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Making European Cities more Affordable, Productive and Sustainable

Eugenio Leanza

Gianni Carbonaro

In this article¹ we take inspiration from the experience of the JESSICA Initiative to delineate the rationale for a city-based, bottom-up approach to stimulate the economic recovery of the European Union. The proposed approach involves an agenda for a European research programme on urban management and finance, which brings together the vision of the city as a system of interlinked assets to be managed in a sustainable way and the use, in this context, of a methodology broadly inspired to corporate finance principles. The proposed agenda is intended to lead to better diagnostics and strategic investing to address urban transformation patterns likely to characterise the European city system in the coming years. This agenda should stimulate European researchers and practitioners to develop a methodology leading to the definition of sustainable productivity metrics for urban systems, as well as practical modelling strategies that can assist the decisions of city managers and long-term investors in urban infrastructure.

1. EU Urban Growth and decline: a Single European Market for Cities?

The opportunities and challenges for the European Union deriving from the progressive establishment and consolidation of a single market enabling capital, goods, people and services to flow freely within the continent have been extensively discussed.² In addition, different strands of literature have examined the dynamics of territorial competition and the impacts of globalisation on the performance of local economic systems.³ However, only relatively few observers have concentrated their attention on how the EU Single Market and the single currency impact not only on goods, services and jobs, but also on competition between locations – and particularly cities. These are better seen as functional urban areas, i.e. the logistic, immaterial and fixed capital platforms which underpin the production and exchange of goods and services in high-density labour and energy markets. The effects of this “single market for cities” have been reinforced through the creation of the Euro, since a single currency reveals with more evidence the differentials in total factor productivity among the different territories in the EU.

As a natural result of the creation of such a market, capital flows will tend to move from low-productivity to high-productivity urban systems. This is a relatively new phenomenon at the European continental scale, but it doesn't differ in nature from what has happened in the

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² The site http://ec.europa.eu/internal_market/index_en.htm gives access to a wide range of information and documents on the single market policy of the EU.

³ For early contributions on territorial competition see for instance Cheshire P. & Gordon R. (1998) “Territorial Competition: some lessons for policy”, *The Annals of Regional Science* 32, 321–346; on how cities are exposed to pressures from globalisation see OECD (2007) *Competitive Cities in the Global Economy*, Paris; and <http://en.wikipedia.org/wiki/Glocalization> for links on literature on how global enterprises adapt to local economies.

US over the last century and which has led the economic profession to employ concepts of spatial equilibrium and agglomeration economies to explain urban growth and decline in the US.⁴ Under a single currency and a unified continental economy, rapid spatial adjustment is more likely to occur. An example of the speed of adjustment is provided by US housing prices, which have gone down by 28% on average with variations ranging from a 70% drop in some areas like Nevada to far more contained changes in areas like Texas or Washington DC. Similar forces are likely to drive spatial adjustment in Europe, causing changes to be sharper and more rapid than in the second half of the past century, and this instability is likely to be exacerbated in the current financial context.

The paper is organised as follows. Section 2 discusses how the financial crisis is likely to exacerbate the dissimilarity in economic performance between “cash-absorbing” and “cash-generating” territories. In section 3 we argue that the spatial equilibrium in the EU will be increasingly determined by productivity differentials between cities and reaching the new equilibrium is likely to require a substantial and costly adjustment. Section 4 discusses how the establishment of properly structured strategic investing mechanisms can help to reduce the social and economic cost of this adjustment and how the urban development funds promoted through the JESSICA initiative can play the role of strategic investors in cities. In section 5 the case is made on implementing strategic investing through an innovative city management model incorporating the urban development fund concept. Section 6 and 7 delineate the opportunities offered by the forthcoming EU multi-annual financial framework 2014-2020 and the scope to apply the impact investing paradigm to urban development.

2. Financial Crisis and Spatial Change

It is important to see the “single market for cities” against the background of the current financial crisis and the on-going and forthcoming demographic changes - these will operate as the main drivers of the transformation of the EU economy in the medium term.

It is also important to understand that the European crisis has a financial and territorial aspect.⁵ The financial component of the crisis was initially triggered from the US, with the longstanding US balance of payments problems and explosion of financial crisis in 2008 generating a persistent distrust in the functioning of global financial markets and reducing the availability of long-term finance to tackle temporary and structural imbalances. In the more recent stages of this process, restrictions in liquidity and long-term finance are having a lasting impact upon the accumulation of investment and the attractiveness of asset classes characterised by long duration or repayment periods, such as real estate, fixed infrastructure, and human capital formation. The impact on attractiveness is compounded by the re-pricing of assets according to their perceived riskiness, much higher following the financial crisis. The spatially focused approach suggested in this paper is also directed at assisting European decision-makers in their attempts to control this process and make the de-leveraging of the economy less disorderly and socially disruptive.

However, there is an additional (and indeed crucial) component of the current financial strains which is intrinsically linked to the changes in EU spatial equilibrium. The joint impact from the shortage of finance and pressure of demographic factors, namely the restructuring of labour markets and pension systems as the result of the ageing process and the retirement of baby boomers, are putting a particularly heavy toll on functional urban areas and accelerating the re-organisation of European urban space. This is because the current crisis is likely to

⁴ For a recent synthesis see Glaeser E.L. (2008), *Cities, Agglomerations and Spatial Equilibrium*, Oxford University Press, New York.

⁵ For a radical point of view on the territorial roots of the current economic crisis, see the works of the geographer David Harvey, for instance his recent Harvey D. (2010), *The Enigma of Capital and the Crisis of Capitalism*, Profile Books, London.

strike territories with different intensity, while central government transfers, which have often compensated imbalances in the past, are available –if at all– only to a much smaller extent. In practice this will favour local economies based on “cash-generative” activities, typical for instance of export clusters, compared to “cash-absorbing” territories such as consumption-driven cities, where often the heavy investment and maintenance requirements related to the existing physical built stock adds to the obligation to provide local services to an ageing population. The economic geographer Laurent Davezies has examined the impact of the financial and economic crisis on French regions,⁶ documenting the emergence of a “territorial fracture” between four types of territory –those market-oriented with a high export / employment performance, primarily the larger urban regions; low-productivity areas which however maintain high income and consumption levels driven by tourism, retired residents and public sector employment; productive areas under threat, primarily due to their weak industrial base; and non-productive, low-income territories with a heavy dependence on social welfare transfers. The last two types are the most vulnerable and account for some 20% of the French population.

3. Cities Matter: Factors Influencing EU Spatial Equilibrium

The total factor productivity of EU functional urban areas will be affected by the transformation of local labour markets and their impact on organic cash-generation and fiscal performance. This is a central element in EU spatial reorganisation, as the baby boomers represent today some 45% of the EU labour force. This implies that, depending on the underlying demographic scenario, some 90-100 million individuals are going to retire over the next 20-25 years throughout Europe. According to the projections contained in a recent report of the European Commission,⁷ the population aged 15-64 is expected to drop by 14% between 2010 and 2060, with some 45 million individuals less in this age group.⁸ In parallel, the population aged 65 and above will “almost double, rising from 87.5 million in 2010 to 152.6 million in 2060 in the EU.” As a consequence old-age dependency ratio is expected double in the EU as a whole from four working-age individuals for every over 65 year-old to two. Naturally these EU-wide orders of magnitude hide stark differences between countries and locations. Due to the effects of the current crisis, new job creation could be particularly concentrated in some areas or growth poles, driven by spatially diversified total factor productivity. This is why top-down actions aimed at alleviating the dependency ratio, e.g. by extending through national labour market and retirement policies the participation rate and working life of the labour force, should be accompanied by bottom-up actions with an increased focus on local total factor productivity and spatial reorganisation.

A further trend interacting with population ageing concerns the impact of the downsizing in public sector employment due to the need to consolidate public accounts in many European cities, particularly in the financially fragile peripheral Member States. A substantial blockage of public sector staff turnover is likely to take place over the coming years, in an environment where private sector job creation is also going to slow down in sectors which have been key drivers for urban employment over the past thirty years, such as banking, insurance, finance, legal services, and real estate.

In this context, job loss in cities will further affect the local tax base and revenue generation capacity, which is essential to preserve, maintain and improve capital

⁶ Davezies L. (2012), *La crise qui vient. La nouvelle fracture territoriale*. Editions Seuil, Paris.

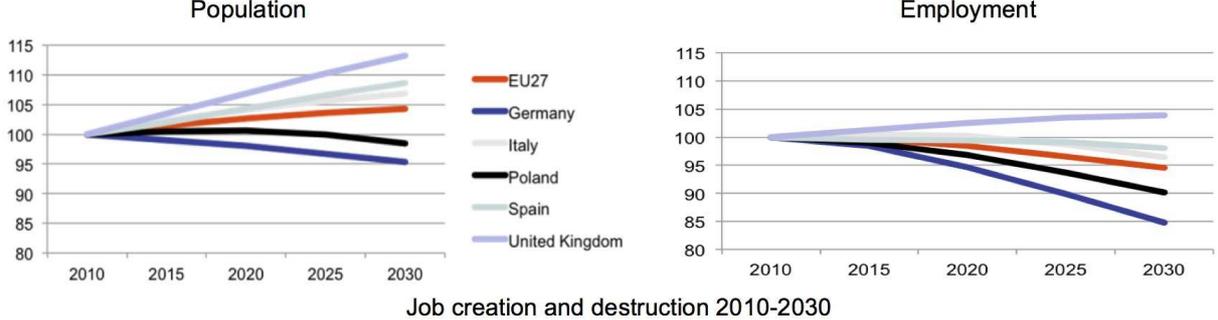
⁷ For a recent report on this topic, see European Commission (2012), *The 2012 Ageing Report. Economic and budgetary projections for the 27 EU Member States (2010-2060)*, Directorate-General for Economic and Financial Affairs, Brussels.

⁸ The report notes that this is “not a uniform phenomenon across the EU; it is projected to increase in 7 Member States (Belgium, Ireland, France, Cyprus, Luxembourg, Sweden and the United Kingdom).”

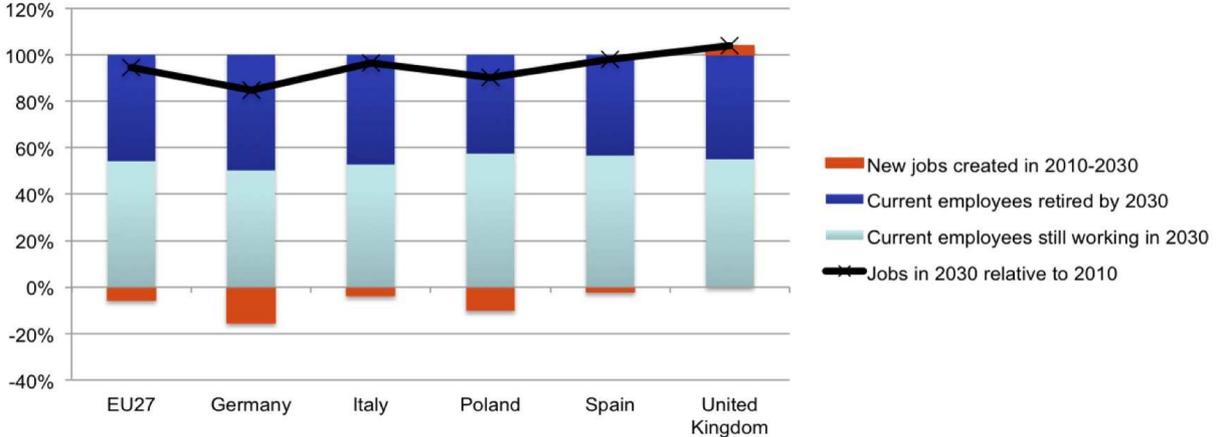
infrastructure. Local labour markets will expand especially in cash-generating export sectors with a resilient productivity performance. It will be therefore essential to have a robust and practical methodology to assess total productivity trends and cash-generation capacity in cities, including the capacity to export goods and services, and their ability to attract visitors and the sale of real estate to foreign investors. In case of lack of cash-generating capacity, urban areas may end up exporting human capital in the form of trained workers in prime working age, as already experienced, for example, in East Germany Länder in the post-unification period.

The diagrams in Figure 1 below provide a demonstration of the diversity of trends in population and employment in Europe. By 2030, some 45% of currently employed population will have retired and the differences across territories are likely to be severe.

Figure 1. Population and employment forecasts 2010-2030 (2010=100)

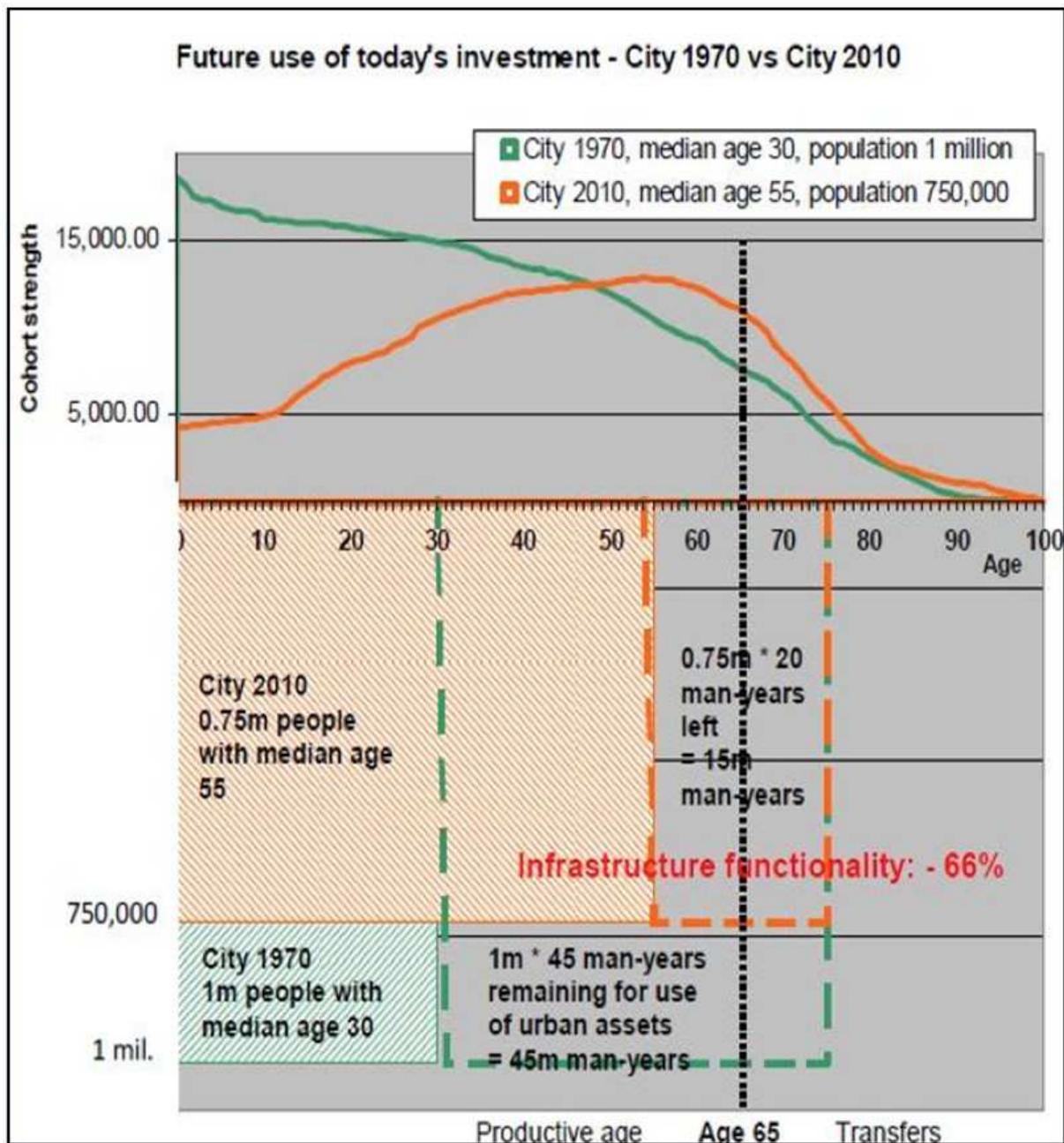


Job creation and destruction 2010-2030



A further conceptual illustration of how differences in population size and structure may impact on city performance and the demand for urban infrastructure is provided by the diagram in Figure 2. There the same city, assumed to have a given built infrastructure, is compared at two different points in time, one when inhabited by a population with a structure typical of the 70's, the other with a population structure typical of a city which has “shrunk and aged”. While the example is hypothetical, the orders of magnitude are not dissimilar from those that can be observed for a city like Genoa –and although it is a simplification to abstract from migration flows, the inertial impact of the existing population structure and the simple metric of “aggregate residual life-years” as a proxy for the future demand for city infrastructure indicate that the expected future use of urban assets is likely to be far lower for the “2010” than for the “1970” city. Thus the “2010” city is more dependent on transfers from other governmental levels and subject to increasing fiscal stress in order to meet the costs of an oversized and possibly decaying urban infrastructure – in other words, a much riskier place to invest in.

Figure 2. Shrinking and aging – one city, two futures for urban assets



Beyond population and employment trends, a further determinant of EU spatial equilibria, adjustment paths and urban policy options is the risk-adjusted cost of capital applied by investors to assess investment opportunities in different EU locations. Rating agencies have been aware for some time of the impact of ageing on financial risk has been and recent research by Standard and Poor's⁹ point to a striking potential medium and long-term impact of ageing on country credit risk assessments. For instance simulations show that the Eurozone risk rating distribution is expected to deteriorate significantly, with a majority of countries moving to BBB and speculative grade under a "constant policy" scenario, which applies also to countries currently enjoying a high credit rating like Germany and the UK.¹⁰ Risk considerations affect investor decisions also at a sub-national level. To illustrate in the Italian

⁹ Standard & Poor's (2013), *Global Aging 2013: Rising to the Challenge*, accessed 21/04/2013. https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1098626&SctArtId=145185&from=CM&ns_l_code=LIME. The site provides a link to a tool allowing the user to access a range of simulations based on the study <http://ratings.standardandpoors.com/includes/global-aging-in-2013.html>.

case, recent data¹¹ on non-performing loans by region for Italy confirm the well-known amplitude of territorial differences, indicating that while the national rate at the end of 2012 stood at 6.4%, regional rates varied between the 4-5% range in regions such as Lazio, Trentino-Alto Adige and Lombardy and over 15% in Basilicata and Molise.

The cost of capital will thus be determined by the joint effect of country-specific factors and location-specific risks. In this respect, each functional urban area is characterised by different levels of capital accumulation, depreciation rates, returns on total capital deployed, leverage ratios and borrowing costs, the latter influenced by the various components of total indebtedness –maturity, instruments, borrowers’ features, perceived riskiness, etc. For instance, German export cities enjoy a high productivity in Europe, and low land and property costs as well as the overall features of the national economy, including Germany’s polycentric urban development. This will be reflected by better ROI indicators and generally lower borrowing costs compared to other EU cities. In the future, areas characterised by lower total factor productivity are likely to be confronted at the same time with rapidly rising borrowing costs, which should be seen as a “local risk premium” charged on new initiatives to compensate for higher location-related risks. So project risks in Catanzaro, Italy (or Detroit in the US) will differ substantially from those in Stuttgart, Germany (or Washington DC in the US) in terms of asset liquidity and re-sale values of assets in case of bankruptcy. *Ceteris paribus* the profitability required to match the risk-adjusted cost of capital applicable to a location may be far in excess of the level offered in practice by investment opportunities available locally, creating a gap difficult to bridge in many European cities.

The demographic transformation will impact on the costs for health services, social security and the care of the disabled and the elderly, but also on the geographic impact of the financial transfers through pension payment streams. More resources devoted to these policies over the next 40 years may impose a lower allocation of resources to territorial and social cohesion policies, affecting in particular certain cities more than others. The lower capacity of national systems to transfer resources from the centre to the local economies is not good news considering that the impacts of economic crisis generally tend to hurt more dramatically cities than the countryside.

As already mentioned, where overall population is stagnant or decreasing, accelerating migration flows within and between countries will become the main determinant of the population growth and decline of urban systems and increasingly significant in their economic performance. This will impact on both the young and the elderly, in large share pensioners, with the movements of the former being driven by job opportunities and the latter being pulled by “cost of living” considerations, which could generate reverse flows from relatively big urban systems towards peripheral, smaller-size and countryside areas.¹²

The fact that the spatial reorganisation will be reinforced by market-driven dynamics, such as capital flows accelerating the accumulation of resources in higher productivity areas at the expense of the others, has already been mentioned. This reorganisation will have spatially diversified wealth effects, since the new urban spatial equilibrium is 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. In the majority of the EU countries, especially those of the so-called EU periphery, a major share of household

¹⁰ Interestingly, Italy is one of the few countries performing better in the long-term under the S&P model simulations, with credit rating improving over time on the 2010-2050 horizon.

¹¹ Associazione Bancaria Italiana (2013) *ABI Monthly Outlook. Economia e Mercati Finanziari-crediti*, Marzo 2013 – Sintesi, Roma. On spatial diversity across Italian regions, see also Centro Studi Sintesi (2013) “L’economia italiana all’ombra della crisi”, <http://www.centrostudisintesi.com/new/wp-content/uploads/Disagio-economico.pdf>, accessed 21/04/2013.

¹² For a non-technical presentation of how contemporary labour market dynamics can lead to severe territorial unbalances see Moretti E. (2012), *The New Geography of Jobs*, Houghton Mifflin Harcourt, Boston.

wealth is held in urban assets, typically owner-occupied housing, as these have traditionally protected the value of the investment against inflation and economic down-turns. In the case of Italy for example the housing component in total household wealth accounts for around 60%. This means that spatial reorganisation within the EU “single market for cities” will have important repercussions on how local economies contribute to GDP at higher territorial levels, through the creation or destruction of wealth and asset price changes, as the wealth effect will in turn impact on household saving and consumption as well as the direction of investment flows.

This is happening in a phase when significant changes in the distribution of financial wealth are taking place in connection to interest rate movements and the perception of local and country-specific systematic risk. Increasingly, asset prices are likely to reflect an important component of “territorial”/urban systematic risk, while interest rates will vary across locations in order to take local risk factors into account. In this respect, the European property market may move from a situation characterised by highly correlated performances across locations to a more diversified and volatile market, with lower overall correlation and more weight to local factors as determinants of performance.

4. A Route to Recovery? Strategic Investing for Cities and JESSICA

In the coming years the EU economy will be struck at the same time by a spatial reorganisation, the aftermath of a major financial crisis and the impacts of an ageing population on the labour market and the health and pension systems. If the impacts of this critical transformation are to be managed, these changes should be addressed systematically with the support of an appropriate methodology.

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 in the past. Quantitative easing seems to lead to short-term speculative investing or emergency packages with only limited impact on the long-term productivity of labour and capital. On the other hand, economists are aware that fiscal policy could have a better and long lasting impact –however, most EU countries lack today the fiscal capacity to enforce such policies. As a result of the limited effectiveness of traditional monetary and fiscal policies, policies aimed at managing spatial reorganisation processes may work as more effective instruments to support the long-term recovery of the European economy. In this respect it makes sense to see cities as engines for national economic recovery “from below”. As an illustration of this approach, “metropolitan export plans” have been proposed in the United States as a way to accelerate the export performance of the national economy.¹³ These locally based export plans are intended to produce a systematic strategy to enhance the export capabilities of cities. The driving concept is that cities have a specific advantage –compared to other policy-making and delivery levels– to stimulate local companies to capture the potential for exports. Backing metropolitan-led exports is seen as an essential bottom-up complement to ensure that macro policies designed to boost exports –trade agreements, export credit, exchange rate management...– succeed. Pilot plans of this type have been developed for Los Angeles, Minneapolis, Portland and New York.

The European city system is at a crossroads and the way spatial transformation is managed may affect significantly the dynamics and performance of EU local labour markets –and thus the long-term recovery of the European economy– over the next 20 to 30 years. The

¹³ On this, see for instance McDearman B., Liu A. (2012), *Ten Steps to Delivering a Successful Metro Export Plan*, Brookings Institution-Rockefeller Foundation, Washington.

successful management is linked to the capability to invest strategically in European territories and in this context the experience gained since 2006 in the JESSICA initiative can give a useful insight on how financial instruments and financial products can be employed and developed to this end.

As a reminder, the JESSICA initiative (Joint European Support for Sustainable Investment in City Areas) is a European action focusing on the creation of specialised financial instruments for urban areas. These instruments –Urban Development Funds or “UDFs”– operate as revolving instruments supporting the sustainable transformation of European cities.¹⁴ The key aims of JESSICA are to assist national authorities –Member States, regions and cities– to employ Structural Funds resources more effectively by using them as revolving financial instruments rather than one-off grants, and through this to mobilise additional financial resources for public-private partnerships and other projects included in integrated plans for sustainable urban transformation. Investments supported by UDFs must be line with Structural Funds operational programmes agreed for the current programming period. In doing so, national authorities have also more opportunities to use financial and managerial expertise from international financial institutions such as the EIB. As a further reminder, the potential EIB involvement in setting up financial instruments is threefold: advising and assisting authorities in implementing financial instruments; promoting the use of Urban Development Funds and best practice across Europe; acting as a Holding Fund,¹⁵ when so requested by Member States or managing authorities.

They should be seen as “impact funds” aiming at the twin objectives of replenishing their capital to enable investing on a revolving basis and achieving non-financial impacts on sustainable urban development.¹⁶ An essential step in producing impact is through a strategic investing approach paving the way for sustained improvements in the allocation of capital within cities. This will lead towards a progressive shift of capital from non-productive to productive uses, as well as lowering production costs by selectively targeting efficiency gains. There is thus a strong rationale to reinforce research work addressing these issues throughout Europe.

In the context of the current transformation of urban systems, the “affordable smart grid” challenge can be used as example of what strategic investing in cities should do. Urban assets can be seen as the result of how over time energy has “crystallised” into the physical fabric of cities.¹⁷ Seeing cities as crystallised energy can give significant insights for the analysis of the resilience of urban systems and how urban energy investing can have a central role over the next 20 years. Green energy and smart grids have to be introduced in Europe in order to meet sustainable development and climate action objectives. Therefore modelling for urban asset management should also encompass the transformation of the energy system and the technologies involved. Currently the stimulus towards establishing 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 ROI and financial performance. City-level assessment should include affordability (i.e. the cost implications on urban asset management) and economic externalities. Thus there might be a gap between the

¹⁴ For further information on the JESSICA initiative, see <http://www.eib.org/products/jessica/index.htm>.

¹⁵ A Holding Fund is simply a fund of funds, i.e. an investment vehicle managing and investing in several Urban Development Funds.

¹⁶ The literature on impact investing is now extensive, although not focused on instruments for territorial impact. For an introduction to the concept see J.P. Morgan Global Research (2010), *Impact Investments: An emerging asset class*, JPMorgan Chase & Co., The Rockefeller Foundation and Global Impact Investing Network (GIIN), Inc. and the site of GIIN, the main association of impact fund operators <http://www.thegiin.org/cgi-bin/iowa/home/index.html>.

¹⁷ The links between sustainability concepts and the urban energy balance are analysed for instance in Tiezzi E., Pulzelli R. (2008), *Città fuori dal caos. La sostenibilità dei sistemi urbani*. Donzelli, Rome.

real need for smart energy investments and those being proposed. The risk is that if the grid in Europe will be “smart” but not affordable, the negative impact on households and low-income Europeans could be significant. This may further exacerbate spatial disparities given how contemporary labour markets are driven by then cumulative effect of intellectual capital growth and labour mobility towards selected high value added clusters. In view of the above, the future “smart grid” has to be “adaptive”, customised to the local context and compatible with the local labour systems. This is a planning and organisational challenge for local authorities, which points to the importance of an innovative urban management approach centred on a robust strategic investing methodology.¹⁸

5. The Need for a New Urban Management Approach

This innovative urban management approach is based on two main components. The first is the vision of the city as a set of interlinked assets –physical assets, human capital and technology. The second is to apply a “corporate finance” approach to the management of these assets, focusing on the current state of each asset, its associated cost and benefit streams, and the aggregate capital inflows and outflows, their drivers and interdependencies. The city diagnostics will examine for instance how the existing skill mix correlates with city demography and how ageing may affect the city skill endowment in the medium-long term – and whether migrants will be able to replace the gap in younger population cohorts to preserve or improve the skill mix and maintain competitiveness and the required cash-generation capacity. Although conceptually straightforward, such a vision requires a change in city managers’ frame of mind, from a fragmented 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, where territorial diagnostics based on the vision of the city as a set of interlinked assets is followed by the identification of priority investment areas, integrated plans and project selection.

Although the challenges in building a detailed methodology for the construction of the balance sheet of an urban economy cannot be presented in detail in this article, the diagram below provides a conceptual outline of how a corporate finance approach can be adapted to this context. In the diagram below the balance sheet notion is applied to the system of inter-linked assets constituting an urban system.

Figure 3. The balance sheet of an urban economy

¹⁸ The negative long-term implications on Italian territorial development of a lack of strategic perspective in cities are clearly articulated in Calafati A. G. (2010), *Economie in cerca di città. La questione urbana in Italia*. Donzelli, Rome.



In corporate finance, effective asset management is a core business activity aimed at maximising corporate value or profit for company shareholders. For a city or functional urban area, the effective management of city assets is a decision-making process carried out for the benefit of citizens, which involves valuing, investing in, acquiring, holding and disposing of assets –in the extensive interpretation of “urban assets” adopted in this paper– to maintain the city on a sustainable development path, in a context where external financial support may be increasingly difficult to obtain.

In many cities, the urban investment strategy informed by the diagnostic analysis just illustrated will shift long-term financing priorities from their emphasis on fixed material assets to skills, human and organisation capital, since the return from the latter type of assets can outperform what can be achieved through traditional capital expenditure. In order to pursue effectively this change in management culture, urban areas need specialists with the skills and capabilities to carry out city diagnostics, identify transformation scenarios and economic therapies –and translate these into shared investment strategies to be pursued through alliances between authorities, city managers, technology providers and economic/financial operators. Innovative city management is necessary to bring forth sustainable urban transformation in an increasingly risky, competitive and volatile environment. That’s why it makes sense to establish specialised financial instruments –impact funds similar to the UDFs promoted by the JESSICA initiative– to support the transformation of city systems.

Achieving sustainable long-term urban productivity gains to benefit those who live and work in cities will prove particularly challenging in shrinking urban systems in competition with other systems in a free continental market and a globalised world economy. A rapid decline in demand for urban space may reduce sharply land prices and the potential to use

infrastructure charges to fund local expenditure. Tailored strategies can however mitigate these risks –an example is given by the opportunity to exploit cross-border migration and investment flows. There are several examples of the relevance of such long-distance flows, such as the Asian migration to the United States in recent decades, the presence of well-established Asian (Chinese) productive districts in Italy or the recent approach adopted by the UK authorities to attract Chinese capital, including possibly infrastructure management skills, to revive the PPP market. The European spatial reorganisation may give Chinese investors the opportunity not only to acquire European assets at convenient prices, but also to become active investors and economic operators on a greater scale in the European cities. Beyond the current risks of property market turbulence in China, longer term risks associated to massive investing to develop new urban assets in the mainland may exceed those associated to investing in developed urban assets. Such an investment strategy could make sense also in view of the demographic situation in China, where the consequences of the single-child policy could be that China may have to continue to invest massively to build up cities for the next two decades, but then confront a long-term decline in demand for urban space. In a sense, this implies that buying and using European “ready-made” urban assets with a strong goodwill component, as European cities have been operating and adapting to their surrounding environment for centuries, could be a more valuable opportunity for Asian long-term investors than investing in domestic cities. A further acceleration of Asian investment –and possibly migration– could thus help “rejuvenating” the EU economy. Further research on these issues will help European decision-makers to better understand and govern this process in the coming years.

6. After 2013: the New European Perspective

As of the end of 2012 over 40 Urban Development Funds were operational in 11 countries and some 55 regions in the EU, for a total amount of committed funding of approximately EUR 2.0bn, mostly from Structural Funds resources.¹⁹ This constitutes already a very encouraging result for an innovative initiative like JESSICA, but it would be excessively optimistic to consider these UDFs as fully-fledged impact funds for sustainable urban development, acting as strategic urban investors in European cities along the lines previously illustrated. Nevertheless, their existence provides a springboard for the development of urban asset management tools whose impact can be magnified through the resources that will become available in the forthcoming programming period, if these are appropriately used.

The legislative package proposed by the European Commission for the next programming period 2014-2020 gives a much wider relevance to the territorial/urban agenda and to the use of financial instruments to deliver the objectives of Cohesion Policy and the 2020 European agenda –“smart, sustainable and inclusive growth”. This means that a strategy relying on cities as engines for the economic recovery can benefit from increased opportunities to employ the resources provided by the EU Cohesion Policy budget.²⁰ The order of magnitude of the resources dedicated to Cohesion Policy in the Commission’s proposal is approximately EUR 370bn, available for a broad range of investment types in covering the entire EU territory. A substantial amount of these resources, estimated in the range up to EUR 25-35bn, could be employed through revolving financial instruments. While it is difficult at this stage to quantify the share dedicated to urban energy and territorially focused instruments, it is reasonable to assume that it will be substantial. In addition, a strong emphasis has been put on integrated territorial strategies as a way to make investment more effective and opportunities

¹⁹ With a market share of about 95%, the EIB is the leader in the European market for financial instruments dedicated to urban sustainable development supported by the Structural Funds.

²⁰ On the proposed legislative package, see http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm#1.

for city authorities to take on a direct role in the management of Cohesion fund resources have been greatly enhanced. Cities will be able to contribute resources in kind (e.g. through land and buildings) to the capitalisation of urban development funds,²¹ and these contributions can be used to cover the national co-financing requirement for Cohesion Policy instruments.

The additional flexibility of the new regulatory framework and increased scope for direct involvement of cities will contribute to the establishment of a new generation of urban development funds which may take a leading role as strategic investors for European urban transformation, in cooperation with the banking sector.

7. The Impact Investing Paradigm: a New Role for “Local Community Banking”

As illustrated in the previous sections, ample opportunities exist to employ financial instruments for smart, sustainable, and affordable cities and in this context the banking sector will have a pivotal role. In our view one of the weaknesses of the way authorities responsible for the management of operational programmes identify and finance investment opportunities lies in their poor coordination with the banking sector. Partly, this is due to the fact that the traditional grant-centred project funding approach has not stimulated the systematic application of sound financial analysis (e.g. ROI, banking viability, etc.) and linked that to project selection and structuring. The dialogue with private investors and the banking sector has also been too occasional, and learning-by-doing opportunities that can only be captured through regular co-operation missed, and with that the opportunity to use more effectively scarce EU resources.

In the countries and regions where they have been implemented, the financial instruments promoted by the JESSICA initiative have started to progressively change the way structural fund resources are employed, and the transition from traditional grant funding to revolving instruments capable of attracting additional financial resources and reconstituting the value of the instrument allowing its further re-use. However, the recent financial crisis and the associated increase in risk aversion have impacted on capital remuneration requirements, so that adequate levels of private sector co-investment have been in practice very difficult to mobilise.

As already explained, the consequences of the financial crisis are intensified by the single market and the currency union, leading to an increasingly obvious economic dualism between “core” and “non-core” urban areas in the EU. This dualism brings about a need to diversify investment strategies between “core” and “non-core” cities to a much wider extent than in a macro-economic environment where devaluation could be relied on to correct productivity and current account imbalances between countries. In the years before the establishment of the monetary union for instance periodical devaluation often contributed to prevent sharp decreases in nominal property values also in cities with declining demand for urban space.

Currently EU “core” urban areas, e.g. German export cities such as Munich or Stuttgart enjoy, compared to peripheral areas, higher organic investment profitability (ROI), lower local systemic risk, direct investment flows, the expectation of increasing or stable asset prices, which attracts real estate investments in line with total return targets of global investors. Under these conditions credit decisions by the banking sector lead to softer lending rates to local projects. Last but not least, local authorities in “core” urban areas with resilient land values can use value capture mechanisms to finance social expenditure and support local infrastructure without incurring into additional borrowing.

²¹ On the British experience of establishing PPP vehicles where property assets are contributed by the local authorities, see Thompson B. (2012), *Local Asset Backed Vehicles: A success story or unproven concept?* RICS, London.

The above-mentioned economic factors have triggered a rapid deleveraging process in peripheral economies, as in non-core areas the risk-weighted return from many types of urban projects cannot match the rapidly increasing cost of capital faced by banks and financial intermediaries. However, financial instruments of the type promoted through the JESSICA initiative can be employed to provide finance at sub-commercial terms, now allowed under State Aid regimes approved by the European Commission.²² This will enable urban development funds and territorial financial instruments to offer terms and conditions which are compatible with the lower organic returns from urban projects in non-core countries. The process can be expected to be strongly supportive of job creation and overall EU growth as in the long term it may contribute to stabilise financial markets.

In this challenging environment, the role of financial instruments promoted through JESSICA must be tailored to address both authorities' and investors' concerns. To give an example, Cohesion Policy resources channelled through JESSICA instruments can be offered as subordinated and junior capital, in order to adapt the overall risk profile to the requirements of different classes of co-financiers. This should balance the risk-reward equation for many strategic projects that while essential for the sustainable transformation of cities would not be delivered through unassisted market mechanisms. Typically, the availability of a subordinated tranche generates a significant relief in terms of risk-weighted-assets (RWA) for the co-financing bank, reducing *ceteris paribus* capital adequacy requirements and making lending more attractive. An even more ambitious alternative exists and should be seriously taken into consideration. This concerns the possibility of using the JESSICA funds to subscribe capital instruments (e.g. hybrid Tier 1 instruments) issued by the banking sector in order to set-up and capitalise vehicles supporting sustainable urban transformation. This mechanism would boost the availability of "impact-related" regulatory capital for those banks willing to dedicate their lending to these policy objectives, leveraging additional lending capacity in that direction. The subscription can happen in tranches or through securities convertible into equity instruments, aligned with the co-lending activity and the capital absorption targeted by the authorities and investors. To be clear, this would be conditional on employing the increased lending capacity for impact investing supporting long-term sustainable development strategies. In this context it is worth noting that the pricing structure should also be harmonised in order to reflect the conversion into Tier 1 capital, and that relevant regulatory implications will need to be analysed in detail (conditionality, pricing, etc.).

For the reasons illustrated at length in the previous sections, a reinforcement of European financial instruments for territorial cohesion is needed in order to facilitate the European economic recovery, with cities and innovative investors as the engines of this process. These mechanisms should operate at a decentralised or "shared" level, in line with the mission and objectives of the EU's Cohesion Policy.

These financial instruments should be structured to enable them to unlock their full potential to promote transformational investment in cities. An essential step in unlocking this potential is to facilitate the deleveraging process by supporting the recapitalisation of those banking institutions which want to play an active role in shaping local urban infrastructure, energy and labour systems over the next twenty years. This may stimulate the growth of an innovative brand of financial institutions specialised in local strategic investment under a revised "merchant and savings bank" business model. This business model will rely on the one hand on the impact fund concept, whereas the simultaneous achievement of a financially-sound performance and durable impacts on territorial development is the key driver of investment decisions, and on the other on the potential offered by 2014-2020 Cohesion Policy

²² For details on the aid regimes approved by DG-Competition for urban development funds in England and Spain, see http://ec.europa.eu/competition/state_aid/cases/240234/240234_1247477_97_2.pdf and http://ec.europa.eu/competition/state_aid/cases/240808/240808_1295596_79_2.pdf.

resources to mobilise sound investment beyond that offered by unassisted market forces. On their part, cities could add to the financial resources mobilised by the innovative financial institutions by contributing in-kind resources as already explained. As the “EU Bank”, the EIB could support the development of this new segment in the financial system making available co-financing resources, both directly and through its traditional network of financial partners, while facilitating cross-border synergies to unlock the maximum impact from the financial instruments for urban development currently in place and those that will be established in the forthcoming programming period.