Summaries of Doctoral Dissertations

Institutions, Information, and Markets in Fifteenth-Century Tuscany

Following the path traced by Lance Davis and Douglass C. North, this dissertation studies the impact of institutions on market economies.[1] At the same time, it investigates the crucial role that information imperfections have on market allocations and outcomes. Specifically, by making extensive use of unpublished manuscripts kept at the State Archives of Florence, this dissertation studies the impact of specific institutions and information imperfections on the way credit markets, marriage markets, and agrarian labor markets worked in fifteenth-century Tuscany, one of the most vibrant European economies in the Middle Ages and the Renaissance.

Economic historians have long appreciated that capital markets matter. Besides Lance Davis's famous study on the implications of capital-market integration, several works have investigated the impact on economic development and growth of financial institutions such as banks, free banking, deposit insurance, universal banking, stock exchanges, insider lending, and rural capital markets. Others have studied the interactions between private credit markets and public finance. More recently, economic historians have paid more attention to smaller financial institutions and less formal mechanisms for the allocation of capital.[2] Thanks to their works, we can appreciate the microeconomic underpinnings of capital markets, including the role played by asymmetric information and contractual forms.

This dissertation contributes to this latest literature at an earlier period and for a vibrant economy. Specifically, it shows the impact of Jewish lending on private credit markets and public finance in five Tuscan towns in the early fifteenth century. In the private credit markets of early Renaissance Tuscany, in which credit cooperatives were still to be invented and where notaries did not act as crucial financial intermediaries, Jewish lending helped households smooth consumption, buy working capital, and provide dowries to daughters. Living in different towns and being often organized in partnerships, Jewish lenders directly shared risk with each other and helped these economies out of financial autarky. In contrast with what has been argued by previous studies, this dissertation reassesses the role played by Jewish lending in private credit markets.[3] Specifically, it shows that Jews did not merely provide small consumption loans to poor households, but also large loans to wealthy merchants, artisans, prominent notaries, and medical doctors.

Jewish lending also helped the public finance of the communes, in which they resided. Tuscan town governments, being often in need of money to finance ordinary expenses, as well as extraordinary expenses such as providing cheap grain in times of hardship or financing a war against a neighbor town, turned often to Jews to finance these expenses: they taxed, and borrowed from, Jews. More important, Tuscan town governments regulated Jewish lending in a way not only beneficial to the "welfare of the poor," as they often claimed, but also with an eye on public finance. Specifically, this dissertation argues and shows that, besides citizens' welfare, public finance considerations also affected the choice of the interest rate ceiling Jews were allowed to charge. In many instances, the interest rate ceiling for Jewish lenders was kept artificially high in order for the communes to reap the rent earned by Jews on some

[1] This dissertation was completed in 1997 in the Department of Economics at Northwestern University under the supervision of Joel Mokyr, Edward Muir, and William Rogerson. Financial support from Ente Einaudi (Rome) is gratefully acknowledged.

[2] See, among others, Banerjee, Besley, and Guinnane, "Neighbor's Keeper"; Guinnane, "Co-operatives; and Hoffman, Postel-Vinay, and Rosenthal, "What Do Notaries."

[3] Carpi ("Account Book") and D. Herlihy (*Medieval and Renaissance Pistoia*) argued that Jewish lenders lent mostly to poor households.

of their loans. By allowing Jewish lenders to charge a high interest rate and then by taxing them, town governments actually imposed an additional commodity tax on their citizens—the good purchased being the loans provided to citizens by Jews themselves.

This dissertation also investigates the role of dowries and highlights the variables affecting the size of dowries in fifteenth-century Tuscany. Dowries are a worthwhile topic of study for two reasons. First, in medieval and Renaissance Tuscany, dowries represented very large movements of wealth from bride households to groom households. In Cortona between 1415 and 1436, the average dowry amounted to 125.5 florins, with 14 florins being the annual average salary of an urban worker in Florence. Needless to say, these movements of wealth might have affected, and be affected by, households' savings behavior and wealth accumulation. Second, from a theoretical viewpoint, the intriguing feature of the dowry is that it is both a marriage payment and an intergenerational transfer. The former is the feature studied more extensively by economists.[4] Dowries are paid by bride households to groom households when daughters marry; without a marriage there is no dowry. If marriage transactions happen in a market set-up, the dowry should be the price of the goods being purchased and sold. When viewed as marriage payments, dowries may greatly affect the functioning of marriage markets. These markets, together with the institutions and social norms that regulate them, may affect economic growth, consumption smoothing, savings behavior, and female labor supply. Meanwhile, economists have neglected the study of the dowry as intergenerational transfer from parents to their daughters. Intergenerational transfers from parents to children can be either inter vivos transfers or bequests. Dowries fall in the first category. The timing of intergenerational transfers can have several economic implications: the savings behavior of parents and the labor supplied by their children may be affected. Children receiving inter vivos transfers may behave differently than those receiving bequests in terms of the attention and care they are willing to provide to their parents, as they grow old.

When considering the dowry as marriage payment, the issue is what the bride's parents are paying for in the marriage market. To address this issue, this dissertation suggests and tests the present net value hypothesis, according to which the dowry depends upon the value of the bride's contribution to the marital household. The bride's contribution to the marital household takes into account the value of the housework (and farm work, if any) she will perform, the love and pleasures she will bring to her husband, her ability to "produce" children, to rear and supervise them, minus the value of her lifetime consumption. Ceteris paribus, the younger the bride, the larger her contribution in the marital household, and the smaller the dowry her parents will have to pay to convince the groom's household to accept their daughter. When considering the dowry as intergenerational transfer, the issue is whether parents are altruists towards their daughters. In an altruism framework, if parents care about their daughters' well-being, they should provide larger dowries when daughters marry "down" into less wealthy or less prominent households than when marrying up.

The estimation, based on 209 marriage contracts for the Tuscan town of Cortona between 1415 and 1436, offers positive support to the present net value hypothesis (dowries and the bride's age seem positively correlated) and to the altruism model (parents provided their daughters with larger dowries when the daughters married down). As an interesting by-product, this dissertation sheds light on the marriage strategies of wealthy and prominent households, as well as of very humble peasants, small artisans, and poor urban workers—those groups whose social and economic behavior is always very challenging to study due to the paucity of memories or other records that may document their history.

The last chapter of this dissertation is devoted to the study of agrarian contracts. Economists have long investigated the choice of agrarian contracts in developing countries and

[4] See, for example, Becker, *Treatise*; Cigno, *Economics*; Grossbard-Shechtman, *On the Economics*; and Rao, "Rising Price."

the impact of these contracts on the economic development of these regions. Studies have been devoted to the determinants of the choice among fixed-rent contracts, wage contracts, and share contracts. From the Middle Ages until the nineteenth century, the predominance of share cropping in some regions and the almost complete absence of share contracts in other regions has characterized the agrarian history of Western Europe. Since the thirteenth century, share contracts had become the predominant agrarian arrangements in some regions of northern and central Italy. In 1316 more than three-fourths of the contracts between landowners and tenants in the countryside near Siena in Tuscany were share contracts. Between the close of the Middle Ages and roughly 1700 the French countryside also witnessed a dramatic expansion of sharecropping. In contrast, in other places in Europe, such as England and Ireland, landlords preferred to lease their estates out for fixed-rent contracts.

Historians have advanced various hypotheses regarding the adoption and spread of share cropping in late medieval Italy and early modern France. The risk-sharing hypothesis argues that, in times of labor shortages following the Black Death, landlords offered share contracts to attract risk averse tenants by offering them partial insurance against output risk.[5] Marc Bloch's thesis maintains that missing or imperfect capital markets favored the expansion of share contracts in these regions of Western Europe. Specifically, according to Bloch, share contracts were offered to poor tenants lacking farm equipment and working capital.[6] The moral hazard hypothesis asserts that share cropping was an ideal contract for monitoring the tenants' effort, while ensuring they would have not damaged valuable assets such as the perennial crops grown on the estates. [7]

While previous studies have suggested and tested one single hypothesis at a time—making impossible to verify whether the other hypotheses are accepted or rejected—this dissertation provides a test for these three hypotheses. The difficulty in testing them jointly usually stems from the lack of data both on landlords and their peasant tenants. This dissertation can test jointly the three hypotheses thanks to a unique sample containing information both on landlords and their peasant tenants. The findings are somehow surprising: the estimation suggests that all three hypotheses find support in the data from 1427 Tuscan agriculture. More generally, this dissertation shows that any single-factor explanation for the choice of agrarian contracts in medieval and Renaissance Tuscany is bound to provide an incomplete picture.

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[5] Herlihy, and Klapisch-Zuber, *Les Toscans.*
[6] Bloch, French Rural History.
[7] Hoffman, "Economic Theory"; Galassi, Mealli, and Pudney, "Econometrics"; and Emigh, "Spread."

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Caps and Gowns: Historical Reflections on the Institutions That Shaped Learning for and at Work in Germany and the United States, 1800–1945

How and why did Germany and the United States institutionalize such radically different educational and training systems?[1] Germans rely heavily upon regulated apprenticeships supplemented by vocational schooling to prepare and certify the majority of their youth for work. Americans, in contrast, formally educate, train, and certify their young almost exclusively in academically oriented schools. These divergent strategies have had strikingly different consequences for the distribution of knowledge and skills in the two societies, as well as for the way in which work came historically to be organized.

The great strength and sustained popularity of German vocational education, training, and certification practices issued from their effectiveness in fostering fungible work knowledge and skills. This success created a mutual interest in them among employers and workers that, together with state mediation, promoted the development of a complex system of governance which directly linked vocational programs and certificates to the economy. Conversely, the great weakness and low status of American vocational education programs derived from their conspicuous record of mediocrity. By subordinating secondary vocational education and training programs to the academically oriented system of schooling already in place, Americans effectively relegated them to marginality. Cut off from the workplaces and communities of practice in which vocations took shape and were plied, vocational education and training could not function effectively.

In the broadest, most abstract sense, two factors shaped the divergence in German-American education and training. On the "supply" side, the capacity of social actors in the two societies to engage in collective action differed considerably, especially in the training sphere. Whereas both Americans and Germans experimented with systematic forms of workplace training after 1900, only Germans found a way to sustain and reinforce these

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