

# Innovating Through PPPs: The Case of Economic Development in Barcelona

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## **PPP FOR CITIES**

The Specialist Centre on PPPs in Smart and Sustainable Cities (PPP for Cities) is a research, innovation and advisory center that aims to provide public authorities throughout the world with support in the organization, management and execution of projects involving collaboration between the public and private sector in the field of smart cities.

It is also a platform for partnership between companies and such authorities at the global level, where they can explore the dynamics of public-private partnerships in depth, create best practice guides and standards, and design solutions to the problems faced by cities.

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# 1. Introduction

One of the main purposes of government is to provide the public with services related to infrastructure at a reasonable and socially acceptable cost. The generalized contraction of public investments in recent decades, partly due to the need to contain public spending following economic shocks, has fueled a growing interest in alternative models of financing public works. In particular, a broad category of agreements between private and public counterparties, Public-Private Partnership (PPP), has gained attention.

The PPP defines a series of contractual forms based on the cooperation between two or more parties and the governance of common interests, obtained through the interaction between private initiative (with a profit-making purpose) and administrative action in pursuit of public interests. The PPP thus represents an important procurement opportunity for public authorities to promote the revival of the economy in an environment of budgetary restrictions.

The object of the PPP is the construction, transformation, maintenance and operational management of work<sup>1</sup> in exchange for its availability, its economic exploitation, or the provision of a service related to the use of the work itself. The institution of the PPP is suggested when the use of private capital and resources can have benefits for the public administration and the end-users of the services. These benefits can be both of an economic nature and materialize in a reduction in the overall costs of building and managing the infrastructure, or attributable to an increase in the efficiency, effectiveness and quality of the services provided.

Occupying a public space for a neighborhood initiative, regenerating territories, recovering an abandoned farmhouse and building a subway are examples of potential PPP projects. However, it would be illogical to apply blanket rules to these. The further one moves away from the typified and highly regulated world of infrastructural concessions and project financing, the more space there is to build lasting and flexible cooperation models, naturally in compliance with public-law principles.

While the tender of a public procurement is based on public demand (for example, a municipality that has to build a public school) and on a private response (a private entity that wins the tender to build that school for the municipality), the PPP activates a more complex and more dialogic interaction. So much so that the economic operator, single or grouped, can also be the promoter of a project to create a public work included or not in the political programming. Apart from the presence of a local government counterparty, partnership and public procurement show some specific differences:

- In the case of a PPP, the public and private entities collaborate on an equal basis, sharing the risks of a specific program of common interest. That interest is internal to a contractual model that values flexibility to adapt to the pursuit of a common goal.
- In the case of public procurement, the public and private parties are counterparties to a negotiation scheme in which the economic operator complies with what is agreed. On the one hand, in traditional procurement, the administration asks and the economic operator responds; on the other hand, the two join forces in a more dynamic way in the partnership.

In practice, in the PPP, the private sector also appears on the demand side; that is, it contributes to the identification of what the public interest is, proposing investments, presenting projects, promoting innovation and helping fuel the concrete pursuit of public interests.

As already mentioned, the PPP allows the private sector to formulate proposals to the political administration. It accelerates the process of acquiring contractual documentation and consequently facilitates the acquisition of all the legal, economic and financial elements necessary to prepare for the implementation of important public works. In general, by giving space to the private initiative PPP, the public administration benefits from the planning, economic and legal efforts made by the business world.

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<sup>1</sup> Commission of the European Communities. "Green Paper on Public-Private Partnerships and community law on public contracts and concessions." EUR-Lex — Access to European Union Law — Choose Your Language. Last modified April 30, 2004. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0327:FIN:EN:PDF>.

However, there is nothing to prevent administrations from publishing notices of expression of interest offering the opportunity to private individuals to formulate proposals in certain areas. If the administration recognizes the proposal as being in the public interest, it can also modify it, and then must submit it to competition.

The PPP formula has often been the subject of criticism. This is because, during the executive phase, partnership contracts – especially related to the construction and management concessions – can lead to substantial changes to what was entrusted in the tender phase. This may extend the duration of the contracts and the amount of the loan paid to private individuals.

Nevertheless, PPPs encompass a wide range of cooperation forms between the public and private sectors in which skills and private capital complement public resources. They can facilitate new investments in infrastructure and public services and avoid increasing public debt. The contractual relationship of a PPP varies according to the extent of involvement and risk taken by the private party. However, it is still possible to distinguish two macro-categories of partnerships based on the legal instruments that implement them:

- The contractual partnership, typically characterized by a direct link between the private partner and users and in which the private entity provides a service to the community under the control of the public entity.
- The institutionalized partnership, in which there is a corporate structure held jointly by the public and private partners, whose mission is to carry out the work or provide a service for the community. This is the case, for example, of investee companies created for the management of public services at the local level. An institutionalized PPP is achieved through the creation of a company jointly owned by the public and private sectors or through the transfer of a public company to private control (that is, privatization).

In the design of a contract, it is crucial to identify and allocate risks such that each party share appropriately the responsibility of the cost related to the work being implemented. To achieve the best value of this, it is important to seek to optimize, rather than maximize, risk transfer. In this context, operational risk is one of the key aspects of a PPP contract. It includes construction risk, demand risk and availability risk and represents the type of risk deriving from factors beyond the control of the parties. Consequently, it differs from risks such as those related to poor management or contractual breaches by the parties of the economic operator. In a PPP, the operational risk can be completely transferred to the economic operator or may be mainly retained by the grantor. There may also be a mixed situation, in which revenues are expected related to a fee paid by the granting public administration or services whose risk is fully borne by the economic operator.

After a brief contextualization of the Spanish city of Barcelona in Section 1.1, this study aims to describe the evolution of public spending related to PPPs in Barcelona (Section 2) and to analyze each partnership in terms of complexity and knowledge using the Innovation Matrix proposed by the authors (Section 3). Subsection 3.2 presents two relevant cases in support of the aforementioned matrix and Section 4 concludes the analysis. Unless otherwise specified, the information and data in this study were collected in April 2022 and refer to the 10-year period between 2011 and 2021.

## **1.1. The Demography and Economy of the City of Barcelona**

This section features a collection of the main demographic and economic indicators that reflect the situation of Barcelona and its metropolitan area.

Barcelona is the capital of the autonomous community of Catalonia that overlooks the coast of north-eastern Spain and is the core of a metropolitan region of about 636 km<sup>2</sup>. With an estimated population of more than 1.6 million in 2021<sup>2</sup>, Barcelona is the second-largest city in Spain after Madrid. Barcelona has a much larger urban area, with a population of more than 3.2 million in 2021, making it one of

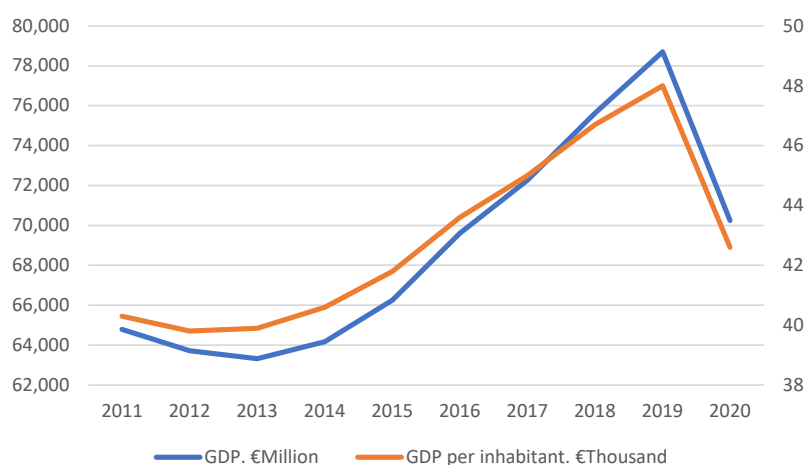
<sup>2</sup> It includes residents within the administrative limits. Gencat. "Idescat. The Municipality in Figures." Idescat. Institut D'Estadística De Catalunya. Last modified 2022. <https://www.idescat.cat/emex/?id=080193&lang=en>.

the most populous metropolitan areas in the European Union<sup>3</sup>. The city's population density – the relationship between the resident population and the territorial surface of the municipality – exceeds 16,000 people per square kilometer. This value highlights the stability of Barcelona's population in recent decades, as the city is exceptionally densely populated, with a steadily growing metropolitan area.

Barcelona is recognized as a dynamic economic power for its cultural, financial, commercial and tourist importance. It has one of the most important ports in the Mediterranean Sea, one of the busiest airports in Europe, and is also an important point of communication between Spain and France by highway and high-speed rail. The city is committed to art, quality of life, innovation, solidarity and sustainability, and is prospering with an international projection. As such, Barcelona is in a continuous process of strengthening its capacity to attract companies, talent and foreign investment from its strong international position.

Due to the recent pandemic, the gross domestic product (GDP) of the city of Barcelona in 2020 dropped to €70.25 million, or €42,600 per inhabitant<sup>4</sup>. As shown in **Figure 1**, this value represents the lowest value since 2017, when the city was still recovering from the financial crisis of 2008.

**Figure 1. Barcelona GDP**



A similar situation occurred in the unemployment rate of Barcelona, which had fallen sharply from a high level of 23.1% in 2013 to 10.9% in 2019. This rate rose to 12.5% in 2020, before decreasing to 11.2% in 2021<sup>5</sup>.

Year	Unemployment rate
2013	23.1%
2019	10.9%
2020	12.5%
2021	11.2%

According to Idescat<sup>6</sup> estimates, major sectors standing out for gross value added (GVA) are the service sector at 88.2%, followed by industry at 8%, and construction 3.8%. The service sector shows a stable trend compared to the industry sector, which gained ground at the expense of the construction sector.

Between 2014 and 2019, Barcelona expanded economically due to domestic and external demand in a context of very moderate inflation. Among other factors, this growth was possible thanks to the significant expansion of the export base of Barcelona's economy and the Catalan economy in general, over the last decade. This reflects a highly positive structural change for the economy of the city and its region, and is a necessary factor for continuing to strengthen and promote the post-pandemic recovery.

<sup>3</sup> Àrea Metropolitana de Barcelona. "Getting to Know the Metropolitan Area." Inici-Àrea Metropolitana De Barcelona. Last modified 2022. <https://www.amb.cat/en/web/area-metropolitana/coneixer-l-area-metropolitana>

<sup>4</sup> Gencat. "Idescat. Territorial Gross Domestic Product. Barcelona." Idescat. Institut D'Estadística De Catalunya. Last modified March 22, 2022. <https://www.idescat.cat/pub/?geo=mun%3A080193&id=pibc&n=1043&lang=en>

<sup>5</sup> Idescat: <https://www.idescat.cat/pub/?id=aec&n=318&lang=en>

<sup>6</sup> Gencat. "Idescat. Territorial Gross Domestic Product. Valor Afegit Brut. Per Grans Sectors (%). Barcelona." Idescat. Institut D'Estadística De Catalunya. Last modified January 15, 2021. <https://www.idescat.cat/pub/?id=pibc&n=13832&geo=mun:080193&lang=en>



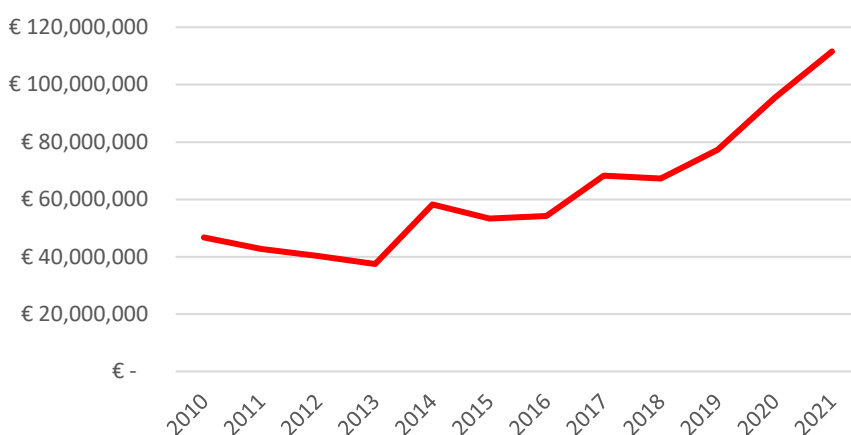
## 2. The Evolution of PPPs in Barcelona

The section on the evolution of PPPs in Barcelona is organized in several subsections. First, we will provide a general overview of the evolution of economic development PPP projects. Second, we will examine the evolution of different programs (economic dynamization, tourism and social economy). Third, we will provide evidence of investments in highly innovative programs. Finally, we will provide a detailed evolution of the overall innovation of PPP projects led by the Barcelona City Council.

### 2.1. Total Spending in PPPs for Economic Development

Overall, the evolution of PPP projects for economic development has increased over the last 11 years (see **Figure 2**). Although there have been short periods without increases (for example, between 2010 and 2013), the general upturn has been of a significant magnitude. The period with the lowest budget devoted to PPP projects was 2013, with a little less than €40 million. Yet in 2021, the total amount designated for these surpassed €100 million.

**Figure 2. Total Spending on PPPs**



Beyond the general increase in PPP projects, it is worth looking at the programs in detail.

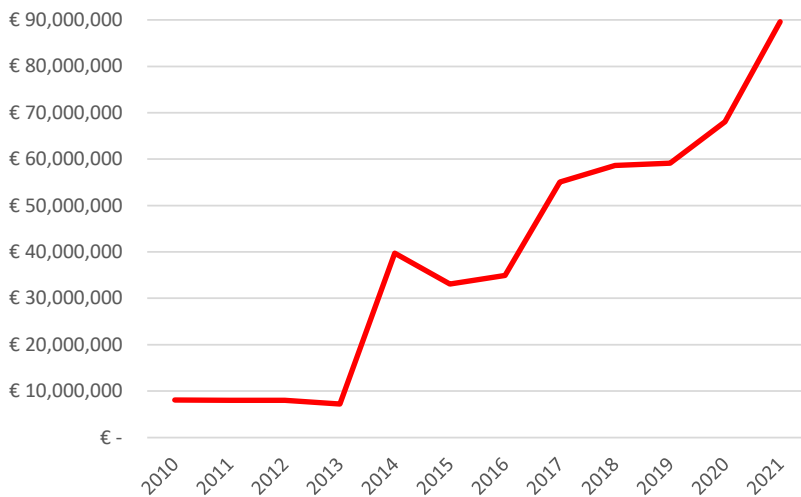
### 2.2. Economic Activities by Program in Barcelona

In this section, we explore how total funding presented is split between three large economic promotion programs. The first program is aimed at local economic development. This program includes all the PPP projects that target specific local stakeholders like public markets, retailers, companies or entrepreneurs. The second program focuses on tourism and leisure, which includes PPPs devoted to improving the image of the city internationally and to attract foreign investment. A final program area is dedicated to the social economy. Since the city government places a strong emphasis on social issues, Barcelona devotes part of its economic development budget to PPPs in socially responsible sectors of the economy.

#### 2.2.1. Local Economic Development

In terms of local economic development, we can identify different periods during our period of analysis (see **Figure 3**). First, the period between 2010 and 2013 is characterized by a stand-still budget just below €10 million. After that, 2014 presents a high spike in terms of investment, climbing to €40 million devoted to local economic development. Next, 2015 and 2016 are defined by a slow decline compared to 2014, although this increases again in 2017. At this point, a period of acceleration occurs in 2020 and, especially, in 2021. One reason for this trend is that the city council opted for new and innovative projects such as the promotion of creative industries.

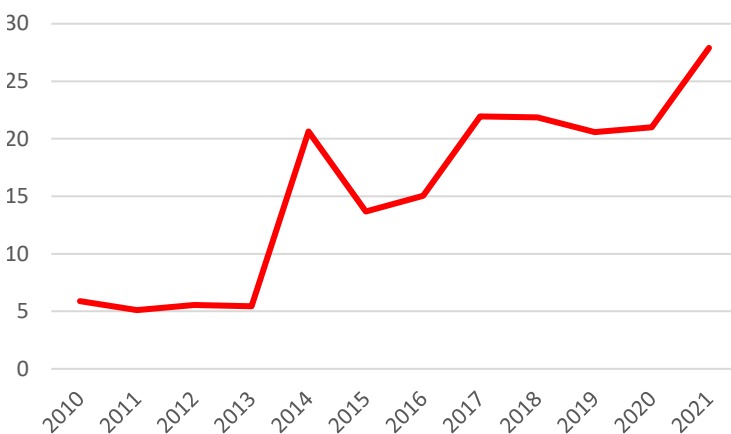
**Figure 3. Total Investment in Local Economic Development**



Indeed, Barcelona plays a central role in creative activities in Catalonia. These creative industries include different economic sectors like fashion, architecture, design, hospitality, communications and the visual arts, among others. In all of these areas, Barcelona serves as a prominent location on an international level, facilitating significant amounts of foreign investment. Thanks to its mixture of history, culture, creativity and dynamism, the city provides a suitable and fertile ground for creative industries. This is strengthened by the city council's commitment to PPP projects in these industries.

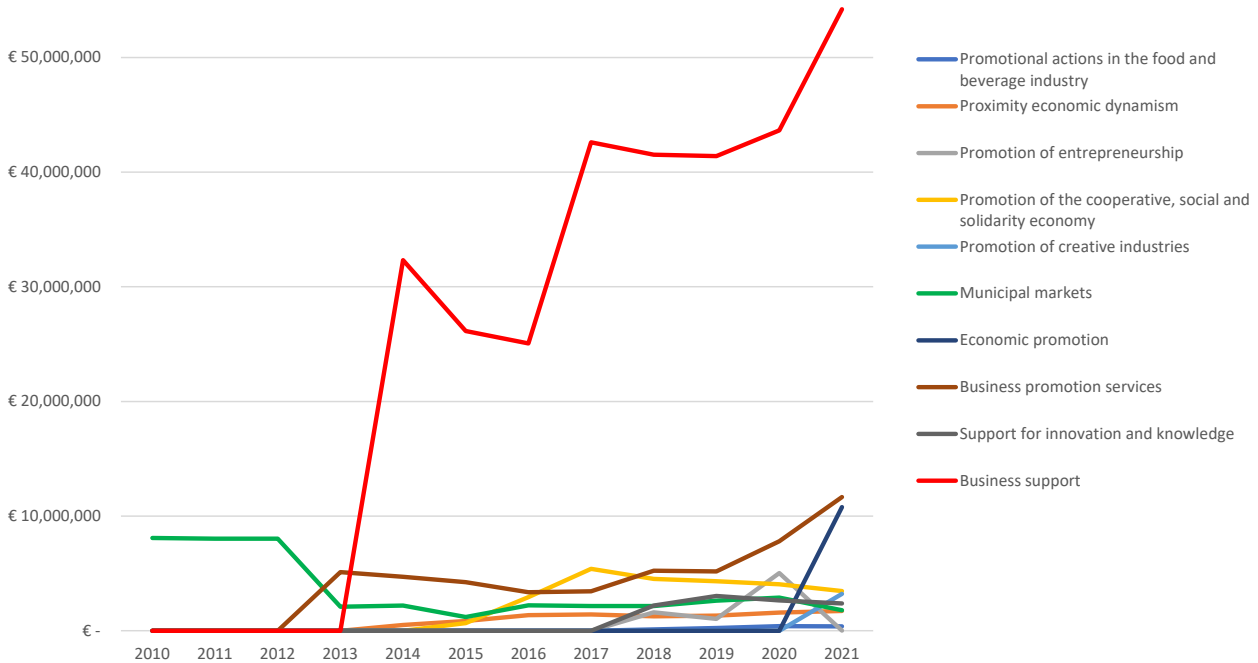
PPPs represent almost 30% of all PPPs in economic development (see **Figure 4**). The percentage has been increasing since 2013, with PPPs previously accounting for just 5% of the economic development budget. Therefore, these results indicate a clear commitment of the city council to collaborate with other stakeholders in the form of PPP in the long term.

**Figure 4. Percentage of Total PPPs in Economic Development**



When we look at the detailed data (see **Figure 5**) for local economic development, we observe that the largest program is business support. This was the largest project during most of the years analyzed, growing from €30 million in 2014 to €55 million in 2021. Another growing trend is trade promotion services, which went up from €5 million in 2013 to almost €12 million in 2021. Above all, one of the most innovative policies is the promotion of creative industries.

**Figure 5. Total Expenditure by PPP Program**



The Barcelona City Council, through the Department of Tourism and Creative Industries, approved in 2019 the government measure to promote and activate the creative industries and integrate them as a backbone of all municipal policy. The concept of creative industries has many definitions, but in the case of Barcelona, the city focused on the economic impact of culture and creativity. This includes a wide range of activities such as design, fashion, film industry and architecture, among others. In Barcelona, the creative industries employ 43,535 workers in 4,675 companies, with a turnover of €10.2 billion.

The aim of the Barcelona City Council is to place the creative industries within economic development. This is an innovative approach, since creative industries are usually curated by culture departments. By making this change, the city council is committed to the economic impact of the creative industry on other sectors of the city that this industry affects. For example, the city council is committed to promoting design in different sectors. Consequently, it is working with students from the city's schools to work on the design of the new business areas and retail spaces. Therefore, the aim is for design and creativity to have an impact on the entire productive economy.

Although the commitment has been made by the city council, the contact with the private sector is permanent through a bidirectional relationship. Private actors can make proposals to the city council and the city council also proposes actions to the sector. For example, the "culture bonus" was created in 2020. In the midst of the pandemic, the city council created a grant in collaboration with the Guild of Film and the Guild of Booksellers, Music and Theater to establish a program to promote cultural consumption in the city. This policy subsidized citizens with €10 for every €30 spent on culture. In addition to specific programs, other forms of collaboration have also been established. An example is the establishment of the Creative Barcelona Table, an entity that includes 70 people representing all sectors of the creative economy. This group has become a city council advisory board on policy design. This group has a delegate committee of 20 people to gain agility and define working groups with specific projects to tackle complex issues. Of course, there are also more formal relationships through agreements such as with music festivals, Barcelona Design Week or existing clusters that have a formal structure.

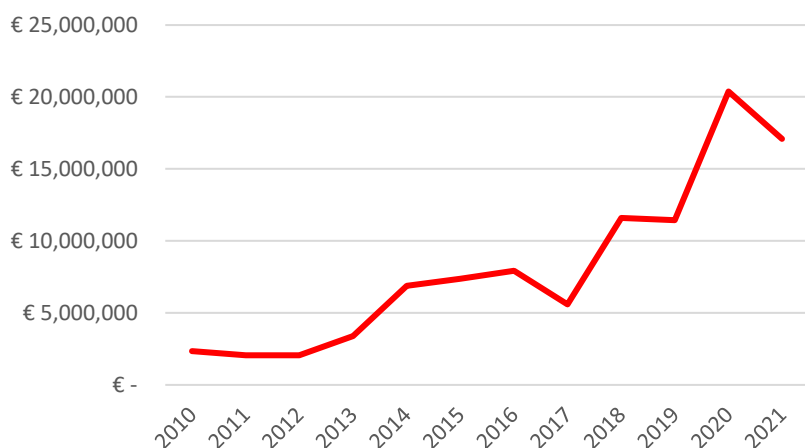
To deepen knowledge needed to carry out innovative policies, the city council decided to map all companies in the creative industries. The city council developed this project as a strategic starting point, since real environments are dynamic and have often changed by the time that policies are implemented. Through an agreement with different stakeholders, a thorough analysis of each sector within the creative industry was made to have a clear picture of the context in which to act. At the same time, the Creative Barcelona Table was intended to be very transversal and, therefore, has opted for a flat structure without much hierarchy. Its aim is to align what is being done in many areas of the city that can affect the creative industries, with the objective of increasing economic impact. For example, in the case of music festivals, the group is not so much in charge of the artistic aspect (this is already done by the area of culture). Instead, it is focused on the impact that these festivals have on the city's music industry. Significant coordination with other areas of the city council is required in order to align all the policies that are made to generate the greatest economic impact.

Moreover, Barcelona's policies towards creative industries show that innovation needs to be applied in the procedure as well. In this sense, the internal experience in the administrative processes of the city council is of high value. Having in-house staff who are experts in administrative procedures can help you find innovative solutions to processes that would otherwise not be possible or take too long. In the case of Barcelona, the city council has been able to adapt some of the processes to make them more agile and flexible and thus facilitate innovation. This is specially the case in the context of the creative industries, where there has been a big change between 2019 and 2021. So much so, that many municipalities have been interested in how the culture bonus agreement has been formalized, as they have been unable to promote similar measures due to the limitations of the administrative process. In fact, the city council itself describes the changes made to boost the creative industries as "creative." This is an example of innovation and creativity applied to administrative processes. What has been achieved is to balance the criteria of guarantee of control, transparency and legality with objective criteria of real impact and in a short period of time.

### 2.2.2. Tourism and Leisure

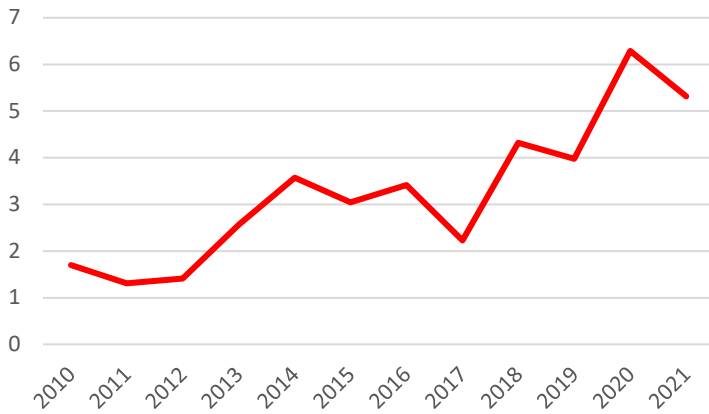
In terms of tourism and leisure, the dedicated budget has also increased through the years (see **Figure 6**). However, it is worth noting the budget dropped from €20 million in 2020 to €17 million in 2021. Although we observe a decline in the last period, the overall budget has been increasing steadily since 2013, starting below €4 million and rising over the following years.

**Figure 6. Total Tourism and Leisure Budget**



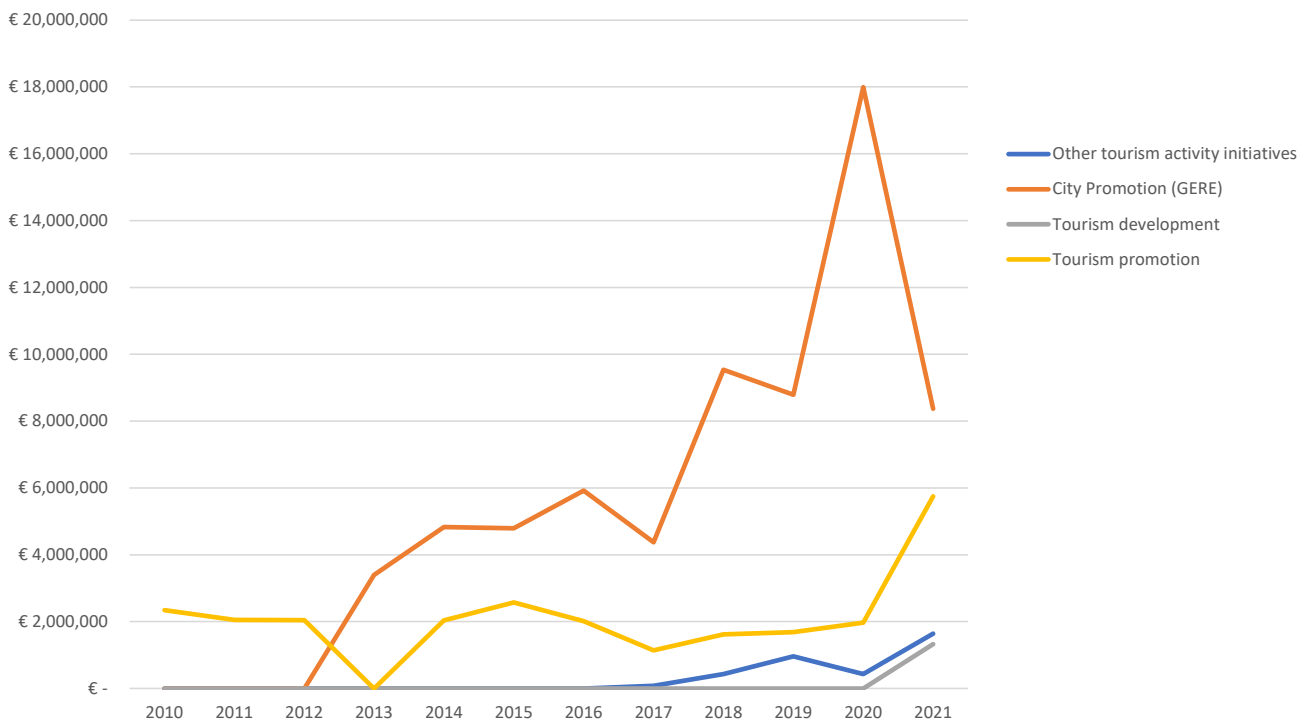
As a percentage of all PPPs for economic development, tourism and leisure projects represent more than 5% of all PPPs in the economic development area (see **Figure 7**). Although it may seem trivial, it is a proportion that has increased from less than 2% in the period 2010-2013 to more than 5% in 2020 onwards.

**Figure 7. Percentage of Total PPPs Tourism and Leisure**



Looking at the program-level data, we observe that the majority of PPPs focused on tourism promotion (see **Figure 8**). This program represents slightly less than 50% of all PPPs in 2021.

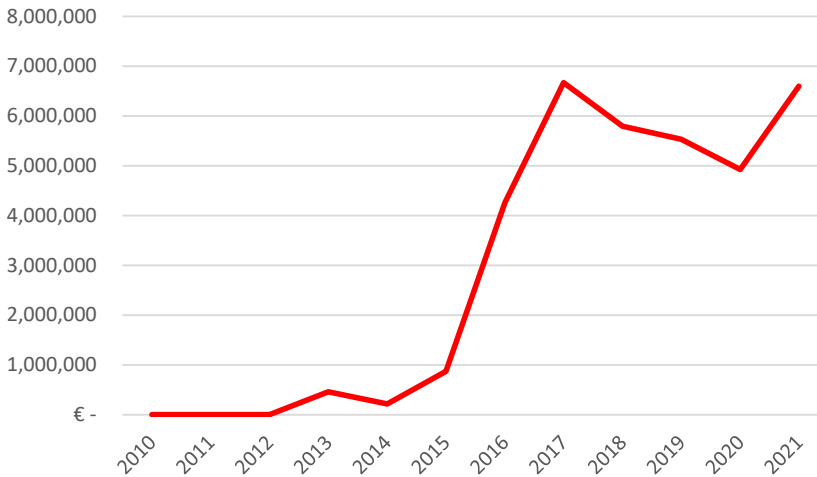
**Figure 8. Total Expenditure by PPP Program**



### 2.2.3. Social Economy

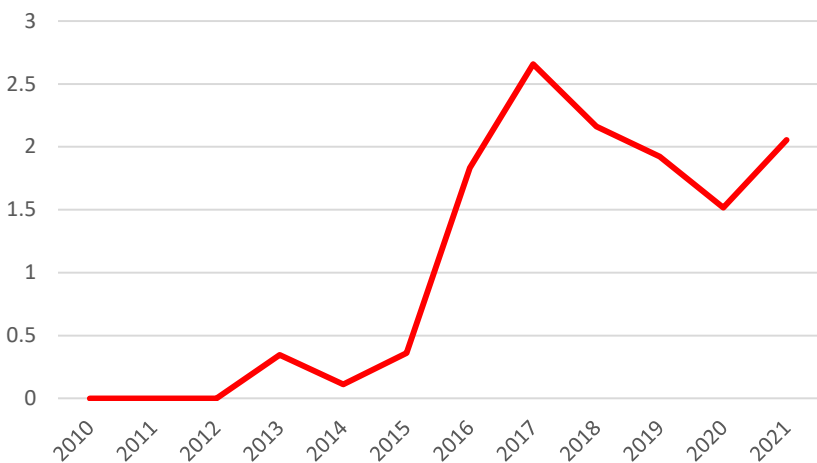
Regarding the social economy, the Barcelona City Council made a great effort in this area starting around 2015, investing almost €35 million in this category since then (see **Figure 9**). The highest peak was reached in 2017, with more than €6.5 million invested in PPPs related to the social economy. Although there was a small decline after 2017, previous investment levels were attained in 2020.

**Figure 9. Total Social Economy Budget**



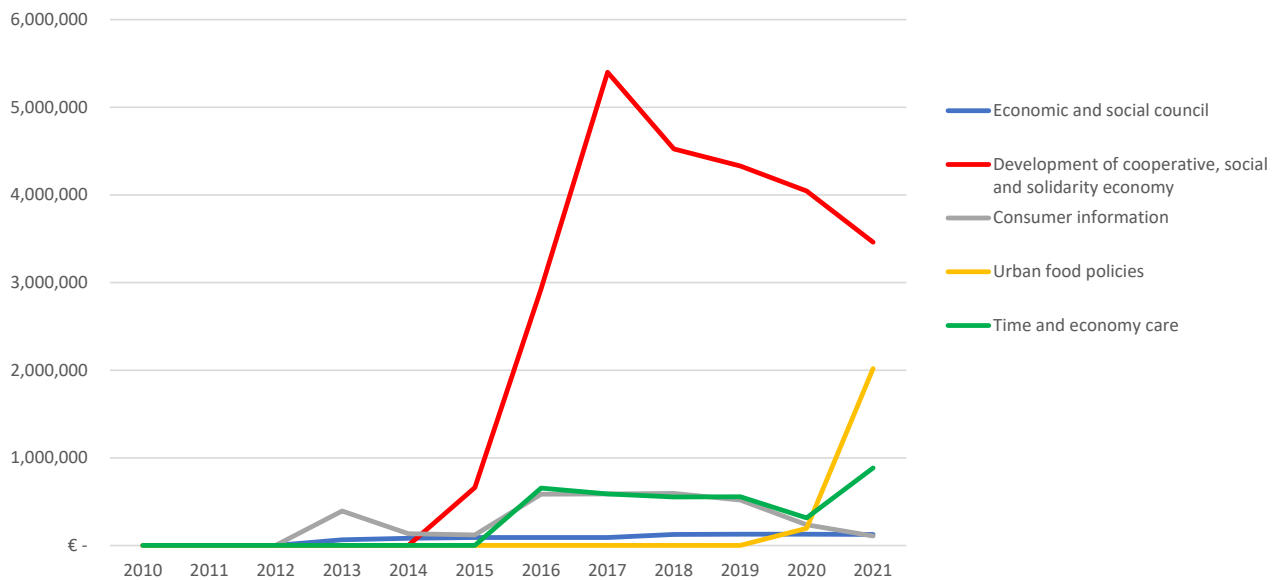
Overall, social economy PPP projects account for 2% of the budget devoted to PPPs in the economic development area (see **Figure 10**). As with the previous case, we observe a slight decline after 2017 that was somehow reversed in 2020. While in terms of absolute magnitude the investment in 2021 reached the same amount as in 2017, in relative terms it is still below the inflection year. This is due to the increase in the overall budget devoted to PPPs by the economic development area.

**Figure 10. Percentage of Total PPPs Social Economy**



Social economy and food policies intersect but are two different interventions. The first is a tool to reduce socio-economic inequalities, while the second is about promoting sustainable food in the city because it is important to promote the transformation of the food system to ensure the health of people and the planet. From 2016 onwards, the social economy was deployed and food policy was promoted, especially from 2020 (see **Figure 11**). Food policy is very new, although it already had a seed in municipal market programs or school canteens. In 2020, Barcelona opted to serve as the World Sustainable Food Capital, as well as host the meeting of the Milan Urban Food Policy Pact forum<sup>7</sup>. This commitment is being made to promote this policy in Barcelona and put it on the agenda.

**Figure 11. Total Expenditure by PPP Program**



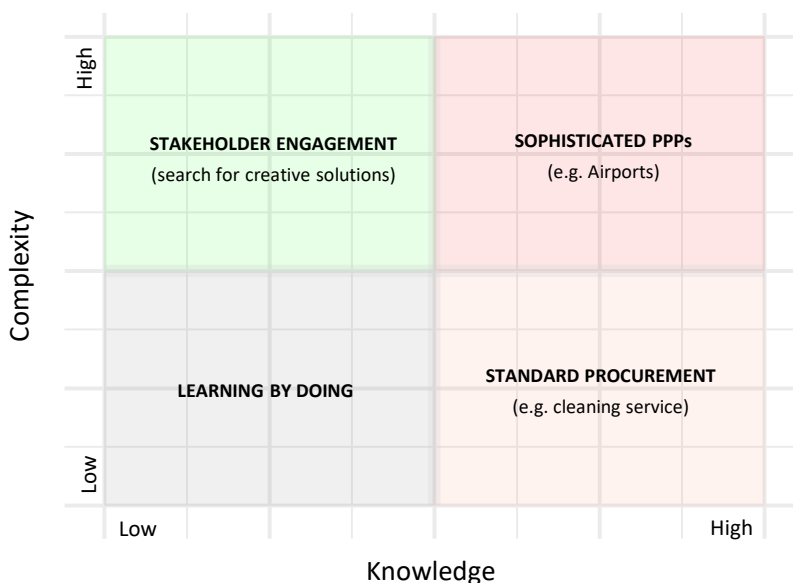
Focusing on specific programs, the promotion of the cooperative, social and solidarity economy accounts for the majority of investments. However, the city council is moving towards a more balanced budget distribution among the different programs. While the cited program accounted for 90% of the social economy PPPs in 2017, in 2021 it reflected 50% due to the increase in other projects. Among these other projects, it is worth mentioning the increasing importance of urban food policies (with more than €2 million) and the economy of care (almost €1 million). Both have increased in 2021 and account for more than 40% of the overall budget devoted to PPPs in the social economy.

<sup>7</sup> Milan Urban Food Policy Pact. "Milan Pact Awards 2022." Milan Urban Food Policy Pact. Last modified July 19, 2021. <https://www.milanurbanfoodpolicypact.org/>

### 3. Innovation Matrix

As discussed in the introduction, PPPs take the form of legally binding agreements and contracts, with particular tasks to be performed by each stakeholder. However, not all contracts are equally complex nor all situations allow for a contract form. In fact, the decision depends on two main concepts: complexity and knowledge. Simple contracts are suitable for situations where there is extant knowledge so the actors clearly know what is expected and how to deliver the products/services. In addition, simple contracts require that the complexity of the actions is not too high. Examples of simple contracts include the procurement of cleaning services or gardening in public parks. When there is high complexity and high knowledge levels, more complex contracts may be employed. These highly developed contracts act as a form of quasi-integration by establishing interorganizational ties (Stinchcombe, 1985). An example of such a situation – where knowledge and complexity arise at the same time – is the management of large infrastructures like airports or highways.

**Figure 12. PPP Innovation Matrix**



On the other hand, more innovative situations may emerge. In this setting, innovation does not depend so much on the complexity of the actions, but on the knowledge we have for carrying them out. In situations with low complexity and low knowledge, one can simply opt for learning-by-doing PPPs. On the other hand, contexts in which there is low knowledge and high complexity require a search for creative solutions through stakeholder engagement. In these cases, there is a lot of uncertainty and detailed contracts are likely to fail, since low knowledge prevents the stakeholders from seeing potential challenges derived from their actions. Therefore, a more relational and flexible approach is needed.

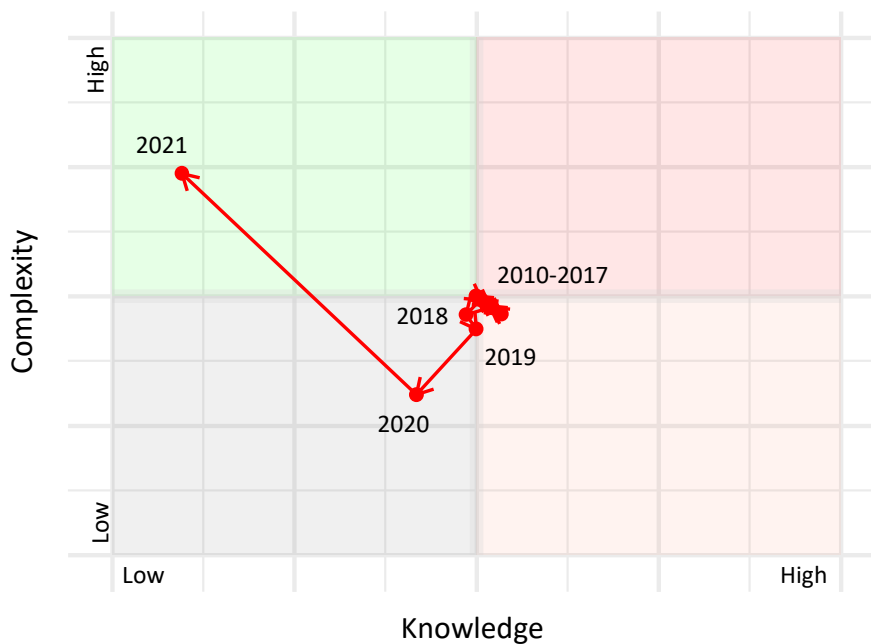
In the next section, we focus on the PPP Innovation Matrix and map the evolution of the Barcelona City Council PPPs for economic development in terms of the aforementioned variables: complexity and knowledge.

#### 3.1. Barcelona Municipality’s Growth Matrix Over the Years

Through qualitative data gathered in interviews with members of the city council, we classified each PPP program in terms of its complexity and the knowledge already existing in public administration. With this, we determined the overall position for each year in the matrix by calculating the coordinates in terms of both complexity and knowledge. So that our results would not be driven by absolute numbers, we calculated the percentage of PPP programs over the whole PPP budget for the whole period 2010-2021 belonging to each quadrant of the matrix. This procedure gives us a relative position for each year in terms of complexity and knowledge of the implemented PPP projects for economic development. In the **Figure 13**, we show the results:



**Figure 13. Knowledge and Complexity Evolution of PPPs in Barcelona**



The period between 2010 and 2017 is characterized by a focus on PPPs of which the city council had a high knowledge and where there was low complexity. This included programs like tourism promotion, public markets or retail promotion. However, after 2018, the innovation landscape changed dramatically. The Barcelona City Council started to devote more attention to projects for which they had less knowledge, and therefore were more innovative.

At the beginning, the city council followed a cautionary strategy to approach the movement through learning-by-doing. Between 2018 and 2020, the city council implemented more innovative projects that required more flexible involvement of other stakeholders. This approach included an emphasis on programs focused on entrepreneurs and support to new ventures in traditional sectors. However, the city council took a big step in 2021. For the first time in its history, Barcelona placed itself in the high-complexity and low-knowledge quadrant.

This means that the city moved towards the most innovative position in terms of PPP projects for economic development. Among others, we can highlight programs to support innovation, economic promotion, food policies, or the creative industries program. All of these require a flexible approach due to their inherent innovative nature, making it impossible to manage these PPPs in a strictly contractual manner. On the contrary, the city council looked for mechanisms that allow for speedy decisions and timely sharing of accurate information between stakeholders. Of course, this situation can create coordination difficulties or disagreement between partners arising from the complexity of the environment, but inter-organizational and inter-stakeholder relationships can mitigate these challenges.

To do so, we have identified several concepts that policymakers should address. First of all, policymakers need to assess and adapt their functional capabilities to properly deliver innovative PPPs. This includes improving the knowledge, skills and experience of public employees who are probably not used to working in such dynamic environments. Secondly, the cultural capabilities of the whole department should be aligned with innovation. The habits, attitudes, beliefs, values and routines of individuals belonging to the department need to be oriented towards the innovation target. Of course, both functional and cultural capabilities are also important for non-public actors of the PPPs.

We will describe later the results of several interviews performed to assess the needs and challenges faced by the city when trying to adapt their functional and cultural capabilities to deliver innovative PPPs for economic development.

Both in the case of social economy and new food policies, there were external actors implicated, especially those from the economic and social fabric of the city. Barcelona has also collaborated with universities that have done research on the subject, especially in the social and solidarity economy. At the same time, it has also collaborated with other administrations, for example, promoting the social and solidarity economy network. Barcelona presides over this network, which includes more than 50 municipalities in Catalonia and represents more than 60% of its population. In sustainable food, above all, the city council has had an intense collaboration with agents from the metropolitan area, even outside the administrative boundaries of the city. In both cases, there has been close cooperation with the Generalitat (the Catalan regional government).

In the social and solidarity economy, there has been a great deal of collaboration with the business network of the city, among both those that operate in the market and those that do not seek a purely economic return but are rather social agents. In 2020, Barcelona approved a city strategy co-led by the Catalan Social Economy Association and supported by many representative and leading entities in the city. The city council created a group where 11 entities are represented, in which more than 40 people have participated. Moreover, the city developed working groups to carry out more specific projects. Regarding sustainable food, Barcelona has promoted the Agropolis space, with entities that promote the agricultural transition towards sustainable practices and has collaborated in a special manner with the Farmers Union, but also with other important organizations in the sector. However, as in many innovative projects, the city has faced some challenges.

Within the social and solidarity economy, strong political will has made it possible to make significant budget contributions. Thus, investment has not been the main barrier. The problems associated with a lack of knowledge have been critical. While important work has been done to accelerate the learning curve, the city faced a shortage of qualified staff. Co-creation and co-production work in PPPs requires knowledge and staff who can work on this inside the city council since it is difficult to delegate this part of the work to external agents via tenders.

In terms of innovative policies, there are few benchmarks. Not only from other cities, but there is also a lack of scientific evidence. It is very difficult to find data to measure and evaluate the policies of the city council. This is why Barcelona is working to help generate enough data and information in this regard to see the quantitative and qualitative evolution of the areas where they are trying to make changes.

In relation to the problems arising from the governance of innovative projects, the city council has a very good relationship and positive experiences with external actors. The main problem identified is the lack of time to nurture these relationships. To mitigate this challenge, Barcelona tries to combine regulated governance and flexible governance. For example, public managers opted for a city agreement because it offered a flexible framework for collaboration and allowed them to focus collaboration on action. In other words, the city is mainly looking for flexibility options that facilitate focusing on utility, delivery of services and, overall, performance. Of course, they also have more regulated and organized spaces such as regular meetings, but the main focus is on flexibility.

On the other hand, one of the biggest barriers is the timing of public procurement and bidding. The pace can be slow and this can be a very important barrier to innovation. In high-innovation projects, it is very difficult to think and predict what the situation will be like in a year and a half (which is the average duration of a contracting or bidding process). Another important element is that the city lacks legal-administrative instruments to give consistency, continuity and sustainability to projects and innovative public processes. Indeed, Barcelona found actors in the city with the capacity and will to carry out these innovative projects, what they call “allies” to design these policies. However, when the time comes for implementation, the legal and administrative structure of the public sector includes many obstacles that make it difficult for these actors to participate in the implementation. Obviously, it is necessary to guarantee fairness in awards through public tenders, but in more innovative programs there are times when it is difficult to find actors with the knowledge and ability to carry them out. In addition, the fact that public teams spend a lot of time managing administrative processes makes it impossible for them to devote more time to relational governance and the relationship with external actors.

From an organizational point of view, it has been necessary to create new teams. The existing public structure did not have the necessary skills to carry out these policies. Especially because there was no knowledge internally. Beyond budgeting issues, team building has been key for driving these innovative policies. The creation of more innovative teams has led to public hirings; in fact, there are few people on the teams in charge of innovative policies who do not come from outside the administration. This has allowed the city to create a different work and organizational culture. Since the city manages complex policies for which they do not have much knowledge, they need flexible tools that allow adaptation to the changes and needs that appear during the implementation phase. In addition, Barcelona tries to avoid bottlenecks when dealing with external actors, giving priority and importance to relationships with them. Of course, the city council did an exercise of planning these innovative policies, but planning is not written in stone. This is because it is impossible to predict what will happen with this type of policy. These are open plans that can be adapted as they unfold and allow the city to be imaginative in proposing how to fit administrative processes with the reality outside of public administration.

## **3.2. Specific Focus: Entrepreneurship and Investment Attraction**

Among the different PPPs implemented by Barcelona's city council, we have selected two special programs that we think are exemplary of the city's innovative. We will describe the program to support entrepreneurship and the program to attract foreign investment. Both programs required a dynamic and relational approach to deal with multiple challenges arising from the complex context in which they operate.

### **3.2.1. Entrepreneurship**

The Covid pandemic forced the Barcelona city council to provide different services and create new programs to adapt to the unforeseen situation. These new and adapted services have been created by consensus with the economic ecosystem and some directly in the form of public-private partnerships. For example, the city council decided to invest in venture capital funds. This is a program in which Barcelona City Council, as part of its financial strategy, takes into account the need to invest in investment funds that provide financing to emerging companies. This is in stark contrast to other forms of public sector funding, such as grants or direct contracting. In other words, the city council is not a sponsor or customer of these companies, they are investors. In total, they have contributed €10 million to venture capital funds. Another innovation is that the city council has asked these investment funds that for every euro invested by the city council, they invest five. That is, they multiply public investment by five. In addition, Barcelona also requested that part of this fund be invested in women-led companies.

The innovation of this program is not as much as the call for partners and venture capital funds, the administrative procedure, the negotiations, and so on. These are just the basics of collaboration. It has more to do with pre-competitive dialogues. Formal and informal consultations were held with people who manage venture capital funds to present the idea of the city council and gather their opinions. In other words, the process of creating this call was more important than the call itself. The most beneficial part of this process is that the city council has not relied on recruitment laws- because they are not contracting- nor by the subsidies law- because they are not subsidizing either. It is money that has a forecasted return, an investment.

Another example of innovation was the creation of a pandemic guarantee system. Barcelona's city council launched a line of fully backed micro-credits for small businesses that were having a bad time during the Covid crisis. These are small businesses that may not be attractive to the banking system, but which Barcelona considers key to the city. The mechanism for doing so was a grant to a credit company to provide financing to small businesses. Just as the previous example of investing in venture capital funds has more to do with promoting Barcelona as an entrepreneurial city, this second example has more to do with a desire to mitigate the short-term effects of the pandemic.

Similarly, central government aid was supplemented. During the pandemic, the Spanish government offered help to the self-employed to deal with the crisis of demand generated by the measures deployed to stop the virus. Knowing that Barcelona is a more expensive city than the rest of the Spanish cities, the city council wanted to complement this aid so that the workers of Barcelona are not less covered than those of the rest of the country. In this case, instead of creating a specific program, the city council used the mechanisms of the central government to expedite the management, so that it was not necessary to carry out two procedures, but only that of the state which was automatically supplemented with extra money if the worker was registered in Barcelona. The innovation in this sense is the administrative collaboration between public administrations. The Barcelona experiences show that innovation must be based on a specific reason or problem. This reason can be a political will, a need or an emergency, but the motivation to innovate is much more decisive for the success of the innovation than the budget.

However, doing so is not easy. The city council is a very large and a very guaranteeing organization. Any move has to go through a lot of administrative and legal control, so risk-taking is not easy. There are people who are involved in the legal and administrative part of policymaking who need to make it clear that the innovation being proposed makes sense and is feasible. In order to carry this out, managers of the city council have identified a system that works. Once the innovative idea has been generated, it is necessary to explain the idea to all those who, later during the administrative process of acceptance of the proposed program, will have a vote and the possibility of a veto. That is, go to the end of the chain and update them with all the details, including identified problems and possible solutions. This allows these people to informally give their opinion on how the idea should be materialized from an administrative and legal point of view so that it can go ahead. It is about raising fears and risks before it is time to decide whether to approve or not.

The cited examples also show that, when there is an emergency, clear and common goals appear. For example, during the pandemic, it was clear inside the city council that something was needed to be done to combat the problems associated with the pandemic. This facilitated many of the innovations explained above. It was a common diagnostic situation where reaching agreements was very easy because people were aligned. It should be noted that to do innovative things, organizations need to take risks. However, the important thing is that these risks – inherent in any innovation – are calculated. In that sense, the administration needs to be more entrepreneurial. Entrepreneurs take risks to innovate, but they do so in a calculated way. Obviously, innovation carries the risk of failing and paying an economic or reputational price, but it is necessary. To calculate the risks well, organizations can start with small-scale projects and, once evaluated, scale them in case they work. Innovation is a matter of talent and governance, not legality or budget.

### **3.2.2. Attracting Talent and Investment**

The city of Barcelona has an international economic promotion office to attract companies and entrepreneurs to create jobs. This translates into three lines of action: city brand, foreign and local promotion, and international talent. The city brand focuses on economic promotion, ensuring that Barcelona is perceived as a city for doing business with high quality of life, a city for entrepreneurship, a start-up city, etc. However, the ultimate goal is for the world to know that Barcelona offers all these opportunities and that jobs are created as a result. The second line of action is foreign and domestic promotion: organizing activities in countries that are net emitters of foreign investment (in general, those of the OECD). There, the city council travels to fairs taking local companies and organizing networking activities abroad. But the office also works at a local level, for example, taking advantage of the Mobile World Congress, when the entire mobile industry visits the city. The third line of action is aimed at international talent. The objective in this line is to exploit the idea that internationals who live in the city can become prescribers of Barcelona in other countries. The city has more than 22% of its citizens who are foreigners, which represents great capital and an asset since they act as recommenders among their nationals to open company headquarters or undertake new economic ventures in the city.

More specifically, one of the lines that is working more effectively and where a lot of effort is being invested is that of attracting and retaining talent. The city has taken a very important leap in this regard.

Sometimes city promotion is thought of as a purely marketing or branding issue, but the office shifted its focus towards people. First, because they are citizens of the city of Barcelona and, second, because they can act as multiplier agents and attractors. In this sense, the city council organizes an event called Barcelona International Community Day. It is a day in which they concentrate a large part of the public and private offer of topics that may be interesting for foreign residents in the city and their families. During that day, foreigners can explore the benefits of the city in terms of languages, real estate, education, insurance companies and banks, as well as public benefits: the Bicing service, car parks, services for companies or entrepreneurs, etc. It is a meeting day between the international community residing in Barcelona and the city.

One of the clearest examples is the collaboration with two major city brands: Sonar and FC Barcelona. With the first, the city works to promote creative industries in the city, something that favors the private sector as well as the public sector. It is a win-win situation. Sonar, despite being an advanced music festival born in the city, has international versions, which brings an opportunity for cultural diplomacy. Taking advantage of these international editions, Barcelona organizes parallel events to promote the city and to which it invites local actors to international editions. On the other hand, there is also sports diplomacy. Together with FC Barcelona, the city visits some international events (like the FC Barcelona route through Japan) in which they take the opportunity to explain the advantages and services offered by the city.

This allows the city to be in a situation that, balancing the budgetary dedication vs. the benefits obtained, they obtain very positive results. Even so, money is the least of the problems when implementing innovative promotion policies. Obviously, the budget is important, but not the most important thing. In general, an exorbitant budget is not needed to execute effective international promotion if cities do it with the support of the local private sector. So, the promotion is not considered a city council project or a project of a few companies, it is about turning it into a city project of all stakeholders. In addition, these joint projects are more durable over time, since they are supported by different actors. Another benefit of this relational approach is that it generates more credibility internationally, since perceptions are formed over a long time. Of course, relational governance has some challenges. The most complicated part of this process is managing the wishes and interests of so many different actors, because sometimes they are opposed. Another barrier faced by Barcelona is the bidding system, whose main objective is to prevent corruption. Obviously, this is an important and laudable goal, but the system entails certain controls that impede innovation. The main criterion of this system is that there should not be any shadow of a doubt about the process, however, this can be burdensome when taken to the extreme. This is especially the case because innovative policies focus on results rather than processes. These two different objectives produce dysfunctions, since the culture of guarantee and the culture of results in the context of innovation generate friction.

Obviously, people pertaining to the promotion office are also central. In Barcelona, there are staff with backgrounds in economics, sociology, communication and other disciplines in order to have a mix of multidisciplinary profiles. Beyond academic qualifications, what is important is that they identify with the vision, the project and the city. There must be a high degree of passion for the city, which optimizes communication. This passion ends up being transmitted in all promotional actions. In terms of governance, it is a unit with a very flat organization chart and a different work culture. In addition to the people on the team, a common vision at the political level is also important. In Barcelona, the vast majority of political parties have a shared vision of promoting the city abroad. This generates stability and the capacity to communicate the brand effectively. And in the case of Barcelona, even the private sector shares this common vision.

In this sense, Barcelona is convinced that it is necessary to start from the reality and assets of the city itself. But Barcelona is not a special case. Here it is important to add that all cities have assets. All cities can be attractive in something and start their journey to gain a foothold in global positioning. But they have to work very hard, since city image is not built in the short term. In addition, cities must also work hard to build the necessary public-private partnerships. Initially, these alliances will probably be small and troublesome, but they are the seed of the city's long-term image. Because in the end, the most important thing to generate a message that attracts talent and investment is that it be a shared message. Only in this way are actors, projects, ideas and, most importantly, people aligned.

One of the most prominent examples of this type of collaboration is the one between Barcelona's city council and Barcelona Partners. This organization was born to attract foreign investment and it is jointly funded with private and public contributions. It is composed of about 30 companies and the city council, which means that the commitment of the private sector is at the highest level. Board meetings are attended by the presidents of these companies, which are among the largest in Spain.

Barcelona Partners identify companies around the world that are (or importantly, could be) interested in coming to Barcelona. The goal is to identify which companies are most likely to come and, at the same time, are attractive to the city. To achieve this, having the largest companies in Spain as partners is a great asset. When you have to talk to a company in San Francisco, it is easier if you go hand-in-hand with the main companies and councils in the country. That's because they already know these companies, which confers more confidence in the proposal to come to Barcelona. In other words, it offers the best of both the private and public sectors. At the beginning, companies are usually interested in talking to other companies about potential partners, suppliers, policies, the city, and so on. Later, when the decision is made, the public sector aspect becomes more relevant.

The aim is to put Barcelona on the radar of these companies so that they consider it as a potential location. However, Barcelona Partners does not target every company. They want to attract projects with the capacity to generate systemic value in the city. According to them, "systemic value" means the value of staying in the city long term. The companies targeted are not those already thinking about Barcelona; instead the focus is on companies that could bring this systemic value to the city. To do so, it is necessary to provide a complementary service to that already offered by the city council or other administrations in investment attraction. This is more of a soft approach, whereby Barcelona Partners acts as mediators and complementors of the public efforts to attract investment, leveraging the fact that they are also private companies. They serve to make the public sector more flexible in order to attract projects in which the coexistence of the private sector and various public administrations is needed.

A good example of this systemic value and the task that Barcelona Partners has done is the America's Cup yacht race. While the America's Cup is just an event, it brings a lot of systemic value. The construction of state-of-the-art ships will be manufactured in the city and all the associated innovation will remain. This is because yacht teams do not build their boats until they know in which city they will compete. This is because the level of sophistication of the competing yachts is very high and their design and manufacturing depend on the type of water, winds and other characteristics of the location where the competition takes place. In other words, to build these yachts, you need a lot of technology. In addition, in the Barcelona edition, all support vessels will be hydrogen-powered vessels, a cutting-edge technology that has only been tested on pilot projects. Now Barcelona has the opportunity to use 30 of them during the competition and the manufacture of these boats will be in Barcelona. This will offer the opportunity for the industry to remain in the city in order to build boats for other competitions or become the main manufacturing hub of these boats.

## 4. Conclusions

In general, organizations (whether public or private) can establish two main governance mechanisms for their collaborations: contractual or relational mechanisms. Contracts are legally enforceable promises, where each actor's responsibilities and obligations are specified. In other words, they are binding agreements. However, contracts are not suitable for collaborations in highly innovative contexts where the knowledge of the actors is low. This becomes even more relevant when low knowledge is accompanied by high complexity.

Such low-knowledge contexts require a softer governance, what we call a relational mechanism. This type of governance is based on shared norms, rules and patterns of behavior to which parties are expected to conform. Instead of being legally enforced, relational mechanisms rely on self-enforcement and are based on mutual trust between partners and stakeholders. This type of governance relies on uncodified tasks or obligations, and require positive inter-organizational relationships and clear information exchange to be successful. By adopting relational governance, stakeholders have more flexibility to adapt to the complex context of which they have little knowledge. From there, flexibility is translated into continuous improvement, adaptation and adjustments to changing conditions. However, relational governance also comes with a potential cost. The lack of specificity and codification can lead to chaotic situations where misunderstandings are common and performance is hampered.

Moreover, as we have discussed, potential barriers may arise during the process. These have been covered in the qualitative information gathered during interviews. In particular, we identified the following barriers for innovative PPPs:

- Budgeting challenges. These are related to difficulties in securing financing sources because of novelty. City councils are not used to financing innovative projects because of their risk-averse legislation. Therefore, finding suitable and sufficient funding can be challenging.
- Knowledge challenges. Cities also face challenges related to a lack of skilled personnel, a lack of empirical evidence about the innovative policy, or lack of information in general. Due to the very nature of innovation, there is little information about the outputs, outcomes and processes that lead to them.
- Cooperation challenges. These are inherent to innovative projects in which organizations have low knowledge and experience. Due to high complexity environments, distributing tasks and risks through different stakeholders and establishing formal and informal mechanisms of cooperation can be challenging.
- Administrative/legal challenges. Public administrations are often constrained by strict legislations that harm their ability to innovate. While these regulations and policies are necessary to avoid corruption, and the misuse of funds, they also reduce the available options of public administrations for delivering innovative approaches.

In this report, we have shown how the Barcelona City Council has recently adopted a dynamic perspective of PPPs for economic development bypassing many of the barriers listed above. Through our in-depth quantitative and qualitative analysis, we show that Barcelona adopted an innovative focus for economic development through collaboration with multiple stakeholders by means of a relational governance mechanism.

One of the main findings from the qualitative data collected is that Barcelona's relational mechanism should not be confused with an informal or loose approach. On the contrary, the city made a great effort to ensure that economic development policies are effectively delivered through trust and collaboration. This fact proves that the trade-offs arising in complex contexts for which stakeholders have little knowledge can be well balanced if the optimal governance is designed and adaptation mechanisms are in place. Therefore, this report serves as a call for action in terms of dynamic management of innovative PPPs for economic development.

Additionally, we provided quantitative evidence about the specific effort that Barcelona City Council has devoted to economic development through PPPs. In general, the city has increased the budget for PPPs from less than €40 million to more than €100 million in 2021. Moreover, the increase in the absolute numbers has been accompanied by an increase in the innovativeness of the implemented programs. Specific policies fostering the cooperative economy or the creative industries are clear examples of this movement.

Importantly, this report highlights the need to incorporate knowledge. Cities need administrative systems that allow the incorporation of knowledge into the organization. When dealing with innovative policies, traditional approaches like working only with tenders and with delegation of tasks is risky. The administration needs to learn and absorb external knowledge to succeed. In our case study, Barcelona opted to incorporate external knowledge through recruitment in order to absorb knowledge. Since knowledge has to be incorporated in some way, the Barcelona case shows that the fastest procedure is the creation of new teams with external people. In addition, there is a need for shared governance that allows for greater openness to co-creation and allows for high levels of uncertainty to be managed.

This report highlights the importance of focusing not only on quantitative measures to assess PPPs for economic development, but also the importance of governance. The Barcelona experience suggests that cities aiming to create PPPs in innovative contexts should be aware of the trade-offs between different governance mechanisms and the resulting structure. While the relational approach may sound more attractive than the contractual approach, it requires the balancing of different – and sometimes diverging – interests and needs. Therefore, policymakers should be aware of the potential challenges they may face starting at the inception phase. In that sense, building trust and a shared common vision among stakeholders at the design phase is key. In other words, innovative PPPs should not be focused only on quantitative measures and KPIs, but also on the social aspect and human component. We do believe that the example of Barcelona is a stimulating case for cities as they increasingly adopt innovative PPPs to improve their citizens' quality of life.



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