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Fab Labs in Italy: Collective Goods in the Sharing Economy

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Income class	Number of	% with at least 1	% world	% Fab Labs
	countries	Fab Lab	population	worldwide
High income: OECD	32	90.6	15.3	75.0
High income: non-				
OECD	48	25.0	4.3	7.9
Medium-high income	53	32.1	33.3	11.2
Medium-low income	51	25.5	39.1	4.9
Low income	31	16.1	8.1	1.1
All countries	215	35.3	100.0	100.0

 TABLE 1 Countries with at least one Fab Lab according to World Bank income classes, 2015

Source: Elaboration of World Bank and FabLab Foundation data

TABLE 2 Fab Labs in EU countries according to the innovative performance classes of theInnovation Union Scoreboard, 2015

Classes	Number of	Average number of	Fab Labs per
0105585	countries	Fab Labs	10 mil. inhabs
Innovation Leader	4	9.0	4.0
Innovation Followers	8	16.0	8.6
Moderate Innovators	13	7.1	2.1
Modest Innovators	3	1.0	3.8
All EU countries	28	9.3	4.4

Source: Elaboration of Innovation Union Scoreboard (IUS) data.



FIG. 1 Fab Labs density based on IUS innovation index, 2015

TABLE 3 Geographical distribution of Fab Labs in Italy, 2015 (%)

Geographical distribution	North West	Third Italy	Lazio	South	Total
Number of FabLabs	16	21	5	14	56
% Fab Labs out of national total	28.6	37.5	8.9	25.0	100.0
% Provinces with at least 1 Fab Lab	36.0	48.7	60.0	24.4	37.3
% Population 2012	26.6	29.6	9.3	34.5	100.0
% manufacturing companies 2011	30.1	39.4	5.4	25.0	100.0
% manufacturing employees 2011	39.1	43.0	3.8	14.1	100.0

Source: elaboration of Istat and Fab Lab Foundation data

FIG. 2 Distribution by Province of Italian Fab Labs, 2015



35							
30					29		
25							
20							
15						0	
10				6		9	
5	2	3	3	Ū			4
0							
	1st sem	2nd sem	1st sem	2nd sem	1st sem	2nd sem	1st sem
	20	12	20)13	20)14	2015

FIG. 3 Opening year of Italian Fab Labs (absolute values)





TABLE 4 Logistic regression that predicts if a country has a Fab Lab or not

Model summary	Nagelkerke's R ²	χ^2	df	Sig.	No. cases included
	,396	69,23	2	,000,	202
Variables in the equation	В	E.S.	df	Sig.	Exp
					(B)
Urban Population 2010 (millions)	.001	.000	1	.000	1.000
Internet-users per 100 people 2010	.032	.007	1	.000	1.033
Constant	-2.421	.356	1	.000	.089

Source of data: World Bank

TABLE 5 Logistic regression that predicts if a country on the Innovation Union Scoreboard is included in the high-intensive class of Fab Labs (number of laboratories per 10 million inhabitants)

Model summary	Nagelkerke's R ²	χ^2	df	Sig.	No. cases included
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	.407	12.37	1	.000	34
Variables in the equation	В	E.S.	df	Sig.	Exp
					(B)
Gdp per capita 2014 (million euros)	.096	.035	1	.007	1.000
Constant	-2.028	.839	1	.016	.132

Source of data: Eurostat and IUS.

TABLE 6	Logistic	regression	that	predicts	whether	or	not d	an	Italian	Provinc	e has	а
Fab Lab	1											

Model summary	Nagelkerke's R ²	χ²	df	Sig.	No. cases included
	.362	33.95	4	.000	110
Variables in the equation	В	E.S.	df	Sig.	Exp
					(B)
Added per capita value 2012	.235	.086	1	.006	1.265
Residents 2011 (in thousands)	.002	.001	1	.009	1.000
% Population with tertiary education 2011	.442	.168	1	.009	1.555
% Manufacturing companies 2011 (up to 9 employees)	.097	.047	1	.039	1.102
Constant	-14.108	4.011	1	.000	.000

Source of data: Istat

TABLE 7 Points assigned to each Fab Lab to	o construct typology, scale 1-5.
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	Aggregation	Territory
NW1	3.8	4.5
NW2	4.8	4.8
NW3	5	2
NW4	5	1
NW5	4	0.5
NW6	2.5	4.8
NW7	2.1	4.7
NW8	2	4
TI1	4.6	3.8
TI2	2.8	5
TI3	5	3.9
TI4	5	4.6
TI5	4	3.8
TI6	4.5	2.8
TI7	1.9	5
TI8	4	5
S1	1.5	5
S2	1	4
S3	4	2.3
S4	2.5	4