

Does tax evasion affect the new firm birth rate?

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Abstract

In this paper we investigate whether tax evasion plays a role in determining firms' birth rate. Our empirical analysis is based on data for the Italian provinces (NUTS-3) from 2004 to 2011. We consider two measures of tax evasion, both expressed as a propensity to evade: the ratio between the tax gap (as measured by the Italian Revenue Agency) and tax compliance, and the ratio between tax gap and value added, able to encompass the role of the tax burden. We find strong evidence supporting the idea that tax evasion has a positive effect on firms' birth rate. Indeed, tax evasion can influence the ability of a firm to raise start-up funds but can also provide additional resources to extend survival over time, especially when faced with adverse macroeconomic shocks.

Keywords: new firm birth rate, tax evasion, entry rate

JEL classification codes: C33; H26; K42; M13

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1. Introduction

The study of the factors that affect firms' birth rates is a topic of interest to many, especially scholars and policy makers. Economic development cannot proceed without a lively entrepreneurial sector, and the role of entrepreneurship as a driver of economic progress has been investigated since the seminal analysis of Schumpeter (1911).

It is well known that an efficiently functioning financial system is a necessary ingredient for economic growth since it is conducive to a rise in both the quality and quantity of investment. From a different perspective, there is a large strand of literature (see e.g. Rajan and Zingales, 1998; Berger and Udell, 1998) showing how financial market conditions affect the real variables during the business cycle through the credit channel and/or via balance sheet effects. Hence financial markets can undoubtedly play a role in shaping the strength of the business environment as well as the decision to start up a new business.

In this paper we investigate the role of tax evasion among the factors that affect the decision to set up a new business in order to explain the variation in new firms' birth rates across the Italian provinces. In dealing with regional variation in firms' birth rates the economics literature (see e.g. Reynolds, 1994; Armington and Acs, 2002) has focused on demographic factors (population growth), entrepreneurial environment characteristics (industrial specialization, industrial intensity, R&D), financial and economic development of the area (credit market, income growth rate, unemployment), socio-economic characteristics (immigration, social capital, human capital), and physical and social infrastructure (regional diversity and creativity).

We aim at deepening the existing knowledge about the effects of tax evasion on new business creation in Italy, noted for its considerable underground production and an industrial structure largely characterized by small-sized firms and high barriers to access to credit in a purely bank-centered financial system. The typical features of small businesses (diminutive size, little commitment of shareholder capital, lack of transparency) make it nearly impracticable for them

to access bond and equity markets directly. As much of their debt is bank debt, they are most severely affected by the tightening of the credit supply, and may be pushed to seek funding from alternative channels, namely the illegal credit market (usury), and/or resort to tax evasion.

According to the ECB Survey on the access of small and medium-sized enterprises (hereafter SMEs) to finance (a demand-side survey, see ECB, 2013) and the OECD Scoreboard (a supply-side survey, see OECD, 2013), following the aftermath of the 2007 financial crisis, conditions for access to finance remained tight for SMEs in the Euro area economies. Since 2009, the first year of the ECB SMEs survey, Euro area SMEs have reported a continuous decline in profits, to which SMEs in Italy and Spain contributed strongly. In the latter countries, a substantial percentage of firms (50%) reported in 2013 that access to finance was still a very pressing problem, with a peak recorded in Greece (61%), whereas the corresponding percentage shrinks to 30% in Germany and Belgium. This suggests that credit market conditions differ considerably across countries, with financial strains in vulnerable Euro countries.

Interaction in the opposite direction, leading from the underground economy/tax evasion to the credit market, is also well documented. Recent analysis of Italian financial markets (Cannari and Gobbi, 2010) suggests that the considerable incidence of the underground economy is one of the causes that explains the gap in financial development in southern vs. northern regions. Other studies have found that the presence of illegal activities in southern Italian regions significantly increases interest rates (Di Patti, 2009), while the underground economy (or irregular work) has a significant and negative effect on the credit-to-GDP ratio (Gobbi and Zizza, 2012).

Broadly speaking, tax evasion has a contrasting effect on the ability of a territory to generate new firms. On the one hand, tax-compliant firms in a region where tax evasion is widespread suffer from unfair competition; in this sense, "honest" entrepreneurs would be discouraged from setting up new businesses. On the other, since tax evasion can be construed as a source of self-financing to firms, "less honest" entrepreneurs might have a higher incentive to start their businesses in areas where tax evasion is high. As we will see, our results suggest that the latter effect prevails.

The paper is structured as follows. Section 2 reviews the relevant literature in the light of the paper's motivation. Section 3 describes in detail the data employed for the empirical analysis, while section 4 discusses our econometric strategy and the empirical results. Section 5 concludes.

2. Literature review and motivation

This paper aims to bridge two main strands in the literature. One strand focuses on regional variation in new firm formation, with special attention to the role of the financial markets. The other deals with the nexus between financial markets and underground activities. Given that credit is a crucial variable allowing the birth of a new firm, the "bridge" lies in the role of underground credit, namely in the form of tax evasion.

With regard to the determinants of regional variation in new firm formation, according to cross-country studies (Klapper et al., 2010) the key explanatory variables which determine new firm birth rates consist in the quality of the regulatory and legal environment, access to finance, and the business environment. Similarly, studies investigating new firm formation within a single country (Bartik, 1989, Armington and Acs, 2002; Lee et al., 2004; Rocha and Sternberg, 2005) find that significant explanatory variables comprise tax variables, industrial density, population and income growth, selected public services (fire protection, welfare), financial market variables, human capital, social infrastructures such as creativity and diversity, and measures of geographical proximity.

With regard to the literature investigating the nexus between informal economy/tax evasion and financial markets, the cost of accessing credit is ultimately the opportunity cost of operating formally (Dabla-Norris and Feltenstein, 2005; Straub, 2005; Antunes and Cavalcanti, 2007, Argentiero et al. 2015). This also explains why smaller firms which are, by their very nature, characterized by a higher degree of informational opacity, face higher costs of access to credit (Berger and Udell, 1998), and why a larger share of firms that choose to be underground are small/medium-sized firms. Since access to credit is vital not only for a firm's investment and growth, but initially for a firm's birth,

informational friction, the decision to go underground and new business creation are all strictly interconnected.

To the best of our knowledge, the role of tax evasion in entrepreneurship has not been extensively investigated. This is a major issue since, beyond the commonly envisaged implication that tax evasion generates unfair competitiveness (Bobbio, 2016), a more subtle analysis reveals that it can also operate as an additional source of funding, which is especially valuable in the presence of credit constraints able to generate self-fulfilling business cycles (Liu and Wang, 2014). In addition, given that most tax evasion is undertaken by moonlighting firms, by which we mean firms that operate simultaneously in the official and unofficial sectors, it may be found that, in territories with flourishing and successful tax evasion, the effective tax burden suffered by moonlighting entrepreneurs is less substantial than in areas where tax enforcement is stricter. This might push more firms to enter the market in areas with lower enforcement since, in the presence of lower expected taxes, less efficient firms also join the market.

We are aware that resorting to illegal channels for funding an entrepreneurial activity has very different effects in the short and long run. In other words, such a decision could prove short-sighted. However, the present works builds on this line of thinking since, under the constraint of credit rationing, many SMEs might be compelled to adopt such an approach.

3. Data and summary statistics

The panel dataset contains annual observations from 103 Italian provinces¹ (NUTS-3 level) over the period 1996 to 2014. Detailed definitions and sources of all the variables used in the empirical analysis are presented in Table 1:

TABLE 1 ABOUT HERE

The dependent variable concerning the firms' birth rate (hereafter entry rate) is taken from the Italian National Statistics Institute (ISTAT). The entry rate is measured by standardizing the number of new entrants relative to the number of firms already in existence (ecological approach): the ratio is available for the period 1996-2014.

The source of tax evasion data is the Italian Revenue Agency (*Agenzia delle entrate*). Precisely, we consider two measures for the propensity to evade: the former is given by the ratio of tax gap² (Pisani, 2014) to tax compliance, i.e. the spontaneous fiscal revenues in each province, and it is available for the period 2001-2013³. The latter indicator for the propensity to evade is the ratio of tax gap to the value added in each province. As shown by Argentiero et al. (2015), this last indicator encompasses a role of tax burden, because it is given by the product of the ratio of tax gap to tax compliance with tax burden (the ratio of tax compliance to value added):

$$\frac{\text{taxgap}}{\text{value added}} = \frac{\text{taxgap}}{\text{taxcompliance}} \cdot \frac{\text{taxcompliance}}{\text{value added}} \quad (1)$$

¹In order to facilitate the comparisons among the provinces for different years, we do not consider in our sample the new provinces introduced in 2001 and operative in 2005 (Olbia-Tempio, Ogliastra, Medio Campidano and Carbonia-Iglesias) and those introduced in 2004 and operative in 2009 (Monza-Brianza, Fermo and Barletta-Andria-Trani).

² The overall tax gap is a complex variable derived by the sum of the tax gaps in IRAP (Regional Tax on Productive Activities), VAT, income and profit tax.

³ Yet, the series of tax gap and tax compliance individually taken are only available for the period 2001-2010.

The remaining explanatory variables are derived from socioeconomic, socio-demographic and deterrence factors. Socioeconomic variables include the per capita value added (level and rate of growth), the per capita value added produced in the financial sector, the economic activity rate, the unemployment rate, the employment rate, a metric to measure social capital (ISTAT), and a composite indicator built to measure institutional quality in Italy (Institutional Quality Index-IQI, Nifo and Vecchione, 2014 and Lasagni et al., 2015).

The importance of the availability of credit is "captured" using a metric to measure the loan market concentration, i.e. the Herfindahl index for loans (Bank of Italy).⁴

We also include education in the analysis, defined as the number of 24-34 year-old men who have obtained at most a middle school diploma for every 100 men in the same age group⁵.

The dependent variable, the entry rate, changes considerably over time, as emerges clearly from Figure 1. The business cycle plays an important role in shaping the inflow of new firms in the market. During economic downturns, the average entry rate declines. This is the case for the recession of 2002-2003, for instance, when the entry rate declined. It is more evident for the recession after the financial crisis which started in 2007: in 2007-2009 the average entry rate declined by one percentage point (from 7.8% in 2007 to 6.8% in 2009).

FIGURE 1 ABOUT HERE

⁴ We thank Riccardo De Bonis (Bank of Italy), who kindly provided the Herfindahl index data. On some aspects emphasized by the concentration indicator in the market for Italian loans, see De Bonis and Ferrando (2000) and Infante and Rossi (2013), among others.

⁵ In addition, we have furtherly controlled for the innovative profile of the local productive structure by using the proportion of patents and the propensity to export, but none of the two variables is statistically significant.

The business cycle effect on the new firm birth rate is an easy-to-understand mechanism. In addition to this time variability, there is great heterogeneity across Italian provinces, as witnessed by the wide gap between the minimum and maximum values in terms of entry rate recorded for each year of the sample.

TABLE 2 ABOUT HERE

Differences across geographical areas are worth closer investigation so as to clarify in which areas firms' dynamics are more pronounced. If we compare a province with high per capita income, say Milan, and another with low per capita income, say Naples, we find quite surprisingly that the new business creation is significantly higher in the poorer provinces.

FIGURE 2 ABOUT HERE

We would expect exactly the opposite since it is usually claimed that the variation in firm birth rates is related to the existence of: regional externalities, also originating from a high concentration of firms and benefiting from high personal income growth, service infrastructures, higher average education level, and entrepreneurial culture (Armington and Acs, 2002). There may well be several explanations to account for this phenomenon: first of all, a process of catching up, suggesting that in less developed areas there is a more pronounced dynamism in entrepreneurial activity; secondly, a differently structured economic environment, more or less specialized in sectors with a high firm turnover; finally, an explanation could be related to an "illegal" environment favoring false dynamism, such as a lower effective tax burden. In actual fact, Milan and Naples are very different not only in the above listed variables, which favor Milan, but also in terms of propensity to tax evasion, which is considerably higher in Naples.

FIGURE 3 ABOUT HERE

Interestingly, it emerges that entry rates in Naples are almost always above the entry rates in Milan (figure 2) and propensity to evasion in Naples is at least double than in Milan (figure 3). Hence the

challenge is to understand whether and to what extent tax evasion might favor the entry rate of new firms.

Starting from this very intuitive and preliminary evidence, we proceed to check for evidence of correlation between our dependent variable, the new firm birth rate, and the explanatory variable in question, namely tax evasion. The scatter plot reported in Figure 4 suggests that our intuition might be worthy of further investigation.

There is clear evidence of a significant and positive correlation between new firm formation and tax evasion. In other words, in provinces where there is a large share of tax receipts concealed from the Revenue Agency we also observe that the entry rate is higher.

FIGURE 4 ABOUT HERE

This is consistent with the statistically significant “by-province” correlation found in our sample between entry rate and tax evasion amounting to 0.12.

4. Empirical framework

4.1. *Econometric Issues*

The following model analyses the impact of tax evasion on the new firm entry rate in a panel dataset of Italian provinces from 2004 to 2011⁶:

$$Entry_{it} = \alpha + \beta_1 TaxEvasion_{it} + \beta_2 X_{it} + \eta_t + c_i + u_{it} \quad t = 1, \dots, T \quad (2)$$

⁶ As shown in table 1, time series are available for different time-spans; hence the period 2004-2011 (and 2004-2010 when propensity to evasion is measured in terms of value added) is the common sample for the time series used in the regressions.

Equation (2) is the basic function of new firm formation estimated by the literature, where η_t is a separate time period intercept, X_{it} is a vector of explanatory variables defined in the previous section, C_i is the time-constant unobserved fixed effect and u_{it} are idiosyncratic errors.

In a first step, we simply estimate a pooled OLS model with time dummies. However, these estimates involve some statistical problems. Firstly, time invariant territorial characteristics (fixed effects) may be correlated with the explanatory variables. Secondly, since for several variables included in the matrix X_{it} causality may run in both directions with firm's birth rate, these regressors may be correlated with the error term and endogeneity may arise. These panel data require an instrumental variable procedure, which is the object of our second step of econometric analysis. In particular, we use the two-stage least-squares within estimator, which takes into account provincial fixed effects and allows the use of multiple instruments to control for the endogeneity. Furthermore, the use of robust standard errors takes into account the presence of heteroskedastic errors.

In order to deal with the endogeneity issue arising from the reverse causality from entry rate to tax evasion and from entry rate to value added, we instrument tax evasion through Gini inequality index (Gini) measured at a provincial level (see Acciari and Mocetti, 2012), whereas per capita value added (Value Added) has been instrumented through per capita value added produced in the financial sector (Financial Value Added) and the Institutional Quality Index (IQI, see Nifo and Vecchione, 2014 and 2015)).

In Italy, the income redistribution resulting from tax evasion with respect to any income that is not clearly attributable and subject to withholding tax is particularly important. In recent decades, in a context of continuing increases in the tax burden in Italy, as documented by Braiotta et al. (2015), massive tax evasion by small businesses, artisans, shopkeepers, merchants and professionals has led to (or reinforced) strong inequalities. As a matter of fact, in our sample the “by province” correlation coefficient between tax evasion measured in terms of tax compliance and Gini inequality index is

statistically significant and equal to 0.50, whereas when tax evasion is measured as a share of value added, the correlation is statistically significant and equal to 0.35. Moreover, as noted by Lasagni et al. (2015), the quality of the institutions measured by the Institutional Quality Index plays a central role in explaining firm-productivity in Italy; following this evidence, we test the “by province” correlation coefficient between the provincial per capita value added and Institutional Quality Index and we find a statistically significant value of 0.42.

The choice of per capita value added produced in the financial sector (Financial Value Added), as a further exogenous instrument⁷ for per capita value added is related to a stylized fact of the Italian entrepreneurship: almost the 97% of the Italian firms are small-sized (see Corte dei Conti, 2014), whereas financial value added is mainly generated by medium-big sized firms, such as banks and insurance companies. Hence, although per capita financial value added can be considered a determinant for the new firms’ birth rate as a proxy of access to finance, a reverse causality relationship going from entry rate to per capita financial value added does not seem to be possible.

4.2. Empirical Results

Table 3 provides the best results for the new firm birth rate when estimating a pooled OLS. In order to save space, we do not report time dummies. In each column, coefficients and standard errors are referred to estimations carried out by using different measure for the economic activity level and tax evasion. In particular from column (1) to (4), propensity to evasion is measured in terms of tax compliance, whereas from column (5) to (8), propensity to evasion is a share of value added, thus encompassing tax burden. Moreover, in columns (1) and (5) the economic activity level is measured in terms of per capita value added, in columns (2) and (6) we use the activity rate, in columns (3) and (7) the unemployment rate and in columns (4) and (8) the employment rate.

⁷ The “by province” correlation between per capita financial value added and per capita value added is statistically significant and equal to 0.82.

Our hypothesis is basically confirmed for all the specifications: the parameters of tax evasion are always positive and statistically significant; tax evasion does matter in the formation of new enterprises.

The estimated impact of control variable is also worthy of note. In addition to the economic activity level, social capital and the Institutional Quality Index have a positive and statistically significant effect on the entry rate, thus showing the role of the societal structure in economic development (Helliwell and Putnam, 1995). Furthermore, the degree of bank concentration, as measured by the Herfindahl index in the credit market, is statistically significant and negatively influences the birth of new enterprises, thus indicating the presence of credit rationing in our sample. The role of schooling at a first sight may seem counterintuitive: in fact, the positive sign for the schooling coefficients indicates that a lower level of education has a positive effect on the new firms' birth rate. Nonetheless, this evidence is in line with the dimension of the Italian firms: the majority of them are small-sized firms where skilled labor is often preferred to high education levels.

Table 4 reports the estimated coefficients when using an instrumental variable approach within a fixed effect model defining as "group variable" the provinces. As stated in the previous subsection, the instrumented variables are per capita value added and propensity to evade, whereas the instruments used are per capita financial value added and Institutional Quality Index for per capita value added and Gini index for the propensity to evade.

As is clear from Table 4, the explanatory variable of interest, tax evasion, is still highly statistically significant and positively affects the formation of new enterprises with both the measure of propensity to evade (columns (1) and (2)), although social capital is not statistically significant. This result is also robust in the presence of unemployment rate (columns (3) and (4)) as a measure of the level of economic activity. Nevertheless, in this last specification both social capital and the Herfindahl index in the credit market are not statistically significant. Hence, the evidence described above supports the

intuition that the provision of funds to firms through an illegal channel (via tax evasion) is a strategic resource for new entrants in the market.

5. Conclusions

In this paper, we investigate the impact of tax evasion on new firm formation in Italian provinces during the period 2004-2011. After controlling for determinants commonly accepted in the literature on regional variation of new firms' birth rate, we note that the latter is influenced by both the working of the legal market of credit and illegal sources of funding, namely tax evasion. In a country like Italy, with a large share of underground economy on GDP, high rates of tax evasion and a very large share of small and micro firms, credit rationing can easily arise. Therefore, tax evasion may well represent an alternative source of financing with respect to bank credit.

These results pose serious policy problems. The presence of credit rationing for under-collateralized borrowers, namely micro and small-sized firms, is the main phenomenon triggering the findings highlighted above. As a matter of fact, a high proportion of businesses that operate wholly or partly in the informal sector means that credit restrictions are strengthened. In this perspective, tax evasion represents an additional risk for banks providing loans, conducive to further credit restrictions. This line of reasoning shows a first causal link running from tax evasion to credit rationing. However, the opposite causal channel may well be working. Credit rationing itself becomes an incentive to operate in the informal sector: tax evasion can be an alternative source of funding to bank credit. Therefore, in the presence of a banking system which rations credit to micro and small-sized firms, tax evasion may be used as an alternative source of financing. In this case, the causal link runs from credit constraints to the decision to operate in the informal or moonlight economy. Therefore, it is clear that in examining the links between the credit market and the weight of undeclared businesses there is the risk of a vicious circle: greater restrictions generate more tax evasion, which in turn generates further restrictions in channeling bank loans. The essence of the story told by our data is that to promote new

business formation, the crucial issue is the working of the credit market. In terms of policy implications, the efforts made by the Government to remove the barriers of access to the credit market especially for micro and small businesses might have important side effects in terms of reducing the presence of underground economy, thus discouraging the use of tax evasion as a self-financing device.

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Table 1: Data definitions and sources

VARIABLES	DEFINITIONS	SAMPLE	SOURCE
Entry rate	Ratio of new firms in a year to the number of firms already in existence	1996-2014	ISTAT
Propensity to evasion (1)	Ratio of tax gap to tax compliance	2001-2013	Italian Revenue Agency (Agenzia delle Entrate)
Propensity to evasion (2)	Ratio of tax gap to value added	2001-2010	Authors' elaborations on Italian Revenue Agency (Agenzia delle Entrate) and ISTAT data
Value added	Per capita value added normalized per 10,000 inhabitants	2000-2014	ISTAT
Financial Value added	Per capita value added per 10,000 inhabitants produced in the financial sector	2000-2014	Authors' calculations on ISTAT data
Activity rate	Share of the population (employed and unemployed) that constitutes the manpower supply of the labor market	2004-2015	ISTAT
Unemployment	Share of unemployed people (aged 15 and	2004-2015	ISTAT

	over) on the labor force (aged 15 and over)		
Employment	Share of employed people (aged 15 and over) on the active population	2004-2015	ISTAT
Population	Total resident population	1995-2014	ISTAT
Social_Capital	Share of employees of the cooperatives on the total number of employees	2003-2013	ISTAT
Schooling	Number of persons aged 25-34 who attended middle school as their highest educational level per 100 men in the same age group	2004-2011	ISTAT
H credit	Herfindahl index for bank credit: for each bank (or group) the Herfindahl index is calculated as the sum, multiplied by 100, of the square ratios between the loans of the bank (or group) to the firms at the provincial level and the total of bank's (or group) loans	1998-2014	Bank of Italy

Iqi	Institutional Quality Index for 110 provinces. The index has five dimensions based on: corruption, government effectiveness, regulatory quality, rule of law and accountability.	2004-2012	A. Nifo e G. Vecchione (2014)
Gini	Gini inequality index calculated in each province	2005-2011	Acciari and Mocetti (2012)
Propensity to export	Value share of exports in dynamic world demand sectors on total exports	1995-2015	ISTAT
Patents	Number of patents registered at the European Patent Office (EPO) per million inhabitants	1995-2011	ISTAT

Table 2: Descriptive statistics of Entry rate

Year	Entry rate			
	mean	min	max	p50
1996	8.5	4.7	49.6	7.8
1997	7.7	4.7	11.3	7.6
1998	7.5	5.5	9.6	7.6
1999	7.9	5.9	9.2	7.9
2000	8.3	5.9	11.3	8.3
2001	8.3	6.0	11	8.3
2002	8.1	5.9	11.9	8.1
2003	7.5	5.2	9.8	7.5
2004	8	5.7	9.8	8.1
2005	7.8	5.5	10.3	7.9
2006	7.7	5.3	11.1	7.8
2007	7.9	5.7	10.7	7.9
2008	7.3	5.3	10.2	7.3
2009	6.9	4.3	10.3	7.0

2010	7.4	5.5	10.8	7.4
2011	7	5.5	9.9	7.0
2012	6.8	5.1	9.6	6.7
2013	6.8	5.2	10	6.9
2014	6.5	4.8	8.6	6.5

Table 3: OLS-POOLED Estimations¹

Dependent variable:								
Entry rate (in log)								
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Propensity to Evasion (1)	0.007 (0.002)***	0.006 (0.001)***	0.007 (0.001)***	0.0068 (0.0014)***				
Propensity to Evasion (2)					0.051 (0.02)**	0.044 (0.02)**	0.048 (0.02)**	0.044 (0.02)**
Value Added	2.58e-07 (9.20e-08)***				1.44e-07 (8.08e08)*			
Activity Rate		0.0002 (0.00006)***				0.00012 (0.00006)**		
Unemployment			-0.0006 (0.0001)***				-0.0004 (0.0001)***	

¹ Robust standard errors in parenthesis. ***, ** and * indicate that the coefficient is significant at the 1%, 5% and 10% levels of significance, respectively.

Employment				0.0002 (0.00005)***				0.0001 (0.00005)***
Social Capital	0.0006 (0.0002)***	0.0006 (0.0002)***	0.0007 (0.0002)***	0.0006 (0.0002)***	0.0006 (0.0003)**	0.0006 (0.0002)***	0.0008 (0.0002)***	0.0007 (0.0002)***
Schooling	0.00005 (0.00004)	0.00007 (0.00004)*	0.00011 (0.00004)***	0.00008 (0.00004)**	0.00006 (0.00004)	0.00007 (0.00004)**	0.0001 (0.00004)***	0.00008 (0.00004)**
H credit	-0.0144 (0.0045)***	-0.0198 (0.0047)***	-0.0218 (0.0046)***	-0.0206 (0.0047)***	-0.013 (0.005)***	-0.0159 (0.005)***	-0.018 (0.005)***	-0.0164 (0.005)***
lqi	0.0035 (0.0015)**	0.0031 (0.0016)**	0.0014 (0.0016)	0.0026 (0.0016)*	0.0038 (0.0016)**	0.0035 (0.0017)**	0.0018 (0.0017)	0.003 (0.0018)*
Constant	0.067 (0.004)***	0.0592 (0.005)***	0.0756 (0.0022)***	0.059 (0.0043)***	0.068 (0.004)***	0.064 (0.005)***	0.074 (0.003)***	0.064 (0.004)***
Number of observations	800	800	800	800	700	700	700	700
R-squared	0.25	0.25	0.27	0.26	0.22	0.22	0.24	0.23
F test	22.85	24.83	26.62	25.60	18.73	19.51	21.11	19.83

Table 4: IV-2SLS PANEL Estimations²

Dependent variable: Entry rate (in log)				
Variables	(1)	(2)	(3)	(4)
Propensity to Evasion (1)	1.14 (0.31)***		0.687 (0.24)***	
Propensity to Evasion (2)		7.068 (3.85)*		2.30 (1.41)*

² Robust standard errors in parenthesis. ***, ** and * indicate that the coefficient is significant at the 1%, 5% and 10% levels of significance, respectively.

Instrumented variables: propensity to evasion; value added. Exogenous instruments for two stage least squares: Gini, financial value added and Iqi.

Value Added	0.00001 (5.84e-06)**	0.00003 (0.00001)***		
Unemployment			-0.038 (0.006)***	-0.042 (0.007)***
Social Capital	-0.03 (0.02)	-0.005 (0.015)	-0.014 (0.013)	0.004 (0.01)
Schooling	0.0027 (0.001)**	0.004 (0.001)***	0.003 (0.001)***	0.004 (0.0008)***
H credit	-1.108 (0.345)***	-0.58 (0.31)*	-0.21 (0.28)	0.11 (0.28)
Constant	1.405 (0.187)***	01715 (0.55)	1.95 (0.10)***	2.00 (0.11)***

Number of observations	700	600	700	600
R-squared (overall)	0.10	0.10	0.10	0.10

Figure 1: Firms' birth rate in the Italian province

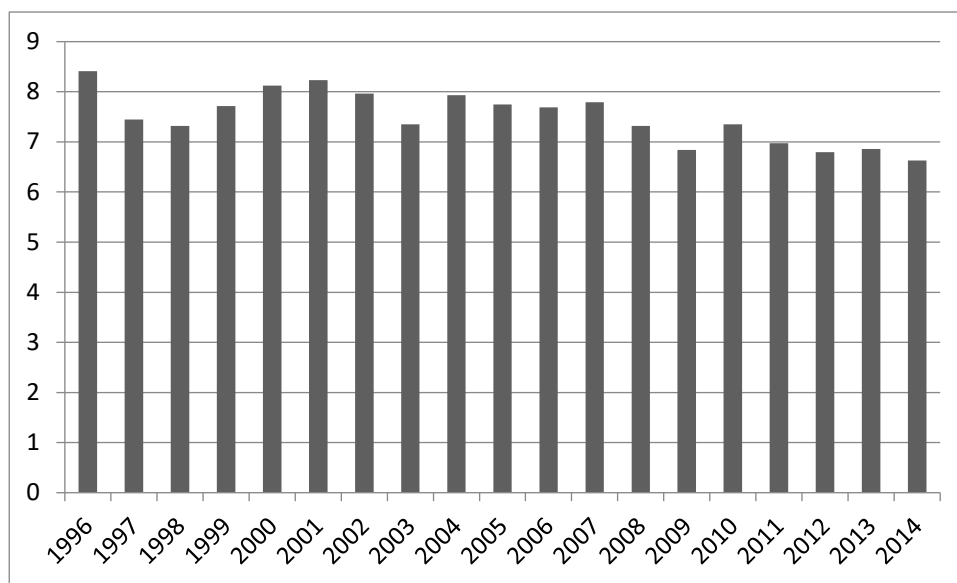


Figure 2: Entry rates in Milan and Naples

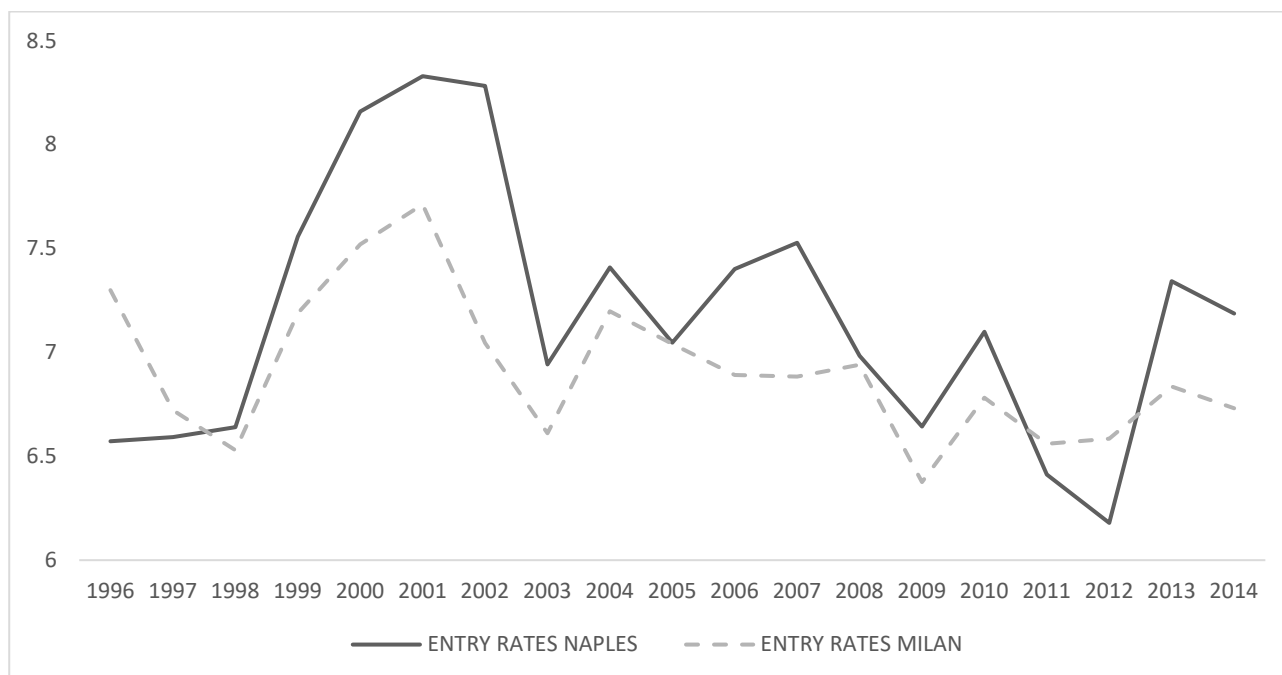


Figure 3: Propensity to evasion in Milan and Naples

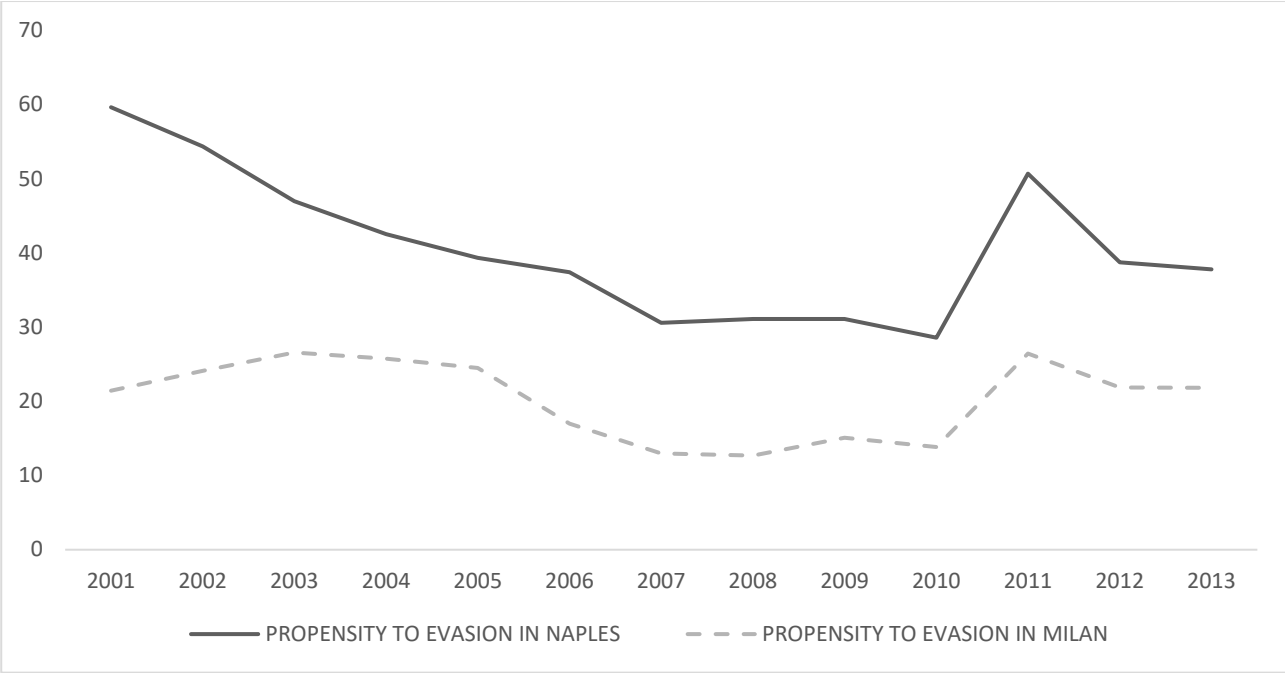


Figure 4: Scatter plot between entry rate (vertical axis) and propensity to evade

