



# TSA Compilation Reconciling Supply and demand



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## The importance of setting up a TSA for the system of tourism statistics of a country

- Setting up a TSA has to be understood as a process by which to check the internal consistency of tourism statistics (demand and supply) and of tourism statistics with the rest of the national statistical system;
- This is particularly true when doing the exercise for the first time, that in most cases, allows to collect evidences about the short comings that, before this exercise, did not appear clearly;
- It is to underline that setting up a TSA, with all its characteristics of consistency, might not be directly possible, that is, the process might not lead necessarily to an acceptable result; nevertheless, the pilot exercise will provide indications on the fields where improvements are needed.



## Constructing a TSA from basic information

- Once the basic information has been collected on demand by visitors and supply by domestic producers, there is still work ahead before setting up a TSA;
- A detailed supply and use table, consistent with the national accounts of the country should be available, corresponding to the same year, and with a reasonable degree of detail that allows identifying or approximating tourism characteristic products and activities, as well as tourism connected products.



## The process: observed data have to be transformed before being checked and cross classified

- **Transforming** data on tourism expenditure/ consumption derived from surveys to visitors into the TSA tables 1, 2, 3 and 4;
- **Transforming** the «classical» supply and use table of National Accounts into the TSA table 5;
- **Checking** the global consistency of supply of goods and services with the corresponding demand by visitors; correcting inconsistent data when feasible (or noting the inconsistencies)...
- **Applying** assumptions on the activities supplying visitors with specific goods and services;
- **Reviewing** the resulting data and the assumptions to see whether they can be modified, and correcting or stating inconsistencies....



## The starting point: the available data

- Vectors of domestic, outbound and inbound tourism expenditure according to classification of demand (COICOP based); these usually should not include international passenger transportation (a separate calculation unless there is no domestic supply for international flights...);
- A supply and use table according to SCN 2008 with a degree of breakdown of products and activities such that tourism characteristic activities and products can be reasonably be identified;
- An estimation of the adjustment between internal tourism expenditure and internal tourism consumption (non market services; own account production of accommodation services) (or temporarily skip this difference)
- An estimated (analogy with other economy, expert opinion...) table of equivalence between tourism expenditure by purpose and by the product classification of the supply and use table;
- An estimated model of the breakdown of packages (domestic, inbound and outbound) into products of the supply and use table, including international transportation, accommodation, food and beverage serving services, travel agency services. etc.



## Adjusting the format of the Supply and Use table

- Review the treatment of imports by products in particular that of direct purchases of resident abroad/ direct purchases of non-resident in the economic territory and the vector of household final consumption by product;
- Review the treatment of travel agency services and that of activities using their intermediation to sell their products to ensure its consistency with the TSA requirements (net treatment) and adjust if necessary;
- Review the incidence of taxes on products on commodities in which tourism consumption exist as these are included in demand but excluded from output of activities (valued at basic prices): a method consists in excluding taxes on products from tourism consumption (applying average tax rates...);
- Review the goods included in tourism consumption; they might refer both to domestically produced goods and to goods imported to the economy as only the retail trade margin generates GDP.



table 6 Colombia 2005 pilot exercise	Tourism industries										other non characteristic industries		Total output	total tourism consumption	share of consumption
	Accommodation	Food serving	sum of two		air transport		travel agencies		subtotal tourism industries						
	Output	Output	Output	tourism consumption	Output	tourism consumption	Output	tourism consumption	Output	tourism consumption	Output	tourism consumption			
Accommodation services for visitors	2.427		2.427	2.116					2.427	2.116			2.427	2.116	87,20%
Food and beverage serving services	1.393	18.743	20.136	3.275	-	-	-	-	20.446	3.275	-	-	20.446	3.275	16,00%
Road passenger transport services	-	-	-	-	-	-	3	-	23.217	1.765	204	-	23.421	1.765	7,50%
Water passenger transport services	-	-	-	-	-	-	1	-	747	-	-	-	747	0	0,00%
Air passenger transport services	-	-	-	-	3.041	2.599	-	-	3.041	2.599	2	-	3.043	2.599	85,40%
Travel agencies and other reservation services	8		8		263		3.789	212	4.089	212	516		4.605	212	4,60%
Real estate services	36		36		7		-		34.029	-	1.329		35.358		0,00%
Car rental	9		9				27		43	-	3.561	33	3.604	33	0,90%
market recreation services	21		21		-		-		10.906	547	-		10.906	547	5,00%
Non market recreation services	-		-		-		-		1.621	-	-		1.621		0,00%
Other non tourism characteristic products	55	0	46	0	118	0	0	0	890	-	482417	2.282	483.307	2.282	0,50%
Total output/total consumption	3.949	18.743	22.683	5.391	3.429	2.599	3.820	212	101.456	10.514	488.029	2.315	589.485	12.829	2,20%
Total intermediate consumption			13.505	3.210	2.100	1.592	1.849	102	39.786	6.042	238.418	1.131	278.204	7.173	2,60%
Value added			9.178	2.181	1.329	1.007	1.971	109	61.670	4.472	249.611	1.184	311.281	5.656	1,80%
Remuneration of employees			4.385	1.042	432	327	968	54	11.280	1.651	97.963	465	109.243	2.116	1,90%
Total taxes and subsidies			173	41	50	38	82	5	754	105	6.284	30	7.038	135	1,90%
Taxes on products				-		-			-	-					
Subsidies on products				-		-			-	-					
Other taxes on production			173	41	50	38	82	5	754	105	6.284	30	7.038	135	1,90%
Mixed income			3.632	863	-	-	71	4	26.631	1.582	57.228	271	83.859	1.854	2,20%
Gross Operating Surplus			988	235	866	656	850	47	23.024	1.148	88.117	418	111.141	1.566	1,40%





**Thank you!**

**Marion LIBREROS**

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