



Fragmented Ownership and Second Homes in Tourism Resorts

JUAN GABRIEL BRIDA¹, FEDERICO BOFFA²

¹ Competence Centre in Tourism Management and Tourism Economics (TOMTE), School of Economics and Management, Free University of Bolzano, Italy. E-mail: JuanGabriel.Brida@unibz.it

² Department of Legal and Economic Studies (JESI), Law School, University of Macerata, Italy. E-mail: Federico.Boffa@unimc.it

ABSTRACT

In spite of the generally accepted view that second homes induce a higher seasonality and a lower occupancy rate than hotels, they persistently prevail in many tourism destinations. This paper introduces a mechanism to illustrate and analyze the decision problem of constructing second homes or hotels. We introduce a two period game with two players representing a developer of buildings in a tourism destination D and a tourist T. D owns a piece of land and faces two alternatives: to construct a hotel or to build a second home. T has to choose between buying a second home or renting a hotel room. Another ingredient of the model is an externality mechanism representing the value placed by tourists on the probability of finding an available place at the destination. The paper shows the persistence of sub-optimal equilibria in the game, in which the land is allocated to a socially inefficient use (second homes rather than hotels). We show that a necessary condition for such inefficiency to emerge is that the related externality cannot be internalized. This occurs under a regime of dispersed ownership.

KEY WORDS

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INTRODUCTION

Second homes are defined as privately owned properties mainly used for vacations that are not the sole or main residence of an individual (see Müller 2004; Accinelli, Brida, and Carrera 2007). In the period 1991-1999, the number of second homes grew two percent faster than the overall housing stock (Di, McArdle and Masnick 2001), probably as a consequence of the increase in individuals' wealth. In part, this is the reason why second home tourism has recently commanded a considerable attention, both among the policy makers, and within the scientific community (Carliner 1990, 1998, 2002; Parsons 1992; Hecodk 1993; Casado 1999; Petterson 1999; Gallant and Tewdwr 2000, 2001; Tress 2002; Francese 2003; Visser 2003; Hoogendoorn and Visser 2004; Müller 2004; Lundmark and Marjavaara 2005). The received literature highlights the

substantial responsibility of second homes in increasing seasonality, thereby reducing the demand for local business, and generating a negative spillover on the entire community (Pijanowski and Shellito 2003), which ultimately reduces overall welfare.

However, it has not illustrated a convincing reason for the emergence or the persistence of this alleged inefficiency. This paper attempts to bridge this gap, by indentifying a specific channel, largely consistent with the available evidence, which could contribute to explaining the phenomenon. We model and illustrate a simple externality mechanism that may emerge under a regime of dispersed (or fragmented) ownership of the various recreational facilities at the destination, and in the presence of land use restrictions that place a bound on the number of buildings or on their aggregate size. For the purpose of this paper, we define integrated ownership as a system in which the hotel owners own the lateral activities of the resort (e.g. ski resorts, restaurant, and various amenities) as well. On the contrary, we define dispersed (or fragmented) ownership as a system in which the hotel owners do not own the lateral activities. As a point of clarification, integration in our framework does not require all of the hotels being owned by the same company; it merely requires all of the lateral activities being owned by companies that also own a hotel.

Our argument draws on the intuition that seasonality damages the destination, as it reduces the revenue of the lateral activities of the resort, i.e. the various businesses that operate there (for example, in a ski resort, the lifts owner). Also, while second homes tend to increase seasonality, hotels do reduce it. Inefficiency arises when second homes outnumber hotels. We then analyze a mechanism through which such inefficiency persists, based on an externality argument. In particular, a second home owner does not consider the negative impact due to the increased seasonality (second homes tend to be left unused for a large portion of the year); on the other hand, a non-integrated hotel owner won't consider the positive impact that emerges for precisely the opposite reason (i.e. that the hotel is full). This can potentially lead to inefficiencies, which disappear when the hotel owner is integrated. In such case, the hotel owner recognizes the positive impact of its high utilization rate on the revenue. There are various reasons why a consumer may prefer ownership of a second home over rental of a hotel room, including, among others, the three that follow. First, he may value the certainty of having the place available when he decides to go, even at the last minute - something that a hotel room cannot ensure (we will focus on this specific benefit in our model). Second, he may regard it as an investment, with the prospects of future yields. Third, he may have a specific taste for the comfort or other features of homes, or, alternatively, a dislike for some specific features of hotels.

Clearly, the preference ordering for homes and hotel is reflected in their relative prices, and, as a consequence, in the values of the hotel (the expected profit, resulting from the value that consumers attach to the hotel), and of the second home (the value that the owner attaches to the second home itself). However, in spite of the consumer's relative preference for second homes,

an “integrated” firm may still find it more profitable to build the hotel when the extra revenue generated by the collateral activities for an hotel (precisely due to its higher utilization rate) is larger than the consumers’ extra value for the second home against the hotel. For all these reasons, a piece of land may be mostly valued by an “integrated” firm, owning both the hotel and (a portion of) the recreational facilities in the resort, followed by a consumer who is interested in buying a second home, and finally by a hotel owner who is not integrated in the lateral activities. On the other hand, an aggregate welfare-maximizing decision would require to build the hotel. It follows that private and social welfare are maximized only under an integrated regime.

Our assumption of land use restrictions that place a bound on the number of buildings or on their aggregate size reflects a common institutional rule in place in many tourism resort, justified possibly by environmental concerns, or, more generally, by the target of a sustainable tourism. A number of papers have dealt with the effects of ownership restrictions on the housing market. For instance, (Muller 2002) analyzed foreign second home purchases in northern Sweden and (Parsons 1992) focused on the price effect of land use restrictions. Only very recently, and for very few countries, we have documented data about the usage and market of second homes. For example, there are good description of second homes market in Sweden and sales, taxation and usage registers are available for this country (Müller 2004; Marjavaara and Müller 2007; Marjavaara 2007), but this can be regarded as an exception.

To our knowledge, however, none of them has explicitly analyzed the tradeoffs between hotels and second homes in the context of sustainable tourism. As far as the ownership structure, they differ in the various types of resorts. Therefore, we observe both fragmented and integrated ownership (Candela, Castellani and Mussoni. 2007). The previous literature has identified a number of impacts of second homes on the environment. Such impacts can bring about both benefits and problems, related to a diverse range of factors that affect the sustainability of local communities. These factors, such as housing, services and facilities, local economies and social and cultural vitality cut across a variety of policy areas, requiring effective partnership working between policy makers. However, it is important not to see the impact of second and holiday homes in isolation from other factors contributing to changes within local communities and especially other pressures as the market of hotel facilities.

ANALYTICAL FRAMEWORK

A (self-interested) profit-maximizing developer D owns a piece of land in a given ski resort R , and is allowed to build a unit, which he will sell to a buyer. The developer has to decide whether to build a hotel (for simplicity consisting of a single room, or a single “bed”) or a private home (also, consisting of a single bed). Observe that, for the purpose of the model, it would be equivalent to compare a second home and one used for renting. By doing so, he compares

the profit he gets from each of the two alternatives. If he builds a hotel, he will sell it to a profit-maximizing company (or individual), denoted H , which will manage it with the goal of profit maximization. If he builds a home, he will sell it to a private owner, F who will use it as a vacation home. Notice that another way to interpret the hotel alternative in our model is a home with a time sharing arrangement, while an alternative way to interpret the second home in our model is a home without a time sharing arrangement. Being the developer a (self-interested) profit-maximizer, he compares the willingness to pay of the two types of buyers (H and F): If H is willing to pay more than F , he builds a hotel and sells it to H ; vice versa, if F is willing to pay more than H , he builds a private home and sells it to F .

The resort is active in two seasons, a peak, and an off-peak season. Clearly, for a mountain destination the peak would be the winter, and the off-peak would be summer, while for a sea destination, the opposite would be the case. A number of potential tourists derive utility from spending time at the resort, regardless of whether they stay in their private home or at a hotel. For simplicity, we disregard tourists who already own a second home, and do not derive, in this framework, any utility from either the new hotel or the new second home. Hence, in any given period, the hotel room and the private home, as long as they are both used (or, clearly, both empty) yield the same utility to consumers. The results would hold a fortiori if, instead, we assumed that consumers prefer their private home over the hotel. The consumers' utility is defined as:

$$U = \begin{cases} \theta^p - p & \text{if he spends time at the resort in peak} \\ \theta^{op} - p & \text{if he spends time at the resort in offpeak} \\ 0 & \text{otherwise} \end{cases}$$

where θ^p and θ^{op} denote the individual values of spending time at the resort respectively in peak and off-peak, and p the price the individual spends, which depends both on the season and on his chosen type of accommodation (house versus hotel). Individuals are risk neutral, and, as can be inferred from the previous equation, their utility differs according to whether they reach the destination on peak or off-peak. The resort has a mass of K beds. The game develops in three stages. First, the developer D chooses whether to build an hotel or a second home. Second, the developer sells the facility he has decided to build (to a private customer if it is a second home, or to a company or an individual manager if it's an hotel). Third, tourists make their consumption decisions. They choose whether to enjoy the destination on peak, or off-peak, or, finally, neither in the peak nor off-peak. Those who decide to enjoy the destination will use their private home if they bought one, or rent an hotel room otherwise. We consider the following assumptions:

- a) Both the house and the hotel room can host at most two consumers, one in peak and one off-peak, and after the game their residual value is zero. Ob-

serve that both the house price and the hotel price are set assuming their life cycle lasts for the two periods of the game only. While these assumptions may seem unrealistic, they hold for both the hotel and the private home, thereby making the two alternatives homogenous and comparable; therefore, they are not restrictive for the purpose of the model.

- b) We rule out the alternative that the private home owner rents it or shares it through other types of contracts. This (crucial) assumption reflects both the higher rigidity in the second home renting market with respect to the hotel market, and the empirical evidence that a large portion of second home owners prefer to leave the home unused rather than renting it (see Bieger, Beritelli and Weinerta 2007).
- c) A mass M^p of perfectly homogenous individuals has a taste for spending the peak season at the resort, and their utility if they reach the resort in peak is θ^p . A mass M^{op} of perfectly homogenous individuals has a taste for spending time at the resort offpeak, and their utility is they reach the resort off-peak is θ^{op} . The consumers who have a taste for the peak have no taste for off-peak, and vice versa. This assumption reflects the segmentation - empirically observed - between the target groups for summer and winter tourism in mountain and sea resorts (see for instance, Meidan 1984; Spencer and Holecek 2007).
- d) $\theta^p > \theta^{op}$, that is, the value of the destination in peak (for peak customers) exceeds the value of the destination off-peak (for non-peak customers). This assumption is quite natural, and corresponds to a definition of peak load in tourism (see Dwyer and Forsyth 2006).
- e) $M^p > M^{op} > K$. The mass of tourists potentially interested in the destination is larger on peak than off-peak. However, in both cases, the demand exceeds the hotel capacity. Observe that this assumption, coupled with the shape of our demand function, guarantees that the outcome is identical for a range of market structures covering Bertrand competition, Cournot competition and collusion (hence the results are invariant to the assumed type of competition). While empirical observations suggest that hotels tend to remain partially empty in really off-peak periods, our assumption remain valid as long as we are willing to interpret the peak period of our model as "high peak" and the off-peak period of our model as "medium peak", in the following sense: In "high peak" periods (for example, for a European ski resort, Christmas vacations), both hotels and second homes are full, while in a "medium peak" period (for example, for a European ski resort, February), hotels tend to be full, while second homes are generally unused for most of the month. A further justification for our assumption consists in the fact that hotels are increasingly using price differentiation, or yield management, strategies aimed at increasing the occupancy rate even off-peak.
- f) The developer's cost of building the private home and the hotel are identical, and normalized to zero for convenience, to allow for a greater degree of comparability between the two options.

- g) While being self-interested, the developer is part of the community; therefore, his profit is computed as part of the welfare accruing to the resort. While in practice the developer itself might be an outside entity, the license for building would be awarded by the community, which would then retain the proceeds from the awarding procedure.
- h) Hotel rooms are booked simultaneously. There is no way a consumer can reserve in advance and be sure to get a hotel room (This assumption is made only for simplicity. The results would hold even assuming a sequential process of hotel booking, but this would generate more cumbersome computations).

Results: Equilibrium Characterization

In equilibrium, the developer D is selling the unit to the party that values it the most, and is therefore willing to pay the most for it. Moreover, in equilibrium, as long as the hotel market is competitive, the valuation of the unit for each party is equal to the flow of expected profit from the unit for H , denoted by V_H , and the flow of expected utility from the unit for F , denoted by V_F . Hence, the developer D will sell the unit to the hotel owner H if $V_H \leq V_F$; otherwise, it will sell it to the private (home) owner F . As both the hotel and the private home yield utility for two periods only, V_H (respectively, V_F) represent the sum of profit (respectively, utility) in the two periods. In our framework, a consumer prefers the private home over the hotel only because owning the home insures him against the risk of not finding an available hotel room, and hence not being able to reach the destination in the desired period. In other words, the consumer values the certainty of finding an available room, which is not ensured by the limited hotel capacity K . It follows that a tourist wishing to enjoy the destination has two alternatives. Either, he reserves an hotel room, where he finds an available spot with probability $\Pr(K)$ at a price $p(K)$, or he buys a home, where he finds an available spot with probability 1 at a price P_F . The consumer chooses to buy the house instead of the hotel if and only if the value from the home ($\theta - P_F$) (that is, the prospect of spending with certainty time at the resort, either in peak or off-peak) exceeds the value from the hotel (that is, the prospect of spending time at the resort conditionally on finding an available hotel room). Hence, a consumer (in peak or off-peak) prefers the house over the hotel if the following condition holds:

$$\theta - P_F \geq \Pr(K)\theta - p(K) \quad (1)$$

where P_F is the home price. Equation 1 tells us that the tourist prefers to buy the house if the net value from the house (i.e., the value of enjoying the destination with certainty minus the price) exceeds the net value from the hotel (i.e., the value of enjoying the destination minus the hotel price weighted by the probability of finding an available room). The individual, as previously discussed, is willing to spend more for the home, as he is sure of enjoying

the utility from the resort. Observe that, in principle, both an individual who prefers the peak, as well as one who prefers the off-peak, might be interested in the home. Hence the house is built if either of the following holds: $\theta^p - P_F \geq Pr^{op}(K) \theta^{op} - p^{op}(K)$ or $\theta^p - p_F \leq Pr^p(K) \theta^p - p^p(K)$. Under our assumption that the mass of consumers interested in the peak period exceeds the mass of customers interested in the off-peak period, and the latter in turn exceeds the available hotel capacity (that is, $M^p > M^{op} > K$), we derive the prices:

$$p(K) = \begin{cases} \theta^p & \text{in the peak} \\ \theta^{op} & \text{in the off - peak} \end{cases} \quad (2)$$

Under Bertrand competition, Cournot competition and collusion, this is the only equilibrium. To prove it, assume otherwise. If the equilibrium price is $\theta < \theta^p$ (θ^{op}) in peak (off-peak), then a firm would profitably deviate by charging θ^p (θ^{op}) and still attract customers (as, given θ , there are customers who are willing to rent the hotel room, have a value of θ^p (θ^{op}) for that, but cannot find it). On the contrary, assume the equilibrium price is $\theta > \theta^p$ (θ^{op}). Then, there are no hotel rooms rented, but a potential profit available of θ^p (θ^{op}). It follows that every firm faces a profitable deviation to θ^p (θ^{op}). The price schedule (2) is indeed an equilibrium, from which there is no profitable deviation. The probability $Pr(K)$ of finding an available room at the hotel is given by the ratio of "hotel capacity-mass of tourists", that is,

$$Pr(K) = \begin{cases} \frac{K}{M^p} & \text{in the peak} \\ \frac{K}{M^{op}} & \text{in the off - peak} \end{cases}$$

It follows that equation (1) becomes:

$$P_F \leq \theta^p - \frac{K}{M^p} \theta^p - \theta^p \quad (3)$$

and

$$P_F \leq \theta^{op} - \frac{K}{M^{op}} \theta^{op} - \theta^{op}$$

A potential "peak tourist" buys the house if $P_F \leq \theta^p$, while a potential "non peak" tourist buys the house if $P_F \leq \theta^{op}$. The developer, if he finds it optimal to build the home, maximizes his profit by selling it to the type of tourist with the highest value for it, reflected into a higher willingness to pay. The highest price a tourist is willing to spend results from

$$\max \left\{ 2\theta^p - \frac{K}{M^p} \theta^p; 2\theta^{op} - \frac{K}{M^{op}} \theta^{op} \right\} = 2\theta^p - \frac{K}{M^p} \theta^p$$

(as assumption d. implies that $\frac{K}{M^p} \leq \frac{K}{M^{op}}$). Peak tourists get the highest value from the home, hence they are willing to pay a higher price. It follows that, if she

decides to build the private home, the developer can charge:

$$P_F = 2\theta^p - \frac{K}{M^p} \theta^p$$

A hotel owner, on the other hand, given his pricing policy, achieves a positive profit both in peak, and off peak:

$$\pi^H = P^H = \theta^p + \theta^{op} \tag{4}$$

Equation (4) implies that the maximal price that an hotel owner is willing to pay for the hotel is given by $\theta^p + \theta^{op}$. That is the price the developer can charge if he decides to build the home. The developer chooses the option that maximizes his revenue (equal to its profit by assumption). Hence, the developer decides to build the private home if:

$$2\theta^p - \frac{K}{M^p} \theta^p > \theta^p + \theta^{op} \tag{5}$$

It follows that the home is built instead of the hotel if either the difference in value between customers who have a taste for the peak and those who have a taste for the off-peak is substantial, or if the probability of finding an available spot is relatively low. Observe that, differently than the hotel, the second home remains empty off-peak. Under this circumstance, the resort is giving up the revenue potentially generated by the tourist in the lateral activities in the off-peak period. For convenience, let us denote by VA^p and VA^{op} the extra value added that tourists injects in the resort, through the lateral activity, respectively on-peak and off peak. Without loss of generality we did not discuss at least two different approaches to this important issue, such as “finance-investment” and “public financing” aspects. But recall that many of the resort second home is put into rental management company’s portfolio to generate cash flow for the owner. At least that is the case in the USA and Southern Europe.

Results: Welfare

This subsection examines explicitly the total welfare effects of the two alternatives. The total welfare generated by the home results from the aggregation of the developer’s revenue $2\theta^p - \frac{K}{M^p} \theta^p$ equal to the consumer’s value for the second home, given that the developer, in its monopsony position, is able to extract the full surplus from the consumers), and the external effects (denoted by VA^p) on the economy in the peak period – the only period in which the second home is used. Remember that we are assuming that the developer is part of the community (if this is not literally true, it could still be that the local government is able to impose fees or taxes on the developer to hold the hotel’s revenue inside the community). The total welfare from the second home is then:

$$2\theta^p - \frac{K}{M^p} \theta^p + VA^p$$

In turn, the aggregate value generated when the hotel is built results from the aggregation of the price paid by the company (or the individual) that buys the hotel (in turn equal to the consumers' value for the hotel – fully extracted by the hotel owner), $\theta^p + \theta^{op}$, and the external effects on the economy in both periods (being the hotels fully used both in peaks and off-peak). The total welfare from the hotel is therefore given by:

$$\theta^p + \theta^{op} + VA^p + VA^{op}$$

Total welfare maximization coincides with profit maximization for an integrated owner. Indeed, an integrated ownership, where the hotel owner owns the lateral activities as well, recognizes (and therefore internalizes) the externality and the extra value added generated by the hotel through the lateral activities off peak. Therefore, the maximization of the aggregate welfare coincides with the maximization problem of the integrated owner. In this case, the private home is built if:

$$2\theta^p - \frac{K}{M^p} \theta^p + VA^p > \theta^p + \theta^{op} + VA^p + VA^{op} \quad (6)$$

By comparing (5) and (6), one may notice that under integrated ownership, the hotel room is built more often than under fragmented ownership. Furthermore, the hotel room is built when it is optimal from the viewpoint of the local community to do so. Observe that the inefficiency of the dispersed structure emerges when the initial number of hotels is low. In this case, the consumer has a substantial chance not to find an available room, and therefore places a high value on the certainty provided by the second home. Hence, a resort with few hotels (and fragmented ownership, lack of side-payment, and no other forms of incentives for hotels) lies in a "second homes trap" where the low number of hotels induces consumers to place a high value on private homes. In this case, therefore, the low number of hotels persists over time. In other words, abundance of second homes generates more second homes, whereas abundance of hotels generates more hotels.

CONCLUSION AND IMPLICATIONS

The paper shows a simple mechanism that may contribute to explaining the persistence of inefficient (from the resort's community viewpoint) equilibria, in which the land is allocated to a socially inefficient use (second homes, rather than the hotels, which would increase the aggregate welfare for the community). This inefficiency emerges as a result of an externality problem.

An integrated owner, who owns the lateral activities (such as, for instance, the restaurants, or the ski resorts), as well, has a high incentive to pay the developer a large amount, in order to make sure that the hotel is built rather than the second home. Indeed, when the hotel is built, the integrated hotel owner not only benefits from the revenue of the hotel activity, but it also (differently than under the fragmented ownership framework), increases its profit thanks to the lateral activities. Therefore, when the hotel owner is integrated in the lateral activities, the number of hotels tends to increase. This is also optimal from the viewpoint of the community, as it reduces seasonality thereby guaranteeing a more uniform flow of tourists all year long.

Key in our mechanism is the “value of holiday security”, that is, the value placed by individuals on the certainty of finding an available spot for the desired time spells at the selected destination. While we recognize that second homes purchase decisions involve a great deal of complex variables, our model focuses on one specific aspect, and provides, in our view, valuable testable implications. If the previous argument is correct, however, a puzzle persists. Why doesn't either an integrated ownership structure or side-payments among the various actors emerge as an equilibrium of the game? The prevalence of a dispersed structure over an integrated one can be attributed to a variety of reasons, among which we believe the following are the most prominent. . First, historical reasons coupled with some market frictions that preclude efficient transactions and a transition towards a single ownership mechanism. Second, capital market imperfections, by limiting the capital available to the firms, reduce its size. Third, local policy arrangements that tend to favor dispersed over concentrated ownership.

Our results entail a strategy suggestion for hotel owners, who should, whenever possible, horizontally integrate into the lateral industrial activities of the destination (for instance, restaurants and amenities), in order to be able to fully capture its potential value; alternatively, if fragmented ownership, due to financial or regulatory constraints, has to be preserved, the hotels should coordinate and team up into consortia, in order to facilitate the emergence of procedures that internalize the externality through side-payments, or provide forms of joint ownership of the resort lateral industrial activities by the various hotel owners.

The results also suggest some policy implications. First and foremost, any regulation that explicitly favors second homes at the expenses of hotels is inefficient, from the viewpoint of the community. Second, any regulation that favors fragmented over concentrated ownership at a destination tends to exacerbate the inefficiencies of building homes over hotels (and hence should be banned). Third, under dispersed ownership, side payments among the various operators, as well as forms of mixed ownership of related activities shouldn't be prohibited (rather, if anything, they should be encouraged). The results of the paper suggest that specific laws, prescribing that a certain proportion of the new structures should consist of hotels, might be welfare-enhancing. However, this specific point deserves a word of caution, motivated

by two reasons. First, any of these “top-down” policy measures might generate a number of unintended consequences; a valid assessment of such policies therefore requires a more careful analysis. Second, even without assuming unintended consequences, a specific law favoring hotels over second homes could ultimately determine an excess of hotels over second homes (a possible outcome when the initial number of hotels is sufficiently high), thereby reducing the aggregate welfare for the community. A market-based approach, consisting in integrated ownership, or, if possible, in self-sustaining mechanisms of side-payments, is therefore largely preferable to a top-down regulated approach.

Finally, a word on the interpretation of parameter values. Our findings show that the inefficiency of the fragmented structure emerges when the initial number of hotels is low. A resort with a limited amount of hotels (and fragmented ownership, lack of side-payment, and no other forms of incentives for hotels) lies in a vicious circle where the inefficiency persists unless some of the structural aspects of the economy change. This “second homes trap” affects a number of resorts, mostly ski resorts, where, in the presence of few hotels, there does not seem to be an incentive to increase the hotel supply, but rather to build new second homes. We believe that a promising future line of research should consider the impact effects, measured in terms of costs and generation of employment in the local community, under a direct policy to build hotels. Our guess, however, is that the tourism multiplier effect on local economic development is higher for hotels, as hotel guests tend to have a higher average daily per capita expenditure (in terms of indirect tourism expenses). In addition, for further research we may consider, for instance, incorporating important aspects of tax revenue generation from those two investments into hotels and second homes. Hotels generate sales tax (VAT) special bed tax and property tax, and the second homes are also contributing substantial tax revenues from property tax to local governments. Second Homes put in rental pools generate sales tax and bed tax as units are leased out as vacation homes.

REFERENCES

- Accinelli, E., Brida, J.G. and Carrera, J.S. E. (2007). Second Homes: The Effects on Social Welfare of a Change on the Valuation of Individual Opportunity Cost, *Anatolia: An International Journal of Tourism and Hospitality Research*, 18(1): 85-96.
- Bieger, T., Beritelli, P. and Weinerta, R. (2007). Understanding Second Home Owners Who Do Not Rent. Insights on the Proprietors of Self-Catered Accommodation, *International Journal of Hospitality Management*, 26 (2): 263-276.
- Candela, G., Castellani, M. and Mussoni, M. (2007). *Second Homes vs Hotels: A Suggestion for a Self-Enforcing Policy*. WP 50-07 The Rimini Centre for Economic Analysis.
- Carliner, M. (1990). *Second Home*. *Housing Economics*, July Issue.
- Carliner, M. (1998). *Second Home Construction*. *Housing Economics*, July Issue.
- Carliner, M. (2002). *Second Homes: A Growing Market?* *Housing Economics*, July Issue.
- Casado Diaz, M.A. (1999). Socio-Demographic Impacts of Residential Tourism: A Case Study of Torrevieja, Spain, *International Journal of Tourism Research*, 1: 223-237.

- Dwyer, D. L. and Forsyth, P. (2006). *International Handbook on the Economics of Tourism*. Edward Elgar Publishing.
- Di, Z. X., McArdle, N. and Masnick, G. S. (2001). *Second Homes: What, How Many, Where, and Who*. Joint Center for Housing Studies of Harvard University Research Note N01-2.
- Francese, P. (2003). The Second Home Boom, *American Demographics*, June 2003.
- Gallant, N. and Twedwr-Jones, M. (2001). Second Homes and the UK Planning System, *Planning Practice & Research*, 16 (1): 59-69.
- Gallant, N. and Tewdwr-Jones, M. (2000). *Rural Second Home in Europe: Examining Housing Supply and Planning Control*. Avebury: Ashgate.
- Hall, C. M. and Williams, A. M. (eds.) (2002). *Tourism and Migration: New Relationships Between Production and Consumption*. Dordrecht: Kluwer Academic Publishers.
- Hecodk, R. (1993). Second Homes in the Norwegian Mountains: Cultural and Institutional Contexts for Continuing Development, *Tourism Recreation Research*, 18(1): 45-50.
- Hoogendoorn, G. and Visser, G. (2004). Second Homes and Small-Town (Re)Development: The Case of Clarens, *Journal of Family Ecology and Consumer Sciences*, 32: 105-115.
- Jansson, B. and Müller, D.K. (2004). Second Home Plans among Second Home Owners in Northern Europe's Periphery. In: C.M. Hall and D.K. Müller (Eds.). *Tourism, Mobility and Second Homes: Between Elite Landscape and Common Ground*, Channel View Publications (pp.261-272), Clevedon: Channel View.
- Lundmark, L. and Marjavaara, R. (2005). Second Home Localizations in the Swedish Mountain Range, *Tourism*, 53: 3-16.
- Marjavaara, R. (2007). The Displacement Myth -- Second Home Tourism in the Stockholm Archipelago, *Tourism Geographies*, 9(3): 296-317.
- Marjavaara R. and Müller, D.K. (2007). The Development of Second Homes' Assessed Property Values in Sweden 1991-2001, *Scandinavian Journal of Hospitality and Tourism*, 7(3): 202-222.
- Meidan, A. (1984). The Marketing of Tourism, *The Service Industries Journal*, 4(3): 166-186.
- Müller, D. K. (2002). German Second Home Development in Sweden. In C. Hall and A. M. Williams (Eds.). *Tourism and Migration: New Relationships between Production and Consumption* (pp.169-185). Dordrecht: Kluwer.
- Müller D.K. (2004). Second Homes in Sweden: Patterns and Issues. In C.M. Hall and D.K. Müller eds., *Tourism, Mobility and Second Homes: Between Elite Landscape and Common Ground* (pp.244-258). Clevedon: Channel View.
- Parsons, G. R. (1992). The Effect of Coastal Land Use Restrictions on Housing Prices: A Repeat Sale Analysis, *Journal of Environmental Economics and Management*, 22: 25-37.
- Petterson, R. (1999). Foreign Second Home Purchases -- the Case of Northern Sweden, 1990--96, *CERUM Working Paper No 14*, Centre for Regional Science, Umeå University, Umeå.
- Pijanowski, B. C. and Shellito, B.A. (2003). Using Neural Nets to Model the Spatial Distribution of Seasonal Homes, *Cartography and Geographic Information Science*, 30(3): 281-290.
- Spencera, D. M. and Holecek, D.F. (2007). Basic Characteristics of the Fall Tourism Market, *Tourism Management*, 28(2): 491-504.
- Tress, G. (2002). Development of Second-Home Tourism in Denmark, *Scandinavian Journal of Hospitality and Tourism*, 2(2): 109-121.
- Visser, G. (2003). Visible, Yet Unknown: Reflections on Second-Home Development in South Africa, *Urban Forum*, 14(4): 12-33.

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