

Urban Studies

<http://usj.sagepub.com>

Can Deprived Housing Areas Be Revitalised? Efforts against Segregation and Neighbourhood Decay in Denmark and Europe

Hans Skifter Andersen
Urban Stud 2002; 39; 767
DOI: 10.1080/00420980220119561

The online version of this article can be found at:
<http://usj.sagepub.com/cgi/content/abstract/39/4/767>

Published by:



<http://www.sagepublications.com>

On behalf of:

Urban Studies Journal Limited

Additional services and information for *Urban Studies* can be found at:

Email Alerts: <http://usj.sagepub.com/cgi/alerts>

Subscriptions: <http://usj.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.co.uk/journalsPermissions.nav>

Citations <http://usj.sagepub.com/cgi/content/refs/39/4/767>

Can Deprived Housing Areas Be Revitalised? Efforts against Segregation and Neighbourhood Decay in Denmark and Europe

Hans Skifter Andersen

[Paper first received, August 2000; in final form, July 2001]

Summary. Research literature on area-based initiatives in deprived urban areas in Europe shows that there is no general agreement on the purpose of such revitalisation programmes. Evaluations of the programmes come to very different conclusions on the effects of the efforts, but the majority are negative in the sense that they find that conditions have not improved in the supported areas. An important reason for this is our uncertain understanding of the nature of deprived areas. In Denmark, an extensive effort in 500 deprived social housing estates during 1995-98 had as one of its main purposes the combatting of processes leading to increased deprivation. These estates had increasingly lost competitiveness in the housing market, due to the perception that they had become 'excluded places'. The main instruments have been rent decreases, physical improvements and support for organisational and social changes. An extensive research evaluation of the programme has shown that this strategy has stopped the negative trends in the estates, but also that further and longer-term efforts will be needed to create new and positive development.

Introduction

Many European governments have initiated programmes with area-based initiatives to fight against problems in deprived urban areas. However, in the research literature there has been much disagreement on the effects of these programmes, with some researchers of the opinion that the purposes of such initiatives are questionable and the effects doubtful. One of the main reasons for this disagreement is that there have been different conceptions of the purposes of the programmes and of the urban problems they try to solve.

In this article, we shall briefly discuss

some of the literature on how to understand deprived urban neighbourhoods and review some of the conclusions from previous studies of area-based initiatives in western Europe. Danish urban policy and area-based initiatives in 500 social housing estates in the late 1990s will then be described and the effects of these efforts are analysed, based on a recent Danish research evaluation. Finally, the purpose and effects of area-based initiatives are discussed in the context of understanding deprived urban areas as excluded places.

Hans Skifter Andersen is in the Department of Housing and Urban Studies at the Danish Building and Urban Research Institute, Box 119, DK-2970 Horsholm, Denmark. Fax: + 45 4586 7535. E-mail: hsa@by-og-byg.dk.

How Can We Understand Deprived Urban Neighbourhoods: Pockets of Poverty or Excluded Places?

It is difficult in the literature in this field to find a clear and common understanding of the fundamental causes of why deprived urban areas appear and why area-based initiatives are necessary and useful. The mainstream European research on deprived urban areas seems to be dominated by the view that their existence is directly linked to and explained by general processes of segregation, social exclusion and impoverishment in cities. Deprived or depressed urban areas are mainly seen as 'pockets of poverty'—spatial concentrations of poor and excluded people (see Lee and Murie, 1999; Madanipour, 1998; Cars *et al.*, 1998; Social Exclusion Unit, 1998). In this view, problem areas are thought to be caused primarily by general processes that create inequality and poverty in the cities—namely, global and local economic restructuring processes and defective welfare policies (Musterd *et al.*, 1999; Parkinson, 1998). Deprived urban areas are understood as just another aspect of deprivation stemming from the general exclusion of people in globalised cities.

In this theoretical context, the crucial question is if the spatial concentration of poor people in itself results in an increase in the poverty and social exclusion of the residents—the so-called social neighbourhood effects. If these effects are substantial, there are good reasons for considering spatial pockets of poverty as a special problem that should be countered by public measures. If social neighbourhood effects are small, however, it is difficult to argue the case for special area-based initiatives. Instead, other and more general measures for the reduction of poverty and social exclusion should be used.

Some researchers in this field (Friedrichs, 1997; Musterd and Ostendorf, 1998) conclude that some neighbourhood effects can be found, but that they tend to be small in Europe compared with the US experience. Musterd *et al.* therefore conclude that

in an European context there are good reasons not to identify automatically social spatial inequality as such with 'problems' (Musterd *et al.*, 1999, p. 574).

Not surprisingly, these researchers are critical of the area-based approaches used in many countries to solve problems in deprived neighbourhoods. Van Kempen and Priemus for example conclude that

The battle against segregation and concentration is fought on the basis of ideas that are questionable in the Dutch situation, and probably in other European countries as well (van Kempen and Priemus, 1999, p. 655).

Research on deprived neighbourhoods has often concentrated on the general trends in western societies leading towards increased economic and social polarisation (see for example, Sassen, 1994; Hamnett, 1994; Jargowsky, 1997; Wacquant, 1997; and Allen, 1998). Much recent literature has discussed the spatial consequences of globalisation and changes in the labour market and has tried to connect this with deprived areas. It has, however, been difficult to identify a clear connection between these phenomena, and often the literature has been quite speculative.

There are indications that segregation in general and deprivation in specific places are not explained fully by globalisation and social exclusion, and that there is not a direct connection between the development of depressed neighbourhoods and general social and economic changes at the national or regional level. There is plenty of evidence that segregation and deprivation continue in situations where the national or local economy is booming and social inequality is decreasing.

In a national context, Denmark and Finland are examples of countries with increasing employment and decreasing social inequality while, at the same time, segregation is increasing and new problem estates are appearing (Skifter Andersen and á rø, 1997; Andersen, 1999; Hjarnø, 1996; Kortteinen and Vaatovaara, 1999).

With regard to the regional and local levels Mumford and Lupton conclude from their mapping of low demand for housing in problem estates in England that

There is no straightforward link between city and neighbourhood fortunes ... Leeds has one of the fastest growing economies in Britain, but its poorest wards have not stopped declining (Mumford and Lupton, 1999, p. 30).

Gibb *et al.* note that

explanations for low demand [in deprived neighbourhoods] do not all lie in issues of population loss, income and employment ... in regions with buoyant economies low demand will remain a problem of particular property types and particular neighbourhoods (Gibb *et al.*, 1999, p. 5).

Hall stresses that external factors cannot explain why particular estates are impacted upon more severely than others.

The emergence of urban decay and deprived neighbourhoods is connected with social segregation, which tends to concentrate the poor in the least attractive parts of a city. But it is not always obvious why some neighbourhoods have initiated a process of decline and others have not. There is a higher probability of deprivation and decay in neighbourhoods dominated by certain types of tenure and building type in poorer cities with economic decline. But some such areas have not declined, while some other types of neighbourhood have had problems.

These facts suggest that there is an incomplete understanding of why deprived urban areas appear and also of the purpose of area-based initiatives. In what follows, a new way of perceiving these areas will be presented. The text is a short summary of a forthcoming book on this subject (Skifter Andersen, 2001) which aims at contributing to a deeper understanding of why such neighbourhoods come into existence and what their impacts are on cities.

Urban decay is a result of the interaction between social, economic and physical changes in cities, but it can be argued that

deprived neighbourhoods also constitute a very important element of and contribution to this interaction. These areas are not just a simple result of social inequality and segregational forces, they are also by themselves creating new segregation and inequality. In these neighbourhoods, strong self-perpetuating processes have been started that by complicated mechanisms pull them into a downward spiral from which they seldom escape unaided. Thereby, forces have been created that also have an impact on the rest of the city. These areas can be seen as magnetic poles that attract poverty and social problems, and repel people and economic resources in ways that influence other parts of the urban space. They are the visible signs that cities are subject to special socio-spatial forces that create social and physical inequality, unstable conditions and sometimes destruction—most clearly observed in the slums of big US cities.

The jumping-off point for a different understanding of the causes of deprived urban areas is the concept of ‘vicious circles’, which are found in such areas. In Denmark, our understanding of deprived housing estates has been based for some time on a perception of these estates as neighbourhoods where negative self-perpetuating social, economic and physical processes have taken place (Kirkegård, 1985; Vestergård, 1998; Skifter Andersen, 1999a). Other researchers have written about ‘the cycle of labelling and exclusion’ (Taylor, 1998; Costa Pinho, 2000), ‘independent neighbourhood effects to do with cumulative decline’ (Gibb *et al.*, 1999), the ‘spiral of decline in which underlying problems ... are perpetuated and compounded over a period’ (Morrison, 1999), ‘downward spirals and dynamics’ (Lee and Murie, 1999), ‘mutually reinforcing social, building and organisational problems’ (Power and Tunstall, 1995) and ‘self and/or mutually reinforcing tendencies ... ‘vicious’ or ‘downward’ cycles’ (Hall, 1997).

All these statements refer to how different factors inside and outside the affected urban areas reinforce each other in a negative direction creating increased deprivation, stigmati-

sation and decay. Taylor is concerned with the connection between changes in the image of estates and changes in the composition of residents, where an increasingly bad reputation leads to middle-class people moving away and being replaced by poor and excluded families. Costa Pinho (2000) has studied the mechanisms leading to the creation of negative social identities and public image. Morrison (1999) focuses on problems of drugs, anti-social behaviour, violence, crime and prostitution creating a poor reputation in a neighbourhood. Gibb *et al.* (1999) find that one of the main reasons for abandonment and low demand for housing in these areas is that the decaying environment leads to a high turnover of residents and lack of interest among house-hunters. Mumford and Lupton (1999) focus on the fact that instability and a disorderly neighbourhood environment cause highly localised low demand. Power and Tunstall (1995) point to high turnover and vacancies resulting in damage to buildings, loss of social cohesion and a breakdown in controls, which generate serious management problems, poorer conditions, deteriorating services and eventual chaos. These studies of deprived neighbourhoods—and the experience of slums in the US (see Skifter Andersen, 1995)—suggest that a revised understanding of the nature of deprived urban neighbourhoods, as just pockets of poverty, is needed.

When visible signs of social and physical decay appear in neighbourhoods, and especially if they get a bad press, a rapid change will occur in how these places are perceived by outsiders. These neighbourhoods get *excluded* from the mental maps of possible living environments held by the majority of the urban population.

Thus, an alternative understanding is to perceive deprived urban neighbourhoods as 'excluded places'. This exclusion is caused by self-perpetuating social, cultural, financial and physical changes which increasingly make these areas diverge from the rest of the city. These trends tend to make 'ordinary' people flee to other parts of the city making room for an increasing concentration of low-

income and socially excluded groups and thus increasing social spatial division. This effect is even more serious when we consider the segregation of ethnic minorities, where the forces at work are much stronger.

Policies for Tackling Deprived Housing Estates in Europe

The Character of Initiatives and Strategies Used

It is difficult to get an overview of policies in different countries because much of the literature in this field is not written in English. The description in this section is therefore mostly based on experiences from countries like Great Britain, Sweden, Denmark and the Netherlands, and may be incomplete.

A review of some of the available recent literature in the field has been conducted, based mainly on British experiences (see Taylor, 1998; Morrison, 1999; Mumford and Lupton, 1999; Parkinson, 1998; Power, 1997; Kürpick and Weck, 1998; Cameroun, 1998; Evans, 1998; Hall, 1997; and Vestergaard, 1999) This shows that the following kinds of effort have been made:

- physical renovation and embellishment;
- improving management and housing service for residents;
- active marketing and attempts to counteract bad press and bad reputation;
- change of tenure or extended disposal of dwellings;
- support for private service facilities;
- special efforts against crime—cooperation with police and other local institutions;
- mobilisation and empowerment of residents and communities;
- direct social support for socially weak groups—integration measures for immigrants;
- attempts to attract new private firms and workplaces to the neighbourhood; and
- education, job training and other attempts to get employment to residents.

These area-based initiatives seldom seem to have been chosen in connection with a clear strategy. Also attempts to classify these efforts and their purposes are seldom found in the literature. Hall (1997) distinguishes between 'inward-looking' and 'outward-looking' approaches. This division is based on an understanding of the problems of the estates as either 'internal' or 'external'. Internal problems are seen as related to the nature of the estate, while external problems are related to 'structural factors' and to the relationship between the estate and the city. Hall argues that regeneration policies have tended to focus on solving internal problems and therefore have been inward-looking. He calls for outward-looking approaches, which seek to overcome physical and social isolation directly, to improve access to employment and to place more emphasis on strategic, city-wide or linked partnerships.

Cameron and Davoudi (1998) also argue for a division of initiatives into 'looking-in' (community development and empowerment) and 'looking-out' approaches (jobs and training, etc.) and find that the policies of the 1990s—as distinct from those of the 1980s—contain both approaches.

Parkinson (1998), who has looked at programmes in five countries, concludes that all countries increasingly use area-based approaches. He describes the general development in the initiatives as shifts from physical approaches in the 1980s to what he calls 'welfare approaches'—in recent years, with more emphasis on economic dimensions and employment. He also stresses the great differences between countries.

Starting from the above discussion on how to understand deprived urban areas, we will argue that the division of initiatives into inward- and outward-looking approaches is not adequate. This concept reflects a static view of the estates, where the dynamics of segregation and population changes are not taken into consideration.

Instead, three other types of strategy will be proposed:

(1) *Efforts to combat the exclusion of neigh-*

bourhoods: initiatives that focus on how to stop and reverse the self-perpetuating processes that make some areas increasingly stigmatised and unattractive compared with the rest of the city.

(2) *Area-based efforts to combat social exclusion:* as a supplement to general welfare policies, it can sometimes be relevant to have efforts concentrated in deprived urban areas for two reasons: to combat the special effects produced by area deprivation that tend to increase social exclusion; and, because local private resources perhaps could be mobilised to support public efforts.

(3) *General efforts to combat segregation:* initiatives that attack conditions which tend to increase segregation—for example, differences between tenures or rules for the allocation of dwellings in social housing.

This classification cuts across the division into inward- and outward-looking initiatives. Some of the outward-looking initiatives, like job training, belong to the second type of strategy, while others—for example, changing the physical relationship between the estate and the city—could be a part of the first. Some initiatives could be parts of both types of strategy. For instance, community development and empowerment could have the joint aims of supporting residents individually and the neighbourhood in general. At the same time, the strategies support each other. Improvement of neighbourhoods also benefits the people living there and thus can reduce social exclusion. Efforts against social exclusion can lead to an improvement in the image of a neighbourhood.

Experiences with Area-based Efforts

The programmes and efforts applied have been very diverse, and so too have been the experiences with and the evaluations of the various initiatives. In Parkinson's (1998) study of experiences from five European countries, it is said that there are "considerable disagreement about the merits of

area-based approaches". In his opinion, one of the causes is faulty knowledge of the effects of area-based initiatives.

Parkinson has a positive evaluation of some of the English initiatives—especially the City Challenge Programme—and finds that the UK has had more success with its initiatives than any other country. However, he also states that it has been

difficult to find conclusive evidence yet in any country of identifiable improvements in the economic and social circumstances of these areas (Parkinson, 1998, p. 3).

Some other judgements have also been quite negative. The English government's Social Exclusion Unit (1998), for example, has concluded that none of the English initiatives has "really succeeded in setting in motion a virtuous circle of regeneration (summary, p. 2) and "only for a few areas improvements have lasted. Most areas have either not improved or worsened" (ch. 2, p. 1). Taylor is also quite negative in her appraisal of initiatives in difficult-to-let estates. She states that "successive regeneration initiatives appear to have made little impact on the most difficult to let estates" (Taylor, 1998, p. 819).

Power (1997) has been more positive in her evaluation of the initiatives on 20 estates in 5 countries. One of the reasons could be that she had other objectives and expectations concerning the effects. The estates studied had very serious problems. They underwent a rapid decline and several of them were to some extent given up by the local authorities. The positive conclusion from Power was that

the 'patchwork approach' that addresses physical, organisational, financial and social problems together has prevented ... precarious communities from continuing on their downward trajectory, arresting decay and re-stabilising conditions (Power, 1997, p. 5).

However, she found that there are still unsolved problems on the estates and it is questionable whether the achieved stability will last. Evans (1998) in his evaluation of the

English 'Housing Plus' programme, which combines physical, financial and social measures, finds that the combined effect of the HP initiatives was "impressive". There was "a dramatic turnaround" in the residents' confidence in the estates and a sharp decrease in the proportion of residents who wanted to move. There was also a good connection between the extent of the efforts and the growth in community confidence. His critique of the programme was, however, that the scale of initiatives had been quite modest in relation to the severity of problems, which made "the overall response quite patchy".

Some of the more negative evaluations have concerned initiatives that have been too narrow in their scope. It is a general conclusion (Social Exclusion Unit, 1998; Hall, 1997; Musterd *et al.*, 1999; Parkinson, 1998; Christiansen *et al.*, 1993) that physical improvements alone are unsustainable.

There is also evidence that isolated efforts to combat social exclusion by trying to get residents back in employment only have a limited effect on the general problems of an area. Special initiatives to create jobs for people living in deprived estates are costly and difficult to operate. If they are carried through without other measures to improve the quality of the estates, people just move away if they get jobs (Taylor, 1998; Hall, 1998) and the estate is left with empty apartments or new households without employment will move in. Isolated efforts to create employment in the neighbourhood in construction work or by getting new firms to locate there have thus proved to have had little effect on the estates as a whole (Cameron and Davoudi, 1998; Hall, 1998).

Another general conclusion is that the effects of initiatives are time-dependent. It takes a long time to create the partnerships and community involvement that are essential to success (Taylor, 1998). Residents need time and are often brought into the process far too late. Short-term initiatives are therefore doomed to failure. There is a danger that these kinds of initiative will just lead to a public focus on the failures of the estates that will increase their stigmatisation and bad

reputation (Marsh and Mullins, 1998; Taylor, 1998) without having noticeable positive effects.

Policies to Combat Deprived Housing Estates in Denmark

Conditions in Danish Social Housing

Like other European countries, from the beginning of the 1980s Denmark has experienced increasing problems in a number of large social housing estates built after the war. For different reasons, the problems have, however, not been so massive as in countries like the UK and France. Denmark is a country with relatively little economic inequality and welfare payments have been extensive. There was a growth in social exclusion in the 1980s, but falling unemployment rates in the 1990s have to some extent rectified this.

Social housing constitutes about 19 per cent of the housing stock. Owner-occupied housing and co-operatives are 57 per cent of the stock. In Denmark, an important factor is the organisation of the social housing sector, where an extensive decentralisation of power to tenants and housing estates in many ways has made the troubled areas better suited to manage their emerging problems.

Area-based Initiatives

As in many other countries, public initiatives in deprived areas in Denmark in the 1980s concentrated on physical improvements. An evaluation of these efforts has shown that they had a positive effect, but that increasing social problems made them insufficient to make permanent changes in the situation of the estates (Vestergaard, 1998).

A new generation of policies began in 1993 following a change in government and when the emergence of problems with immigrants in certain neighbourhoods came on the public agenda. The new government set up a so-called Urban Committee consisting of ministers from five different ministries. The committee quickly drew up an action plan

consisting of 30 proposals for initiatives. These initiatives can be grouped into the following categories:

- physical renovation;
- rent decreases and economic rehabilitation;
- social empowerment: employment of special social workers and support for social activities, especially among immigrants and socially excluded residents;
- special education initiatives for immigrants and refugees, including efforts to solve problems following a concentration of foreign-speaking children in certain schools;
- measures against crime;
- new rules and institutional framework regulating immigration and housing for immigrants;
- new rules regulating the assignment of dwellings; and
- increased state funds for local authorities with problem estates.

The initiatives were planned to take place from 1994 to 1998. Funding for the initiatives was provided from different sources. The main contributions were to come from the Ministry of Social Affairs (DKK175 million), the Ministry of Housing and Urban affairs (DKK20 million), the Ministry of Education (DKK100 million), local governments (DKK305 million) and the National Building Fund (DKK205 million), which is a fund financed by contributions from all social housing in Denmark. Moreover, remortgaging a number of loans on the estates provided DKK6.3 billion for investments in renovation and rent decreases.

The main initiatives were investments in physical upgrading (DKK6billion), rent decreases, etc. (DKK441 million), social workers and activities (DKK420 million) and education initiatives (DKK100 million). It is, however, doubtful whether local authorities in reality have provided DKK305 million for social initiatives as anticipated. It has not been possible to control their real contribution, but the evaluation suggests that it has been quite a lot lower than planned. The real

resources used for the social initiatives could therefore be much lower.

The Estates Chosen and Their Problems

In total, about 500 housing estates (administrative sections) with 115 000 dwellings were identified for support. Some of these estates were located in the same urban area.

The problems in these areas were very different in character and size and some of them would probably, in a broader European context, be seen as quite well-functioning neighbourhoods. For political reasons, some of the money was spread to local authorities and estates where problems were limited. Some of them, however, had severe problems and a very one-sided residential composition

It can be seen from Table 1 that the share of residents on early retirement or welfare payments in the selected deprived housing areas was much higher than the national average but, compared with other deprived areas in Europe, the figures are relatively low. However, there were big differences between the estates and the figures were

much higher in some, as can also be seen from the table (the maximum shares).

The average share of immigrants coming from eastern Europe or from Third World countries was also relatively low compared with many other problem estates in Europe, but it is high compared with the Danish average. However, some of the estates have many immigrants.

Two surveys were conducted among the housing associations and among the elected boards of tenants in each estate about the problems in the estates before the efforts started (Table 2). Many of the estates were run down and at the same time had very high rents compared with other housing in the local area. The most common social problems were vandalism and crime, but some estates also had serious problems with alcoholics and drug-users. As a result, more than half of the estates thought that they had a bad reputation. Only in one-third of the estates was it felt that a concentration of foreign ethnic groups was a special problem, but in many estates the opinion was that it was difficult to integrate them into the life of the estate.

Table 1. Social composition of residents in supported housing areas compared with all housing in Denmark, 1996

Groups of residents	Percentage share of residents			Over presentation in deprived areas percentage
	Deprived areas		All housing	
	Average	Maximum		
Early retirement	11	50	5	117
Welfare benefits	12	62	3	315
Old-age pension	22	82	22	1
Fully unemployed	3	12	2	79
Students	5	31	4	26
Partly employed	12		10	22
Fully employed, low-income	7		11	- 37
Fully employed, higher-income	22		38	- 44
Immigrants from poor countries	17	71	3	394

Note: Overrepresentation is the percentage by which the share of the group in deprived areas exceeds the share of the group in all housing. The partly employed have been both in and out of employment during 1996.

Source: Skifter Andersen (1999b).

Table 2. Share of supported estates with different kinds of serious problems before the efforts started

	Share of estates with serious problems (percentage)
<i>Physical conditions</i>	
Bad location	10
Run-down buildings	58
Lacking common facilities	28
Run-down outdoor spaces	17
<i>Financial problems</i>	
Rents too high	54
<i>Social problems</i>	
General social problems	39
Alcoholics	35
Drug addicts	30
Vandalism	53
Crime	45
Problems with young people	31
<i>Foreign ethnic groups</i>	
Problems with integration	67
'Concentration too high'	36
<i>Image</i>	
Bad reputation	56

Source: Skifter Andersen (1999b).

The Strategies of the Urban Committee

Like many other political initiatives, the Urban Committee reacted to current problems brought to the light by the press, local authorities and housing associations. There was no formulated coherent strategy and understanding of the problems behind the initiatives.

When looking at the proposed initiatives and the expressed grounds for them, however, it can be argued that there were at least four different strategies embedded in the initiatives. These strategies were later called:

- (1) *local network strategy*: Strengthening local networks to combat social exclusion.
- (2) *Improved competition strategy*: Improving competitiveness for the estates on the housing market.
- (3) *Reduce segregation strategy*: Changing the assignment of dwellings to combat segregation
- (4) *Reduce consequences strategy*: Reducing

undesirable consequences for the municipalities.

The local network strategy had the aim of establishing permanent co-operation between the housing estates, local authorities and other local actors for solving the problems of the estates. It was intended to strengthen the activity of and social relations between residents in the areas in order to improve living conditions for deprived tenants and immigrants living on the estates. Moreover, it was hoped that social problems would be reduced by means of locally based efforts and by mobilising local resources. The main efforts in this strategy were the support for social workers and for social activities on the estates, and also the demands of local co-operation between local authorities, housing associations, tenants' local organisations (estate boards, etc.) and other local parties.

The improved competition strategy had the aim of improving the ability of the estates to

compete in the housing market and to attract groups other than the poor and jobless and also to reduce the high frequency of moves on the estates. The most important initiatives were physical renovation and rent decreases. However, the support for social activities was also seen as an instrument to enable an increase in the quality of life on the estates and to improve their reputation.

The reduce segregation strategy primarily consisted of changes in rules and administrative practices to limit the concentration of marginalised people and immigrants on these estates. It will later emerge that these initiatives were difficult to implement because they could be seen as discrimination against the groups that one wanted to keep away from the estates.

Finally, the efforts to reduce the consequences were concentrated on support for schools with many foreign-speaking pupils, on education and training of immigrants and on increased funds for municipalities with problems.

These strategies fit well into the theoretical framework outlined in the section above. The 'local network strategy' matches to what we have called area-based efforts against social exclusion. The 'improved competition strategy' fits into efforts against exclusion of places. And the 'reduce segregation strategy' is similar to the efforts against segregation. The Danish efforts on deprived housing estates can therefore be properly understood within the outlined theoretical framework.

The Research Evaluation of the Efforts Made by the Urban Committee

An extensive research evaluation of most of the initiatives taken by the Urban Committee (UC) was conducted between 1997 and 1999. Several research institutes and private consultants were involved, but the Danish Building and Urban Research Institute has, in co-operation with the Danish Institute of Social Research, been responsible for the main effort and the principal evaluation.¹

Parkinson (1998) has pointed to three reasons why knowledge on urban regeneration

projects is insufficient. They are: faulty evaluation projects; the effects are entangled and difficult to unravel; and, evaluations have often been conducted too early to see any effects. The Danish evaluation suffers to some extent from the last problem—partly because the ministries wanted an early evaluation and partly because the initiatives were delayed. The two first problems are, however, limited by the extent of data and the methodology used. The amount of data collected has been extensive and by using advanced statistical methods the effects of different kinds of effort have been isolated. Moreover, the development of the estates has been compared with the development of the local housing market and especially with other social housing estates.

The main sources of the evaluation were

- the applications for support and the action plans;
- case studies in 20 estates and municipalities;
- interviews with 2000 residents in 40 estates;
- surveys among housing associations, estate boards, social workers and local authorities in all estates (about 500);
- data from central registers on residents in the estate before and after the efforts, and also on movements in and out of the estates; and
- data from central registers on the development of the housing market in the municipalities and at the national level.

As a part of the evaluation, an analysis was made of the problems encountered on the supported estates before the initiatives were started up, and how they interacted. A model was constructed about the relationships between these factors and tested by statistical analyses (see Skifter Andersen, 1999b). The analyses very clearly showed that negative developments of these factors have mutually reinforced each other.

On the basis of this model of spirals of deprivation, a new model was constructed of how we expected that the different UC efforts should influence, both directly and

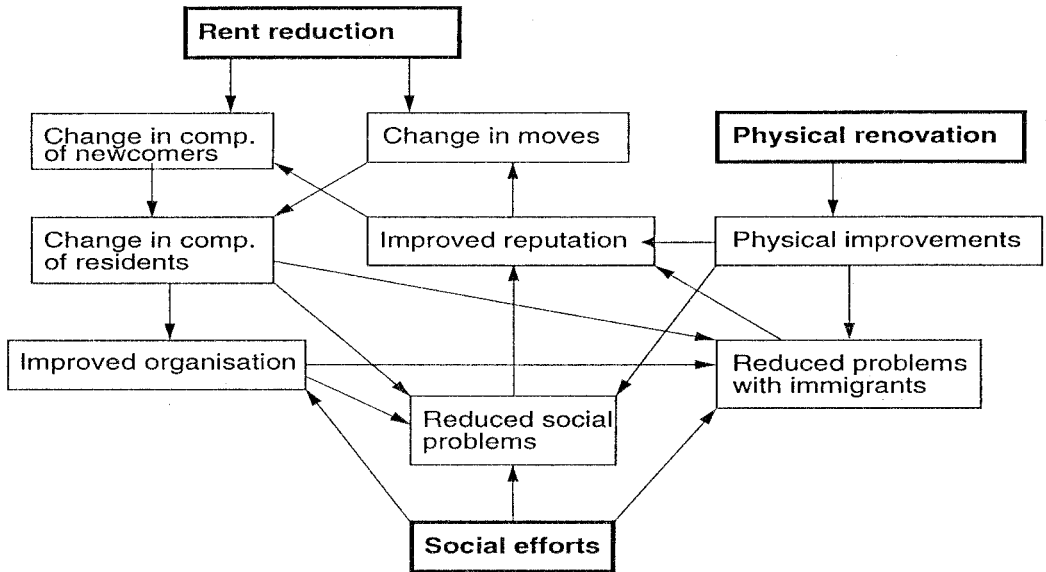


Figure 1. Model of the expected relations between UC efforts and changes in the conditions of the estates.

indirectly, conditions on the estates (see Figure 1). The model assumes that the reductions in rents should reduce moving frequencies and the number of empty flats, and should also influence the composition of both new tenants and leavers, leading to a change in the composition of residents towards more people in work and fewer immigrants and socially excluded. This change in residents should result directly in fewer social problems and fewer special problems in connection with ethnic groups, and also indirectly through an increase in tenants' activity and improved organisation because of increased social resources among tenants.

The physical efforts consisted of repair of building damage, refurbishment of buildings and improvements to open spaces and common facilities. It was expected that these improvements should improve the appearance and reputation of the estates, which again should influence the moves in and out of the estates. Improvement in common facilities and open spaces were also expected to contribute to better tenant organisation and fewer social problems.

The social efforts were expected to increase social activity, make more residents active and improve the tenants' organisation.

Thereby, the reputation of the estate should be improved. Moreover, parts of the social initiatives should be directed directly against socially excluded residents and immigrants, thus achieving a reduction in social problems.

How Successful Were the Efforts?

The Overall Changes in the Supported Estates

The collection of data for the evaluation took place in 1996–97 at a point in time when the efforts had only been in place for a short time. This was partly due to the fact that it took a much longer time than expected to implement the initiatives.

The main conclusion of the evaluation is that negative social, physical and economic development on the estates has been stopped, and that the efforts of the Urban Committee have prevented problems from escalating. But the problems have not yet been solved. Figure 2 illustrates how housing associations and section boards have judged the extent of different problems on the estates, and the changes after the efforts have been started. It may be expected that the positive effects

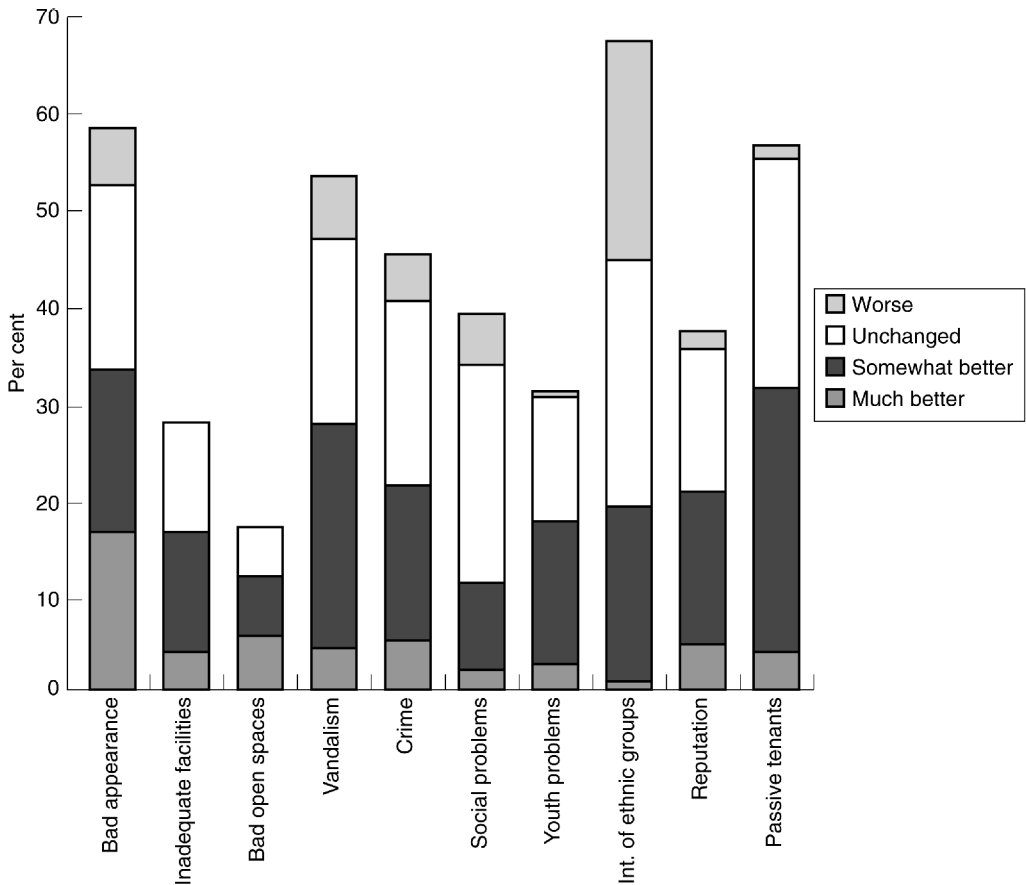


Figure 2. The percentage of estates (dwellings) that had serious problems in 1994 (before the initiatives started) and the percentages of these which had changed for the better or worse, 1995–97.

have been overestimated by the housing associations because they are to some extent responsible for the work involved.

It can be seen from Figure 2 that the direct effects of the physical efforts have been improved visual appearance and better facilities and open spaces in a number of estates. Nearly 60 per cent of estates having serious problems with poor appearance, corresponding to one-third of all estates, have been somewhat or greatly improved. There has been a marked increase in the activity level of tenants, reducing previous problems caused by passivity.

In about one-quarter of the estates, serious problems with crime and vandalism have been reduced. In a similar number, serious problems are unchanged or worsened. The

improvements probably have a connection with special efforts targeted at young people. In more than 50 per cent of the estates with serious problems with young people these problems have been reduced. Social problems in general have been reduced in only 30 per cent of the estates with serious problems, while in 10 per cent they have increased.

Integration of immigrants is the only case where there have been more estates experiencing increasing problems than estates with a decrease in problems. This is linked to the increasing number of immigrants from Third World countries on the estates.

A major indicator of the degree of 'exclusion' is the reputation of the estates. It can be argued, that there are at least three different kinds of reputation: reputation

among residents; reputation among outsiders; and, the reputation that residents believe is found among outsiders (Rijpers and Smeets, 1998). I have argued elsewhere (Skifter Andersen, 1999c) that reputation as evaluated in this study must resemble the third type. Figure 2 shows that nearly 40 per cent of the estates felt that a bad reputation was a serious problem before improvement efforts started and that 55 per cent of these—i.e. 20 per cent of all estates—felt that this problem was reduced. Only a few estates have worsened.

Vacant dwellings were only a serious problem in very few of the estates, which suggests that the problems in the Danish estates are more limited than, for example, in England, where vacant dwellings and 'low demand' are a big problem (Mumford and Lupton, 1999; Morrison, 1999; Gibb *et al.*, 1999). Moreover, the number of vacant dwellings was further reduced once the Urban Committee began its work and the waiting-lists for the estates have grown longer. This development can only partly be ascribed

to the initiatives, as there has been a similar trend in the social housing sector as a whole.

High mobility among tenants and changes in the composition of residents towards more excluded and marginalised people were common in many of the estates before the initiatives of the Urban Committee began. We collected data on this at the beginning of 1998, the social initiatives having been started two years earlier and the rent reductions on average just over a year earlier. The physical improvements had on average been finished for eight months and many were still unfinished.

In spite of this short time-frame it has been possible to identify positive changes on the estates as can be seen from Figure 3. Moving frequencies have been reduced by 6 per cent (relatively) and the reduction has been greatest among employed residents. This can be compared with no change in mobility nationally and also in other, newer, social housing estates. In fact, the mobility rate is now lower on average in the supported estates than in other newer social housing estates.

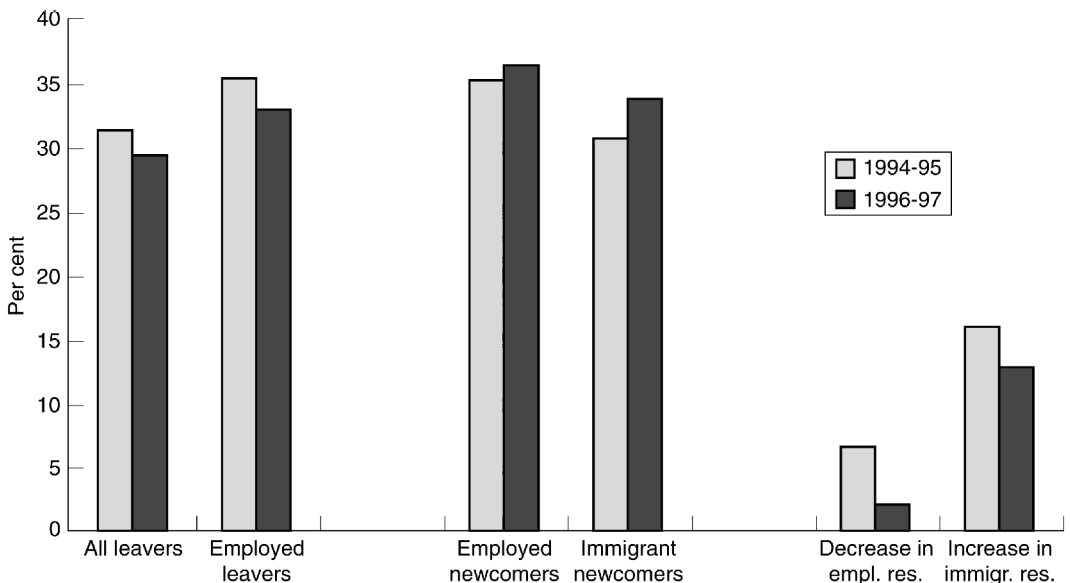


Figure 3. Moving frequency for all residents and for employed residents, 1994–95 and 1996–97; share of newcomers that were employed or immigrants; the relative decrease in the share of residents that were employed; and, the increase in the share that were immigrants in the two periods. *Note:* The changes shown are due only to population changes as they have been adjusted for employment changes among sitting residents.

The composition of newcomers has changed towards more employed persons. This is remarkable, as the inertia is strong in the system that distributes dwellings to house-hunters. Newcomers are mainly chosen from waiting-lists where people for most of these estates have been registered for several years.

The effect of these changes in movements into and out of the estates has been a pronounced reduction in the earlier sharp decrease in the share of employed people (and increase in the share of excluded). It is expected that the composition of residents will soon become stabilised and perhaps there will be a positive change in the share of employed. The figures shown are averages for a large number of estates where some have had small and limited efforts and others have had large and many-sided projects. A more detailed study of the data has shown that the greatest changes have been among the estates which earlier had the most negative trends in mobility and residential changes. This is perhaps unsurprising since these estates have received the most help.

On the other hand, there has been an increasing share of immigrants among newcomers. This is the main reason why housing associations feel that problems with integration have increased. An explanation is that the share of immigrants among house-hunters in general has increased even more, particularly in other social housing estates. Moreover, the rate of increase in the share of immigrants among residents has been reduced a little—as can be seen from the right-hand section of Figure 3.

The Effects of Different Kinds of Strategies and Initiatives

The local network strategy. A condition for support from the Urban Committee was that applications were made by social housing associations and local governments working in co-operation. Applications were required to contain a thorough description of the situation in the estate and a detailed action plan, which both parties stood behind. Another

demand was that in each case a steering committee should be established with members from both the housing estates and the local authorities.

One of the important results of the local network strategy is that, in many municipalities, a permanent co-operation has been established between local authorities and the tenants' elected boards of the estates, where other local actors are also often involved. In some municipalities, the programme has also succeeded in changing local authority strategies, with social work being more orientated towards neighbourhood-based efforts. In many other municipalities, however, there has not been much change in the strategy of local authorities and co-operation with the estates has been weak.

Later on, it emerged that the application requirements had both positive and negative consequences (Skifter Andersen, 1999a). The positive effects were that co-operation was established between the parties and also in many cases functioned in practice. The negative consequences were that the action plans were of limited use and produced conflicts later on with the tenants, because they were made in a hurry and the tenants themselves had seldom been involved. In many estates, the action plans were either completely changed or abandoned when tenants and their local organisations came into play.

On some of the estates, the efforts made have succeeded in involving and directly benefiting vulnerable and deprived tenants. However, many of the social activities were directed towards all tenants and these general activities have seldom involved the weak groups or the immigrants; only activities aimed specifically at these groups have been to their direct benefit. Some of the most successful activities were directed at young people and have reduced problems with crime and vandalism.

In the statistical tests of the effects of the local network strategy, three criteria have been used: changes in the activity level of tenants; changes in the extent of social problems; and, changes in problems with the integration of ethnic groups.

The statistical analysis shows that expenses used for social activities or social workers—as might be expected—have a significant effect on the activity levels of tenants (see the Appendix, Table A1). The extent of social activities has been increased and the tenants have become more active as a result of the efforts. There is also a statistically significant connection between the social efforts made and a decrease in social problems (Appendix, Table A2) and also in problems with the integration of immigrants (Appendix, Table A3). It is especially on estates with big problems before the initiatives started that there have been improvements. Thus, the conclusion here is that, even if many of the social activities have not been directed at the most needy groups, they have nevertheless contributed to solving social problems and to the integration of immigrants.

Similarly, the physical efforts made in improvements to common facilities and open spaces have also had a significant, positive, social effect (see Appendix, Tables A1–A3). This suggests that area-based physical schemes do have an effect on social exclusion, to the extent that they encourage social life in the area.

The strategy of improved competitiveness.

The criteria used to test the effects of the strategy have been: improved reputation; reduced mobility rates; an increasing share of employed people among newcomers; and, an increasing share of employed among residents. In this section, the evaluated effects are described of the rent decreases, the renovation work and the social projects. We are looking at both the direct effects and the indirect effects, in agreement with Figure 1.

A direct sign that rent reductions have had an effect on mobility rates is that the number of persons moving fell by 13 per cent on average on the estates where rents were reduced, while it was unchanged in estates without rent decreases. The statistical analysis, the results of which are found in Table A5 in the Appendix (a logistic regression model of factors explaining when residents

moved away or stayed), shows that rent decreases have had a very significant effect on mobility on the estates. It also shows that the effect depends on how early they were made. Another statistical analysis—not shown—has, moreover, shown that the rent decreases have had an especially strong effect on the mobility of residents in employment.

In general, few of the estates had problems with low demand and empty dwellings. The analysis of the effects of rent decreases on the demand for dwellings on the estates was therefore concentrated on the extent to which the estates attracted more people in employment. As can be seen from Table A6 in the Appendix, the amount of rent decrease had a very significant effect on whether newcomers were in employment or not. The analysis showed, however, that the effects of the rent decrease were very dependent on two other variables: the price level of owner-occupied housing on the local market; and, the share of immigrants among residents in the estate (interaction in regression). This indicated that rent reductions only affected the composition of newcomers in the larger urban areas, where real estate prices are relatively high and owner-occupied housing is more expensive. In the smaller towns, where social housing has difficulties in competing with cheap owner-occupied housing, rent reduction did not affect the composition of newcomers. Moreover, the effects were small or absent in estates with a high share of immigrants. In these estates, it seems that economic incentives alone cannot improve their poor competitiveness, which has been mainly a result of their social and cultural image.

It has not been possible to construct a statistical test of the effects of rent reductions on the changes in the composition of the residents. However, it is obvious that, when there are positive effects on both the lower mobility rates of employed residents and on the share of the employed among newcomers, there will also be an effect on the share of employed among all residents. A simple cross-tabulation (Table 3) shows that, on the estates with reduced rents, there have been much greater differences in the popu-

Table 3. Percentage changes in estates with and without rent reductions in the number of residents in employment, immigrants and those marginalised from the labour market

	Employed	Immigrants	Marginalised ^a
<i>Estates without rent reductions</i>			
Relative change 1994–95	– 3.4	13.0	8.2
Relative change 1996–97	– 2.6	19.0	5.7
Difference	0.8	6.0	– 2.4
<i>Estates with rent reductions</i>			
Relative change 1994–95	– 10.2	13.2	15.6
Relative change 1996–97	– 2.3	11.5	3.9
Difference	7.9	– 1.7	– 11.7

^aResidents over 17 years that are full-time unemployed or have their main income from early pension or welfare benefits.

lation changes before and after the rent reduction than in estates with no rent reduction.

Before the reductions (in 1994–95), there was a sharp decrease in the number of residents in employment on the estates which got rent reductions—a greater decrease than in the other estates. After the reduction in 1996–97, this decrease was strongly reduced to a level below the level of the other estates. It can also be seen that the rate of increase in the number of immigrants in the other estates has grown, while it has been reduced in estates with rent reduction. Furthermore, the growth in people marginalised from the labour market has been reduced much more on the estates with rent reduction. These changes cannot all be ascribed to rent reductions because, to a great extent, there is a coincidence between these and physical renovations. The same kind of cross-tabulation can be made for these efforts so the changes must be seen as the combined effect of these two kinds of initiative.

The rent reductions have also had an indirect effect through the changes in residents that have occurred. From Table A4 (see Appendix) it can be seen that the development in the reputation of the estates depends on the changes in the share of immigrants. It also depends on the development in social problems which again depends on changes in the share of marginalised people, refugees and other immigrants (Appendix, Table A2).

As an immediate result of the physical

renovation, some of the estates have been improved in the form of embellishment of the buildings and open spaces and improved common facilities. A statistical analysis showed, however, that there is only a very weak correlation between our measure of the efforts—investment per square metre of housing space—and the qualitative evaluations of the physical improvements that we got from the surveys. This can partly be explained by the fact that a lot of money was used to repair building defects which do not contribute much to the utility value of the estate.

As can be seen from Tables A5 and A6 in the Appendix, it has been difficult to find any direct effects of the investments on the physical efforts and population changes in the estates. The variable, investments per square metre, is significant, but the effect is small and the sign wrong. In addition to the above-mentioned inaccuracy of the investments variable, this could also be due to some correlation with the strong rent reductions variable. Moreover, the physical improvements had only been finished for a short time when the data were collected.

Another statistical analysis (see Appendix, Table A4) has shown, however, that the improvements in the visual appearance of the estates have had a significant effect on their reputation. We also know from other analyses in our project (Skifter Andersen, 1999b) that a bad reputation has an important

influence on mobility rates and the composition of newcomers. The effect on reputation increases with the length of time since the renovations were finished. It is especially in estates that had a bad reputation before the initiatives started, and with a bad location, that there have been great improvements.

As for the rent reductions, it can be argued that the physical efforts have had an indirect effect on reputation and population changes through the reduction in social problems that have been an effect of improvements in common facilities and open spaces (Appendix, Table A2).

Finally, it has been demonstrated that there is a direct effect of expenses for social efforts on improvements in reputation (Appendix, Table A4), but not on the mobility and composition of newcomers.

The reduce segregation strategy. This part of the initiatives proposed by the Urban Committee proved to be much more difficult to implement than the other strategies because it demanded new legislation and new agreements with local governments. The main proposals concerned the dispersal of newly arrived refugees among more municipalities, to give local authorities better opportunities to disperse social problems in the social and private housing stock and to make it possible for housing associations to regulate the composition of new occupants. Moreover, there was a specific proposal to set up a special institution to co-ordinate the assignment of dwellings in the capital region of Copenhagen.

Some of these initiatives were never realised and others were implemented several years after the other efforts. From the beginning of 1999, there has been an agreement with local governments on how to disperse refugees to municipalities with few immigrants. Since 1998, exemptions have been given to housing associations in certain approved estates to deviate from the rules requiring newcomers always to be taken from the waiting-lists. The purpose of this has clearly been to limit the number of immigrants and socially weak persons among new occupants. Moreover, local authorities have

been allowed to give compensation, paid by the state, to private landlords who place some of their dwellings at the disposal of refugees and other people in housing need. The last initiative never worked, as very few private landlords were interested.

The dispersal of refugees has been a success. Also, the exemptions given to the housing associations have been used. The problem here is that the housing options open to immigrants and other weak groups have been reduced in some municipalities without creating alternatives for them. However, in the municipalities which still have a great influx of immigrants due to family reunification, some politicians consider these initiatives to have been insufficient. As a result of their pressure on the government, a new and very debated decision to limit family reunification has been taken. New legislation has been approved by parliament to raise the age-limit for reunification by marriage from 18 to 25 years.

Conclusions

Research literature on experiences with efforts to revitalise deprived urban neighbourhoods in Europe shows that there is much disagreement on the purpose of these efforts and also on their effects. Some researchers have been quite positive in their judgements. Others have been very negative, saying that regeneration initiatives appear to have made little impact and that they are based on ideas that are questionable. It is especially initiatives that have been too limited in size or time, or too narrow in their scope that have failed, while more extensive programmes of longer duration, combining physical, organisational, financial and social efforts, have been more positively evaluated.

One of the main reasons for this disagreement on the effects of area-based initiatives is an inadequate understanding of the nature of deprived urban areas. In much of the literature, deprived neighbourhoods have been interpreted as 'pockets of poverty'—a spatial concentration of poor people in parts of cities caused by social inequality and segregation. This kind of understanding has meant that the

potential purposes of area-based efforts have been seen as limited and the effects of them have to some extent been misinterpreted. An alternative understanding has been proposed whereby deprived urban areas are understood as 'excluded places', which themselves contribute to spatial inequality and segregation.

Based on this understanding, it has been noted that area-based initiatives could have two different purposes: to stop or reverse the exclusion of neighbourhoods; and, to combat social exclusion at a neighbourhood level. The second objective could stem from the fact that area deprivation creates special problems for people living there and that local resources could be mobilised to supplement public resources. However, the most important objective should be the first.

The Danish efforts to revitalise 500 social housing estates fit well into this approach. There were four strategies embedded in the Danish initiatives: to strengthen social networks and reduce social problems in the areas (combat social exclusion); to improve the ability of the estates to compete in the housing market (combat exclusion of the place); to reduce segregation in general; and, to reduce other consequences for local authorities of deprived neighbourhoods. The main instruments for the two first strategies were rent decreases, physical upgrading and social and organisational support.

The extensive research evaluation of the initiatives was conducted a little too soon after the efforts were made. Also, the effectiveness of the programme has been weakened due to the fact that the resources, for political reasons, have been spread to too many estates with smaller problems and limited efforts.

Marked positive effects of the improved competition strategy have, however, been observed, which have stopped negative trends in most of the estates and especially in the areas with the largest problems and the strongest efforts. Rent decreases in particular have proved to be a strong instrument. But the problems have not yet been removed and it is necessary to continue the efforts.

For many of the estates, their reputation has been improved, which has had an effect on the mobility among tenants and the social composition of newcomers. The moving frequency has gone down—especially among tenants in employment—and more people in employment are found among the newcomers. As a consequence, the earlier strong trends in the composition of tenants, with more people on public transfers and fewer in employment, have come to a halt.

What has not been achieved is a suspension of the growth in the number of immigrants on the estates. There has thus been an increase in the share of immigrants in the period 1996–97 after the measures were implemented. This can partly be explained by a general increase in the number of immigrants and refugees seeking dwellings in the period. Moreover, the rate of increase for immigrants on the estates was larger in the previous period 1994–95, so there has been some progress.

The local network strategy has in many estates succeeded in creating co-operation between the estates, local authorities, residents and other local actors and has to some extent reduced social problems. In particular, problems with crime and vandalism have been reduced by efforts targeted at young people.

The Danish case thus confirms the conclusion of Power (1997) and others that area-based initiatives have a purpose and that they also can work. But we are 'swimming against the tide' (Power and Tunstall, 1995) and the initiatives must be of sufficiently long duration and extent and also must combine physical, organisational, financial and social aspects. It is costly, but the alternative is to let the areas decline to the point where the consequence is abandonment and demolition.

Note

1. The reports from the evaluation are in Danish with an English summary. They consist of: Skifter Andersen, 1999a, 1999b; Vestergaard *et al.* 1999, Munk 1999, Varming, 1999.

References

- ALLEN, J. (1998) Europe of the neighbourhoods, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 25–52. London: Jessica Kingsley.
- ANDERSEN, H. T. (1999) *Urban restructuring—towards a new urban form*. Paper for ENHR Conference at Balaton, Hungary, August.
- BURROWS R. and RHODES, D. (1999) *Unpopular Places? Area Disadvantage and the Geography of Misery in England*. Bristol: The Policy Press.
- CAMERON, S. and DAVOUDI, S. (1998) Combating social exclusion, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 235–252. London: Jessica Kingsley.
- CARS, G. (2000) *Social exclusion in European neighbourhoods: Processes, experiences and responses*. Final report of project financed under the TSER programme, Brussels: European Commission.
- CARS, G., MADANIPOUR, A. and ALLEN, J. (1998) Social exclusion in European cities, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 279–288. London: Jessica Kingsley.
- CHRISTIANSEN, U., VESTERGÅRD, H. ET AL. (1993) *Bedre bebyggelser—bedre liv?* [Better estates—better lives?]. SBI-Town Planning 65, Danish Building Research Institute.
- COSTA PINHO, T. (2000) *Residential contexts of social exclusion: images and identities*. Paper for ENHR Conference, Gävle, June.
- EVANS, R. (1998) Tackling deprivation on social housing estates in England: an assesment of the housing plus approach, *Housing Studies*, 13, pp. 713–726.
- FRIEDRICHS, J. (1997) Context effects of poverty neighbourhoods on residents, in: H. VESTERGAARD (Ed.) *Housing in Europe*, pp. 141–160. Hørsholm: Danish Building Institute.
- GIBB, K., KEARNS, A. and KINTREA, K. (1999) *Low demand, housing preferences and neighbourhood choices*. Paper to ENHR Conference, Balaton, Hungary, August.
- HALL, P. (1997) Regeneration policies for peripheral housing estates: inward- and outward-looking approaches, *Urban Studies*, 34, pp. 873–890.
- HAMNETT, C. (1994) Social polarisation in global cities, *Urban Studies*, 31, pp. 401–424.
- HIARNØ, J. (1996) *Global cities in two ways, a comment on Saskia Sassen's global city hypothesis*. Papers, Migration No. 18, Danish Centre for Migration and Ethnic Studies, South Jutland University.
- JARGOWSKY, P. A. (1997) *Poverty and Place: Ghettos, Barriers and the American City*. New York: Russell Sage Foundation.
- KEARNS, A., ATKINSON, R. and PARKER, A. (2000) *A geography of misery or an epidemic of contentment? Understanding neighbourhood (dis)satisfaction in Britain*. Paper to ENHR Conference, Gävle, June.
- KEMPEN, R. VAN and PRIEMUS, H. (1999) Undivided cities in the Netherlands: present situation and political rhetoric, *Housing Studies*, 14, pp. 641–657.
- KIRKEGÅRD, O. (1985) *Forbedring af nyere etageboligområder—Et litteraturstudium* [Improvement of newer housing estates]. SBI-meddelelse 55, Danish Building Research Institute, Hørsholm.
- KORTTEINEN, M. and VAATOVAARA, M. (1999) *Model of segregation within the Metropolitan area of Helsinki*. Paper for ENHR Conference at Balaton, Hungary, August.
- KÜRPICK, S. and WECK, S. (1998) Policies against social exclusion in Germany, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 189–210. London: Jessica Kingsley.
- LEE, P. and MURIE, A. (1999) Spatial and social divisions within British cities: beyond residualisation, *Housing Studies*, 14, pp. 625–640.
- MADANIPOUR, A. (1998) Social exclusion and space, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 75–94. London: Jessica Kingsley.
- MARSH, A. and MULLINS, D. (1998) The social exclusion perspective and housing studies: origins, applications and limitations, *Housing Studies*, 13, pp. 749–759.
- MORRISON, N. (1999) *Addressing the difficulties in letting social housing across the UK*. Paper to ENHR Conference, Balaton, Hungary, August.
- MUMFORD, K. and LUPTON, R. (1999) *Low demand for housing and area abandonment, compounding effects of areas on life chances*. Paper to ENHR Conference, Balaton, Hungary, August.
- MUNK, A. (1999) *Byudvalgets boligsociale indsats* [The social efforts made by the Urban Committee]. SBI-report 319, Danish Building Research Institute.
- MUSTERD, S. and OSTENDORF, W. (1998) *Urban Segregation and the Welfare State*. London: Routledge.
- MUSTERD, S., PRIEMUS, H. and KEMPEN, R. VAN (1999) Towards undivided cities: the potential of economic revitalisation and housing re-differentiation, *Housing Studies*, 14, pp. 573–584.
- PARKINSON, M. (1998) *Combating Social Exclusion: Lessons from Area-based Programmes in Europe*. Bristol: The Policy Press.
- PEDERSEN, D. O. (1999) *De direkte virkninger af omprioriteringen i almene boligafdelinger* [The direct effects of the remortgaging of loans in

- social housing estates]. SBI-report 309, Danish Building Research Institute.
- POWER, A. E. (1997) *Estates on the Edge: The Social Consequences of Mass Housing in Europe*. London: Macmillan.
- POWER, A. and TUNSTALL, R. (1995) *Swimming Against the Tide: Polarisation or Progress on 20 Unpopular Council Estates, 1980-1995*. York: Joseph Rowntree Foundation.
- RIJPERS, B. and SMEETS, J. (1998) *Housing challenge: managing neighbourhood image*. Paper presented at the ENHR conference, Cardiff, September.
- SASSEN, S. (1994) *The Global City: New York, London, Tokyo*. Princeton, NJ: Princeton University Press.
- SKIFTER ANDERSEN, H. (1995) Explanations of urban decay and renewal—what can Europe learn from American research?, *Netherlands Journal of Housing and the Built Environment*, 10, pp. 65–86.
- SKIFTER ANDERSEN, H. (1999a) *Byudvalgets indsats 1993–98: Sammenfattende evaluering* [The efforts made by the Danish Urban Committee 1993–98: summary of the evaluations]. SBI-report 320, Danish Building Research Institute, Copenhagen.
- SKIFTER ANDERSEN, H. (1999b) *De totale virkninger af Byudvalgets indsats i almene boligområder* [Total effects of the efforts to improve Danish problem estates]. SBI-report 321, Danish Building Research Institute, Copenhagen.
- SKIFTER ANDERSEN, H. (1999c) *Self-perpetuating processes of deprivation and decay in Danish social housing estates*. Paper presented to the ENHR Conference, Balaton, Hungary, August.
- SKIFTER ANDERSEN, H. (2001) *Sores in the face of the city: on the interaction between segregation, urban decay and deprived neighbourhoods* (forthcoming).
- SKIFTER ANDERSEN, H. and Á RØ, T. (1997) *Det boligsociale Danmarkskort* [A geographical map of social deprivation in Danish housing], SBI-report 287, Danish Building Research Institute.
- SOCIAL EXCLUSION UNIT (1998) *Neighbourhood Renewal*. London: Cabinet Office.
- TAYLOR, M. (1998) Combating the social exclusion of housing estates, *Housing Studies*, 13, pp. 819–832.
- VARMING, M. (1999) *Virkningerne af Byudvalgets renovering af bygninger og friarealer* [Effects of renovations of buildings and open spaces supported by the Urban Committee]. SBI-report 323, Danish Building Research Institute.
- VESTERGÅRD, H. (1998) Troubled housing estates in Denmark, in: A. MADANIPOUR, C. CARS, and J. ALLEN (Eds) *Social Exclusion in European Cities*, pp. 115–130. London: Jessica Kingsley.
- VESTERGAARD, H., MUNK, A., CHRISTENSEN, G. ET AL. (1999) *Byudvalgets boligsociale indsats II: 20 eksempler på aktiviteter* [20 examples of social efforts supported by the Urban Committee]. SBI-report 310, Danish Building Research Institute.
- WACQUANT, L. (1997) Urban marginality in the coming millennium. Department of Sociology, University of California at Berkeley.

Appendix. Statistical Analyses

In this appendix, are shown some of the results of the statistical tests on the effects of the economic, physical and social efforts in deprived housing estates in Denmark. As described in the paper, the data are based on public registers, on a special database of the estates and the economic re-

Table A1. Results from two logistic regressions explaining causes of increasing activity levels among tenants and an increasing number of social activities (*R*-statistics *100)

	Activity level	Number of social social activities
Problems with low activity before initiatives	27	18
Increase in the share of partly employed residents	1.4	
Increase in the share of residents 26–40 years old	6	
Improvements in common facilities	8	25
Improvements in open space	28	24
Size of estate (number of dwellings)	8	– 11
Year of construction	7	
Share of dwellings in semi-detached buildings	3	– 10
Degree of urbanisation	– 7	
Expenses for social workers (DKK per square metre)	7	2
Expenses for social activities (DKK per square metre)		8

Note: All results shown are significant at the 5 per cent level.

sources used there and also on surveys with evaluations of the problems in the areas and their trends. These evaluations are made on a scale from one to five.

Three different kinds of statistical analysis are shown. First, Table A1 is a linear multivariable regression model explaining changes in an index of social problems, which is constructed on the basis of the evaluation of several kinds of problem in the estates. The number of cases in the used data is 400 corresponding with the number of estates where all data were available. The standardised beta coefficient is shown.

Secondly, Tables A2, A3 and A4 are logistic regressions explaining when some estates have

had a positive change in their situation. The database is 400 cases. As there are no logic variables in the models, for simplification, the results show the *R*-statistic.

Thirdly, Tables A5 and A6 are also logistic regression models, but the database here is all adult residents over 17 years of age—Table A5—corresponding to 160 000 cases, and all adult newcomers (Table A6). The results are explained by the *B*-coefficient and by the change in mobility rate (or share of employed among newcomers) created by a change in the independent variables corresponding to twice their standard deviation.

For further explanations see Skifter Andersen (1999b).

Table A2. Results of a linear regression explaining the causes of reduced social problems (beta coefficient *100)

	Standard beta coefficient
Social problems before initiatives	15
Increase in the share of residents on welfare	-3
Increase in the share of full-time unemployed	-2
Increase in the share of refugees	-6
Increase in the share of other immigrants	-2
Improvements in common facilities	3
Improvements in open space	8
Size of estate (number of dwellings)	7
Year of construction	-3
Share of dwellings in semi-detached buildings	8
Degree of urbanisation	-5
Expenses for social activities (DKK per square metre)	1
Expenses for social workers (DKK per square metre)	8

Note: All results shown are significant at the 5 per cent level.

Table A3. Results of a logistic regression explaining causes of decreasing problems with integration of immigrants

	<i>R</i> -statistic *100
Problems with integration before initiatives	14
Increase in the share of immigrants in total	2
Increase in the share of refugees	-5
Increase in the share of children of immigrants	-4
Increase in the share of residents living on early pension	-6
Increase in the share of full-time unemployed	-6
Improvements in common facilities	12
Size of estate (number of dwellings)	10
Year of construction	11
Share of dwellings in semi-detached buildings	-8
Degree of urbanisation	8
Expenses for social activities (DKK per square metre)	1
Expenses for social workers (DKK per square metre)	12

Note: All results shown are significant at the 5 per cent level.

Table A4. Results of logistic regression explaining causes of improved reputation

	<i>R</i> -statistic *100
Problems with bad reputation before initiatives	18
Bad location	9
Bad visual appearance before initiatives	2
Improvements in social problems	16
Improvements in problems with integration of immigrants	8
Increase in share of immigrants	-6
Size of estate (number of dwellings)	-4
Year of construction	10
Share of dwellings in semi-detached buildings	2
Degree of urbanisation	-2
Improvement of visual appearance	10
Number of months since renovation finished	10
Expenses for social efforts	9

Note: All results shown are significant at the 5 per cent level.

Table A5. Results of logistic regression model explaining why people move out of the estates

	R-statistic *100	B-coefficient	Significance	Factor of change	Change in mobility rate
Age (number of years)	-6.5	-0.018	0.0000	10	-4
Male?	-1.8	-0.147	0.0001	1	-3
Children in household?	1	0.1131	0.0112	1	2
Unstable household? ^a	3	12.1000	0.0000	1	69
Number of years in dwelling	-3.6	-0.0165	0.0000	5	-2
Income (1000 DKK)	4.2	0.0022	0.0000	100	5
Immigrant?	-5	-0.5443	0.0000	1	-10
Size of dwelling (square metres)	-3	-0.0059	0.0000	10	-1
Semi-detached?	-1.5	-0.1836	0.0011	1	-4
Percentage of immigrants in estate	2.1	0.0058	0.0000	10	1
Mobility rate in municipality	10	0.0449	0.0000	5	5
<i>Variables representing efforts</i>					
Investments in renovation (1000 DKK per square metre)	1.13	0.13	4E-04	1	3
Number of months since renovation	-1.8	-0.0077	0.003	8	-1
Rent decrease (DKK per square metre)	-1.8	-0.008	0.0000	54	-8
Number of months since decrease	0	0.0028	0.411	14	1
Expenses for social efforts (DKK per square metre)	-0.6	-0.0019	0.027	36	-1
Rent decrease * time since	0.92	0.0002	0.003	756	3
Rent decrease * social efforts	1.1	0.00006	4E-04	1944	3

^aHouseholds broken up by divorce, etc.

Table A6. Results of logistic regression explaining when newcomers were in employment

	Unit of measurement	Coefficient	Significance	R-statistic *100	Factor of change	Change in share of employed
Size of dwelling	square metres	0.0056	0.0000	5	50	7
Rent	DKK per square metre	0.0002	0.0018	1.2	100	0
Semi-detached?	0/1	0.1885	0.0000		1	5
Year of construction	Year	-0.0076	0.0000	-3.3	10	-2
Social problems (Index)	0/100	-0.0032	0.0000	-2.2	50	-4
Share of immigrants	per cent	-0.0141	0.0000	-6	30	-10
Immigration rate to municipality	per cent	0.0275	0.0000	6	25	16
Composition of local housing market ^a	per cent	0.0094	0.0000	4.3	20	5
Local price level for owner-occupied dwellings	DKK per square metre	0.0002	0.0000		-1 863	-9
Rent decrease	DKK per square metre	0.0078	0.0000	1.7	35	7
Investments in renovation	1000 DKK per square metre	-0.0001	0.0000	-1.2	2	0
Expenses of social efforts	DKK per square metre	-0.0009	0.4664		36	-0.8
Rent decrease*price level		0.00000	0.0000		65 205	12.6
Social efforts*share of immigrants		0.0001	0.0070		1 080	2.7

^aShare of dwellings in municipality that are social housing.