Bridging the design / finance divide: adding ‘design strings’ to the finance of urban development

Matthew Carmona, Tommaso Gabrieli & João Bento

To cite this article: Matthew Carmona, Tommaso Gabrieli & João Bento (2023): Bridging the design / finance divide: adding ‘design strings’ to the finance of urban development, Journal of Urban Design, DOI: 10.1080/13574809.2023.2206549

To link to this article: https://doi.org/10.1080/13574809.2023.2206549

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 12 May 2023.

Submit your article to this journal

Article views: 192

View related articles

View Crossmark data
Bridging the design / finance divide: adding ‘design strings’ to the finance of urban development

Matthew Carmona, Tommaso Gabrieli and João Bento

ABSTRACT
Professional, policy and conceptual divides continue to throw up barriers to a shared understanding between the domains of urban design and development finance. Drawing on cross-Europe analysis, this paper explores the relationship between mechanisms of finance and tools of urban design governance, asking how they can work together to enhance urban quality. Practices were conceptually-ized and compared and those that combined tools were identified and evaluated. The results fed into an evolving typology of urban design governance and helped to establish clear principles for the effective combination of finance and design: adding ‘design strings’ to the finance of urban development.

Introduction
Urban design governance can be defined as state-sanctioned intervention in the tools and processes of designing the built environment (Carmona 2016). Throughout Europe, local, regional, and national administrations have established urban design governance systems that are intended to ensure the compliance of urban development with basic urban design qualities and enhance design quality outcomes. For every built environment intervention, the line-up of stakeholders, the leadership and the power relationships will be different, although consistency will be the negotiation and ultimate shaping of projects and places through a design process. Quality in design is not, however, universally prioritized.

Despite this, studies in and beyond Europe have demonstrated a positive relationship between design governance processes and design quality outcomes. These include the routine use of design competitions in Sydney (Freestone, Davison, and Hu 2019) or the use of design codes and design review in England (Carmona et al. 2020). When systematically used at the local level, these sorts of tools seem to signal a higher commitment to achieving design quality and to ensuring that developers employ suitably skilled and committed design teams capable of crafting contextually appropriate projects.

Pan-European studies on the governance of design are thin on the ground, an exception being in the use and effectiveness of design competitions (Biau, Weber, and Zetlaoui-Léger 2020; Architectuur Lokaal 2021; Strebelt and Silberberger 2017, 8; Kowalczyk 2018).
Research conducted in the UK that had examined a decade-long experiment with the use of informal (non-regulatory) tools for the governance of design (Carmona, de Magalhães, and Natarajan 2017) nevertheless offered a promising set of concepts and experiences to inform a Europe-wide enquiry. The resulting project, christened ‘Urban Maestro’, was funded by the European Union’s Horizon 2020 research and innovation programme, and ran from December 2018 to April 2021. It utilized the UK study as a stepping-off point from which to explore tools of urban design governance across Europe and their related financial mechanisms.

This paper focusses on the financial dimension of urban design governance and asks how can these separate but intimately linked dimensions of urban development process work together to enhance urban quality? This was a focus of the larger Urban Maestro project that has been virtually unexplored in the international literature, despite the fundamental relationship between the economics of development and what can be achieved in design terms. Following a brief introduction to design quality and finance interface, the paper explores urban design governance tools before comparing them with finance mechanisms. Lessons are drawn out from the comparison and conclusions are given.

Finance and urban design

Writing in the first-century BC, Vitruvius called for structures that exhibit firmness (or stability), commodity (functionality) and delight (aesthetic appeal). Ever since, these essential parameters have been taken as criteria for good design in a product design sense, and notably in architecture. However, a fourth criterion of ‘economy’ should also be added, not merely in a narrow sense of respecting budget constraints, but also in the sense of respecting and optimizing precious resources (both economic and environmental). While environmental issues are increasingly integrated into European urban design governance frameworks from the pan-European scale downwards, economic concerns are not, at least not so obviously.

In the context of the built environment, these economic resources come, primarily, in the form of financing – the act of providing funds (public or private) for development projects. Leinberger (2005, 24) argues ‘Learning how this system works, and how it may be influenced to accept different models, should be one of the top concerns of advocates of change’ including those such as urban designers who need to manipulate it. This is because, as Ellin (1997) notes, ‘form follows financing’.

Financial institutions, practices, regulations, and constraints are intrinsic to any economic activity and operate at different interdependent scales, from the transnational to the very local (Adams and Tiesdell 2013, 183–6). There is no room to discuss all the nuances of development process and its economics as they relate to urban design here (see Carmona 2021, 540–586 for a full discussion). Instead, the focus in this paper is on the specific interface between the tools of urban design governance and those of finance. Within the complex picture of modern finance, financial mechanisms with ‘design strings’ encompass the use of public and/or private financing instruments alongside and interconnected with one or more tools of urban design governance.

This combination has the potential to ensure that economic resources are used to shape both development processes and design outcomes in a defined public interest.
This is quite separate (although may be linked) to the funding of urban design governance tools. While almost all tools of urban design governance will require funding to establish and operationalize them, far fewer will be linked explicitly to the financing of development.

The category of financial mechanisms used in development will encompass very different instruments. A traditional classification of financial mechanisms could be based on whether those are public or private instruments; it might be based on the geographical scale at which they operate; and, for private instruments, it could distinguish between equity and debt instruments, with bonds and loans being the typical instruments of debt financing. In most urban areas, private investment will be vital to augment the efforts of public and third-sector funders, but these forms of finance typically carry a profit rather than a public interest motive and – seen in isolation – the most profitable avenue for investment may not be the optimum one as regards delivering design quality (Leinberger 2008).

Investors in design quality

There are many forms of private investors and developers. And just as there are varying motivations informing the operation of urban design governance (Carmona 2016, 707), investors and developers will have different combinations of motivation guiding their operations. These will include motivation with a direct public benefit such as creating jobs, stimulating the economy, regenerating places, building a reputation, and so forth. However, profit will almost always feature prominently in these lists, and sometimes exclusively (Figure 1).

Figure 1. Gated housing development in Gdynia, Poland, representing an expression of development guided strongly by the market/profit motive (image Matthew Carmona).
Public developers such as social housebuilders or transport agencies, likewise, will have varying motivations guiding their activities, including housing the disadvantaged, maximizing new home numbers, delivering functional infrastructure, making the books balance, and so on. Again, these may not emphasize the delivery of place quality or its long-term economic, social, and environmental ‘place value’ (Carmona 2019). The challenge explored in this paper, therefore, is to weight the system so that it is clearly in the interest of all actors to deliver a well-designed built environment. In other words, one in which it becomes easier to make a profit or deliver more homes or other social benefits by designing it well.

Municipalities, in partnership with private and community actors committed to an area, can also utilize supply-side stimulation to stoke demand. The methods employed include encouraging or subsidizing flagship (catalytic) projects; subsidizing development; area-based improvements; provision of infrastructure; investing in heritage retention; and/or developing design frameworks of various sorts. As development involves calculation of reward and risk, these actions are generally intended to reduce risk (to those making investments) and to provide a more secure investment environment while avoiding ‘growth at any cost’ scenarios. In achieving this, better-quality design helps (in theory) to ensure that economic benefits are spread more widely, while poor-quality design might reduce the speed at which impacts propagate through local economies (Carmona, de Magalhaes, and Edwards 2001, 76–7; Brennan and Tomback 2013; La Rosa et al. 2017).

A consequence of such processes is that the public sector is simultaneously stimulating/attracting investment while also regulating the resulting development. Under such a scenario the potential exists for design criteria to be relaxed or compromised to ensure investment happens. This will be particularly so in environments perceived to be disadvantaged where reducing regulation can be viewed as a stimulus to growth (van Doren 2005). However, investment in the public realm by municipalities and private actors alike can be rapidly undermined when regulatory processes permit sub-standard development schemes. This is often further complicated by institutional fragmentation whereby one municipal department (or an arms-length public agency) is concerned with stimulating development (e.g., an economic development or regeneration agency) and another is regulating it (e.g., the planning department/agency) (Cappelli, Guastella, and Pareglio 2020). Notably, if the policies and practices of various agencies are not adequately joined-up, the opportunity is created for less scrupulous developers (those only in search of a quick profit) to exploit the gaps (Figure 2). The critical aspiration is to get joined-up thinking across the public and private sectors and across all investment decisions, making the connection between design aspirations (however, defined) and delivery (however, financed) critical.

The linkage between design and finance will be apparent in most development projects. Falk (2011: 38), for example, argues that the significant investments by the public sector in key locations across Europe – Lille, Amersfoort (and indeed across the Randstad), Karlsruhe, Freiburg, and Montpellier – and the huge private investments they attracted, provided the ideal opportunity to attach design strings. Hall (2014, 295; 309) in his final evocatively titled book *Good Cities, Better Lives, How Europe Discovered the Lost Art of Urbanism* agreed. In the book he took an intellectual grand tour through Germany, Scandinavia, France, and the Netherlands to
European cities which, he argued, ‘have got it right’. The result was a call for a locally based model of finance that is responsive to local context, engages public and private actors in a shared endeavour and ultimately creates places in which people can thrive.

This means irrevocably linking long-term investment strategies and a clear place-based vision for ‘good cities and better lives’. As is now explored, it includes finance-related decision-making that encourages the production and use of informal as well as formal tools of urban design governance.

**Constructing a European typology of urban design governance tools**

From a broad discussion of finance and its interface with urban design (which will be returned to), the focus now shifts to the primary focus of the Urban Maestro project, the tools of urban design governance in Europe. An important distinction was made at the start of the project, between hard and soft powers, and formal and informal tools. As the exercise of government has become ever more multi-layered and complex and has moved away from either top-down command and control approaches or hands-off free market ones, governments have needed to familiarize themselves with a new basket of governmental approaches that range from the application of softer influencing powers – ‘carrots’ – to harder law-making powers – ‘sticks’. These increase in their relative weight and interventionist force as they go i) steward, ii) leader (influencing and informing), iii) customer, iv) provider (of services), v) funder, vi) regulator, and vii) legislator (Siodmok 2017).
Siodmok (2017) places these seven styles of government intervention in a matrix against different stages of maturity to identify 28 different ways that policymakers operate. As they journey from the soft power to the hard power end of the spectrum, they activate tools that move from the informal (encouraging) to the increasingly formal (directive). Importantly, at the softer end of the spectrum, these modes of action have been increasingly implemented through arms-length government agencies or through engaging private, third sector and community actors directly in the delivery of government (Salamon 2000).

None of these are exclusively the province of design, but instead relate to the full range of state roles and responsibilities. Applied to design, all can be used to shape the ‘decision-making environment’ within which design occurs by influencing, cajoling, or encouraging other parties towards ends in the public interest. Relating this to the governance of urban design, the decision-making environment, design processes and design outcomes are inextricably inter-related (or should be). Thus, for systems of urban design governance to be responsive to changing circumstances, they need to be capable of working through the scales and being ‘smart’ in the sense that they continually learn from the experience of implementation and refine practices and the decision-making environment accordingly. Arguably, this is both easier and quicker and therefore more responsive at the softer end of the spectrum, as the examples given at the start of this paper, from Australia and England, demonstrate.

‘Formal tools’ such as zoning ordinances are legally defined in statute as required roles of state actors and typically must go through a range of statutory adoption processes to ensure that they are fully compliant with other legislative regimes, such as environmental protections and human rights. They also need to be politically sanctioned, for example by a minister, mayor, or municipality; often they are subject to statutory public engagement or consultation requirements; and they need to be fully legal and robust, as set down in any enabling legislation. This all takes time, sometimes many years, and is difficult to change once it comes into force, making it somewhat inflexible. Set against this are the advantages of the statutory weight of such tools and the transparency and democratic authority inherent in their path into existence.

By contrast, ‘informal tools’ are discretionary and therefore optional for authorities to use (or not). This means that they can be introduced and modified far more rapidly and with less public and political scrutiny, although will typically still have to meet key public sector standards of probity and fairness, particularly when linked to finance instruments with the inevitable potential for corruption (Ajit 2005). Design competitions, for example, will sometimes be required in legislation (national, regional or local) although are more often simply recommended in policy (e.g., Conference of Ministers of Culture 2018). They can be organized speedily and flexibly, but often with little transparency or democratic oversight (Architectuur Lokaal 2021). Informal tools were the particular focus of Urban Maestro.

A tools-based methodology

Urban Maestro represented a piece of qualitative cross-national comparative research and collective learning (Mangen 1999) spanning across the European Union (including, at the time, the UK) and EFTA countries. While governance, design and financial
contexts and practices vary hugely across Europe, when related through a robust analytical framework, enough commonalities exist to allow meaningful comparison, theorization, and analysis. The breadth of coverage necessitated a trade-off with the depth of understanding possible in relation to any one place or tool and its context, although this was a trade-off worth making given the insights possible from a wide trawl. In this case, it was helped by the focus on informal tools that exist, to a large degree, independent of regulatory and governance specificities. The work quickly revealed an obvious strong desire amongst practitioners, policymakers, and researchers across Europe to learn from each other.

The project used five research methods to gather and capture information about the diverse urban design governance approaches utilized:

1. **Typology:** utilizing the earlier UK-focused research (Carmona, de Magalhães, and Natarajan 2017) as a departure point, a tools-based conceptualization of urban design governance was constructed, tested, and refined in order to establish a European typology of urban design governance tools.

2. **Survey:** a Europe-wide survey of informal urban design governance practices was conducted primarily at the level of nation states as a first means to test and refine the typology and to begin the process of gathering experiences from across Europe. Sent to 124 governmental, local government and non/arms-length governmental agencies across Europe, a 51% response rate was achieved.

3. **Panorama:** the largest part of the work involved the systematic compilation of a Europe-wide panorama of innovative practices of informal urban design governance and its publication at [https://urbanmaestro.org](https://urbanmaestro.org). This features around 100 such practices.

4. **Case studies:** chosen from the panorama to focus in greater depth on 30 innovative and representative practices of informal urban design governance to gain greater understanding and insight into their use and utility.

5. **Workshops:** examining innovative practices further through a series of curated conversations with a diverse range of practitioner audiences across seven separate events spread through 2019 and 2020, some in person and others online, attracting a combined audience of 870 professionals, politicians, and researchers.

The five approaches ran simultaneously and were carefully coordinated. Because this paper draws from across the methods, space does not permit their full methodological exploration. Instead, a comprehensive account can be viewed at Carmona, Bento, and Gabrieli (2023) ([https://www.uclpress.co.uk/collections/ro_homepage_products/products/211153](https://www.uclpress.co.uk/collections/ro_homepage_products/products/211153)).

**The Europe-wide survey**

The survey represented an early and critical stage of the project, enabling a first attempt to establish a Europe-wide picture of how urban design governance tools are being used across the continent. It uncovered an increasing number of administrations (national to local), developing an increasingly diverse and sophisticated set of approaches to offer clear leadership on design quality. It revealed that governments across Europe are taking
advantage of the informal tools of urban design governance to take the delivery of a better-designed built environment to new levels. But practices are far from consistent.

Some tools have been widely used and adopted across almost all administrations in Europe, for example, design awards and forms of design review. Others are far more sporadic, including the use of design indicators, and have yet to be widely mainstreamed. Others are well established and no longer seem particularly innovative, while elsewhere they remain little used, and their adoption would represent a significant innovation. Design competitions fell into this category.

The survey confirmed that informal tools were an important means to complement the formal side of local urban design governance toolkits, and greatly extend the means available to government actors to influence how the built environment is shaped. Through these means many administrations across Europe are proactive in promoting design quality and fostering a culture of place quality. To deliver this, a diverse range of collaborative processes and partnerships have been established between public and non-governmental or arms-length organizations to deliver and use the informal tools of urban design governance. In particular, the most proactive administrations have been setting up dedicated institutions and initiatives to drive forward a stronger local culture of design quality.

If notions of governance embody the idea that a wide range of actors, tools, and relationships are involved in the process of governing (Pierre and Peters 2000), then the survey confirmed that the pursuit of design quality is no exception. Ultimately, however, while the public sector acts with, for and amongst other stakeholders, it was clear that it retains a special responsibility for creating the conditions within which a high quality built environment can flourish. This is likely to be subject to sorts of ‘agency’ problems that are well established in the economics and built environment literature, which shows how governmental decision-makers are not always aligned to the interests of those they serve, the public (Eisenhardt 1989; Garikipati and Olsen 2008). In Europe, informal tools of urban design governance are increasingly at the heart of these complex place, shaping processes. They offer, amongst other things, a greater connection to local places and populations and, theoretically at least, to their needs.

**A European typology**

Based on the survey and early work scoping out a Europe-wide panorama of practices, the earlier UK typology was gradually refined and extended and developed into a conceptual European typology of urban design governance tools. Underpinning this are two key conceptual and practical distinctions relating to the range of tools being used:

- Quality culture versus quality delivery tools: Some tools focus primarily on influencing the broad culture (or environment) within which the emphasis on design quality is variously prioritized, articulated and negotiated. This indirectly shapes subsequent processes of design, including the selection and use of a second category of tools that are concerned less with the decision-making environment and more with providing a mechanism through which specific project-related design decisions can be made. These help to shape actual places and therefore the outcomes from
urban design. The two categories overlap and are not mutually exclusive, but nevertheless conceptually identify an important distinction.

- **Formal versus informal tools:** The most widely used tools focus on formally ‘directing’ decision-making processes relating to the design of projects and places. In doing so, they use the hard powers of the state, which are generally obligatory to use and to follow. Others informally ‘influence’ decision-making, whether related to establishing the quality culture or enacting quality delivery tools. Informal tools use the soft powers of the state to encourage and cajole development actors, but in a discretionary (non-obligatory) manner. Again, these categories are not hard and fast, with some types of tools being used in both formal and informal categories, including design review, or can be used in different ways at different stages of the development process.

When considered together, these distinctions suggest three categorizations of urban design governance tool: i) informal quality culture tools, ii) informal quality delivery tools and iii) formal quality delivery tools. A fourth – formal quality culture tools – can be envisaged, for example the inclusion of the built environment as a mandatory topic for children in schools. They are omitted from the typology as formal educational policy is beyond the remit of built environment policymakers and professionals and therefore beyond the scope of this paper. This leaves nine tool types that are defined in Figure 3 but explored in greater depth elsewhere (Carmona, Bento, and Gabrieli 2023).

**Figure 3.** A European typology of urban design governance tools (image Matthew Carmona).
It is important not to be overly rigid in how such a typology might be used. As already suggested, many tools have both culture and delivery implications, and the division between the formal and informal categories are not hard and fast. The classification is instead a relational instrument, designed to understand and relate broad types, rather than to strictly classify them. Within each category of tool, there is also a transition from lesser to greater engagement or from more passive to more active intervention in projects and places. This implies that tools at the base of each category are more hands-on and often more forceful in their application. Again, while this may generally be the case, it will not always be so, as the transition will not always be as clearcut as the figure suggests.

**Financial mechanisms and urban design governance tools**

As already suggested, urban design does not work in isolation. The most creative design solutions, for example, will be of little value if economic systems do not allow for their implementation, a critique sometimes levelled at the results of international design competitions (Kreiner 2017). For this reason, urban design governance outcomes and processes are shaped by the availability of economic resources and the nature of financing instruments for projects. Whichever tool is selected, there is the potential to use financial (and other economic) means alongside or as part of the urban design governance toolbox to incentivize good design and discourage poor design.

Financial means could, for example, encourage the production and use of urban design governance tools, most simply by utilizing funding released within the informal support category of Figure 3. More significantly, they can be used to incentivize the aspirations encompassed by urban design governance as part of formal incentivization processes. While any financial mechanism might, in theory, be used for that purpose, in practice some are far more commonly used than others. It was not the aim of Urban Maestro to comprehensively map all such development finance mechanisms, but instead to understand which approaches have the potential to engage directly with and enhance urban design outcomes and processes.

Drawing on these distinctions and to investigate the link between finance and urban design governance, a working classification was devised (building on Carmona et al. 2016: 42–45) of possible finance mechanisms that have been used in conjunction with urban design governance tools or which have otherwise helped deliver defined urban design aspirations. The working classification identified six mechanisms across two key categories:

1. Raising finance – through subsidy and direct investment:
   - Direct financing instruments, used to help deliver urban quality, including loans or subsidies for well-designed development, direct public funding tied to defined quality thresholds, and various mechanisms for land value capture.
   - Direct public investment, in projects, to reduce developer risks associated with the upfront investments in place quality through mechanisms such as area improvements, land transfer, infrastructure provision, and so on. These can also be used to give the public sector a seat at the table when key development decisions are being made.
• Taxation supplements, used to raise finance for direct investment in the places to which they relate. Typically, these are local in their application, with common mechanisms including Business Improvement Districts (BIDs), tax increment financing, planning gain (betterment) charges and development impact fees.

(2) Managing investment – through process management, indirect economic stimulus and partnership working:

• Indirect financing instruments, used to encourage the delivery of urban quality through mechanisms such as tax incentives (e.g., reductions in local taxation or development taxes) and zoning bonuses/enhanced development rights associated with certain types of development.

• Steering mechanisms, to encourage good design through the direct involvement of the public sector in the development process, perhaps through the creation of public private partnerships (PPPs) or the development of exemplar projects. These include the voluntary imposition by development consortia of design guidance upon themselves, such as the use of design codes.

• Regulatory management, approaches are designed to reduce the formal regulatory burden in exchange for better design. This might include fast tracking architect-designed projects or streamlined regulation zones tied to defined design parameters.

Returning to the European survey, the working classification was used to garner responses that included information on formal incentivization mechanisms and their interface with design (Figure 4).

Within the rising finance category, most financial incentive schemes were related to heritage projects or the delivery of new housing. In both cases, the finance was often dependent on meeting minimum levels of design quality, requiring that schemes are assessed in some way using a tool of urban design governance. Sometimes this simply required that a defined process had been followed, for example that a design review or design competition process had been conducted. Elsewhere, it required that a defined quality threshold had been reached, with the requisite assessment made using a suitable design rating tool.

The European survey also suggested that direct public investment is frequently used to reduce the risks to the private sector associated with the upfront costs of delivering high-quality development. Respondents confirmed that, for the public sector, the benefit comes in driving the sustainable development and regeneration of urban areas with funding awarded on a qualitative basis with an assessment of design quality often amongst the essential criteria for that investment, for example through commitments to meet design aspirations laid out in a practice guide or similar tool. Local taxation supplements, by contrast, seem to be little used in Europe, in part because such measures are often controlled nationally (or even internationally by the European Union). Responses nevertheless recognized that they have the potential to be associated with the delivery of high-quality design, either to discourage certain behaviours (as a levy on vehicles entering a congested area does), or by endorsing them, perhaps by offering tax advantages (such as the absence of a levy on zero emission vehicles). They are, however, discretionary in their use, and design quality is just one of the many factors that might be encouraged in this way.
Turning to mechanisms associated with managing investment processes, the most widely used mechanism within the indirect financing instruments category was the provision of tax incentives for the restoration of heritage buildings and to increase the energy performance of buildings. Zoning bonuses – a mechanism extensively used in North America to encourage the delivery of benefits such as new public spaces (Kayden 2005) – are infrequently used in Europe.

Steering tools were rarely identified by the respondents to the survey. This was despite the well documented role of the public sector in setting high standards of design in countless exemplar projects across the continent, from new neighbourhoods to public buildings and public realm projects. There was also little recognition in the survey of the potential role of public-private partnerships, most likely reflecting an absence of knowledge at the national scale about such practices, rather than the absence of the practices themselves. Regulatory management tools also seem to be rarely used in Europe, the exception being in the UK where such mechanisms have been widely deployed, although not always with design strings

Figure 4. Urban design governance tools and financial mechanisms (image Matthew Carmona).
attached. This has led, too often, to worse rather than better quality development (Carmona 2020).

The survey suggested that while all financial mechanisms are used in Europe, awareness of the potential to link financial approaches and design tools remains low. In turn, this suggests that the association is underexploited, with most respondents unaware of any obvious linkages being made in their jurisdictions between design and finance. If the critical task for the state is not simply to incentivize development but to incentivize high-quality development, the survey suggested that currently many administrations are attempting to do this without critical financial tools at their disposal.

**Raising finance in practice**

Despite the low level of awareness regarding the potential linkage between design and finance, the further exploration of practices identified in the survey and explored during the Europe-wide panorama of practices and associated case studies and workshops demonstrated a clear potential to add design strings to the sorts of tools included in the working classification. Space does not permit the full exploration of these (instead see https://urbanmaestro.org). Nevertheless, a brief description of a number of these where the connection between finance mechanism(s) and urban design governance tool(s) was particularly evident helps to demonstrate the range and forms that such interventions took. Starting with those in the raising finance category:

**Grenoble public spaces programme**

The Grenoble-Alpes Metropole administration is promoting an experimental and design-led community participatory process for improving public spaces. A guide for public spaces was developed, including an evaluation system via a participatory and incremental process that gradually scales up temporary interventions. Citizens define specific needs and bring this to the city administration, leading to a range of explorative projects over the course of 3 months. After an evaluation, each initiative may be expanded for 1 to 3 years and, if successful, a final intervention will be carried out with a higher budget (Gabrieli 2020). The initiative employs direct financing alongside exploration and information tools.

**Mehr Als Wohnen (more than housing)**

Swiss housing cooperatives are well-established, non-profit legal entities representing a distinctive form of affordable home ownership. For example, the Mehr Als Wohnen-co-operative in Zurich is financed from a variety of sources: members of the cooperative pay an equity deposit, which is refunded (with interest) when they vacate their residence; the co-op issue bonds and borrows through mortgages from banking institutions; and the state grants special low-interest loans. Residents assist in the development of their neighbourhoods, working together in teams, participating in workshops and voting for decisions. The expectation that flows from the public investment is for a high-quality development delivering long-term social and economic value that residents both support and share (https://urbanmaestro.org/exam
ple/mehr-als-wohnen/). The example utilizes direct public investment linked to exploration.

**The Stadmakers Fonds (Citymaker-Fund)**
This fund was created to address the difficulties that non-conventional place-making projects encounter with securing finance from traditional sources. The fund acts as a matchmaker between place-makers and investors with an emphasis on projects that contribute to delivering a clear social as well as economic return. In 2019, it received its first investment of €1 million from the City of Utrecht, following which the fund began to fund schemes. A subsequent partnership with the Triodos Bank exponentially increased the capital available. The fund charges a low interest on loans and advises and assists potential recipients to make a case for funding (Karssenberg, Stauttener, and Gerritsma 2020). The initiative combines direct private financing and direct public investment with support tools.

**Europan**
First set up in 1988 and now run 16 times, this biennial competition for young design professionals under 40 years old utilizes sites across Europe with 30% of projects being realized by the participating country authorities. Each Europan costs around 5–6 million euros, where 95% of the funding is offered by national and local-level partners, with each country able to organize the competition and its ambitions on their own terms and according to their own budget (Bravo 2020). The initiative utilizes a direct financing mechanism and employs persuasion, exploration, and support tools.

**By&Havn**
A development and operating company jointly owned by the City of Copenhagen and the Danish state, By&Havn sells building plots to investors and housing cooperatives and actively participates in urban living initiatives from the initial planning phases until neighbourhoods come to life. The revenue from its activities helps to fund major infrastructure projects in Copenhagen including the development of the metro as well as urban spaces, quays, jetties, parks and initiatives in the new urban neighbourhoods (https://urbanmaestro.org/example/by-havn/) (Figure 5). The initiative operates on a commercial basis supported by both direct financing from land value capture and direct public investment, while using support, information, persuasion, and rating tools.

**Managing investment in practice**
If the examples so far largely encompass mechanisms in the direct financing instruments and direct public investment sub-categories, then turning to management investment category, examples focus on indirect financing instruments and steering mechanisms:

**Concept tendering**
Instead of using a direct award or a bidding process (where price is the deciding factor), concept tendering brings to the fore the qualities of place by making them a key decision-making factor equal to or even more important than price. Evaluation matrices are applied to ensure transparency. The concept-tendering procedure was first developed in the 1990s
in Tübingen, and since then German cities have been able to use a variety of different and diverse criteria, enabling them to compare the quality of submitted projects, some based on complex point matrices and others on unweighted lists of criteria (Temel 2020). The mechanism is based on indirect financing combined with incentive and rating tools.

**Podpora architektonických a urbanistických soutěží**
A Czech national subsidy programme for supporting architectural and urban competitions to procure design services for public buildings, public spaces, and planning documents. Through subsidizing half of the costs associated with competition prizes (up to €15,000 per competition), the fund helps to overcome a reluctance to stage competitions because of the cost and administrative time involved. Such costs reduce the enthusiasm for competitions in smaller municipalities, despite their proven impact on improving development quality, with the fund helping to fill the gap (Morkus 2020). The scheme provides a steering mechanism combined with support and rating tools.

**Oslo waterfront regeneration**
The development of Bjørvika is a collaboration between Oslo City Council and Bjørvika Utvikling (a joint private/public entity). Quality is secured through a combination of formal and informal tools including a clause in the head agreement, which stipulates that each square metre of property sold should yield a defined sum towards the development of public space. A further clause prescribes how finance will be supplied to the project without the municipality taking on any direct financial risk, while the coherence of the area is shaped through extensive guidelines and a set of indicators (Bergsli 2020) (Figure 6). The regeneration process encompasses a steering mechanism based on public-private partnerships and analysis, information, and support tools.

*Figure 5. Today Copenhagen’s waterfront is a haven for walking, relaxation, contemplation, and exercise (of all sorts), providing the city with an animated blue lung (image: Matthew Carmona).*


Be.exemplary
The Brussels-Capital Region offers subsidies for architecture projects following regular calls for projects that will enhance the construction or renovation of exemplary buildings. The goal is to demonstrate that it is possible to achieve excellent environmental performance within a reasonable budget. Following three calls between 2017 and 2019, 117 projects were selected amounting to 265,000 m² and attracting 18.5 million Euros of financial support. The exemplary nature of the projects is evaluated by a panel of experts and publicized on a dedicated website (https://urbanmaestro.org/example/be-exemplary-programme/). The scheme constitutes a steering mechanism and employs support and information tools.

Hafencity
HafenCity is being developed by HafenCity Hamburg GmbH (HCH), based on public investment and revenues from the sale of land. HCH, owned by the City of Hamburg, enforces a strict competitive bidding process where the crucial factor for awarding contracts is the quality of concepts (70%) over price (30%), with investors required to undertake an architectural competition once bids have been ratified. In exchange, the financing of the purchase price is postponed until after the building permit is granted giving time for investors to refine the design, secure finance and find potential users; in effect shifting the risk profile to benefit both the city and investors (https://urbanmaestro.org/example/hafencity-hamburg/) (Figure 7). The project involves a steering mechanism through public-private partnerships, indirect financing through concept tendering, and rating and support tools.

These and other examples were explored in some depth through the Urban Maestro panorama, case studies and workshop phases of the project. The collective learning informs the discussion and conclusions set out in the remainder of this paper.
Bridging the design/finance divide

Starting from two premises about the economics of design: (i) high-quality design solutions will be of little value if economic systems fail to allow for their implementation, and (ii) financial instruments can incentivize good design solutions, the workshops repeatedly demonstrated that in most cases there is a professional disconnect between the worlds of design and finance (or specifically the economics of development). At the same time, there is a good degree of consistency in the broad types of tools and mechanisms used across Europe, albeit with local variations.

There are design/finance and soft power/finance divides, but also a great potential to bridge these gaps

Although discussions at the workshops revealed the potential for the innovative use of development funding to create schemes with positive spill overs and synergies, few presenters at the Urban Maestro workshops could fully unpack the economic rationale and business models associated with specific urban design governance tools. An obvious conclusion is that European urbanists need better training as their understanding of real estate dynamics is often poor and without such an understanding it is difficult to engage real estate interests by bringing ‘asset values’ as well as ‘potential values’ to bear fully on positively shaping places. The reverse is also true, that real estate actors – including those working in the public sector – need better means of accounting for a holistic notion of place value (Carmona 2019) and not just economic value.

A further disconnect was also apparent in the obvious gap between the use of the informal tools of urban design governance and the finances of development. Thus, modes of financial incentivization can be found primarily in the formal toolbox of development,
perhaps because of the need for formalized transparency in the use of public funds and the need to avoid corruption. In contrast, informal/soft power incentives tend not to be explicitly financial (see Figure 4).

The workshops confirmed the conceptual distinction between funding and finance. Although public funding such as the Czech subsidies programme for design competitions and some private funding, including for design review in England, supports local practices of urban design governance, these forms of funding are not directly focussed on the financing of development. They would, however, impact indirectly, for example through encouraging better designed outcomes, and result in a different set of economic dynamics.

Despite this, the potential clearly exists to explicitly link design aspirations and the economics of development, using informal tools to encourage ‘good behaviour’ (good design) and discourage bad behaviour (poor design). Indeed, the workshops explored forms of information (e.g., Swiss Baukultur policy – https://urbanmaestro.org/talk/baukultur-approach-to-improving-building-culture/), rating (e.g., Scottish Place Standard – https://urbanmaestro.org/example/place-standard-tool/), support (e.g., Dutch Q-Teams – https://urbanmaestro.org/example/q-teams/), and exploration (e.g., temporary public realm improvements in Budapest – https://urbanmaestro.org/talk/creative-rehabilitation-of-urban-spaces-in-budapest-hu/), that indirectly impacted on development value and financing. They did this through changing the culture, expectations, and environment for investment to one in which design was prioritized, leading to long-term impacts on both the monetary and intrinsic value of places.

This remains a relatively under-explored topic in the academic literature, and the workshops identified a need for a better understanding of how financial mechanisms are used as part of wider design governance approaches and of the specific impacts they have on the ground. Nevertheless, a working hypothesis can be proposed that informal tools of urban design governance are effective at creating a culture of design quality and at gently ‘nudging’ proposals towards better outcomes (Corr and Plagnol 2018). Also, that finance can explicitly support these functions alongside any incentivization through formal governance mechanisms.

Financial mechanisms can incentivize design quality, but they need design strings attached

Analysing UN-Habitat (2016a, 2016b) recommendations, there are various ways that national governments can shape local fiscal systems to make them more responsive to local needs. These include:

- Increasing local government autonomy over taxes, revenues, and expenditures
- Supporting intergovernmental transfers of funds from higher levels of government to localities
- Authorizing local governments to leverage fiscal tools like municipal borrowing and land value capture to raise funds locally to support economic development and infrastructure
• Enabling localities to marshal resources that facilitate access to credit markets when they seek funds to support operations, maintenance, infrastructure financing, or service delivery to citizens
• Enabling shared project execution through arrangements with private and other public sector stakeholders, including the lending of equity to projects such as publicly owned land.

In principle, any of the sources of finance outlined above could be used for built environment-related purposes, and, again in principle, any could be linked to defined design quality expectations. Whichever means is selected, the analysis demonstrated the potential to use financial mechanisms alongside or as part of the urban design governance toolbox in such a way that the delivery of high quality is rewarded. However, because these approaches involve finance, either the giving or receiving of finance by the state or private actors and its investment in the public realm; typically, they are regulated and therefore lie within the formal side of the larger governance toolbox.

It follows that to ensure financial mechanisms are used to deliver high-quality design, they need to be used in conjunction with the tools of urban design governance. Arguably effective financial mechanisms for use in combination with design tools fit within the larger set of economic approaches included in the working classification of financial mechanisms already discussed. These encompass not only the way finance is raised, transferred, and applied, but also mechanisms that shape the economic equation that developers have to balance. This might include managing the regulatory process to streamline it and achieve faster permissions in exchange for better design or offering tangible incentives such as the use of zoning bonuses for developers that demonstrably invest in design quality. These latter mechanisms, up to now, have been little used in Europe.

Instead, formal financial mechanisms which lever design quality on the promise of i) finance, ii) land or iii) public investment have been favoured, although these are not without their challenges. Illustrating this with the examples already provided:

• City makers funds, such as Stadmakers Fonds, offer a formal financing mechanism with an explicit focus on place-based innovation for socially motivated developers and investors, but remain rare in Europe, tending to be associated with places that already have a tradition of social enterprises/development. Questions therefore remain about the replicability and viability of such initiatives in other contexts and at larger scales, although at a small scale they possess the potential for the effective use of direct financial incentives to deliver enhanced design outcomes.
• By transferring public land at a discount price, German Concept tendering provides an explicit financial incentive for private developers to deliver concepts with defined social attributes. This formal mechanism can be used to encourage good design through factoring design in as a quality factor to be considered when evaluating ‘concepts’, although it does not follow that this is always the case. Local priorities vary and design quality can be usurped by other factors.
• Experimental approaches like that adopted at Grenoble can encourage investment and act as a bridge to bottom-up initiatives in a context of limited public resources. For example, the total expenditure for an experimental intervention in the town of Vif was €280,000, whereas the typical cost for a permanent major transformation of
that area would be in the region of €2 million (Gabrieli 2020). The financial model of such initiatives often uses a virtuous combination of formal (budget for participatory initiatives) and informal (temporary bottom-up urban transformation) tools.

**Land value capture and PPPs have the greatest immediate potential to link finance with the delivery of superior design**

Two more widely utilized financial mechanisms were selected for in-depth analysis in the last Urban Maestro workshop. Respectively, from the raising finance and managing investment categories of the working classification, Land Value Capture (LVC) and Public Private Partnerships (PPPs) were chosen based on the potential revealed in the earlier workshops and accompanying case study analysis. LVC has the potential to capture private resources and direct them towards public urban improvements, while PPPs can coordinate public and private resources towards delivering a shared vision for urban quality.

Over the last decade, both mechanisms have been strongly supported by the United Nations, the World Bank, and by other agencies, as important answers to the typical funding gap for delivering urban infrastructure (United Nations 2017; UN-Habitat 2016b), although these mechanisms take on profoundly different characteristics in different territories. LVC and PPP do not ipso facto generate urban quality, but when properly designed and combined with (formal and informal) tools of urban design governance they can assist in achieving desirable outcomes by empowering stakeholders that are not motivated solely by the profit motive. Their use can also lead to the involvement of stakeholders motivated to produce better and more inclusive design outcomes, as was the case in the Copenhagen (By&Havn), Oslo Waterfront, and Hamburg (Hafencity) cases, as well as in widely cited European exemplar cities such as Freiburg (Falk 2020) (Figure 8).

In each of these cases, careful strategic planning and design and formal mechanisms of land assembly and associated LVC and a positive partnership between the state and private interests created the conditions for high-quality outcomes. These are born of what Falk (2011) has coined the ABC of Ambition (combining top-down and bottom-up aspirations); Brokerage and balance between competing interests; and Continuity over time. It also necessitated that public actors could be seen as trusted partners, requiring, in turn, financial competency stemming from the ability to be clear and realistic on feasible returns, avoiding disappointing private investors, and carefully choosing projects that are sustainable on all fronts including economically and in their urban design.

Convincing real estate partners to invest in (longer-term) public goods such as high-quality public space requires demonstrating the reality of its return on investment. While some intrinsically understand this, persuading others necessitates space for using the soft powers of discussion and negotiation. Alternatively, it requires bypassing traditional real estate markets altogether in favour of encouraging more socially motivated (local, small, individual) investors who are looking for projects with more moderate returns but good societal added value. The investments made by Stadmakers Fonds in Utrecht and elsewhere and the work of Miss Miyagi (a socially focussed design/development house based in Leuven) offer good examples, although whether such niche models can be generalized and developed at scale remains unknown (https://urbanmaestro.org/talk/places-that-makes-us-miss-miyagi-be/).
Design governance carries a cost which is typically (although not exclusively or always) borne by the public sector

Irrespective of their long-term benefits, all design governance tools carry a cost. Some tools, such as International Building Exhibitions, rely heavily on the existence of long-term state-led financial support, which may be difficult to mobilize in many contexts (https://urbanmaestro.org/example/international-building-exhibition-iba/). Other cases showed that meaningful results can be achieved with relatively inexpensive measures. These included the training programmes offered by Urban Design London, which average out at just £37 per training place (https://urbanmaestro.org/example/urban-design-london/).

Some worry that costs are not always shared. Professional associations, for example, have complained that design competitions needlessly exacerbate competition among design studios, leading to an excessive drainage of resources as design teams are not properly compensated. A consequence may be that with some forms of competition, only the best resourced and most established practices can participate (Carmona 2006). This may unintentionally undermine a fully inclusive process and a full diversity of ideas. To avoid this, some have called for stricter guidelines on the rules and conditions for architectural competitions, preferably at a pan-European level. The Architect’s Council of Europe (2016, 1), for example, argue that architectural competitions are ‘the perfect source for innovative, economic and sustainable solutions’ but advance a set of rules for conducting them to ensure that they remain fair, including sufficient prize money and remuneration. The potential for unintended consequences should always be born in mind in relation to any tool, although the use of informal tools may, to some extent, mitigate this through the ability to experiment, learn from and modify such tools with relatively little cost and effort.

Competitions (like other tools) also carry a significant cost for their promoters, in the Czech Republic, for example, calculated at 2–2.5% of development costs (Ministry of Regional Development 2021, 44–45). In Europe, competitions are typically financed by public funds and by the free or below market rates for entrants. In contrast to the
Australian practices previously referenced (Freestone, Davison, and Hu 2019), mechanisms to extract the costs of competitions from development value do not seem to exist. This may explain the divergence in the take up of such tools in different countries and why the Czech Republic felt it necessary to offer direct subsidies to smaller local government administrations to cover their costs. In Belgium (Wallonia), indirect subsidies have been offered through the provision of technical, legal, or administrative assistance for preparing and conducting competitions (https://urbanmaestro.org/example/bma/). In England, the direct payment by developers for design review provides a rare example of the beneficiary pays principle in operation for the delivery of urban design governance services in Europe (Carmona 2018).

Conclusion

Across Europe, governance, economic, development and political priorities and systems still vary markedly, and the high-level analysis and findings in this paper need to be understood in the context of all the local variations and nuances that implies, and which limited space has not enabled this paper to fully air. Within this caveat, a chicken and egg question arises. Does the availability of finance incentivize good design or does the promise of good design incentivize the finance?

In most of the cases examined, the two work together, with a key ambition to create better projects leading to a desire to develop approaches that will deliver on that ambition; approaches with clear finance and design components, albeit at a cost. Such processes, however, require a pre-existing ambition, and this is only likely to come if a culture of design quality is first nurtured. Equally, once established, the cases explored by Urban Maestro showed that the finance and design sides are mutually reinforcing, with design quality, once delivered, reinforcing the case for and delivery of more finance and more quality.

Of course, financial incentives will be only one of the many potential incentives created by urban design governance tools. A design competition, for example, may give a very small financial incentive but have a large reputational one with long-term economic benefits to those who take part and are successful. There are also indirect financial impacts from the use of urban design governance tools. For example, a tool that supports the delivery of good design through facilitating the provision of design expertise in a public authority or development partner is de facto a form of financial incentive, even if the money is not offered directly. This is because the assistance provided translates into lower costs and may (in time) deliver higher revenues from projects. Many of the quality delivery tools, particularly those associated with support and exploration, will have indirect economic consequences.

There are also many real estate actors (public and private) that are already motivated to produce high-quality development for combinations of economic, social, and environmental reasons. They may not need a financial incentive to do so, but engaging with the tools of urban design governance can potentially provide them with means to turn those aspirations into reality, and to inculcate other parties (perhaps public authorities) into that vision. This reflects the notion that much development occurs within a system of networked governance (Adams and Tiesdell 2013, 106) in which motivations are complex and intertwined and will not always be straightforward or stem from expected sources. With
relevance to such complex governance environments Land Value Capture and Public Private Partnerships seem to have particular potential when shaped via urban design governance tools.

What was apparent from examining the panorama of practices compiled by Urban Maestro was a strong pre-existing desire to ensure, either that specific developments would be of high quality or that future (yet undefined) developments would be. The various financial mechanisms were then used to ensure that ‘quality’ as an objective was written into the operating system that would subsequently deliver those projects. According to Urban Maestro workshop participants, this has several powerful effects:

- It ‘locks in’ quality, because in order to access the money and the development opportunity, a high-quality development becomes a pre-requisite
- It sets a high bar early in the development process, ensuring that the decision-making of all actors involved in particular developments factor-in quality ambitions from the start
- It expands the notion of value beyond a purely economic one to one encompassed in the concept of place value (Carmona 2019), namely that projects should maximize economic, social, environmental and health benefits to be considered successful and that the quality of place is fundamental to this
- It utilizes informal urban design governance tools as the means to establish the quality credentials of projects and ensure their subsequent delivery and combines this with formal (and sometimes) informal finance mechanisms.

In this way, the hypothesis that formal financial and informal urban design governance tools are potentially complimentary (as represented in Figure 4) was strongly supported by the empirical evidence gathered by Urban Maestro. There is no direct financial incentive, for example, in the production of a design guide, but the moment public funding is committed or permission to build development is made conditional on meeting its principles, the financial dimension becomes both apparent and powerful. Most of the formal financial tools have an explicit incentive function; in essence, they offer funds conditional on specific design attributes being delivered, where the definition of those design attributes is typically established in quality culture tools and further defined and applied care of quality delivery tools.

Coming explicitly to the question asked at the start of this paper concerning how financial mechanisms and urban design governance tools can work together to enhance urban quality, the analysis reveals that combining approaches is very effective at delivering high quality, sustainable outcomes. In other words, the availability of funding with design strings attached strongly boosts the chances of delivering successful design outcomes.

This does not mean, however, that such a linkage is always necessary nor necessary in perpetuity. Because informal tools create a culture within which design is prioritized, over time the need to incentivize design quality through other formal and financial means may fall away, leaving actors that are intrinsically motivated to deliver good design and who will continue to do so, given that the expectation is established. In such circumstances, urban design governance may revert to the use of informal tools in isolation to continue nudging all actors to do even better and to prevent any backsliding if other factors, notably the economic climate, changes.
Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Horizon 2020 Framework Programme [831704].

References


