

3 Economic competitiveness

- 3.1 This chapter examines the evidence that the natural environment can enhance the economic competitiveness of a particular region. Economic competitiveness refers to the ability of a particular region to attract businesses and investment, and therefore encourage economic activity.
- 3.2 There are several ways this could occur. On a very local scale, the natural environment in an area may increase employee productivity. Consumers in greener areas may spend more locally. Tourists may be drawn to the area and spend money on accommodation and other activities.
- 3.3 If households or businesses would prefer to be located in greener areas, this is likely to show up in the amounts they pay to purchase or rent in the area. This chapter therefore includes a section on house prices, and also on regional investment (which includes investment in office buildings).

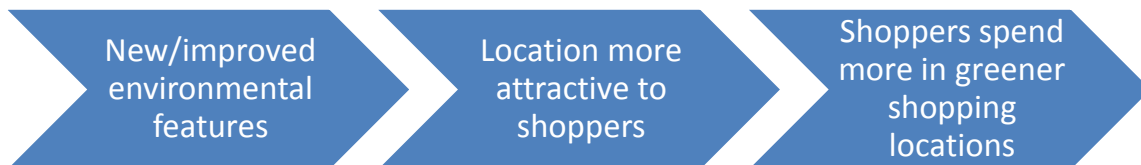
3a Consumer spending

There is a limited body of research that suggests that people spend more in locations with more natural features. Shoppers are likely to experience less stress in such places.

Introduction

- 3.4 There is some evidence that people's spending behaviour may be affected by the nearby environment. Shopping can be a highly stressful activity requiring a high degree of mental alertness. In the Mental Health chapter, it is demonstrated that greenspace is linked to reduced stress and attention fatigue. By reducing the level of fatigue experienced by consumers, it may be possible to attract them to certain less stressful shopping destinations, and to make their shopping experiences more enjoyable.
- 3.5 There is evidence to suggest that consumers in a positive mood spend more than those who are in a more negative mood, and are more satisfied with their experience with the retailer. Similarly, store employees are affected by the store environment, and have been shown to be more responsive to customers, and more satisfied with their employer, in a nicer retail environment (Joye, Willems et al. 2010).
- 3.6 Changes to consumer behaviour may result in changes in spending patterns, with consumers attracted to, and spending more in greener places. However, it does not change the amount of money they have available to spend. What is likely to occur therefore is a redistribution of income between regional locations, but no economic IMPACT at the national level.

Theory of change



Can the benefit be quantified?

- 3.7 Yes. In theory this benefit can be quantified by examining consumer spending behaviour in locations with differing levels of greenery, taking into account other variables that impact on consumer spending.

How strong is the evidence?

- 3.8 The evidence for this benefit is highly suggestive but due to the small number of studies, should not be regarded as conclusive. The evidence is drawn from studies investigating consumer perceptions in retail environments. These are largely based on experiments using photographs of different retail settings. It has been demonstrated that there is a strong correlation between people's predicted reactions based on photographs, and their actual reactions in store (Brenngman, Willems et al. 2012).

Evidence

- Research in the Netherlands found that the introduction of vegetation into a fashion store with a complex store interior (large quantity and variety of products, complicated store layout) was linked to feelings of pleasure and reduced stress amongst prospective shoppers. Feelings of

pleasure were found to be an important factor in determining whether or not the consumer would approach or avoid the store (Brenngman, Willems et al. 2012)⁴.

- Surveys across 26 different-sized cities in the USA found that shoppers reported being willing to travel further to visit, stay longer once there, and more frequently visit, business districts with trees. Trees were also linked with shoppers valuing products more highly, with willingness to pay for a selection of nine products increasing by 9.2 percent. Willingness to pay for parking was also higher for shopping areas with trees (Wolf 2005)⁵.

3.9 It should be noted that integrating greenery into the retail environment needs to be done on a case-by-case basis. Greenery can potentially reduce access to shops or products, hide shop frontage and advertising, and exacerbate crowding if situated incorrectly (Joye, Willems et al. 2010).

References

Brenngman, M., K. Willems, et al. 2012. "The impact of in-store greenery on customers." *Psychology of Marketing* **29**(11): 807-821.

Joye, Y., K. Willems, et al. 2010. "The effects of urban retail greenery on consumer experience: Reviewing the evidence from a restorative perspective." *Urban Forestry and Urban Greening* **9**: 57-64.

Wolf, K. 2005. "Trees in the small city retail business district: Comparing resident and visitor perceptions." *Journal of Forestry* **103**(8): 390-395.

⁴ This effect only applied to a 'complex' store interior, and not for stores with a simple uncluttered layout. The authors note that effects observed in fashion retail may not occur in other shopping settings (for instance supermarkets), where the shopping activity is more utilitarian rather than a form of entertainment.

⁵ Survey respondents were presented with two hypothetical scenarios using photographs of streetscapes with different vegetation. The survey had 161 respondents and a response rate of 10.1%, which is considered low, and also a higher proportion of upper middle class respondents than the US average. The products analysed were divided into convenience (for example, sandwich), shopping (for example, jacket) and specialty (for example, glasses) items.