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Achieving affordable housing through energy efficiency strategy

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HIGHLIGHTS

- Provision of affordable dwellings is an emerging priority within Italian context.
- Lack of public funds leads to promote Public–Private Partnership schemes.
- Without public grants the adoption of a venture philanthropy approach is needed.
- The examined case study allows to explain the role of buildings energy efficiency.
- Buildings energy efficiency may boost feasibility of social housing transactions.

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ABSTRACT

Cooperation between public and private sector has achieved a remarkable widespread, in the Italian context, over the last two decades. Nevertheless, the increasing difficulty in accessing the capital market and the rising cost of funding sources, both noticeable over the past few years, led to a slowdown of Public–Private Partnership (PPP) initiatives. Meanwhile, the community is expressing new needs to be satisfied, such as the conversion of brownfields, the recovery of housing stock dating back to former times, as well as the refurbishment of public offices or schools. Emerging priorities include the supply of affordable dwellings for low to medium income households.

This essay aims to examine a case study in which PPP and buildings energy efficiency have been successfully combined, in order to jointly contribute to the achievement of a social housing settlement.

Thanks to energy efficiency measures—concerning building envelope insulation, heating system and other installations—the agreed rent results far higher than social rent of protected tenancies, and furthermore above the range of fair rents characterising other regulated tenancies, but mildly lower than market rents. All this allows to achieve an equity yield rate satisfying from the perspective of a venture philanthropy investment.

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1. Introduction

1.1. Public–private partnership

A well-known green paper published by the European Commission (2004) states that "The term public–private partnership (PPP) […] refers to forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service" (p. 3). Fundamentals of PPP are: long lasting relationship between public and private partners; investment costs sharing; multiple tasks assigned to private entities; risk transfer from public to private sector so each risk shall to be assumed by the subject who is identified as more able to control it. The same green paper distinguishes between purely contractual PPP, such as concession-based project finance transactions, and institutionalized PPP, namely the mixed equity companies.

Over the span of the past two decades, PPP in general and project finance specifically have developed across European countries, most of all in UK, Spain, France, Germany, Italy, and Portugal, accounting together more than 90 per cent of European PPP's market from 1990 to 2009 (Kappeler and Nemoz, 2010). Main Italian experiences lie in the fields of turnpikes, car parking, underground railway lines, new hospitals replacing the old ones abandoned due to conditions of physical and functional obsolescence, kindergartens, sports facilities, cemeteries and gas distribution networks (Cori et al., 2010).

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A communication of the Commission to the EU Parliament underlines that "just at the time when the more systematic use of PPPs would bring considerable benefits, the crisis has made the conditions for these instruments more difficult. Although there is now some evidence of recovery, the volume and value of projects currently closing is still significantly below pre-crisis level" (European Commission, 2009, pp. 2, 3). As a matter of fact, during the last years PPP transactions have been progressively slowed down, in Italy as well as in other European countries (Kappeler and Nemoz, 2010), by unfavourable conditions emerged in capital markets, as highlighted by rising cost of debt capital provided by lenders (Antonini et al., 2014). According to the Statistical Bulletin edited quarterly by national central bank (Bank of Italy, 2004–2014), since mid-2004 until mid-2008, Annual Percentage Rate (APR) applied in long term loans to the productive sector had an average implicit spread close to 1.4 per cent, if compared to Euribor rate. This was consistent with data published in public authorities' reports relating to the valuation of PPP initiatives, which recommended assuming a spread of about 1.5 per cent at an average financing risk (Utfp, 2002). Since 2009–2011, the spread over base rate was growing up to 2.7 per cent. From 2012 to date, average spread has further increased, reaching 4.3 per cent and waving in the range between 360 and 480 basis points (Fig. 1). Therefore, economic crisis has led to lower willingness to provide debt capital by lenders, as well as to higher cost of same borrowed capital (European Commission, 2009). "Credit crunch" expression well summarizes this combination of factors.

Meanwhile, the community conveys new needs to be fulfilled, beyond the scope of infrastructure and urban facilities. This emerging demand refers to conversion of brownfields, recovery of housing stock dating back to former times—or, sometimes, simply aged more than a couple of decades—as well as refurbishment of public buildings intended for administrative offices or schools. Emerging priorities include supply of affordable dwellings for low to medium income households.

1.2. Social housing

Following the path, at first at least, common to most Western European countries (Norris, 2012), main Italian public housing production dates back to the decades post-second world war, with hundreds thousands low-cost dwellings realized through National Insurance Institute plan, other thousands dwellings financed by means of Workers' Housing Management fund, and whole settlements realized and managed by each Council Housing Institutes, which were established on a local basis (Pogliani, 2014). Instead, the eighties and the following decade were characterized by a declining effort (Padovani, 1996), as evidenced by progressive decreasing public spending on housing, which fell under 1 per cent of GDP by the end of the nineties (Gibb, 2002) against 1.9 per cent reported in 1985 (Cerniglia, 2005). Moreover, incentives were provided to tenants so as to redeem public dwellings, particularly by allowing a purchase price far lower than market value, because of government decision "to privatise half of the public housing stock in order to […] cut public expenditure" (Balchin, 1996, p. 161).

After being almost disregarded for a long time, provision of affordable housing is becoming ever more relevant over the past few years (Pogliani, 2014). A new national plan (approved by Law 133/2008, s. 11) focuses on a network of property investment funds, besides other PPP's approaches, to be set up in order to attract private funding. At the same time, a Ministerial Decree—came into force April 2, 2008—provided the current legal definition of social dwelling. It is a residential real estate unit intended to be rented—at least eight years—or sold, at a rent or price lower than market ones. Rental tenure types are mainly two: protected tenancies, provided by local public bodies at social rents, and regulated tenancies, provided by both public bodies and private entities at agreed rents. Leases may consist in a fixed-term tenancy or, much less frequently, in a periodic tenancy. Recent regulatory actions witness the renewed interest in social housing, characterized by two remarkable differences with the past. The first one concerns mission. Objective of public intervention during the sixties and seventies was "housing the poor" in a narrow sense, particularly internal migrants from southern to northern Italy. Current policy objective involves housing a variety of households and income groups in the broadest sense. The second difference concerns funding. Sovereign debt crisis entailed the need to cut the government budget. In turn, fund shortage suggested the opportunity to experiment innovative financing schemes (Baldini and Poggio, 2014). Therefore, despite PPP is experiencing the above-mentioned difficulties, it appears to be still an unavoidable path to pursue social housing enhancement in the Italian context.

1.3. Buildings energy efficiency

The hypothesis to fund social housing settlements by means of PPP requires to devise profitable transactions for private partners. Several recent reports suggest to pursue this goal exploiting opportunities offered by ongoing EU energy policy, aiming to achieve the short-term objective of reducing primary energy consumption by 20 per cent until the year 2020, and the long-term purpose of a low-carbon economy by the year 2050. Beyond declarations of intent, which can be found in EU acts or position documents, an

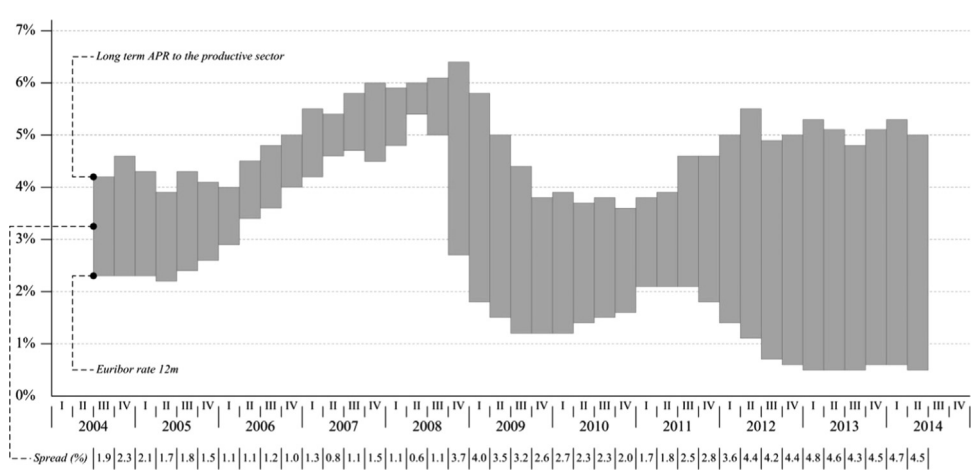

Fig. 1. Cost of debt capital.

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