AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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

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

Help ensure our sustainability.

Give to AgEcon Search

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

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

**Simulating the Impact on the Local
Economy of Alternative
Management Scenarios
for Natural Areas**

Paola De Agostini, Stefania Lovo,
Francesco Pecci, Federico Perali
and Michele Baggio

NOTA DI LAVORO 139.2005

NOVEMBER 2005

NRM – Natural Resources Management

Michele Baggio, Paola De Agostini, Stefania Lovo,
Graduate students, Department of Economics, University of Verona
Francesco Pecci, *Department of Economics Society Institutions, University of Verona*
Federico Perali, *Department of Economics, University of Verona*

This paper can be downloaded without charge at:

The Fondazione Eni Enrico Mattei Note di Lavoro Series Index:
<http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm>

Social Science Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=855967>

The opinions expressed in this paper do not necessarily reflect the position of
Fondazione Eni Enrico Mattei
Corso Magenta, 63, 20123 Milano (I), web site: www.feem.it, e-mail: working.papers@feem.it

Simulating the Impact on the Local Economy of Alternative Management Scenarios for Natural Areas

Summary

This working paper estimates the impact on the local economy of the High Garda Natural Park of alternative management scenarios for the West Garda Regional Forest. The local economy is specialized in tourist services and strongly linked to the tourist presence and their level of expenditure. We wish to investigate the effects of the participative management strategy, which takes into account users preferences and the non-participative strategy, using the SAM multiplier analysis. The local SAM has been constructed considering three sectors: agriculture, tourism and a third aggregate sector including all the other activities. The resident population has been divided into two categories: residents employed in the tourist sector and the remaining resident population. The SAM analysis shows that the accounting representation of the local economy is meaningful and that the participative program, if chosen by the central regional management, would be the most desirable program also at the local level.

Keywords: Tourism, SAM, Multiplier analysis

JEL Classification: C63, C67

This paper was presented at the Second International Conference on "Tourism and Sustainable Economic Development - Macro and Micro Economic Issues" jointly organised by CRENoS (Università di Cagliari and Sassari, Italy) and Fondazione Eni Enrico Mattei, Italy, and supported by the World Bank, Chia, Italy, 16-17 September 2005.

Address for correspondence:

Stefania Lovo
Department of Economics
University of Verona
Via dell'Università
37129 Verona
Italy
Phone: +39 0458028523
E-mail: stefanialovo@economia.univr.it

1. INTRODUCTION

This study estimates the impact on the local economy of alternative management scenarios of the West Garda Regional Forest which is centrally managed by regional authorities located in Milan. Because the forest is part of the High Garda Natural Park¹ (Figure 1), which extends over nine municipalities of the Brescia province and is managed locally, the implementation of the best management program depends critically on the impact on the local economy. The nine municipalities of the High Garda Natural Park are highly specialized in tourist services and strongly linked to the tourist presences and their level of expenditure, therefore the implementation of a new management program of the West Garda Regional Forest, affecting tourist flows, may have a significant impact on the entire economy.

This analysis is part of a multidisciplinary study which integrate the assessment and management aspects of the policy decision process in managing public goods and natural parks. In the first stage, four functions have been identified within the park area, using territorial information coming from a geographic information system (GIS); these functions are: naturalistic, protective, productive and tourist (De Agostini et al, 2005). Then the multi-criteria analysis, developed in De Agostini (2005), has identified two alternative optimal combinations of the four functions taking into consideration territorial information and information related to the preferences of park's users, estimated using the contingent valuation method (Cooper et al, 2005a) and the travel cost valuation method (Cooper et al, 2005b). One optimal combination is defined as non-participative because it involves only the preferences of central management. The other is the participative strategy which takes into account the users' preferences as revealed by the estimated contingent prices.

We intend to simulate the effects of the participative and non-participative strategies on the entire economy of the park because what is best for the central management may not be best for the local management that is concerned with maximizing the impact on the local economy and the welfare of the local citizens. The convergence of these objectives is desirable to avoid conflicts between the central and the local management.

Figure 1 West Garda Regional Forest as a part of the High Garda Natural Park

The tool used in this study to estimate the impact on the local economy of the different management interests in the West Garda Regional Forest is the SAM multiplier analysis applied at the local level of a territory. The social accounting matrices (SAM) are adequate tools to represent the local economy. They define the relationships between local firms and households as well as the physical flows from and to the rest of the economy. They provide a direct and synthetic picture of sector

interdependencies, formation of household income, and the dependence of households on local services and productive activities.

To apply the impact analysis at a local level, we need to know with an acceptable level of precision the economic structure of the territory (Dorward et al., 2003; Bendavid-Val, 1983). The data available from official sources are not organized with the purpose of building tables of sector interdependencies and social accounting matrices at a territorial level. Therefore, the information is often not available at the level of aggregation desirable for the efficient planning of local development activities. This was the most evident constraint faced during the SAM construction.

The SAM analysis shows that the accounting representation of the local economy carries weight and that the participative program, if chosen by the central regional management, would be the most desirable program also at the local level.

Figure 2 - Stages of the impact analysis

As described in Figure 2, the impact analysis develops in four phases: data collection and elaboration, construction of the SAM, its balancing, and simulations. This study follows the same sequence. Section 2 describes the data required for constructing and balancing the local SAM. Section 3 describes the SAM multiplier analysis. Section 4 presents simulations and results of the impact on the local economic system of the managerial alternatives described above. Section 5 draws some conclusions.

2. THE LOCAL SOCIAL ACCOUNTING MATRIX FOR THE WEST GARDA AREA: DESIGN AND DATA REQUIREMENTS

A SAM is a tool of regional analysis providing useful guidelines for the development of a regional economy (Fannin, 2001). It is a system of social accounts which reproduces the economic flows in a particular area. The SAM describes the relevant features of the socio-economic structure and the relationships between the structure of production and the distribution of income and expenditure among households in a particular area. An estimation of the impact of public policies and the examination of the links between social and economic development is useful to support the local policy-making decision process.

A SAM is the natural extension of the input-output model. It includes inter-industry transactions, payments of productive factors, household expenditure, income transfers, government expenditure and transactions with the rest of the economy, defining the circular flows of income within the economic area of interest.

The most evident limitation of this powerful instrument is represented by the scarcity of available information at the regional and local level that is necessary to build a SAM. To describe the High Garda Natural Park's economy we used a simplified SAM which

still reflects the structural characteristics of the local economy necessary to estimate the impact of a change of the park management strategies on the local economy.

Three sectors have been considered: agriculture, tourism and a third aggregate sector including all the other sectors such as industry, construction, commerce and other relatively less important economic activities. Our SAM considers only one social institution, the household, and gives less importance to savings and capital. The structure is reproduced in Figure 3 while Box 1 describes the SAM contents.

	Agriculture	Tourism	Other sectors	Labor	Capital	Residents	Rest of the economy	Total
Agriculture	Inter- sector transactions					Domestic consumption of local agricultural products	Final and intermediate agricultural exported products	Total sales of the agriculture sector
Tourism						Expenditure within the park area by resident tourists	Tourist expenditure within the park area by non-resident tourists	Total sales of the tourist sector
Other sectors							“Exported” intermediate and final products and local services	Total sales of other sectors
Labor	Labor employed in agriculture	Labor employed in tourism	Labor employed in other sectors				Income of residents employed in non local firms, in health and education sectors	Total labor of residents + labor of non-residents employed in local firms
Capital	Capital employed	Capital employed	Capital employed					Total employed capital in local firms
Residents				Labor income			Other income	Resident households incomes
Rest of the economy	“Imported” intermediate goods	“Imported” intermediate goods	“Imported” intermediate goods	Non resident workers employed in local firms	Capital supply	Domestic consumption of “imported” goods and services and savings		Balancing account
Total	Total agriculture production	Total tourist production	Total production of other sectors	Labor supply	Capital supply	Total residents’ consumption	Balancing account	

Figure 3 – The local SAM for the High Garda Natural Park

Box 1 - Description of the SAM contents:

Agriculture: includes cereals, permanent cultivations and livestock. The other productive activities and resident and non-resident consumers, demand for intermediate and final consumption of agricultural goods (in the row). The value of intermediate goods sold to firms located outside the territory of interest is included in the column 'rest of the economy'. The column includes the consumption of intermediate goods by the agricultural sector and the value of the productive factors, labor and capital, used in the production process. Intermediate goods purchased by firms located outside the territory are listed in the column 'rest of the economy'.

Tourism: includes services offered to the park tourists such as hotels and restaurant, food, drinks, recreational and cultural activities. Hotels and restaurants are included in the tourist sector because their returns are assumed to come entirely from tourism. The other items are partially counted because tourists are only present in some periods of the year and part of the revenue comes from local consumption.

Other sectors: includes all the other sectors in the territory like industry, construction, commercial activities, transport and so on. The main activities are commerce (wholesale and retail), construction and other professional services such as legal consulting, financial consulting, architectural, engineering and other technical activities.

Labor: includes all the professional categories of employees and self-employed. The quantity of labor employed in agriculture, tourism and other sectors is reported in the row. Resident workers employed in firms outside the territory and in the health and education sectors, which represent 5.4 per cent of the total employed population, are included in the account 'rest of the economy'. This share of value-added is distributed among resident and non-resident households (in the column).

Capital: the total return to capital factor from the three productive activities is indicated in the row. This component of value-added is not redistributed because this factor is not relevant for the analysis (in the column). It is then included in the 'rest of the economy' row for the balancing of the SAM.

Residents: includes income and consumption of the inhabitants of the park area. The resident population has been divided into two categories: residents employed in the tourist sector and the remaining resident population. In the SAM, the row indicates the income composition. It consists of labor and other income, including transfers, interest, etc. Considering that other income is not relevant for this analysis, it is indicated in the column 'rest of the economy'. Expenditure on consumption goods is indicated in the column. It is subdivided into consumption of domestic agricultural goods, tourist consumption within the park area and consumption of goods and services provided by other local firms. Savings, taxes and expenditure on consumption goods produced by non-local firms are in the row 'rest of the economy'.

Rest of the economy: includes what is purchased and sold outside the economic area of interest, and those values which are relatively less relevant to the study but necessary for the final balancing of the SAM such as other income, savings and capital supply. The ‘rest of the economy’ row includes the amount of intermediate ‘imported’ goods, income of the non-residents employed in local firms, savings, taxes and the consumption of ‘imported’ goods and services. Intermediate and final goods consumed by non resident households and demanded by non local firms are indicated in the column. Non-resident tourists’ expenditure, other income and labor income of residents employed in firms outside the territory and in the health and education sectors are also reported.

2.1 SAM construction and balancing

The construction of a local social accounting matrix is a difficult task, mostly because of the scarcity of local statistical information organized at a local level. As a consequence the researcher is forced to use alternative and indirect sources to make hypotheses and get information about the local economic entities (Bendavid-Val, 1983).

Within the park, the national statistical office (ISTAT) identifies two local labor systems (LLS) gravitating around the municipalities of Limone and Toscolano Maderno. A local labor system is an area composed by several adjacent municipalities defined on the basis of the maximization of commuters’ flows within the same area and the minimization of commuters’ flows across different areas. The Limone LLS includes also the Tremosine municipality. The Toscolano Maderno LLS includes the municipalities of Gardone Riviera, Gargnano, Magasa, Tignale, Toscolano Maderno and Valvestino. The Salò municipality is at the center of a third LLS which includes other municipalities all outside the park. For the Limone and Toscolano Maderno LLS, we assume that most inhabitants live and work within the territory. This assumption was not extended to the Salò municipality because there is a relevant movement of workers going in and out. Statistical information on the local labor systems is not fully developed and data cannot be disaggregated either by sectors or by municipality (Faramondi and Paris, 2002). As a consequence, we use the information about local

labor systems as a comparison framework in order to evaluate the quality and consistency of the information gathered for constructing the SAM.

The productive structure of the area is mainly composed by small firms with fewer than 10 employees (96 per cent of the total firms). The employees mostly work in the tourist and commercial sectors. Their distribution within the territory shows the economic importance of Salò and Toscolano Maderno.

The economy of small municipalities which are near or belong to natural parks is often strongly linked to the tourist presence and their level of expenditure. In Limone for instance, which has about 1000 inhabitants, 70 per cent of the employees work in the tourist sector. Tourism is in fact the most important sector. It is of high quality because hotels with three or more stars are about 65 percent of the total.

Figure 4 describes data and sources used in this study for building the local SAM for the High Garda Natural Park.

Figure 4 - Sources and data used for the SAM construction

Table 1 reports the aggregate values at the sector level generated following the procedure specified in the Appendix. As expected, tourism plays a relevant role in the local economy within the park boundary.

Table 1-Main aggregates of the park productive sectors

Sectors	Employed	Value-added	Sales	Wages and salaries
Tourism	1837	33 179	81 926	12 185
Other sectors	4203	123 939	398 422	33 245

Considering that the data come from many sources at different points in time, the West Garda SAM is not balanced. Table 2 presents the initial unbalanced SAM, computed using the procedure illustrated in the Appendix.

Table 2 – The local SAM before balancing (in thousands of euros)

	Agriculture	Tourism	Other sectors	Labor	Capital	Resident population	Rest of the economy	Total
Agriculture	382	281	1135			1545	1255	4597
Tourism	51	1194	744			164	47 111	49 265
Other sectors	567	3400	25 569			159 012	209 874	398 422
Labor	1246	28 905	78 866				39 199	148 216
Capital	1350	4274	45 074					50 698
Resident population				180 665			93070	273 734
Rest of the economy	1000	43 746	247 034	4526	50 698	113 014		460 019
Total	4597	81 800	398 422	185 191	50 698	273 735	390 509	

We use the cross entropy method (CE) to correct for this problem as illustrated in detail in the following section.

2.2. SAM balancing using the cross entropy method

The *cross entropy method* estimates a balanced and consistent matrix starting from an original unbalanced social accounting matrix using information available both at micro and macroeconomic levels (Robilliard and Robinson, 1999 and Robinson et al, 1998). This approach is based on Shannon's *information theory* (1948) lately applied to statistical inference by Jaynes (1957). In 1994 Golan, Judge and Robinson used this approach to estimate the coefficients of an input-output table. The objective is to obtain a new set of coefficients close to those previously available but incorporating updated or additional information about economic aggregates such as value-added or consumption.

Two types of information are considered. The first type of information comes from the observed samples, where weights (coefficients) are computed embodying several demographic information. Weights represent the starting point of the estimating process. The second type of information comes from aggregate sources, such as national accounts. They are provided as aggregate values or weighted averages of the distribution of observed variables among observed households.

The High Garda Natural Park SAM has been balanced fixing the rows and columns sums, except for the tourist account, to their initial average value. The tourist row sum has been fixed to the column sum value because of insufficient information on the tourist expenditure reported in the row. The total value-added produced by the industry and services sectors has been fixed to that found in the survey on the local labor systems. We could not use this information for the SAM construction because it refers only to aggregate values (Faramondi and Paris, 2002). However we adjust the content of the value-added cells using the aggregate data available at the local labor system level.

From the initial SAM we obtain the column coefficients $A_{i,j}$:

$$A_{i,j} = \frac{t_{i,j}}{y_j}$$

where $t_{i,j}$ represents the cell in the i -th row and the j -th column and y_i is the total sum of the j -th column.

The estimation process minimizes the cross-entropy distance between the new estimated coefficients and the previous ones:

$$\min I = \left[\sum_i \sum_j A_{i,j} \ln \frac{A_{i,j}}{\bar{A}_{i,j}} \right]$$

subject to the following constraints:

$$\sum_j A_{i,j} y_j^* = \frac{y_j^* + y_i^*}{2}, \quad i = 1, \dots, n-1$$

$$\sum_j A_{t,j} y_j^* = y_t^*, \quad t = \text{tourist}$$

$$\sum_i \sum_j G_{i,j} T_{i,j} = VA$$

$$0 \leq A_{i,j} \leq 1$$

where $\bar{A}_{i,j}$ and $A_{i,j}$ are respectively the prior and the new estimated SAM coefficients, y^* are rows and columns sums of the $\underline{n}$ accounts, $\mathbf{T}$ is the initial SAM which is multiplied by matrix $\mathbf{G}$ which has 1 in the value-added cells (labor and capital) of each sector (agriculture, tourism and other sectors) and 0 elsewhere. VA represents the value-added produced by industry and services sectors found in the survey on the local labor systems. An analytic description of the complete model, where row and column sums involve errors in measurement, is presented in Robilliard and Robinson (1999) and Robinson and El-Said (2000). The balanced SAM for the High Garda Natural Park is reported in Table 3.

Table 3 – The local SAM balanced (in thousands of euros)

	Agriculture	Tourism	Other sectors	Labor	Capital	Resident population	Rest of the economy	Total
Agriculture	382	268	905			1628	1415	4597
Tourism	52	1222	858			227	79 442	81 801
Other sectors	566	3180	18 888			158 843	216 428	397 905
Labor	1246	30 829	110 487				42 419	184 981
Capital	1351	4610	66 621					72 582
Resident population				180 350			100 871	281 222
Rest of the economy	1001	41 691	200 146	4631	72 582	120 524		440 575
Total	4597	81 801	397 905	184 981	72 582	281 222	440 575	

The balanced values in Table 3 are similar to the original values and the resulting balanced SAM is now ready for the impact analysis.

3. THE MULTIPLIER ANALYSIS

We use the SAM multiplier analysis for simulating the impact on the local economic system of changes in relevant exogenous policy variables as a result of the interrelations existing among revenue, income and expenditure flows of households and firms. The matrix of multipliers obtained from the SAM captures both the direct and indirect effects on production and income and also the circular effects that are the result of the circular flow of income within the local economy.

The SAM multiplier analysis considers prices as exogenously fixed and implies the following behavioral assumptions:

1. since prices are given, it is not possible to estimate the impact of price variations and the conclusions must be drawn in terms of quantities;
2. functional relations use fixed technical coefficients of Leontief technologies and it is therefore not possible to consider changes in the productivity of labor and capital;

3. there are no bounds on goods supply because supply satisfies demand by assumption.

In developing a SAM multiplier model, the first step is to decide which accounts should be exogenous and which are endogenous on the basis of the specific aim of the analysis (De Janvry and Sadoulet, 1995, Pyatt and Round, 1979). Given that in our case the study evaluates the impact of environmental policies on the local economy, the account ‘rest of the economy’ is considered exogenous.

	Endogenous accounts							Total	Exogenous accounts	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	
(1)Agriculture	T _{ij}					T _i		N ₁	X ₁	Y ₁
(2)Tourism								N ₂	X ₂	Y ₂
(3)Other sectors								N ₃	X ₃	Y ₃
(4)Labor	T _{fj}							N ₄	X ₄	Y ₄
(5)Capital								N ₅	X ₅	Y ₅
(6)Residents employed in the tourist sector				T _f				N ₆	X ₆	Y ₆
(7)Rest of the resident population								N ₇	X ₇	Y ₇
(8)Exogenous accounts	E								L	Y _x
TOTAL EXPENDITURE	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇		Y _x	

Figure 5 - Representation of the SAM model

The matrix of the endogenous transactions, T , can be divided into four sub-matrices. In Figure 5, the matrix T_{ij} is the matrix of transactions which is presented also in the input - output model. The matrix T_{fj} represents the composition of the value-added in different sectors of the economy; the matrix T_f represents the distribution of the value-added to the endogenous institutions and the matrix T_i corresponds to the expenditures of the endogenous institutions. The column vector X represents the injections from exogenous to endogenous accounts. We can simulate shocks on the endogenous

variables by modifying the elements of vector **X**. **L** corresponds to the transactions between exogenous accounts and the row vector **E** shows the leakages from the endogenous to the exogenous accounts. The column vector **Y** and **Y_x** represents the total income and the total expenditure of endogenous and exogenous accounts respectively. Considering the matrix of endogenous accounts **T**, we divide the elements in each column by its column total. We obtain the matrix of coefficients **A** and inverting the matrix **(I - A)**, where **I** is the identity matrix, we obtain the SAM multiplier matrix, **M**. Similarly we divide each element of the row vector **E** by its column total to obtain the vector of coefficients **B**. Impacts on total output and income are derived using the following expressions:

The vector of impacts: $\Delta Y = (I - A)^{-1} \Delta X$;

The leakages from endogenous to exogenous accounts: $\Delta L = B \Delta Y$;

The SAM multiplier matrix: $M = (I - A)^{-1}$;

The vector of exogenous shock: ΔX .

In the High Garda Natural Park case **X** is the account ‘rest of the economy’ and ΔX corresponds to changes in the final demand for agricultural products and the tourists’ expenditure of non residents. The expression describing the impact on leakages ΔL must hold with equality because in a SAM framework total injections from exogenous accounts must be equal to total leakages from the endogenous to the exogenous accounts. In this expression **B** is the vector of coefficients which represents what the exogenous accounts receive from the endogenous ones.

4 SIMULATIONS AND RESULTS

This section estimates the impact of both the participative and non-participative management policies of the West Garda Regional Forest on the local economic system. In line with the analysis developed in the previous study, Table 4 describes the following three scenarios:

- benchmark – the actual forest plan;
- scenario A – non-participative regional management program;
- scenario B – participative regional management program.

Note that in scenario B, the public manager based in Milan takes formally into consideration the preferences of the users as revealed by the estimated contingent prices.

Table 4 - Combinations of functions and their description

Functions	Description	Combinations of functions (%)		
		Benchmark Scenario Actual forest plan	Scenario A Non- participative	Scenario B Participative
Naturalistic function	Conserving nature, wildlife and ecosystem	26	65	94
Productive function	Providing market with timber and non-timber products: fodder, mushrooms, resins, etc.	21	2	2
Protective function	Preserving structural features of the canopy and territory	26	2	2
Tourist function	Providing tourist-recreational services: sports, outdoor activities (hunting and fishing, horse riding, biking, etc.)	27	31	2

In the benchmark scenario, 27 per cent of the park is devoted to the tourist function while 26 per cent is devoted to the naturalistic function. If the adopted management policy follows scenario A, then the importance of the naturalistic function increases to 65 per cent while the tourist function does not change significantly. On the other hand,

if the adopted policy follows scenario B then the importance of the tourist function reduces to 2 per cent and the park mainly offers the naturalistic function in up to 94 per cent of the total area. In both scenarios, protective and productive functions declines to 2 per cent.

As it is reasonable to expect, these scenarios attract different flows of tourist and have a differential impact on agriculture as they imply different uses of land. With respect to the participative program, the non-participative management plan places more importance on the tourist function. Note that more hectares allocated to the tourist function do not necessarily mean higher levels of tourist flows. The tourist function embodies recreational services, sports and natural activities such as fishing, biking and horse riding. These are all anthropic interventions which according to the contingent evaluation analysis seem to be little desired by visitors. Tourists prefer this area to be allocated at naturalistic aims where human interventions are reduced to vegetation and fauna habitat maintenance. For this reason, we simulate that scenario B induces a higher number of visitors than scenario A. In simulating a change in tourist flows, we must also consider that the West Garda Regional Forest is a part of the West Garda Park where most tourists are attracted by cultural and sports events, historical places, monuments and so on. Changes in tourist flows depend also on the efficiency of the future developments in the parks potentialities. Therefore we simulate three possible changes in tourist flows, affecting tourists' expenditure for each scenario.

Agricultural activities within the park area are partly linked to the productive function of the West Garda forest. Both scenarios devote only 2 per cent of the territory for productive ends implying a reduction in the land used for agricultural purposes. As a consequence, agricultural activities decline. In the participative scenario (A) the impact

is smaller because a larger area is allocated to the naturalistic function. Note that while in tourist areas there is negligible agricultural activity, in naturalistic areas a certain level of agricultural activities is maintained. Therefore we simulate a negative change in the agriculture sector of about 10 per cent in scenario A and of about 5 per cent in scenario B.

Table 5 reports the SAM multipliers for the High Garda Natural Park corresponding to changes in the non-resident final demand for agriculture products and tourist services.

Table 5 – The SAM multipliers

	Agriculture	Tourism
Agriculture	1.094	0.007
Tourism	0.014	1.016
Other sectors	0.377	0.316
Labor	0.406	0.473
Capital	0.385	0.112
Resident population	0.396	0.461

The Multipliers show the changes in output and income of the local sectors and resident population as a result of exogenous shocks. Looking at the tourism column each value can be interpreted as the additional output or income generated in the row account due to a one unit increase in non-resident tourist expenditure. The Multipliers show a negligible link between tourism and other local activities (0.007, 0.316) with respect to agriculture (0.014, 0.377). On the other hand, changes in the tourist sector have a larger impact on the resident population income level (0.416).

In the simulation analysis an increase in tourist flows is expected to have a greater direct impact on the tourist sector and smaller indirect effects on other local activities, because of the high share of non-resident tourists' expenditure on the total output of the

tourist sector (Table 3). Tables 6 and 7 respectively show the simulations result expected in terms of changes in production, labor demand and incomes of the resident population

Table 6 – Simulation results, variations in production and labor demand (in thousands of euros)

BENCHMARK SCENARIO Actual forest plan			SCENARIO A Non-participative			SCENARIO B Participative		
Change in the agriculture sector (%)			-10	-10	-10	-5	-5	-5
Change in tourists' expenditure (%)			0	+5	+10	0	+10	+20
	Production	Labor	Results					
Agricultural sector	4.597	1.246	-3.36	-2.74	-2.11	-1.67	-0.43	+0.80
Tourist sector	81 800	30 829	-	+4.93	+9.86	-	+9.87	+19.73
Other sectors	402 502	111 732	-1.16	-0.85	-0.55	-1.14	-0.54	+0.54
Total sectors	484 303	142 562	-0.03	+1.05	+2.13	-0.02	+2.16	+4.33

If there is no change in tourist flows, both strategies have a negative impact on the local economy caused by the shock on the agriculture sector (Table 6). However, if the adopted management policy is scenario B, the negative impact is smaller. An increase in tourist expenditure affects positively both the tourist sector and the other activities due to indirect and circular effects. The impact on the local economy generated by the adoption of scenario A is positive given the relevance of tourist sector to the local economy. On the other hand, the impact is negative for agriculture (2 per cent) and the other sectors. If the management policy is participative, in the case of a 10 per cent increase in tourist expenditure, the results are similar to those of scenario B but the negative effects on agriculture and other sectors are smaller. If the park is developed

incorporating the users' preferences, the increase in tourists' expenditure can be even higher. In the case of a 20 per cent increase, the effects on the local economy are markedly positive. The negative impact on agriculture is offset by the positive indirect and circular effects caused by the change in tourist expenditure.

Table 7- Simulations results, variations in resident population income level (in thousands of euros)

BENCHMARK SCENARIO Actual forest plan		SCENARIO A Non-participative			SCENARIO B Participative		
Change in the agriculture sector (%)		-10	-10	-10	-5	-5	-5
Change in tourists' expenditure (%)		0	+5	+10	0	+10	+20
		Results					
Income level of residents employed in tourist sector	44 645	-	+3.18	+6.35	-	+6.36	+12.71
Income level of residents employed in agricultural and the other sectors	236 576	-0.02	+0.12	+0.26	-0.01	+0.28	+0.56
Income level of total resident population	281 221	-0.02	+0.60	+1.23	-0.009	+1.24	+2.49

Inspection of Table 7 reveals that the impacts on the income level of residents employed in the non-tourist sector are not economically significant. If there is no change in tourist expenditure, residents face a negative but small impact in both scenarios. On the other hand, in the case of a 10 per cent increase, both scenarios have positive effects on the local population. If the participative scenario is adopted, a 20 per cent increase in tourist expenditure causes a positive impact of about 12 per cent on the income level of the resident population employed in the tourist sector.

5. CONCLUSIONS

This study analyzed the impact of the participative and the non-participative managerial alternatives of the West Garda Regional Forest on the local economy of the High Garda Natural Park, where the forest is located, using a social accounting matrix framework developed at the local level. This approach provides a comprehensive view of the local economic scenario and its basic structural characteristics. The territorial analysis allows us to understand better the social economic and environmental interactions at the local level and to verify the potential sources of conflict between the central management, having jurisdiction over the West Garda Regional Forest, and the peripheral management commanding the High Garda Natural Park.

Although the data available for the area of interest were scattered, the resulting SAM adequately represents the interactions between local economic activities and the resident population. However more and better quality data would permit a more efficient use of the model potentialities.

We simulated the impact of both the participative and non-participative optimal combinations of functions using the SAM multiplier approach that gives an immediate representation of direct, indirect and circular effects. The participative program is obtained by maximizing the manager's revenues, taking formally into consideration the preferences of users and residents by including the prices that visitors are willing to pay for each function as weights of the objective function. The simulation analysis showed that the participative program is preferable to the non-participative program for the impact both on production and income level. It follows that the participative regional management program matches both the preferences of users and the interests of local institutions because the territory receives a larger benefit from its implementation.

However the presence of vested interests among local institutions, associations and actors may be a further source of conflict among the stakeholders. This issue will be analyzed in Baggio (2005).

APPENDIX - DATA SOURCES

In this appendix we describe the data sources used to estimate the values content in the SAM. We collected data mainly from the data bank Ionio Cineca. Local information was provided by the population census (Istat, 1991) and the intermediate census of industry and services (Istat, 1996a). From the regional statistical yearbook of Lombardy we collected data related to households' incomes and expenditure and employers' professional positions per each observed municipality. Information about value-added and sales of each sector was found in the economic accounts of enterprises yearbook (Istat, 1996b). The value-added produced in agriculture referred to the census of agriculture of 1991 while the agricultural standard gross incomes comes from the Inea yearbook of Italian Agriculture of 1996. Data used to determine value-added, inter-sector transactions, production, income, consumption and labor income are illustrated in sequence.

1. Value-added

The procedure used for determining the value-added at factor costs produced by local firms includes two phases. First, the number of employees by local economic activity, derived from the intermediate census of industry and services, is multiplied by the average value-added per employee, assuming that the West Garda's firms produce a value-added similar to the average values of the Lombardy Region. The Italian national statistical office (Istat) distinguishes between firms with less than 19 employees and firms with more than 19 employees. We also adopt this classification because within the area considered there are mostly small firms (less than 19 employees). This allows us to be more precise in the estimation. During the SAM

balancing process these values have been compared with the data at the Local Labor System level. The obtained value-added is divided into labor and capital remuneration using regional average values. After having determined the amount of labor expenditure, we subtract social contributions, using percentage values calculated at a national level, in order to obtain values as close as possible to the local labor income levels. We verified the congruence between the obtained labor income and the values determined by multiplying the number of employees as derived from the population census of 1991, by the average annual income reported in the statistical yearbook of the Lombardy region. Table 8 and 9 report the values obtained. Considering that dependent employees (managers, employees and workers) represent only a part of the total number of employees, we needed to determine the income level of self-employed people. We assumed that the self-employed workers are equally distributed among sectors. Finally, we estimated the value-added produced by the agriculture sector using data from two sources: the census of agriculture and the Standard Gross Margin provided by the yearbook of Italian agriculture (Inea, 1996). For the agriculture sector the value-added is derived from the information available on gross incomes, which are close to the value-added produced by the agricultural sector (European Commission, 2002). The values obtained are reported in Table 10. The value-added have then been divided into labor and capital remuneration on the basis of the information on farm budgets collected by Inea and reported in the 1996 yearbook.

2. Inter-sector transactions

Given that local input-output tables are not available, the national input-output table has been used in order to define the size of inter-sector transactions under the assumption of constant proportions between the national, regional and local level. After obtaining the total transactions of agriculture, tourism and other sectors we derived the coefficients matrix referred to the intermediate transactions among the three accounts. Since firms are rather small and heterogeneous we assumed that most of the intermediate goods come from firms located outside the area of interest.

3. Production

In order to determine the total production of the three sectors considered in this study (agriculture, tourist and other sectors) we consider that the local sales per employee are a reasonable approximation of the average regional values, therefore we multiply average sales per employed by the number of employed, in each sector. The total production of agriculture derives from average regional values. We identified that the value-added produced by agriculture sector represents the 56 per cent of the total. These values were then compared to those obtained from the input-output table following the procedure described above.

4. Income

In determining the income and consumption levels of the resident population we need to make further assumptions. Since there is no local information on income and household consumption we assumed that they are similar to the regional and provincial average values. Therefore we derived the average per capita income,

labor income and the distribution of consumption expenditure as shown in Table 11. The resident population was divided into two categories: residents employed in the tourist sector and the remaining resident population. Table 12 shows the income composition of the two categories.

5. Consumption

Intermediate consumption of local firms' products have been determined assuming that the small and heterogeneous local firms purchase mostly from firms located outside the territory of interest. The share of production assigned to final local consumption has been calculated by dividing final consumption by total production derived from the national input - output table (see Table 13). By distinguishing among two typologies of visitors, we calculate resident and non-resident tourist expenditure using information on daily personal expenditure obtained from the travel cost section of the West Garda Regional Forest survey. Moreover, using data on arrivals and the number of nights spent in hotels and supplementary accommodation provided by the Province of Brescia, we determine the average yearly flow of tourists (Table 14).

6. Labor

Estimation of labor income follows the procedure described in the 'Value-added' section of this appendix. The number of resident and non-resident workers in firms is calculated by comparing data from the population census and the intermediate census of industry and services. Note that the comparison is difficult because they differ both in terms of heterogeneity of units studied and also for the period they

refer to. While the population census refers to households, the intermediate census of industry and services collects information on people employed using local units as a basis.

Table 8 – Value-added, sales and labor costs of the other sectors (in thousands of euros)

OTHER SECTORS		Employed by sector	Value-added	Sales	Wages and salaries
15	FOOD AND DRINK INDUSTRIES	286	11 074.12	31 461.52	4147.89
17	TEXTILE INDUSTRIES	66	2199.77	6472.96	870.60
18	CLOTHING INDUSTRIES	56	1635.86	2568.24	866.45
20	WOOD AND WOOD AND CORK PRODUCTS	71	1587.74	3912.52	429.83
21	PAPER AND PAPER PRODUCTS	23	646.19	2410.15	215.60
22	PUBLISHING AND PRINTING	32	988.29	2631.04	317.87
24	CHEMICAL PRODUCTS, SYNTHETIC AND ARTIFICIAL FIBERS	5	222.85	945.89	62.04
25	GUM AND PLASTIC PRODUCTS	4	128.29	369.99	39.89
26	NON-METALLIFEROUS MINERAL PRODUCTS	5	135.57	411.87	44.79
28	METAL PRODUCTS	164	5473.16	10 536.55	1956.32
29	MACHINES AND MECHANICAL MACHINERIES INSTALLATION, ASSEMBLY, REPAIR AND MAINTENANCE	137	6234.98	12 410.36	2656.82
31	MACHINES AND N.C.A. ELECTRICAL SET	9	255.18	668.86	86.09
32	RADIO TELEVISION AND COMUNICATION	3	72.98	198.47	25.05
33	MEDICAL AND PRECISION MACHINES, AND OPTICAL INSTRUMENTS	24	649.50	1709.27	196.14
35	MOTOR VEHICLES	31	765.29	2364.70	238.32
36	FURNITURE AND OTHER MANUFACTURING INDUSTRIES	26	525.03	1583.15	172.06
40	PRODUCTION AND DISTRIBUTION OF ENERGY, GAS AND WATER	1	69.62	363.69	16.28
41	WATER COLLECTION, PURIFICATION AND DISTRIBUTION	1	39.35	92.50	11.70
45	CONSTRUCTION	731	16 837.84	49 192.16	4842.52
50	TRADE, MAINTENANCE AND REPAIRING OF AUTOS AND MOTOR VEHICLES	175	3407.32	29 228.88	1134.03
51	WHOLESALE OF AUTOS AND MOTOR VEHICLES	279	12 481.04	73 601.93	3048.48
52	RETAIL, AUTO AND MOTOR VEHICLES EXCLUDED, REPAIR OF PERSONAL AND HOUSE GOODS	902	15 279.69	81 056.88	3206.35
60	LAND AND CONDUCT TRANSPORT	64	1976.58	5113.34	411.63
61	SEA AND WATER TRANSPORT	6	93.58	201.11	38.70
63	BEARING AND AUXILIARY TRANSPORT	46	1786.53	8127.28	600.44
64	POST AND TELECOMUNICATIONS	3	60.27	448.85	28.50
65	MONEY AND FINANCIAL SERVICES	2	40.18	105.87	19.10
67	AUXILAIRY ACTIVITY OF FINANCE INTERMEDIATION	81	2342.65	4287.88	496.08
70	ESTATE	171	9334.80	19 473.27	584.72
71	HIRE OF MACHINERY AND GOODS FOR PERSONAL USE	5	114.65	484.95	23.60
72	INFORMATIC AND RELATED ACTIVITIES	47	1572.92	3599.76	431.35
73	RESEARCH AND DEVELOPMENT	2	94.00	135.62	7.48
74	OTHER PROFESSIONAL ACTIVITIES	571	22 595.31	35 033.75	5335.92
90	SOLID RUBBISH DISPOSAL AND DRAINS	5	259.00	791.21	61.98
92	RECREATIONAL, CULTURAL AND SPORT ACTIVITIES	26	1267.59	3022.62	183.98
93	OTHER ACTIVITIES	143	1691.24	3404.64	436.72
Total		4203	123 938.97	398 421.71	33 245.30

Source: Intermediate industry and services census, 1996

Table 9 – Value-added, sales and labor costs of the tourist sector (in thousands of euros)

TOURIST SECTOR		Employed by sector	Value-added	Sales	Wages and salaries
52.2	RETAIL OF FOOD, DRINKS AND TOBACCO IN SPECIFIC SHOPS	69	1169	6201	245
55	HOTELS AND RESTAURANTS	1719	30 692	72 710	11 709
92	RECREATIONAL, CULTURAL AND SPORTIVE ACTIVITIES	20	975	2325	142
93	OTHER ACTIVITIES	29	343	690	89
TOTAL		1837	33 179	81 926	12 185

Source: Intermediate census of industry and services, (Istat 1996a)

Table 10 - Agriculture sector value-added (in thousands of euros)

AGRICULTURAL SECTOR				
	Cereals	Permanent cultivation	Livestock	Total
Gardone Riviera	7.10	47.92	21.81	76.82
Gargnano	36.27	160.28	110.17	306.72
Limone sul Garda	0.63	77.60	0.85	79.07
Magasa	7.94	0.00	62.89	70.83
Salò	334.47	275.72	153.57	763.76
Tignale	88.53	73.25	74.91	236.69
Toscolano-Maderno	76.37	196.23	67.48	340.07
Tremosine	110.79	59.16	475.86	645.80
Valvestino	5.37	0.00	71.37	76.74
Totale	667.45	890.15	1038.90	2596.51

Source: Our elaborations; INEA (1996)

Table 11 - Incomes and consumptions of resident population (in thousands of euros)

INCOME	
Resident population	27 164
Per capita average annual income (Lombardy)	10.08
Total income	273 735
CONSUMPTION	
% Consumption/income (Lombardy)	94 %
Total consumption expenditure	257 311
Total savings	16 424
INCOME COMPOSITION	
% Labor income/total income (Province of Brescia)	65.87 %
Total labor income	180 309
Total other income	93 426

Source: Quantitative distribution of income in surveys of Italian family budgets (Istat, 1996c)

Table 12 – Composition of the resident population's income

Income composition (%)		
SOURCES	Resident population employed in the tourist sector	Rest of the resident population
Labor income from domestic sectors		
Agriculture	-	0.52
Tourism	64.45	-
Other sectors	-	45.63
Other incomes (include incomes of residents employed in non-local firms, in education and health sectors)	35.55	53.85
Total	100.00	100.00

Table 13 - Final consumption of goods produced by local firms of the first 8 sectors (in thousands of euros)

OTHER SECTORS		Employees	Sales	Final Consumption /production	Final consumption
15	FOOD AND DRINK INDUSTRIES	286	31462	50.0	15746
17	TEXTILE INDUSTRIES	66	6473	21.2	1370
18	CLOTHING INDUSTRIES	56	2568	65.2	1674
20	WOOD AND WOOD AND CORK PRODUCTS	71	3913	7.1	276
21	PAPER AND PAPER PRODUCTS	23	2410	6.9	165
22	PUBLISHING AND PRINTING	32	2631	29.7	782
24	CHEMICAL PRODUCTS, SYNTHETIC AND ARTIFICIAL FIBERS	5	946	14.1	133
25	GUM AND PLASTIC PRODUCTS	4	370	8.7	32
TOTAL		4203	50772		20180

Source: Istat , 1996b
Istat, 2000

Table 14 - Arrivals and nights spent by Italian and foreign tourists in hotels

HOTEL AND SUPPLEMENTARY ACCOMODATION						
PERIOD January - December 1998	ITALIANS		FOREIGN VISITORS		TOTAL	
	Arrivals	Nights spent	Arrivals	Nights spent	Arrivals	Nights spent
JANUARY	1492	8280	423	2039	1915	10 319
FEBRUARY	1904	7733	725	1798	2629	9531
MARCH	2942	10 535	6095	2238	9037	32 915
APRIL	10 104	34 513	27 267	129 847	37 371	164 360
MAY	9300	47 356	32 964	160 429	42 264	207 785
JUNE	9684	60 478	28 476	193 178	38 160	253 656
JULY	11 541	91 189	31 270	234 121	42 811	325 310
AUGUST	15 893	139 750	38 223	267 911	54 116	407 661
SEPTEMBER	7842	53 506	31 274	203 132	39 116	256 638
OCTOBER	3994	12 662	18 872	101 157	22 866	113 819
NOVEMBER	1884	6121	1219	5106	3103	11 227
DECEMBER	1805	6407	713	2087	2518	8494
TOTAL	78 385	478 530	217 521	1 303 043	295 906	1 801 715

Source: Province of Brescia, Ufficio promozioni e statistica.

NOTES

¹ The High Garda Natural Park extends for about 38 000 hectares, half of which are covered by woods. It embraces the municipalities of Salò, Gardone Riviera, Toscolano Maderno, Valvestino, Magasa, Gargnano, Limone, Tignale and Tremosine. The territory has heterogeneous morphological characteristics. It ranges from a height of 65m to 2000m above the sea level. It presents also very different climatic conditions, typical of a Mediterranean system in the land surrounding the lake shores and the ‘alpine systems’ on the north-west side of Garda Lake.

REFERENCES

- Baggio, M., (2005), 'Resolution of Conflicts in a Natural Area', in *Integrated assessment and management of public resources*, eds. Cooper, Perali and Veronesi, Edward Elgar (forthcoming).
- Bendavid-Val, A. (1983), *Regional and Local Economic Analysis for Practitioners*, Praeger Publishers, New York.
- Cooper, J., F. Perali, Tommasi, N. and M. Veronesi, (2005a), 'A contingent valuation method incorporating fairness and citizen participation', working paper of the Department of Economics of the University of Verona.
- Cooper, J., F. Perali, Tommasi, N. and M. Veronesi, (2005b), 'Travel cost estimation conditional on leisure consumption', in *Integrated assessment and management of public resources*, eds. Cooper, Perali and Veronesi, Edward Elgar (forthcoming).
- De Agostini, P., (2005) 'Identification of the best combination of environmental functions using multi-criteria analysis', in *Integrated assessment and management of public resources*, eds. Cooper, Perali and Veronesi, Edward Elgar (forthcoming).
- De Agostini, P., V. Cicogna and Perali, F., (2005) 'The supply of functions by homogeneous areas using cluster analysis', in *Integrated assessment and management of public resources*, eds. Cooper, Perali and Veronesi, Edward Elgar (forthcoming).
- De Janvry, A. and E. Sadoulet, (1995), *Quantitative Development Policy Analysis*, The Johns Hopkins University Press, Baltimore.
- Dorward, A., J. Morrison, C. Poulton and T. Hardwick (2003), *Disaggregated Impacts of Agricultural Policy Reform on Rural Households in Malawi*, First Meeting OECD Global Forum Pro-Poor Agricultural Policies, Paris.

- European Commission, (2002), *Definitions of Variable Used in FADN Standard Results*, RI/CC 8882 Rev. 7.0, Brussels.
- Fannin M. (2001), *Construction of a Social Accounting Matrix for Country Fermanagh, Northern Ireland*, Southern Regional Science Association, USA.
- Faramondi, A. and M. G. Paris (2002), *Le nuove stime di aggregati socio-economici per i Sistemi Locali del Lavoro*, Sixth Conference of Statistics, Rome.
- Golan, A., G. Judge, and S. Robinson. (1994), 'Recovering information from incomplete or partial multisectoral economic data', *Review of Economics and Statistics*, **76**, 541 – 49.
- Inea (1996), *Agricoltura Italiana Conta*, INEA, Rome.
- Istat (1991), 'Censimento della popolazione e delle abitazioni', Istat, Rome; at IONIO Servizio Banche Dati Cineca, <http://ionio.cineca.it/>
- Istat (1996a), 'Censimento intermedio dell'industria e dei servizi', Istat, Rome; at IONIO Servizio Banche Dati Cineca, <http://ionio.cineca.it/>.
- Istat (1996b), 'Conti Economici delle Imprese', Istat, Rome.
- Istat (1996c), 'Distribuzione quantitativa del reddito nelle indagini sui redditi delle famiglie agricole', Istat, Rome.
- Istat, (2000), 'Tavola intersettoriale dell'economia italiana' – Anno 1992, Istat, Rome; at IONIO Servizio Banche Dati Cineca, <http://ionio.cineca.it/>.
- Jaynes, E.T (1957), 'Information Theory and Statistical Mechanics', *Physical Review*, **106**, Issue 4, 620 – 30.
- Province of Brescia, Ufficio promozione e statistica at:
<http://www.provincia.brescia.it/turismo/turismo-uffici.php>
- Pyatt, G. and J. I. Round (1979), 'Accounting and Fixed Price Multipliers in a Social

Accounting Matrix Framework', *The Economic Journal*, **89**(356), 850-73.

Regional Statistical Yearbook of Lombardy in <http://www.ring.lombardia.it/>.

Robilliard, A. S. and S. Robinson (1999), 'Reconciling Household Survey and National Accounts Data Using a Cross Entropy Estimation Method', IFPRI. Discussion Paper No. 50.

Robinson, S., A. Cattaneo and M. El-Said (1998), 'Estimate a Social Accounting Matrix Using Cross Entropy Methods', International Food Policy Research Institute, TMD Discussion Paper No. 33.

Robinson, S. and M. El-Said (2000), 'GAMS Code for estimate a Social Accounting Matrix (SAM) Using Cross Entropy (CE) Methods', International Food Policy Research Institute, TDM Discussion Paper No. 64.

Shannon, C. E. (1948) 'A mathematical theory of communication', *Bell System Technical Journal*, **27**, 379 – 423.

NOTE DI LAVORO DELLA FONDAZIONE ENI ENRICO MATTEI

Fondazione Eni Enrico Mattei Working Paper Series

Our Note di Lavoro are available on the Internet at the following addresses:

<http://www.feem.it/Feem/Pub/Publications/WPapers/default.html>

<http://www.ssrn.com/link/feem.html>

<http://www.repec.org>

NOTE DI LAVORO PUBLISHED IN 2004

IEM	1.2004	Anil MARKANDYA, Suzette PEDROSO and Alexander GOLUB: <u>Empirical Analysis of National Income and So2 Emissions in Selected European Countries</u>
ETA	2.2004	Masahisa FUJITA and Shlomo WEBER: <u>Strategic Immigration Policies and Welfare in Heterogeneous Countries</u>
PRA	3.2004	Adolfo DI CARLUCCIO, Giovanni FERRI, Cecilia FRALE and Ottavio RICCHI: <u>Do Privatizations Boost Household Shareholding? Evidence from Italy</u>
ETA	4.2004	Victor GINSBURGH and Shlomo WEBER: <u>Languages Disenfranchisement in the European Union</u>
ETA	5.2004	Romano PIRAS: <u>Growth, Congestion of Public Goods, and Second-Best Optimal Policy</u>
CCMP	6.2004	Herman R.J. VOLLEBERGH: <u>Lessons from the Polder: Is Dutch CO2-Taxation Optimal</u>
PRA	7.2004	Sandro BRUSCO, Giuseppe LOPOMO and S. VISWANATHAN (lxv): <u>Merger Mechanisms</u>
PRA	8.2004	Wolfgang AUSENNEGG, Pegaret PICHLER and Alex STOMPER (lxv): <u>IPO Pricing with Bookbuilding, and a When-Issued Market</u>
PRA	9.2004	Pegaret PICHLER and Alex STOMPER (lxv): <u>Primary Market Design: Direct Mechanisms and Markets</u>
PRA	10.2004	Florian ENGLMAIER, Pablo GUILLEN, Loreto LLORENTE, Sander ONDERSTAL and Rupert SAUSGRUBER (lxv): <u>The Chopstick Auction: A Study of the Exposure Problem in Multi-Unit Auctions</u>
PRA	11.2004	Bjarne BRENDSTRUP and Harry J. PAARSCH (lxv): <u>Nonparametric Identification and Estimation of Multi-Unit, Sequential, Oral, Ascending-Price Auctions With Asymmetric Bidders</u>
PRA	12.2004	Ohad KADAN (lxv): <u>Equilibrium in the Two Player, k-Double Auction with Affiliated Private Values</u>
PRA	13.2004	Maarten C.W. JANSSEN (lxv): <u>Auctions as Coordination Devices</u>
PRA	14.2004	Gadi FIBICH, Arie GAVIOUS and Aner SELA (lxv): <u>All-Pay Auctions with Weakly Risk-Averse Buyers</u>
PRA	15.2004	Orly SADE, Charles SCHNITZLEIN and Jaime F. ZENDER (lxv): <u>Competition and Cooperation in Divisible Good Auctions: An Experimental Examination</u>
PRA	16.2004	Marta STRYSZOWSKA (lxv): <u>Late and Multiple Bidding in Competing Second Price Internet Auctions</u>
CCMP	17.2004	Slim Ben YOUSSEF: <u>R&D in Cleaner Technology and International Trade</u>
NRM	18.2004	Angelo ANTOCI, Simone BORGHESI and Paolo RUSSU (lxvi): <u>Biodiversity and Economic Growth: Stabilization Versus Preservation of the Ecological Dynamics</u>
SIEV	19.2004	Anna ALBERINI, Paolo ROSATO, Alberto LONGO and Valentina ZANATTA: <u>Information and Willingness to Pay in a Contingent Valuation Study: The Value of S. Erasmo in the Lagoon of Venice</u>
NRM	20.2004	Guido CANDELA and Roberto CELLINI (lxvii): <u>Investment in Tourism Market: A Dynamic Model of Differentiated Oligopoly</u>
NRM	21.2004	Jacqueline M. HAMILTON (lxvii): <u>Climate and the Destination Choice of German Tourists</u>
NRM	22.2004	Javier Rey-MAQUIEIRA PALMER, Javier LOZANO IBÁÑEZ and Carlos Mario GÓMEZ GÓMEZ (lxvii): <u>Land, Environmental Externalities and Tourism Development</u>
NRM	23.2004	Pius ODUNGA and Henk FOLMER (lxvii): <u>Profiling Tourists for Balanced Utilization of Tourism-Based Resources in Kenya</u>
NRM	24.2004	Jean-Jacques NOWAK, Mondher SAHLI and Pasquale M. SGRO (lxvii): <u>Tourism, Trade and Domestic Welfare</u>
NRM	25.2004	Riaz SHAREEF (lxvii): <u>Country Risk Ratings of Small Island Tourism Economies</u>
NRM	26.2004	Juan Luis EUGENIO-MARTÍN, Noelia MARTÍN MORALES and Riccardo SCARPA (lxvii): <u>Tourism and Economic Growth in Latin American Countries: A Panel Data Approach</u>
NRM	27.2004	Raúl Hernández MARTÍN (lxvii): <u>Impact of Tourism Consumption on GDP. The Role of Imports</u>
CSRM	28.2004	Nicoletta FERRO: <u>Cross-Country Ethical Dilemmas in Business: A Descriptive Framework</u>
NRM	29.2004	Marian WEBER (lxvi): <u>Assessing the Effectiveness of Tradable Landuse Rights for Biodiversity Conservation: an Application to Canada's Boreal Mixedwood Forest</u>
NRM	30.2004	Trond BJORNDAAL, Phoebe KOUNDOURI and Sean PASCOE (lxvi): <u>Output Substitution in Multi-Species Trawl Fisheries: Implications for Quota Setting</u>
CCMP	31.2004	Marzio GALEOTTI, Alessandra GORIA, Paolo MOMBRINI and Evi SPANTIDAKI: <u>Weather Impacts on Natural, Social and Economic Systems (WISE) Part I: Sectoral Analysis of Climate Impacts in Italy</u>
CCMP	32.2004	Marzio GALEOTTI, Alessandra GORIA, Paolo MOMBRINI and Evi SPANTIDAKI: <u>Weather Impacts on Natural, Social and Economic Systems (WISE) Part II: Individual Perception of Climate Extremes in Italy</u>
CTN	33.2004	Wilson PEREZ: <u>Divide and Conquer: Noisy Communication in Networks, Power, and Wealth Distribution</u>
KTHC	34.2004	Gianmarco I.P. OTTAVIANO and Giovanni PERI (lxviii): <u>The Economic Value of Cultural Diversity: Evidence from US Cities</u>
KTHC	35.2004	Linda CHAIB (lxviii): <u>Immigration and Local Urban Participatory Democracy: A Boston-Paris Comparison</u>

KTHC	36.2004	<i>Franca ECKERT COEN and Claudio ROSSI (Ixviii): <u>Foreigners, Immigrants, Host Cities: The Policies of Multi-Ethnicity in Rome. Reading Governance in a Local Context</u></i>
KTHC	37.2004	<i>Kristine CRANE (Ixviii): <u>Governing Migration: Immigrant Groups' Strategies in Three Italian Cities – Rome, Naples and Bari</u></i>
KTHC	38.2004	<i>Kiflemariam HAMDE (Ixviii): <u>Mind in Africa, Body in Europe: The Struggle for Maintaining and Transforming Cultural Identity - A Note from the Experience of Eritrean Immigrants in Stockholm</u></i>
ETA	39.2004	<i>Alberto CAVALIERE: <u>Price Competition with Information Disparities in a Vertically Differentiated Duopoly</u></i>
PRA	40.2004	<i>Andrea BIGANO and Stef PROOST: <u>The Opening of the European Electricity Market and Environmental Policy: Does the Degree of Competition Matter?</u></i>
CCMP	41.2004	<i>Micheal FINUS (Ixix): <u>International Cooperation to Resolve International Pollution Problems</u></i>
KTHC	42.2004	<i>Francesco CRESPI: <u>Notes on the Determinants of Innovation: A Multi-Perspective Analysis</u></i>
CTN	43.2004	<i>Sergio CURRARINI and Marco MARINI: <u>Coalition Formation in Games without Synergies</u></i>
CTN	44.2004	<i>Marc ESCRIHUELA-VILLAR: <u>Cartel Sustainability and Cartel Stability</u></i>
NRM	45.2004	<i>Sebastian BERVOETS and Nicolas GRAVEL (Ixvi): <u>Appraising Diversity with an Ordinal Notion of Similarity: An Axiomatic Approach</u></i>
NRM	46.2004	<i>Signe ANTHON and Bo JELLES MARK THORSEN (Ixvi): <u>Optimal Afforestation Contracts with Asymmetric Information on Private Environmental Benefits</u></i>
NRM	47.2004	<i>John MBURU (Ixvi): <u>Wildlife Conservation and Management in Kenya: Towards a Co-management Approach</u></i>
NRM	48.2004	<i>Ekin BIROL, Ágnes GYÓVAI and Melinda SMALE (Ixvi): <u>Using a Choice Experiment to Value Agricultural Biodiversity on Hungarian Small Farms: Agri-Environmental Policies in a Transition al Economy</u></i>
CCMP	49.2004	<i>Gernot KLEPPER and Sonja PETERSON: <u>The EU Emissions Trading Scheme. Allowance Prices, Trade Flows, Competitiveness Effects</u></i>
GG	50.2004	<i>Scott BARRETT and Michael HOEL: <u>Optimal Disease Eradication</u></i>
CTN	51.2004	<i>Dinko DIMITROV, Peter BORM, Ruud HENDRICKX and Shao CHIN SUNG: <u>Simple Priorities and Core Stability in Hedonic Games</u></i>
SIEV	52.2004	<i>Francesco RICCI: <u>Channels of Transmission of Environmental Policy to Economic Growth: A Survey of the Theory</u></i>
SIEV	53.2004	<i>Anna ALBERINI, Maureen CROPPER, Alan KRUPNICK and Nathalie B. SIMON: <u>Willingness to Pay for Mortality Risk Reductions: Does Latency Matter?</u></i>
NRM	54.2004	<i>Ingo BRÄUER and Rainer MARGGRAF (Ixvi): <u>Valuation of Ecosystem Services Provided by Biodiversity Conservation: An Integrated Hydrological and Economic Model to Value the Enhanced Nitrogen Retention in Renaturated Streams</u></i>
NRM	55.2004	<i>Timo GOESCHL and Tun LIN (Ixvi): <u>Biodiversity Conservation on Private Lands: Information Problems and Regulatory Choices</u></i>
NRM	56.2004	<i>Tom DEDEURWAERDERE (Ixvi): <u>Bioprospection: From the Economics of Contracts to Reflexive Governance</u></i>
CCMP	57.2004	<i>Katrin REHDANZ and David MADDISON: <u>The Amenity Value of Climate to German Households</u></i>
CCMP	58.2004	<i>Koen SMEKENS and Bob VAN DER ZWAAN: <u>Environmental Externalities of Geological Carbon Sequestration Effects on Energy Scenarios</u></i>
NRM	59.2004	<i>Valentina BOSETTI, Mariaester CASSINELLI and Alessandro LANZA (Ixvii): <u>Using Data Envelopment Analysis to Evaluate Environmentally Conscious Tourism Management</u></i>
NRM	60.2004	<i>Timo GOESCHL and Danilo CAMARGO IGLIORI (Ixvi): <u>Property Rights Conservation and Development: An Analysis of Extractive Reserves in the Brazilian Amazon</u></i>
CCMP	61.2004	<i>Barbara BUCHNER and Carlo CARRARO: <u>Economic and Environmental Effectiveness of a Technology-based Climate Protocol</u></i>
NRM	62.2004	<i>Elissaios PAPYRAKIS and Reyer GERLAGH: <u>Resource-Abundance and Economic Growth in the U.S.</u></i>
NRM	63.2004	<i>Györgyi BELA, György PATAKI, Melinda SMALE and Mariann HAJDÚ (Ixvi): <u>Conserving Crop Genetic Resources on Smallholder Farms in Hungary: Institutional Analysis</u></i>
NRM	64.2004	<i>E.C.M. RUIJGROK and E.E.M. NILLESEN (Ixvi): <u>The Socio-Economic Value of Natural Riverbanks in the Netherlands</u></i>
NRM	65.2004	<i>E.C.M. RUIJGROK (Ixvi): <u>Reducing Acidification: The Benefits of Increased Nature Quality. Investigating the Possibilities of the Contingent Valuation Method</u></i>
ETA	66.2004	<i>Giannis VARDAS and Anastasios XEPAPADEAS: <u>Uncertainty Aversion, Robust Control and Asset Holdings</u></i>
GG	67.2004	<i>Anastasios XEPAPADEAS and Constadina PASSA: <u>Participation in and Compliance with Public Voluntary Environmental Programs: An Evolutionary Approach</u></i>
GG	68.2004	<i>Michael FINUS: <u>Modesty Pays: Sometimes!</u></i>
NRM	69.2004	<i>Trond BJØRNDAL and Ana BRASÃO: <u>The Northern Atlantic Bluefin Tuna Fisheries: Management and Policy Implications</u></i>
CTN	70.2004	<i>Alejandro CAPARRÓS, Abdelhakim HAMMOUDI and Tarik TAZDAÏT: <u>On Coalition Formation with Heterogeneous Agents</u></i>
IEM	71.2004	<i>Massimo GIOVANNINI, Margherita GRASSO, Alessandro LANZA and Matteo MANERA: <u>Conditional Correlations in the Returns on Oil Companies Stock Prices and Their Determinants</u></i>
IEM	72.2004	<i>Alessandro LANZA, Matteo MANERA and Michael MCALEER: <u>Modelling Dynamic Conditional Correlations in WTI Oil Forward and Futures Returns</u></i>
SIEV	73.2004	<i>Margarita GENIUS and Elisabetta STRAZZERA: <u>The Copula Approach to Sample Selection Modelling: An Application to the Recreational Value of Forests</u></i>

CCMP	74.2004	<i>Rob DELLINK and Ekko van IERLAND</i> : <u>Pollution Abatement in the Netherlands: A Dynamic Applied General Equilibrium Assessment</u>
ETA	75.2004	<i>Rosella LEVAGGI and Michele MORETTO</i> : <u>Investment in Hospital Care Technology under Different Purchasing Rules: A Real Option Approach</u>
CTN	76.2004	<i>Salvador BARBERÀ and Matthew O. JACKSON</i> (lxx): <u>On the Weights of Nations: Assigning Voting Weights in a Heterogeneous Union</u>
CTN	77.2004	<i>Àlex ARENAS, Antonio CABRALES, Albert DÍAZ-GUILERA, Roger GUIMERÀ and Fernando VEGA-REDONDO</i> (lxx): <u>Optimal Information Transmission in Organizations: Search and Congestion</u>
CTN	78.2004	<i>Francis BLOCH and Armando GOMES</i> (lxx): <u>Contracting with Externalities and Outside Options</u>
CTN	79.2004	<i>Rabah AMIR, Effrosyni DIAMANTOUDI and Licun XUE</i> (lxx): <u>Merger Performance under Uncertain Efficiency Gains</u>
CTN	80.2004	<i>Francis BLOCH and Matthew O. JACKSON</i> (lxx): <u>The Formation of Networks with Transfers among Players</u>
CTN	81.2004	<i>Daniel DIERMEIER, Hülya ERASLAN and Antonio MERLO</i> (lxx): <u>Bicameralism and Government Formation</u>
CTN	82.2004	<i>Rod GARRATT, James E. PARCO, Cheng-ZHONG QIN and Amnon RAPOPORT</i> (lxx): <u>Potential Maximization and Coalition Government Formation</u>
CTN	83.2004	<i>Kfir ELIAZ, Debraj RAY and Ronny RAZIN</i> (lxx): <u>Group Decision-Making in the Shadow of Disagreement</u>
CTN	84.2004	<i>Sanjeev GOYAL, Marco van der LEIJ and José Luis MORAGA-GONZÁLEZ</i> (lxx): <u>Economics: An Emerging Small World?</u>
CTN	85.2004	<i>Edward CARTWRIGHT</i> (lxx): <u>Learning to Play Approximate Nash Equilibria in Games with Many Players</u>
IEM	86.2004	<i>Finn R. FØRSUND and Michael HOEL</i> : <u>Properties of a Non-Competitive Electricity Market Dominated by Hydroelectric Power</u>
KTHC	87.2004	<i>Elissaios PAPYRAKIS and Reyer GERLAGH</i> : <u>Natural Resources, Investment and Long-Term Income</u>
CCMP	88.2004	<i>Marzio GALEOTTI and Claudia KEMFERT</i> : <u>Interactions between Climate and Trade Policies: A Survey</u>
IEM	89.2004	<i>A. MARKANDYA, S. PEDROSO and D. STREIMIKIENE</i> : <u>Energy Efficiency in Transition Economies: Is There Convergence Towards the EU Average?</u>
GG	90.2004	<i>Rolf GOLOMBEK and Michael HOEL</i> : <u>Climate Agreements and Technology Policy</u>
PRA	91.2004	<i>Sergei IZMALKOV</i> (lxv): <u>Multi-Unit Open Ascending Price Efficient Auction</u>
KTHC	92.2004	<i>Gianmarco I.P. OTTAVIANO and Giovanni PERI</i> : <u>Cities and Cultures</u>
KTHC	93.2004	<i>Massimo DEL GATTO</i> : <u>Agglomeration, Integration, and Territorial Authority Scale in a System of Trading Cities. Centralisation versus devolution</u>
CCMP	94.2004	<i>Pierre-André JOUVET, Philippe MICHEL and Gilles ROTILLON</i> : <u>Equilibrium with a Market of Permits</u>
CCMP	95.2004	<i>Bob van der ZWAAN and Reyer GERLAGH</i> : <u>Climate Uncertainty and the Necessity to Transform Global Energy Supply</u>
CCMP	96.2004	<i>Francesco BOSELLO, Marco LAZZARIN, Roberto ROSON and Richard S.J. TOL</i> : <u>Economy-Wide Estimates of the Implications of Climate Change: Sea Level Rise</u>
CTN	97.2004	<i>Gustavo BERGANTIÑOS and Juan J. VIDAL-PUGA</i> : <u>Defining Rules in Cost Spanning Tree Problems Through the Canonical Form</u>
CTN	98.2004	<i>Siddhartha BANDYOPADHYAY and Mandar OAK</i> : <u>Party Formation and Coalitional Bargaining in a Model of Proportional Representation</u>
GG	99.2004	<i>Hans-Peter WEIKARD, Michael FINUS and Juan-Carlos ALTAMIRANO-CABRERA</i> : <u>The Impact of Surplus Sharing on the Stability of International Climate Agreements</u>
SIEV	100.2004	<i>Chiara M. TRAVISI and Peter NIJKAMP</i> : <u>Willingness to Pay for Agricultural Environmental Safety: Evidence from a Survey of Milan, Italy, Residents</u>
SIEV	101.2004	<i>Chiara M. TRAVISI, Raymond J. G. M. FLORAX and Peter NIJKAMP</i> : <u>A Meta-Analysis of the Willingness to Pay for Reductions in Pesticide Risk Exposure</u>
NRM	102.2004	<i>Valentina BOSETTI and David TOMBERLIN</i> : <u>Real Options Analysis of Fishing Fleet Dynamics: A Test</u>
CCMP	103.2004	<i>Alessandra GORIA e Gretel GAMBARELLI</i> : <u>Economic Evaluation of Climate Change Impacts and Adaptability in Italy</u>
PRA	104.2004	<i>Massimo FLORIO and Mara GRASSEN</i> : <u>The Missing Shock: The Macroeconomic Impact of British Privatisation</u>
PRA	105.2004	<i>John BENNETT, Saul ESTRIN, James MAW and Giovanni URG</i> : <u>Privatisation Methods and Economic Growth in Transition Economies</u>
PRA	106.2004	<i>Kira BÖRNER</i> : <u>The Political Economy of Privatization: Why Do Governments Want Reforms?</u>
PRA	107.2004	<i>Pehr-Johan NORBÄCK and Lars PERSSON</i> : <u>Privatization and Restructuring in Concentrated Markets</u>
SIEV	108.2004	<i>Angela GRANZOTTO, Fabio PRANOVI, Simone LIBRALATO, Patrizia TORRICELLI and Danilo MAINARDI</i> : <u>Comparison between Artisanal Fishery and Manila Clam Harvesting in the Venice Lagoon by Using Ecosystem Indicators: An Ecological Economics Perspective</u>
CTN	109.2004	<i>Somdeb LAHIRI</i> : <u>The Cooperative Theory of Two Sided Matching Problems: A Re-examination of Some Results</u>
NRM	110.2004	<i>Giuseppe DI VITA</i> : <u>Natural Resources Dynamics: Another Look</u>
SIEV	111.2004	<i>Anna ALBERINI, Alistair HUNT and Anil MARKANDYA</i> : <u>Willingness to Pay to Reduce Mortality Risks: Evidence from a Three-Country Contingent Valuation Study</u>
KTHC	112.2004	<i>Valeria PAPPONETTI and Dino PINELLI</i> : <u>Scientific Advice to Public Policy-Making</u>
SIEV	113.2004	<i>Paulo A.L.D. NUNES and Laura ONOFR</i> : <u>The Economics of Warm Glow: A Note on Consumer's Behavior and Public Policy Implications</u>
IEM	114.2004	<i>Patrick CAYRADE</i> : <u>Investments in Gas Pipelines and Liquefied Natural Gas Infrastructure What is the Impact on the Security of Supply?</u>
IEM	115.2004	<i>Valeria COSTANTINI and Francesco GRACCEVA</i> : <u>Oil Security. Short- and Long-Term Policies</u>

ITEM	116.2004	<i>Valeria COSTANTINI and Francesco GRACCEVA: <u>Social Costs of Energy Disruptions</u></i>
ITEM	117.2004	<i>Christian EGENHOFER, Kyriakos GIALOGLOU, Giacomo LUCIANI, Maroeska BOOTS, Martin SCHEEPERS, Valeria COSTANTINI, Francesco GRACCEVA, Anil MARKANDYA and Giorgio VICINI: <u>Market-Based Options for Security of Energy Supply</u></i>
ITEM	118.2004	<i>David FISK: <u>Transport Energy Security. The Unseen Risk?</u></i>
ITEM	119.2004	<i>Giacomo LUCIANI: <u>Security of Supply for Natural Gas Markets. What is it and What is it not?</u></i>
ITEM	120.2004	<i>L.J. de VRIES and R.A. HAKVOORT: <u>The Question of Generation Adequacy in Liberalised Electricity Markets</u></i>
KTHC	121.2004	<i>Alberto PETRUCCI: <u>Asset Accumulation, Fertility Choice and Nondegenerate Dynamics in a Small Open Economy</u></i>
NRM	122.2004	<i>Carlo GIUPPONI, Jaroslav MYSLIAK and Anita FASSIO: <u>An Integrated Assessment Framework for Water Resources Management: A DSS Tool and a Pilot Study Application</u></i>
NRM	123.2004	<i>Margaretha BREIL, Anita FASSIO, Carlo GIUPPONI and Paolo ROSATO: <u>Evaluation of Urban Improvement on the Islands of the Venice Lagoon: A Spatially-Distributed Hedonic-Hierarchical Approach</u></i>
ETA	124.2004	<i>Paul MENSINK: <u>Instant Efficient Pollution Abatement Under Non-Linear Taxation and Asymmetric Information: The Differential Tax Revisited</u></i>
NRM	125.2004	<i>Mauro FABIANO, Gabriella CAMARSA, Rosanna DURSI, Roberta IVALDI, Valentina MARIN and Francesca PALMISANI: <u>Integrated Environmental Study for Beach Management: A Methodological Approach</u></i>
PRA	126.2004	<i>Irena GROSFELD and Iraj HASHI: <u>The Emergence of Large Shareholders in Mass Privatized Firms: Evidence from Poland and the Czech Republic</u></i>
CCMP	127.2004	<i>Maria BERRITTELLA, Andrea BIGANO, Roberto ROSON and Richard S.J. TOL: <u>A General Equilibrium Analysis of Climate Change Impacts on Tourism</u></i>
CCMP	128.2004	<i>Reyer GERLAGH: <u>A Climate-Change Policy Induced Shift from Innovations in Energy Production to Energy Savings</u></i>
NRM	129.2004	<i>Elissaios PAPYRAKIS and Reyner GERLAGH: <u>Natural Resources, Innovation, and Growth</u></i>
PRA	130.2004	<i>Bernardo BORTOLOTTI and Mara FACCIO: <u>Reluctant Privatization</u></i>
SIEV	131.2004	<i>Riccardo SCARPA and Mara THIENE: <u>Destination Choice Models for Rock Climbing in the Northeast Alps: A Latent-Class Approach Based on Intensity of Participation</u></i>
SIEV	132.2004	<i>Riccardo SCARPA Kenneth G. WILLIS and Melinda ACUTT: <u>Comparing Individual-Specific Benefit Estimates for Public Goods: Finite Versus Continuous Mixing in Logit Models</u></i>
ITEM	133.2004	<i>Santiago J. RUBIO: <u>On Capturing Oil Rents with a National Excise Tax Revisited</u></i>
ETA	134.2004	<i>Ascensión ANDINA DÍAZ: <u>Political Competition when Media Create Candidates' Charisma</u></i>
SIEV	135.2004	<i>Anna ALBERINI: <u>Robustness of VSL Values from Contingent Valuation Surveys</u></i>
CCMP	136.2004	<i>Gernot KLEPPER and Sonja PETERSON: <u>Marginal Abatement Cost Curves in General Equilibrium: The Influence of World Energy Prices</u></i>
ETA	137.2004	<i>Herbert DAWID, Christophe DEISSENBERG and Pavel ŠEVČIK: <u>Cheap Talk, Gullibility, and Welfare in an Environmental Taxation Game</u></i>
CCMP	138.2004	<i>ZhongXiang ZHANG: <u>The World Bank's Prototype Carbon Fund and China</u></i>
CCMP	139.2004	<i>Reyer GERLAGH and Marjan W. HOFKES: <u>Time Profile of Climate Change Stabilization Policy</u></i>
NRM	140.2004	<i>Chiara D'ALPAOS and Michele MORETTO: <u>The Value of Flexibility in the Italian Water Service Sector: A Real Option Analysis</u></i>
PRA	141.2004	<i>Patrick BAJARI, Stephanie HOUGHTON and Steven TADELIS (lxxi): <u>Bidding for Incomplete Contracts</u></i>
PRA	142.2004	<i>Susan ATHEY, Jonathan LEVIN and Enrique SEIRA (lxxi): <u>Comparing Open and Sealed Bid Auctions: Theory and Evidence from Timber Auctions</u></i>
PRA	143.2004	<i>David GOLDREICH (lxxi): <u>Behavioral Biases of Dealers in U.S. Treasury Auctions</u></i>
PRA	144.2004	<i>Roberto BURGUET (lxxi): <u>Optimal Procurement Auction for a Buyer with Downward Sloping Demand: More Simple Economics</u></i>
PRA	145.2004	<i>Ali HORTACSU and Samita SAREEN (lxxi): <u>Order Flow and the Formation of Dealer Bids: An Analysis of Information and Strategic Behavior in the Government of Canada Securities Auctions</u></i>
PRA	146.2004	<i>Victor GINSBURGH, Patrick LEGROS and Nicolas SAHUGUET (lxxi): <u>How to Win Twice at an Auction. On the Incidence of Commissions in Auction Markets</u></i>
PRA	147.2004	<i>Claudio MEZZETTI, Aleksandar PEKEČ and Ilia TSETLIN (lxxi): <u>Sequential vs. Single-Round Uniform-Price Auctions</u></i>
PRA	148.2004	<i>John ASKER and Estelle CANTILLON (lxxi): <u>Equilibrium of Scoring Auctions</u></i>
PRA	149.2004	<i>Philip A. HAILE, Han HONG and Matthew SHUM (lxxi): <u>Nonparametric Tests for Common Values in First-Price Sealed-Bid Auctions</u></i>
PRA	150.2004	<i>François DEGEORGE, François DERRIEN and Kent L. WOMACK (lxxi): <u>Quid Pro Quo in IPOs: Why Bookbuilding is Dominating Auctions</u></i>
CCMP	151.2004	<i>Barbara BUCHNER and Silvia DALL'OLIO: <u>Russia: The Long Road to Ratification. Internal Institution and Pressure Groups in the Kyoto Protocol's Adoption Process</u></i>
CCMP	152.2004	<i>Carlo CARRARO and Marzio GALEOTTI: <u>Does Endogenous Technical Change Make a Difference in Climate Policy Analysis? A Robustness Exercise with the FEEM-RICE Model</u></i>
PRA	153.2004	<i>Alejandro M. MANELLI and Daniel R. VINCENT (lxxi): <u>Multidimensional Mechanism Design: Revenue Maximization and the Multiple-Good Monopoly</u></i>
ETA	154.2004	<i>Nicola ACOCELLA, Giovanni Di BARTOLOMEO and Wilfried PAUWELS: <u>Is there any Scope for Corporatism in Stabilization Policies?</u></i>
CTN	155.2004	<i>Johan EYCKMANS and Michael FINUS: <u>An Almost Ideal Sharing Scheme for Coalition Games with Externalities</u></i>
CCMP	156.2004	<i>Cesare DOSI and Michele MORETTO: <u>Environmental Innovation, War of Attrition and Investment Grants</u></i>

CCMP	157.2004	<i>Valentina BOSETTI, Marzio GALEOTTI and Alessandro LANZA: <u>How Consistent are Alternative Short-Term Climate Policies with Long-Term Goals?</u></i>
ETA	158.2004	<i>Y. Hossein FARZIN and Ken-Ichi AKAO: <u>Non-pecuniary Value of Employment and Individual Labor Supply</u></i>
ETA	159.2004	<i>William BROCK and Anastasios XEPAPADEAS: <u>Spatial Analysis: Development of Descriptive and Normative Methods with Applications to Economic-Ecological Modelling</u></i>
KTHC	160.2004	<i>Alberto PETRUCCI: <u>On the Incidence of a Tax on PureRent with Infinite Horizons</u></i>
IEM	161.2004	<i>Xavier LABANDEIRA, José M. LABEAGA and Miguel RODRÍGUEZ: <u>Microsimulating the Effects of Household Energy Price Changes in Spain</u></i>

NOTE DI LAVORO PUBLISHED IN 2005

CCMP	1.2005	<i>Stéphane HALLEGATTE: <u>Accounting for Extreme Events in the Economic Assessment of Climate Change</u></i>
CCMP	2.2005	<i>Qiang WU and Paulo Augusto NUNES: <u>Application of Technological Control Measures on Vehicle Pollution: A Cost-Benefit Analysis in China</u></i>
CCMP	3.2005	<i>Andrea BIGANO, Jacqueline M. HAMILTON, Maren LAU, Richard S.J. TOL and Yuan ZHOU: <u>A Global Database of Domestic and International Tourist Numbers at National and Subnational Level</u></i>
CCMP	4.2005	<i>Andrea BIGANO, Jacqueline M. HAMILTON and Richard S.J. TOL: <u>The Impact of Climate on Holiday Destination Choice</u></i>
ETA	5.2005	<i>Hubert KEMPF: <u>Is Inequality Harmful for the Environment in a Growing Economy?</u></i>
CCMP	6.2005	<i>Valentina BOSETTI, Carlo CARRARO and Marzio GALEOTTI: <u>The Dynamics of Carbon and Energy Intensity in a Model of Endogenous Technical Change</u></i>
IEM	7.2005	<i>David CALEF and Robert GOBLE: <u>The Allure of Technology: How France and California Promoted Electric Vehicles to Reduce Urban Air Pollution</u></i>
ETA	8.2005	<i>Lorenzo PELLEGRINI and Reyer GERLAGH: <u>An Empirical Contribution to the Debate on Corruption Democracy and Environmental Policy</u></i>
CCMP	9.2005	<i>Angelo ANTOCI: <u>Environmental Resources Depletion and Interplay Between Negative and Positive Externalities in a Growth Model</u></i>
CTN	10.2005	<i>Frédéric DEROLAN: <u>Cost-Reducing Alliances and Local Spillovers</u></i>
NRM	11.2005	<i>Francesco SINDICO: <u>The GMO Dispute before the WTO: Legal Implications for the Trade and Environment Debate</u></i>
KTHC	12.2005	<i>Carla MASSIDDA: <u>Estimating the New Keynesian Phillips Curve for Italian Manufacturing Sectors</u></i>
KTHC	13.2005	<i>Michele MORETTO and Gianpaolo ROSSINI: <u>Start-up Entry Strategies: Employer vs. Nonemployer firms</u></i>
PRCG	14.2005	<i>Clara GRAZIANO and Annalisa LUPORINI: <u>Ownership Concentration, Monitoring and Optimal Board Structure</u></i>
CSRM	15.2005	<i>Parashar KULKARNI: <u>Use of Ecolabels in Promoting Exports from Developing Countries to Developed Countries: Lessons from the Indian LeatherFootwear Industry</u></i>
KTHC	16.2005	<i>Adriana DI LIBERTO, Roberto MURA and Francesco PIGLIARU: <u>How to Measure the Unobservable: A Panel Technique for the Analysis of TFP Convergence</u></i>
KTHC	17.2005	<i>Alireza NAGHAVI: <u>Asymmetric Labor Markets, Southern Wages, and the Location of Firms</u></i>
KTHC	18.2005	<i>Alireza NAGHAVI: <u>Strategic Intellectual Property Rights Policy and North-South Technology Transfer</u></i>
KTHC	19.2005	<i>Mombert HOPPE: <u>Technology Transfer Through Trade</u></i>
PRCG	20.2005	<i>Roberto ROSON: <u>Platform Competition with Endogenous Multihoming</u></i>
CCMP	21.2005	<i>Barbara BUCHNER and Carlo CARRARO: <u>Regional and Sub-Global Climate Blocs. A Game Theoretic Perspective on Bottom-up Climate Regimes</u></i>
IEM	22.2005	<i>Fausto CAVALLARO: <u>An Integrated Multi-Criteria System to Assess Sustainable Energy Options: An Application of the Promethee Method</u></i>
CTN	23.2005	<i>Michael FINUS, Pierre v. MOUCHE and Bianca RUNDSHAGEN: <u>Uniqueness of Coalitional Equilibria</u></i>
IEM	24.2005	<i>Wietze LISE: <u>Decomposition of CO2 Emissions over 1980–2003 in Turkey</u></i>
CTN	25.2005	<i>Somdeb LAHIRI: <u>The Core of Directed Network Problems with Quotas</u></i>
SIEV	26.2005	<i>Susanne MENZEL and Riccardo SCARPA: <u>Protection Motivation Theory and Contingent Valuation: Perceived Realism, Threat and WTP Estimates for Biodiversity Protection</u></i>
NRM	27.2005	<i>Massimiliano MAZZANTI and Anna MONTINI: <u>The Determinants of Residential Water Demand Empirical Evidence for a Panel of Italian Municipalities</u></i>
CCMP	28.2005	<i>Laurent GILOTTE and Michel de LARA: <u>Precautionary Effect and Variations of the Value of Information</u></i>
NRM	29.2005	<i>Paul SARFO-MENSAH: <u>Exportation of Timber in Ghana: The Menace of Illegal Logging Operations</u></i>
CCMP	30.2005	<i>Andrea BIGANO, Alessandra GORIA, Jacqueline HAMILTON and Richard S.J. TOL: <u>The Effect of Climate Change and Extreme Weather Events on Tourism</u></i>
NRM	31.2005	<i>Maria Angeles GARCIA-VALIÑAS: <u>Decentralization and Environment: An Application to Water Policies</u></i>
NRM	32.2005	<i>Chiara D'ALPAOS, Cesare DOSI and Michele MORETTO: <u>Concession Length and Investment Timing Flexibility</u></i>
CCMP	33.2005	<i>Joseph HUBER: <u>Key Environmental Innovations</u></i>
CTN	34.2005	<i>Antoni CALVÓ-ARMENGOL and Rahmi İLKILIÇ (Ixxii): <u>Pairwise-Stability and Nash Equilibria in Network Formation</u></i>
CTN	35.2005	<i>Francesco FERI (Ixxii): <u>Network Formation with Endogenous Decay</u></i>
CTN	36.2005	<i>Frank H. PAGE, Jr. and Myrna H. WOODERS (Ixxii): <u>Strategic Basins of Attraction, the Farsighted Core, and Network Formation Games</u></i>

CTN	37.2005	<i>Alessandra CASELLA and Nobuyuki HANAKI</i> (lxxii): <u>Information Channels in Labor Markets. On the Resilience of Referral Hiring</u>
CTN	38.2005	<i>Matthew O. JACKSON and Alison WATTS</i> (lxxii): <u>Social Games: Matching and the Play of Finitely Repeated Games</u>
CTN	39.2005	<i>Anna BOGOMOLNAIA, Michel LE BRETON, Alexei SAVVATEEV and Shlomo WEBER</i> (lxxii): <u>The Egalitarian Sharing Rule in Provision of Public Projects</u>
CTN	40.2005	<i>Francesco FERI</i> : <u>Stochastic Stability in Network with Decay</u>
CTN	41.2005	<i>Aart de ZEEUW</i> (lxxii): <u>Dynamic Effects on the Stability of International Environmental Agreements</u>
NRM	42.2005	<i>C. Martijn van der HEIDE, Jeroen C.J.M. van den BERGH, Ekko C. van IERLAND and Paulo A.L.D. NUNES</i> : <u>Measuring the Economic Value of Two Habitat Defragmentation Policy Scenarios for the Veluwe, The Netherlands</u>
PRCG	43.2005	<i>Carla VIEIRA and Ana Paula SERRA</i> : <u>Abnormal Returns in Privatization Public Offerings: The Case of Portuguese Firms</u>
SIEV	44.2005	<i>Anna ALBERINI, Valentina ZANATTA and Paolo ROSATO</i> : <u>Combining Actual and Contingent Behavior to Estimate the Value of Sports Fishing in the Lagoon of Venice</u>
CTN	45.2005	<i>Michael FINUS and Bianca RUNDSHAGEN</i> : <u>Participation in International Environmental Agreements: The Role of Timing and Regulation</u>
CCMP	46.2005	<i>Lorenzo PELLEGRINI and Reyer GERLAGH</i> : <u>Are EU Environmental Policies Too Demanding for New Members States?</u>
IEM	47.2005	<i>Matteo MANERA</i> : <u>Modeling Factor Demands with SEM and VAR: An Empirical Comparison</u>
CTN	48.2005	<i>Olivier TERCIEUX and Vincent VANNETELBOSCH</i> (lxx): <u>A Characterization of Stochastically Stable Networks</u>
CTN	49.2005	<i>Ana MAULEON, José SEMPERE-MONERRIS and Vincent J. VANNETELBOSCH</i> (lxxii): <u>R&D Networks Among Unionized Firms</u>
CTN	50.2005	<i>Carlo CARRARO, Johan EYCKMANS and Michael FINUS</i> : <u>Optimal Transfers and Participation Decisions in International Environmental Agreements</u>
KTHC	51.2005	<i>Valeria GATTAI</i> : <u>From the Theory of the Firm to FDI and Internalisation: A Survey</u>
CCMP	52.2005	<i>Alireza NAGHAVI</i> : <u>Multilateral Environmental Agreements and Trade Obligations: A Theoretical Analysis of the Doha Proposal</u>
SIEV	53.2005	<i>Margaretha BREIL, Gretel GAMBARELLI and Paulo A.L.D. NUNES</i> : <u>Economic Valuation of On Site Material Damages of High Water on Economic Activities based in the City of Venice: Results from a Dose-Response-Expert-Based Valuation Approach</u>
ETA	54.2005	<i>Alessandra del BOCA, Marzio GALEOTTI, Charles P. HIMMELBERG and Paola ROTA</i> : <u>Investment and Time to Plan: A Comparison of Structures vs. Equipment in a Panel of Italian Firms</u>
CCMP	55.2005	<i>Gernot KLEPPER and Sonja PETERSON</i> : <u>Emissions Trading, CDM, JI, and More – The Climate Strategy of the EU</u>
ETA	56.2005	<i>Maia DAVID and Bernard SINCLAIR-DESGAGNÉ</i> : <u>Environmental Regulation and the Eco-Industry</u>
ETA	57.2005	<i>Alain-Désiré NIMUBONA and Bernard SINCLAIR-DESGAGNÉ</i> : <u>The Pigouvian Tax Rule in the Presence of an Eco-Industry</u>
NRM	58.2005	<i>Helmut KARL, Antje MÖLLER, Ximena MATUS, Edgar GRANDE and Robert KAISER</i> : <u>Environmental Innovations: Institutional Impacts on Co-operations for Sustainable Development</u>
SIEV	59.2005	<i>Dimitra VOUVAKI and Anastasios XEPAPADEAS</i> (lxxiii): <u>Criteria for Assessing Sustainable Development: Theoretical Issues and Empirical Evidence for the Case of Greece</u>
CCMP	60.2005	<i>Andreas LÖSCHEL and Dirk T.G. RÜBBELKE</i> : <u>Impure Public Goods and Technological Interdependencies</u>
PRCG	61.2005	<i>Christoph A. SCHALTEGGER and Benno TORGLER</i> : <u>Trust and Fiscal Performance: A Panel Analysis with Swiss Data</u>
ETA	62.2005	<i>Irene VALSECCHI</i> : <u>A Role for Instructions</u>
NRM	63.2005	<i>Valentina BOSETTI and Gianni LOCATELLI</i> : <u>A Data Envelopment Analysis Approach to the Assessment of Natural Parks' Economic Efficiency and Sustainability. The Case of Italian National Parks</u>
SIEV	64.2005	<i>Arianne T. de BLAEIJ, Paulo A.L.D. NUNES and Jeroen C.J.M. van den BERGH</i> : <u>Modeling 'No-choice' Responses in Attribute Based Valuation Surveys</u>
CTN	65.2005	<i>Carlo CARRARO, Carmen MARCHIORI and Alessandra SGOBBI</i> : <u>Applications of Negotiation Theory to Water Issues</u>
CTN	66.2005	<i>Carlo CARRARO, Carmen MARCHIORI and Alessandra SGOBBI</i> : <u>Advances in Negotiation Theory: Bargaining, Coalitions and Fairness</u>
KTHC	67.2005	<i>Sandra WALLMAN</i> (lxxiv): <u>Network Capital and Social Trust: Pre-Conditions for 'Good' Diversity?</u>
KTHC	68.2005	<i>Asimina CHRISTOFOROU</i> (lxxiv): <u>On the Determinants of Social Capital in Greece Compared to Countries of the European Union</u>
KTHC	69.2005	<i>Eric M. USLANER</i> (lxxiv): <u>Varieties of Trust</u>
KTHC	70.2005	<i>Thomas P. LYON</i> (lxxiv): <u>Making Capitalism Work: Social Capital and Economic Growth in Italy, 1970-1995</u>
KTHC	71.2005	<i>Graziella BERTOCCHI and Chiara STROZZI</i> (lxxv): <u>Citizenship Laws and International Migration in Historical Perspective</u>
KTHC	72.2005	<i>Elsbeth van HYLCKAMA Vlieg</i> (lxxv): <u>Accommodating Differences</u>
KTHC	73.2005	<i>Renato SANSA and Ercole SORI</i> (lxxv): <u>Governance of Diversity Between Social Dynamics and Conflicts in Multicultural Cities. A Selected Survey on Historical Bibliography</u>
IEM	74.2005	<i>Alberto LONGO and Anil MARKANDYA</i> : <u>Identification of Options and Policy Instruments for the Internalisation of External Costs of Electricity Generation. Dissemination of External Costs of Electricity Supply Making Electricity External Costs Known to Policy-Makers</u> <u>MAXIMA</u>

ITEM	75.2005	<i>Margherita GRASSO and Matteo MANERA: <u>Asymmetric Error Correction Models for the Oil-Gasoline Price Relationship</u></i>
ETA	76.2005	<i>Umberto CHERUBINI and Matteo MANERA: <u>Hunting the Living Dead A “Peso Problem” in Corporate Liabilities Data</u></i>
CTN	77.2005	<i>Hans-Peter WEIKARD: <u>Cartel Stability under an Optimal Sharing Rule</u></i>
ETA	78.2005	<i>Joëlle NOAILLY, Jeroen C.J.M. van den BERGH and Cees A. WITHAGEN (lxxvi): <u>Local and Global Interactions in an Evolutionary Resource Game</u></i>
ETA	79.2005	<i>Joëlle NOAILLY, Cees A. WITHAGEN and Jeroen C.J.M. van den BERGH (lxxvi): <u>Spatial Evolution of Social Norms in a Common-Pool Resource Game</u></i>
CCMP	80.2005	<i>Massimiliano MAZZANTI and Roberto ZOBOLI: <u>Economic Instruments and Induced Innovation: The Case of End-of-Life Vehicles European Policies</u></i>
NRM	81.2005	<i>Anna LASUT: <u>Creative Thinking and Modelling for the Decision Support in Water Management</u></i>
CCMP	82.2005	<i>Valentina BOSETTI and Barbara BUCHNER: <u>Using Data Envelopment Analysis to Assess the Relative Efficiency of Different Climate Policy Portfolios</u></i>
ETA	83.2005	<i>Ignazio MUSU: <u>Intellectual Property Rights and Biotechnology: How to Improve the Present Patent System</u></i>
KTHC	84.2005	<i>Giulio CAINELLI, Susanna MANCINELLI and Massimiliano MAZZANTI: <u>Social Capital, R&D and Industrial Districts</u></i>
ETA	85.2005	<i>Rosella LEVAGGI, Michele MORETTO and Vincenzo REBBA: <u>Quality and Investment Decisions in Hospital Care when Physicians are Devoted Workers</u></i>
CCMP	86.2005	<i>Valentina BOSETTI and Laurent GILOTTE: <u>Carbon Capture and Sequestration: How Much Does this Uncertain Option Affect Near-Term Policy Choices?</u></i>
CSRM	87.2005	<i>Nicoletta FERRO: <u>Value Through Diversity: Microfinance and Islamic Finance and Global Banking</u></i>
ETA	88.2005	<i>A. MARKANDYA and S. PEDROSO: <u>How Substitutable is Natural Capital?</u></i>
ITEM	89.2005	<i>Anil MARKANDYA, Valeria COSTANTINI, Francesco GRACCEVA and Giorgio VICINI: <u>Security of Energy Supply: Comparing Scenarios From a European Perspective</u></i>
CCMP	90.2005	<i>Vincent M. OTTO, Andreas LÖSCHEL and Rob DELLINK: <u>Energy Biased Technical Change: A CGE Analysis</u></i>
PRCG	91.2005	<i>Carlo CAPUANO: <u>Abuse of Competitive Fringe</u></i>
PRCG	92.2005	<i>Ulrich BINDSEIL, Kjell G. NYBORG and Ilya A. STREBULAIEV (lxv): <u>Bidding and Performance in Repo Auctions: Evidence from ECB Open Market Operations</u></i>
CCMP	93.2005	<i>Sabrina AUCI and Leonardo BECCHETTI: <u>The Stability of the Adjusted and Unadjusted Environmental Kuznets Curve</u></i>
CCMP	94.2005	<i>Francesco BOSELLO and Jian ZHANG: <u>Assessing Climate Change Impacts: Agriculture</u></i>
CTN	95.2005	<i>Alejandro CAPARRÓS, Jean-Christophe PEREAU and Tarik TAZDAÏT: <u>Bargaining with Non-Monolithic Players</u></i>
ETA	96.2005	<i>William BROCK and Anastasios XEPAPADEAS (lxxvi): <u>Optimal Control and Spatial Heterogeneity: Pattern Formation in Economic-Ecological Models</u></i>
CCMP	97.2005	<i>Francesco BOSELLO, Roberto ROSON and Richard S.J. TOL (lxxvii): <u>Economy-Wide Estimates of the Implications of Climate Change: Human Health</u></i>
CCMP	98.2005	<i>Rob DELLINK, Michael FINUS and Niels OLIEMAN: <u>Coalition Formation under Uncertainty: The Stability Likelihood of an International Climate Agreement</u></i>
CTN	99.2005	<i>Valeria COSTANTINI, Riccardo CRESCENZI, Fabrizio De FILIPPIS, and Luca SALVATICI: <u>Bargaining Coalitions in the Agricultural Negotiations of the Doha Round: Similarity of Interests or Strategic Choices? An Empirical Assessment</u></i>
ITEM	100.2005	<i>Giliola FREY and Matteo MANERA: <u>Econometric Models of Asymmetric Price Transmission</u></i>
ITEM	101.2005	<i>Alessandro COLOGNI and Matteo MANERA: <u>Oil Prices, Inflation and Interest Rates in a Structural Cointegrated VAR Model for the G-7 Countries</u></i>
KTHC	102.2005	<i>Chiara M. TRAVISI and Roberto CAMAGNI: <u>Sustainability of Urban Sprawl: Environmental-Economic Indicators for the Analysis of Mobility Impact in Italy</u></i>
ETA	103.2005	<i>Livingstone S. LUBOOBI and Joseph Y.T. MUGISHA: <u>HIV/AIDS Pandemic in Africa: Trends and Challenges</u></i>
SIEV	104.2005	<i>Anna ALBERINI, Erik LICHTENBERG, Dominic MANCINI, and Gregmar I. GALINATO: <u>Was It Something I Ate? Implementation of the FDA Seafood HACCP Program</u></i>
SIEV	105.2005	<i>Anna ALBERINI and Aline CHIABAI: <u>Urban Environmental Health and Sensitive Populations: How Much are the Italians Willing to Pay to Reduce Their Risks?</u></i>
SIEV	106.2005	<i>Anna ALBERINI, Aline CHIABAI and Lucija MUEHLENBACHS: <u>Using Expert Judgment to Assess Adaptive Capacity to Climate Change: Evidence from a Conjoint Choice Survey</u></i>
CTN	107.2005	<i>Michele BERNASCONI and Matteo GALIZZI: <u>Coordination in Networks Formation: Experimental Evidence on Learning and Salience</u></i>
KTHC	108.2005	<i>Michele MORETTO and Sergio VERGALLI: <u>Migration Dynamics</u></i>
NRM	109.2005	<i>Antonio MUSOLESI and Mario NOSVELLI: <u>Water Consumption and Long-Run Urban Development: The Case of Milan</u></i>
SIEV	110.2005	<i>Benno TORGLER and Maria A. GARCIA-VALIÑAS: <u>The Determinants of Individuals’ Attitudes Towards Preventing Environmental Damage</u></i>
SIEV	111.2005	<i>Alberto LONGO and Anna ALBERINI: <u>What are the Effects of Contamination Risks on Commercial and Industrial Properties? Evidence from Baltimore, Maryland</u></i>
SIEV	112.2005	<i>Anna ALBERINI and Alberto LONGO: <u>The Value of Cultural Heritage Sites in Armenia: Evidence from a Travel Cost Method Study</u></i>
CCMP	113.2005	<i>Mikel GONZÁLEZ and Rob DELLINK: <u>Impact of Climate Policy on the Basque Economy</u></i>
NRM	114.2005	<i>Gilles LAFFORGUE and Walid OUESLATI: <u>Optimal Soil Management and Environmental Policy</u></i>

NRM	115.2005	<i>Martin D. SMITH and Larry B. CROWDER (lxxvi): <u>Valuing Ecosystem Services with Fishery Rents: A Lumped-Parameter Approach to Hypoxia in the Neuse River Estuary</u></i>
NRM	116.2005	<i>Dan HOLLAND and Kurt SCHNIER (lxxvi): <u>Protecting Marine Biodiversity: A Comparison of Individual Habitat Quotas (IHQs) and Marine Protected Areas</u></i>
PRCG	117.2005	<i>John NELLIS: <u>The Evolution of Enterprise Reform in Africa: From State-owned Enterprises to Private Participation in Infrastructure — and Back?</u></i>
PRCG	118.2005	<i>Bernardo BORTOLOTTI: <u>Italy's Privatization Process and Its Implications for China</u></i>
SIEV	119.2005	<i>Anna ALBERINI, Marcella VERONESI and Joseph C. COOPER: <u>Detecting Starting Point Bias in Dichotomous-Choice Contingent Valuation Surveys</u></i>
CTN	120.2005	<i>Federico ECHENIQUE and Mehmet B. YENMEZ: <u>A Solution to Matching with Preferences over Colleagues</u></i>
KTHC	121.2005	<i>Valeria GATTAI and Corrado MOLteni: <u>Dissipation of Knowledge and the Boundaries of the Multinational Enterprise</u></i>
KTHC	122.2005	<i>Valeria GATTAI: <u>Firm's Intangible Assets and Multinational Activity: Joint-Venture Versus FDI</u></i>
CCMP	123.2005	<i>Socrates KYPREOS: <u>A MERGE Model with Endogenous Technological Change and the Cost of Carbon Stabilization</u></i>
CCMP	124.2005	<i>Fuminori SANO, Keigo AKIMOTO, Takashi HOMMA and Toshimasa TOMODA: <u>Analysis of Technological Portfolios for CO2 stabilizations and Effects of Technological Changes</u></i>
CCMP	125.2005	<i>Fredrik HEDENUS, Christian AZAR and Kristian LINDGREN: <u>Induced Technological Change in a Limited Foresight Optimization Model</u></i>
CCMP	126.2005	<i>Reyer GERLAGH: <u>The Value of ITC under Climate Stabilization</u></i>
PRCG	127.2005	<i>John NELLIS: <u>Privatization in Africa: What has happened? What is to be done?</u></i>
PRCG	128.2005	<i>Raphaël SOUBEYRAN: <u>Contest with Attack and Defence: Does Negative Campaigning Increase or Decrease Voters' Turnout?</u></i>
PRCG	129.2005	<i>Pascal GAUTIER and Raphael SOUBEYRAN: <u>Political Cycles : The Opposition Advantage</u></i>
ETA	130.2005	<i>Giovanni DI BARTOLOMEO, Nicola ACOCCELLA and Andrew HUGHES HALLETT: <u>Dynamic Controllability with Overlapping targets: A Generalization of the Tinbergen-Nash Theory of Economic Policy</u></i>
SIEV	131.2005	<i>Elissaios PAPYRAKIS and Reyer GERLAGH: <u>Institutional Explanations of Economic Development: the Role of Precious Metals</u></i>
ETA	132.2005	<i>Giovanni DI BARTOLOMEO and Nicola ACOCCELLA: <u>Tinbergen and Theil Meet Nash: Controllability in Policy Games</u></i>
IEM	133.2005	<i>Adriana M. IGNACIUK and Rob B. DELLINK: <u>Multi-Product Crops for Agricultural and Energy Production – an AGE Analysis for Poland</u></i>
IEM	134.2005	<i>Raffaele MINIACI, Carlo SCARPA and Paola VALBONESI: <u>Restructuring Italian Utility Markets: Household Distributional Effects</u></i>
SIEV	135.2005	<i>Valentina ZANATTA, Paolo ROSATO, Anna ALBERINI and Dimitrios REPPAS: <u>The Impact of Speed Limits on Recreational Boating in the Lagoon of Venice</u></i>
NRM	136.2005	<i>Chi-CHUR CHAO, Bharat R. HAZARI, Jean-Pierre LAFFARGUE, Pasquale M. SGRO, and Eden S. H. YU (lxxviii): <u>Tourism, Jobs, Capital Accumulation and the Economy: A Dynamic Analysis</u></i>
NRM	137.2005	<i>Michael MCALEER, Riaz SHAREEF and Bernardo da VEIGA (lxxviii): <u>Risk Management of Daily Tourist Tax Revenues for the Maldives</u></i>
NRM	138.2005	<i>Guido CANDELA, Paolo FIGINI and Antonello E. SCORCI (lxxviii): <u>The Economics of Local Tourist Systems</u></i>
NRM	139.2005	<i>Paola De AGOSTINI, Stefania LOVO, Francesco PECCI, Federico PERALI and Michele BAGGIO (lxxviii): <u>Simulating the Impact on the Local Economy of Alternative Management Scenarios for Natural Areas</u></i>

- (lxv) This paper was presented at the EuroConference on “Auctions and Market Design: Theory, Evidence and Applications” organised by Fondazione Eni Enrico Mattei and sponsored by the EU, Milan, September 25-27, 2003
- (lxvi) This paper has been presented at the 4th BioEcon Workshop on “Economic Analysis of Policies for Biodiversity Conservation” organised on behalf of the BIOECON Network by Fondazione Eni Enrico Mattei, Venice International University (VIU) and University College London (UCL) , Venice, August 28-29, 2003
- (lxvii) This paper has been presented at the international conference on “Tourism and Sustainable Economic Development – Macro and Micro Economic Issues” jointly organised by CRENoS (Università di Cagliari e Sassari, Italy) and Fondazione Eni Enrico Mattei, and supported by the World Bank, Sardinia, September 19-20, 2003
- (lxviii) This paper was presented at the ENGIME Workshop on “Governance and Policies in Multicultural Cities”, Rome, June 5-6, 2003
- (lxix) This paper was presented at the Fourth EEP Plenary Workshop and EEP Conference “The Future of Climate Policy”, Cagliari, Italy, 27-28 March 2003
- (lxx) This paper was presented at the 9th Coalition Theory Workshop on "Collective Decisions and Institutional Design" organised by the Universitat Autònoma de Barcelona and held in Barcelona, Spain, January 30-31, 2004
- (lxxi) This paper was presented at the EuroConference on “Auctions and Market Design: Theory, Evidence and Applications”, organised by Fondazione Eni Enrico Mattei and Consip and sponsored by the EU, Rome, September 23-25, 2004
- (lxxii) This paper was presented at the 10th Coalition Theory Network Workshop held in Paris, France on 28-29 January 2005 and organised by EUREQua.
- (lxxiii) This paper was presented at the 2nd Workshop on "Inclusive Wealth and Accounting Prices" held in Trieste, Italy on 13-15 April 2005 and organised by the Ecological and Environmental Economics - EEE Programme, a joint three-year programme of ICTP - The Abdus Salam International Centre for Theoretical Physics, FEEM - Fondazione Eni Enrico Mattei, and The Beijer International Institute of Ecological Economics
- (lxxiv) This paper was presented at the ENGIME Workshop on “Trust and social capital in multicultural cities” Athens, January 19-20, 2004
- (lxxv) This paper was presented at the ENGIME Workshop on “Diversity as a source of growth” Rome November 18-19, 2004
- (lxxvi) This paper was presented at the 3rd Workshop on Spatial-Dynamic Models of Economics and Ecosystems held in Trieste on 11-13 April 2005 and organised by the Ecological and Environmental Economics - EEE Programme, a joint three-year programme of ICTP - The Abdus Salam International Centre for Theoretical Physics, FEEM - Fondazione Eni Enrico Mattei, and The Beijer International Institute of Ecological Economics
- (lxxvii) This paper was presented at the Workshop on Infectious Diseases: Ecological and Economic Approaches held in Trieste on 13-15 April 2005 and organised by the Ecological and Environmental Economics - EEE Programme, a joint three-year programme of ICTP - The Abdus Salam International Centre for Theoretical Physics, FEEM - Fondazione Eni Enrico Mattei, and The Beijer International Institute of Ecological Economics.
- (lxxviii) This paper was presented at the Second International Conference on "Tourism and Sustainable Economic Development - Macro and Micro Economic Issues" jointly organised by CRENoS (Università di Cagliari and Sassari, Italy) and Fondazione Eni Enrico Mattei, Italy, and supported by the World Bank, Chia, Italy, 16-17 September 2005.

2004 SERIES

CCMP	<i>Climate Change Modelling and Policy</i> (Editor: Marzio Galeotti)
GG	<i>Global Governance</i> (Editor: Carlo Carraro)
SIEV	<i>Sustainability Indicators and Environmental Valuation</i> (Editor: Anna Alberini)
NRM	<i>Natural Resources Management</i> (Editor: Carlo Giupponi)
KTHC	<i>Knowledge, Technology, Human Capital</i> (Editor: Gianmarco Ottaviano)
IEM	<i>International Energy Markets</i> (Editor: Anil Markandya)
CSRM	<i>Corporate Social Responsibility and Sustainable Management</i> (Editor: Sabina Ratti)
PRA	<i>Privatisation, Regulation, Antitrust</i> (Editor: Bernardo Bortolotti)
ETA	<i>Economic Theory and Applications</i> (Editor: Carlo Carraro)
CTN	<i>Coalition Theory Network</i>

2005 SERIES

CCMP	<i>Climate Change Modelling and Policy</i> (Editor: Marzio Galeotti)
SIEV	<i>Sustainability Indicators and Environmental Valuation</i> (Editor: Anna Alberini)
NRM	<i>Natural Resources Management</i> (Editor: Carlo Giupponi)
KTHC	<i>Knowledge, Technology, Human Capital</i> (Editor: Gianmarco Ottaviano)
IEM	<i>International Energy Markets</i> (Editor: Anil Markandya)
CSRM	<i>Corporate Social Responsibility and Sustainable Management</i> (Editor: Sabina Ratti)
PRCG	<i>Privatisation Regulation Corporate Governance</i> (Editor: Bernardo Bortolotti)
ETA	<i>Economic Theory and Applications</i> (Editor: Carlo Carraro)
CTN	<i>Coalition Theory Network</i>