ASPECTS OF EMILIA ROMAGNA AS AN ECONOMIC DEVELOPMENT MODEL

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The Italian region of Emilia-Romagna and its capital city, Bologna, enjoy economic success; effective, efficient, creative government; a strong civil society; and exceptional standards of livability. It's easy to be beguiled by this remarkably salubrious place. In particular, economic developers have been attracted to the Emilian flexible manufacturing networks in which small and medium sized enterprises (SMEs) both compete and cooperate as the occasion dictates. At the same time most sectors of Emilian industry have managed to be innovative enough to remain competitive in the global market.

Is the Emilian model exportable? Is the model so rooted in the deep culture and history of the region that it is not suitable to a place with a dissimilar culture and history? If culture and history are necessary preconditions what particular elements are necessary? These are the key questions we need to answer.

This paper has several objectives. First, to deepen our knowledge of Emilia-Romagna and the circumstances surrounding its success by a review of some relevant literature. Second, to offer some preliminary conclusions.

Observations from the literature will be briefly presented in a concise format that can be used and relied upon by practitioners. The arguments and evidence supporting these observations will not be presented. Ample persuasive evidence will be found by the interested reader in the references.

{Footnotes are explanatory or expand on the argument in the paper. Numbers in parentheses refer to the references at the end of this paper. Since many references are relevant to several points, I have used a modified version of the endnote convention used in medical literature. References are numbered and any given reference may be cited multiple times.}

Description of the Emilian Model

Emilia-Romagna's manufacturing economy is characterized by industrial districts. Industrial districts have all of the characteristics of clusters (as described by Michael Porter) but have additional features as well. Industrial districts are "territorially concentrated productive systems made up of sectorally homogeneous small and medium enterprises, specialized in single phases of the productive process and inter-related by a dense network of horizontal, vertical and diagonal relations."(4) The candy industry in Chicago is a cluster; it is not an industrial district.

Industrial districts are composed of "populations of interacting small and specialized firms that compete and cooperate with one another in way that is conducive to growth and is highly flexible in meeting differentiated and constantly changing markets." (37) The firms in a district share out among themselves the labor required for the manufacturing of particular goods through specialization and subcontracting. "Specialization promotes efficiency and specialization combined with subcontracting promotes collective capability. Industrial districts promote trust and cooperation, which shows entrepreneurial dynamism and flexibility. This 'flexible networking' is characterized by the active presence of both a community of people and a population of firms in one naturally and historically bounded area."(21,39)

> The most important implication of industrial districts goes beyond the agglomeration economics and [is] the community of people. (21)

There is a constant spillover of information as people in the industry continually interact, both formally and informally. There is information "in the air."[1]

> Through a shared-knowledge base and continual contracting and recontracting, experience fosters relational trust, in turn, limits opportunism among partners in this communitarian industrial district market. (21)
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> While firms interact continuously with each other, the strict conditions of impersonal competitive markets do not even begin to apply. Nor is there any single overarching authority. Yet, such local economies are often capable of equaling, and sometimes of outdoing, those varieties of organization that are more familiar to political economists. Very clearly, the form of production seen in these districts requires a high degree of cooperation between firms. Formal contracts are relatively rare; indeed, subcontracting relations depend on word-of-mouth agreements. [Despite the great risks of opportunism on the part of both subcontractors and final firms] the evidence suggest that … these risks have been overcome… This lack of opportunism in cooperative relations is the result of trust. (8)

The social and economic fabric is an integrated whole. Local institutions, including government, trade associations, unions, banks, universities, technical colleges, training institutes, and voluntary associations all are linked and participate. (39)

A notable feature of the Emilian model is the establishment of technical service centers within the major clusters of the region by the regional government. (4) ERVET is the entity responsible for operationalizing this policy. The establishment of these service centers occurred in a context of technically competent first generation entrepreneurs with limited formal education; limited availability of private technological help; difficulties in accessing universities and research institutes on the part of entrepreneurs; and limited formal organization of clusters. Local government or other entities, such as a Chamber of Commerce, subsequently established additional service centers. (4,20)

[1] The phrase is from Alfred Marshall, writing in 1890: "…The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements…have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. (Quoted in 35)

The centers vary by district and no two perform identical functions. Among the services offered by one or more centers are:

Collection, analysis and dissemination of market intelligence and competitor activity.

Engineering and design assistance.

Information, training and assistance about standards and certification.

Technical training.

Engagement in international partnerships and relationships.

Technology transfer.

Research.

Promotion and marketing.

Business consulting and support services such as quality, intellectual property, financing, safety and information technology. (4)

The dense links within an industrial district facilitates exploiting existing opportunities and building on existing technologies. But since these dense links are among people with similar backgrounds and experiences they may be less useful at exploring new technologies. Here is where local institutions (such as service centers, research institutes, universities, etc.) “Can act as intermediary agents linking external and ‘dispersed’ network relationships with the internal (to the industrial district) ‘dense’ links, [feeding] the district with new ideas and concepts that are, then, continually refined [by] the internal redundancy, proximity and the transactional intensity of the district."(21,3)

The effectiveness of the service centers in all of the areas in which they operate is a question of debate. (9)

The particular confluence of industrial districts, strong civil society, good government and livability may be unique to Emilia-Romagna but industrial districts are found elsewhere in Europe. Nor is Emilia-Romagna the only European region that has experienced economic success. Industrial districts can be found in France, Britain, Germany and Spain. (21)

What Accounts for the Economic Success of Emilia-Romagna?

Robert Putnam persuasively demonstrated the strong linkage between social capital and the success of the Emilia-Romagna economy, as well as its success at government and civil society. Putnam also showed that the region has enjoyed high social capital for centuries.[2] (26)

"Social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them."[3] (25)

Putnam did not conclusively demonstrate that social capital *caused* this success. Some argue that it was the success of the economy, civil society and government that led to increased stocks of social capital. I am persuaded that both statements are true: high stocks of social capital engender the trust and habits of reciprocity that allow flexible networking to occur *and* the success of flexible networking creates social capital. These effects are reciprocal and lead to a virtuous circle.[4]

There is reinforcement among the high stock of social capital, an "historically sedimented local political culture that cuts across class, gender and institutional divides," and a finely balanced interplay "between a responsible state and an active civil society." (3)

The work of scholars working on trust and reciprocity supports and illuminates the mechanism underlying the relationship between social capital and the economy.[5] Game theory has proved useful in deepening this understanding. (5,23) Trust[6], essentially the expectation that one person will act in the interest of another, is a product of knowledge of one another's interests, transparency, social rewards, and social sanctions. (7,34,38) These factors are all more likely with increasing stocks of social capital. (32) Bennett Harrison was one of the first to note that the advantage of the "Italian model" was due to "trust—an outgrowth of experience. As he put it,

[2] Putnam certainly has his critics. (10,15, for example). Most of the criticisms that I am aware of either attack Putnam for something that he did not in fact say or are based on very flimsy arguments.

[3] This is by no means the only definition of social capital but it will serve our purposes here. In addition to Putnam (quoted above) Pierre Bourdieu and James Coleman have each set forth influential definitions. Bourdieu called social capital a capital "of social connections, honurability and respectability."(1) It is "the totality of all actual and potential resources associated with the possession of a lasting network of more or less institutionalized relations of knowing or respecting each other."(6) Social capital is primarily the property of an individual, according to Bourdieu. Coleman said social capital "is defined by its function. [It] is a variety of different entities… that all consist of some aspect of social structures and they all facilitate certain actions of actors – whether persons or corporate actors [that is, purposive organizations] within the structure." For Putnam and Coleman social capital is a collective good. (1) Bourdieu was working on class stratification, Coleman on education and Putnam on the effectiveness of regional governments when they formulated their definitions.

[4] A detailed description of the mechanisms by which social capital works is beyond the purpose of this paper. The interested reader should consult references (1,8,11,22,24,25,26,29,31,32)

[5] The social capital concept ties the economy to society, whereas Fordist production tended to keep the economy separate from the economy.(31)

[6] Descriptions of social capital containing phrases such as "Norms of trust and reciprocity" tend to invest the concept with a positive image, sort of like cookies baking in the oven. But social capital is in reality value neutral. Just like financial capital or human capital, social capital can be employed for asocial, antisocial or downright evil purposes. Terrorist groups have high stock of social capital, for example. The dark possibilities of social capital have been well recognized, including by scholars such as Putnam that regard an adequate stock of social capital as necessary for a society.(25,29,31)

regional growth in Italy proceeded from proximity to experience to trust to collaboration to enhanced regional growth." (35)

The importance of social capital for economic performance is widely acknowledged,[7] albeit sometimes with various qualifications. (1,12,29,31,32) It is generally agreed that

- Social capital leads to trust and reciprocity. (1,25,26,29,32)

- Trust reduces transaction costs and thereby makes economic activities in general, and flexible networking in particular, more viable and efficient. (1,4,8,25,26,32,38)

- Trust makes cooperation easier and cooperation is a requirement for innovation. (1,12,16,38)

Social capital is an important contributor to economic success but it is not the only important factor. (1) "Businesses have never thrived, nor economies flourished, without social capital" but social capital is not substitutable for financial capital (land, money, physical resources) or human capital. (29)

Traditional purely economic factors have been important in Emilia-Romagna as anywhere.

Among the other factors that have been linked to the region's economic success are:

- An "enterprising spirit (widespread among individuals, firms and associations) and a general acceptance of the levels of risk it implies.

- A high degree of social and economic cohesion, which is strongly encouraged by the regional government and facilitated by welfare support for workers and a widespread distribution of strong growth.

- A high level of social mobility and good opportunities for entrepreneurship, career advancement and growth.

- A reputation for a production system that is flexible and reliable.

[7] One weakness of much of the literature on social capital is caused by the difficulty in measuring it. As in so much social science, authors too often default to the easy to measure. They end up making conclusions based on insufficient evidence. While Putnam does not fall into this trap – his research is exceptionally thorough -- many of his critics and supporters do. Two recurring examples come to mind. First is the use of and reliance on one question concerning trust on the World Values Survey. This question has the advantage of being asked to the citizens of many countries over many years. The problem is that the question is not without ambiguity, especially as it is translated into many languages. It does not measure social capital in all its dimensions and it may also measure things other than social capital. The second example is the over reliance on measuring membership and participation in associations. Membership in organizations that require active involvement (Kiwanis or a softball team for example) both requires and creates social capital. Organizations with passive or "checkbook" members (such as AARP or the Sierra Club) are not associated with strong stocks of social capital. This measure is uni-dimensional: association membership is only one instance of social capital, there are many, many more. For a similar critique see reference (1,22).

- An efficient regional public administration." (20)

- A unique kind of "Communist and Socialist 'political community'… wherein people of the same political leaning came to be in charge of local and regional government, labor unions, small artisan associations and industries and firms organized as cooperatives." (3)

These factors are not unrelated to social capital or to each other, of course, and each factor reinforces the others. (Here is our virtuous circle again.) But Emilia-Romagna has this particular combination that has been unusually beneficial.

While many observers would regard the factors we have been discussing as "positive" from a social point of view, there are some less positive factors that led the Emilian economy to take its unique form. Labor unions gained victories in the 1960s which had major impacts on large firms. To escape the rigidities of labor contracts many firms began to subcontract to small firms that were less unionized and less regulated, at least *de facto*. As a consequence there was an "explosion in the number of very small firms working in specialized mechanical engineering in Bologna between 1971 and 1981. During the same period, employment among very small firms nearly tripled." (9)

Recent labor relations have been relatively peaceful and the major union is eager to cooperate with ways to maintain and increase employment. Bilateral bodies between trade unions and small firm trade associations play a role in delivering benefits and in providing other collective competition goods. (9)

The weakness and inefficiency of the national Italian state has led to the emergence of strong trade associations that respond to the deficiencies of the state and are deeply involved in the day to day work of their members. "On the one hand, the state fails to provide many important collective competition goods… On the other hand the state nevertheless imposes an almost impossibly high regulatory burden on small firms." The associations encourage cooperation on some matters among firms, but the associations themselves are fragmented. (9,3)

Changes in the Emilian Model Due to Competitive Developments

The Emilian model is not static. While enormously successful it is important to remember that the model as customarily described was successful in a particular context. As that context changes the response of Emilian actors changes. *Those who seek to replicate the success of Emilia Romagna must take care not to replicate elements of a model that are no longer relevant for contemporary circumstances and have in fact been, or are being, altered in Emilia Romagna itself.*

The traditional organization of relatively autonomous industrial districts is being altered somewhat to become more and more a network of interconnected clusters. "With increased global competition, such intervention at the cluster level is not considered sustainable by the regional government. The new assumption is that local clusters can improve their competitiveness only if the whole region's knowledge and innovation base becomes stronger."(4)

There is a new emphasis on leader firms that have greater potential to participate in international networks directly. "This marks a fundamental shift in the Emilian model of provision of 'real services' – the emphasis is now on helping leader firms to survive in international markets, and on helping medium sized firms to grow and adapt to a leadership role, rather than on supporting the network of small firms as such." (9,3)

Some service centers are finding it necessary to become self-sustaining and more customer driven. The centers are also becoming more connected to non-local customers and partners.

The market conditions that the region finds itself in are forcing changes. Changes in the expectations and demands of final customers are having profound effects on the way the region does business. It's worth quoting from a study of the packaging machine industry in Bologna at length:

> Larger firms, or consortia, of large firms, appear to be enjoying an ever more dominant role in many, perhaps most, [industrial] districts… Previously, a large firm might work together with several smaller firms, which produced specialized machines that complemented its range. This is becoming less and less common as such firms are either being bought by larger firms or finding their niches disappearing. This is all the more marked because of changes in customer requirements. Increasingly, large customer firms do not ask simply for machines but for a broad array of services… of a sort that smaller firms would have difficulty in producing. Some large firms in the area are seeking to reinvent themselves, providing a complete "turnkey" service… Relationships between machine producers and their customers appear to be getting closer and closer.
>
> Smaller specialized firms in the area have increasingly been bought out by larger ones. Furthermore, those smaller firms that remain independent are finding it increasingly difficult to gain access to customers. The Bologna packaging industry is coming to be dominated by a few large "group firms," with close long-run relations with customers, from which the smaller firms are gradually being excluded. Some highly successful small firms still produce for niches… but very many now face the unpalatable choice of integrating their operations with larger firms (being bought out or becoming a dependent subcontractor) or going out of business.
>
> The changes in power relations described… appear to be associated with changes in both the forms and distributional consequences of cooperation… Traditionally, cooperation among firms within the district has taken place on the basis of diffuse reciprocity. There had been little reliance on formal contracts, with final firms and subcontractors instead relying on informal agreements and commitments to underpin cooperation… [Firms] relied on personal relationships involving guarantees of work over the long term and occasionally other forms… of exchange. It is unlikely that these relationships were "personal" in the sense that they involved strong affective commitments… Instead these

> personal relationships were based on informal norms about what was, or was not, acceptable behavior between firms…
>
> There is evidence that these practices – and the rules that gave them shape – were rooted in the rough equality that initially pertained between final firms and subcontractors, and that as power relations are shifting, so too are mutual expectations… The largest firms have increasingly secured a lock on the final markets [that is, on the relationship with the end use customers] and begun to buy up smaller competitors, decreasing the options available to subcontractors. Simultaneously, the larger firms in the area have sought to make their relationships with their subcontractors formalized and "arms length"… and extract a greater share of the proceeds of cooperation. In large part, this has been accomplished through making the subcontractor relations more hierarchical.
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> Subcontractors are still expected to cooperate with larger firms… However, they must do so without the guarantees of work over the longer run that traditionally applied in the district. Informal commitments, based on quasi-personal relationships and community based norms of behavior, are being replaced by contractual arrangements that can be renewed or abandoned as final firms see fit. This is quite different from the traditional dispensation, in which both final firm and subcontractor shared risks and rewards to a much greater extent. (8) (Also see 7 and 9.)

This change is not unique to Emilia-Romagna or Italy, it has been found in other European industrial districts. Scholars call this phenomenon the "regional fragmentation thesis." (37) SMEs have adapted to the "large firm challenge" by becoming part of localized supplier hierarchies grouped around one large firm. [8] It has been described as a change "from 'network of firms' to the 'networked firm.' While it preserved the identity and some of autonomy of the smaller firms, it was not without risk of draining localities of their entrepreneurial and other resources." (18)

The wholly admirable Emilian model was perfect for a period of time, successfully marrying the social, political, economic and political capacities of the region to the needs and wants of a wide group of customers. But this model *may* not be as successful in other circumstances.

Lessons from Europe and Beyond

[8] "The rise of the corporate hierarchy supplier chain needs to be distinguished from… the growing importance of the market against other governance forms as part of the general rise of neo-liberalism. Because corporate hierarchy, like the market, is a form of governance that tends to exclude actors other than corporate managers – in particular government at all levels and trade unions – there is a tendency in some literature to fail to distinguish between them. This is erroneous. The governance mechanism of the market comprises anonymous, perfectly competitive markets where no firms have a capacity to shape prices and contract relations except through pure competition, within a context of institutions for maintaining the strictness of these rules. Corporate hierarchy becomes important precisely at the point where some large firms are able to escape the severity of the pure market. They become sufficiently large to be price makers and not just price takers; they can shape contracts through the exercise of authority over subordinates rather than through a pure bargain; and they can develop long-term relations with suppliers which may be able to withstand short-term market fluctuations. (18, also see 17.)

While we have a particular focus on Emilia-Romagna there is a great deal to be learned from research about economic development and innovation in other regions of Europe. The following observations come from studies of other regions and from multi-regional studies, some of which include Emilia-Romagna and others that do not. There is nothing that is in disagreement with specific Emilian observations.

Innovation is an absolute requirement in order for relatively high wage manufacturing economies to prosper in a global economy.

Innovation is more and more a networked process so access to and cooperation with others, local or international, is vital to positive outcomes. "In modern innovation theory the strategic behavior and alliances of firms, as well as the interaction and knowledge exchange between firms, research institutes, universities and other institutions, are at the heart of the analysis of innovation processes. Innovation and the upgrading of productive capacity is seen as a dynamic social process that evolves most successfully in a network in which intensive interaction exists between those 'producing' and those 'purchasing and using' knowledge." (36)

European data "reveals that manufacturing firms with intensive network integration (local or not) are more successful than those without it." The smaller the firm the more important local linkages are. However, all firms need both local and trans-territorial linkages. (16,27) These networks consist of other firms, suppliers, customers, service providers, universities, research centers, etc. Suppliers, customers and service providers are generally the most important network partners for manufacturing firms. (16,27) International and inter-regional networks are becoming increasingly important: only a few areas can remain insular. (30)

Endogenous development, originating within the firms and local community, is more beneficial than exogenous development, controlled by an outside actor or actors. (12) In the Saint-Etienne region of France cooperation among firms has increased but it has been at the firms' behest. Local, national and EU interventions similar to Emilian service centers were largely irrelevant to firms' actions and successes. (18,19)

Firms in traditional industries with only minimum innovation have less of a need to be linked in networks.

"The behavior of firms is strongly influenced by the institutional fabric of each national innovation system."(16,27) National borders turn out to be obstacles to cooperation, while sub-national territorial borders are not. Cultural differences do matter. What works in one region will not necessarily be successful in another. Development projects should "follow the terrain," that is, arise from the strengths of the area. (30)

A report of the results of the European Regional Innovation Survey notes:

> The experience with Third Italy and its regional production clusters of small and medium sized firms strongly support the assumption that close connections between innovative actors are favorable to regional economic development but they are extremely region-

> specific. Policy did play a major role in Third Italy's development, however, due to specific socio-cultural conditions and other limitations, this region cannot be viewed as a general model for regional development that can easily be transferred to other Italian regions or even to regions in other countries. (16)

Describing the importance of territory, or space, to the development process Garofoli says:

> Collaborative relations among firms, relations between the system of production and the socio-institutional system, the competencies and involvement of workers in the productive organization of the firm and in the wider social model of the area, the role of specific local institutions which intervene to overcome deficiencies (or "failures") of the market (such as technological centers, training schools and local development agencies) become crucial. In other words, a social system of interrelations, of circulation of information, of production, and reproduction of values, organizes itself to permeate and characterize the mode of production. This means that many crucial factors are historically embedded in the local society and are not therefore easily transferable to other areas: the process of development acquires its definitive character as a social process by refusing to appear only as a technical process. (12)

> Ultimately, the "social embeddedness" of firm relationships means that internal dynamics of regional industry clusters are likely to vary widely between countries, and often within them. Outside of the industrial district literature, however, examples of cooperation between enterprises in given clusters are relatively few. Many of the characteristics of firm interdependence in Italy are culturally specific; modes of business behavior in the United States and many other industrialized countries are very different.[9] (36)

> In Europe, it seems, trust based on experience may permit rival firms in the same industry to cooperate on certain common fronts. In the U.S., however, the parallels have proved elusive. Did Silicon Valley measure up to Harrison's criterion? Alas, no. The spectacle of Valley firms such as Intel suing each other at every opportunity (usually over intellectual property rights) rules this particular cluster out as an example of post-neoclassical trust and harmony. In Harrison's view, firms that rely on each other through informal agreements and cumulative collaboration do not wind up in court…. Trust is relatively easy among firms and their suppliers. A much rarer phenomenon—except in Italy—is trust between competitors. On this and other counts the Italian clusters are a distinctive type, [dubbed] *Italianate*. (35)

Attempts to create industrial districts or clusters as an economic development strategy have had questionable success. "One of the most important reasons why such strategies misfired more often than they succeeded is that too little attention was paid to the economic and social pre-requisites that are necessary–at least as hypothesized in the vast theoretical literature–for growth

[9] Exportation of the Italian model to less developed areas is also problematic. "While most of the current cluster debate is taking place in industrialized countries with already diverse economies and relatively strong effective demand (domestic and/or international), in less developed regions a policy decision to concentrate resources on key industries, instead of more general infrastructure needs or other strategies that would serve best a broad array of industries, brings with it significant risks against which the gains remain unverified." (36)

centers to work." (36) Note that there is a distinction between attempting to create an industrial district and supporting an existing one.

Politics also matters. A politics that is "more autonomous from particularistic interests increases [the] capacity to provide collective goods that are essential for economic development," as opposed to a politics that is controlled by special interests and based on clientism. (31 also see 3,13,14)

> Underlining the role of social capital for local development leads to neither simple devaluation of the role of the state in favor of the market nor to sheer localism. This new perspective moves rather in the direction of rethinking the role of the state in development policies… Public institutions from above should help local actors to mobilize from below; they should help them produce and use social capital efficiently… For a strategy of this type to work it is necessary to involve local actors, but the autonomy of political action is also a necessary condition, namely the capacity to resist – at both local and higher levels – particular interests and to pursue collective objectives. (31)

"Experience has shown that regional policy is more successful in stimulating existing innovation potentials and not so much so in developing innovative regions from the very beginning."(27)

The "central broker," that is the leader of a cooperative multi-firm effort, such as the head of a service center, must be in the hands of someone highly admired, respected and accepted by the business community. This turns out to be a key success factor. (16)

Entrepreneurs will not invest time and money in the development of networks unless they expect these activities to lead to profits. (16)

The existing knowledge base of the firm and the capacity of the firm to absorb and integrate new knowledge influence the success of innovation. (4,16,27)

Innovation is a slow, cumulative process. (12,16)

The examples and evidence in this paper are all based on experiences from European countries with histories of greater government involvement in the economy than in the United States, whether measured by percentage of GDP, ownership of firms or corporatism. These countries vary greatly one from another but they all have solidaristic traditions of one sort of another compared to the more individualistic tradition in the U.S.[10] Much of the literature reviewed here is concerned with sub-national European regions. These are all basically mono-ethnic and mono-cultural. Therefore some lessons may not apply to multi-ethnic and multi-cultural societies such as the U.S. or South Africa.[11] The individualism and heterogeneous ethnicity of

[10] Solidarity may take different forms. It may be based on the family, class, sub-state nationalism, religion, or political ideology. But the tendency is for Europeans to identify more with a group beyond the individual, as compared to Americans. Solidarity, or group identity has been found to directly influence cooperation.
[11] Although clearly unsuitable for the United States, the Singapore model may well be worth investigating by our South African colleagues. Although hardly a liberal democracy, Singapore has been successful in building a strong economy while integrating three major ethic groups, a set of accomplishments that has escaped almost every other

the United States may make cooperation among firms more difficult to achieve. The European Union, national governments and sub-national governments all spend fairly generously to support research and implementation of economic development projects, unlike the U.S.

Emilia-Romagna has enjoyed a high and increasing investment rate, whereas Illinois lags in this measure. (4)

Tentative Conclusions

1. Social capital is a major factor in the success of Emilia-Romagna. This is confirmed by the success of Emilian civil society and government, which have been successful in ways that also both draw upon and create social capital. A pre-existing stock of social capital allowed Emilians to seize the economic opportunities presented in the last half of the twentieth century. This was not the only factor in the economic success of the region. Certainly human capital was critical in developing a successful manufacturing industry. And the nature of the economic opportunities themselves (including the type of products demanded and customer preferences) were well suited to Emilian strengths.

This does not mean that high stocks of social capital are required for all economic success, only that it was and is an important part of Emilian success.

These high stocks of social capital have not been sufficient to protect the region from changes in the nature of economic opportunities. As these opportunities shift they may be less compatible with the region's strengths.

2. There are a variety of other factors that interacted with the high stock of social capital that contributed to Emilia-Romagna's success. While none of these factors is unique to the region the precise combination, coupled with international events, resulted in a unique alchemy. The "Emilian miracle" is only exportable to the extent that it can be adjusted to fit the culture and circumstances of the importer. Place and culture matter.

3. The processes and structures adopted by Emilia-Romagna are mere artifacts of the region's deep culture: they were the correct tools for the confluence of external and internal circumstances at the time. These processes and structures are NOT the reasons the region was successful. Simply copying processes and structures will not result in similar success elsewhere. Processes and structures must be appropriate for the culture of the community and the external circumstances of the time. Of course, elements of Emilian processes and structures may well be useful to other regions on a case by case basis. The validity of this point is driven home by the fact that Emilia-Romagna is itself changing its processes and structures as external circumstances change.

4. Innovation is a requirement for prosperity for Western Europe and North America. Cooperation, collaboration and networking are important practices that result in innovation. Much can be learned about these practices from Emilia-Romagna. While direct copying simply

regime. The dismal failure of the United States to truly integrate the bulk of its black population into the economic mainstream makes it a poor model for South Africa.

will not work, careful study and adaptation to local culture, human capital, and economic circumstances can yield benefits. In the end a successful economic development initiative must be custom tailored.

5. The United States in general and Chicago in particular must face up to certain challenges in adapting the Emilian model. The United States has reasonably high levels of social capital although these are rapidly declining. But this social capital is of a different nature than that found in Emilia-Romagna. Our strong individualistic streak does not mean we can't cooperate: we do so all the time, but in very different ways and with a different worldview. (Not many businesses would enter into a vendor-customer relationship without a written contract, for example. But we often tend to see contracts as creating trust by establishing clear understandings in advance, not as a sign of distrust.)

We face a massive problem of ill- and inadequately educated citizens. This problem is dangerously near the point where our competitive advantages could be irretrievably lost.

We are an ethnically, socially and racially heterogeneous society without much sense of solidarity.

We too often resort to blaming others rather than assuming responsibility for our own lives. This tendency is often played out in litigation and politics.

Our national, and in many cases state and local politics, has been captured by the kinds of "particular interests" that makes achievement of "collective objectives" difficult.

These challenges don't mean we cannot learn and borrow from Emilia-Romagna, only that we must bear these distinctions in mind as we craft sensible adaptations that will be useful here.

Limitations

This paper is limited by three factors: It is based entirely on secondary research. Much of the literature that I would have liked to read is in Italian or German, languages that I do not read. The identification and reading of literature was done on my own time and that time was limited.

Further Research

Questions for colleagues in Emilia Romagna

Is each of the observations and conclusions stated herein substantially correct? If not, please identify weaknesses or misunderstandings.

What factors have we missed or neglected?

What additional sources should we consult?

Questions for a site visit.

What is the exact breakdown of services for service centers? In particular we are interested in knowing the breakdown between government (EU, national, regional, local) funding, government contracts, contracts from groups of firms or associations, and contracts for individual firms. What proportion of the business is truly bottom-up, i.e., driven by demand from firms, and how much is top-down, driven by policy makers or politics?

How are service offerings determined?

How, in detail, are services delivered?

How are services priced? Are they at or below market prices?

Is the packaging industry case unique or typical? What is your current thinking about the regional fragmentation thesis?

References

1. Frane Adam and Borut Roncevic, "Social Capital: recent debates and research trends," *Social Science Information,* 42(2), 2003, pp. 155-183. *I read this article late in my research and found that many of my conclusions were confirmed in this well written review.*

2. Gabriel A. Almond and Sidney Verba, *The Civic Culture,* Princeton: Princeton University Press, 1963.

3. Ash Amin, *The Emilian Model: Institutional Changes,* Bologna: Istitutio per il Lavoro, Working Paper 01.

4. Andrea Bardi and Silvano Bertini, *Regional Development and Industrial Clusters in Global Competition,* IVth RLDWL Congress, Transnational Co-operation on Social Regulation, February 25-29, 2004.

5. Ken Binmore, "Reciprocity and the Social Contract," *Politics, Philosophy and Economics,* 3(1), 2004, pp.5-35. *This is an accessible, well-written introduction to some key game theory concepts.*

6. Regina Birner and Heidi Wittmer, "Using Social Capital to Create Political Capital: How Do Local Communities Gain Political Influence? A Theoretical Approach and Empirical Evidence from Thailand," in Nives Dolsak and Elinor Ostrom, eds. *The Commons in the New Millennium,* Cambridge MA: MIT Press, 2003.

7. Henry Farrell, “Trust Distrust, and Power,” in Russell Hardin, ed., *Distrust*, New York, Russell Sage Foundation, forthcoming 2004.

8. Henry Farrell & Jack Knight, “Trust, Institutions, and Institutional Change: Industrial Districts and the Social Capital Hypothesis,” *Politics and Society,* 31(4), London, December 2003, pp.537-566.

9. Henry Farrell and Ann-Louise Lauridsen, *Collective Goods in the Local Economy: The Packaging Machinery Cluster in Bologna*, March 2001. Available at http://www.henryfarrell.net, March 25, 2004.

10. Ben Fine, *Social Capital versus Social Theory,* London: Routledge, 2001.

11. Markus Freitag, “Social Capital in (Dis)Similar Democracies,” *Comparative Political Studies,* 36 (8), October 2003, pp. 936-966.

12. Gioacchino Garofoli, “Local Development in Europe,” *European Urban and Regional Studies,* 9(4), 2002, pp315-329.

13. Paul Ginsborg, *Italy and Its Discontents,* New York: Palgrave, 2003.

14. _____, *A History of Contemporary Italy: Society and Politics 1943-1988,* New York: Palgrave, 2003. *Ginsborg places the events in Emilia-Romagna in historical context. A fine place to begin one’s understanding of Italy.*

15. Jason Kaufman, *For the Common Good? American Civic Life and the Golden Age of Fraternity,* New York: Oxford, 2002.

16. Knut Koschatzky and Rolf Sternberg, “R&D Cooperation in Innovation systems – Some Lessons from the European Regional Innovation Survey,” *European Planning Studies,* 8(4) August 2000, pp.487-501.

17. William Lazonick, “The Theory of the Market Economy and the Social Foundations of Innovative Enterprise, *Economic and Industrial Democracy*, 24(1), 2003, pp. 9-44.

18. Patrick Le Gales, *The Governance of Local Economies, a French Case Study,* Los Angeles, Department of Sociology, UCLA, 2003, eScholarship Repository http://repositories.cdlib.org/uclasoc/trcsa/5.

19. Jonah D. Levy, *Tocqueville's Revenge*, Cambridge MA: Harvard University Press, 1999.

20. Daniele Mazzonis, “The Changing Role of ERVET in Emilia-Romagna,” in *Global Pressure and Local Response in Italy,* Geneva, 1996.

21. F. Xavier Molina-Morales, *et.al.* “The Role of Local Institutions as Intermediary Agents in the Industrial District,” *European Urban and Regional Studies*, 9(4), 2002, pp315-329.

22. Kenneth Newton, “Trust, Social Capital, Civil Society, and Democracy,” *International Political Science Review,* 22 (2), 2001, pp. 201-214.

23. Elinor Ostrom, *Governing the Commons,* Cambridge U.K.: Cambridge University Press, 1990. *Ostrom's book is a foundation work on allocation of social goods. Not always an easy it read, it is an essential work by a leading game theorist and expert on reciprocity.*

24. Robert D. Putnam, ed., *Democracies in Flux,* Oxford: Oxford University Press, 2002.

25. Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community,* New York: Simon & Schuster, 2000.

26. _____, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton: Princeton University Press, 1993. *Absolutely essential for an understanding of the Emilian success and most of the literature that discusses it.*

27. Javier Revilla Dietz, "Metropolitan Innovation Systems: A Comparison between Barcelona, Stockholm and Vienna," *International Regional Science Review,* 25(1), January 2002, pp.63-85.

28. Gerald Schneider, Thomas, Plumper & Steffen Bauman, "Bringing Putnam to the European Regions, *European Urban and Regional Studies,* 7(4), London, pp.307-317.

29. Xavier de Souza Briggs, *Social Capital and the Cities: Advice to Change Agents,* Paper presented at an International Workshop on Community Building, The Rockefeller Foundation, Bellagio, Italy, October 1997.

30. Lenart Svensson and Casten von Otter, "Strategies for Regional Regeneration: Learning from the Bergslagen Regional Research Centre," *Economic and Industrial Democracy*, 23(3), 2002, pp. 421-439.

31. Carlo Trigila, "Social Capital and Local Development," *European Journal of Social Theory,* 4(4), London, 2001, pp.427-442.

32. Gaute Torsvik, "Social Capital and Economic Development," *Rationality and Society,* 12(4), 2000, pp. 451-476.

33. Vera Zamagni, "Evolution of the Economy," in P. McCarthy, ed., *Italy After the Second World War,* Oxford: Oxford University Press, draft 2002.

34. Dan M. Kahan, *The Logic of Reciprocity: Trust, Collective Action, and the Law*, Public Law and Legal Theory Paper No. 31, New Haven: Yale Law School, available March 20, 2004 at http://papers.ssrn.com/abstract=361400.

35. *The Web Book of Regional Science*, Regional Research Institute, West Virginia University, http://www.rri.wvu.edu/WebBook/Norton/nortonupdate/neoflows1.htm, 4-16-04

36. Edward M. Bergman and Edward J. Feser, *Industrial and Regional Clusters: Concepts and Comparative Applications,* http://www.rri.wvu.edu/WebBook/Bergman-Feser/chapter2.htm#2.4.5, 4-16-04.

37. Roger Hayter, Dynamics of Industrial Location, http://www.sfu.ca/~hayter/Flespec.htm 4-16-04

38. Russell Hardin, *Distrust*, paper for the Russell Sage Foundation conference on Distrust, Bellagio, Italy, October 13-17, 1997.

39. Francesco Garibaldo, *Networks and Nodes,* Bologna: Istitutio per il Lavoro, Working Paper 02.