ning in the US. It is not meant to clarify the Canadian and British planning systems. In Part VI Cullingworth concludes with a discussion of the limited possibilities for land use reform in the US.

The Political Culture of Planning is recommended to anybody looking for comprehensive, up-to-date and accurate information on a wide variety of land use planning subjects. Cullingworth has the ability to touch upon many aspects of land use planning, without floundering in too much detail. He has been able to give an account of a system, that is actually not much of a system. Land use controls vary greatly from state to state and from locality to locality. This book presents the material in a coherent way, emphasizing contemporary planning practice. Cullingworth does not claim to have written a book with complete coverage. In the preface he warns the reader that he omitted environmental policies, capital improvement programs and local economic development. We do think, however, that the book is still an invaluable introduction to American land use planning. For those who are interested in a deeper study of the subject, the book is a useful starting point; the notes in the text refer to an extremely extensive bibliography. It is worth spending £45.00 for this well-produced book that may well become Cullingworth's next classic on planning.

Amsterdam Deliane Hummelen & Bart Wissink

Markets, States and Housing Provision: Four European Growth Regions Compared.

Since the beginning of the 1980s, there has been growing interest in international comparative housing research in many industrialized countries. The reasons for this renewed interest in international comparative research are various. Apart from the general interest of academics, it is increasingly important too for politicians and policy makers to understand how the specific housing policy instruments which are employed in different countries are used, and what the effects of these instruments are. There are various ways in which comparative studies can be conducted. A lot of them have however serious shortcomings. The greatest problem is often a lack of underlying theory and the absence of explanations for the features they describe. The number of international comparative research projects based on a set of previously identified problems and employing a theoretical framework is very small. The greatest value of the study executed by Barlow and Duncan is therefore that the study is based on a fundamental and theoretically grounded methodology combined with a lot of empirical evidence. Therefore the book is very valuable for all housing researchers and even more for housing professionals.

The goal of the study was to assess the relative efficiency of different housing provision systems, using growth regions in Britain, France and Sweden as case studies. Britain was used as an example of a deregulated housing system, Sweden as a housing market with detailed state intervention and France was taken as an intermediate case. The high growth regions were Berkshire, Southern Greater Paris, Toulouse and Northern Greater Stockholm.

The authors focused their study on the specific institutional contexts of housing provision. What were the effects of the types of market/state mixtures, with their different institutional arrangements, on housing provision? As opposed to the universal approach of neoclassical economics where any market is in principle the same, this question immediately puts the accent on difference. The response of the researchers to the question of assessing economic and social efficiency has been one of deliberately not trying to incorporate every dimension of efficiency. Instead they focus on some basic system characteristics and, operationally, on empirical indicators of these characteristics. What are the relative levels of production efficiency, allocative efficiency and 'dynamic' efficiency in the selected case studies of housing provision in Britain, France and Sweden. Production output and costs were taken as an index of production efficiency and allocative efficiency was examined by looking at product diversity and consumption patterns. Most difficult to define was dynamic efficiency. This was done by information on producer structures and strategies as indices of long-term efficiency. Both trends and absolute measures were used to examine these indicators.

The results of the research was that the 'marketization assumption' was rejected, based on theoretical reasons as well as empirical evidence. This assumption says that state intervention should be reduced or even removed and markets have to be as open as possible.

The empirical results showed that the Northern Stockholm area had the highest per capita output over the 1980s, and overall the most favourable cost trends in producing new housing. Berkshire showed the lowest output and the least favourable cost trends. Northern Stockholm also provided a better cost/benefit array for consumers. In Berkshire, choice was the most limited. Housing costs, as a proportion of income, were lower in the Stockholm area with less inequality between social groups. Finally, conditions for long-term improvements in house building were weakest in Berkshire and strongest in Northern Stockholm. The French growth areas were usually somewhere in between.

The higher levels of efficiency in the Swedish case, and to a lesser extent in the French areas, were produced by state intervention to open up housing land and finance markets. This counteracted market tendencies to short-term planning, under investment, speculative behaviour and boom/slump patterns. It also allowed diversity in housing production, where markets fail to recognize the longer term social and
economic benefits of a variety of producers and tenures. In turn, greater diversity encouraged intersectoral competition and counteracted speculative behaviour. Greater local government autonomy also promoted housing diversity where local councils could respond to the particular conditions and political preferences in their areas.

As mentioned at the beginning, the overall judgement of the work is quite positive. There are not many studies which have successfully achieved a comparative research project on housing provision based on a set of previously identified problems and employing a comprehensive theoretical as well as empirical framework. Also the work attributes the role of other factors outside of the housing market. In this sense, housing does not stand in isolation from other social developments, but forms an integral part of the organization of society. These factors could have a big influence on the output of the housing system. We could mention demographic events as migration and birth rates, income policy and income distribution, and the more general socio-economic policy. Also the selection of the cases needs closer attention. As the results from the study showed, there are big differences between Berkshire and the other four regions which have more similar outcomes. So the question is whether the British example could be regarded as typical. The most difficult task will however be to convince the responsible politicians in the different countries of the real effects of their liberal housing policy.

Delft Peter Boelhouwer

Tropical Hardwood from the Brazilian Amazon. A Study of the Timber Industry in Western Pará.

Up to the end of the 1960s the roundwood source for the Amazonian timber industry was mainly the seasonally inundated lowland forest, the várzea. The upland forests, the terra firme, were not accessible. Since the construction of the Trans Amazon highway and other roads the situation has changed.

In a recent study the consequences of the greater accessibility of the forests are investigated. The principal research question of the dissertation is: what spatial and socio-economic features characterize the Amazonian timber industry, what is its role in the regional development process and in the incorporation of the Amazon into the national and international economy and what are the socio-economic and ecological consequences of timber exploitation? The study is not only of interest for those studying development issues, but also for those studying the causes of deforestation.

After an exposition on the importance of the timber industry within the national and regional perspective, particular attention is given to the spatial and socio-economic features of the timber industry in an area of 30,000 square kilometres in the western part of the Pará. An area near the municipality of Santarém was selected for field work as that region offered the opportunity to study both traditional and modern forms of timber extraction. The core of the wood-processing activities, initially located in Santarém along the banks of the Amazon River, is now scattered along the roads constructed during the past decades. The timber industry is highly integrated into the local economy. The production of construction timber and timber for boats and agricultural tools is oriented towards local consumers. The larger part of the raw materials they utilize comes from clearings for agriculture and cattle raising; the damage to the primary forest is minimal. The small enterprises make hardly any profits; investments are low, equipment is poor and often obsolete, there is a lack of spare parts and labour conditions are hard. Although most enterprises are small, the medium-sized and large enterprises play a much more important role as a source of employment. The profits of the latter are generally invested within the region, in the timber industry as well as in other economic activities. In this sense one can conclude that they contribute significantly to the diversification of the local economy. However, the raw material which the medium-sized and large enterprises utilize comes from mechanized logging operations. The damage caused by uncontrolled mechanized operations is considerable: harvesting only a small percentage of the trees per hectare results in the destruction of or irreversible damage to a quarter or even half of the remaining trees. Moreover, their timber operations constitute a source of land conflicts with the indigenous people and the recently settled colonists.

What is the connection between timber exploitation and the destruction of the tropical rain forests? According to the author, timber exploitation is not the major cause of deforestation in the Brazilian Amazon. The colonists, pushed to the Amazon due to land scarcity in other parts of Brazil, are not the chief offenders. They are not allowed to deforest more than 50 per cent of their holdings and often lack even the means to clear the land for agricultural purposes. Furthermore, the trees constitute a reserve of capital for unexpected or extra outlays and a means of broadening their subsistence when agriculture alone does not provide enough to survive. They consider the forest reserve as a valuable asset and selective logging will be applied to minimize damage to other trees. The damage is considerably less in comparison to the large-scale mechanized operations. The real cause of the ecological disaster is the opening of the forest areas for large-scale cattle ranches, large-scale farming, the construction of roads and hydroelectric dams and large-scale mining projects. One of her conclusions is that timber exploitation is more a consequence of clearings than a cause.

Can timber exploitation and sustainable development of the Amazon go hand in hand? No clear-cut