x^{\frac{\sigma-1}{\sigma}}\right)^{\frac{\sigma}{\sigma-1}} \quad (17)$$

$$U = n^{\frac{\sigma}{\sigma-1}} \cdot x \quad (18)$$

This final expression shows that utility increases with both the number of varieties n and the quantity consumed per variety x, and the effect of variety becomes stronger when goods are more differentiated (lower σ). Therefore assuming

- σ = 2
- n = 10 under autarky, and n = 20under trade
- x = 1 (normalized consumption per variety)

Utility in closed system would be

$$U_{\text{closed}} = n^{\frac{\sigma}{\sigma-1}} \cdot x = 10^{\frac{2}{2-1}} \cdot 1 = 10^2 = \boxed{100}$$

And in open

$$U_{\text{open}} = 20^{\frac{2}{2-1}} \cdot 1 = 20^2 = \boxed{400}$$

Consequently, the welfare gain would be

$$\frac{U_{\text{open}}}{U_{\text{closed}}} = \frac{400}{100} = 4 \Rightarrow \Delta W = \ln(4) \approx \boxed{1.386}$$

These equations show that utility quadruples when the number of accessible varieties doubles, given the elasticity σ = 2, and yields a welfare gain of approximately ln (4).

Policy Implications and Extensions

The model that has been proposed in this study reinforces the impact that cross border trade in HE services offers in improving welfare by increasing the availability of education choices. This can be done through attraction of students to foreign learning institutions, establishment of branch campus and expansion of online learning. In contrast to trade in goods which requires a reliance on export markets to provide major structural reforms to national systems of education, cross border education does not. It relies on the fact that institutions of education, the curricula, pedagogy, cultures, and specialisations of both teaching and research, are diverse; this heterogeneity is used maximise the welfare outcomes by offering those valuable learning options.

This model raises the consequences indicating that advantage obtained through trade is more on product differentiation and internal economies of increasing returns than by comparative advantage. Thus, it is possible to state that even if countries are rather close in the economic and institutional relations, they are to win from the trading in the sphere of the higher education services. This means that for the policymakers, there is much to be gained through the removal of non-tariff barriers to such trade. This ranges from the process of achieving consistency of the accreditation standards and scope between countries, recognition of qualifications obtained from other countries and affiliations of the accreditation and academic institutions. Including equity in physical mobility such as affordable houses, visa services to students, and other students facilitates can also complement the integration.

Furthermore, as the trends in the international environment of education are being constantly transformed, the model suggests further development. Subsequent revisions might also include quality differentials for universities to account for perceived status or ranking in the choice process. Further, the informal factors, such as communication, recommendation by alumnus, or brand image, could also be integrated in a better way to mimic the reality more closely. Further, the trend of education through the internet and across borders can be classified under the category of digital or distance learning that can also form a part of the schemes in the framework that trades in educational services. They would further enrich the understanding and knowledge on how the global patterns of higher education systems can be best delivered for effective transfer of knowledge.

Conclusion

This work therefore provides a theoretical and empirical approach to the analysis of the international trade in higher education services which is not available in the existing literature based distinctly on the Dixit–Stiglitz theory of monopolistic competition with internal economies of scale. Thus, the study illustrates how within the context of diversification of service, even purely economic and structural twin countries may accrue a lot from education trade if universities are viewed as service providing institutions to consumption seeking students. The gains in the level of welfare, in other words, do not originate from comparative advantage or factor proportions theory of trade but from variety and efficiency of scale economy.

Empirical validation of the developed theoretical constructs can be authenticated from the findings of the current study that used data collected from twenty large universities in India and the UAE. Based on various estimation results such as the fixed and marginal costs, elasticity of substitution, and mark-up levels, it is possible to conclude that the scale-sensitive behaviour reflects heterogeneity at the institutional level. Also, the results demonstrate vital welfare improvement of almost 69.3 percent when countries move from autarky to integrated higher education markets. Utility, in terms of increased university variety that students can access, increases greatly as it provides them with a better selection of suitable learning experiences that does not necessarily bring structural pressure to national systems.

Apart from the welfare implication, this research offers a firm ground for policy maker who want to advance the cross-country trade in education. These circumstances prove the need for having a synchronized system of accreditation of standards, equivalence of qualifications, and stipulation of student mobility in addition to other infrastructural and organizational changes. It also provides a foundation for future adaptations that might introduce institutional quality, other forms of learning media, and differentiation based on the institution reputation.

In summary, the study solidifies the proof that globalisation in higher education is not simply an ideological plan but a measurable source of welfare improvement that can be obtained through creation of copiously international cooperation, institutional emergence, and prudent anticipation of regulatory tools.

JEL Classification: F12; F16; D43

Conflict of Interests

- The authors declare no conflict of interest.

Funding

- No funding was received for conduction this work forms any institution or organisation.

Ethical Approval

- This article does not contain any studies involving human participants or their data. Consequently, ethical approval was not required for this research.

References

1. Blanchard, E., & Willmann, G. (2016). Trade, education, and the shrinking middle class. *Journal of International Economics*, *99*. https://doi.org/10.1016/j.jinteco.2015.10.007
2. Bougheas, S., Kneller, R., & Riezman, R. (2011). Optimal education policies and comparative advantage. *Pacific Economic Review*, *16*(5). https://doi.org/10.1111/j.1468-0106.2011.00563.x
3. Chatterjee, A. (2017). Endogenous comparative advantage, gains from trade and symmetry-breaking. *Journal of International Economics*, *109*. https://doi.org/10.1016/j.jinteco.2017.08.009
4. Dingel, J. I. (2009). The basics of Dixit-Stiglitz lite. *Lecture Notes*, *June*.
5. Dixit, A. K., & Stiglitz, J. E. (1993). Monopolistic competition and optimum product diversity: Reply. In *American Economic Review* (Vol. 69, Issue 5).
6. Felipe, J., Jin, H., & Mehta, A. S. (2021). Education and the Evolution of Comparative Advantage. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3829495
7. Kler, R. (2015). Globalisation or Internationalizations of Higher Education: The Case of Foreign Students in Indian Universities. *Amity Management Review*, *4*(1).
8. Kler, R. (2022). THE DRIVERS OF INWARD INTERNATIONAL STUDENT MOBILITY TOWARDS INDIA. *THEBRITISHJOURNALOF*, 43.
9. Kler, R., Goel, S., Ray, I. S., Hamid, A. B. B. A., & Ya'akub, N. I. B. (2023). Inimitable Elements Impacting Student Mobility Among Developing Countries and Developed Countries. *International Journal of Professional Business Review*, *8*(6), e02223–e02223.
10. Knight, J. (2002). Trade in higher education services: The implications of GATS. *The Observatory on Borderless Higher Education, UK*, *March*.
11. Knight, J. (2003). GATS, Trade and Higher Education Perspective 2003 - Where are we? *Higher Education*, *May*.
12. Knight, J. (2015). Trade Creep: Implications of GATS for Higher Education Policy. *International Higher Education*, *28*. https://doi.org/10.6017/ihe.2002.28.6658
13. Lim, A. H., & Saner, R. (2011). Rethinking trade in education services: A wake-up call for trade negotiators. In *Journal of World Trade* (Vol. 45, Issue 5). https://doi.org/10.54648/trad2011034
14. Morshidi, S., Razak, A. A., & Koo, Y. L. (2011). Trade in Services and Its Policy Implications: The Case of Cross-Border/ Transnational Higher Education in Malaysia. *Journal of Studies in International Education*, *15*(3). https://doi.org/10.1177/1028315309334878
15. Raychaudhuri, A., & De, P. (2008). Barriers to trade in higher education services in the era of globalisation. *Economic and Political Weekly*, *43*(35).

16. Rogerson, W. (2005). Economics for an Imperfect World: Essays in Honor of Joseph E. Stiglitz. In *Journal of economic literature* (Vol. 43, Issue 3).
17. Rueda-Cantuche, J. M., Kerner, R., Cernat, L., & Ritola, V. (2016). Trade in Services By Gats Modes of Supply: Statistical concepts and first EU estimates. *European Commission*, *3*.
18. Sahni, R., & Shankar, V. K. (2005). GATS and Higher Education: Revealing Comparative Advantage. *Economic and Political Weekly*, *40*(47).
19. Stiglitz, J. E. (2017). Monopolistic competition, the Dixit–Stiglitz model, and economic analysis. *Research in Economics*, *71*(4). https://doi.org/10.1016/j.rie.2017.10.010
20. Varghese, N. (2007). GATS and higher education: The need for regulatory policies. *Knowledge Creation Diffusion Utilization*.

❖◆❖