BOOK REVIEW


The Introduction opens with a reference to the encyclical Rerum Novarum by Pope Leo XIII of 1891. The basic idea of this historical document is to find proper economic institutions that go beyond ‘the abuses of capitalism and the illusions of socialism’. Nowadays we would call this the third way. For Uzawa the third way consists of introducing social common capital that is held by society as common property resources. The term social refers to the idea that social institutions are entrusted on a fiduciary basis to provide services derived from common capital. The basic idea raises two fundamental questions. First, what exactly is meant by social common capital? Second, what are social institutions if they are neither private firms nor government agencies?

The first fundamental question is answered by an enumeration of several types of social common capital. The author distinguishes three main forms: (1) the natural environment and natural resources such as oceans, forests, the earth’s atmosphere, etc.; (2) social infrastructure including roads, bridges and also phenomena like medical care and education; (3) cultural capital comprising artworks, historical buildings, and so on. Examples belonging to categories (1) and (2) are dealt with in several chapters, but there is no further reference to cultural capital in the book.

The second fundamental question about the characteristics of social institutions is nowhere answered in a straightforward manner. Sometimes there is a hint of an explanation. For instance, in case of medical care the physicians and co-medical staff that are trusted on a fiduciary basis with the management ‘must obey professional codes of conduct truthfully and take care of patients using the best scientific knowledge and the highest technical proficiency of the medical sciences available today’ (p. 323). That is fine, but in the model on medical care, as elsewhere in the book, social institutions are presented as entities that sell services in private markets in order to maximize profits. The question, whether under such circumstances the high expectations raised in the book are realized, remains to be seen.

The analysis of the provision of services and price setting in case of social common capital is preceded by a rather long chapter (60 pages) on the theory of the commons. In this theory people hold common property, but there is no separate institution that rules over production and distribution. Private firms compete in the exploitation of the commons. The classical example is of course fishing in a common pool. Since the seminal work of Hardin (1968) it is well known that such a situation may result in overexploitation, bringing about depletion of the resource. However, Uzawa does not think that there is any reason for a tragedy. The author stresses that one has to be aware of the difference between open access
and common property. In the latter case rights are assigned to a group of producers, fishermen for instance, that has access to the common pool, whereas outsiders are excluded from fishing.

In Chapter 1, the model of the commons is applied to fishery, forestry and agriculture. In each case the commons as a whole is concerned with the harvest time plan that gives the group maximum profits. The optimal plan can be found by appropriate mathematical techniques that are exposed in great detail in each application. It appears that in the long run the commons opts for a steady state solution with a constant stock of the natural resource and a constant harvest/stock ratio. This comes as no surprise, but it remains to be seen how the necessary discipline among participants is maintained. Moreover, private parties have to act on the basis of imputed prices of the stock of natural resources. Who is going to tell them?

The optimal plan is compared with a market equilibrium where producers (say fishermen) maximize profits without taking account of static externalities (which are not essential) and dynamic externalities (which are). Under these circumstances there may result a complete depletion of the stock, but the outcome depends on several parameters such as the market price of output and the regeneration potential of the resource. In either case the long-run level of the stock is smaller than in the planning solution. Open access is no problem, because as there are more fishermen the harvest of each of them is proportionally smaller. This seems to contradict the earlier statement on the vital difference between open access and common property.

In Chapters 2–9 the concept of social common capital is developed mathematically. A prototype model is introduced in Chapter 2. In this chapter social common capital takes the form of infrastructure for which all users have to pay. Congestion (a negative externality) can be reduced by levying a tax on the use of the services of social common capital. For a given tax rate a general market equilibrium is obtained under neoclassical conditions with respect to the behaviour of different agents. The optimal tax rate can be derived by maximizing an utilitarian social welfare function subject to standard feasibility conditions. The allocation models in Chapter 2 are set up for the short run. Capital accumulation is analyzed in Chapter 3. The author takes great trouble to explain the Ramsey–Koopmans–Cass theory of optimal accumulation. Dynamic optimality assumes perfect foresight, which is ‘only of an academic interest, without significant merit from social and policy points of view’ (p.136). Sustainability, on the other hand, implies stationary expectations with respect to the schedules of marginal efficiency of investment in both private and social common capital. It is shown that the sustainable time-path of consumption and investment in private and social common capital approaches the long-run stationary state.

The prototype model is adapted to deal with different issues like the natural environment (Chapter 4), energy and recycling of residual waste (Chapter 5), agriculture (Chapter 6), global warming (Chapter 7), education (Chapter 8) and medical care (Chapter 9). This results in a lot of repetition so that the patient reader has to swallow about 1,500 mathematical expressions.

In most cases the author does not make clear why social provision of certain services is preferable over private provision. Take for example the case of education.