

# Chapter 10

## Socially Inclusive Urban Transformation After the Great Recession

### Toward a New Civic Economy Model

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**Abstract** This chapter focuses on the need for a new civic economy model discussing first the causes and the conditions of the urban unbalances in Europe which are likely to persist in the aftermath of the Great Recession. It elaborates on the evolving role of cities within the EU and the mounting challenges for cities suffering from shrinkage and economic decline, considering the increasing aging of the European population. The authors argue that the effectiveness of centrally managed policy instruments to combat these trends is limited. So they make the case for the concept of a new civic economy enabled by a bottom-up, decentralized policy approach and sustained by innovative urban management practices, which they believe can address at least some of the challenges confronting European cities.

**Keywords** Great Recession • European cities • Public expenditure

#### 10.1 Introduction

The effects of the Great Recession, climate change risks, the global shift in manufacturing activities toward Asia, and the rise of high-tech businesses driven by information technology, as well as rapid demographic aging, are some of the key challenges for transformational urban investment in the EU. The difficulties confronting the European continent have institutional, economic, and financial ramifications, but also global spatial impacts which are leading to a geographical

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reconfiguration of the metropolitan and urban landscape in the EU (Sassen 2001, 2002; Glaeser 2011; Florida 2010; Leanza and Carbonaro 2013). Against this background, the need for a change in the urban investment paradigm should be more openly discussed among those interested in the future of European cities, who should become aware of the ongoing transformation of the European urban job markets, which in turn has serious consequences on the overall capital accumulation processes and the everyday life of EU citizens. It is time to focus on operational proposals for innovative solutions in cities, supporting the analysis through place-based approaches.

It is virtually impossible to describe in a short text the main challenges faced by the “shapers” of a participative approach to urban transformation in the EU’s current situation, in which the unemployment rate is a double-digit number and most cities continue to suffer the effects of a persistently very weak economic situation. This takes place in the context of a broader economy which shows a tendency toward chronically deficient demand and job destruction in manufacturing/service sectors driven by technology advancement, which may point to a long-term trend labeled as “secular stagnation” by former US Treasury Secretary Larry Summers and other observers (Eichengreen 2015).

The current economic crisis forces us to review our understanding of how cities function and how urban growth and decline mechanisms have changed in the aftermath of the Great Recession. The answers to these questions can help us to think about how urban studies could be refocused in order to propose innovative ways to reinforce the job-creation function traditionally performed by urban areas in Western economies. Urban development is a key driver of economic development, and cities account for a major share (from 70 to 85 % in advanced economies) of what economists define as GDP. The overall urbanized population is expected to exceed the five billion mark, or 60 % of the world’s total, in 2030. This compares with an urban population of 750 million, or less than 30 % of the world’s inhabitants, in 1950 (Véron 2006), implying an overall exponential growth of urban economies, investment, and fixed assets, while urban land prices and financial wealth – mainly concentrated in thriving cities – expand at an even faster rate.

Increasingly and in the fast-growing, emerging market economies in particular, urbanization is characterized by the emergence of vast metropolitan areas. This tends to be justified by economists on the basis of (often difficult to demonstrate) agglomeration economies linked to the concentration of production factors and large and highly flexible urban labor markets, though in thriving economies small- and medium-sized urban areas still represent a vital and crucial component of the overall urban system (Glaeser 2009). In mature Western economies, urbanization processes generate a continuous, complex reshuffling in city hierarchies at the national and continental level, which are often driven by shifts in logistic and manufacturing capacity, while in emerging market economies urban growth is driven by rapid rural-urban migration (Saunders 2010; Davis 2006). These trends have fundamental macroeconomic, demographic, welfare, and environmental consequences and a long-term impact on the spatial concentration and dispersion of assets, including human and social capital. Urbanized surface has increased by 78 % in the EU

since the mid-1950s, compared to a population growth of 33 %. Land taking and soil sealing “decoupled” from an overall view of sustainable urban land use are caused by ineffective planning practices and, possibly, by a lack of professional city management with a holistic understanding of the inner relations between the financialization of our economy, sustainability, resilience, efficiency, as well as urban demographics.

In this chapter, we will first discuss how the interlinked impacts of globalization, the financialization of the economy, the EU single market, and the currency union have contributed to the creation of serious urban unbalances in Europe, which are likely to persist in the aftermath of the Great Recession. Against this background, we then elaborate on the evolving role of cities within the EU, the mounting challenges for cities suffering from shrinkage and economic decline, and the effect of the wider aging of the European population. We argue that the effectiveness of centrally managed policy instruments to combat these trends is limited. Finally, we make the case for a bottom-up, decentralized policy approach sustained by innovative urban management practices, which we believe can address at least some of the challenges confronting European cities – the concept of the civic economy being one of the basic components of the new urban management paradigm.

## **10.2 European Cities After the Great Recession**

### ***10.2.1 Accelerating Urban Dualism in the European Union***

The opportunities and challenges for the EU deriving from the progressive establishment and consolidation of a single market enabling capital, goods, people, and services to flow freely in the continent have been extensively discussed (Calafati 2014). However, only few in the professional and academic community have addressed the implications of the establishment of the single market on the competition among European cities and metropolitan areas. In a financial and globalized economy, in which barriers to the movement of labor and capital have been removed, cities are “read” by markets as competing functional urban areas, i.e., logistic, immaterial, human, and fixed capital platforms which underpin the production and exchange of goods and services in high-density job and energy markets. The effects of this “single market for cities” have been magnified by the introduction of a single currency, which has exposed the EU urban systems to shocks and adjustments driven by the wide differentials in total factor productivity between urban areas. Locational advantage within a unified market has affected the dynamics of a system originally based on the competition among firms located in different countries. In a sense, the dynamics of competition have been progressively evolving toward an “urban struggle” for global leadership and valuable resources among EU metropolitan systems, where the potential performance of locally based economic activities – integrating resources from the private, public, and third sector – affects firm and household location decisions and the future evolution of urban job markets.

This scenario is producing urban winners, in particular those cities which have proactively modified their strategies – attraction/retention of external trade, effective governance, and cooperative skills – in order to adapt to the new trends. However, competition among cities also leads to the unintentional emergence of a large number of unintentional urban casualties, with dramatic impacts on national finances. “Core” metro urban areas enjoy higher organic investment profitability, lower local systemic risks, direct investment flows, and the expectation of increasing or stable asset prices, which attracts further investment in a virtuous circle. Banks can soften lending rates to local projects in expanding urban economies, taking into consideration the lower default ratios and higher recovery rates. Surging land price dynamics can – through the appropriate use of value capture mechanisms – finance social expenditure and support infrastructure deployment without incurring additional public sector debt. In shrinking or declining areas, the opposite trends are at work, affecting long-term welfare levels.

A natural consequence of the EU institutional and monetary architecture – originally designed to work in a federal system – is that capital accelerates its movement from low-productivity toward high-productivity urban systems. In Europe the limited amount of EU budgetary funds allocated to social and territorial cohesion cannot significantly offset the self-reinforcing differentials in urban capital accumulation triggered by the wider macroeconomic developments. Thus, the burden of the adjustment falls upon the budgets of the national and local authorities and on their ability to design and implement structural reforms and innovative governance. In addition, urban crises often affect countries which are large net contributors to the EU budget, such as Germany, France, the UK, and Italy. This should encourage all urban actors to reflect on the need to look at the reorganization of EU urban space with a perspective which goes beyond a formalistic, region-focused, GDP-centered approach in the definition of European territorial cohesion priorities.<sup>1</sup>

The spatial reorganization phenomena just described do not differ in nature from those that took place in the USA already in the second half of the twentieth century, which led the economic profession to develop concepts such as spatial equilibrium and agglomeration economies to explain urban growth and decline in the American continent (for a recent synthesis, see Glaeser 2008, 2011). Under a single currency and a unified continental economy, the American urban geography and city hierarchy have been reshaped in many ways over the past 150 years. Agglomeration economies and changes in spatial equilibrium patterns linked to the creation of a single currency are similarly driving the current spatial adjustments in Europe at an accelerated pace.

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<sup>1</sup>One of the most important authors pleading for the introduction of alternative approaches in the design of EU territorial cohesion policy is Laurent Davezies (2012). Harvey (2010, 2012, 2014) provides a radical vision of the reasons which have generated the spatial crisis.

### ***10.2.2 Cities: Workshops, Playgrounds, or Betting Shops?***

In recent years, there has been a lively debate among urban economists and urban geographers on whether the predominating role of the city should be seen mainly as a “workshop” – with urban economic development centered on the production side, which ultimately determines city dynamics, population changes, skill mix, and income levels – or as a “playground,” where a key role is played by the presence of location-specific amenities which makes certain cities attractive to high value-added activities (Storper 2013). Moretti shows how the development of innovative sectors determines an acceleration of job growth in all market segments, with amenities playing a growing job-spurring role in thriving cities (Moretti 2012). The role of amenities has further benefited from the growing importance of financial transfers and accumulated financial wealth in advanced economies. Urban growth phenomena become partially disconnected from the direct productive role played by cities in the global exchange system of goods and services. In particular, the expansion of social welfare and pension systems, implying an enhanced consumption capacity and mobility among pensioners, has further reinforced the role of amenities in retaining and attracting people with spending power, leading to growing attention being paid to the provision of “customized housing” and “attractors” both within and outside productive hubs.

In a previous contribution, the authors have suggested that some of the recent wave of urbanization has been fueled through mechanisms better understood as a form of investment driven by debt-financed urban real options, closely connected to the financialization of modern economy (Leanza and Carbonaro 2015). Cities used to grow through relatively slow, continuous stratification, but in the twentieth century, urban investment became one of the key transmission channels of the central banks’ monetary policy, both directly and indirectly through the effect created by financial and real wealth effects on household consumption (Mishkin 2001; 2007). In this context, access to urban building rights and the associated potential changes in land use in essence represent an entitlement to urban rent. Its (real option) value depends on expectations of future asset prices as well as monetary factors, including interest rate conditions, volatility and frequency of transactions, perceived locational advantages, asset demand/supply considerations, etc. In this perspective, investors – including homebuyers – target metropolitan growth poles with high volumes/density of transactions and sufficient asset liquidity, at the detriment of more peripheral cities, mainly in consideration of the high option value of urban investment in “core” growing cities. As a result, urban investment promoted by agents aiming to maximize the financial “up-side” potential via financially leveraged strategies has automatically determined an increased level of total debt and financial instability in urban economies. It should also be noted that “spatial” economic hedging via the creation of “city future markets” is intrinsically difficult, if not virtually impossible, due to the nature of real estate markets and their exposure to planning rights, which can be manipulated by the political authorities through the creation/allocation of new building rights “ex nihil” to vested interest

groups. In this context, there are wide differences among urban areas in the elasticity of land markets to demand and supply factors. The growing importance of authorization processes in changes in land use (land, building rights, and gray costs in some emerging market economies can account for up to 50 % of the final building price) has also greatly strengthened the position of the supporters of liberalization and more transparent planning practices (Andersson and Moroni 2014). The control of concessions, building rights, or credit facilities can accelerate the extraction of financial extra profits favoring a limited number of individuals at the detriment of the remaining urban stakeholders. Investment decisions supported by debt-financed urban option models are particularly sensitive to fast growth/densification, price volatility, low interest rates, long exercise periods, and access to finance. However, a blockage in the powerful money machine of urban expansion triggers recessive processes which are often difficult to control. A still stumbling homebuilding industry has been, according to former Federal Reserve Governor Ben Bernanke, one of the main reasons why the US recovery has remained sluggish and failed to deliver job creation comparable to the traditional levels enjoyed in the American economy (Solow 2013).

### ***10.2.3 Money and Cities***

Money, credit, and monetary policy are not spatially neutral and have contributed to the acceleration of the urbanization rate in recent history. The monetary system operates as a powerful capital allocation mechanism by continuously transferring and concentrating economic and financial resources toward the most productive and efficient uses. However, when this mechanism is hampered by the decline in organic profitability, market economies react by moving development toward new areas, through spatial change and enhancements in technology and transport (Harvey 2014). The historical roots of the accelerated rate of urbanization at a global scale lie in these mechanisms, fueled by the progressive evolution of a dollar-led international monetary system and an increased financialization of the economy, nurtured by the large and persistent deficits of the US current accounts, the global currency adjustments after Bretton Woods, the recurring financial crises, and the current financial globalization. More recently, given the prevalence of accommodative monetary policies in most economies, the fate of many Western metropolitan areas has been exposed to a complex system of bets concerning the delocalization of production activities, the future evolution of agglomeration economies in different cities, and the consequent expected impact on urban asset and land prices.<sup>2</sup> In most cases urban planning and architecture become passive and

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<sup>2</sup>The American 1993 Nobel Prize Laureate Robert J. Shiller has produced pioneering research in the field of the dynamics of asset prices.

oblivious followers of these trends, which are the ultimate drivers of urban growth and decline (Benevolo 2011; Campos Venuti 2010).

The loose monetary policies of most central banks and the broad availability of financial resources in search of speculative returns have pushed all urban players to modify their natural investment behaviors, favoring home ownership vs. renting, as well as stimulating an economic fight for the control of land destined to be urbanized/densified in consideration of its dynamic value potential. Even the social housing industry has started to transform its inner nature throughout Western economies, to take into account the economic agents' financial preferences for home ownership as a long-term saving instrument for households. These processes have produced a growing financial exposure to systematic "place-based" risks. While it is relatively easy to finance and realize urban expansion that is supported by credit expansion, which in turn is fueled by accommodative monetary policies, through the value capture mechanisms generated by the transformation of agricultural land into urbanized areas, it is more complex to obtain paybacks (net of depreciation and physical maintenance) on large-scale urban capital investment on a long-term, sustainable basis. This happens in the context of rapid aging processes, in which the financial holding preferences of middle-aged and retired people move from equity to fixed-income securities. Thus, in addition to the vision of cities as workshops or playgrounds, the "leveraged" betting shop may become a more appropriate image in certain cases (Minsky 1992).

#### ***10.2.4 The Mechanics of Urban Stagnation/Shrinkage***

Typically, urban managers in shrinking or declining metropolitan areas are torn by conflicting needs such as implementing politically difficult cost cuts, reducing the burden of oversized and obsolete physical assets, urgently finding new adaptive cash-generating solutions. Identifying and promoting new roles for productive assets, including entrepreneurial resources and workers' skills, necessarily implies exploring opportunities in new directions – reusing underemployed assets, unlocking latent economic potential in neglected resources, repricing public assets and goods, eliminating redundant infrastructure, and supporting the civic economy through active human capital and employment policies. Wide-ranging and inclusive regeneration policies are likely to be needed for a successful metropolitan turnaround strategy, as stakeholders have to assume an increasingly proactive role. These efforts may also entail a significant rebalancing of the activities in individual cities and in the wider system of each city's spatial relationships. The ability to monitor and govern these changes and the capacity to benchmark and replicate success stories become a key to urban success.

Particularly in Europe, where banks play a dominating role as providers of finance, the main mechanisms which cause urban areas to experience a blockage in capital accumulation are through a squeeze in the banking provision of credit to local

enterprises and projects. Technically this happens when the banks cannot achieve the targeted risk-adjusted financial return on their equity, on the basis of benchmarks defined by markets, shareholders' preferences, or political decisions (Modigliani and Miller 1958). Often credit crunches are also a result of a deficit in the banks' minimum regulatory capital caused by the accumulation of losses on their historical credit exposures. A deflationary situation is likely to have exacerbated impacts on economically weak cities, where decreases in the value or liquidity of assets held by banks as security (e.g., mortgaged houses) will affect the recovery rates in bankruptcy procedures (see Mian and Sufi 2014 for proposals concerning a reform of mortgage finance), leading to a contraction in the availability of local credit and an oversupply of assets, often triggered by unimaginative public repossession and foreclosure policies. Shrinkage in the economy can also be intensified by a fall in demand fueled by expectations of a deflationary fall in local asset and consumer prices, bringing down the number of jobs, salaries, and tax revenues while increasing the role played by high fixed costs in urban shrinkage. In these circumstances, there is very little that central banks can do in order to reactivate a virtuous economic cycle, and a substantial role is played by structural reforms which reactivate the potential of local economies. The long-term response – should it not be possible to activate the public sector's financial transfers – is a progressive rationalization in urban capital expenditure programs of both public and private sectors, as experienced in the American “rust belt” or Eastern Germany after 1989 (Katz and Bradley 2013; Tumber 2012; Coppola 2012; Ritter 2007).

These processes are rendered more acute by the consolidation of the banking industry into an oligopoly of large “global” players, partly as a result of bankruptcies, liquidations, or mergers of weak local banks. The globalization of the financial industry is accompanied by a progressive sector specialization, where asset management, pension and mutual fund activities, investment banking, credit origination, and payment services – segments characterized by healthier inner profitability and lower capital regulatory requirements – are progressively separated by “high capital-absorbing” credit activities (often externalized toward actors suffering from asymmetric information deficit). Against this backdrop, while well-functioning, integrated financial markets can be considered a positive feature in optimal currency areas, market-driven solutions do not factor in the suboptimal, fragmented nature of the EU currency union, which requires a strong presence of local banking and community impact finance, and may have destabilizing consequences, intensifying the unbalanced distribution of financial risks across EU territory.<sup>3</sup>

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<sup>3</sup>See European Commission (2015).



### ***10.2.5 Population Aging and Spatial (Dis)equilibrium in the EU***

The challenges for urban turnaround strategies in declining European cities are further complicated by an aging population, which will affect their total factor productivity, labor market performance, organic cash generation capability, and fiscal balance. This is a central element in EU spatial reorganization, as the baby boomers represent today some 45 % of the labor force. This implies that, depending on the underlying demographic scenario, some 90–100 million individuals are going to retire over the next 20 years throughout Europe in a situation of high youth unemployment and weak public sector finance in most Member States.<sup>4</sup> The old-age dependency ratio is expected to double in the EU as a whole from four working-age individuals for every over 65-year-old to two, unless new immigrants bring about an increase in the workforce (as well as in expected labor revenue and tax generation) sufficient to compensate for the impacts of an aging indigenous population.

Aging will take place in a spatial context where new job creation will be unevenly distributed – also due to a lack of EU fiscal integration of social policies – depending on spatial variations in total factor productivity, innovation, and flexibility. In weaker urban contexts, actions aimed at stretching the working life of an aging population should be accompanied by investment in total factor productivity enhancing. Top-down actions aimed at alleviating the constraints posed by the increasing dependency ratio – e.g., through reforms reinforcing labor and women participation rates and the growth of microenterprise and small enterprises – should be accompanied by bottom-up “place-based” actions aimed at improving the effectiveness of the urban civic economy. Both approaches imply more investment in human capital and soft factors, rather than in hardware and fixed capital.

Population aging is already taking place and implies a downsizing in public sector expenditure due to the need to consolidate public accounts in more fragile economies in the Member States, in an environment where private sector job creation may also slow down due to lower demand in banking, insurance, finance, legal services, real estate, and construction sectors. Cities will be confronted with a reduction in the tax base and revenue generation capacity, i.e., factors essential for preserving, maintaining, and improving capital infrastructure, with a growing tension with central governments. Local labor markets will expand in cash-generating export sectors with a resilient productivity performance, but job growth should be accompanied and sustained by an enhanced performance of civic economy. It will therefore be essential to build a robust methodology to gauge total factor productivity trends and value creation in cities. Shrinking urban systems may end up exporting their human capital in the form of trained workers and specialized technicians, with the need to better assess the accumulation of human capital. New monitoring methodologies have to be implemented to assess the impact of brain

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<sup>4</sup>For a recent report on this topic, see European Commission (2012). See also Sellon (2004).

drain. Some urban areas will be faced with an oversized, riskier, and decaying urban infrastructure. A lower total factor productivity will also bring about rising borrowing costs – a “local risk premium” charged on new initiatives to compensate for higher location-specific risks. In practice, in each metropolitan hub, the gap between investment profitability and the risk-adjusted cost of funds will have to be bridged and managed.

The demographic transformation will affect the costs of health services, social security, and the care for the disabled and the elderly, but also on the geographical distribution of financial transfers and pension payments. More resources devoted to these policies over the next 20 years may in some cases soften the territorial impact of aging for areas that are attractive retirement destinations (Bonvalet et al. 2007). The general lower capacity of national budgets to transfer resources from the center to the local economies is, however, an unwelcome development, considering that the impacts of economic crises generally tend to hurt cities more than the countryside. It is also to be noted that, in European nonfederal states, a substantial component of the public sector debt was generated by territorial transfers through the public sector’s employment and welfare measures (Davezies 2012). Where overall population birth rates are stagnant or decreasing, accelerating migration flows and the ability to integrate new citizens become the main determinants of urban success or decline.

Spatial reorganization will lead to strongly dualistic wealth accumulation effects, since the new urban spatial equilibrium and the demographic transition are likely to destroy a substantial amount of wealth held by residents and investors in shrinking cities, while capital gains will concentrate in growing urban systems such as export hubs.<sup>5</sup> In the majority of EU countries, especially those of the so-called EU periphery, a major share of household wealth is held in urban assets, typically owner-occupied housing, as these have traditionally protected the value of the investment against inflation and economic downturns. In the case of Italy, for example, the housing component in total household wealth accounts for around 56 % in 2013, according to the Bank of Italy.<sup>6</sup>

Presently, and even more in the future, we are likely to experience an increasing importance of spatial policies. The reason is that, on the one hand, monetary policy does not appear to be working as well or as predictably as it did in the past. Quantitative easing seems to have only a limited impact on the long-term productivity of labor and capital, as the system appears superficially stabilized, but the conditions for a sustainable long-term allocation of capital are not met. On the other hand, fiscal policy could have a better and more long-lasting impact, but the EU – also because of self-imposed constraints – currently lacks the fiscal capacity to implement such policies. As a result of the limited effectiveness of traditional

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<sup>5</sup>On this, see, for instance, McDearman and Liu (2012) and Dowell and Sung (2008).

<sup>6</sup>It is interesting to note that home ownership is more widespread in urban shrinkage contexts than in high growth poles (e.g., in the USA, Detroit has a home ownership in excess of 71 % vs. some 55 % in San Francisco).

monetary and fiscal policies, policies focused on managing spatial reorganization become critical in assisting economic adjustment in cities and through that in facilitating the overall recovery of the European economy.

As a result of the above-described trends, large numbers of young, talented professionals are increasingly attracted to high-productivity metropolitan hubs in the “core” economies, often located outside national boundaries. In a monetary union characterized by wide productivity differentials, firms must offer higher wages to retain high-quality human capital in disadvantaged cities and towns, thus deepening the competitive gap compared to metropolitan growth areas.<sup>7</sup> The emigration of talented workers leads to inflationary pressures on housing and *ceteris paribus* subdues salary growth in thriving metropolitan hubs. In the declining cities of the periphery, deflationary conditions and a likely fall in fertility prevail, due to the emigration of couples and women of childbearing age, as well as the pressures generated by accelerated aging processes.

Given the high level and expected dynamics of property prices, young households in growing metropolitan hubs have an incentive to “hedge” against the risk of further housing price increases by borrowing through long-term mortgages, thus taking on a costly and speculative financial burden on their future professional life income. Large personal borrowing, combined with long working hours and job competition, may lead young couples to defer the decision to have children to a later stage or to limit family size. Through this mechanism, turbulences in urban economic cycles have much wider and long-lasting impacts on national birth rates, population, and economic dynamics, which in turn, when not properly addressed, fuel populist rhetoric and conservative movements.

## 10.3 Innovations: The Challenges

### 10.3.1 Complementary Currencies

As we have argued in the previous sections, the pro-cyclical money supply coupled with deregulated financial markets and embedded speculative incentives (typical of our debt-based monetary economies) are not likely to be conducive to a stable and balanced urban development. Among some of the best-known reform proposals alternative to the current arrangements was the so-called Chicago Plan, proposed by Irving Fisher in the 1930s (in essence, moving from a banking-centered financial architecture toward a public sector monopoly) and, somewhat on the opposite side, Friedrich Hayek’s monetary free markets proposed in his 1976 book *Denationalisation of Money* (Lietaer et al. 2012). As far as the euro is concerned, a number of experts have proposed to go back to a system of semi-floating currency rates within the EU, similar to the ECU Exchange Rate Mechanism in the 1980s and

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<sup>7</sup>According to the assumptions of the spatial equilibrium theory.

1990s, to ease the restrictions imposed by the euro on the weaker economies, which under the current EU monetary and fiscal architecture can readjust only through long periods of deflation and austerity. Possibly one of the most relevant reform proposals in this sense has been advanced by W. Streeck, who considers that the euro could preserve an anchor role similar to the one originally proposed by Keynes for the Bancor during the initial Bretton Woods' negotiations (Streeck 2013).

In this context, it also appears of interest to consider the proposal by a number of unorthodox specialists to move toward "money ecosystems," characterized by the presence of parallel, complementary currencies alongside the conventional one.<sup>8</sup> This ecosystem would be characterized by a plurality of means of exchange and issuing institutions, including the government. According to the proponents of this alternative economic approach, regional complementary currencies would act as a medium of exchange, but not necessarily as a store of value (or unit of account) to mitigate the intrinsic spatial shortcomings of the euro monetary system.<sup>9</sup> These complementary currencies would operate according to the "demurrage" concept originally proposed by S. Gesell in Germany in the 1930s and experimentally tested by a number of small communities in Switzerland, Austria, and Germany.<sup>10</sup>

Some of the elements in these proposals are intrinsically disruptive and may involve radical changes in the urban capital accumulation cycle. For instance, large components of the debt-financed urban fabric – often one of the causes for the acceleration in CO<sub>2</sub> emissions – would become economically obsolete. However, in the current macroeconomic environment, the massive investments needed to develop alternative energy technologies necessary to cope with climate change will require complex financial incentives, which are likely to exceed the fiscal and borrowing capacity of most national economies. This may indicate that a further political evolution in our monetary arrangements is needed to cope with strategic sustainability issues. In the same way, some of the transformational challenges associated with the so-called smart city cannot be intended simply as the application of new technology to urban investment driven by traditional financial mechanisms, but involve a deeper rethinking of the financial and economic paradigms determining capitalistic urban development mechanisms. This is likely to imply a much lower prospective demand for urban assets in the form we currently know.

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<sup>8</sup>There are various other explanations to justify the advantages produced by complementary currencies (Lietaer et al. 2012; Kennedy 1990). In our perspective, in a deflating open economy, the virtual disappearance of money from a single-currency monetary circuit can be assimilated to a sub-case of the Gresham Law applied to an open economic system. The lack of a means of exchange triggers the collapse of the debt-financed optional components of the urban system. The collapse of the Greek economy can be partly blamed on the blockage of the monetary activity in Athens, a city accounting for over half of the Greek economy's performance.

<sup>9</sup>See Munchau (2015).

<sup>10</sup>In essence, the application of negative interest rates for the possession of money, to avoid that the latter is hoarded by individuals, thus depressing consumption and investment. See Gesell (2003).

General purpose technologies, like those used in the “new machine age,” are going to drive most of future economic growth through a cascade of complementary technological, economic, and organizational innovations. It is not certain that urban managers will be able to rapidly take advantage of smartness and flexibility, as proven by the research carried out by Brynjolfsson and McAfee (2014) on the introduction of electricity in the US economy, which took more than 30 years to start displaying its full effects. The newly introduced general purpose technologies based on computer science and artificial intelligence have four “game changer” dimensions – they are digital, exponential, combinatorial, and programmed for independent knowledge accumulation. It is fair to anticipate that the new technologies will find broad application in urban economies, but full gains in total factor productivity are likely to be captured only gradually.

As indicated by Larry Summers and others,<sup>11</sup> the main risks of the application of new technologies are connected to a productivity growth decoupled from job creation and wealth creation for the working class, as well as a risky disappearance of the middle class, which has traditionally represented the most active component of aggregated demand in urban contexts. After a phase of externalization of manufacturing jobs to low-wage countries, a large number of manufacturing/service jobs are being destroyed even in China – a destruction which is in large part due to routine tasks being taken over by increasingly competitive computer-driven machines and robots. These phenomena are replicated in software, services, media, finance, manufacturing, retail, trade, and healthcare – in essence, in all industries, affecting the “white collar” urban professional segments in particular.

In spite of the immense positive potential of technical innovation, the risks of technology-related disruptions are also with us, and we may have to radically rethink cities as living and working environments. A key challenge will be represented by the capacity of the institutions to preserve the integration between the work of specialists, the power of the new machines, and an equitable distribution of the new wealth produced. Scale will be less and less a condition for success, while the main objective may become to preserve the resilience of the job system and civic economy (Begg 2002). Technologies capable of generating a substantial number of innovative jobs will become crucial in this context. In cities, as in the wider economy, participative, liberal, and transparent institutions free from the influence of “extractive” vested interests seem to represent preconditions for a successful transition to a sustainable and inclusive long-term development (Acemoglu and Robinson 2012). In this context, the role of the civic economy warrants some reflection, which we will present in the next section.

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<sup>11</sup> See, for instance, Summers (2013, 2014) and Summers and Balls (2015). See also Eichengreen (2015).

### ***10.3.2 Civic Impact Finance and the New Urban Management***

An innovative urban management approach should be based on two main elements: the first is the vision of the city – i.e., the relevant functional urban area (OECD 2013, 2009)<sup>12</sup> – as a set of interlinked assets. The second is the application of a “corporate finance” approach to the management of these assets, focusing on the current state of each asset, its associated cost and benefit streams, the aggregate asset inflows and outflows, and understanding their drivers, interdependence, and their impact on community behavior. The city diagnostics underpinning the definition of an investment strategy will, for instance, examine how the existing skill mix correlates with city demography, how aging may affect the city skill endowment in the medium to long term, and whether migrants will be able to replace the gap in younger population cohorts to preserve or improve the skill mix, to maintain competitiveness and the required cash generation capacity.

“Civic impact finance”<sup>13</sup> entails the interaction among “open data systems,” financial instruments for the “participative smart city” which operate in those high impact investment areas and projects which cannot currently be served by the banking sector. The aim is to foster alternative, more affordable, and sustainable business models in sectors characterized by low financial returns. Examples can be found in impact finance, participative finance, and crowdfunding<sup>14</sup> models which could also target pension rights’ notional capital (to be partly allocated following individual preferences) and “sustainable public tendering” by the public sector. A second pillar of civic impact finance is related to “holistic” urban sustainability reporting aimed at measuring the sustainable long-term impact of investments, with particular attention on those “soft” factors – like the accumulation and conservation of social and human capital – which are key determinants for a city’s long-term competitiveness.

The utilization of urban complementary cryptocurrencies and the development of ICT-based payment systems and crowdfunding platforms at the metropolitan level may become some of the key tools to implement future smart city strategies and enable local civic economies to tackle urban decline. The utilization of

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<sup>12</sup>Metropolitan functional areas are in essence highly integrated job systems. According to the authors, in urban economy, the performance of the working population (human capital) is deeply interconnected with four types of productive factors, namely, natural capital, fixed capital (housing, productive assets, logistics, and infrastructure), money and financial capital, and spatial capital (i.e., proximity and density factors which impact on the agglomeration economies and land rent). See Leanza and Carbonaro (2015).

<sup>13</sup>Of the many publications on civic finance, see Ahrensbach et al. (2011).

<sup>14</sup>Through the appropriate use of technology and innovation, the “participative smart technology” exercise may help to overcome some of the current problems inherent to what W. Streeck has defined as “Kaleckian conflict” between the “deployers” of capital/infrastructure (the “capitalists”) and the “users” of capital/infrastructure (the “workers”).

parallel currencies in metropolitan regions may also facilitate the deployment of environmentally friendly solutions which cannot meet the standard financial performance requirements of a market economy.

Although these innovations are conceptually appealing, implementing them in practice will require a change in the mindset of city managers. A shift will be needed from fragmented sector-specific decision-making to a strategic approach that takes into account an integrated view of asset management. This approach should be supported by a systematic analysis, in which territorial diagnostics (based on the vision of the city as a set of interlinked assets) is followed by the identification of priority investment, integrated plans for urban development, and project selection. This approach will shift long-term financing priorities from an emphasis on fixed assets to skills, human and organization capital, since return from the latter type of assets can outperform what can be achieved through traditional capital expenditure. Innovative city management is necessary to bring forth sustainable urban transformation in an increasingly risky, competitive, and volatile environment.

As an illustration, the integrated approach to sustainable modeling for urban asset management should encompass the transformation of the city energy system and the technologies involved. Currently the stimulus toward establishing decentralized energy systems and smart grids in Europe is primarily driven by energy producers, equipment suppliers, and utilities, usually without a focused analysis of the implications of smart city investing on city-level performance indicators, taking into account social affordability and economic externalities as well. Also to be noted, in view of the growing market integration generated by the globalization processes, the large metropolitan area governments will be confronted with the need to develop customized econometric models incorporating finance, land, and local job market performance to govern fiscal choices at an appropriate scale/timing.

### ***10.3.3 The Role of Financial Instruments***

The authorities responsible for urban transformation will have to improve their coordination with key urban stakeholders in order to establish the conditions for sustainable, nonspeculative growth. Ample opportunities exist to employ dedicated financial instruments more efficiently for smart, sustainable, and affordable cities. In this context, cooperation among authorities, the private sector, and local banks can lay the ground for a thriving civic economy.

Opportunities offered by EU financial instruments can start to progressively change the way EU budgetary resources are employed, encouraging the transition from traditional grant funding to revolving instruments capable of attracting additional financial resources and reconstituting the value of the invested capital, allowing for its further reuse. Tackling the European territorial dualism requires diversified investment strategies between the “core” and “noncore” cities, possibly even more than in a multicurrency macroeconomic setting, where devaluation could be relied on – and it cannot because of the single currency – to correct imbalances between countries.

In difficult areas the risk-weighted return of various types of urban projects cannot match the risk-adjusted cost of capital faced by banks and financial intermediaries. Here, EU financial instruments can be employed to facilitate the provision of finance at sub-commercial terms under EC-authorized state aid regimes. This will enable urban development funds and territorial financial instruments to offer terms and conditions which are compatible with the lower returns that characterize the environmentally friendly, job-creating, and socially inclusive projects of the civic economy. In challenging environments, financial instruments can be offered as subordinated mezzanine and junior capital, in order to modulate the financial risk profile to project performance and investor requirements. Such anchor projects with a tailored risk-reward balance are unlikely to be delivered through unassisted market mechanisms and could support the progressive shift of urban capital to socially productive uses, as well as lowering costs by selectively targeting efficiency gains.

## 10.4 Conclusions

Central banks have constantly used monetary policy with the aim of stimulating wealth, export rates, investment, and consumption, thus affecting how urban systems invest, typically acting on both the demand and the supply sides for housing, industrial equipment, and infrastructure. Keynesian “fine-tuning” investment, originally designed to stabilize the economic cycle in recessions, has progressively evolved into economic “push,” pro-cyclical economic maneuvers. In the majority of market economies, economic growth has been pursued via planning-led “Keynesian-Fordian” urbanization, with large infrastructure projects often located at the edge of the cities, sometimes via the creation of satellite housing districts,<sup>15</sup> peripheral town network investment, and infrastructure serving wide-range metropolitan regions, in search of economies of scale, land rent, and agglomeration factors. While it is true that macroeconomic policies are not designed to affect territorial development, we have argued that monetary policy decisions are not spatially “neutral,” as they redirect activity flows toward different territorial economies and project types and, with the increasing financialization of the economy, push city growth further toward debt-driven and speculative capital accumulation models.<sup>16</sup> In addition, in the wake of the Great Recession – especially in Europe – monetary policy no longer works as it used to. Wherever possible, central banks could be obliged to bypass a financial system (no longer able to complete its original capital allocation mission) and work directly with governments, to inject newly created money into the real economy through different channels involving new forms of monetary and banking

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<sup>15</sup>Originally influenced by the Levittown social experiment in Nassau County (NY).

<sup>16</sup>On the risks associated to boisterous, debt-fueled urban growth in China, see Chen (2015).



innovation.<sup>17</sup> Even in these cases, the territorial implications of such interventions should be properly analyzed and openly discussed to ensure transparency and accountability and the potential impact on the democratic city models to be pursued with the active participation of entrepreneurs, workers, prosumers, and citizens.

Urban disciplines are confronted with various innovative approaches where concepts such as “sustainable civic transformation” (vs. “urban development”), “open systems” (vs. “closed systems”), “location-/place-based factors” (vs. “sector-centered/horizontal policies”), “tailored impact investing” (vs. “debt-financed infrastructure”), “nonlinear/disequilibrium” (vs. “linear/equilibrium”), and “combinatorial economies” (vs. “scale economies”) are gaining importance and underpin the future transformation of urban areas and metropolitan systems in advanced economies. In this context, urban management and city system modeling, planning, and architecture need to be increasingly interlinked with other disciplines in order to address issues related to sustainability, complex networks, value systems, social behavior, institution building, and the need to reinforce human and social capital in cities.<sup>18</sup> Educational and training institutions should develop these innovative approaches in order to enable professionals to work in a new multidisciplinary environment.

We are confronted with a transformation of the leadership in our economies, from natural resource owners of the past, to urban and financial asset owners of the present, to technology and intangible factor (represented by the digital economy) owners of the coming age.<sup>19</sup> The traditional urban transformation model, controlled by the public sector and based on Keynesian-Fordian infrastructure stimulus, seems to be broken, and current banking and financial instruments do not seem able to provide an appropriate solution. What comes next, then? Cities built according to the mass production debt-fueled paradigm must develop new, place-based, customized transformation strategies aimed at achieving a more balanced management and evolution of their multiple, integrated assets which represent the main source of their citizens’ wealth and earning capacity in the future. The links between efficiency, resilience, diversity, and connectivity in cities and their impact on economic inequality and social strains are not explored enough in the professional and political debate. The impact of accelerated urban change and the challenges it will pose to future generations are probably underestimated, one simple reason for this being that perhaps there is no clarity on how to capture or measure this impact – and something we do not perceive or understand is often simply ignored. An open discussion is

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<sup>17</sup>See Chick V., Graeber D., Wren-Lewis S., and other 16 economists (2015) “Better ways to boost Eurozone economy and employment,” *Financial Times*, 26 March.

<sup>18</sup>In an urban context, social capital could be regarded as the ability of local/urban communities to preserve certain social bonding qualities, behaviors, or performances despite change in demographic fundamentals. On the definition of social capital, see Putnam (1995) and Stiglitz (2012) on the socially and economically disruptive consequences of inequality, while the classical insights of Jacobs (1961) on the role of local communities and neighborhoods in producing a vibrant city economy remain as authoritative today as they were when they were originally written.

<sup>19</sup>Rampini (2014).

difficult without appropriate knowledge, data, models, and institutions, making it hard for urban managers, political leaders, and financiers to make correct choices in their strategies.

Therefore there is a need for a new urban management paradigm which incorporates the concept of civic economy and reconciles the financial imperatives of complex advanced economies with long-term sustainable development. Perhaps new or reformed institutions are needed to direct the transformation of our cities so that, for instance, growing wealth inequality between and within cities does not bring down the overall quality of life in our society. The key to move toward an effective civic economy, capable of succeeding where top-down centralized policies seem to have failed, may lie in engaging more in microscale optimization processes and experiments, based on the development of interdisciplinary, location-specific know-how, benchmarked against the best practice emerging in peer communities, and benefitting from the close interaction offered by institutional innovation, social media, and other emerging ICT innovations.

**Acknowledgements** The authors gratefully acknowledge the decisive contribution of Piotr Pomorski, whose assistance in shaping this paper was essential. The responsibility for the views and opinions contained in this paper rests solely with the authors, and such views and opinions do not necessarily represent the position of the European Investment Bank.

## References

- Acemoglu D, Robinson JA (2012) *Why nations fail: the origins of power, prosperity, and poverty*. Crown Business, New York
- Ahrensbach T, Beunderman J, Fung A, Johar I, Steiner J (2011) *Compendium for the civic economy: what the big society should learn from 25 trailblazers*. 00:/in Association with NESTA & Design Council CUBE, London
- Andersson DA, Moroni S (2014) *Cities and private planning. Property rights, entrepreneurship and transaction costs*. Edward Elgar Publishing Limited, Cheltenham
- Begg I (2002) *Urban competitiveness: policies for dynamic cities*. Policy Press, Bristol
- Benevolo L (2011) *La fine della città*. Laterza, Bari
- Bonvalet C, Drosso F, Benguigui F, Huynh P-M (2007) *Vieillesse de la population et logement: Les stratégies résidentielles et patrimoniales*. La Documentation Française, Paris
- Brynjolfsson E, McAfee A (2014) *The second machine age. Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company, New York
- Calafati A (2014) *La città nel progetto europeo*. In: Della Torre M, Pedretti B (eds) *Cittadinanza. Geografie, filosofie, iconografie, economie*. Donzelli editore, Roma
- Campos Venuti G (2010) *Città senza cultura*. Laterza, Bari
- Chen Z (2015) *China's dangerous Debt*. *Foreign Aff.* 94(3):13–18
- Coppola A (2012) *Apocalypse Town. Cronache dalla fine della civiltà urbana*. Gius, Laterza & Figli, Bari
- Davezies L (2012) *La crise qui vient: La nouvelle fracture territoriale*. Seuil, Paris
- Davis M (2006) *Planet of slums*. Verso, New York
- Dowell M, Sung Ho R (2008) *Aging baby boomers and the generational housing bubble*. *J Am Plann Assoc* 74(1):17–33
- Eichengreen B (2015) *Secular stagnation: the long view*. Working paper 20836. NBER, Cambridge, MA

- European Commission (2015) Green paper – building a capital markets union, COM 2015-63 final. European Commission, Brussels
- European Commission Directorate-General for Economic and Financial Affairs (2012) The 2012 ageing report. Economic and budgetary projections for the 27 EU member states (2010–2060). European Commission, Brussels
- Florida R (2010) *The great reset: how new ways of living and working drive post-crash prosperity*. HarperCollins, New York
- Gesell S (2003) *Die natürliche Wirtschaftsordnung durch Freiland und Freigeld*. Cologne (digital edition)
- Glaeser E (2008) *Cities, agglomeration and spatial equilibrium*. Oxford University Press, Oxford
- Glaeser E (2009) Why has globalization led to bigger cities? *The New York Times*, 19 May
- Glaeser E (2011) *The triumph of the city: how our greatest invention makes us richer, smarter, greener, healthier and happier*. Penguin Group, New York
- Harvey D (2010) *The enigma of capital and the crises of capitalism*. Oxford University Press, Oxford
- Harvey D (2012) *Rebel cities: from the right to the city to the urban revolution*. Verso, New York
- Harvey D (2014) *Seventeen contradictions and the end of capitalism*. Profile Books Ltd, London
- Jacobs J (1961) *The death and life of great American cities*. Vintage Books, New York
- Katz B, Bradley J (2013) *The metropolitan revolution. How cities and metros are fixing our broken politics and fragile economy*. Brookings Institution Press, Washington, DC
- Kennedy M (1990) *Geld ohne Zinsen und Inflation*. Verlagsgruppe Random House, München
- Leanza E, Carbonaro G (2013) Making European cities more affordable, productive and sustainable. *L'industria* 2:275–294
- Leanza E, Carbonaro G (2015) Attaining sustainable, smart investment. The smart city as a place-based capital allocation instrument. In: Vesco A, Ferrero F (eds) *Handbook of research on social, economic, and environmental sustainability in the development of smart cities*. IGI Global, Hershey (in press)
- Liettaer B, Arnsperger C, Goerner S, Brunnhuber S (2012) *Money and sustainability. The missing link*. Triarchy Press, Axminster
- McDearman B, Liu A (2012) *Ten steps to delivering a successful metro export plan*. Brookings Institution-Rockefeller Foundation, Washington, DC
- Mian A, Sufi A (2014) *House of debt: how they (and you) caused the great recession, and how we can prevent it from happening again*. University of Chicago Press, Chicago, IL
- Minsky HP (1992) *The financial instability hypothesis*. Working paper (74). The Jerome Levy Economics Institute of Bard College
- Mishkin F (2001) *The transmission mechanism and the role of asset prices in monetary policy*. The National Bureau of Economic Research, Cambridge, MA
- Mishkin F (2007) *Housing and the monetary transmission mechanism*. The National Bureau of Economic Research, Cambridge, MA
- Modigliani F, Miller MH (1958) The cost of capital, corporation finance and the theory of investment. *Am Econ Rev* 48(3):261–298
- Moretti E (2012) *The new geography of jobs*. Houghton Mifflin Harcourt, New York
- Munchau W (2015) Why smoke and mirrors are safer than cold Turkey. *Financial Times*, 16 March
- OECD (2009) *How regions grow: trends and analysis*. OECD, Paris, France
- OECD (2013) *Definition of Functional Urban Areas (FUA) for the OECD metropolitan database*. OECD, Paris, France
- Putnam R (1995) *Bowling alone. America's declining social capital*. *J Democr* 6(1):65–78
- Rampini F (2014) *Rete Padrona, Amazon, Apple, Google & co. Il volto oscuro della rivoluzione digitale*. Giangiacomo Feltrinelli Editore, Milano
- Ritter GA (2007) *Der Preis der deutschen Einheit. Die Wiedervereinigung und die Krise des Sozialstaats*. Verlag C. H. Beck oHG, Munich
- Sassen S (2001) *The global city: New York, London, Tokyo*. Princeton University Press, London
- Sassen S (2002) *Global networks, linked cities*. Psychology Press, London

- Saunders D (2010) *Arrival city: the final migration and our next world*. William Heinemann, London
- Sellon GH (ed) (2004) *Global demographic change: economic impacts and policy challenges*. The Federal Reserve Bank of Kansas City, Kansas City
- Solow R (2013) How to save American finance from itself. Has financialization gone too far? *New Republic*, 08/04/2013
- Stiglitz JE (2012) *The price of inequality: how today's divided society endangers our future*. W.W. Norton & Company, New York
- Storper M (2013) *Keys to the city. How economics, institutions, social interaction, and politics shape development*. Princeton University Press, Princeton
- Streeck W (2013) *Gekaufte Zeit. Die vertagte Krise des demokratischen Kapitalismus*. Suhrkamp Verlag, Berlin
- Summers LH (2013) Economic possibilities for our children. *NBER Reporter* (4), 1–6. The National Bureau of Economic Research, Cambridge, MA
- Summers LH (2014) Reflections on the new 'Secular Stagnation hypothesis'. *Vox*, 30 October.
- Summers L, Balls E (eds) (2015) *Report of the commission on inclusive prosperity*. Center for American Progress, Washington, DC
- Tumber C (2012) *Small, gritty and green. The promise of America's smaller industrial cities in a low-carbon world*. MIT Press, Cambridge, MA
- Véron J (2006) *L'urbanisation du monde*. La Découverte, Paris