Atti della XV Conferenza Nazionale SIU
Società Italiana degli Urbanisti
L'Urbanistica che cambia. Rischi e valori
Pescara, 10-11 maggio 2012
Planum. The Journal of Urbanism, n.25, vol.2/2012
www.planum.net | ISSN 1723-0993
Proceedings published in October 2012

A Comparative Analysis of Urban Containment Policies Regarding Their Impacts on Urban Housing Market

Ali Ustun
Politecnico di Milano
Dipartimento di Architettura e Pianificazione
Email: *ustun.ali@hotmail.com*
Tel. 329.462 0175

Abstract
The dispersion of urban settlements continue to force local & regional governments to take measures to tackle the dispersion usually taking place on the expense of agricultural land and natural resources. The complexity of containing the development is especially high as it's phenomena strongly associated to housing needs among many other, which makes urban containment subject to intense criticism due to creating higher residential demand on urban fringe resulting in uplifting effect on housing prices. Having acknowledged that lack of any attention to dynamics in development of containment policy might create such lateral effect undermining the overall efficiency of the policy, the paper compares two cases which are widely recognized as successful in their spatial outcomes and in their effect on the urban residential market. Outcomes signal a lack of consideration of complexity of housing as a commodity in most of the criticism directed to containment policies as the main reason of the rise in residential prices.

The expansion of the urban land contrary to the diminishing agricultural land has been a significant challenge in the contemporary urban development policy agenda since its earliest days when automobile-dependant sprawl in the United States threatened the sustainable growth and attracted urban planner's and policy-maker's attention. (Milward 2006; Hammer et. al 2004; Gennaio et al. 2009; Marjo et al, 2006) Since the late '80'ies which marked the starting point of this phenomena, the U.S. government has tried to tackle the problem both on the central-state level and on the local level with different legislative tools. (Carruthers 2002). Soon after the same questions emerged also in the largely urbanised nodes of Central Europe and the British Island. The focal point of the problem in the European context is the scarcity of the green land and the correlated resources. (Marjo et al, 2006). Furthermore, urban sprawl is held responsible for habitat endangerment (Price et al., 2006), social segregation (power, 2001), a significant rise in infrastructure maintenance cost (Burchell et al., 2002)
Today, the development of strategies to address the environmental problems posed by the urban sprawl is a significant challenge in the face of the growing criticism on urban sprawl. It's widely accepted that the transformation of the non-urban land into urban land calls for policy-intervention, yet the containment policies have also been subject to fierce opposition as they are claimed to impose side effects on the urban housing market as the introduced policies tend to tackle the growth problems by intervening solely on the land production which in turn creates several problems in ensuring he access to affordable housing and moreover it shall even jeopardize the efficiency of the containment itself as it create speculative consequences which forces the price upwards in the urban residential market, leading to a higher residential demand in periphery and suburban areas and therefore controversially forces sprawl.
This paper acknowledges that lack of economic concerns and of attention to property market dynamics in development of urban containment policies result in inefficiency. Therefore it aims to analyse various urban containment policies in different context on the basis of their effect on the urban growth and of the urban property market mainly in two contexts: Portland, USA and Netherland, both of which are highly recognized by the success in minimizing the urban growth. Analysis will give specific attention on followed policies, their effects on the urban growth and their effect on the housing market. The paper will proceed by the analysis of

both cases and then will conclude by critics and highlights regarding some short-comings of various attempts in analysing the economic effects of urban containment policies.

The Portland Case "a rigorous achievement in urban containment"

The urban containment history of the Portland city is marked in the 1979, when the Oregon region has mandated the creation of urban growth boundaries all over the state. Portland Metropolitan took an additional step and created the regional government "Metro" which became in charge of ensuring the urban containment and planning activity. The rigorous urban containment policy in the metropolitan area has also been consolidated with complying downtown revitalization projects which helped to increase the number of jobs created in the downtown area; vacant land in the urban area has been reutilized by new activities which helped significantly to slow down the transformation of the high quality farm land into urban land. Another point to note, the growth policy followed by Metro hasn't foreseen static borders between the urban areas and the rural ones yet boundary is intended to limit the development within the urban area. Metro is also in charge of defining the long - term planning goals such as population - density targets and promoting transportation systems encouraging the public transport. By law the Metro is held responsible to ensure the land availability within the growth boundaries (Philips & Goodstein, 2000).

Between the 1979 -1995, Portland has caused a sharp population growth as an expected effect of containment policies and downtown improvements. Despite, the total area of the boundary has expanded by only 5 square miles which can be viewed as a success when thought that Denver (having the more or less the same initial and final population in the same time period) has expanded by 180 square miles. (Philips & Goodstein, 2000). As also ascribed by Gibson & Abbott (2002), the strict policies have been quite successful in the conservation of the agricultural land on the Columbia River basin while enabling the Portland city to grow as a regional transport, finance and service centre, to which lately also added the substantial interest of electronics industry.

Further to strict spatial regulations to contain the development, the housing need of the Portland citizens has been soundly addressed since the establishment of Metro. It's worthwhile to mention that Portland already had an established agenda for affordable housing thanks shipyard industry which attracted low-income labour-force during the second world war. As stated by Gibson & Abbott, 2002, the public housing administration in Portland (Housing Authority of Portland) is considered as the one of the best public housing authorities in the States holding a reputation to innovate ways in financing the affordable housing via the redevelopment of existing buildings. The Bureau of Housing Community Development has been established to channelize the federal government fund into production and rehabilitation of housing as well as neighbourhood streets, parks and other infrastructure, and it proved to be effective in providing housing and shelter for the low-income groups as well as the socially disadvantaged. (Gibson & Abbott, 2002). This has contributed to revitalization of many inner city neighbourhoods suffering from poverty, bad environmental conditions.

Despite the community development efforts have made a great effort since the introduction of urban growth boundaries in the mid '90'ies the booming economy, prospering city centre with environmental enhancements together with the increasing population have propelled an important demand on the vacant land especially for the poorer areas. As a result, during the 90'ies the housing stock at Portland has experienced significant uplift. As Gibson & Abbott, (2002, 433) reports: "…From 1990 to 1999 the average home price in Portland region rose %97 from USD 96.000 to USD 188.600." Even though the income per capita has also shown a significant positive trend during the same period (Phillips & Goldstein, 2000). Consequently housing affordability has become a major problem in Portland region starting from the late '90'ies.

Since the late 90'ies the Portland region urban growth boundary has been stigmatized for the uplifting effects and held responsible for enlarging gap of the provision of affordable housing especially from the economist domain. However, as figured Phillips & Goodstein (2000), much of the criticism seems to be groundless as the price change of median house in Portland demonstrate a 69% increase from 1991 to 1996 (furthermore showing a reasonable consistence with the figures demonstrated by Gibson & Abbot for the period of 1990-1999), which shows a faster pace than national average. However, Phillips & Goodstein (2000) figures that the median residential prices in Portand followed a similar trend shown by other cities with similar size and population (more than 1 million inhabitants), such as Denver, Phoenix and Salt Lake City although these cities don't have any urban growth boundary. As the study by Phillips & Goodstein (2000) evidenced, using a regression analysis, a significant part of the price change in the Portland residential market stems from housing consumers' perception of the good economic conditions and growing income and decreasing unemployment rate and improvements in the environmental conditions in the city centre creating a demand-driven speculative effect on housing prices.

Today, housing affordability rests as major problem in Portland. Despite the per capita income in Portland is higher than the national level, the income level has raised just as half the rate of residential prices (Gibson & Abbott 2002). According to Metro, the long term unmet housing need is projected at 90.000 units in 2017 and the five-year production goals of Metro aim to recover only 10% of such gap, despite of the strict policies to

protect the existing low-income housing stock and encourage developer to provide low income housing in new developments. The housing prices doubled also in the most disadvantaged parts of the city, the community builders had to compete with private constructors in the process of redevelopment. In order to prevent transformation of low-income housing stock into luxurious housing, in 2000 the Portland passed a regional ordinance which required one- for - one replacement of low income housing units. By this strategy Portland minimized the risk of gentrification and redevelopment of ex industrial areas into luxurious housing areas. The developers have been encouraged to provide low income housing in high-end residential projects by density bonuses.

The "Dutch" Case

The policy attitude of the Dutch government has also been regarded as successful in the international realm. (Alterman, 1997) which managed to deal with the problem of the land-scarcity and today as figured by Kolpron et al. (2001), has left 86% of the land in the country as greenfield.
The crucial point in the open space protection in the Dutch case became the definition of the open spaces, within which, agricultural and natural landscape are placed. (Koomen et al, 2008). The main trend in the land transformation, as analysed by the Dutch policy maker, is the dimension of the natural land remains almost stable while that of the agricultural land diminishes favouring the increase of urban land. Therefore the policy priority is defined to protect the agricultural land. The Dutch planning perceives farmland as an asset to structure the urban land and defines two types of areas: buffer zones and green hearts. (Koomen et al 2008). While green hearts ensure a certain amount of open space for recreation, accessible by a short distances, buffer zones are subject to higher urbanization pressure. The main rationale of this approach was to avoid urban growth along the road lines, which create urban belts. Initially, green heart spatial policy has been very restrictive enabling virtually no development yet, in 1998 a limited development right for working and living has been granted yet, the buffer zones are subject to a national-level legislation with financial means, practically the vacant lots in the urban fringe is purchased by government in order to prevent further growth and provide recreational uses.
The urbanisation pressure is tried be relieved by complying zoning regulations. The policy foresees the incremented the urban density in certain zones and conserve the density in other ones. The infill development and brown field development are promoted by the development policy, however the urbanisation pressure to be created on the surrounding areas (where the development is addressed) is quite not well addressed by the policy. (as also pointed out by Koomen et al. 2008).
The effects of this rather "aggressive" open space preservation policies, confirm, achievement in containing the most of the development in urban centres. The Dutch landscape can easily be observed as a cluster of cities and open areas with a clear distinction in between. However, Koomen et al (2008) identifies four peculiarities, which contribute to the success of Dutch urban containment: first, the value of agricultural land in Netherlands is significantly high due to intensive agriculture and strong agricultural sector. Despite limited area of the available land, the Netherlands a major worldwide agricultural exporter. The value of agricultural land is higher (than urban land) in certain types of land; secondly, the higher investment cost of infrastructure provision for urban development due to the physical characteristics of the soil, which is "wetland" containing a large amount of water. The non-urban land is usually not readily suitable for the building requiring high costs for preparation. Land preparation costs can get even higher in certain regions when considered that the major part of the country lies below the sea level. This increases the infrastructure provision costs for the new development and principally for this reason the urban most of the developments in the Netherland are usually composed of large scale developments with high density in order to minimize the unit production cost of land treatment/preparation and infrastructure provision, which becomes the most suitable development form given market conditions and local governments take advantage of this situation by designing the planning procedures in order to ensure the provision of large areas servicing the new development; thirdly, the housing market has been dominated by largely dominated by subsidized housing until the 80'ies. Local government policies often well supported the supply side of housing market. The share of the socially rented housing in the total housing stock has risen from 12% to 44% from 1945 to 1990 (Korthals, 2009, 235); finally the efficiency of the planning system. Even the urban development process is highly regulated by strict policies and procedures the Dutch planning system has efficiently provided the fully – serviced urban land where and when needed (Faludi & Van der Valk, 1994). Even though it seems insignificant minimized time lagging in meeting the urban development demand has left no space for speculative forces.

Conclusions

The literature on the urban containment policies and the housing market consistently find that the urban containment policies contribute the upwards tendency in housing prices which is observed on two cases studies

examined. The main standing point of such trend is usually associated to the contradictory relation between the inelastic supply caused by urban containment policies and income elastic housing demand (Chessire & Sheppard, 2005). However, there are some theoretical and practical objections to the above-mentioned equation minimizing the price the problem into a demand – supply – income triangle. As Nelson and Dawkins (2002) points out, we mustn't forget the segmented character of the housing market. The usual problem in limiting the developable land availability, the policies usually make it less cost efficient for developers to use the land for affordable housing which will lead to over abundance of highly priced new housing in the urban fringe. As seen in the case of Portand, such problem is addressed as the planning, which introduces density premiums to developers who reserves a certain portion of the new development for affordable housing. (Although no exact quantitative data could be found). A second problem relates to the complex character of housing as a commodity. In my opinion, any housing policy cannot fail to acknowledge this factor and it's consequences on the housing demand. As proven by the Portland case, the rising income of the city residents has revived the demand for the high-end housing with improved social and environmental amenities and actually this have undeniably a major factor in the residential price in the long term. This is even further proven by Dawkins & Nelson (2002) on the theoretical basis as they essentially associate the outward shift in housing demand curve (as caused by urban containment policies) to the presence of additional public and social amenities usually at closer distances in the contained communities. At this point it remains highly questionable if the upper force on the housing demand is introduced by urban containment policy or improved quality in the urban environment. It's worthwhile to mention that even though Portland has been highly criticised of the price rise due the growth boundary and urban containment policies the price trend over the 1991-1996 followed the same trend as other American cities of similar size and population but without urban growth boundary (Phillips & Goodstein, 2000). Therefore it remains highly questionable whether such price change has been caused by the improved environmental conditions and public amenities at the inner city? or the improved transport? or by increasing jobs created in the inner city or to increasing population?

The Dutch case, evidences that highly aggressive containment policies for the urban and non-urban land are precisely-adapted to Dutch land market. The success of the policy also owes much to a very competitive agricultural land market with respect to urban land market and relatively higher investment costs of land preparation, which undeniably help to keep the fringe development "under control". Even under these circumstances of great facility to control the land development, the Dutch government however does strictly control the public provision urban and environmental amenities as well as the provision of the socially rented housing which is undeniable tool to regulate the urban housing market. However, even in the Duch-Case where a benevolent State with a financially strong public sector, (which achieved to increase relevantly the share of socially rented housing in the latest developments) the housing prices gradually continue to rise in relation to the income level and cost of construction. (Korthals, 2009; Koome et al. 2007)

To conclude, the paper revised two successful land containment cases with respect to the imposed policy style and their effects on the property market. First one highly stigmatized for it's unforeseeable effect on the residential prices and the second one as an "absolute" success case under favourable conditions. Yet it's not surprising to note that in both cases the residential prices are headed upwards which in direct relation to the rising income level. Therefore this study shows us an "isolated" correlation between the residential property market and urban containment policies is destined to be imprecise principally because the housing market is fairly elastic to the income changes. It' should be considered naturally true that urban containment policies create and upwards effect on the urban residential property market however the magnitude and sources of this effect cannot immediately be defined since the housing is a complex commodity, composed of a high number elements with different characteristics.

References

Books

Burchell R., Lowenstein G., Dolphin WR., Galley CC., Downs A., Seskin S., Gray Still K., Moore T. (2002). *The Costs of Sprawl*, National Academy Press, Washington.

Kolpron Consultants, Deloitte, N.E.I. (2001). *Taxing Land: Research Towards an Open Space Tax, A Development-Plan- Betterment Tax, A Steering Tax, A Financing Tax and A Yearly Tax on use of Space*, Rotterdam.

Articles

Millward H., (2006), "Urban containment strategies: A case-study appraisal of plans and policies in Japanese, British, and Canadian cities", in *Land Use Policy*, n. 23, pp. 473–485.

Hammer, R. B., Stewart, S, I., Winkler, R. L., Radeloff, V. C., Voss, R. P. (2004), "Characterizing Dynamic Spatial and Temporal Residential Density Patterns from 1940–1990 Across the North Central United States", in *Landscape Urban Plan*, n. 69, pp. 183–199.

Gennaio M. P., Hersperger A.M., Bugi M., (2009), "Containing Urban Sprawl—Evaluating Effectiveness of Urban Growth Boundaries Set by the Swiss Land Use Plan", in *Land Use Policy*, n. 26, pp.224–232.
Marjo K., José LB., Lavalle C., McCormick N., Demicheli L., Sagris V., Brezger A., (2006), "Are European cities becoming dispersed? A comparative analysis of 15 European urban areas", in *Landscape and Urban Planning*, n. 77, pp. 111–130.
Carruthers J. L., (2002), "The Impacts of State Growth Management Programmes: A Comparative Analysis', in *Urban Studies*, n. 11, vol. 39, pp. 1959–1982.
Bengston D. N., Fletcher J. O., Nelson, K. C. (2003), "Public Policies for Managing Urban Growth and Protecting Open Space: Policy Instruments and Lessons Learned in the United States", in *Landscape and Urban Planning*, n. 3, vol. 69, pp. 271–286.
Cheshire P., Sheppard S., (2005), "The Introduction of Price Signals Into Land Use Planning Decision-Making: a Proposal", in *Urban Studies*, no.4, vol. 42, pp. 647–663.
Phillips J., Goodstein E., (2000), "Growth Management and Housing Prices: The Case of Portland, OR", in *Contemporary Economic Policy*, no. 3, vol. 18, pp. 334–344.
Gibson K., Abott C., (2002), "City Profile, Portland Oregon", in *Cities*, no. 6, vol. 19, pp. 425–436.
Alterman R., (1997), "The Challenge of Farmland Preservation: Lessons From a Six-nation Comparison", in *Journal of the American Planning Association*, no. 2, 63, pp. 220–243.
Koomen E., Dekkers J., Van Dijk T., (2008), "Open-Space Preservation in the Netherlands: Planning, Practice and Prospects", in *Land Use Policy*, n. 25, pp. 361–377.
Korthals W. K., (2009), "Taxing Land for Urban Containment: Reflections on a Dutch Debate", in *Land Use Policy*, n. 26, pp. 233–241.
Smith J., & Adams, J (2002), "Planning Cities", in *Journal of Planning*, no. 2, vol.1, pp. 209-222.