AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

ISSN: 1444-8890

ECONOMIC THEORY, APPLICATIONS AND ISSUES

Working Paper No. 76

Financial Implications of Seasonal Variability in Demand for Tourism Services (A Draft)

by

Clem Tisdell

August, 2016

THE UNIVERSITY OF QUEENSLAND

ISSN 1444-8890

ECONOMIC THEORY, APPLICATIONS AND ISSUES

(Working Paper)

Working Paper No. 76

Financial Implications of Seasonal Variability in Demand for Tourism Services (A Draft)[1]

by

Clem Tisdell[2]

August, 2016

© All rights reserved

[1] The draft of a proposed contribution to Chia-Lin Chang and Michael McAleer (eds) "Handbook of Tourism Finance: Connecting Tourism and Finance" to be published by World Scientific. Comments welcome.

[2] School of Economics, The University of Queensland, St. Lucia Campus, Brisbane QLD 4072, Australia
Email: c.tisdell@economics.uq.edu.au

`

WORKING PAPERS IN THE SERIES, *Economic Theory, Applications and Issues,* are published by the School of Economics, University of Queensland, 4072, Australia.

Production of the series *Economic Theory, Applications and Issues* and two additional sets were initiated by Professor Clem Tisdell. The other two sets are *Economics Ecology and Environment* and *Social Economics, Policy and Development*. A full list of all papers in each set can be accessed at the following website: http://www.uq.edu.au/rsmg/clem-tisdell-working-papers

For more information write to Professor Clem Tisdell, School of Economics, University of Queensland, St. Lucia Campus, Brisbane 4072, Australia or email c.tisdell@economics.uq.edu.au

In addition, the following working papers are produced with the Risk and Sustainable Management Group and are available at the website indicated. *Murray-Darling Basin Program, Risk and Uncertainty Program, Australian Public Policy Program, Climate Change Program* :http://www.uq.edu.au/rsmg/working-papers-rsmg

For further information about these papers, contact Professor John Quiggin, Email: j.quiggin@uq.edu.au

Financial Implications of Seasonal Variability in Demand for Tourism Services (A Draft)

ABSTRACT

Using Jensen's inequality (and its mathematical generalization), this contribution shows how increased seasonal (periodic) variability of demand for tourism services can increase the annual profit of a tourism enterprise and the producers' surplus of a corresponding competitive segment of the tourism industry experiencing this increased variability. It identifies conditions which result in these effects being magnified and takes account of the fact that a tourism business' supply of services is often subject to capacity utilization constraints. A novel feature is that allowance is made for the possibility that variations in the market demand for tourism services may alter the prices of factors of production.

Keywords: demand variability; Jensen's inequality, price instability in tourism; profitability in tourism and demand variability; producers' surplus and demand variability.

JEL Classifications: C02; D20; D41; L83.

Financial Implications of Seasonal Variability in Demand for Tourism Services (A Draft)

1. Introduction

The demand for many tourism services alters throughout the year mainly due to changing seasons and variations in the pattern of public holidays. As a result, the extent to which tourism services are utilized normally varies throughout the year and affects the annual profits of tourism enterprises. In the low season, they often find that they have considerable excess capacity whereas in the high season their capacity is fully utilized. An interesting question is: would the annual profits of a tourism business be increased by reducing the variability of demand for its services? It will be shown that this may actually reduce the firm's profits.

This is shown by adapting the findings of Walter Oi (1961) to this case and mathematically extending his results by making use of Jensen's inequality (Jensen, 1906; Anon, 2016) and its generalization presented by Hardy et al. (1934, theorem 90, p. 74). The generalization by Hardy et al. covers the extension of Jensen's inequality by Karamata (1932). A purely (perfectly) competitive economic model is assumed of the standard type first developed by Alfred Marshall (1890). Initially, a diagrammatic exposition (similar to that used by Oi) is employed to show how known seasonal variations in the demand for tourism services add to focal enterprises' annual profit and the producers' economic surplus in the corresponding segment of the tourism industry experiencing these fluctuations compared to a stationary level of demand throughout the year. Secondly, the mathematical generalization of this result follows. Subsequently, attention is given to how capacity considerations might influence the results. This is followed by a discussion of the findings, paying attention to qualifications and ways in which the analysis might be extended.

2. An Example of How Seasonal Variability in Demand for Tourism Services can Increase the Profitability of a Firm and the Economic Surplus of the Corresponding Segment of the Tourism Industry.

Suppose that the segment of the tourism industry under investigation is purely competitive. Businesses operating in this segment are consequently price-takers. Furthermore, for simplicity, imagine that for half of the year there is a high level of demand for the services of this segment of the tourism industry (for example, tourist accommodation) and for the other half, there is a low level of demand for these services. Consequently, in the case shown in Figure 1(b) (in which BS represents the supply schedule) this may result in market equilibrium in the relevant segment of the industry being established at E_1 during the low season and at E_2, in the high season. Then the market price of services (for example, accommodation) is P_1 during the low season and is P_2 in the high season. Therefore, the average price of these services for the year is $\overline{P} = 0.5\ (P_1 + P_2)$. Note that the demand schedules are not shown in Figure 1(b). They can take any form and they need not shift in a parallel fashion. The relevant question is: if demand can be stabilized at $\overline{P}$, would the producers' economic surplus in this segment of the tourism industry and the annual profit of enterprises operating in this segment be lower or higher than when seasonal variability of demand prevails?

Figure 1(a) **Figure 1(b)**

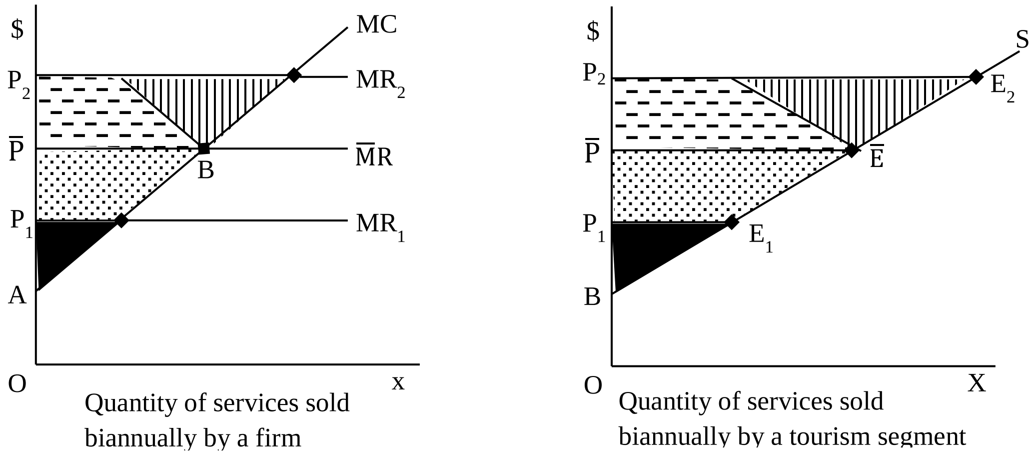

Figure 1: An illustration to show that an increase in the variability of demand for tourism services in a segment of the tourism industry raises the producers' economic surplus obtained in this segment and the profitability of firms operating in this segment. Note that the horizontal scale of Figure 1(b) is compressed compared to that of Figure 1(a).

Given the case illustrated in Figure 1, it can be shown that the annual profit of tourism operators rises with greater seasonal variability of demand and also producers' surplus in the corresponding segment of the tourism industry. When the price of tourism services is $\overline{P}$ throughout the year, the annual operating profit of a representative firm is equal to twice the shaded plus the dotted area in Figure 1(a). In Figure 1(b), the annual producers' surplus is also equal to twice the shaded area plus the dotted area. The annual profit of the representative firm rises by an amount equivalent to the hatched triangular area shown in Figure 1(a) when the price of tourism services is P_1 for half the year and P_2 for the remainder. Producers' surplus also increases by an amount equivalent to the hatched triangular area shown in Figure 1(b). The proof is the same for both cases so that for the representative firm need only be presented.

In the low season (when price is P_1), the profit of the representative firm is below that when price is stabilized at $\overline{P}$ by an amount equivalent to the dotted area in Figure 1(a).

On the other hand, when price is P_2, profit in the high season exceeds that when price is stationary throughout the year by an amount equal to the sum of the flecked area **plus** the hatched area. The flecked area is the mirror image of the dotted area. Hence, the increase in annual profit of the firm as a result of seasonal variability in demand for its services is equivalent to the hatched area. Furthermore, as the difference in demand between seasons increases so too does the firm's annual profitability.

It can also be shown that seasonal variability of demand is more profitable to a firm the more responsive are its operating costs to altering demand conditions. This happens (other things being held constant) when the slope of the marginal cost curve as a function of output is reduced, that is the rate of change of the marginal cost curve declines (Tisdell, 1968, Ch. 6). In this case, the change in a firm's operating (variable) cost becomes more responsive to variations in the price of tourism services.

3. Mathematical Generalization

The results illustrated in Figure 1 can be mathematically generalized using Jensen's inequality and its most general form as set out by Hardy et al. (1934, theorem 90, p. 74). This is because if the marginal cost of a tourism business increases with its supply of tourism services, $C'(x) > 0$, for values greater than its average variable cost, its operating profit as a function of the price of these services (determined by their market equilibrium value) increases at an increasing rate for values of P in excess of the firm's minimum average variable cost of production. The firm's operating profit function (in this range) is therefore a strictly convex function of P. The mathematics of this is explained in Tisdell (1968, Appendix to Chapter 5). When price is less than its minimum average variable, it pays the business to close down for this period and its operating profit is then zero. Consequently, an operating loss is avoided for that period.

Let π represent the level of maximum profit of the firm when price is P and let P_0 correspond to the minimum of the average variable cost of the firm. Then the following relationship exists if the second derivative of its total variable costs as a function of its supply of tourism services (x) is positive.

$$\pi = f(P) \quad f' > 0, \ f'' > 0 \text{ for } P \geq P_0 \tag{1}$$

$$= 0 \qquad \text{for } P < P_0 \qquad (2)$$

In the case illustrated in Figure 1(a) where the marginal cost schedule of the firm is linear, the function π consists of a portion of the positive branch of a quadratic function for $P > P_0$. P_0 is the intercept of the firm's marginal cost curve with the horizontal axis in Figure 1(a). P_0 is also the minimum of the firm's average variable cost in this case.

Given that the function f(P) is strictly convex for P_0, Jensen's inequality and its extensions apply. This inequality has been primarily applied to probability theory. A different novel application will be given here. However, first consider the implication of the theory for probability theory. If f(P) is strictly convex and P is variable then,

$$E\,[f\,(P)] > f\,(E[P]) \qquad (3)$$

where E represents the statistical expected values (first moments) of the relevant random variables involved. This expression indicates that the expected value of the function f(P) is greater when P is variable than when P is constant at the average of its variable values. This result basically follows because the chord (secant) jointing any two different points on a strictly convex function lies above the function.

This is illustrated in Figure 2 for a biannual case. Note that relative frequencies rather than probabilities are relevant to this tourism application of Jensen's inequality. In Figure 2, the continuous portion of f(P) is represented by the strictly convex curve ABCE and for $P < P_0$, it corresponds to point O, a zero operating profit. If for half the year, the price of tourism services is P_1 and for the other half it is P_2, the average annual price of tourism services is $\overline{P} = 0.5\,P_1 + 0.5\,P_2$. If the demand curve stabilized so that $\overline{P}$ prevailed throughout the year, annual profit of the firm amounts to twice $\bar{\pi}$. However, if price is seasonally variable, annual profit is equal to twice $\hat{\pi}$ which is greater than twice $\bar{\pi}$ because $\hat{\pi}$ lies on the center of the chord BE at point D which is above point C.

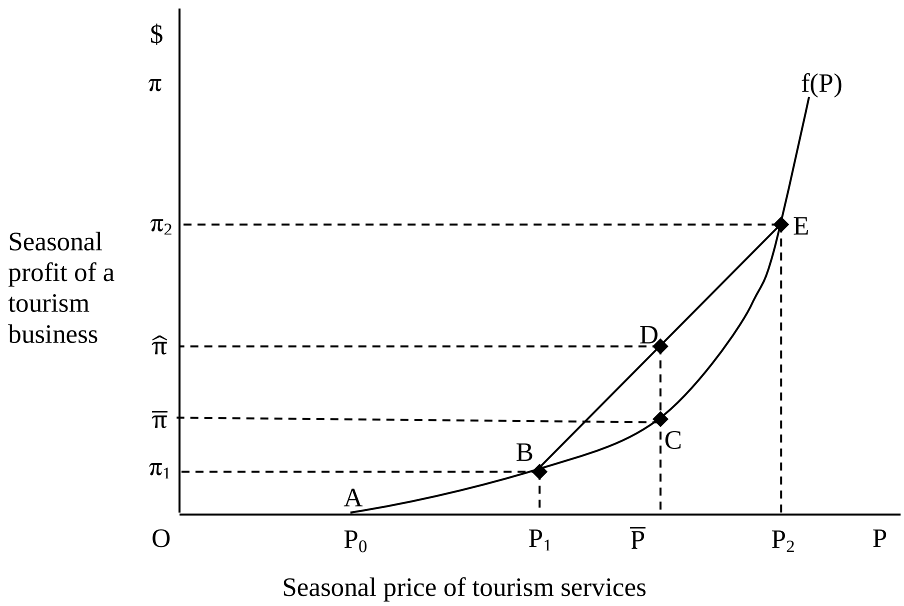

Figure 2: An illustration of Jensen's inequality which is re-interpreted so as to show the impact on the profitability of a firm of the seasonal variability of demand for tourism.

Given this mathematical representation, the annual profit of the tourism business is greater the more variable is the seasonal demand for its services, the level of average seasonal demand remaining constant. Other things equal, this effect is magnified the greater is the convexity of f(P), that is the larger is f''. In turn, f'' is larger, the smaller is the rate of change of the firm's marginal cost in relation to its supply of tourism services.

Given this neoclassical economic model of the firm, a firm's operating profit as a function of the market price of its product is discontinuous, because when this price is less than its average variable costs, it does not pay the firm to operate. Nevertheless, a chord joining the zero value of the profit function to a price level where it does pay to operate will be in a superior position to f(P). While increased price variability for values less than the minimum of average variable cost will have no effect on annual profitability, other things held constant, increased price variability for prices in excess of a firm's minimum average variable cost will elevate its annual profit even if it does not pay it to operate in some seasons.

Consider how the model outlined above can be made operational in the case of a tourism business experiencing seasonal (periodic) variation in the demand for its services. The seasons or periods considered need to be of equal lengths and the short run cost functions ought to be the same in each period. Obtaining seasons or periods of equal lengths for a year is not a serious constraint if the periods are based on weeks because 52 has several different possible divisions which yield whole numbers.

If the year is divided into *n* equal periods, if *i* indicates the *i*-th period, and if r_i is the relative (annual frequency) of period *i*, which numerically has a value of *i/n* (which can also be expressed as r^{-1}), then when the price of tourism services varies throughout the year,

$$\sum_{i=1}^{n} n^{-1} f(P_i) > f\left(\sum_{i=1}^{n} P_i/n\right) \tag{4}$$

assuming that all values of P are not less than P_o. This inequality corresponds to inequality (3). The annual profit of the tourism business is equal to *n* times the expressions in inequality (4). Consequently, the annual profit of the tourism services is higher when the price (demand for its services) varies seasonally or periodically throughout the year compared to situations in which the demand for its services is stable at the average of the altering price. It is higher by an amount *n* times the L.H.S. of expression (4) less *n* times that on its R.H.S. There is even room for the stabilized price of tourism services to be somewhat higher than the average fluctuating price and for the annual profits of the firm to be higher with price variability than in its absence.

The same type of mathematical analysis as that used above can be employed to specify the effects of demand variability on the level of producers' economic surplus in a segment of the tourism industry. If the supply curve of this segment has a normal slope, producers' surplus as a function of the equilibrium prices of the tourism services supplied by this segment increases at an increasing rate. Therefore, producers' surplus as a function of the equilibrium price of tourism services is strictly convex. Hence the same mathematical analysis applies to this case.

4. Allowing for Capacity Constraints

The above analysis of the effect on the profits of a tourism enterprise of fluctuations in the demand for its services does not allow for capacity constraints. However, in the short-run, many tourism enterprises have capacity constraints, for example, the total number of hotel rooms, the available seats in buses, airplanes and so on. How does this affect the result outlined above? Perhaps surprisingly, the firm may still benefit from increased variability of demand for its services which results in its operating at full capacity for part of the year and at less than full capacity for the remainder of the year. This can be shown by modifying Figure 1, and is illustrated in Figure 3.

In Figure 3, the representative firms biannual supply of tourism services reaches full capacity at $x = x_k$ and the line AB represents its marginal cost schedule. Let P_k be the price of tourism services that just makes it profitable for the firm to operate at full capacity. If the price of its services is P_k throughout the year, the firm's total annual profit will be equal to twice the shaded area plus the dotted area. Now suppose that the price of these services is P_1 in the low season and P_2 in the high season so that on average the price of these services is P_k. Annual profit will increase by an amount equal to the hatched area. The same type of argument is relevant as that applied in the case illustrated by Figure 1. Moreover, the greater is the disparity between P_1 and P_2, the larger will be this hatched triangle. The firm benefits by not fully utilizing its capacity throughout the year in this case.

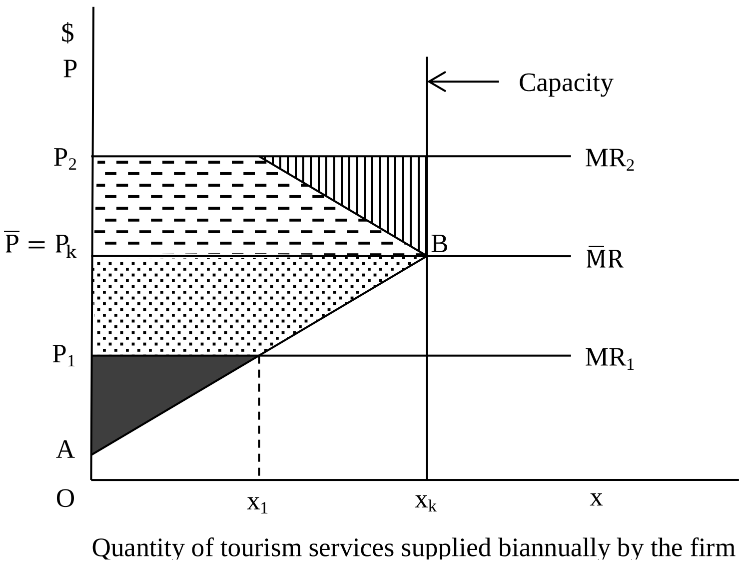

Figure 3: An illustration that the annual profit of a tourism enterprise can be increased by greater seasonal (periodic) variability in the demand for its services resulting in it transiting from a situation where its capacity is fully utilized throughout the year to one in which its capacity is underutilized for a part of the year.

It may come as a surprise to discover that having underutilized capacity in the tourism industry for part of the year can be profitable. Note that if prices are always such that the firm's capacity is fully utilized, its annual profit is not increased by greater price instability given that the average price level of tourism services remains constant. This is because its level of operating is a linear function of P in these circumstances.

Note that the firm's marginal cost curve need not be linear for the above results to follow. Also the previous modelling can be adjusted to fit this case. In this case, the firm's operating profit function f(P) is zero for P < minimum average variable cost; strictly convex for $P_0 \leq P \leq P_k$ (where P_0 corresponds to the minimum of average variable cost) and linear for $P > P_k$.

5. Discussion and Concluding Comments

Although the above modelling is relatively general, it does have some limitations. It supposes that the firm’s cost function is the same for each period. The prime assumption needed is that its production efficiency remains the same in all periods. However, it is possible to allow for systematic periodic changes in factor prices both in constructing the focal supply schedule of the industry and the corresponding marginal cost schedule actually experienced by firms operating in that segment. This model can take account of a situation in which the level of production of a segment of the tourism industry increases the prices of variable inputs as the level of the segment’s production rises. In this case, the adjusted supply curve of the focal segment of the industry becomes steeper when the rate of change in factor prices as a function of the level of production of this focal segment increases. Hence, increased annual producers’ surplus as a result of magnified demand variability will be lower the more sensitive are resource prices to the level of production of this segment of the tourism industry. Furthermore, the adjusted marginal cost curves of firms (that is, adjusted to allow for variations in resource prices) will be steeper in these circumstances. Consequently, the economic benefit firms obtain from the increased variability of demand for their tourism services is reduced. However, these benefits would only be eliminated if this phenomenon caused their adjusted marginal cost curves to become perfectly inelastic, which is very unlikely. The same applies to producers’ surplus: producers’ surplus would only fail to increase in response to increased variability of demand if the adjusted supply curve happened to become perfectly inelastic. The propositions set out in this paragraph can be easily illustrated by modifying diagrams 1(a) and 1(b) in Figure 1. The adjusted market supply curve rotates in an anti-clockwise fashion on the fixed point $\overline{E}$ and the marginal cost curve does likewise on the fixed point B.

The modelling does not allow for errors which may be made by firms in their production decisions because of possible uncertainty about the level of periodic (seasonal) demand for their services. The importance of seasonal price uncertainty is probably not as great in the tourism industry as in agriculture but is unlikely to be completely absent in all segments of the industry. Types of adjustment which can be made to allow for this uncertainty are set out in Tisdell (1968). If increased errors in production decisions occur as product variability rises, this reduces the economic benefit to a firm of price variability, and if these errors are extreme, product price variability can lower the profit of the business.

Another relevant issue is whether a business will in fact maximize its profit by closing down when the price of its product is below the minimum of its average variable cost of supplying tourism services. In some cases, it may pay the firm to hoard staff in periods of low demand because it may be difficult to re-hire qualified staff when demand recovers. Costs are therefore, not entirely reversible; an element of hysteresis may be present. In general, the extent to which it pays a tourism business to alter the flexibility of its operations to cope with product price variability and uncertainty is an additional aspect worthy of consideration. This is given some attention in Tisdell (1968, Ch. 6).

Further extension of the theory is desirable to take account of situations involving imperfect competition. This will not be attempted here. Nevertheless, there are circumstances in which the basic theory does extend to situations involving imperfect competition.

To conclude: it has been shown that increased seasonal (periodic) variability of demand for tourism services can increase the annual profit of tourism enterprises and also producers' surplus in those segments of the tourism industry experiencing increased variability of demand. Factors which influence the size of these effects have been identified and qualifications to the basic theory have been specified. The results obtained are not intuitively obvious. For example, it can be more profitable for a tourism business to have excess capacity for part of the year rather than have a stabilized demand situation in which its capacity is fully utilized throughout the year.

6. References

Anon (2016), '*Jensen's inequality'*, Wikipedia. Available at https://en.wikipedia.org/wiki/Jensen%27s_inequality. [Accessed 2 August 2016].

Hardy, G.H., J.E. Littlewood and G. Polya (1934), *Inequalities,* Cambridge, UK: Cambridge University Press.

Jensen, J.L.W.V. (1906), 'Sur les fonctions convexes et les inégalités entre les valeurs moyennes', *Acta Mathematica*, **30**(1)**,** 175-193. doi: 10.1007/BF02418571.

Karamata, J. (1932), 'Sur une inégalité relative aux fonctions convexes ', *Publications Mathematiques de l'Université de Belgrade,* **1,** 145-148.

Marshall, A. (1890), *Principles of Economics*, 1st Edn., London: Macmillan.

Oi, W.Y. (1961), 'The desirability of price instability under perfect competition', *Econometrica*, **29,** 58-64.

Tisdell, C.A. (1968), *The Theory of Price Uncertainty, Production and Profit,* Princeton, NJ: Princeton University Press. Reprinted, 2015 and available online.

PREVIOUS WORKING PAPERS IN THE SERIES
ECONOMIC THEORY, APPLICATIONS AND ISSUES

1. Externalities, Thresholds and the Marketing of New Aquacultural Products: Theory and Examples by Clem Tisdell, January 2001.
2. Concepts of Competition in Theory and Practice by Serge Svizzero and Clem Tisdell, February 2001.
3. Diversity, Globalisation and Market Stability by Laurence Laselle, Serge Svizzero and Clem Tisdell, February 2001.
4. Globalisation, the Environment and Sustainability: EKC, Neo-Malthusian Concerns and the WTO by Clem Tisdell, March 2001.
5. Globalization, Social Welfare, Labor Markets and Fiscal Competition by Clem Tisdell and Serge Svizzero, May 2001.
6. Competition and Evolution in Economics and Ecology Compared by Clem Tisdell, May 2001.
7. The Political Economy of Globalisation: Processes involving the Role of Markets, Institutions and Governance by Clem Tisdell, May 2001.
8. Niches and Economic Competition: Implications for Economic Efficiency, Growth and Diversity by Clem Tisdell and Irmi Seidl, August 2001.
9. Socioeconomic Determinants of the Intra-Family Status of Wives in Rural India: An Extension of Earlier Analysis by Clem Tisdell, Kartik Roy and Gopal Regmi, August 2001.
10. Reconciling Globalisation and Technological Change: Growing Income Inequalities and Remedial Policies by Serge Svizzero and Clem Tisdell, October 2001.
11. Sustainability: Can it be Achieved? Is Economics the Bottom Line? by Clem Tisdell, October 2001.
12. Tourism as a Contributor to the Economic Diversification and Development of Small States: Its Strengths, Weaknesses and Potential for Brunei by Clem Tisdell, March 2002.
13. Unequal Gains of Nations from Globalisation by Clem Tisdell, Serge Svizzero and Laurence Laselle, May 2002.
14. The WTO and Labour Standards: Globalisation with Reference to India by Clem Tisdell, May 2002.
15. OLS and Tobit Analysis: When is Substitution Defensible Operationally? by Clevo Wilson and Clem Tisdell, May 2002.
16. Market-Oriented Reforms in Bangladesh and their Impact on Poverty by Clem Tisdell and Mohammad Alauddin, May 2002.
17. Economics and Tourism Development: Structural Features of Tourism and Economic Influences on its Vulnerability by Clem Tisdell, June 2002.
18. A Western Perspective of Kautilya's Arthasastra: Does it Provide a Basis for Economic Science? by Clem Tisdell, January 2003.
19. The Efficient Public Provision of Commodities: Transaction Cost, Bounded Rationality and Other Considerations.
20. Globalization, Social Welfare, and Labor Market Inequalities by Clem Tisdell and Serge Svizzero, June 2003.
21. A Western Perspective on Kautilya's 'Arthasastra' Does it Provide a Basis for Economic Science?, by Clem Tisdell, June 2003.
22. Economic Competition and Evolution: Are There Lessons from Ecology? by Clem Tisdell, June 2003.
23. Outbound Business Travel Depends on Business Returns: Australian Evidence by Darrian Collins and Clem Tisdell, August 2003.
24. China's Reformed Science and Technology System: An Overview and Assessment by Zhicun Gao and Clem Tisdell, August 2003.

25. Efficient Public Provision of Commodities: Transaction Costs, Bounded Rationality and Other Considerations by Clem Tisdell, August 2003.
26. Television Production: Its Changing Global Location, the Product Cycle and China by Zhicun Gao and Clem Tisdell, January 2004.
27. Transaction Costs and Bounded Rationality – Implications for Public Administration and Economic Policy by Clem Tisdell, January 2004.
28. Economics of Business Learning: The Need for Broader Perspectives in Managerial Economics by Clem Tisdell, April 2004.
29. Linear Break-Even Analysis: When is it Applicable to a Business? By Clem Tisdell, April 2004.
30. Australia's Economic Policies in an Era of Globalisation by Clem Tisdell, April 2004.
31. Tourism Development as a Dimension of Globalisation: Experiences and Policies of China and Australia by Clem Tisdell, May 2004.
32. Can Globalisation Result in Less Efficient and More Vulnerable Industries? by Clem Tisdell, October 2004.
33. An Overview of Globalisation and Economic Policy Responses by Clem Tisdell, November 2004.
34. Changing Abundance of Elephants and Willingness to Pay for their Conservation by Ranjith Bandara and Clem Tisdell, December 2004.
35. Economic Globalisation: The Process and its Potential Social, Economic, and Environmental Impacts by Clem Tisdell, October 2005.
36. Introduction: An Overview and Assessment of The Economics of Leisure by Clem Tisdell, November 2005.
37. Globalisation and the Economic Future of Small Isolated Nations, Particularly in the Pacific by Clem Tisdell, November 2005.
38. Business Partnerships in a Globalising World: Economic Considerations by Clem Tisdell, December 2005.
39. Economic and Business Relations Between Australia and China: An Overview and an Assessment by Clem Tisdell, November 2006.
40. China's Economic Performance and Transition in Relation to Globalisation: From Isolation to Centre-Stage? by Clem Tisdell, November 2006.
41. Knowledge and the Valuation of Public Goods and Experiential Commodities: Information Provision and Acquisition by Clem Tisdell, November 2006.
42. Students' Evaluation of Teaching Effectiveness: What Surveys Tell and What They Do Not Tell by Clem Tisdell and Mohammad Alauddin, November 2006.
43. Economic Prospects for Small Island Economies, Particularly in the South Pacific, in a Globalising World by Clem Tisdell, November 2006.
44. The Evolution and Classification of the Published Books of Clem Tisdell: A Brief Overview by Clem Tisdell, July 2007.
45. Cost-Benefit Analysis of Economic Globalization by Clem Tisdell, January 2008.
46. Economic Benefits and Drawbacks of Cities and their Growth Implications by Clem Tisdell, January, 2008.
47. Interfirm Networks in the Indonesian Garment Industry: Trust and Other Factors in their Formation and Duration and their Marketing Consequences by Latif Adam and Clem Tisdell, April, 2008.
48. Trust and its Implications for Economic Activity, Welfare and Globalisation by Clem Tisdell, April, 2008.
49. Economics, Corporate Sustainability and Social Responsibility by Clem Tisdell, May 2008.
50. Structural Transformation in the Pig Sector in an Adjusting Vietnam Market: A Preliminary Investigation of Supply-side Changes by Clem Tisdell, September 2008
51. Thirty Years of Economic Reform and Openness in China: Retrospect and Prospect by Clem Tisdell, October 2008.

52. Quantitative Impacts of Teaching Attributes on University TEVAL Scores And Their Implications by Clem Tisdell and Mohammad Alauddin, April 2009.
53. A Comparative Economic Study of the Chinese and Australian Cotton Production by Xufu Zhao and Clem Tisdell, May 2009
54. Trends in Vietnam's Pork Supply and Structural Features of its Pig Sector by Clem Tisdell, May 2009.
55. Economic Reform and Openness in China: China's Development Policies in the Last 30 Years by Clem Tisdell, June 2009.
56. The Survival of Small-scale Agricultural Producers in Asia, particularly Vietnam: General Issues Illustrated by Vietnam's Agricultural Sector, especially its Pig Production by Clem Tisdell, June 2009.
57. Economic Benefits and Drawbacks of Cities and their Growth Implications by Clem Tisdell, September 2009.
58. Economic Challenges Faced by Small Island Economies: An Overview by Clem Tisdell, September, 2009.
59. Natural Protection from International Competition in the Livestock Industry: Analysis, Examples and Vietnam's Pork Market as a Case by Clem Tisdell, Ma. Lucila Lapar, Steve Staal and Nguyen Ngoc Que. November, 2009.
60. Agricultural Development in Transitional Asian Economies: Observations Prompted by a Livestock Study in Vietnam by Clem Tisdell. May 2010
61. An Economic Study of Small Pigholders in Vietnam: Some Insights Gained and the Scope for Further Research by Clem Tisdell, May 2010.
62. The Excitement and Value of Discovering Tourism Economics: Clem Tisdell's Journey by Clem Tisdell, May 2010.
63. The Competitiveness of Small Household Pig Producers in Vietnam: Significant Research and Policy Findings from an ACIAR-sponsored Study and their Limitations by Clem Tisdell, November 2010.
64. Animal Health Economics. What Can It Do? What Are The Big Questions? By Clem Tisdell December 2010.
65. Agriculture, Structural Change and Socially Responsible Development in China and Vietnam. By Clem Tisdell, April 2012.
66. My Book, "Economic Development in the Context of China": Its Origins plus Experiences in China in 1989 and their Sequel". Clem Tisdell, August, 2013.
67. Information Technology's Impacts on Productivity, Welfare and Social Change: General Observations. Clem Tisdell, July, 2014.
68. Theories about the Commencement of Agriculture in Prehistoric Societies: A Critical Evaluation by Serge Svizzero and Clement Tisdell, August 2014.
69. Inequality and Wealth Creation in Ancient History: Malthus' Theory Reconsidered by Serge Svizzero and Clement Tisdell, September, 2014.
70. Information Technology's Impacts on Productivity, Welfare and Social Change: Second Version by Clement Tisdell, December 2014.
71. The Failure of Neoclassical Economics Modelling and Human Behavioural Ecology to Satisfactorily Explain the Evolution of Neolithic Societies by Clem Tisdell and Serge Svizzero, February, 2015.
72. The Collapse of Some Ancient Societies due to Unsustainable Mining Development (A Draft) by Clem Tisdell and Serge Svizzero, April 2015.
73. Rent Extraction, Population Growth and Economic Development: Development Despite Malthus' Theory and Precursors to the Industrial Revolution by Clem Tisdell and Serge Svizzero, May 2015.
74. The Role of Palatial Economic Organization in Creating Wealth in Minoan and Mycenaean States by Serge Svizzero and Clem Tisdell, June 2015.
75. Different Behavioral Explanations of the Neolithic Transition from Foraging to Agriculture: A Review by Clem Tisdell and Serge Svizzero, January 2016.