Role of Cultural Heritage in the Sustainable Development of Rural Settlements

A Sedova¹, A Balakina²

¹PhD Candidate, Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano, p.za Leonardo da Vinci 32, Milan 20133, Italy
²Head of Department of Architecture, Professor, Department of Architecture, Moscow State (National Research) University of Civil Engineering, Yaroslavskoye Shosse, Moscow 129337, Russia

E-mail: anastasiia.sedova@polimi.it, balakinaae@mail.ru

Abstract. World spread globalization is a continuously process which necessitate growing of big cities with prospering metropolises and the process of emptiness small cities and countryside. The problem of the extinction of the Russian countryside is one of the acute social and economic problems of modern Russia. What is more, according to The World Bank's data, the tendency of the decrease in the share of the rural population is also relevant for countries of Europe and the USA. Likewise, in Russia, for 8 years from 2002 to 2010 the number of abandoned villages had rocketed from 13 to 19.5 thousand. Hence, amount of abandoned rural cultural heritage properties, such as country estates, churches, graveyards is continuously increasing. The paper analyses the ways of how the implementation of modern business models for the above obsolete properties can contribute to the regeneration of rural settlements. Moreover, the research reports the driving forces of the regeneration, barriers, risk and opportunities given by the shift to new governance model as an aspect of sustainable development.

1. Introduction

1.1. Cultural heritage framework for a sustainable development
Retrieving some international policy documents issued by the UNESCO in the early 2010, the Hangzhou Declaration “Placing Culture at the Heart of Sustainable Development Policies” recognized the role of culture as the fourth pillar of sustainable development, together with the economic, environmental and social domains [2]. UNESCO [2] had characterized heritage as a catalyst for achieving sustainable development of urban environment: “We also reaffirm the potential of culture as a driver for sustainable development, through the specific contributions that it can make – as knowledge capital and a sector of activity – to inclusive social, cultural and economic development, harmony, environmental sustainability, peace and security. This has been confirmed by a wealth of studies and demonstrated by numerous concrete initiatives”.

What is more, cultural heritage was adopted as ‘strategic resource for a sustainable Europe’ [3]. Namely, heritage force tourism which owes much of its attractiveness to the rich cultural heritage of Europe, be it in historic towns and cities or in the countryside [4]. Moreover, it needs to be restored and maintained that have to be supported by vast amount of jobs and involved experts. The availability
of cultural heritage and services is not only important for its measurable economic benefits. It also enriches the quality of life for European citizens and contributes to their wellbeing, sense of history, identity and belonging [4].

In a raplex environment, Buildings that can adapt to constant changing market demands would be more sustainable and provide investors with confidence as long-term investments. When buildings are constructed for both present requirements and future change, real estate decisions will effectively begin to represent a sustainable investment [5]. Moreover, the European Union [6] recommends that the regeneration of urban property, particularly older buildings, generally pursues the sustainable development tenet of economic growth.

1.2. Urban versus rural areas worldwide
Cities have been around since the 3rd millennium B.C. And as long as they have existed, people have been drawn to them for what they offer. As recently as 1800, however, only 2 per cent of the world’s population lived in urban areas. Sixty-five years ago, metropolitan New York was the only urban center with a population of more than 10 million; today, there are 47 such cities worldwide (as at 2016). During the same 65-year period, the number of cities with more than one million inhabitants increased more than fourfold — from 80 to 436 (as at 2016).

Currently all over the earth there are 3.4 billion out of 6.9 billion people living in the countryside [7]. Thus, urbanization and globalization are modern fact of life. It is expected that, from 2010 to 2025 the population in cities with over 0.5 million inhabitants will rocket from 1.686 to 2.256 billion respectively. Hence, the world faces the problem of rural depopulation and the emptiness of rural cultural heritage.

Over the last few decades, the European countryside has undergone profound changes [8]. The automatization of the agricultural sector, the modernization of facilities, the regional migration to cities and the aging of the remaining inhabitants of rural areas lead to the emptiness of vast rural territories and as evidence consequence the presence of neglected properties. This phenomenon is common in the rural areas of most European countries, such as Belgium [9], Denmark [10], Italy [11], the Netherlands [12], the United Kingdom [13] and Sweden [14]. Rural zones are characterized by the mono-oriented urban structure, it means that as opposed to cities, rural settlements appear around a primary dominant element, such as country estates, farms, barracks, health facilities, religious complexes, industrial parks. Evident, that due to this urban structure, the emptiness of the primary dominant element leads to the rural structure destruction and rural depopulation. Thus, the paper argues that once being reused from cultural, social, environmental, and the most important, economic perspectives, rural cultural heritage may force sustainable development of rural zones.

1.3. Cultural heritage as rural capital
Placido Domingo reports that cultural heritage is a capital of irreplaceable cultural, social, environmental and economic value. Cultural heritage is seen as a key resource for sustainable development [15]. The idea of sustainable development of cultural heritage is: according to the 2030 Agenda for Sustainable Development, Goal 17. “Strengthen the means of implementation and revitalize the global partnership for sustainable development”, hence sustainable development should consider equal development as urban as rural settlements. Moreover, according to the above Agenda, an important aspect of sustainable development is the strong cooperation of different stakeholders and private and public parties [16].

Understanding the characteristics of a rural business is increasingly important, in light of the growing diversity and reach of economic activities in rural areas.

Bosworth and Turner [17] analysed the concept of “rural capital” that was proposed in the US by Castle [18] who indicated it as “development and conservation <…> is of fundamental importance to rural people as they exercise their autonomy in addressing common concerns and pursuing their aspirations”. In this quotation we can see parallels with neo-endogenous development thinking which emerged in Europe at a similar time [19, 20, 21, 22] to advocate the deployment of local assets.
combined with extra local networks in the pursuit of development objectives. These might include combinations of tangible (economic, natural and physical) and intangible (social, organizational and cultural) capitals as well as human capital which arguably falls somewhere in between [23]. Castle suggests that the agglomeration of capitals within the rural economy creates additional value, just as the Community Capital framework suggests that accrual of different forms of capital within a community can be mutually self-reinforcing [24, 25]. Rural capital, as an aggregation of forms of capital attached to a given rural territory, could be aligned to the concept of territorial capital, defined as, “the system of territorial assets of economic, cultural, social and environmental nature that ensures the development potential of places” [26]. It has been observed that in regions where territorial capital assets play an important role, regional growth performance tends to be stronger [27].

Since ancient times, rural settlement had been formed around its primary dominant elements, while nowadays this cultural asset suffers the decrease of attention, lack of financing and, as a result, lack of maintenance issues, managerial activities and preservation knowledge. It is generally believed, that built cultural heritage is often analysed from a sociocultural point of view but rarer from the economic point of view. Evident, that it is not an easy task, because the value of collective memory, inspirational and emotional characteristics of historic buildings that are considered as the main characteristics that value it for a society, are generally perceived as somethings completely incompatible with economics. Nevertheless, social, environmental, cultural and economic are four pillars of sustainable development, that have to be considered altogether. Hence, rural capital is a synonym of sustainable development, where the economic aspect has equal weight as the other aspects. Wilkinson, Remoy and Langston [28] wrote that the definition of heritage as capital enables the related concepts of depreciation, investment, rate of return, etc., to be applied to the definition of values and management strategies of heritage. Equally, the discussions of rural cultural properties adaptation should be opened between professionals who deal with the preservation and maintenance of cultural assets, economists who establish economic and cultural policy, and specialists of sacred studies, in case of the emptiness of religious cultural heritage, who are focused on the preservation of emotional and spiritual values.

The emptiness of a single rural dominant element is followed by the formation of holes in rural tissue, which could be filled through the new understanding of cultural heritage uses. Business-oriented approach, stakeholders’ cooperation, new government models are seen as tools to fulfill these holes, and hence, tools to ensure sustainable development.

2. The contribution of heritage properties to regeneration

2.1. Driving factors of regeneration

Undoubtedly, one of the main characteristics of rural architecture is its “utilitarian purpose”, to the extent that buildings lacking a function have tended to disappear. For this reason, reuse is a viable option for preserving this rural cultural heritage. Adding additional value to conserving heritage buildings and places is the reuse principle implicit in the idea of sustainability [29]. Bullen and Love analyzed factors influencing the adaptive reuse of buildings [5]. Adaptive reuse has become an integral strategy to ameliorate the financial, environmental and social performance of buildings [28]. In many cases, increasing the life of a building through reuse can lower material, transport and energy consumption and pollution and thus make a significant contribution to sustainability [30].

On the one hand, rural settlement are not popular tourism destination and these settlements have low economic circulation. The heritage could be included to rural development and tourism, thanks to funding from EU programs. Nevertheless, in many cases new proposed commercial use for built rural cultural heritage properties is an unjustified goal of its renewal and, hence, rural regeneration.

On the other hand, any rural settlement apart of pure residential function have to provide places for socialization, education and health care. Unfortunately, many rural areas have a lack of these social services and amenities, but it gives an opportunity to the spaces of rural heritage to fill holes in functionality of villages. What is more, when well maintained, former these places can be bulwarks that help neighbourhoods resist decline and increase value of the area. Likewise, Rush Library (see
figure 1) is placed in a former Catholic church. Rush is a small town in Ireland, in 2011 it had population of about 9,000. The Library is open for public, is a popular place as for studying and after-school place of staying for children, as for the elderly who may attend here a course of how-to-use a computer. Periodically, the building hosts workshop, master classes and small-size events. In total, Rush Library has about 5,000 readers monthly which means that more than a half of Rush’s population use the library on a regular basis. To sum up, the conversion was able to fill the educational gap of the settlement.

![Figure 1. Rush Public Library, Rush, County Dublin, Ireland.](image)

There is no doubt, regeneration arises from the physical, economic, social and environmental decline. Regeneration can be considered as a process that seeks to reverse decay, raise value and kick-start markets to counter the perception of market failure that characterizes renewal locations [31]. Importantly, the role of the development of the real estate market, physical forms of development, roles of the private and public sectors are crucial in planning regeneration. This is increasingly related to arguments connected to urban competitiveness and investability [32] with regeneration being placed within the wider dimension of urban renaissance and city living [31]. Investment perspectives and financial contribution to regeneration are not well studied up to now, hence the proposal studies general aspects of the above both occurrences and sees how they can be applied for rural reality. Thus, any regeneration location is characterized by material and physical obsolescence, distressed constructions and infrastructure that lead to the increase of investment risk and higher costs. This fact has resulted in the valuation of land being one of the most contentious issues in the appraisal of urban regeneration projects [32].

The majority of researchers say that the state plays as a main actor in the operations of land markets. Direct state intervention in the land market is often embodied as part of a national strategy to facilitate private-sector initiatives [31]. The planning regeneration is considered as possible scenario to enlist the private sector to guarantee the well-being of settlements. For the side of sustainability provision, market occurs when the long-term needs and aspirations of consumers are satisfied. In persuade private partners, as developers, to use sustainable solutions, government clearly needs to launch policy initiatives that encourage adaptive re-use [5]. The US and UK are at the head of renovation development, where the public financing of regeneration is focused on grants and tax-based mechanisms while private sector financing approaches consider issues from both development and investor perspectives [31]. A further lesson of successful regeneration partnership from the US is the
matching of differing investors with varying risk profiles to appropriate investment opportunities [33, 34].

Undoubtedly, the planned regeneration should not focus on physical renewal as well as on social innovation. The innovation is associated with regeneration policy that forces the growth of population and employment with long-term increase in the settlement. What is more, it can foster the increasing amount of investment initiatives in an area. Then built cultural heritage then may play a key role in rural regeneration not only from physical perspective but also from the social renewal [15].

2.2. Barriers, risks, opportunities of regeneration

Bullen and Love [5] highlighted the list of barriers that can influence the decision on adaptation of cultural heritage of existing heritage building stock:

- condition of external fabric and finishes;
- maintenance costs;
- higher rental in reuse buildings;
- building regulations/planning restrictions;
- complexity;
- lack of skilled tradesmen;
- building layout (e.g., space efficiencies);
- health and safety requirements;
- commercial risk and uncertainty;
- low quality construction.

Importantly, that rural cultural heritage provides even more barriers of adaptation then the urban one. For instance, the majority of rural settlements have low transport connections, do not have social services, suppliers, choice of market supply. Nevertheless, it can be seen as a driver of regeneration, if these a developer is able to find ways of putting these services to former heritage site. Thus, difficulties of the sites may bear pilot project of rural development. Undoubtedly, any pilot projects have high risk to failure, while it also may provide high opportunities to the following wider development in the future. For instance, pilot projects potentially may benefit from government support, state protection, high community interest, business involvement, grants for innovative projects, communitarian funds.

A rule of thumb states that developers go to the least difficult site in order to decrease risks and failure possibility. Kumul [35] wrote that investors and developers typically base their adaptive reuse decisions on perceptions rather than an objective assessment of risk, complexity, cost and value. Nevertheless, the paper analyzes the main aspects that influence on regeneration. Thus, regeneration policy as articulated in this paper needs to be focused if inner-city areas and brownfield sites are to be made sufficiently attractive to developers and possess the capability of yielding an appropriate profit margin [31]. The developers can meet the complexity associated with re-use obsolete structure, decayed materials, parts in disrepair, and etc. These may need additional investment and extra-time needed to finish the project. Moreover, in the majority of cases old properties do no correspond with the requirements of new building codes and regulatory acts, the project needs to bring older facilities to current performance level [36]. Likewise, large-scale projects come amid risk of being performed over the business cycle. Thus, regeneration strategies need to be long-term and cover at least 10-15 years horizon [31].

From economic perspective, partnerships are considered as successful mechanisms to achieve well-being of the property through re-use or regeneration. Undoubtedly, in swaying developers to embrace sustainability, government clearly needs to generate policy initiatives that encourage adaptive re-use [5]. The policy should engage private partners who are seen as occupiers and users of the regenerated property. The formation of financially feasible projects is the primary fact that motivate private sector
to undertake development [31], the business often needs to be sure of the purpose of the regeneration and its role in the partnership agreement. Hence, state’s measures aimed on forcing adaptive re-use and regeneration should include national, regional, and municipal legislative possibility of planning re-use or regeneration, consultations and open data about grants and potential tax-reductions, making inventories of potential adaptive re-use sites, possible property ownership. Adair et al. [31] concludes that the most effective form of partnership is that which focuses upon risk reduction–risk sharing strategies and in which the financial and delivery mechanisms for regeneration are explicit.

3. Rural regeneration in Russia

3.1. Characteristics of the rural areas in Russia

The problem of the extinction of the Russian countryside is one of the acute social and economic problems of modern Russia. What is more, according to The World Bank's data, the tendency of the decrease in the share of the rural population is also relevant for countries of Europe and the USA. Russia today is a country of cities, only a quarter of the population lives in rural areas. Mass migration of people from the villages to the cities began after the II World War, and it happened very quickly. As early as in the beginning of the 20th century, 85% of the population was rural, at that time Russia was a typical peasant country. To understand its modern features, it should be imagined how the villages looked like before and what became of it. Currently, there are 153 thousand rural settlements in Russia, and just a little over a thousand. However, the ratio of the number of city people and villagers is the opposite: only 27% of the country's population lives in rural areas (40 million people), and 73% in cities (108 million people). In Russia, for 8 years from 2002 to 2010 the number of abandoned villages rocketed from 13 to 19.5 thousand. Unemployment in the countryside is one of the main incentives for moving to the city.

At the same time, for Russia the extinction of huge rural areas becomes a strategic problem: when the results of capital investments in infrastructure made in the Soviet Period will be completely destroyed, huge investments will be needed to restore the depressed territories. Nowadays, the Russian society faces growing interest to the idea of rural territories, which have social services and financial circulation.

Russian now is in the stage of understanding the needs of sustainable development that consists with the problem of deglobalization. It is important to understand, that there are a lot of cultural heritage objects became ownerless and neglected conjoined with the extinction of rural territories. The most valuable rural Russian heritage is Orthodox churches and monasteries that have always been the spiritual center of the settlement (S. Melnikova – personal communication on 14 February 2018). Vast amount of them nowadays are abandoned and, what is more, ruined after the collapse of the USSR. The total amount of both rural and urban churches in Russia are 7,932, at least a half of them, namely 3,493 are rural abandoned buildings, in reality the amount of village churches can be higher.

3.2. Possible role of cultural heritage in the rural regeneration in Russia

Religious building is a specific type of cultural public property which has several constrains in finding appropriate managing solutions. There is no doubt, this kind of heritage objects should be addressed in more detail [1].

Since ancient times Russian Orthodox Church had played a key role in the social life. A church had been a central part of a village or a city from architectural point and, moreover, from cultural point of view. But the society does not stand still and when the Bolsheviks took power in 1917 and proclaimed the organization of the USSR, strong persecutions on the Orthodox Church began. Nowadays, 26 years have passed since the collapse of the USSR, Russian society still has Soviet’s holdover – almost 8 thousand abandoned churches. With increasing development and the continuous process of urbanization, the economic, social, and cultural characteristics of rural settlements all around Russian territory are transforming. Originally religious buildings were the most important urban identity elements, but nowadays abandoned churches create “exclusion” zones in villages [1]. Particularly, an
abandoned Orthodox church, that can be the unique rural element that preserve traditional way of life (Melnikova, 2018), has social, economic, technical and physical obsolescence.

The majority of churches belongs to 18th or 19th century and since 1917 (The Great October Revolution) they have not been conserved or maintained, hence now we can observe weak structures, old materials and building technologies, and buildings that do not correspond with new codes and norms, thus becoming more damaged and less attractive for developers. Hence, the policy, needed to force the process of building re-use and rural renewal should consider state federal programs, tax-reduction and grants that motivate private sector to undertake development. The use of taxation incentives together with planning activities and regulatory approach in order to encourage renewal through property development is the central feature of the regeneration model [31]. Namely, the rural areas regeneration could be forces by the religious property development. The fiscal incentives that work in Russian mainly for the construction of new religious buildings, could be applied also for the rural sacred development as taxed are transparent, has less uncertainties and inform business about the development value determination. Federal grants, such as through the program “Culture of Russia”, can provide positive finding resource that could be more targeted. Whereas taxes incentives could provide new forms of investment, stimulate property-based urban regeneration, focus developers’ interest in locations and establish new markets that otherwise would not have existed [31]. The establishment of new innovative markets is a key factor in church and villages renewal in Russia for the reason that existing market does not able to provide profitable solutions for the problem of vast neglected territories and properties.

In the analysis performed by McGreal et al. [37] indicates a measured degree of support concerning the effectiveness of public–private partnerships in delivering development opportunities within urban regeneration locations. Undoubtedly, the public-private mechanisms for rural and heritage property regeneration bring important benefits beyond funding for heritage. Rypkema [38] notes that, in contrast to other infrastructure projects that attempt to supply a demand, PPPs for conservation “do not start with the building and try to answer the question, “How do I fill that space?” Rather, the equation, which begins with the market, is turned around, and the questions become “What is the unmet or undermet demand in this market?” followed by “Could this building be developed to meet that demand?” Hence, if the main financial providers are represented by small business have big risk to fail as they are not sure of their track record and level of commitment [39]. It can be seen as positive factor for the Russian reality where in 2016 share of small business in GDP was 21.2% that is very low. To sum up, public-private partnership can be seen as key mechanisms to accumulate funding to cultural regeneration projects and to rese revenue streams.

Importantly, among other the above barriers and threats of re-use projects, potential private investors for regeneration of rural church properties have to consider the process of transferring churches that is carried out through the Federal Law from November 30, 2010 n. 327 "On transferring religious properties to the religious organizations from the state or municipal property". Here a developer may face a risk that a church at any moment a church can be transferred to Russian Orthodox Church who can play as owner of third party. Nevertheless, this risk can be overcome through negotiation with the state property’s owner and religious organization. Importantly, experience shows that if viable opportunities are created, the private sector will engage [31].

4. Conclusions
In general, regeneration and reuse are complicated processes, that should consider a lot of driven factors, barriers, threats and particular conditions of each place. Firstly, the renaissance of Russian villages can be performed only studying all the risks of reuse of neglect churches and developers’ high risk of failure. Hence, the most effective form of partnership of regeneration is accepted which focuses upon risk-reduction – risk sharing strategies. Secondly, apart from the presence of private sector investment, various grant, federal funding programs, and fiscal incentives should provide support policy for developers, where the state plays the key role in fostering attractive term for investors.
Currently in Russia, there are some federal initiatives that can be starting points for new markets and forms of public-private partnerships that needed for the feasibility of rural regeneration project.

Significantly, in Russian is evident the growing interest of the modern generation to the problem of abandoned churches in issue from users, volunteers and supporters. In particular case, the rural regeneration needs the innovative forms of partnerships and thinking. As actors of the future regeneration as state policies should be flexible in order to maximize business involvement and avoiding risks and threats.

To sum up, an important role of cultural heritage in the sustainable development of rural settlements is proved. While, the strategies, stakeholders, business models should be set up individually for every case of the villagers’ emptiness. Likewise, rural cultural heritage is able to fill diverse holes in rural tissue, while only the presence of economic, social, cultural and environmental analysis of redevelopment lead to the sustainable development.

References
[1] Boniotti C, Ciaramealla A, Pracchi V, Sedova A 2018 Management models for public cultural heritage: a comparison between the Italian and Russian approaches Proceedings of the 6th International Conference on Heritage and Sustainable Development 13-2
[2] Unesco United Nations Educational, Scientific and Cultural Organization 2013 The Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies. Culture: key to sustainable development Hangzhou International Congress
[3] Council of the European Union 2014 Conclusions on cultural heritage as a strategic resource for a sustainable Europe
[4] European Commission 2015 Getting cultural heritage to work for Europe Report for the Horizon 2020 Expert Group on Cultural Heritage
[5] Bullen P A, Love P E D 2011 Factors influencing the adaptive re-use of buildings Journal of engineering 9 1 32-46
[6] European Union 2001 A sustainable Europe for a better world: European Union strategy for sustainable development
[7] Statista n.d. Global urban and rural population in 1995, 2010 and 2025
[8] Cano A, Garzon E, Sanchez-Soto P J 2013 Historic preservation, GIS, & rural development: The case of Almeria province (Spain) Applied geography 42 34-47
[9] Waiters E and Goedseels V 1996 Conservation of historical farm buildings in a densely populated area: Flanders (Belgium) Proceedings of the international seminar of the CIGR “New uses for old rural buildings in the context of landscape planning” Piacenza (Italy) 99-110
[10] Birkkjær K O and Pedersen S 1996 Re-use of old rural buildings in Denmark Proceedings of the international seminar of the CIGR “New uses for old rural buildings in the context of landscape planning” Piacenza (Italy) 139-144
[11] Agostini S 1999 Architettura rurale: la via del recupero (Milan: F. Angeli)
[12] Van de Vaart J H P 2005 Towards a new rural landscape: consequences of nonagricultural re-use of redundant farm buildings in Friesland Landscape and Urban Planning 70 1-2 143-152
[13] Darley G 1988 A future for farm buildings (London: SAVE Britain’s Heritage)
[14] Ascárd K 1996 Alternative use of old farm buildings Proceedings of the international seminar of the CIGR “New uses for old rural buildings in the context of landscape planning” Piacenza (Italy) 119-124
[15] CHCfE Consortium 2015 Cultural Heritage Counts for Europe full report June 2015
[16] General Assembly United Nations 2015 Transforming our world: the 2030 Agenda for Sustainable Development
[17] Bosworth G and Turner R 2018 Interrogative the meaning of a rural business through a rural capitals framework Journal of Rural Studies 60 1-10
[18] Castle E 1998 A conceptual framework for the study of rural places American Journal of Agricultural Economics 80 621–631
[19] Lowe P, Ray C, Ward N, Wood D, Woodward R 1998 Participation in Rural Development: a Review of European Experience (Centre for Rural Economy University of Newcastle)
[20] Ray C 2001 Culture Economies (Centre for Rural Economy Newcastle)
[21] Ward N, Atterton J, Kim T Y, Lowe P, Phillipson J, Thompson N 2005 Universities, the Knowledge Economy and ‘Neo-endogenous Rural Development’ (Centre for Rural Economy Newcastle University)
[22] Terluin I 2003 Differences in economic development in rural regions of advanced countries: an overview and critical analysis of theories Journal of Rural Studies 19 327–344
[23] Svendsen G and Sorensen J 2007 There’s more to the picture than meets the eye: measuring tangible and intangible capital in two marginal communities in rural Denmark Journal of Rural Studies 23 453–471
[24] Emery M and Flora C 2006 Spiraling-up: mapping community transformation with community capitals framework Community Deviation Journal of Technology education 37 19–35
[25] Flora C B and Flora J L 2008 Rural Communities, Legacy and Change, third ed. Westview Press, Boulder CO USA
[26] Perucca G 2014 The role of territorial capital in local economic growth: evidence from Italy European Planning Studies 22 3 537–562
[27] Camagni R and Capello R 2009 Territorial capital and regional competitiveness: theory and evidence Studies Regional Science 39 1 19–39
[28] Wilkinson S J, Remoy H, Langston C 2014 Sustainable building adaptation: innovations in decision-making Wiley Blackwell Oxford United Kingdom
[29] Mehr S Y, Skates H, Holden G 2017 Adding more by using Less: Adaptive reuse of woolstores Procedia Engineering 180 697 –703
[30] Douglas J 2006 Building Adaptation: second edition (Spon Press, London and New York)
[31] Adair A, Berry J, McGreal S 2003 Financing Property’s Contribution to Regeneration Urban Studies 40 5–6 1065–1080
[32] Begg I 2002 Investability: the key to competitive regions and cities, policy review section Journal of Regional Studies 36 2 187–200
[33] Beattie R 1991 City Grant Journal of Property Finance 1 4 588–592
[34] Simons P 1998 Turning Brownfields into Greenbacks (Washington, DC: Urban Land Institute)
[35] Leinberger C 2000 The connection between sustainability and economic development (D. Porter (Ed.) The Practice of Sustainable Development, Washington, DC: Urban Land Institute) pp 53-66
[36] Kurul E 2007 A qualitative approach to exploring adaptive re-use processes Facilities 25 13/14 554-570
[37] Cooper I 2001 Post-occupancy evaluation-where are you? Building Research and Information 29 2 158-163
[38] McGreal S, Adair A, Berry J, Deddis B, Hirst S 2000 Accessing private sector finance in urban regeneration: investor and non-investor perspectives Journal of Property Research 17 2 109-131
[39] Rypkema D 2008 Heritage and Development: The Role of Public-Private Partnerships Economics and Built Heritage – Towards New European Initiatives eds. Mikko Mäkelki, Raine Mäntsalo, and Kaisa Schmidt-Thomé (Espoo Finland: Centre for Urban and Regional Studies, Helsinki University of Technology)
[40] Bank of England 2000 Finance for Small Businesses in Deprived Communities (London: Park Communications Ltd.)