

Introduction

Economic outcomes are strongly related to political decisions. States policies affect the economy in several ways: by setting the rules of the game, by providing public goods, by redistributing income and wealth, and by the enforcement of law. To perform these actions, the state needs revenues obtained via taxation. Earlier studies have informed about the emergence of fiscal states (Dincecco 2011) and the patterns of historical public spending at the national level (Lindert 2004). But a general understanding of *local* political processes underlying *national* policy decisions in history is still in its infancy (Hoffman 2015). The current draft takes a first deep look into these central matters, studying the political process behind the local decisions to spend for education in Italy from the Unification (1861) to the 1895.

Human capital accumulation, which is linked to public choices for education in the modern economy, is a fundamental driver of economic growth. Endogenous growth theories and the Unified Growth Theory (UGT) assign a key role to human capital accumulation in escaping from the resources-population constraint and in triggering modern economic growth. Hence, differences in income per capita level can be related to differences in accumulation of human capital, via education. At the time of Unification, it was undisputed that differences in schooling across Italian regions were large and that the South lagged behind in terms of human capital accumulation. After fifty years, around 1911, the differences in literacy rates across Italy were still large although the regional differences narrowed.

Cappelli (2015) has explored the fiscal capacity hypothesis behind the poor performance of education in Italy assigning a decisive role for the cross-regional differences in schooling to the decentralized and locally funded provision of education inherited by the Piedmont administrative system. He demonstrated that the shift in 1911 to a mandatory and centralized funded primary education system fostered enrollment rates especially for southern regions.

In first instance, we move forward the fiscal capacity hypothesis and focus on the the political preferences for education at local level during the stage of decentralized education. Political preferences are expressed

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through the voting system and they reflect the preferences of the active electorate. Democracies developed social and infrastructural spending faster than autocracies or limited democracies (Lindert 2004).

Furthermore, earlier studies have argued that national policy decisions worsened the economic and social conditions in Southern Italy, causing Italy's regional divide to expand in the aftermath of the country's unification (Nitti 1900; Federico 2010).

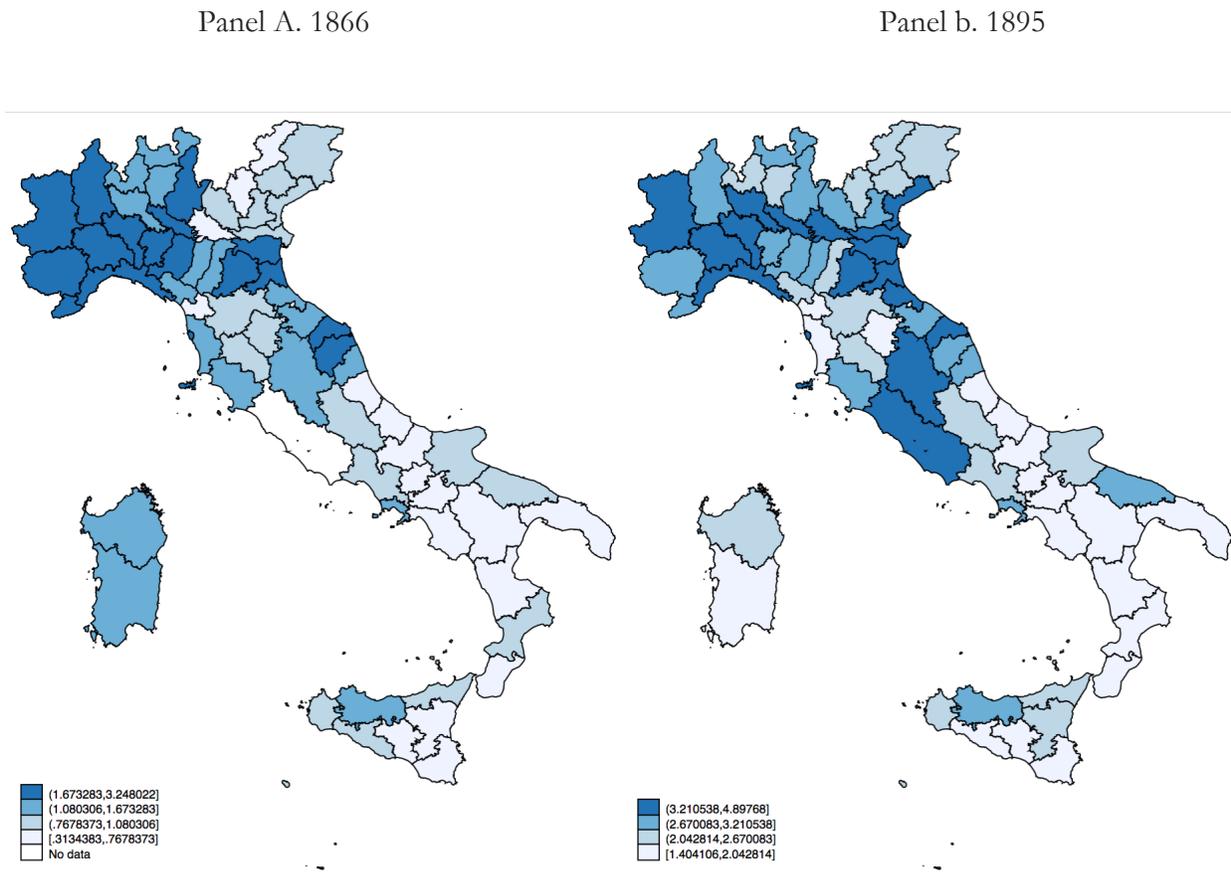
In Italy, because the spending for education was a municipality duty until 1911 the poor results in both human capital accumulation and cross-regional differences in schooling has been charged as a political responsibility of the local elites who prevented investments in education for retaining their economic power. The argument, developed in the past years (Sokoloff and Engerman 2000; Galor et al. 2009; Vasta 1999; Battilani 2001; A'Hearn et al. 2011, p. 166), ascribes to local elites a decisive role in promoting education. In the North the local elites were involved in active modernization by expanding local budget for schooling while in the South the local elites showed themselves reluctant to promote the spread of education. As a result, the passive modernization characterized the behavior of Southern elites who were aimed at keeping education low in order to maintain their local influence and containing wages in the agrarian sector (Felice and Vasta 2015). Contextually, the inefficient organization of cadaster in South, inherited from the Bourbons, prevented to extract the required level of resources to finance municipality budget.

We consider two years, 1866 and 1895, for which we have municipality level budget data and detailed information about political elections to test both the fiscal capacity hypothesis and the role played by political preferences in choosing the level of investments in education.

Municipality-level budget data

To understand the political decision-making process underlying local public expenditures a municipality-level database is been built. Numerous primary documents containing public statistics are available since the Liberal Age onwards. The Italian government published on a regular basis the balance sheets of municipalities containing detailed information about taxation and expenditure. In most of the cases, the data are grouped by provinces (or district) reflecting the aggregate information of municipality-level taxation and expenditure. Figure 1 shows the per capita education expenditure of municipalities gathered by province in 1866 and in 1895.

Figure 1. Per capita expenditure for education at 1911 constant prices.



Electoral data

Electoral statistics inform about entitled groups and the reasons for their entitlement. At the time of the Unification, the Italian electoral system for the political elections was inherited by the Piedmont Constitutional Law. It was based on the idea of a restricted suffrage. The right to vote was granted to individuals on the basis of real estate taxation level, of merits in the industrial sectors and liberal professions, and of personal income taxation level. The individuals entitled with the right to vote was around 2% of total population in 1865.

The Piedmont electoral Law was reformed in 1882. The new system abandoned definitely the principle that the right to vote should have been granted on pure economic requirements. The novel approach admitted to vote all the male people aging 20 who had two years of basic education or alternatively who paid 20 Liras of taxation, which was half of he previous required level. The electoral basis was therefore enlarged up to the 7% of total population in 1895.

Using the information on entitled individuals and the breakdown of active electorate by their entitlement we built two measures of political preferences. The active electorate measures the percentage of individuals entitled to vote. It is an approximation of political participation to the public decisions and defines who is the median elector, i.e. the pivotal decision maker. The electoral reform of 1882 enlarged the active electorate shifting the pivotal decision maker which is now different from that of 1865. A second indicator for the political preference is the composition of active electorate. Entitled individuals can be grouped in those entitled because of fiscal contributors and those entitled by special merits. The electoral system of 1865 in the single-winner-district fixed the amount of taxes paid to acquire the right of vote around 40 Liras. The reformed electoral act of 1882 halved the required taxes enlarging the electoral basis.

Political preference and spending for education

We test two fundamental hypotheses. The first is the role of fiscal capacity in determining the size of spending for education under the assumption that if available resources are larger the policy decision maker might expand the budget for education. The second relates to the size and composition of people entitled to vote. On this side, we might suppose that local elites, those who were endowed with a considerable amount of (real estate) wealth, would had prevented the spending for education. What do we mean for “considerable”? Because the local elite could influence budget allocation through their political representatives our perspective is to look at the amount of wealth needed to have the right to vote.

The empirical strategy is summarized by the following relationship:

$$EDU_i = \alpha + \beta * FC_i + \gamma * AE_i + \delta * EC_i + \theta * X_i + \varepsilon_i \quad (1)$$

where EDU =per capita expenditure for education at constant 1911 prices; FC =fiscal capacity proxied by per capita revenues at constant 1911 prices;

AE =active electorate; EC =electorate composition= *electors_by_wealth/electors_by_merits*. The matrix X contains a set of controls including dummy variables for the pre-unitary kingdoms, latitude of the provincial capital city, and size of population. Municipality-level revenues and expenditures are gathered by province. The number of province (i) is 68 in 1866 and 69 in 1895. In first instance, we test separately the equation (1) at two benchmark years leaving for a future extension of this draft a finer empirical approach.

Results in 1866.

Table 1 reports various estimations of equation (1) for 1866. Let us to note that the elections took place in 1865 and the budget data refer to 1866. All the columns include a dummy variables capturing the pre-unitary

kingdom which each province belonged to for taking into account past institutional environment. Columns 2 and 3 add respectively the size of population and the latitude of capital city.

Table 1. Fiscal capacity and political preferences in 1866

	dependent variable: EDU		
	(1)	(2)	(3)
FC	0.00980 (0.00642)	0.00876 (0.00665)	0.00782 (0.00633)
EC	-0.162*** (0.0430)	-0.158*** (0.0438)	-0.181*** (0.0383)
AE	0.369*** (0.102)	0.380*** (0.101)	0.395*** (0.1000)
Constant	1.204*** (0.179)	1.144*** (0.180)	-2.106* (1.101)
Pre-unitary Kingdom	Y	Y	Y
Pop size in 1866	N	Y	Y
Latitude	N	N	Y
Observations	68	68	68
R-squared	0.799	0.802	0.826

Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The fiscal capacity of municipalities does not display any effect on the spending for education although the coefficient is positive as we expect. In turn, the political preferences predict exactly that a larger active electorate, which is an index of (relatively) more democratic context, has a positive impact on investment in education. Moreover, the composition of electors shows the predicted attitude of local elites to restrain the expenditure for education. Yet, the results we obtain is not in favor of a systematic differences between southern and northern regions. Because we control for the pre-unitary institutional effects, the coefficient discounts the local differences and what emerges is a general attitude of local elites across Italy to keep expenditure in education low.

Results in 1895.

The electoral reform of 1882 enlarged the electoral basin. Although the fraction of population entitled to vote passed from barely 2% to 7% its composition changed considerably moving the pivotal decision makers far from that of 1865. Table 2 reports the same econometric exercise of the previous sub-section for 1895. The choice of 1895 is motivated by the fully comparable electoral data. When the 1882 reform was approved

the electoral system passed from the single-winner-district to the multi-winner-district. In 1895 the single-winner system was reintroduced.

Table 2. Fiscal capacity and political preferences in 1895

	dependent variable: EDU		
	(1)	(2)	(3)
FC	0.0762*** (0.0101)	0.0722*** (0.0101)	0.0736*** (0.0103)
EC	2.414*** (0.716)	2.132*** (0.701)	2.089*** (0.699)
AE	0.0657** (0.0292)	0.0666** (0.0287)	0.0577* (0.0301)
Constant	0.156 (0.423)	0.234 (0.402)	-0.870 (1.842)
Pre-unitary Kingdom	Y	Y	Y
Pop size in 1895	N	Y	Y
Latitude	N	N	Y
Observations	68	68	68
R-squared	0.799	0.802	0.826

Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Under the new electoral rule, the size of active electorate plays the same role as in 1865. This finding confirms that relative (more) large political voice foster spending in education. However, compared to Table 1, the results are different to the extent that now fiscal capacity turns out to be effective for investment in education. Moreover, we observe that the electoral composition displays a positive effect on education. The elites in 1895, if who paid 20 Liras of taxation for the real estate wealth, were much more interested in paying for education. Again, the result discount inherited institutional differences not observed. A partial conclusion is that the enlarged electoral basin and its new composition delivered a pro-modernization attitude in the local budget allocation.

Discussion and very preliminary conclusions

The poor results in terms of investment in education and schooling in Italy hampered the modernization of the Italian economy and society in the XIX century. The obstacles to diffuse modernization were even stronger in southern regions. The reason was that political and economic elites behaved differently. They were more keen to promote modernization in the North than in the South. Local elites limited the allocation

of budget resources towards investment in education which were in turn shrank by a poor fiscal capacity, at least until the supply of education was a municipality duty, ie. until 1911. This view is shared by a large amount of literature.

The results of the present draft qualify this perspective and add some novel evidence. First, the limited fiscal capacity was not as relevant at the early stage of Unification as it was in the late XIX century in pushing investment in schooling. Secondly, in line with a consolidated literature, the process of democratization, proxied by the enlargement of political voice through enfranchisement, is positively associated with more investment in education. Third, the shift of the median voter that occurred as result of the 1882 electoral reform testifies to a change in the pivotal decision maker in favor of education. Although the political voice was in 1895 still restricted to the 7% of individuals the new composition of local elites in the active electorate gave a boost to investment in education. The passive modernization approach left room to an active modernization attitude of local elites in the last decade of XIX century. Contrary to the view that passive modernization was a distinctive character of southern elites we show that it was a distinctive national character in the early decades of Unification.

Moreover, we might carefully think about the role of centralization in promoting education in Italy. The evidence provided in this draft is in favor of a pro-modernization attitude of the policy decision makers even before the shift of the provision of education from the periphery to the center. Perhaps the economic growth of the Giolittian epoch (1907-1913) might stem, among other things, from the changed attitude of local decision maker.

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