Creating Success:

A Comparative Analysis of Regional Development Structure
In Valencia and Toscana

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Introduction

Much of Europe's economy has traditionally been dependent on small and medium sized enterprises.[1] While several of these enterprises are traditional, family-run industries that lack the sophisticated tools to be competitive in an increasingly global market, many of these firms thrive. Despite market failures such as a lack of funding for research and development, international marketing, employee training, and other services, many of these small firms continue to compete effectively. Yet this success is not uniform, and the ability of Small and Medium-sized Enterprises (SMEs) to weather increased competition from firms across the world varies.

Given the high level of importance of SMEs for the European economy, government influence is necessary to rectify market failure. The challenge is therefore for governments (be they EU, national, or subnational entities) to intervene in the market to foster new innovations. The first generation regional development policy in EU states focused on strictly a supply-side mentality to innovation failures, largely ignoring the social and institutional context of innovation. Thus, policies came to be more about building "cathedral[s] in the desert" than building lasting and feasible solutions (Morgan, 1997:104). A more recent aspect of development policy has been the formation of regional development agencies. These agencies were created in many different regions of the EU, with varying levels of success, and the structures of these agencies differs significantly.

In this paper, we attempt to discover if the structure of the regional development agency has an impact on its effectiveness in terms of solving the market failures for smaller and medium sized firms. In this paper we will argue that a centralized regional networking agency is necessary for successful regional development policy.

Literature Review

For many years, economic development debates focused on strictly Neoliberal or Keynesian approaches. Yet recently, the debate is less about these extremes and more about finding a "Third Way" to development. Adopting a more socioeconomic approach, Putnam (1993) argues that social capital, or dense ties amongst actors in a community, influence economic success. Scaling up these relationships, associationalism examines the networks that exist between economic actors not just in civil society but also between government and business actors. Amin and Thrift (1995), Morgan (1997), Bertini and Baldoni (1999) and others argue that "networks of intermediate institutions in between market and state" allow for more democratic development. An amalgamation of sociology, economics, politics, and organizational theory, associationalists argue that networks are composed of nodes, which presume linkages across governmental, business, and social actors. These networks, which are composed of densely linked nodes, foster trust, information transfer and norms of reciprocity that aid in reducing transactions costs and in deepening bargaining power (Amin and Thrift, 1995: 61; Morgan, 1997: 497).[2]

While these authors note the importance of networks that link actors, Richard Locke (1995) argues that the structure to these networks bears important relevance to the consequent economic success or failure. Three structures of relationships exist: hierarchical, polarized, and polycentric (Locke, 1995: 27).[3] The hierarchical and polarized models both contain some element of vertical linkages or opposing camps, making cooperative development difficult. Instead, Locke determines that a polycentric network, where dense horizontal linkages exist between the government, interest groups, and businesses, offers the best context for economic success because of the frequency of communication amongst actors.

These works lay the foundation for a "potentially significant research agenda with respect to the interactive model of innovation and the role of institutions and social conventions in economic development" (Morgan, 1997: 591). While Locke offers an argument more in terms of how regional economies are already structured, we choose to apply this analysis to the idea of network modification through the public policy actions of a regional development agency. Since the 1960s, regional development agencies have been established in many areas. Theoretically, much has been written on the policy roles of these entities. Reid (1999) among others argue that regional development agencies should act as incubators of local enterprises, offering a host of services to ensure that small firms thrive. Wren and Story (2002) go further and talk about providing education, worker retraining, research and development, and consulting services or "soft business practices" that are integral for SME survival given that small firms are not well-suited to providing these services alone due to financial constraints.[4] Yet, while much has been written on the focus that a regional development agency should have and the type of policy instruments that are most effective[5], little exists in the literature about agency structure.[6]

To summarize, we have two basic points of theoretical departure. Starting with Locke's theory of polycentric networks, we argue that these networks alone are not enough to automatically guarantee regional development policy success. Instead, we postulate that the under explored area of regional development agency structure may implicate these outcomes. In this paper we will argue that outcome of regional development policy depends instead on the structure of the regional development agency, where an RDA that is able to function as a "brain" to channel information will demonstrate the most success.

Main Argument

Not all small firms are able to weather increased competition and rectify market failures. More interestingly, even in two areas replete with polycentric networks (the antecedent variable), these market failures are not equally addressed. The structure of the regional development agency (independent variable) is integral in determining successful regional development policy (dependent variable). We will now give a more detailed breakdown of this approach, giving the indicators of each variable.

Antecedent Variable

Locke defines a polycentric system as being characterized by a "dense network of encompassing and open associations and interest groups that are linked to one another through many horizontal ties" (Locke 1998). A polycentric system of relations is present in both polities, based on primary and secondary information.

Independent Variable

To address the question of structure, we dichotomize the independent variable, the structure of the regional development agencies, into two categories: a regionalized model or a diffused one. In the regionalized model, the regional government creates a centralized agency that coordinates the research and development efforts in the region. In a diffused model there exists a web of development agencies that all work independently.

Dependent Variable

Although the success of an RDA is a somewhat ambiguous term, we define it through the ability of the small and medium sized enterprises in the area to foster innovation and the survivability of small firms in the region. Both of these policy arenas are a major focus of regional development agencies as they phrase success in the venue of long-term sustainability: high innovation allows for competitiveness, and SME survival demonstrates that new businesses are effectively able to operate. While the amount of innovation fostered in SMEs in these regions is difficult to quantify, we chose to utilize the IMPIVA criteria in qualitatively measuring innovation in firms including: the amount of new technologies applied, amount of investment in new technologies, environmental friendliness and the degree of internationalization of the firm.[7] However, given time constraints we will generally rely on interviews and other secondary resources to determine these factors. Our second indicator, the survivability rate of SMEs, is far clearer to measure, and these numbers are found in data from each regional polity. This rate provides a clear numerical result that can easily be measured. Thus, policy success is here defined through innovation and SME survival.

Thus, we argue that regional development agencies with a regional authority will be most effective in promoting innovation. This central authority directing policy in the area encourages communication between all members of the network. The resources of the agency are more likely to be used efficiently, and the programs and services the program provides are more likely to fill needs for smaller firms. On the other hand, the diffused model provides a patchwork of confusion where resources are duplicated, and new businesses are unable to access the appropriate services because coordination does not exist.

Methods

In this study, we utilize a cross-sectional method of difference comparison of two sub national regions in Spain and Italy from the 1980's through the present. Both economically and politically, Valencia and Tuscany share several traits. As part of the Mediterranean Growth arc[8], experiencing fairly strong growth over the last decade. Both regions have strong traditional sectors organized into clusters[9] with several SMEs, a growing high tech market, [10] and had fairly mild experiences with deindustrialization[11] but receive Object 2 funding from the European

Union. The two regions both have strong service sectors based largely on tourism, which is a large driver of their regional economies. [12] Tuscany and Valencia are facing the shared problem of asymmetric development. In both cases there are highly developed areas, mainly located around key urban center, while the periphery remains underdeveloped.[13]

Politically the regions also share many similarities. While moving towards a more federalist structure, neither Spain nor Italy granted these regions the full autonomy one would see in a fully federal state. The Socialist tradition in Valencia and Communist tradition in Tuscany help to control for various differences in policy approaches. [14] Further, both regions share a polycentric network of actors where linkages that foster trust are well-established. This will be examined in further detail in the argument section. Thus, the similarities between both regions allow for us to control for many factors in this comparison.

The Case Studies

Given the extent of the similarities of these regions, it is interesting that the results of their industrial policy remain so different. In this section, we will explore the respective development stories of Valencia and Toscana.

Valencia

Valencia's economy is composed of several different sectors. Sixty-four percent of the region's GDP is accounted for by the service sector, while construction makes up 9%, and the once thriving agricultural sector comprises only 3%. The remaining 24% of the region's GDP is from the industrial sector (Domenech-Lopez, 2002). The industrial sector is largely dependent on SMEs, as they comprise 97% of the region's firms (Montero, 2002, p.190) Large, multinational industries are largely nonexistent within the region, with the exception of Ford motors (Martinez, 2002).

Valencia's economy also has a dense polycentric network. This network is characterized by close ties between industry, government, and all other actors, as well as a high degree of trust that has allowed for experimental industrial policy (Montero, 2002, p.192). These networks are often rooted in strong traditional clusters of industry in areas such as textiles, footwear, and toys.

Much of the SME success can be attributed to IMPIVA, the Instituto de la Mediana y Pequeña Industria Valenciana (The Valencian Institute of Small and Medium Sized Industries). IMPIVA's formation happened in the context of a radical change in the governance structure of Spain. Following the Franco era, the calls for regional autonomy made by the Basque region and Catalonia opened the door for regional governments to assume a greater role in the development of local industry. Valencia assumed a substantial degree of autonomy in the early 1980's, as well as a substantial increase in budget.[15] Given their new responsibilities regarding the successes and failures of local industry, the regional government of Valencia, in conjunction with many of the business associations in the region, created the private entity IMPIVA[16] in 1984 in an attempt to revitalize the stagnant industrial clusters and restructure the state-run, vertically-integrated industries. IMPIVA was created with the goal of increasing regional economic competitiveness by harnessing the power of innovation, technology transfer, and business-to-business cooperation.

IMPIVA's role and contribution to SME viability has varied over time. During the initial phase of 1984-95, IMPIVA was successful in establishing SME-critical infrastructure such as technology institutes for sixteen industrial clusters, as well as business innovation centers (BICs). Once these improvements were made, IMPIVA's role continued as a communication center, a source of technical training, and as a provider of funding. The second phase of IMPIVA's lifecycle began with the 1995 election of a more conservative government. The agency experienced significant budgetary cuts, which have diminished its effectiveness. IMPIVA remains an important hub in the network of Valencia, but its ability to implement new programs and ideas has been limited.

When looking at regional development in Valencia, IMPIVA acts as the central coordinator to the network (Apendix A.1.a). IMPIVA receives the funds for development of the region, and distributes them to the other actors, creating a clear channel for development funds.[17] In terms of communication, IMPIVA is again a central entity as it works with the regional, national, and EU governments, as well as the SMEs through business associations and other channels, creating a bridge between governmental and non-governmental actors. Furthermore, IMPIVA's relationship with the tech institutes, which interact directly with the SMEs, gives it a concrete understanding of challenges facing all the SMEs of the region. Thus, IMPIVA plays a central role in development through both improving communication and providing funding.

IMPIVA's effectiveness in terms of fostering innovation has been clear. SMEs have clearly been more successful in innovating over the past two decades since IMPIVA's creation.[18] A substantial number of firms make use of the technology institutes and business innovation centers, as well as the training available through IMPIVA.[19] These facilities have helped to make research and development easier for SMEs, as well as improve its quality. These improvements have helped Valencia's industry become a more important player globally.

In terms of assisting start-up SMEs, IMPIVA has again been greatly successful. Instituto Valenciano de la Exportación (IVEX), the regional BIC, reports that a far greater percentage of SMEs that utilize their advice and programs survive than the SMEs that neglect to use their facilities, an indication that the BICs have been successful in helping to make start-up SMEs more viable.[20] The training and technology made readily available through IMPIVA's other facilities also help firms with relatively few resources become instant competitors.

The fact that IMPIVA has served as a central networking authority has made it immensely more effective in accomplishing its goals. Because the region's SME support infrastructure is so clearly run through IMPIVA, SMEs have little difficulty getting needed assistance. IMPIVA provides all the services available to SMEs, meaning there is little confusion in locating the necessary assistance. The regional government can easily provided needed subsidies through IMPIVA, rather than channeling the money through several different agencies. Essentially, IMPIVA is the understood center of the SME economy of Valencia, a fact that has made providing assistance to the region's SMEs far easier.

Toscana

Known for its history, wine, culture, and clothing, Toscana (or Tuscany) sits in the very heart of Italy in the dynamic Mediterranean growth region. A classic example of the "Third Italy," Toscana has a growing economy based largely in traditional sectors and a thriving tourism industry. Textiles, fashion, leather, marble and agriculture make up the key components of Toscana's traditional industries. Highly localized, these industries often function through industrial districts. Rather than having a few large firms, these districts are characterized by large networks of SMEs (see Appendix A.1b). [21] A vast majority of firms in this region are family owned SMEs.[22] Other sectors to consider include the growing high tech sector[23] and the so called "second engine" of economic growth.[24]

Like many other regions in Europe, dense networks of traditional industries exist in the regions that are composed of SMEs in highly defined clusters. Many of these businesses are family owned enterprises. Cited as "the strong entrepreneurial nature" of the Tuscan people, these firms are more than just business. They represent the history of a family as well as the ability for an individual to realize success (Trigalia 2002). The current system of industrial districts only reinforces their position within an economy. More than money these SMEs seek "soft" governmental support or so called "common goods" which can help them cope with market failures (Wren and Story 2002).

Also key to understanding Toscana, is understanding the dense polycentric network which exists there. In Putnam's work on social capital in Italy, the dense associations found in Toscana are a prime example in his study. Yet in some senses "trying to map associationalism in Toscana is like trying to map a chicken walking around a barnyard."(Bellinni, 2002). The associationalism in Toscana can be best explained as a dense network of ties between individuals, firms and strong ties to local government. These ties exist on a very decentralized plane, and as a result attempting to "map" such a relationship becomes exponentially more difficult as the number of actors increases with every step. A combination of this strong polycentric assocaitionalism and the strong SME economy acts an important background as we begin to look at the independent variable in the region.

When Italy began the process of decentralization in the 1970's, newly formed regional governments were given the capacity to direct regional development schemes. Throughout Italy a variety of different approaches were taken. Toscana began placing specialized agencies on a more local and sector level, working within the preexisting network of localized authorities and strong sectoral ties.[25] By structuring their approach in such a way, the region built upon the traditional local associations rather than replacing it with an overarching development agency. As time progressed, the region and its regional policy evolved. In 1987, Regione Toscana established tech parks by the universities in Pisa, Sienna, and Firenze, the regional government hoped to encourage spin-off industries, develop a technopol network and foster a relationship between the traditionally research based institutions and industry. These tech parks have only proven successful in the first case, [26] while failing to establish an effective network.[27]

Today the regional government has three distinctly regional bodies. IRPET, APET, and FIDI Toscana. Each agency is highly specialized in its function. IRPET (Istituto Regionale per la Programmazione Economica della Toscana) or the Regional Institute for the Economic Programming of the Tuscany was founded in the 1970's. IRPET exists as an advisory board for the regional government specializing in data analysis. APET (Agenzia di Promozione Economica) or Agency for Economic Promotion acts as a marketing firm for the region, especially in international marketing of SMEs. FIDI is a financial institution specializing in financing SME programs. It is important to note that each agency looks at a specific area of development- statistics, marketing, and funding, while there is not a single organization directly coordinating the three.[28] There also exists a highly complex network of agencies at the sub-regional level. The regional government founded most of these agencies. This creates a confusing and complex interaction of regional agencies and local agencies. As a result SMEs often believe that the cost of seeking assistance outweighs the perceived benefit.[29] The methodology used by Toscana placed the "common goods" very close to the actors but the extremely diffused nature has limited policy effectiveness.

When looking at the indicators of innovation and SME survival rate, we find Toscana falling short. Reports and statistics all indicate that SMEs in Toscana are not attempting to evolve. Firms specializing in many of the traditional sectors have not changed production methods or incorporated new technology into their production method. This lack of "innovation" can be explained by the lack of a centralized regional direction. While individual clusters are densely networked, there is less communication between clusters and almost no communication between universities and high tech groups and the SMEs. As in the case of fostering innovation, agencies have been ineffective in supporting start-up SMEs. The survivalability rate of SMEs was at 50%. Furthermore the number of SMEs that are 10-20 years old represent 80% of all regional SMEs. This indicates that the creation of new SMEs is insignificant (Gravina, 2002) .

In conclusion, the method or structure used by Toscana in order to foster regional development has not been effective. When analyzing the ability of Toscana to create an effective regional development policy, we find that "Toscana will not have a cohesive regional development scheme, because the regional government has no way of involving or overseeing all of the actors involved." (Bellini 2002). The decentralized approach attempted to use preexisting polycentric associational ties, but failed in not organizing this highly complex system.

Discussion

Despite strong similarities between the regions of Valencia and Toscana, the former has created a cohesive and sustainable regional development policy, while the latter has been unsuccessful at that endeavor. IMPIVA serves as a coordinating agency for the many development efforts that work within the network. In Toscana, the complex network composed of IRPET, APET, FIDI Toscana, and a host of other actors lacks coordination, succumbing to the danger of multi-agency competition, service duplication and wasted resources (Roberts and Lloyd, 2000: 75). While both regions share a history of polycentric associationalism and industrial clusters, these are clearly insufficient for regional development policy success. Therefore, it appears that the structure of the regional development agencies in each of the regions has played a significant role in their success or failure. The existence of a regionally centralized agency, IMPIVA, has been the secret to Valencia's success, whereas decentralized, uncoordinated regional development agencies have precipitated Tuscany's unsustainable future. Thus, it seems that the existence of a "brain center" in the form of an RDA is necessary for effective coordination and communication, and ultimately regional policy success.

Other Cases

While a coordinated network is necessary, there is a danger of over centralization, which harms cross-sectoral and multi-level partnerships (Syrett and Silva, 2001: 180). The experience of Lorraine, a region in the northeast of France, presents the other extreme in regional development strategy, characterized by a highly centralized, "top-down" approach. Unlike Valencia and Tuscany, the main task in the development of Lorraine in the 1980s was that of industrial reconversion. The French national development agency, DATAR, used over 15 million francs to facilitate the deconstruction of this old steel and coal-mining region. While this endeavor was successful at rapidly dismantling the dying industries,[30] it did little to ensure a sustainable and effective regional development policy.

Without an integrated approach led by the region, Lorraine's development strategy was largely decided in Paris, affording little flexibility to regional actors. The Lorraine Regional Council lacks flexibility in the distribution of state and EU funding due to a history of centralized French policies, where it's simply assumed that "the state will take care of it,"[31] as well as the fact that the regions did not become viable political actors until 1982 (Petiteville 1999:183). Unfortunately, regional actors cannot play a major role in coordinating policy when they are, as Petiteville describes "one link in a chain of negotiations, which includes many other levels of national government" (Petiteville 1999:191)[32]. Moreover, despite an effort to create localized centers of regional development, through DATAR's "concerted regional development programmes,"[33] the program failed, as Drevet notes, "instead of inuring them to rigidities of the central administration, it should have allowed them to confirm their priorities and carry out any necessary redeployment" (Drevet 1996:201).

The result of a centralized policy is that the region was unable to develop a network to provide the basis for the development of small and medium sized firms. As Rimbert and Trapet note, "The region is handicapped by its weak network of small and medium-sized businesses and remains dependent on the strategic decisions of major industrial groups" (R & T 1997). While many multinational corporations are attracted to the region due to its strategic geographic location bordering Germany, Belgium, and Luxembourg, the region has not been successful in retaining these corporations. "The regional council admits that 'having acquired many production units but few decision-making centers, Lorraine is more exposed to relocation risks and to strategies decided elsewhere in the context of globalisation'" (R & T 1997). Unlike IMPIVA, which disseminates information to the firms in Valencia, SMEs in Lorraine are uncoordinated and are left to fend for themselves[34]. The result is that, as Rimbert and Trapet write, "the products involved are generally of low quality and rapidly obsolescent. At the end of their useful life they are generally not replaced, since there are no local development centers to anticipate market trends" (R & T 1997).

Our findings suggest that Lorraine, like Tuscany, lacked a regionally centralized coordinating agency to facilitate successful regional development policy. Of course, it should be noted that Lorraine did not have pre-existing polycentric associationalism; rather, it fell under Locke's category of a polarized network. Nonetheless, the case of Lorraine illustrates that, with or without polycentric associationalism, a "brain center" located too far from the economic activity of the region cannot successfully facilitate a coordinated and successful strategy.

Further Research

The problems being tackled by RDAs "have been several decades, if not centuries in the making" (Hughes, 1998: 526). Tracing the evolution of RDAs given their relative newness will be important. Thus, further research continues to be necessary. Applying this research to other contexts would also be interesting. For instance, the United Kingdom faced a similar problem with network complexity in 1989 where the system was described as "a patchwork quilt of complexity and idiosyncrasy…baffling to business and industry alike" (Coulson, 1999: 269).

Moreoever, the Tuscany case shows us that establishing a centralized information channel is difficult when there are many small and active network nodes (Roberts and Lloyd, 2000: 77). While we explored the link between policy effectiveness and the structure of the Regional Development Agency, the nature of polycentric links and the RDA structure demands further exploration. Does the type of polycentric network impact the RDA structure? Could a strong polycentric network inhibit the creation of a development agency that coordinates the many actors? Network coordination is difficult with strong pre-existing networks (Roberts and Lloyd, 2000). Not all polycentric associations are created equal. While these areas were left unexplored in this paper, all are areas for further research.

Given the time constraints and resource limitations, there are a few issues that our study fails to address in terms of economics, politics and culture. While both Valencia and Tuscany have similar economic structures, a historically strong GDP in Tuscany may decrease the urgency for real systemic change. Tuscany will always have a safety net with its strong "second engine" of tourism based on its cultural history, the same does not exist in Valencia. Unemployment rates might also fall into this area where Spain has a history of unemployment problems, possibly driving the necessity for an effective regional development policy. Further, differences in the strength of cultural identity might also play a role. In Valencia, regional identity has historically been very strong, whereas this does not exist in Tuscany. Some work has started to address questions that fall beyond the importance of polycentric networks. Montero (2002) argues that politics played a vital role in policy outcomes. This needs further explanation in our research.

Conclusion

Exploring Tuscany and Valencia allows us to gain several important insights into the structure of Regional Development Agencies in terms of how they impact regional policy effectiveness. Strong polycentric networks are not enough to compensate for the market failure of SMEs. Rather, it is the structure of the regional development agency that appears to make a difference in the success or failure of regional development policy. A development agency that acts as a channel of information within the network is more successful than a structure filled with a myriad of confusion. Our argument serves to show that more of a centralized authority is needed, yet it is important to remember that structural flexibility is important to cope with changing conditions, making it impossible for a one-size-fits-all solution (Roberts and Lloyd, 2000: 79). A key test of the viability and flexibility of regional development agencies will lie in 2007 when EU structural funds are significantly reduced (Syrett and Silva, 2001: 188). While this research provides only tentative conclusions and further research is necessary, we can begin to look beyond polycentric networks as the panacea to development, and start looking at factors like agency structure.

Notes

[1] Given the strict competition and antitrust policies of the European Union, the legacy of family firms, and other factors, the formation of large firms has been rare in EU member nations. Hence, in most countries of the EU, smaller and medium sized firms are responsible for the majority of technological advances and other innovations that take place.
[2] See Evans, 1997 and Ostrom, 1997 for similar arguments on synergy and co-production
[3] See Locke, 1995 for a much more detailed explanation of his models.
[4] Roberts and Lloyd, 2000; Hughes, 1998 also offer arguments about the policies development agencies should utilize
[5].Although there is a general consensus that a "bottom-up" approach should be utilized as opposed to a "top-down" one (Hughes, 1998).
[6] Haiker, Danson, and Damborg produced a book in 1999 on regional development agencies in Europe that we were unable to obtain for this project. Reading this work might provide more of a context and background for our study.
[7] Rafael Escamilla Dominguez; Area of Marketing and Development, Responsible for External Relations; May 17, 2002; Valencia, Spain.
[8] The Mediterranean Growth Arc is the highly dynamic area along the Mediterranean specifically located in southern Spain through central Italy.
[9] <u>Valencia</u>: ceramics, textiles, footwear, furniture, agriculture, toys /<u>Tuscany</u>: clothing, textiles, marble, furniture
[10] High Tech development in Valencia and Tuscany vary in the degree of development. The highly developed Aero-space industry around Pisa is one of the leading centers in Europe. The newly emerging optic centers in Valencia are just beginning to find their place in the international market. Nonetheless, both economies are seeing an emerging sector in a variety of high tech areas.
[11] Both Valencia and Tuscany continued to rely on their traditional sectors in order to weather the challenges of deindustrialization. The steel industry plays an important role in the modern history of Valencia than it has in Tuscany.
[12] The especially prosperous province of Alicante in Valencia shows the impact of tourism. Alicante has its own airport and a highly developed infrastructure resulting from the high level of tourism. In the Tuscany region, the so-called "second-engine" of growth has played a huge role in bringing in capital. It is important to add that the "second –engine" is not limited to tourism. The cultural heritage of the region and related markets represent an important part of this "engine."
[13] This development problem is important to the study, because we are looking at the role/ structure RDAs. Since both have the shared challenge of equalizing the region, the RDAs would have to take this into consideration.
[14] This also plays a role on the national level, both Spain and Italy had fairly progressive leftist coalitions in government until the late 1990's where there was a shift to more conservative parties. Since the national governments play such a key role in resource allocation, it can be argued that both regions would have benefited by having a "like-minded" national government.
[15] At the end of the Franco era, the amount of the national budget allocated to regional governments for spending increased significantly. With that increase also came a shift in responsibility for regional industrial development from the central government to the regions. – Montero, 2002, pp.51-59
[16] Despite its status as a private entity, IMPIVA is accountable to the regional government and the EU,
[17]IMPIVA receives the majority of its funding from the regional government of Valencia and the EU, and then allocates these funds to its different structures, such as the technology institutes and the business innovation centers.
[18] Numerous interviews, including IMPIVA, IVEX and AIJU
[19] In 1994, there were 2,852; by 2001, there were 6,111 – from interview at IMPIVA
[20] Firms working with CEEI, a BIC in Valencia, succeed at a rate close to 85%, while other firms fail at a rate close to 50%. From interview with Ismael Abel, 2002
[21] These districts can be characterized by the textile industry and fashion industry. Larger luxury firms, like Armani and Prada, provide a strong driving force in the industry, while SMEs in the district act as the suppliers, creating a strong link between the two entities.
[22] Regional government statistics show that SMEs play a leading role in all of the major traditional industries, this is reported in the IRPET 2002 Economic Profile for the Region of Toscana (www.irpet.it).
[23] Growing out of Toscana's strong university system, an emerging high tech industry is taking a more dominant role in the economy. The aerospace, laser and information technology sectors are leaders in their respective fields.

[24] The "second engine" (Trigilia 2002) is more than just tourism, basically the Toscana region holds a special cultural value. This cultural value coupled with a thriving service sector creates another important engine of growth.
[25]"The Italian regions are relatively weak entities whose importance has been limited from above by the influence of the national parties and central government, and from below by the deeply-rooted tradition of local government." (Michel 212)
[26] . Pisa can now claim one of the highest developed aerospace and laser centers in Europe.
Sr. Gravina described these three technopols as the "walled cities," an excellent description of their isolation from one another. The universities were never given enough of an incentive, nor the support to shift their focus from abstract research to finding practical applications in industry. In more recent years, the regional government and the European Union have attempted to create a more cohesive network between both the individual university clusters. Some efforts between CPR and a newly developed tech transfer program in Sienna, Etruina, has developed through a new network of tech agencies called RECITAL (Relay Center for Central Italy). RECITAL is program funded by the EU. When trying to address the "tech transfer" problem, Regione Toscana established Rete Regionale Alta Technologia (RRAT) or Regional High Tech Network in 1994. The initiative departed from traditional programs by attempting to centralize efforts in this area, however the program was discontinued after five years in existence (Bellini 2002). [27]
[28] APET in particular has been receiving criticism because it duplicates the efforts of other agencies. A prime example is Promo Firenze. As a branch of the Firnze Chamber of Commerce, this agency assists SMEs with international marketing, the same service provided by APET. Interestingly enough, the local agency does not support the same banking structure as the regional agencies do. This was made clear in an interview with Promo Firenze employee who explained that sometimes SMEs come to Promo Firenze and other times they go to APET. The agencies will work together, but use different banks and different procedures (Sportolaro 2002).
[29] This has been examined in part by Wren and Story in their work looking at the success of soft business support on SMEs.
[30] "In less than ten years 95% of the old steel plants were liquidated" (Rimbert and Trapet 1997).
[31] According to Mr. Ferrari, Vice President of the Lorraine Regional Council, "French regions have little flexibility in the distribution of funds from the state and E.U." (Ferrari 2002).
[32] "Far from engaging in a dialogue with the European Commission without interference in the management of Community funding from the Structural Funds, the French subnational elected authorities form only one link in a chain of negotiations, which includes many other levels of national government." (Petiteville1999: 191).
[33] Developed in 1993 and known as PACTs, these programs were supposed to give greater autonomy to the regions in their development strategies. According to Christophe Lafoux of DATAR, these programs began again in 2000 and will be re-evaluated in 2003.
[34] There is an agency known as Apeilor, established in 1966, that is regionally-based and combines actors from unions, business associations, the regional government, and DATAR. Unfortunately, according to Lafoux of DATAR, this agency is not involved in aiding SMEs or working with technological institutes. We attempted to contact Apeilor, but received only a brief e-mail response that said "We do not talk to the public." It seems that Apeilor does little to facilitate communication channels.

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