SUMMARY

Purpose of the Study

This book is concerned with management of universities in the Dutch educational system. Each of these institutions depends almost completely (96%) on public financing, although recently private financing increased considerably. The importance of state funding brings about that the majority of activities conducted by Dutch universities are planned and executed in a non-market environment. This implies that non-market failures, such as declining efficiency of production and inadequate allocation of resources (see chapter 1) are likely to occur.

A description of the developments in the Dutch state policy towards universities (chapter 2) reveals that, from 1970 onwards, the Ministry of Education and Sciences has intensified notably the efforts to plan and control academic activities within the institutions of Higher Education. To implement this policy an extensive use has been made of mathematical models and allocation schemes for budgeting purposes, and of juridical regulations concerning academic activities and the composition of academic personnel. The intentions seem clear: given the desired reduction of public expenditure the Ministry has tried to reduce at least one of the above-mentioned non-market failures.

Notwithstanding frequent opposition of university-officials against many state-imposed measures, the majority of these interventions is, obligatory or by free will, now also adopted by the central administration of the universities, in order to intensify and update the internal management processes. Although the increase of planning and control activities, both at the state level and at the central level within universities, aims at improving university conduct, the opposite appears to occur. Only a severe reduction of expenditures seems to have been the result, while the quality of academic conduct has suffered. At the same time, a growing population of planning and control bureaucrats partly diminished the intended improvement of efficiency. Planning and control became time and effort consuming activities, without a clear insight in the pay-off capabilities. These effects probably point to a weakness in the management process: intensified application of control systems in a university environment may cause illusion of managerial control, bureaucracy, dysfunctions and 'quasi-control'. As it is foreseeable that non-market relationships continue to dominate the management of academic activities, it is of
importance to investigate in which way management of universities can be improved without provoking the above-mentioned dysfunctions.

This book contains the results of two different investigations. The first investigation tried to find an appropriate management-system for coordinating and controlling academic activities within faculties. The other investigation concerns the coordination of internal service departments. In this part we dropped the limitation of existing non-market relationships and investigated the impact of introducing market-like relationships within a university organization.

Management of Academic Activities

The main question in this part of the study is in what way the current managementconception can be modified and extended, so as to include the special properties of the academic work which has to be co-ordinated and controlled.

We investigated several images of the university as an organization (chapter 3), such as the models of "organized anarchy", "garbage can decision making", the university as "a loosely coupled organization" and "the university as an institution". We looked at recent developments in control systems for higher education and investigation, and found three properties of academic conduct which complicate the straight-forward application of a management system:

1. The academic goals are ambiguous and difficult to quantify.
2. The results of academic work cannot be quantified nor traced back to clearly stated goals.
3. The effects of management-interventions on academic activities cannot be foreseen in a confident way.

From the literature we deduced some ways to adapt the management system in order to take account of these properties. The contingency theory for example suggests a modification of the way in which management-functions are executed, a different allocation of tasks between management and logistic system, and a limitation of objects to which a management system directs itself.

The transaction-cost approach and the theory of clan-control stress the importance of goal-congruency for the effectiveness of the management process.

Starting from this point we investigated the following questions:

1. To what extent and in what way are management processes and academic processes coupled at department and workgroup level?
2. Does the concept of clan-control exist in the real-life circumstances in academic departments? To investigate clan-control we used the more limited concept of goalcongruency.
3. If goalcongruency exists in practice, to what extent is it possible to increase the level of goalcongruency?
The investigation took place in eight academic departments of three different universities: two large-scale state universities and one medium-scale technical university. To carry out this investigation we studied already existing written background-information, held interviews with key-informants (the department's director or secretary) and carried out a survey. This survey was directed to 496 faculty-members, of whom 44% returned a useful answer (242 respondents).

The results on the first question showed that the daily work of faculty-members is not influenced very much by the planning and administration processes (the subordinate factors), such as organizational procedures, goals articulated by the government board, and administrative rules. Two factors gained substantially more influence in the day-to-day scientific activities of the faculty: the assigned budget and developments in the scientific field (co-ordinate factors).

The members of the department's government board and the bureaucrats within the department proved to have a different perception: they reported a significantly higher influence of the planning and administration process, and significantly less influence of coordinate factors (such as opinions of colleagues, developments in their specialty, etc.).

To conclude, one can characterize the university as a dual organization: the coupling between management process and logistic operations is tighter in bureaucratic activities and looser in scientific activities.

If the intensified planning brought us to this, then the question remains: is it possible to develop a management system that couples more effectively the management process to academic activities? It seemed worth trying to look more profoundly at the possibilities of a system of clan control in a university organization. First of all we had to investigate if anything like "clan control" exists in a Dutch university (see question 2). Furthermore we investigated to what extent it is possible to increase the level of goal congruency (question 3).

We included in the questionnaire 36 normative assertions in the field of education, investigation, relationship with the society, democratization and internal management issues. We divided the population of each department into three groups: administrators and bureaucrats, scientists participating in the management of the department, and scientists who do not have any responsibility in the management process.

First of all we asked the respondents to give their personal opinion on these 36 assertions. The results showed an overall convergence across all groups of all departments.

Secondly, we asked the respondents to respond to the 36 assertions in a way that would, in their eyes, be consistent with the actual policy of the department as a whole. As a result, the congruence between
groups within a department improved. The magnitude of this improvement differed between departments, and varied from a 0.4 percent to a 60.7 percent improvement of the explained variance. But, even more important, in most cases the congruency between groups of different departments lowered significantly. Apparently, each department pursues a department-specific policy.

With respect to the third of the above-mentioned questions, we distinguished persons who hold temporary and persons who hold fixed positions, and between faculty-members who work less than a year and who work more than a year in the same department. The results indicate that the temporarily appointed faculty-members are slightly more congruent with the other groups within the department, than the persons who hold fixed positions. This contradicts our expectations: faculty-members who spend more years in office would be able to come to grasp better with the department’s policy. An explanation could be that nowadays temporary appointments are extensively used to bring the department’s policy into practice.

As organizational factors that might influence goal-congruence, we included the following: organizational structure, organizational culture, the budgeting system, and the organizational environment (the composition of and historical changes in the financial resources received).

It appeared that none of these factors played an important role in the determination of the level of goalcongruency. Two of these organizational factors, the budgeting system and the dispersion of written information about policy-guidelines, show some correlation with goalcongruency. However, due to the limited scale of this investigation it is hard to say to what extent these two organizational factors influence goalcongruency.

Coordination of internal service departments

Internal service departments play an important role in the university organization. They often employ 40 to 50 percent of the total university personnel. A decreasing university budget, a steady and sometimes increasing demand for internal services and the probable existence of inefficiencies, made the board of governors and the university council of two universities decide to implement a transfer pricing system. The main intention was to apply a market-like coordinating mechanism in order to improve the balance between supply and demand of internally produced goods and services.

This part of the study begins with a review of some transfer pricing schemes, ending with a mixed system in which both market and (central) planning elements take a part.

Starting from this theoretical design we investigated the introduction of a transfer pricing system in a real-life situation. This introduc-
tion took 53 months or, to put it otherwise, nearly 4½ years. This fact is not surprising at all: it is well known that the implementation of major changes, which are not imposed on the organization from outside, takes a long time. Therefore, we investigated of what kind the delays in the designing and decision-making process were. It turned out that these delays occurred in the phase of the selection between already elaborated policy-options. These selections were made by bureaucrats during the preparatory phase and by university administrators and representatives in democratic bodies during the decision making process.

However, due to the long time it took before transfer pricing was put into practice, the effects of transfer pricing could not be evaluated at length. Moreover, introduction of a change of this magnitude provokes a major disturbance of normal, day-to-day operations. A reliable evaluation is therefore only possible after a period of adjustment.

Therefore, we only examined what role the arguments, frequently used in the preparatory phase of the project, played in practice. The overall impression of this superficial and tentative evaluation is that, although some internal service departments still are in the very first phase of implementation, the majority of them handle the new situation well. They do not present the expected financial deficits and for most of them the system offered a new challenge: personnel involved get the feeling that they run their own business now. This positive result occurred in spite of the fact that up to this moment, the central university government did not remove the severestly restricting regulations regarding financial and labour issues.