
Exploring the Role of Non-Profit Organizations and Civil Society in Achieving Regional Economic Growth: Four Regional Economic Development Initiatives in the Knowledge and Services Economy

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Abstract

Regional development theory touches on the role that government and private enterprise play in attaining and sustaining growth and the needed linkages among these actors. Porter, in his cluster theory, highlights the need of linkages to labor and service providers that are often non-governmental organizations. However, economic-development theory does not amply address the potential role that civil-society mobilization and non-governmental efforts that incorporate broad participation can play in generating jobs and export capacity and in attaining equitable growth.

This paper looks at four different regional development initiatives that have followed a knowledge-intensive path to development: two in which organized civil society and broad-based organizations, that combine representation from diverse sectors, have played a leading role and two in which they have not been actively present. This comparative study seeks to answer the following questions through qualitative analysis: How instrumental have been organized civil society and broad-based organizations in a region's capacity to generate jobs, to export local goods, knowledge and services, and to attain equitable growth? Are the outcomes of regional development initiatives in which they are actively present significantly different from where they are not? What lessons can be drawn from these experiences that could inform regional development policy?

Regions in which non-governmental organizations take on a catalytic role as economic development intermediaries, and in which means for effective participation are provided, are expected to be more successful at attaining equitable growth and high levels of quality of life than those that do not. This would improve their capacity to attract and retain the talent which is crucial for their knowledge-dependent economic-development strategies. [Keywords: economic development, regional development intermediaries, non-profit sector]

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1 Introduction

Regional development theory touches on the role that government and private enterprise play in attaining and sustaining growth and the needed linkages among these actors. Consequently, regional economic development strategies often deal with the enabling relationship and support structures that ought to exist for those connections to materialize. Furthermore, many regions provide the private enterprise with means to voice their perspective on market trends and/or the needs of industry sectors.

Porter (1995), in his cluster theory, highlights that for an industry cluster to develop there is a need to link enterprises to labor and service providers that are often non-governmental organizations. However, economic-development theory does not amply address the potential role that civil-society mobilization and non-governmental efforts that incorporate broad participation can play in generating jobs and export capacity and in attaining equitable growth. Yet several regions over the last few decades have been moving towards greater means for participation within their economic development organizations and decision making processes.

Among those experimenting with various organizational models for regional development is Puerto Rico, an island under the USA flag with a longstanding industrial tradition. Historically, its economy has been dependent on non-local investment of firms seeking highly qualified labor and a favorable financial and tax environment. Manufacturing in sectors such as pharmaceuticals and medical devices, were among the strong areas of Puerto Rico. However, the environment changed drastically with the elimination of Section 936 of the IRS Code in 1996, forcing Puerto Rico to compete globally on something other than those tax cuts. Since then, Puerto Rico has taken advantage of the skills, knowledge, innovation capacity and infrastructure developed during the Section 936 years. It adopted a Science-and-Technology Policy, thus choosing a high-skill-dependent development path.

On 1999 the Puerto Rico Department of Economic Development and Commerce (DDEC for its Spanish acronym) started to implement this policy with the establishment of a Techno-Economic Corridor (PRTEC) in the Western Region of the Island. PRTEC is a not-for-profit government spin-off that followed a top-down, centralized organizational model at its inception. While the PRTEC coverage area includes 17 municipalities, it was run mainly as a central government initiative and leadership was appointed top-down as well. Since then other regional high-tech initiatives, with a different origin and

organizational model, have spurred throughout Puerto Rico. One of these was the East Central Technological Initiative (INTECO, for its Spanish acronym). INTECO was established in a bottom-up exercise of regional leaders in government, academia, and industry who were willing to collectively gather, share membership in a development organization, and invest in seeking a path to development for their region, that is driven by innovation, technological development and commercialization (ITDC). Among the various initiatives, this non-profit, broad-based organization seeking to generate socio-economic development through the promotion of sciences and research is accredited with achieving the greatest success in creating jobs and boosting its economy. Even during the recession, this region has been recognized as one of the most desirable places to live and do business within Puerto Rico, due to the supports provided for individuals, such as affordable housing, good schools, services and safety, and for business, which include availability of incubation services and production space, supply chain brokerage services, prototyping labs, the creation of technical schools and university programs to prepare future labor, among others.

Among the characteristics that make INTECO stand out are the vision and leadership exerted by two individuals (Mayor William Miranda Marin and Jose Mendez, President of a private university system). Their innovative approach to action, their ability to engage large numbers of followers, and their commitment to participation and democratic governance are believed to have played an important part in the initiative's success. They instilled in the organization the structure and capacity to meet its goals outside bureaucratic government structures by providing a balanced broad-based membership model, with representation from all sectors, including participation means for society at large.

Other regions as well as smaller development consortia are making a conscious effort to emulate the INTECO model without a systematic assessment of its appropriateness, and success for their specific local context. Only PRTEC and INTECO are over ten years old, providing sufficient time to properly evaluate their performance. In order to evaluate the impact of this organizational and participation model, the paper draws from the experience of regions in Puerto Rico, the Continental United States and Asia, as this would also allow assessing the role that non-profit organizations and organized civil society can play in regional socio-economic success.

This paper looks at four different regional development initiatives that have followed a knowledge-intensive path to development. In two

of these, organized civil society and broad-based organizations, that combine representation from diverse sectors, have played a leading role, INTECO being one of them. In another two, these elements have not been actively present, including PRTEC.

This comparative study seeks to address through qualitative analysis and key informant interviews the role of organized civil society and broad-based organizations in a region's economic performance; and to identify lessons from the analysed cases for regional development policy.?

2 Justification and Objectives

Through history, regions around the world have tried a variety of economic development paths within a just as varied set of organizational models. Ones have been more successful than others. Within the successful ones that have followed a knowledge-intensive development path, many have chosen strategies that target specific industry sectors or clusters that they identify as their edge, both in terms of skill and support infrastructure availability, as well as firm presence and linkages among actors.

This paper looks at four regional development initiatives that based on these factors have followed a knowledge-intensive path to development focusing on sectors or clusters that demand high levels of skill as well as innovation support infrastructure. Their ability to compete lays on their capacity to attract and retain talent and the roles that organizations (government, private for profit and not for profit) play in the equation.

In two of these regions the organized participation of civil society and broad-based, non-profit organizations seem to have played a leading role: INTECO-Puerto Rico and Silicon Slopes-Envision Utah-Economic Development Corporation. In the other two they have not been actively present: PRTEC-Puerto Rico and Economic Development Board-Singapore.

While both located in the island of Puerto Rico, the differences in the origin, organizational model and proneness to participations of the PRTEC and INTECO cases have been described. Singapore is similar to Puerto Rico in its island character and for decades emulated the Puerto Rico industrial policy model with undeniable success. This island-city state is currently known for the skills of its people and the infrastructure that effectively supports innovation. Its Economic Development Board (EDB) has played the leading role in developing the island's economy, as well as in creating wealth and jobs for the citizens. This EDB is Singapore's primary government agency for planning and executing

economic development strategies. Much like the PRTEC initiative, it handles economic development as a highly centralized activity with limited representation from non-governmental actors.

The Greater Salt Lake City Region has quickly become known as the Silicon Slopes of the United States. While the region also has an Economic Development Corporation, it has multi-sector representation. In addition, the region's government promotes community empowerment and participatory decision making. The EDC's Envision Utah initiative, which has facilitated participatory decision making since its inception, has become a model for regional planning across the United States, particularly for those with growth restrictions. While not an island, the Greater Salt Lake City Region's capacity to physically grow is highly limited by its geography.

Based in the experiences of these regions and their organizational structures, this paper seeks to answer the following questions:

- How instrumental have been organized civil society and broad-base, non-profit organizations in a region's capacity to generate jobs, to export local goods, knowledge and services, and to attain equitable growth?
- Are the outcomes of regional development initiatives in which they are actively present significantly different from where they are not?
- What lessons can be drawn from these experiences that could inform regional development initiatives with similar context, such as the ones spurring up throughout Puerto Rico?

3 Theoretical and Conceptual Framework

Most literature on regional economic development touches on the role that government and private enterprises play in attaining and sustaining growth. Certainly, firms are critical agents in the economic development process. They create goods and services that are bought or sold locally and traded with firms in other regional economies, generating jobs, income, and fiscal base, among others. They are rent-seeking organisms and locate, at least partially, according to a region's cost of living as well as cost and ease of doing business. The institutional environment that a region is able to offer reliably and sustainably affects those decision criteria.

Places with a better institutional environment exhibit a much higher level of labor productivity, and create a healthier, more fertile business ecosystem than places that are plagued with corruption, lack of transparency and trust-building institutions, red-tape, government

interference, and anti-business policy and processes. (Hall et al, 1999) Government is often the sole provider of infrastructure services that are much needed for conducting business, and achieving export scale and capacity. These include not only utilities, such as power, water, sewage, and waste disposal, but also the roads, airports, ports and rail infrastructure that logistics and transport providers use to connect a region's firms with each other as well as with national and global supply and value chains. The State is often the primary cost-of-living and ease-of-doing business setter with its power to regulate prices, create tax policy and incentive systems, and provide financing and access-to-capital mechanisms within regions.

However, at least within certain markets, as in the case of innovation- and knowledge-based sectors or products, access to adequate high-skill labor, quality support infrastructure, and distance to/from suppliers, markets and even competitors become more important than the simple costs equation. Several authors, such as Hirschman (1958) and Leontief (1986), focus on the needed linkages among these actors and how their presence and strength can affect a region's ability to produce jobs, generate income, and subsequent economic activity, among other, from investment in particular industry sectors. Linkages are at the centre of the so called trickling down or multiplier effect of investment.

Porter (1995) argues that the ability of a firm to properly manage the linkages among its value chain provides its competitive advantage. His cluster theory highlights the need of these linkages not only to the market and suppliers but also to labour, service providers, and other intermediaries that are often non-governmental organizations (NGOs).

However, economic development theory does not amply address the potential role that civil society mobilization and non-profit organizations that incorporate broad participation can play in generating jobs and export capacity and in attaining equitable growth. While the contribution to growth and development from those members of society who actively participate in the economy, producing goods and services, and increasing productivity has been established, little attention has been given to the role that organized society or groups of its members can play in setting regional futures.

Here, *organized civil society* is defined as individuals, institutions, other organizations, and/or aggregates of these which are independent from government and manifest the interests and will of the citizens of a society or members of a community. Since they are seldom directly related to government or private enterprise, they are often referred to as the third sector, which in the widest terms can even include family,

churches, academia, and volunteer-work organisms, among many others.

Putnam (1994) has argued that non-political organizations in civil society are needed for democracy as they build social capital, trust and common values (ethos), which help to hold society itself together, facilitating a shared understanding of the interconnectedness of society and the economic interests within it. Some have criticized the development of the third sector as a way to substitute the institutions of the welfare state that provide a service to society; while others see these organizations as a natural complement to the State function in a context of weakened governance and declining public sector resources.

Diversity in these organizations provides a better understanding of the interests and wants of the community being served. This has raised importance of counting on a wide spectrum of voices while respecting principles of representation of the society or community's make-up and interests.

Broad-based organizations (BBO) are among those institutions in a region that seek to balance participation and representation. They do so by recruiting member groups (not individuals) from specific organizations, such as churches, unions, school councils, academia, community associations, and civic groups. They often establish membership requirements, including legitimate appointments of leaders who, in fact, can represent the interests of the region, as well as financial commitments to fund their joint ventures or agendas.

Their existence and participation are useful assets in planning for regional economic development when they take on as items on their agenda topics such as industrial policy, job creation, skills development, among others. They become strategic partners when they develop the structure to institute programs to address these issues.

These groups, with or without formal organizational structures, can and often do take the role of economic development intermediaries. These intermediaries often assume a brokerage function bringing together seekers and providers of goods, services, information, capital, technology, labour, etc. The need for intermediation arises from the imperfect nature of markets, with regards to information, access, transparency, and stability, among other. They also act as a corrector of this imperfection by introducing new actors, processes, technology, capital, and other resources, as well as accountability mechanisms, public support or political pressure, among others, that the market would not otherwise produce on its own, at all or at the needed quantity, frequency, or speed. Consequently, forms of organized civil society and non-profit-organizations that behave as market intermediaries can

become catalysts of economic development by initiating or drastically transforming relationships and linkages, processes and outcomes for a region.

This paper focuses on two instances of this catalytic role. On the one hand, it looks at non-profit organizations that have taken on the role and functions of economic development government agencies in promotion, investment, direction setting and creation of a healthy institutional environment for all economic actors within a region. These organizations can take several forms that vary from being a government agency quasi-public spinoff with substantial state influence, to an independent broad-based organization with membership and interest representation from a wide variety of economic and non-economic sectors, including firms, labour, academia, and communities, among others. Their agendas also span from fostering particular economic activities to attaining specific social and economic standards for the region. On the other hand, the paper studies the effect that civil society's organization, mobilization, and participation can have on economic development to the degree that these groups or interests can affect decision-making and assist in the implementation of solutions to regional problems. This role can take advantage of participation platforms that government can provide, but could also be demanded or even created by citizens themselves.

4 Methodology

In order to answer the proposed research questions, four regions and their diverse actors, roles and organizational structure are compared and analyzed. The four regions are:

1. Singapore with its State-led Economic Development Board;
2. Greater Salt Lake City Region in Utah USA, with its Economic Development Corporation, and its Silicon Slopes and Envision Utah initiatives;
3. the Western Region of the Island of Puerto Rico USA, with its State-led PRTEC initiative; and
4. the East Central Region of the Island of Puerto Rico USA, with its broad-based INTECO initiative.

First, a profile of each region's economy was prepared. This included population, geographic extension, employment, industrial composition, target economic sectors or clusters, education, support infrastructure, income per capita, and GDP, among others. The main data sources were the Population and Economic Census in the case

of USA regions (INTECO, PRTEC, and Silicon Slopes) and several reports from the Economic Development Corporation of Utah and the Economic Development Board and Institute of Statistics of Singapore.

Secondly, the economic development strategies were characterized and an organizational profile for each was elaborated. The main data sources were historical documents (both printed and online depositories) of the organizations, including Vision/Strategy Plans, Progress Reports, and organizational chronicles, among others. In the case of Puerto Rico, the transcripts of telephone semi-structured key informant interviews with economic development organization leaders conducted at inception and throughout several points of implementation were also available. These profiles focused on the organizational model, its leadership, participation of actors in decisions and actions taken towards development. Particular attention is paid to changes in any of these factors and their importance over time.

Finally, the experiences depicted in these profiles were analyzed and compared in order to draw lessons learned and conclusions, as well as to identify policy implications.

5 Findings

While several associative relationships could be established from the experiences of these four regions, this section focuses on the effect of each region's economic development strategy and organizational model on regional performance. Lessons presented have been chosen from that lens.

Table 1 presents the economic profile of each region highlighting several key general characteristics of its territory, workforce, and economic structure. Table 2 characterizes the primary components of their regional economic development strategies. Table 3 shows what each region has identified as drivers for growth as it pertains to key industry sectors and support infrastructure that have become target for investment and promotion. Finally, Table 4 summarizes each regional initiative organizational model, its history, approach as well as means and effect of sector representation and participation.

5.1 Impact of Economic Development Strategies on Regional Performance

5.1.1 Human Capital Infrastructure Investment

As previously stated, all four regions have chosen a knowledge-intensive path to development. Consequently, their economic development strategies are human-capital dependent. They have

invested heavily on education and training infrastructure that spans from K-12 through technical and higher education.

The regions also exhibit similar educational profiles. As seen in Table 1, with the exception of the Greater Salt Lake City Region, all other regions have comparable proportions of individuals who have at least some level of higher education, between 61.9% and 69.3%.

The larger proportion of individuals with at least some college seen in the Salt Lake City Region (90.2%) could result, at least partially, from the cost of living and ease of doing business that the region is able to offer, thus increasing its capacity to attract and retain talent.

5.1.2 Competitive Cost and Quality of Living and Ease of Doing Business

Regions that implement mechanisms to reduce or manage costs of living and both costs and ease of doing business tend to do a better job at attracting and retaining talent and firms than those that do not address this issue. That is also the case for regions that offer high quality of life, as defined by access to quality and affordable housing, schooling, recreation, security, health, and employment, among others.

As seen in Table 2, the Economic Development Corporation of Utah has implemented aggressive measures to lower the costs of living and ease of doing business in the Greater Salt Lake City Region. They achieved this through competitive personal and corporate tax structures and by cutting transportation and logistics as well as energy costs, relative to competing regions on the USA West, for example. They also have invested in assuring that the region provides affordable housing options for all income levels. This has been beneficial both to firms and individuals and is evidenced in its rate of talent retention and attraction.

Table 1. General Regional Characteristics and Economic Profile

This table provides an at-a-glance summary of general characteristics and economic indicators for each region.

Region	Singapore	Utah - Greater Salt Lake City Region	Puerto Rico - Western Region	Puerto Rico - East Central Region
Geographic Extension (km²)	710	46,432	1,945	1,073
Population	5.2 million (2011)	1.7 million (2010)	580,834 (2010)	513,729 (2010)
Annual Population Growth Rate (%)	2.1% (2011)	1.73% (2010)	-0.05 (2010)	-0.01 (2010)
Income Per Capita	\$46,096 (2011)	\$23,471 (2010)	\$8,078 (2010)	\$10,607 (2010)
GDP in USD	239.7 billion (2011)	105.7 billion (2007)	96.26 billion (2010)	96.26 billion (2010)
Gini Coefficient	47.3 (2011)	41.1 (2011)	54.4 (2007)	54.4 (2007)
Labor Force	3.2 million (2011)	878,969 (2010)	183,411 (2010)	191,874 (2010)
% with Secondary or Higher Qualifications (among resident non-students aged 25 years & over)	67.7 (2012)	90.2 (2010)	61.9 (2010)	69.3 (2010)
Unemployment Rate (%)	1.9 (2012)	6.4 (2010)	18.6 (2010)	14.2 (2010)
Industrial Composition	Trade-Oriented	Entrepreneur- & Trade-Oriented	Entrepreneurship-Oriented	Entrepreneurship-Oriented
	Exports Electronics, Chemicals and Services	Takes advantage of strategic location with a strong logistics & distribution sectors	Healthy Exporting Sectors in Informatics & Medical Devices	Healthy Exporting Sectors in Pharma & Medical Devices
	Lack of Natural Resources	Takes Advantage of Outdoors with Strong Tourism & Recreation Sectors	Large Retail and Services Sectors	Large Retail and Services Sectors
	Human Capital Dependent	Human Capital Dependent	Human Capital Dependent	Human Capital Dependent
	Adds Value to Imported and Local Intermediate Products	Mix of Manufacturing Subsectors, Specializing in Advanced Manufacturing Services	Mostly Manufacturing, with R&D, and Commercialization	Mostly Manufacturing, Evolving into R&D, and Commercialization

Source: U.S. Department of Commerce, Census Bureau, Census of Population 2000, 2010; Singapore Department of Statistics Population and Industry Reports 2013.

Table 2. Regional Economic Development Strategies.

This table summarizes the main components of the strategies in each region included in this comparative study.

Region	Singapore	Silicon Slopes - Greater Salt Lake City Region – CSA	Puerto Rico - Western Region	Puerto Rico - East Central Region
Economic Development Strategy - Primary Components	Strong, Efficient, Stable, Transparent Government	Strengthen Innovation-to-Commercialization Infrastructure, in Connection to Key Clusters	Strengthen Innovation-to-Commercialization Infrastructure	Improve Transparency of Government in Interaction with the Entrepreneurial Ecosystem, Including Permitting and Services
	Invest in Creating High-Quality of Life and Ease of Doing Business	Focus on Trade by Strengthening Logistics and Transportation Infrastructure and Connections with National and Global Supply Chains	Create Stronger Ties between University Labs and the Market Both in Terms of Curricula/Talent and Intellectual Property Creation	Create Science and Technology Centers and Schools (K-12 + Higher Education Programs)
	Transform Education / Training System to Become Talent Hub for the Region	Improve Ease of Doing Business through Access to Capital, Energy Costs, Talent Pool Availability, Among Other	Enable and Promote Quality Supply Chain for Raw Materials and Services in Key Industry Clusters, Making Them Reliable and Cost Efficient	Connect Local Firms in Key Clusters to Each Other and Global Supply Chains Seeking Value-Adding
	Retain and Attract Talent without Heavy Taxation	Provide a Relatively Low Cost of Living to Attract and Retain Talent, particularly with Regards to Housing and Taxes	Foster Entrepreneurship and Innovation, Increase Innovation-based Startups and Provide Incubation Services	Foster Entrepreneurship and Innovation, Increase Innovation-based Startups/Spin-offs, Provide Incubation Services and Support Services for Existing but Expanding Firms, Including Access to Funding/Capital
	Shift from Sourcing Solutions to Co-Creating Solutions with Industry Partners with Strong Innovation Infrastructure	Practice Urban Growth Management Principles	Reserve Land to Accommodate Strategic Initiatives (Incubators, Industrial Parks)	Reserve Land to Accommodate Strategic Initiatives (Incubators, Industrial Parks)

Source: Singapore Economic Development Board, Economic Development Corporation – Utah (EDCUtah), Puerto Rico Techno-Economic Corridor, East Central Technological Initiative, 2013.

While cost of living at Singapore is notably high, particularly with regards to real estate, they have invested in assuring that the cost is

associated with a high standard and quality of living. The Economic Development Board has also designed competitive personal and corporate tax structures. These have granted them recognition as the business and talent hub of Asia; and, they have been successful at retaining that image.

5.1.3 Betting on Strategic Clusters and Completing Value Chains

These regions have identified and taken advantage of their edge, as determined by their local and regional assets, that range from talent, entrepreneurial spirit, industry presence, strategic location, both physical and support infrastructure, and linkages among them, to leadership, participation and history. As seen in Table 3, they strategically targeted clusters in which they can build on existing industry presence, adequate labour force, linkages among actors and other intermediaries. All four regions coincide in their interest in Pharmaceuticals, Medical Devices, Information Technology, Advanced Manufacturing and Services, as well as related sectors.

Then they invested on strengthening existing linkages, filling the missing links of the value chains and inserting the local or regional clusters into broader value chains, national and global. They did so by developing support infrastructure, pushing for the creation of businesses in subserviced or emerging markets, and strengthening the logistics and transport sector, as seen in Table 2. Transportation and Logistics is also among their targets, although focus varies according to the subsector on which their competitive advantage may reside (air, marine, road, rail, etc.). The Utah Economic Development Corporation and Singapore Economic Development Board are especially notable with regards to their investment in enabling local or regional clusters to connect to firms and markets throughout the world.

5.1.4 Creating the Right Institutional Environment

While all four regions have sought to create an institutional environment that is conducive to a fertile business ecosystem and economic growth, they have adopted different strategies with varied levels of success. Several elements of the right institutional environment are closely related to the costs and ease of doing business, and to whether or not the region is perceived as *business-friendly*.

In the cases of Singapore and Utah, due to the geographical coverage of the regional initiative, the development organizations have direct influence on state government and they have been able to provide competitive personal and corporate tax structures. INTECO and PRTEC, as part of the same state government, offer identical personal and corporate tax structures as Puerto Rico as a whole. As a

territory of the USA, Puerto Rico has the same federal tax structure as Utah. However, Puerto Rico is able to offer tax-cuts that Utah is not necessarily able to meet. In addition, INTECO and PRTEC labour costs are less expensive than in the mainland, thus, qualifying them also as somewhat competitive with regards to costs.

Each region has devised a series of programs that grant new and expanding firms various levels of access to capital. Several are tied to state or national sources but others are privately funded. The size of the fund is directly related to the geographical extension and relative importance of the region vis-a-vis its neighbours.

Table 3. Regional Development Levers
 This table summarizes the primary assets that each of the four regions included in this study recognized as levers for development and, as such, incorporated as critical components of its economic development strategy.

Region	Singapore	Silicon Slopes - Greater Salt Lake City Region - CSA	Puerto Rico - Western Region	Puerto Rico - East Central Region
Target Economic Sectors or Clusters	Services, Electronics, Chemicals, Financial Services, Oil and Related Products, Life Sciences, Among Other	Informatics, Life Sciences, Aerospace, Energy, Financial Services, Logistics & Distribution, Advanced Manufacturing	Medical Devices, Aerospace, Informatics, Bio-Science, Renewable Energy, Tourism, Agro-Industry	Materials Manufacturing, Pharmaceuticals, Medical Devices, IT, Energy, Agro-Industry.
	Port of Singapore (important role in supporting trade)	High Connectivity through Rail, Air and Road Makes it a Extraordinary Logistics & Distribution Hub	Science & Technology Schools	Healthy Municipal Tax Base
Support Infrastructure	Low Corruption	Broad Financing/Access to Capital and Tax Infrastructures for Firms	Industry Involvement in School Curricular Design	Regional Development Fund
	Government-Owned Investment Companies	Municipally-Owned Energy Companies, to Lower Costs	Municipal Development Enterprises	Municipal Development Enterprises
	Expensive Cost of Living yet Low Personal and Corporate Taxes	Low Union Affiliation Translates into a Business Friendly Environment	University-Public School Linkages	Science & Technology Schools
	Government-Owned Firms in Key Industry Sectors	Low Costs of Living and Doing Business	Strong Incubator Environments	Strong Incubator Environments
	Focused Workforce Development Policy (Life Long Learning, Skill-Based, Industry-Tied)	School-to-Work Bridging Programs	Workforce and Planning Intermediaries	Industry Involvement in School Curricular Design
	Strong Research Institutes and Universities	Broad Base of Universities, Technical Colleges, and other Technical Institutions	Strong Research Universities and Institutes and Technology Parks in Key Industries	Notable Research Institutes and Technology Parks in Key Industries (Energy, Industrial Design)
Strong R&D-to-Commercialization Infrastructure	R&D Incentives	Healthy R&D-to-Commercialization Infrastructure	Emerging R&D-to-Commercialization Infrastructure	

Source: Singapore Economic Development Board, Economic Development Corporation – Utah (EDCUtah), Puerto Rico Techno-Economic Corridor, East Central Technological Initiative, 2013. Author, 2013.

All regions have also invested in simplifying the development processes. They all have land use plans and/or ordinances that clearly state the type and intensity of land use permitted throughout the region. In addition, they count with industrial or technology parks, and incubators, where firms may locate. They also offer brokerage services in helping firms find the space suited for the desired activity. However, in regions such as the Salt Lake City Region and Singapore the process is more straightforward than at INTECO and PRTEC where it is more complex and, during the first ten years of implementation, involved dealing with over ten different permitting agencies.

The complexity of processes like the one described above gets to the second but even more important aspect of providing a healthy institutional environment. That aspect deals directly with government transparency, stability, and efficiency. While all have taken steps in the same direction, as seen in Table 3, Singapore has done the best job at maintaining the region's low level of corruption. In the cases of Singapore and the Salt Lake City Region, it is worth noting that they have made conscious efforts to maintain a low level of union affiliation. High rates of such affiliation are often associated with unstable work or business environments.

Within Puerto Rico, regions often face fiscal and political instability and union affiliation is higher than in the other two regions. However, INTECO is comprised of mostly autonomous municipalities that have been able to adopt significant accountability measures that have the region being perceived as transparent and stable relative to the rest of the Island at least partially for it being seen as an entity that bears close to no relationship with the unstable, inefficient central government.

5.2 Impact of Organizational Model on Regional Performance

5.2.1 Organizational Model

As seen in Table 4, Singapore's economic development strategy is established and led to fruition entirely within its government. The Economic Development Board has been the primary government agency in charge since the 1960s and coordinates all efforts from supporting agencies still today.

Government was also instrumental in the formation of a regional development initiative in the West Region of Puerto Rico. The Puerto Rico Department of Economic Development and Commerce through its Industrial Development Corporation (PRIDCO), with functions that are very similar to those of Singapore's EDB, created the Puerto

Rico Techno-Economic Corridor (PRTEC) in 1999. While PRTEC has its own Board of Directors which today reserves seats for business and academia, government representation dominated its first ten years of operation, with strong influence from state government. Its composition, design, strategic vision, and work agenda was completely conceived by the central government entity. This affected the municipal governments' willingness to participate and collaborate at first.

Municipal leadership was instrumental in the formation of INTECO, which was founded only a few years after PRTEC. William Miranda Marin, then Mayor of Caguas, and Jose Mendez, President of a private university system with a campus inside the East Central Region of the Puerto Rico, got together to conceptualize a new regional development initiative. Their concept developed in response to the limitations that they observed in PRTEC, such as its dependence on central government, partial municipal engagement, and little participation from academia and business sectors which resulted in a very slow start. It was complemented with the analysis of dozens of models throughout the world.

Table 4. Regional Economic Development Organizational Profile

This table summarizes general characteristics of the economic development organizations working at each of the four regions that are included in the study, highlighting organizational model and means for participation.

Region	Singapore	Silicon Slopes - Greater Salt Lake City Region - CSA	Puerto Rico - Western Region	Puerto Rico - East Central Region
Organization Name	Economic Development Board	Economic Development Corporation + Envision Utah	Puerto Rico Techno-Economic Corridor – PRTEC	East Central Technological Initiative - INTECO
Year of Inception	1961	EDCUtah 1987 EU 1997	1999	2003
Geographic Units Covered	1 City-Island State	8 Counties that Make Up the CSA	17 Municipalities that Make Up the Western Region	10 Municipalities that Make Up the East Central Region
Approach	Top-Down Government Centered and Driven	Bottom-Up Participatory	Top-Down Government-Driven	Bottom-Up Participatory
Organizational Model	Total Government Membership	Business Government Academia Civil Society	Government Academia Business	Academia Government Business
Leadership	State	Shared (Government, Business and Professional Class, Community at Large)	State	Shared (NGOs, Business, Government)
Participation in Decision Making	Centralized at State	Democratic; Shared among Members	Decentralized but Government mostly	Decentralized Government for Policy Matters; Democratic: Shared among Members for All Other
Participation in Execution	State Only	Mostly State and Business	Mostly State, Universities, and Business	Shared
Global Participation in Markets	12 Countries	Not Formally	Not Formally	Not Formally

Source: Singapore Economic Development Board, Economic Development Corporation – Utah (EDCUtah), Puerto Rico Techno-Economic Corridor, East Central Technological Initiative, 2013.

They believed that this regional organization needed to have government representation but be independent from its structure and bureaucracy, and that academia and business had to be equal partners sitting at the same table. Mayor Miranda organized and mobilized the mayors and, with Mr. Mendez, brought in businesses and other educational institutions. After ten years, INTECO runs as an independent

and self-sufficient non-profit organization with representation from all sectors. INTECO has been successful at having central government delegate to the organization and municipal members several functions and facilities, particularly schools and industrial properties.

In the case of the Salt Lake City Region, the Economic Development Corporation of Utah (EDCUtah) has played an important role. Its model is similar to INTECO's with representation from diverse sectors. However, it exhibits heavy business presence and has stronger functional linkages to academia (K-12, technical and higher education), in terms of industry influence on curricular design, practical training and transition programs, among others. Furthermore, the organization has implemented a planning and decision making methodology that also grants participation to society at large: Envision Utah.

Envision Utah is a unique initiative for linking economic development strategy to land use planning through participatory means. While the Salt Lake City Region has conservative views on property and development rights that are usually associated with the private sector, the region's leaders found an atypical structure for regional development planning that is well-fitted to the region's culture and allows for the intervention of organized civil society beyond big economic interests.

Envision Utah is both an organization as well as a process. As a process, it has no official government standing and is administered by a private non-profit organization (the Coalition for Utah's Future). It is led by a steering committee of forward-thinking citizens, business people, elected and appointed government officials and community leaders from non-profit organizations. In the words of the project's executive director, Carleton Montgomery, Envision Utah is a "non-regulatory public/private partnership".

Envision Utah has become widely known for its intensive and extensive public visioning initiative and continuing devotion to sustaining public interest in its recommendations that result from those participatory efforts. It has been crucial for this initiative to win and retain public support in order to ascertain that government will implement their proposals through their traditional powers.

5.2.2 Means for Participations as Means for Greater Growth and Equality

In addition to sector representation, means and importance of participation are the most significant differences among these regions. Only two organizations incorporated some level of participation into their organizational model and/or their decision making processes right

from the start: INTECO and Salt Lake City Region with its EDCUtah and Envision Utah initiatives.

Singapore practices centralized planning and decision making and provides no direct participation of any sector in those processes. Sector problems and concerns are assessed through statistical and economic analysis and addressed when in doing so the economic vision of the island state is fulfilled.

While there is limited sector representation in PRTEC, at least in its early years it did not translate into participation in decision making processes. In fact, decisions and strategy execution fell on the hands of central government, including all investment in infrastructure and seed money for specific initiatives.

INTECO follows the principles of participatory democracy and sustainability. Member municipalities as well as member businesses and other organizations are able to sit at the table to affect decision making and participate in the execution of initiatives. Members of all sectors represented in the organization join by paying a fee that provides for operational costs of the organization. In addition, they charge competitive fees for facilities and services rendered to targeted businesses. These sources, in conjunction with competitive grants, are the primary funding sources that allow the organization to run several facilities and services independent from government. INTECO's organizational model and approach have promoted decentralization of decision making, bringing this closer to the constituents of the member municipalities, and allowing for instances of open participation from society at large in voicing their concerns and proposed solutions to problems.

The Salt Lake City Region has incorporated an innovative approach to active citizen participation in the analysis of and drafting solutions for social, economic, and environmental problems. Participation takes place through continuous surveys, forums, meetings, workshops and *charrettes*, among others. Citizens are given a voice throughout the decision making processes and initiative implementation stages. Taking part of projects from its conceptual phases gives ownership to citizens over their design, execution, and results. This participatory process, Envision Utah is seen today as a successful practice to emulate.

It is worth mentioning that the case with the highest levels of citizen participation in decision making, the Salt Lake City Region, is also the one that, as seen in Table 1, exhibits the greatest equality (lowest Gini Index with 41.1%) and highest proportion of individuals with at least a high-school diploma or equivalent, here used as a proxy for ability to attract and retain a region's talent. This suggests a

relationship between the means for effective and ample participation and the capacity to attain regional equality.

This is consistent with other works that, while not establishing causality, found an associative relationship between the two phenomena (Oxendine 2007). Greater equality as a consequence of the provision of a broader set of opportunities for economic advancement has been found to induce citizens and enterprise's satisfaction with and trust on the State. Involvement in broad-based organizations is the result of growing trust among participants that are empowered and are willing to collaborate with society and its government in the development agenda. This trust is strengthened to the degree that their voices are heard and they, in turn, influence decision making and strategy results that benefit everyone, in an environment of transparency and respect for diverse opinions.

5.2.3 Non-Profit Organizations and Organized Civil Society as Economic Development Intermediaries

Finally, all four of these region-organizations, in fact, function as regional economic development intermediaries by alleviating market imperfections that arise from weak or non-existing linkages among actors in the regional development ecosystem. They bring together buyers and suppliers; facilitate interaction between industry and academia to satisfy demand for a workforce with adequate skills; provide access to capital and financing mechanisms; develop needed support infrastructure; improve quality of life and costs of living as a means for attraction and retention of talent; and create a healthy institutional environment for all economic actors in the region.

However, these are functions that government had traditionally performed, as in the case of Singapore and PRTEC. In strong states, where government has the will, size, managerial capacity, funding, jurisdiction and public support, it makes a lot of sense to retain those functions within the governmental structure. However, when the state lacks some of these traits, leadership, influence and action must come from elsewhere.

Non-governmental, non-profit organizations can and do play an important catalytic role as economic development intermediaries. As INTECO shows, this type of organization can improve the agility with which initiatives materialize by maintaining a flexible, non-bureaucratic organizational structure. They can also increase the probability of success of initiatives by mobilizing private resources and people that take ownership over projects, as in the case of Envision Utah, and push economic development structures to remain accountable, transparent and efficient.

6 Conclusions and Policy Implications

Comparing these four regions allowed exploring the potential effect of regional economic development strategy and organizational model choices on regional performance. Findings suggest that a region, in which non-profit organizations take on the role of economic development intermediaries and in which means for effective participation are provided, seems to be more successful at attaining equitable development, that is, both economic growth and high levels of quality of life, than one that does not. That was certainly the case of the Salt Lake City Region in Utah.

When non-profit organizations act as intermediaries they can introduce new actors, processes, technology, capital, and other resources, as well as accountability measures, among others, that the market (and many times even government) could not otherwise produce on its own, at all or at the needed quantity, frequency, or speed. Consequently, these forms of organized civil society and non-profit-organizations can become catalysts. The impact of their intervention in improving quality of life and creating a fertile business environment, contributes significantly to their capacity to attract and retain their talent which is crucial for their knowledge-dependent economic development strategies.

While each economic development organization's experience can lend a series of lessons that could be applied to other regions around the globe, the Silicon Slopes case suggests several policy implications. First, there is value in distancing the economic development functions from the direct influence of government. As such, state governments should promote decentralization or regionalization of those functions and the creation of non-profit organizations with representation from all relevant sectors to assume that responsibility. Second, composition must be strategically drafted to assure the promotion of linkages among firms and sectors within and beyond the region. Connecting local clusters to global supply and value chains is critical to achieving sustained growth. Third, broad participation of society at large in decision making and implementation should be fostered. Formal and informal participation mechanisms ought to be present throughout the economic development process of a region to provide ownership over its outcomes. Finally, talent looks for places where equality is an important component of a high quality of life. Thus, regions should include attaining greater equality as an economic development goal, particularly when the strategy depends heavily on the skills and knowledge of its talent base as was the case of these regions.

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