

成本效益決策分析
Cost Benefit Decision Analysis
627 M5260
一一〇學年第一學期

授課老師： 吳珮瑛
農業綜合館 214室
3366-2663
Email:piwu@ntu.edu.tw

授課對象： 碩士在職專班學生

學 分： 3學分選修課

課程目的： 本課程將介紹成本效益分析決策的基本原理、原則與方法，同時討論成本與效益用於公部門及私部門財貨或勞務評估的差異，及其與成本有效性評估的區別。除解析成本效益分析方法用於評估公部門財貨與勞務之個案外，並特別探討相關方法用於私部門財貨、勞務及企業社會責任之評估實例。

課程要求：(一) 上課參與及出席：不定期點名（一次以20分計）及分組討論之參與。

(二) 分組討論：每一小組規劃一個個案，說明你們要進行此個案前應考慮什麼項目與因素？又相關項目是否有適當的評估方法？如有、你們將採用本課程講授的那一種（些）評估概念或方法完成個案中某些項目的評估？你不需要找任何數據資料完成任何評估，重點是在規劃、不是真的需要完成一個評估後決定是否執行該計畫，這部分等你是老闆或任職公部門時再好好發揮。（如何分組、規劃所需完成的工作，屆時將有詳細指引與說明）

學期分數評分標準：

上課出席	50%
分組討論、報告及參與	50%

主要用書（以下所列書本有相對完整的成本效益分析學理及評估相關方法；部分書本也有個案，列於各主題下，是來自期刊文章個案，以下所列只是一些範例，一篇文章雖列於某主題下，然可能亦橫跨於兩個及以上主題）

蕭代基、鄭蕙燕、吳珮瑛、錢玉蘭、溫麗琪，2002。『環境保護之成本效益分析：理論、方法與應用』，台北：俊傑書局。

James David and Herminia A. Francisco, ed. 2015. *Cost-benefit Studies of Natural Resource Management in Southeast Asia*. Singapore: Springer. 學校有電子書。

Organization for Economic Co-operation and Development (OECD), 2018. *Cost-Benefit Analysis and the Environment: Further Developments and Policy Use*. Paris: Organization for Economic Co-operation and Development Publishing. 學校有電子書

上課講義與所發的相關文章。

上課日期及時間：

2021年09月26日（星期日）10:00-13:00；14:00-17:00
2021年10月03日（星期日）10:00-13:00；14:00-17:00
2021年10月24日（星期日）10:00-13:00；14:00-17:00
2021年11月07日（星期日）10:00-13:00；14:00-17:00
2021年11月21日（星期日）10:00-13:00；14:00-17:00
2021年12月05日（星期日）10:00-13:00；14:00-17:00
2021年12月26日（星期日）10:00-13:00；14:00-17:00
2022年01月09日（星期日）10:00-13:00；14:00-17:00

實體上課地點：

目前尚未確切安排各週的上課地點（台北或雲林），原則上以台北為主，而教室為農經三教室，若遇疫情因有用餐問題，因此至雲林適當教室及週次尚待安排。

台北：台大校本部，農業綜合館二樓農經三教室。

雲林：視疫情安排上課及可用餐地點。

如需遠距上課、上課日期與時間原則如上，然上課方式另行通知。

課程綱要：

1. 成本效益分析之源起、意義、主要步驟
2. 成本效益分析之概念基礎
3. 成本效益分析背後之經濟學原理
4. 成本效益分析、成本有效性分析與財務分析的差異
5. 何謂環境或自然資源之效益（價值）？
6. 成本與效益之分配
7. 面對風險與不確定性的考量——敏感度分析
8. 成本效益分析選擇不同折現率的意義
9. 效益及損害評估之市場價值評估方法
10. 效益及損害評估之替代市場價值評估法
11. 效益及損害評估之假設市場（非市場）價值評估法
12. 環境成本效益評估案例
 - 農業生態、文化多功能與田園自然景觀價值評估
 - 生態服務系統（包括森林、國家公園、濕地、保護區等）價值評估
 - 永續發展與自然資本價值評估
 - 能源及再生能源之社會成本及效益評估
 - 碳的社會成本（social cost of carbon）之評估
 - 灌溉水資源、地下水維護與集水區價值評估
 - 道路與交通運輸建設效益評估
 - 食品安全與食品特徵價值評估
 - （農）產品標示價值評估
 - 觀光遊憩休閒價值評估
 - 健康與生命價值評估（value of statistical life, VSL）
 - 企業社會責任的價值評估（social return on investment, SROI）

這些文獻供各位參酌、瞭解世界各國如何使用相關方法，完成成本效益評估之完整個案，或任何個案中部分效益或損害之評估，是給大家一個開頭，輕鬆閱讀、儘量理解、未有壓力！

1.農產業生態、文化多功能、田園自然景觀價值評估

- 1.1.朱美琴、蔡明芳，2016。「農業生態系統服務之效益評估-以台南休閒農場為例」，『首府休閒學報』，2卷，1期，39-64。
- 1.2 沈明展、林淑雯、邊泰明，2005。「台灣地區工業園區公共服務價值評估之研究」，『臺灣土地研究』，18卷，2期，49-71。
- 1.3.林正生、陳志成，2010。「農業生活文化與生態環境功能之經濟價值評估」，『農林學報』，59卷，4期，339-358。
- 1.4.胡志平，2005。「新竹科學園區設置之環境風險認知分析與價值評估」，『建築與規劃學報』，6卷，1期，63-80。
- 1.5.洪鴻智、李承嘉、詹士樑、林華慶、蕭婷允、文嫵翔，2013。「水梯田濕地生態與景觀之保育與價值評估」，『臺灣土地研究』，16卷，2期，1-22。
- 1.6.陳凱俐、林雲雀、謝明修、陳琬琪、江佳玲、李家豪，2006。「水田經濟效益評估」，『宜蘭大學生物資源學刊』，3卷，1期，1-14。
- 1.7.萬鍾汶、林妙孺，2010。「消費者專業背景對基因改造產品願付價值之分析」，『生物產業科技管理叢刊』，1卷，2期，63-91。
- 1.8.熊杏華、朱博湧、曾雅榕、王若蓮，2009。「無形資產價值驅動因子之研究—以台灣生化科技產業為例」，『評價學報』，1期，29-43。
- 1.9. Bernués, A., T. Rodríguez-Ortega, F. Alfnes, M. Clemetsen, and L.O. Eik, 2015. “Quantifying the Multifunctionality of Fjord and Mountain Agriculture by Means of Sociocultural and Economic Valuation of Ecosystem Services,” *Land Use Policy*, 48:170-178.
- 1.10. Casesson, S. 2011. “The Value and Valuation of Maritime Cultural Heritage,” *International Journal of Cultural Property*, 18(1):61-80.

- 1.11. Gibbons, S., S. Mourato, and G.M. Resende, 2014. "The Amenity Value of English Nature: A Hedonic Price Approach," *Environmental and Resource Economics*, 57:175-196.
- 1.12. Hackl, F. and G. J. Pruckner, 1997. "Towards more Efficient Compensation Programmes for Tourists' Benefits from Agriculture in Europe," *Environmental and Resource Economics*, 10(2): 189-205.
- 1.13. Hanley, N., M. Whitby, and I. Simpson, 1999. "Assessing the Success of Agri-environmental Policy in the UK," *Land Use Policy*, 16(2): 67-80.
- 1.14. Moon, W. and J. W. Griffith, 2011. "Assessing Holistic Economic Value for Multifunctional Agriculture in the US," *Food Policy*, 36: 455-465.
- 1.15. Pruckner, G. K., 1994. "Agricultural Landscape Cultivation in Austria: An Application of the CVM," *European Review of Agricultural Economics*, 22: 173-190.
- 1.16. Rasul, G., 2009. "Ecosystem Services and Agricultural Land-use Practices: A Case Study of the Chittagong Hill Tracts of Bangladesh," *Sustainability: Science, Practice, & Policy*, 5(2):15-27.
- 1.17. Rogers, A. A., M. E. Kragt, F. L. Gibson, M. P. Burton, E. H. Petersen, and D. J. Pannell, 2015. "Non-market Valuation: Usage and Impacts in Environmental Policy and Management in Australia," *Australian Journal of Agricultural and Resource Economics*, 59:1-15.
- 1.18. Swallow, S. K., 2013. "Demand-side Value for Ecosystem Services and Implications for Innovative Markets: Experimental Perspectives on the Possibility of Private Markets for Public Goods," *Agricultural and Resource Economic Review*, 42(1): 33-56.
- 1.19. Swinton, S. M., F. Lupi, G. P. Robertson, and S. K. Hamilton, 2007. "Ecosystem Services and Agriculture: Cultivating Agricultural Ecosystems for Diverse Benefits," *Ecological Economics*, 64: 245-252.
- 1.20. Venn, T. J. and J. Quiggin, 2007. "Accommodating Indigenous Cultural Heritage Values in Resource Assessment: Cape York Peninsula and the Murray-Darling Basin, Australian," *Ecological Economics*, 61:334-344.

2. 生態服務系統（包括森林、國家公園、濕地、保護區等）價值評估

2.1. James and Francisco, 2015. Chapter 11, 12, 13, 14.

2.2. 王怡平、邱祈榮，2017。「臺灣森林生態性服務價值估算初探」，『臺灣林業科學』，43卷，1期，3-11。

2.3. 汪大雄、王培蓉、林振榮，1999。「扇平自然教育區遊憩效益之經濟評估」，『臺灣林業科學』，14卷，4期，457-468。

2.4. 吳珮瑛、蘇明達，2001。「墾丁國家公園資源經濟效益評估——兼論資源保育之哲學觀與資源價值之內涵」，『國家公園學報』，11卷1期，1-29。

2.5. 吳珮瑛、廖珮吟，2008。「台灣主要國家公園之效益評估—納入時間成本之需求體系旅行成本法」，『農業經濟叢刊』，13卷，2期，1-44。

2.6. 陳麗琴、林俊成、張欣儀、劉瓊霏，2005。「台灣地區森林遊憩經濟價值之效益移轉」，『台大實驗林研究報告』，19卷，4期，271-279。

2.7. 陳麗琴、汪大雄、黃進睦、林國銓，2002。「福山植物園遊憩經濟效益之評估」，『台灣林業科學』，17卷，3期，375-385。

2.8. Amirnejad, H., S. Khalilian, M. H. Assareh, and M. Ahmadian, 2006. “Estimating the Existence Value of North Forests of Iran by Using a Contingent Valuation Method,” *Ecological Economics*, 58: 665-675.

2.9. Bartczak, Anna, 2015. “The Role of Social and Environmental Attitudes in Non-market Valuation: An Application to the Bialowieza Forest,” *Forest Policy and Economics*, 50:357-365.

2.10. Bateman, I., K. Willis, and G. Garrod, 1994. “Consistency Between Contingent Valuation Estimates: A Comparison of Two Studies of UK National Parks,” *Regional Studies*, 28:457-474.

2.11. Bogale, A., 2011. “Valuing Natural Forest Resources: An Application of Contingent Valuation Method on Adaba-Dodola Forest Priority Area, Bale Mountains, Ethiopia,” *Journal of Sustainable Forestry*, 50: 518-542.

2.12. Harrison, Jane Lindsay, 2011. “Contingent Valuation Study on Willingness-to-Pay for Sustainable Forest Products,” *Journal of*

Environmental Assessment Policy and Management, 12(4): 469-489.

- 2.13. Horton, B., G. Colarullo, I. J. Bateman, and C. A. Peres, 2003. "Evaluating Non-user Willingness to Pay for a Large-scale Conservation Programme in Amazonia: A UK/Italian Contingent Valuation Study," *Environmental Conservation*, 30: 139-146.
- 2.14. Kosz, M., 1996, "Valuing Riverside Wetlands: The Case of the 'Donau-Auen' National Park," *Ecological Economics*, 16: 109-127.
- 2.15. Kramer, R. A. and D. E. Mercer, 1997. "Valuing a Global Environmental Good: U.S. Residents' Willingness to Pay to Protect Tropical Rain Forests," *Land Economics*, 73:196-210.
- 2.16. Loomis, J., M. Lockwood, and T. DeLacy, 1993. "Some Empirical Evidence on Embedding Effects in Contingent Valuation of Forest Protection," *Journal of Environmental Economics and Management*, 24:45-55.
- 2.17. Moore, Rebecca, Tiffany Williams, Eduardo Rodriguez, and Jeffrey Hepinstall-Cymerman, 2013. "Using Nonmarket Valuation to Target Conservation Payments: An Example Involving Georgia's Private Forests," *Journal of Forestry*, 111(4): 261-270.
- 2.18. Riera, P. and J. Mogas, 2004. "Finding the Social Value of Forests through Stated Preference Methods: A Mediterranean Forest Valuation Exercise," *Silva Lusitana, n^o especial*:17-34.
- 2.19. Tyrväinen, L., 1997. "The Amenity Value of the Urban Forest: An Application of the Hedonic Pricing Method," *Landscape and Urban Planning*, 37: 211:222.
- 2.20. Wilson, Jeffrey J., Van A. Lantz, and David A. MacLean, 2010. "A Benefit-cost Analysis of Establishing Protected Natural Areas in New Brunswick, Canada," *Forest Policy and Economics*, 12: 94-103.

3.永續發展與自然資本價值評估

3.1. OECD, 2018. Chapter 12

3.2. Aoum, Dani, 2015. "Assessing the Economic Sustainability of Managing Protected Areas Using the CVM and CBA Approaches," *Management of*

Environmental Quality, 27(4): 374-389.

- 3.3. Becken, S. and D. Simmons, 2008. "Using the Concept of Yield to Assess the Sustainability of Different Tourist Types," *Ecological Economics*, 67: 420-429.
- 3.4. Dunuwila, Pasan, V.H.L. Rodrigo, and Naohiro Goto, 2020. "Improving Financial and Environmental Sustainability in Concentrated Latex Manufacture," *Journal of Cleaner Production*, 255, 120202, DOI: 10.1016/j.jclepro.2020.120202.
- 3.5. Egorova, Svetlana, Irina Bogdanovich, Natalia Kistaeva, and Anastasia Kulachinskaya, 2019. "Environmental Costs as an Indicator of Sustainable Development," *E3S Web of Conferences*, 140, 09007, DOI: 10.1051/e3sconf/201914009007.
- 3.6. Hashemi, Shervin and Siamak Boudaghpour, 2020. "Economic Analysis and Probability of Benefit of Implementing onsite Septic Tank and Resource-oriented Sanitation Systems in Seoul, South Korea," *Environmental Technology & Innovation*, 18, 100762, DOI:10.1016/j.eti.2020.100762.
- 3.7. Lynch, John, Trevor Donnellan, John A. Finn, Emma Dillon, and Mary Ryan, 2019. "Potential Development of Irish Agricultural Sustainability Indicators for Current and Future Policy Evaluation Needs," *Journal of Environmental Management*, 230:434-445.
- 3.8. Lopez, Neil Stephen, Jimwell Soliman, Jose Bienvenido Manuel Biona, and Lewis Fulton, 2020. "Cost-benefit Analysis of Alternative Vehicles in the Philippines Using Immediate and Distant Future Scenarios," *Transportation Research Part A*, 23, 102308, DOI:10.1016/j.trd.2020.102308.
- 3.9. Martin, Fernand, 1994. "Sustainability, the Discount Rate, and Intergenerational Effects within a Regional Framework," *The Annals of Regional Science*, 28:107-123.
- 3.10. Ningsih, Kustiawati, Halimatus Sakdiyah, Herman Felani, Rini Dwiastuti, and Rosihan Asmara, 2020. "Economic Valuation for Organic Farming of Dragon Fruit: Cost Benefit Analysis Approach," *International Conference on Environment and Technology*, 469, 012082, DOI:10.1088/1755-1315/469/1/012082.

- 3.11. Roy, M. and S. Chakraborty, 2014. "Developing a Sustainable Water Resource Management Strategy for a Fluoride-affected Area: A Contingent Valuation Approach," *Clean Technologies and Environmental Policy*, 16:341-349.
- 3.12. Suprayoga, Gede B., Martha Bakker, Patrick Witte, and Tejo Spit, 2020. "A Systematic Review of Indicators to Assess the Sustainability of Road Infrastructure Projects," *European Transport Research Review*, 12, 19, DOI: 10.1186/s12544-020-0400-6.
- 3.13. Wu, Pei-Ing, 1998. "Economic Development and Environmental Quality: Evidence from Taiwan," *Asian Economic Journal*, 12:395-412.

4. 再生能源之社會成本及效益與損害評估

- 4.1. James and Francisco, 2015. Chapter 4, 6.
- 4.2. Choumert, J. and P. Phélinas, 2015. "Determinants of Agricultural Land Values in Argentina," *Ecological Economics*, 110: 134-140.
- 4.3. Hanson, E.D., B.J. Sherrick, and T. H. Kuethe, 2018. "The Changing Roles of Urban Influence and Agricultural Productivity in Farmland Price Determination," *Land Economics*, 94(2): 199-205.
- 4.3. Isgin, T. and D.L. Forster, 2006. "A Hedonic Price Analysis of Farmland Option Premiums under Urban Influences," *Canadian Journal of Agricultural Economics*, 54: 327-370.
- 4.4. Lai, Mei-Chun, Pei-Ing Wu, Je-Liang Liou, Yi Chen, and Hanhui Chen, 2019. "The Impact of Promoting Renewable Energy in Taiwan: How Much Hail Is Added to Snow in Farmland Prices?" *Journal of Cleaner Production*, 241: 118519, DOI:10.1016/j.jclepro.2019.118519.
- 4.5. Myrna, O., M. Odening, and M. Ritter, 2019. "The Influence of Wind Energy and Biogas on Farmland Prices," *Land*, 8, 19, DOI:10.3390/land8010019.
- 4.6. Popp, J., Z. Lakner, M. Harangi-Rákos, and M. Fári, 2014. "The Effect of Bioenergy Expansion: Food, Energy, and Environment," *Renewable Sustainable Energy Reviews*, 32: 559-578.
- 4.7. Sheng, Y., T. Jackson, and K. Lawson, 2018. "Evaluating the Benefits from Transport Infrastructure in Agriculture: A Hedonic Analysis of Farmland

Prices. *Australian Journal of Agricultural and Resource Economics*, 62: 237-255.

- 4.8. Spiertz, H., 2013. "Challenges for Crop Production Research in Improving Land Use, Productivity and Sustainability," *Sustainability-Basel*, 5: 1632-1644.
- 4.9. Spiess, W.E.L., 2013. "Does Biofuel Production Threaten Food Security? In: S. Yanniotis, P. Taoukis, N. G. Stoforos, and V. T. Karathanos, (Eds.) *Advances in Food Process Engineering Research and Applications, Food Engineering Series*. New York: Springer, pp. 629-644.
- 4.10. Zhang, W. and C.J. Nickerson, 2015. "Housing Market Bust and Farmland Values: Identifying the Changing Influence of Proximity to Urban Centers," *Land Economics*, 91(4):605-625.

5. 碳的社會成本 (social cost of carbon) 之評估

- 5.1. OECD, 2018. Chapter 14.
- 5.2. Abdallah, Mohamed, Abdallah Shanableh, Ahmad Shabib, and Mohamad Adghim, 2018. "Financial Feasibility of Waste to Energy Strategies in the United Arab Emirates," *Waste Management*, 82: 207-219.
- 5.3. Brown, P. and A. Daigneault, 2014. "Cost-benefit Analysis of Managing the Invasive African Tulip Tree (*Spathodea campanulata*) in the Pacific," *Environmental Science & Policy*, 39:65-76.
- 5.4. Dominati, Estelle J. Fleur J.F. Maseyk, Alec D. Mackay, and John M. Rendel, 2019. "Farming in a Changing Environment: Increasing Biodiversity on Farm for the Supply of Multiple Ecosystem Services," *Science of the Total Environment*, 662:702-713.
- 5.5. Schumacher, Ingmar, 2018. "The Aggregation Dilemma in Climate Change Policy Evaluation," *Climate Change Economics*, 9(3), 1850008, DOI:10.1142/S2010007818500.
- 5.6. Thompson, Dara Y., Brent M. Swallow, and Martin K. Luckert, 2017. "Costs of Lost opportunities: Applying Non-Market Valuation Techniques to Potential REDD+ Participants in Cameroon," *Forests*, 8, 69, DOI:10.3390/f8030069.

- 5.7. Willanda, Nicola, Cecily Maller, and Ian Ridley, 2019. “Addressing Health and Equity in Residential Low Carbon Transitions – Insights from a Pragmatic Retrofit Evaluation in Australian,” *Energy Research & Social Science* 53: 68-84.
- 5.8. Yang, Xi, Xiaoqian Xi, Shan Guo, Wanqi Lin, and Xiangzhao Feng, 2018. “Carbon Mitigation Pathway Evaluation and Environmental Benefit Analysis of Mitigation Technologies in China’s Petrochemical and Chemical Industry,” *Energies*, 11, 3331, DOI:10.3390/en11123331.
- 5.9. Yu, Huajun, Wei Xie, Lan Yang, Anshu Du, Cecilia M.V.B. Almeida, and Yutao Wang, 2020. “From Payments for Ecosystem Services to Eco-compensation: Conceptual Change or Paradigm Shift?” *Science of the Total Environment*, 700, 134627, DOI:10.1016/j.scitotenv.2019. 134627.

6. 灌溉水資源、地下水維護與集水區價值評估

- 6.1. James and Francisco, 2015. Chapter 10.
- 6.2. Damigos, D., G. Tentes, M. Balzarini, F. Furlanis, and A. Vianello, 2017. “Revealing the Economic Value of Managed Aquifer Recharge: Evidence from a Contingent Valuation Study in Italy,” *Water Resources Research*, 53(8): 6597-6611.
- 6.3. Jaghdanii, Tinoush Jamali, Bernhard Brümmer, and Jan Barkmann, 2012. “Comparison of Methods for the Valuation of Irrigation water: Case Study from Qazvin, Iran,” *Irrigation and Drainage*, 61: 375-385.
- 6.4. Kadisha, Jonathan Kadisha and Noelwah R. Netusil, 2012. “Valuing Vegetation in an Urban Watershed,” *Landscape and Urban Planning*, 104:59-65.
- 6.5. Lienhoop, Nele, Emad K. Al-Karablieh, Amer Z. Salman, and Jaime A. Cardona, 2014. “Environmental Cost-benefit Analysis of Decentralised Wastewater Treatment and Re-use: A Case Study of Rural Jordan,” *Water Policy*, 16: 323-339.
- 6.6. Mesa-Jurado, M. A., J. Martiin-Ortega, E. Ruto, and J. Berbel, 2012. “The Economic Value of Guaranteed Water Supply for Irrigation under Scarcity Conditions,” *Agricultural Water Management*, 113: 10-18.
- 6.7. Ojeda, M. I., A. S. Mayer, and B. D. Soloman, 2008. “Economic Valuation

of Environmental Services Sustained by Water Flows in the Yaqui River Delta,” *Ecological Economics*, 65: 155-166.

- 6.8. Powell, J. R., D. J. Allee, and C. McClintock, 1994. "Groundwater Protection Benefits and Local Community Planning: Impact of Contingent Valuation Information," *American Journal of Agricultural Economics*, 76:1068-1075.
- 6.9. Trenholm, R., V. Lantz, R. Martínez-Espiñeira, and S. Little, 2013. "Cost-benefit Analysis of Riparian Protection in an Eastern Canadian Watershed," *Journal of Environmental Management*, 116: 81-94.
- 6.10. Updegraffa, Karen, Melvin J. Baughmana, and Steven J. Taff, 2004. "Environmental Benefits of Cropland Conversion to Hybrid Poplar: Economic and Policy Considerations," *Biomass and Bioenergy*, 27: 411-428.
- 6.11. Weldesilassie, A.B., O. Frör, E. Boelee, and S. Dabbert, 2009. "The Economic Value of Improved Wastewater Irrigation: A Contingent Valuation Study in Addis Ababa, Ethiopia," *Journal of Agricultural and Resource Economics*, 34(3): 428-449.

7.道路與交通運輸建設效益評估

- 7.1. Agosta, Roberto D., 2006. "Financing Road Networks in Developing Countries," *Transportation Research Record Journal of the Transportation Research Board*, 1954(1):1-6.
- 7.2. Brand, Daniel, Mark R. Kiefer, Thomas E. Parody, and Shomik R. Mehndiratta, 2001. "Application of Benefit-Cost Analysis to the Proposed California High-Speed Rail System," *Transportation Research Record*, 1742(1):9-16.
- 7.3. Brey, SevilleRaúl, José I. Castillo-Manzano, Mercedes Castro-Nuño, Lourdes López-Valpuesta, Manuel Marchena-Gómez, and Antonio Sánchez-Braza, 2017. "Is the Widespread Use of Urban Land for Cycling Promotion Policies Cost Effective? A Cost-Benefit Analysis of the Case of Seville," *Land Use Policy*, 63:130-139.
- 7.4. Casady, Carter B., José A. Gómez-Ibáñez, and Emily Schwimmer, 2020. "Toll-managed Lanes: A Simplified Benefit-cost Analysis of Seven US Projects," *Transport Policy*, 89:38-53.

- 7.5. Cavalieri, Marina, Rossana Cristaudo, and Calogero Guccio, 2019. "On the Magnitude of Cost Overruns throughout the Project Life-cycle: An Assessment for the Italian Transport Infrastructure Projects," *Transport Policy*, 79:21-36.
- 7.6. Çelik, Tolga, Yusuf Arayici, and Cenk Budayan, 2019. "Assessing the Social Cost of Housing Projects on the Built Environment: Analysis and Monetization of the Adverse Impacts Incurred on the Neighbouring Communities," *Environmental Impact Assessment Review*, 77:1-10.
- 7.7. Chapman, Ralph Chapman, Michael Keall, Philippa Howden-Chapman, Mark Grams, Karen Witten, Edward Randal, and Alistair Woodward, 2018. "A Cost Benefit Analysis of an Active Travel Intervention with Health and Carbon Emission Reduction Benefits," *International Journal of Environmental Research and Public Health*, 15, 962; DOI:10.3390/ijerph15050962.
- 7.8. Fan, Wenbo and Xinguo Jiang, 2018. "Conceptual Development and Economic Evaluation of Multilevel Premium Highways," *Research in Transportation Economics*, 70: 148-160.
- 7.9. Gjestland, Arnstein, David Philip McArthur, Liv Osland, and Inge Thorsen, 2014. "The Suitability of Hedonic Models for Cost-benefit Analysis: Evidence from Commuting Flows," *Transportation Part Research, A*, 61:136-151.
- 7.10. Haywood, Luke and Martin Koning, 2015. "The Distribution of Crowding Costs in Public Transport: New Evidence from Paris," *Transportation Research Part A*, 77: 182-201.
- 7.11. Næss, Petter, Morten Skou Nicolaisen, and Arvid Strand, 2012. "Traffic Forecasts Ignoring Induced Demand: A Shaky Fundament for Cost-Benefit Analyses," *European Journal of Transport and Infrastructure Research*, 12(3):291-309.
- 7.12. Nash, Chris, 2015. "When to Invest in High Speed Rail," *Journal of Rail Transport Planning & Management*, 5:12-22.
- 7.13. Oda, Takuya, Muhammad Aziz, Takashi Mitani, Yoko Watanabe, and Takao Kashiwagi, 2018. "Mitigation of Congestion Related to Quick Charging of Electric Vehicles Based on Waiting Time and Cost-benefit Analyses: A Japanese Case Study," *Sustainable Cities and Society*, 36:99-106.

- 7.14. Tijma, Joep, Thomas O. Michielsen, Raoul van Maarseveen, and Peter Zwaneveld, 2019. “How Large Are the Non-travel Time Effects of Urban Highway Tunneling? Evidence from Maastricht, the Netherlands,” *Transportation Research Part A*, 130: 570-592.
- 7.15. Ullah, Irfan, Kai Liu, and Tran Vanduy, 2019. “Examining Travelers’ Acceptance towards Car Sharing Systems—Peshawar City, Pakistan,” *Sustainability*, 11, 808, DOI:10.3390/su11030808.
- 7.16. van der Loop, Han, Jan Perdok, and Jasper Willigers, 2014. “Economic Evaluation of Trends in Travel Time Reliability in Road Transport Analysis of Traffic Data in the Netherlands from 2001 to 2011,” *Transportation Research Record: Journal of the Transportation Research Board*, 2450:163-171.

8. 食品安全與食品特徵價值評估

- 8.1. 李文煥、黃炳文、楊育誠，2009。「台灣良質米特徵價格之研究」，『農林學報』，58卷，3期，201-218。
- 8.2. 彭克仲、陳姿萍，2004。「台灣即飲咖啡特徵價格之研究」，『農業經濟半年刊』，75期，83-112。
- 8.3. 謝碧珠、許宜中，2014。「食品的安全代價如何算計」，『會計研究月刊』，339期，31-39。
- 8.4. Andersen, L. M., 2011. “Animal Welfare and Eggs-Cheap Talk or Money on the Counter?” *Journal of Agricultural Economics*, 62(3): 565-584. 8.4. Bronnmann, J and F. Asche, 2016. “The Value of Product Attributes, Brands and Private Labels: An Analysis of Frozen Seafood in Germany,” *Journal of Agricultural Economics*, 67(1): 231-244.
- 8.5. Carlucci, D. B. deGernaro, and L. Roselli, 2016. “What is the Value of Bottled Water? Empirical Evidence from the Italian Retail Market,” *Water Resources and Economics*, 15: 57-66.
- 8.6. Disegna, M., C. Mauracher, I. Procidano, and G. Trevisan, 2009. “Characteristics of Production and Consumption of Organic Trout in Italy,” *New Medit: Mediterranean Journal of Economics, Agriculture & Environment*, 8(3):17-26.

- 8.7.Gao, Z., S. S. Wong, L. A. House, and T. H. Spreen, 2014. “French Consumer Perception, Preference of, and Willingness to Pay for Fresh Fruit Based on Country of Origin,” *British Food Journal*, 116(5): 805-820.
- 8.8.Haghir, M., 2014. “An Evaluation of Consumers’ Preferences for Certified Farmed Atlantic Salmon,” *British Food Journal*, 116(7): 1092-1105.
- 8.9.Haghjou, M., B. Hayati, E. Pishbahar, R. Mohammadrezaei, and G. Dashti, 2013. “Factors Affecting Consumers’ Potential Willingness to Pay for Organic Food Products in Iran: Case Study of Tabriz,” *Journal of Agricultural Science and Technology*, 5: 191-202.
- 8.10.Senyolo, G. M., E. Wale, and G. F. Ortmann, 2014. “Consumers’ Willingness-To-Pay for Underutilized Vegetable Crops: The Case of African Leafy Vegetables in South Africa,” *Journal of Human Ecology*, 47(3): 219-227.
- 8.11.Vickner, S. S., 2015. “Estimating the Implicit Price of Convenience: A Hedonic Analysis of the US Breakfast Sausage Market,” *Agribusiness*, 31(2): 281-292.

9. (農) 產品標示 (商標) 價值評估

- 9.1.莊雅琴、吳珮瑛、蔡孟珂、劉哲良，2018。「臺灣小包裝米包裝標示特徵價格之探討—標示越多價格越高？」『臺灣國際研究季刊』，14(1): 157-195。
- 9.2.闕雅文、陳麗婷，2014。「產銷履歷驗證之價值評估——以水產品產銷履歷驗證為例」，『農業經濟叢刊』，19卷，2期，43-64。
- 9.3.Ahmad, W. and S. Anders, 2012. “The Value of Brand and Convenience Attributes in Highly Processed Food Products,” *Canadian Journal of Agricultural Economics*, 60: 113-133.
- 9.4.Baltas, G. and C. Saridakis, 2009. “Brand-name Effects, Segment Differences, and Product Characteristics: An Integrated Model of the Car Market,” *Pricing Strategy & Practice*, 18(2): 143-151.
- 9.5.Bronnmann, J and F. Asche, 2016. “The Value of Product Attributes, Brands and Private Labels: An Analysis of Frozen Seafood in Germany,” *Journal of Agricultural Economics*, 67(1):231-244.

- 9.6. Jin, Y. H., D. Zilberman, and A. Heiman, 2008. "Choosing Brands: Fresh Produce versus Other Products," *American Journal of Agricultural Economics*, 90(2): 463-475.
- 9.7. Karjaluoto, H., J. Munnukka, and K. Kiuru, 2016. "Brand Love and Positive Word of Mouth: The Moderating Effects of Experience and Price," *Journal of Product & Brand Management*, 25(6): 527-557.
- 9.8. Sogn-Grundvag, C., T. A. Larsen, and J. A. Young, 2014. "Product Differentiation with Credence Attributes and Private Labels: The Case of Whitefish in UK Supermarkets," *Journal of Agricultural Economics*, 65(2): 368-382.

10. 觀光遊憩休閒價值評估

- 10.1. 呂錦隆，2011。「航空服務屬性特徵價格分析—以臺北往上海為實證航線」，『航空季刊』，20卷，1期，71-86。
- 10.2. 李杰獻，2011。「雙溪鄉遊憩活動之經濟效益評估」，『鄉村旅遊研究』，5卷2期，1-13。
- 10.3. 何文惠、闕雅文，2015。「新埔鄉村旅遊之遊憩效益評估」，『調查研究——方法與應用』，33期，71-112。
- 10.4. 吳珮瑛、鄧福麒，2003。「黑面琵鷺保護區生態旅遊規劃方案下居民參與和願付價值關係之檢視」，『戶外遊憩研究』，16卷，4期，41-69。
- 10.5. 林明美、林元興，2007。「博物館價值評估初探——以旅行成本法評估十三行博物館」，『博物館學季刊』，21卷，4期，131-147。
- 10.6. 陳宗玄、李慧珊，2005。「消費者對旅遊資訊願付價值評估之研究—以台北地區為例」，『朝陽學報』，10期，308-329。
- 10.7. 鄭蕙燕、闕雅文，1997。「鰲鼓海岸濕地遊憩經濟價值評估」，『戶外遊憩研究』，10卷，4期，7-18。
- 10.8. 蔡承旺，2011。「開放陸客赴金門自由行之效益測定—旅行成本法應用」，『休閒產業管理學刊』，4卷，2期，18-36。

- 10.9. 闕雅文、鄧秋玲、鄧雁文，2013。「臺灣、日本溫泉旅館特徵屬性與價格分析」，『臺灣國際研究季刊』，9卷，3期，175-198。
- 10.10. Bockstael, N. E., W. M. Hanemann, and C. L. Kling, 1987. "Estimating the Value of Water Quality Improvements in a Recreational Demand Framework," *Water Resources Research*, 23:951-960.
- 10.11. Falk, M., 2008. "A Hedonic Price Model for Ski Lift Tickets," *Tourism Management*, 29: 1172-1184.
- 10.12. Fleischer, A. and A. Tchetchik, 2005. "Does Rural Tourism Benefit from Agriculture?" *Tourism Management*, 26: 493-501.
- 10.13. Knoche, S. and F. Lupi, 2013. "Economic Benefits of Publicly Accessible Land for Ruffed Grouse Hunters," *The Journal of Wildlife Management*, 77(7): 1294-1300.
- 10.14. Melstrom, R. T., F. Lupi, P. C. Esselman, and R. J. Stevenson, 2015. "Valuing Recreational Fishing Quality at Rivers and Streams," *Water Resources Research*, 51(1):140-150.
- 10.15. Noonan, D. S. and I. Rizzo, 2017. "Economics of Cultural Tourism: Issues and Perspectives," *Journal of Cultural Economics*, 41:95-107.
- 10.16. Togridou, A. T. Hovardas, and J. D. Pantis, 2006. "Determinants of Visitors' Willingness to Pay for the National Marine Park of Zakynthos, Greece," *Ecological Economics*, 60: 308-319.
- 10.17. Voltaire, L. L. Lévi, F. Alban, and J. Boncoeur, 2017. "Valuing Cultural World Heritage Sites: An Application of the Travel Cost Method to Mont-Saint-Michel," *Applied Economics*, 49(16): 1593-1605.
- 10.18. Windle, J. and J. Rolfe, 2013. "Estimating Nonmarket Values of Brisbane (State Capital) Residents for State Based Beach Recreation," *Ocean & Coastal Management*, 85: 108-111.

11. 健康與生命價值評估 (value of statistical life, VSL)

11.1. OECD, 2018. Chapter 15.

11.2. 林雅芳，2006。「氣候變遷對健康效益評估之概述」，『全球變遷通訊

雜誌』，50期，11-14。

- 11.3. 傅祖壇、葉寶文，2005。「應用 CVM 在健康效益之評估—高血壓疾病預防之願付價值」，『經濟論文叢刊』，33卷，1期，1-33。
- 11.4. 羅時麒、李明賢，2011。「健康綠建材標章材料之室內健康效益評估」，76期，43-60。
- 11.5. Alberini, A., A. Hunt, and A. Markandya, 2006. “Willingness to Pay to Reduce Mortality Risks: Evidence from a Three-country Contingent Valuation Study,” *Environmental & Resource Economics*, 33: 251-264.
- 11.6. Athukorala, Wasantha, Clevo Wilson, and Tim Robinson, 2012. “Determinants of Health Costs due to Farmers’ Exposure to Pesticides: An Empirical Analysis,” *Journal of Agricultural Economics*, 63(1): 158-174.
- 11.7. Blumenschein, K. and M. Johannesson, 1999. “Use of Contingent Valuation to Place a Monetary Value on Pharmacy Services: An Overview and Review of the Literature,” *Clinical Therapeutics*, 21(8): 1402-1417.
- 11.8. Bock, J.-O., D. Heider, H. Matschinger, H. Brenner, K.-U. Saum, W. E. Haefeli, and H.-H. König, 2016. “Willingness to Pay for Health Insurance among the Elderly Population in Germany,” *European Journal of Health Economics*, 17(2): 149-158.
- 11.9. Gyldmark, M. and G. C. Morrison, 2001. “Demand for Health Care in Denmark: Results of a National Sample Survey Using Contingent Valuation,” *Social Science & Medicine*, 53: 1023-1036.
- 11.10. Habbani, K., W. Groot, and I. Jelovac, 2006. “Household Health-seeking Behavior in Khartoum, Sudan: The Willingness to Pay for Public Health Service in These Services are of Good Quality,” *Health Policy*, 75:140-158.
- 11.11. Hanefeld, J., R. Smith, D. Horsfall, and N. Lunt, 2014. “What Do We Know about Medical Tourism? A Review of the Literature with Discussion of Its Implications for the UK National Health Service as an Example of a Public Health Care System,” *Journal of Travel Medicine*, 21(6): 410-417.
- 11.12. Hunter, P. D. N. Hanley, M. Czajkowski, K. Mearns, A. N. Tyler, L.

Carvalho, and G. A. Codd, 2012. “The Effect of Risk Perception on Public Preferences and Willingness to Pay for Reductions in the Health Risks Posed by Toxic Cyanobacterial Blooms,” *Science of the Total Environment*, 426: 32-44.

- 11.13. Jeuland, M., M. Lucas, J. Clemens, and D. Whittington, 2010. “Estimating the Private Benefits of Vaccination against Cholera in Beira, Mozambique: A Travel Cost Approach,” *Journal of Development Economics*, 91: 310- 322.
- 11.14. Leiter, A. M. and G. J. Pruckner, 2014. “Timing Effects in Health Valuations,” *Health Economics*, 23: 743-750.
- 11.15. Sørensen, J., L. Linde, and M. L. Hetland, 2014. “Contact Frequency, Travel Time, and Travel Costs for Patients with Rheumatoid Arthritis,” *International Journal Rheumatology*, DOI:10.1155/2014/285951.
- 11.16. Tambor, M., M. Pavlova, B. Rechel, S. Golinowska, C. Sowada, and W. Groot, 2014. “Willingness to Pay for Publicly Financed Health Care Services in Central and Eastern Europe: Evidence from Six Countries Based on a Contingent Valuation Method,” *Social Science & Medicine*, 116:193-201.

12. 企業社會責任的價值評估 (social return on investment, SROI)

- 12.1. 鄧美貞、王婉青，2012。「企業社會責任與財務績效：以經營效率為中介效果」，『朝陽商管評論』，11卷，2期，77-104。
- 12.2. Bellucci, Marco, Carmela Nitti, Serena Franchi, Enrico Testi, and Luca Bagnoli, 2019. “Accounting for Social Return on Investment (SROI) The Costs and Benefits of Family-centred Care by the Ronald McDonald House Charities,” *Social Enterprise Journal*, 15(1): 46-75.
- 12.3. Cordes, Joseph J., 2017. “Using Cost-benefit Analysis and Social Return on Investment to Evaluate the Impact of Social Enterprise: Promises, Implementation, and Limitations,” *Evaluation and Program Planning*, 64:98-104.
- 12.4. Hutchinson, Claire Louise, Angela Berndt, Susan Gilbert-Hunt, Stacey George, and Julie Ratcliffe, 2018. “Valuing the Impact of Health and Social Care Programmes Using Social Return on Investment Analysis:

How Have Academics Advanced the Methodology? A Protocol for a Systematic Review of Peer-reviewed Literature,” *BMJ Open*, 8, e022534. DOI:10.1136/bmjopen-2018-022534.

- 12.5. Jirarattanasopha, Varangkanar, Nopphol Witvorapong, and Piya Hanvoravongchai, 2018. “Social Return on Investment for Community-based Alcohol Consumption Control Program during Buddhist Lent,” *Journal of Health Research*, 36(8): 398-407.
- 12.6. Jones, Carys, Gill Windle, and Rhiannon Tudor Edwards, 2020. “Dementia and Imagination: A Social Return on Investment Analysis Framework for Art Activities for People Living with Dementia,” *Gerontologist*, 60(1):112-123.
- 12.7. Kousky, Carolyn, Liesel Ritchie, Kathleen Tierney, and Brett Lingle, 2019. “Return on Investment Analysis and Its Applicability to Community Disaster Preparedness Activities: Calculating Costs and Returns,” *International Journal of Disaster Risk Reduction*, 41, 101294, DOI:10.1016/j.ijdr.2019.101294.
- 12.8. Leck, Chris, Dominic Upton, and Nick Evans, 2016. “Social Return on Investment: Valuing Health Outcomes or Promoting Economic Values?” *Journal of Health Psychology*, 21(7):1481-1490.
- 12.9. Mihalopoulos , Cathrine, Long Khanh- Dao Le, Mary Lou Chatterton, Jessica Bucholc, Julianne Holt- Lunstad, Michelle H. Lim, and Lidia Enge, 2019. “The Economic Costs of Loneliness: A Review of Cost- of- illness and Economic Evaluation Studies,” *Social Psychiatry and Psychiatric Epidemiology*, DOI:10.1007/s00127-019-01733-7.
- 12.10. Muyambi, Kuda, Bruce Gurd, Lee Martinez, May Walker-Jeffreys, Kari Vallury, Pauline Beach, and Shaun Dennis, 2017. “Issues in Using Social Return on Investment As an Evaluation Tool,” *Evaluation Journal of Australasia*, 17(3): 32-39.
- 12.11. Ramon, Ismaila, Sajal K. Chattopadhyay, W. Steven Barnett, Robert A. Hahn, and the Community Preventive Services Task Force, 2017. “Early Childhood Education to Promote Health Equity: A Community Guide Economic Review,” *Journal Public Health Management Practice*, 24(1): e8-e15, DOI: 10.1097/PHH.0000000000000557.
- 12.12. Ricciutia, Elisa and Maria Vittoria Bufalia, 2019. “The Health and Social Impact of Blood Donors Associations: A Social Return on Investment

(SROI) Analysis,” *Evaluation and Program Planning*, 73: 204-213.

12.13. Robertson, Lee, Chris Skelly, and David Phillips, 2019. “Making Hard Choices in Local Public Health Spending with a Cost-benefit Analysis Approach,” *Frontiers in Public Health*, 7, 147, DOI: 10.3389/fpubh.2019.00147.

12.14. Willis, Elizabeth, 2018. “Quantifying the Benefits of Peer Support for People with Dementia: A Social Return on Investment (SROI) Study,” *Dementia*, 17(3): 266-278.

12.15. Yates, Brian T. and Mita Marra, 2017. “Introduction: Social Return On Investment (SROI),” *Evaluation and Program Planning*, 64:95-97.