SUPPORT FOR RURAL TOURISM
Does it Make a Difference?

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Abstract: The promotion of small-scale tourism is intuitively perceived as a suitable form of economic development for rural areas. However, its impact is controversial and not always obvious. To examine these issues, this paper presents an empirical analysis of public support to small-scale tourism enterprises in rural areas in Israel. Using the tools of cost-effectiveness and cost–benefit analysis, public assistance for this type of activity is shown to be able to generate considerable returns. Methodological issues in this kind of analysis are also discussed and the policy implications arising with respect to the suitability of different forms of tourism activity in rural areas are presented. **Keywords:** rural tourism, public support, small-scale enterprises, rural development. © 2000 Elsevier Science Ltd. All rights reserved.

Résumé: L'aide au tourisme rural: fait-elle une différence? La promotion du tourisme à petite échelle se perçoit intuitivement comme une forme convenable de développement économique pour des régions rurales. Pourtant, son impact est controversé et n'est pas toujours évident. Afin d'examiner ces questions, cet article présente une analyse empirique de l'aide publique aux entreprises de tourisme à petite échelle dans des régions rurales d'Israël. En utilisant les outils de coût-efficacité et d'analyse coûts–bénéfices, on montre que l'aide publique pour ce genre d'activité peut générer des bénéfices considérables. On discute aussi des questions méthodiques dans ce genre d'analyse, et on présente les implications de politique qui surgissent vis-à-vis de la pertinence de différentes formes d'activité de tourisme dans des régions rurales. **Mots-clés:** tourisme rural, aide publique, entreprise à petite échelle, développement rural. © 2000 Elsevier Science Ltd. All rights reserved.

INTRODUCTION

Tourism as a strategy for economic growth has been on the regional development agenda for some time. Peripheral and rural areas have frequently looked to it as a tool for promoting local jobs and raising the level of economic welfare (Eadington and Smith 1992; Echter 1995; Fleischer 1999). Often, this is a result of the lack of any viable alternatives or the self-fulfillment of political rhetoric (Baum and Moore 1966; Oppermann 1996). However, every reason

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for promoting tourism as a rural growth tool has a counter-reason for opposing this strategy. Thus, while tourism is heralded as job-generating, it is also blamed for creating low wages and only seasonal employment (Fredrick 1993). When proponents claim that tourism is environmentally friendly, opponents counter that it degrades valuable and finite resources (Gibson 1993). The argument that it generates new demand in the local economy is challenged by the assertion that it displaces existing demand (Hoy 1996). Further, the position that it generates new revenue sources for rural authorities is often challenged by assertions to the contrary: tourism development is a fiscal burden for many small, rural governments, exerting a disproportionate drain on the local service base (Fredrick 1993). Even though the suitability of rural tourism as a tool for economic development has not been fully demonstrated, public agencies continue to support it as a growth strategy. Hall and Jenkins (1997), for example, list 18 different policy instruments used by governments for the promotion of rural tourism. They include regulatory instruments, voluntary instruments, expenditures, financial incentives, and non-intervention decisions. Decision-makers and practitioners alike still perceive rural tourism as an appropriate development path to take.

An often-overlooked fact in the debate about economic development via tourism is that, in many rural areas, its promotion is synonymous with small-business promotion and the industry is heavily characterized by small, family-centered enterprises (Fleischer and Pizam 1997; Wales Tourism Board 1994). In the United States, for instance, according to the Small Business Administration, almost 99% of all tourism-related establishments in rural areas qualify as small businesses (Galston and Baehler 1995). Similarly in the United Kingdom, such rural developments are characterized by a large number of small, family-based businesses (Rural Development Commission 1995).

A survey of rural tourism in Israel has found that almost all economic activity in this industry can be classified as small and family-based (Fleischer, Rotem and Banin 1993). In the rural sector, 82% of all establishments employ less than six employees and in the accommodation (bed and breakfast) subsector, 95% employ less than three workers. In addition, most of this laborforce (64%) is female. While tourism is a highly prevalent form of income diversification for farm enterprises, it accounts for less than 30% of the income for 60% of the farms involved in this business. Furthermore, the total value of its output is estimated at $35 million. This represents only 1% of the total tourism output in Israel.

However, despite the market overlap between small-business and rural tourism enterprises, surprisingly little is known about the effects of the former (Slee, Farr and Snowdon 1997), particularly in some important areas. The effectiveness of this type of growth strategy in generating local jobs and incomes has received limited attention. This has important implications for policy formulation. First, there is the issue of neutrality in public policy. Is there any justifica-

tion for targeting assistance to small-tourism enterprises rather than to the small-firm universe as a whole? Second, is it worth assisting this form of economic activity and what is its cost-effectiveness? Third, even if a rationale for this kind of public support can be established, little knowledge has been acquired as to the welfare impacts of this form of activity. Does it have a redistributive effect, serving those target populations that are most in need? What are the social costs and benefits arising from public support for this activity?

Intuitively, this form of economic development is associated with the generation of local jobs and incomes. The typical enterprise, such as the bed-and-breakfast establishment, is perceived as having low barriers to entry; employing existing, underutilized (fixed and human) capital; and placing modest demands on public assistance (Slee et al 1997). On the other hand, the small-scale character of these operations could perhaps render them marginal in terms of any efforts to improve local welfare. In fact, supporting them may only serve to cannibalize existing enterprises as demand is redivided among more operators. This paper attempts to deal with these issues using empirical evidence from public support for rural tourism establishments in Israel. It analyzes the rationale for supporting small-scale rural businesses and reviews the state of knowledge about the effectiveness of this assistance. This includes a description of the loan and guarantee program that forms the empirical basis for this analysis and the methodology employed to assess the effects of support to such enterprises. The approach taken here involves creating an "employment account" for the program and then deriving a cost–benefit ratio on that basis. In this respect, issues of both efficiency of the program and its distributive effects are dealt with. The paper represents an empirical and methodological contribution due to the current dearth of empirical substance on this subject. It also presents an assessment methodology that can be used by planners and economic development practitioners when grappling with strategy choices.

SUPPORT FOR RURAL TOURISM

'Market failure' forms the basic rationale for public-sector support programs. In tourism and regional development, the case for intervention arises when private markets fail to provide public goods, when externalities are created, or when information asymmetries occur (Bartik 1990; Hartley and Hooper 1993). The latter is particularly apposite in the case of rural tourism. As noted earlier, most enterprises are small businesses. They can be excluded from the capital market because of the existence of an information gap which results in discrimination against them largely because they are unknown quantities (Binks, Ennew and Reed 1992). Market failure arises when these operators are rejected by the private market while businesses having a similar risk profile are being served. The information gap in this instance is the result of small and rural

firms being less accessible and visible to banks and credit providers. For these institutions, the cost of gathering information on small operations can be prohibitive, leading to imperfect markets based on asymmetric information. The firms themselves can also be party to the creation of this information asymmetry and market failure. By failing to distinguish themselves from the pool of applicants, the failure is as much that of the enterprise as of the market.

In the case of rural tourism, it is not difficult to appreciate why the market may fail with respect to many small-scale operations. These often are located in remote areas, from a low capital base, and function with low-level skills and little experience. Despite the fact that they might be viable business concerns, from the credit institution's perspective, they are of the wrong size (too small), the wrong vintage (too new), and in the wrong location (too remote). In view of the potential for market failure, the paucity of assessments of support programs for small tourist-based firms is all the more surprising. Local economic development effects associated with such activity in the Scottish Highlands have been examined (Slee et al 1997); however, their analysis did not focus on the impact of public assistance to these firms. Thus, using a proportional multiplier method, the Scottish study found higher income and employment impacts associated with smaller tourism enterprises than with larger operations, implying greater local economic cooperation of the former. However, this method does not allow for estimating the share of these impacts attributable to public support in European Union Objective 1 regions which include less developed areas of the union (European Commission 1996), with all of its implications for public assistance.

The economic impacts associated with the public assistance of tourism have been addressed methodologically and empirically by Wanhill (1995, 1997). He developed a general Keynesian impact framework for assessing publicly supported tourism activities. These can relate to attractions and venues and require reasonably detailed data on site/venue expenditures and revenues, and tourist consumption patterns. The resultant income and employment multipliers are constructed to account for some of the common methodological pitfalls in economic impact analysis. These include the fact that some local spending may have taken place even in the absence of publicly supported tourism projects and the fact that not all demand related to the project is new. Some of it may be simply displacing existing demand. While this body of work can be applied to evaluating public assistance to small tourism firms, in practice its application has been to larger-scale, stand-alone, traditional-type tourism projects, such as theaters and museums (Johnson and Thomas 1990).

In a more piecemeal fashion, some recent work on small-scale tourism has tried to assess the individual policy instruments used by public agencies. Work by Fleischer (1999) has attempted to estimate the employment and income impacts arising from a tourism business incubator project operating in Israel. Using standard cost-

effectiveness indicators (such as cost-per-job indices), her work suggests the economic efficiency of this program. However, the volume of this impact in terms of the number of jobs and amount of income directly attributable to the program is still very small. Similarly, work on the impacts of subsidized constancy programs for small tourism firms (Lerner and Saati 1997; Vance, Thomas and Margerison 1991) has shown impacts to be marginal. In the main, this literature is more concerned with looking at the performance of the recipient firms (on a before and after basis) than with estimating job creation or social costs.

Information on the effects of public support for small businesses is thus patchy and sporadic (Thomas 1997). In some instances, such as European Union targeted rural programs that offer a variety of support instruments for small tourism-based businesses (Ray 1996; Wanhill 1997), it could be that insufficient time has elapsed to adequately observe the outcomes of the various policy instruments. In addition, this rather incomplete picture is a result of, on the one hand, the fact that studies on the economic impacts of small-scale tourism does not always look at the support programs that increasingly promote this segment of the small-firm population. On the other hand, analyses of public policy for small enterprises do not always highlight economic impacts. Both types of investigations generally overlook welfare and distribution issues arising from the public support for small firms.

Assistance to Rural Tourism

The empirical basis for this investigation is a targeted loan and guarantee program operated by Israel's largest non-government organization: the Jewish Agency (JA). It has historically focused its activities on the development of rural areas and the absorption of new immigrants. These two areas of activity coincided in the 90s in the aftermath of the mass immigration of Jews to Israel from the former Soviet Union. In tandem with national policy, the JA tried to encourage a proportion of the new arrivals to settle in rural communities, often in peripheral and sparsely populated areas. The new immigrants were seen as an important source for effecting the JA's twin policy of absorption and rural settlement. However, the organization was also well aware of the employment implications of this policy in a country struggling to absorb an unexpected population influx of 17% in less than five years. The prospect of large-scale rural unemployment prompted the JA to embark on a program of rural economic development with an emphasis on job creation.

The main instrument for implementing this policy was a loan and guarantee program. This was financed in the main by JA and administered jointly with a national commercial bank. While the agency had operated a few city-based revolving loan funds at the end of the 80s, this was the first comprehensive attempt to use financing as a leverage for rural entrepreneurship and job-generation. Shortly after JA's incursion into this area of economic development, the

national government began to promote nationwide small-firm loan guarantees. This offered funds to small businesses at market rates but with full guarantees. In order to avoid duplication of resources and wasteful competition, JA redefined its loan program terms and target population. As a result, the agency program focused on a niche in the small-firms finance market, namely, small businesses in rural and peripheral locations with special emphasis on new immigrants' businesses. These are precisely the small firms likely to be excluded from conventional sources of capital because of information-based market failure. As noted earlier, the market is likely to discriminate against them even if they offer viable business projects, as the costs of gaining information on firms that are in the "wrong" location or of the "wrong" size or ownership, can be prohibitive. The JA program further distinguished itself from the national small firms scheme by offering smaller loans on average at below market rates (roughly three to four percentage points) and with only a partial guarantee (up to 40%).

An examination of the projects supported by the JA program during the period 1993–95 shows that the fund supported 845 projects, authorizing assistance with a total value of $19.4 million. The data source for this analysis is the loan file compiled for each applicant. This yields information on the basic characteristics of each project as provided by the applicants: description of business, employment (current and projected), capital structure of the business, scale of investment (current and projected), industrial sector, and location. In addition, data are provided on the terms of the loan itself: size, repayment period, grace period, and percentage loan guarantee demanded by the bank from the funding agency.

This analysis separates tourism-based projects from other assisted enterprises. In total, support for these activities accounted for some 18% of the value of all loans authorized over the study period with nearly 140 individual projects supported. Of the rest, services accounted for most of the assistance (nearly 64% of funds disbursed), industry accounted for 7% and agriculture 6%. Further subdividing the tourism activity into three main project categories reveals that 85% of the support was for bed-and-breakfast operations (or the establishment or extension of small country guest houses), 11% went to touring operations, generally jeep and bicycle tour businesses, and 4% was allocated to food establishments (for the purpose of establishing restaurants). This distribution of activities strongly reflects the nature of tourism activity in rural Israel, where these services complement the resource-based attractions of national parks, water sports, and nature walks (Fleischer and Pizam 1997).

Table 1 presents a comparison of basic attributes of the assisted projects for tourism-based small firms and all other supported projects. A difference-of-means test reveals significant differences across basic characteristics. Tourism projects are on average less capital-intensive and with less investment in fixed capital stock. The mean loan size for a project is smaller than for other businesses and

Table 1. Characteristics of the Fund Assistance

Characteristic	Overall Mean	Mean Value by Sector		F-Value and Significance
		Tourism	Other Sectors	
Size of loan[a]	25.3	20.1	26.3	13.9[b]
Size of overall investment[a]	40.3	22.8	43.7	15.6[b]
Investment in fixed cap. stock[a]	23.7	13.1	25.8	7.9[b]
Repayment period (years)	4.5	4.9	4.4	7.2[b]
Grace period (months)	5.9	6.4	5.8	1.5
Funding agency guarantee as percentage of loan	24.2	22.6	24.6	19.2[b]
No. of jobs generated[c]	2.9	2.5	3.0	9.5[b]

[a] In thousands of dollars.
[b] Difference in means significant at $\alpha < 0.001$ level.
[c] As reported by firms.

the level of perceived risk associated with tourism (as captured by the percentage loan guarantee provided by the funding agency) is slightly lower than average. The mean number of jobs attributed to the loan is similar. However, this figure is firm-reported and as such should be treated with circumspection.

In general, rural tourism-based enterprises are smaller and newer than other forms of economic activity in rural areas (services, industry, and agriculture) and other tourism operations nationally. They are the products of reduced agricultural activity and the search for sources of income diversification. In Israel, they have witnessed high growth rates since the end of the 80s, averaging 22% per year (Fleischer and Pizam 1997). Observers are of the opinion that the saturation point in this market is still far off and that opportunities in this field will continue to encourage a stream of family-based, small-enterprise formations. For example, estimated potential market demand and supply in the rural accommodation (bed-and-breakfast) sector was estimated (Fleischer et al 1993) and found excess demand equivalent to more than 700 rooms. The main attributes of the firms in this study reflect these trends.

Assessment Methodology

The method employed here is a hybrid form of impact assessment. The analysis is conducted in two stages. The first deals with the effectiveness of public support for small tourism-based businesses. In this instance, it is important to know the value-for-money impact of the subsidy provided to these small firms in the form of a loan and guarantee. A standard index often used is subsidy-per-job (that is, the amount of public support that contributes to creating an extra place of employment). However intuitive this

measure may seem, its estimation is fraught with methodological challenges.

First, the numerator or the subsidy term has to be estimated. As this particular form of assistance is a loan—which has to be repaid—the size of the subsidy embodied in the loan needs to be calculated. This is achieved by viewing the subsidy as the difference between the market rate for loans of this type and the one actually paid (i.e. the opportunity cost of capital). The present value of the full stream of repayments until loan retirement then has to be calculated. Furthermore, any additional costs associated with the loan have to be discounted. These include administration costs of running the program, default costs of loans not repaid, and the opportunity cost of the funds that serve as the loan guarantee. In the alternative situation, they could have been put to some other (more productive) use.

Second, the denominator in the subsidy-per-job index has to be considered. This relates to the number of jobs attributed to the program. A simple employment tally of the before and after situations of the small business will not suffice. This is because employment impacts attributed to the assistance that would have taken place even in the absence of the program are to be included. In terms of employment generation, this is a "deadweight" effect and cannot be rightly attributed to the program. In addition, it must be recognized that, in certain markets and sectors, subsidizing one operator is likely to put a second out of business. This displacement effect has to be estimated as well.

Third, a comprehensive employment account of the impact of the assistance has to be programmed so the impact captured does not exclusively relate to the direct effect of the program. The indirect employment impacts that are generated by primary job creation, the inter-sectoral linkages that the tourism business cultivates with suppliers and other producers, and the induced impacts on households that benefit from the new employment opportunities have to be noted. All of these are captured in the multiplier effect of the direct job-generation and this has to be included in the estimation. Therefore, a net employment estimate is distilled from the total employment impact reported by the firms. This approach uses the latter as a starting point and it is scaled down or up to account for deadweight, displaced, and indirect employment (Felsenstein, Fleischer and Sidi 1998a).

Once the employment account is constructed, it serves as the basis for answering the welfare issue underlying this analysis, asking whether this form of support makes a difference and which income classes are likely to benefit from the increased welfare that might arise as a result of the program. Such questions endeavor to grapple with important distribution issues that are often overlooked in the assessment literature and that have not been addressed in the context of support for small-scale tourism businesses.

The approach adopted here is to convert the employment impacts estimated in the earlier stage into earnings impacts. The cost-effec-

tiveness analysis is thus expanded into a cost–benefit analysis. As the main benefit of employment gain is income gain, the former has to be converted into units of the latter. Income gain is disaggregated into three classes so that the distribution effects of the assistance can be assessed. This involves various necessary assumptions, the foremost of which relates to the appropriate opportunity cost adjustment for employees in different income groups. The main assumption is that the income of earners in the highest income group cannot be truly credited to the program. As these wage earners could have found alternative income sources in the absence of the program, it cannot be credited with most of their income gain. The question then arises as to the appropriate adjustment to be made. Based on the labor reservation wage estimates from the impact assessment literature (Sridhar 1996; Swales 1997), the lowest earners (Group 1) are fully credited with 100% of their program-generated income, the middle group with 50%, and the highest earners (Group 3) with only 25%. This estimation gives a better indication of the income benefits arising from the program.

On the cost side, the estimation is more straightforward. The opportunity cost of the loan and guarantee has already been dealt with. These are calculated as the alternative uses for these funds and they must be subtracted from the benefits. Administrative and default costs must also be subtracted and also a small adjustment included for the increased cost of raising taxes. Total costs are then subtracted from total benefits and the standard indicators of cost–benefit (C–B ratios and net present values) are presented. However, the most important feature of this analysis is the breakdown of the income impact by groups and the ability to see the proportional and absolute gains across income classes arising from this program. This gives an indication of the welfare effect of the program.

Subjecting this program to a cost–benefit test can be justified on several grounds. First, if discrimination against small firms in the capital market is a result of market failure, then a cost–benefit analysis would seem to be a suitable approach. Second, these measures enable one to distinguish across different income groups and job types, countering the notion of labor as homogeneous input. This in turn adds the distributional effect, allowing an examination of which income groups benefit most from employment generated among small tourism-based businesses.

Program Effectiveness

Subsidy-per-job was used as the central indicator of program effectiveness. To reach a realistic estimate of the size of the subsidy, a screening process was used. This excluded from the analysis those businesses that did not need the program in the first place and could have enlisted alternate sources of funding and those businesses that are so weak that they do not deserve public assistance. The percentage of loan guarantee was used as required by the

bank from the funding agency as the main screening variable. Businesses for whom the requirement was more than one standard deviation above the mean guarantee (24.2%) were deemed too risky to warrant support. Conversely, small businesses for whom the level of guarantee was set more than one standard deviation below the average were considered strong enough not to justify program support. This left slightly under 500 projects for which the subsidy size was estimated. The net present value of the subsidy (using a 5% discount rate) was calculated as $220,860 for the small tourism businesses and as $927,705 for the rest.

These absolute values cannot, of course, be compared. In order to yield a comparative subsidy-per-job index, they were divided by the number of jobs attributable to the program. To do this, an accurate account of the employment impacts, taking into consideration the three factors outlined above deadweight, displacement, and indirect employment, was needed. The expression for the resultant net employment (NE), adjusted from the total employment (TE), is

$$NE = TE(1 - w - (1 - w)d)m_e \qquad (1)$$

where $w =$ deadweight rate, $d =$ displacement rate, and $m_e =$ employment multiplier. The values for the deadweight (w) and displacement (d) parameters have been estimated elsewhere (Felsenstein et al 1998a), as $w = 0.24$ and $d = 0.64$. The employment multiplier is the average multiregional Type I multiplier estimated by the Israel multiregional input–output (MRIO) model (Freeman, Talpaz, Fleischer and Laufman 1990). For the regions under consideration here, the average employment multiplier is 1.66.

Table 2 outlines the stages in the construction of the employment account. The main difference between the tourism enterprises and other small businesses lies in the assumption that all demand for the former is new demand and does not displace existing activity. While this is a quite rigid assumption, in the context of rural tour-

Table 2. Stages in the Estimation of Net Employment Impacts

Stages	Number of Jobs	
	Tourism Firms	Other Firms
Stage I		
Gross employment estimate	485	2,489
Stage II		
Deadweight employment estimate	369	1,892
Stage III		
Displaced employment estimate	369[a]	681
Stage IV		
Net employment estimate with Type I multiplier	609	1,124

[a] Zero substitution assumed in the case of tourism firms.

ism in Israel, it is definitely plausible. As noted above, observers are fairly unanimous in agreeing that this market is still far from saturation. Among the other small firms, however, displacement is considered an important factor. Its magnitude is due in part to the strong service sector orientation of the projects supported by the program. Such small businesses inherently compete with other local firms in a relatively fixed market and in this context, large-scale displacement is inevitable. On the basis of this accounting procedure, a subsidy-per-job estimate can be derived. Dividing estimated subsidy size by the net employment figure yields a subsidy of $367 per job in the tourism sector and $825 per job for the rest of the program-supported small firms.

The discrepancy between tourism and other small businesses is a result of the assumption of zero displacement with respect to the former. It should be noted that these measures of effectiveness estimate only the subsidy element in the program. As such, they are not directly comparable with the standard "cost-per-job" indices that characterize many of the assessments of loan programs for small businesses in rural areas (Bangsund and Leistritz 1997; Mount Auburn Associates 1987). However, if on average the loan covers one-quarter of the start-up capital needed to initiate a new business (Felsenstein et al 1998a), then these results point to a program whose cost of job creation tends towards the lower limit of results reported in other studies.

Estimating Welfare Effects

The employment estimates of the previous stage are now expanded to facilitate a cost–benefit appraisal of the program. This necessitates converting employment gains (NE) into income gains (Y), adjusting for the opportunity costs of labor (τ) in the three income categories. In addition, the revenue generated by the program (R) is included. Therefore, the full expression of program benefits becomes

$$B = (NE \cdot Y \cdot \tau_i) + R(m_o) \qquad (2)$$

where B = benefit, NE = net employment (adjusted for deadweight, displacement, and multiplier effects), Y = annual income, τ_i = opportunity cost of labor; $\tau_1 = 0.25$, $\tau_2 = 0.5$, $\tau_3 = 1$, R = revenue (net of deadweight and displacement effects), m_o = MRIO output multiplier.

All this involves supplementing the original project-level data with additional data on income by location and income class, and firm revenues by sector. In the absence of individual income data, place-based income averages weighted by that of the national sectoral are used. The place-based income data comes from the National Insurance Institute survey (NII 1995). New immigrants' incomes were weighted on average as two-thirds of the income of resident Israelis across all occupational classes (CBS 1996a). The three income classes were derived by dividing the distribution into

three categories: incomes lower than one standard deviation below the mean (Group 1), those that fell in a band of plus or minus one standard deviation around the mean (Group 2), and those that were higher than one standard deviation above the mean (Group 3). Revenue data for each small firm by economic sector were available at the three-digit level from the Central Bureau of Statistics, Survey of Revenues (CBS 1996b) and expanded by an appropriate output multiplier (m_o) generated by the MRIO model (Fleischer and Freeman 1997). The sectoral distribution of firm revenues was then weighted by the regional concentration of the sectors in the national distribution. Income benefits are only fully credited from year three and beyond. Prior to that, the benefits are credited at 25% for the first year and 50% for the second year. This is because of the rather long phase-in period that has empirically been found to exist for these small enterprises (Felsenstein et al 1998a).

Estimating the cost side of the program involves less data manipulation. In essence, the loan value (L) is supplemented by the additional costs of the alternative use (opportunity cost) of the funds (δ_l) and the default rate (β). The former is taken as 0.03 and the latter is calculated on a sliding scale with the risk premium standing at 0.10 for year 1, 0.07 for year 2, and 0.048 thereafter. Other costs that need to be taken into consideration are the administration costs of the program ($\alpha = 0.012$), the opportunity costs of the guarantee ($\delta_g = 0.05$), and the cost of raising extra taxes resulting from new firm revenues ($\lambda = 0.006$). The justification for these parameter values has been dealt with elsewhere (Felsenstein et al 1998b). Total costs are represented by the following expression:

$$C = L + L(\beta_i + \delta_l + \alpha) + G(\alpha + \delta_g) + R(\lambda) \qquad (3)$$

where $C = $ cost, $L = $ loan value, $G = $ guarantee value, $\alpha = $ administration cost, $\beta_i = $ default rate; $\beta_1 = 0.1$, $\beta_2 = 0.07$, $\beta_3 = 0.048$, $\lambda = $ tax-raising cost, $\delta_l = $ opportunity cost of loans, $\delta_g = $ opportunity cost of guarantees.

The results from Table 3 show that the loan assistance program clearly passes a cost–benefit test with respect to support for both small-scale tourism operations and the other (non-tourism)

Table 3. Cost–benefit Comparison Table

Criteria	Tourism	Other
5-Year Estimate (5% discount rate)		
Cost–benefit ratio	6.58	3.09
Present value of benefits per total job ($)	11,074	5,854
Present value of benefits per direct job ($)	18,383	9,884
10-Year Estimate (5% discount rate)		
Cost–benefit ratio	7.42	3.46
Present value of benefits per total job ($)	20,824	5,954
Present value of benefits per direct job ($)	34,567	11,196

businesses. In both instances, cost–benefit ratios are well above unity and the net present values of benefits per job created are large. This is the case over both a five- and ten-year time frame. Prior work has also indicated that the magnitudes of these benefits are not likely to change very much even when alternative social discount rates are taken, such as 3 or 7% (Felsenstein et al 1998b). Perhaps the most significant finding is the magnitude of the difference in impacts between support for tourism and other projects. As noted earlier, this can be attributed to the zero-displacement assumption applied to the former. An advantage of this approach is that all the parameters can be subjected to sensitivity testing. Rerunning the analysis using different levels of demand displacement shows that the positive effects of the program on tourism and other firms are equalized when a 0.56 level of displacement is assumed for the former. This is lower than the displacement level used for the non-tourism firms (0.64). This is a significant finding from a policy perspective and it implies that even under conditions of market saturation supporting small tourism firms leads to more benefits than supporting other small firms.

Table 3 represents the final cost–benefit account, but to observe the welfare effects of the program, the benefit component of that account needs to be disaggregated. As noted earlier, benefits are treated in the following way: employment impacts are converted into those of earnings and tax revenues are included. Earning impacts are adjusted by income group to account for the different opportunity costs of earners at different levels. The present value of the unadjusted income accounting for tourism projects sums to $7.75 million while for other small firms it sums to $28.54 million (Table 4). After adjusting for opportunity costs of the various income groups, these totals are reduced by over 50% and stand at $3.57 million and $13.08 million, respectively. The income distribution effect, however, is captured by looking at only the disaggregated income classes. For a real welfare effect to take place, the poorer earners need to be a proportionately larger part of the overall income distribution after opportunity costs have been adjusted for. As can be seen from Table 4, this estimated change (Δ) is as consistently larger for the tourism firms than for the others. When the poorer earners are considered as Group 1 income alone, the post-adjustment weight of the poor in the income distribution is 0.12 for the tourism firms and 0.06 for the others. When the lowest earners are taken as Group 1 and 2 income, the redistributive effect of the program is calculated to affect 0.17 of the income distribution among the tourism firms and only 0.11 of the distribution among the others. Therefore, support for small tourism firms would seem to have a greater welfare impact than support for other small establishments.

While part of the explanation of the program performance with respect to tourism lies in the displacement and opportunity cost assumptions that underpin this analysis, some further factors need to be considered. First, as mentioned earlier, much of the tourism

Table 4. Income Account and Welfare Effects

Income	Present value[a]	
	Tourism	Other
Income Account:		
Non-adjusted income ($ million)		
Group 1	0.82	1.61
Group 2	4.25	19.68
Group 3	2.68	7.25
Total	7.75	28.54
Adjusted income ($ million)		
Group 1	0.82	1.61
Group 2	2.11	9.68
Group 3	0.64	1.79
Total	3.57	13.08
Income Distribution Change:		
Group 1		
Before adjustment	0.11	0.06
After adjustment	0.23	0.12
Δ[b]	+0.12	+0.06
Group 1 + 2		
Before adjustment	0.65	0.75
After adjustment	0.82	0.86
Δ[b]	+0.17	+0.11

[a] Discount rate = 5%; estimated for program after phase-in period (that is, from year 3 onwards).
[b] The difference between income after adjustment to before adjustment.

infrastructure that serves the small firms is existing fixed capital (such as farmhouses and buildings) that has been transformed into tourism-based facilities. In comparison to other sectors, a relatively low investment yields a relatively high level of job formation. Second, the opportunity cost of former farm labor in rural areas is very low. Such labor cannot compete in national markets because of constraints of distance and skill. Thus, the benefits accruing from the program to farm labor are high because the alternative option is unemployment. Finally, and related to this point, is the fact that much employment created at low cost is female employment (Fleischer et al 1993). Small-scale and farm-based tourism enterprises encourage female participation in the labor force. In the alternative situation, many of these workers would not be working and would be considered household dependents.

CONCLUSION

The empirical evidence presented in this paper makes a case for the public support of small-scale tourism enterprises. On the basis of the particular program and context examined here, it can be seen that support for such firms is more cost-effective than for

other ones; although it should be noted that the subsidy-per-job estimates for the whole universe of small firms were generally low. Expanding the analysis into a full-blown cost–benefit account serves to reiterate this point. While both tourism and other establishments yield favorable cost–benefit ratios and net present values per job, those of the former are consistently higher than those of the latter. In addition, the analysis shows that even when the main assumption favoring tourism firms (that of zero displacement) is held constant, the cost–benefit ratio for the small tourism firms slightly outperforms that of the other enterprises. Taken together, these findings alone would suggest the efficacy of public support for small tourist-based firms, even if it does seem to violate the principle of "neutrality" in public policy.

This position is further strengthened on welfare grounds. An examination of the income distribution impacts of this support program revealed a more pronounced effect among the tourism firms than among the others. Thus, there is also an equity justification for the program and not just an efficiency rationale. However, aside from developing and illustrating an assessment methodology that accounts for welfare impacts, this analysis raises some important issues for the public support of small-scale tourism. The first relates to the inevitability of such support for small-scale rural tourism. As noted earlier, market imperfections form the main rationale for public intervention in the workings of markets. In the case of small tourism firms, the sources of market failure are abundant. Small firms are the objects of public intervention because of the information asymmetries that often result in discrimination against them. The tourism industry is the focus of public activity because of the externalities that it generates and because of the need to maintain the public goods and property rights (such as landscape and natural resources) on which tourism is so dependent. Taken together, the policy question for small tourism-based enterprises is not whether to support them or not, but rather, what form of support and at what level. This analysis shows that even minimal support can yield substantial economic and social returns.

The second issue relates to the suitability of tourism promotion as an economic development strategy for rural communities. The aggregate analysis presented here serves to obfuscate the fact that this development path may not be suitable for all rural regions. While contemporary public policy rhetoric does much to promote tourism development as the "name of the game" (and for some communities it is the *only* game available), not every rural locale in need of employment and income generation is a candidate for tourism. Damaged environments, expended resources, corrupt local cultures, and exploited local labor are all equally plausible scenarios resulting from ill-advised tourism promotion. The challenge for public policy is the development of evaluation instruments sensitive enough to take these factors into account, especially when faced with possibly significant income and employment gains. ■

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