

Global Opportunities and Institutional Embeddedness Higher Education Consortia in Europe and Southeast Asia

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Summary

As a response to processes of globalisation and regional integration, internationalisation activities in universities have changed. Flows have become more massive, the range of activities has broadened, and internationalisation has shifted from a marginal activity to a central institutional issue with strategic importance. These shifts can also be observed in international cooperation among universities. One of the manifestations of this shift is the increase and change of inter-organisational arrangements in higher education. One type of such arrangements – higher education consortia – (a term that will be further defined in the paper) are analysed in detail in the study. This analysis takes inter-organisational diversity as a starting point (Parkhe, 1991). The basic thesis is that partners need to be similar, yet different, or in other words, there needs to be sufficient complementarity as well as sufficient compatibility among the participating universities. This thesis is based on two different perspectives on universities. The Resource Based View (Wernerfelt, 1984; Barney, 1991) argues that organisations cooperate in order to gain access to complementary resources, which they need to achieve a sustainable competitive advantage. Embeddedness theories (e.g. Zukin and DiMaggio, 1990) and institutional theories (e.g. Uzzi, 1997; Scott, 1995) argue that organisations are embedded in and shaped by their (national) institutional context. From this viewpoint, cooperation between partners will be hindered if such institutional backgrounds are incompatible with each other. It is argued that consortia which show a high level of both complementarity and compatibility, will be most successful. Also the paper explores the ways in which the management of consortia can improve the levels of complementarity and compatibility.

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Background of the study

The paper will present the findings of a recently finished research project on globalisation and the changing nature of international cooperation in higher education (Beerrens, 2004). The study focuses on international inter-organisational arrangements and attempts to identify the critical features of a specific type of inter-organisational arrangements: *Higher Education Consortia*. Higher education consortia can be defined as multi-point groupings of organisations which have a limited amount of members and where membership is restricted to particular organisations that are allowed by the other partners to enter the arrangement (Beerrens, 2002). Also they have an indefinite time-span, therefore they are not meant to be dissolved at a particular moment. Cooperation takes place in several activities, covering multiple disciplines and/or themes. International higher education consortia can be seen as a horizontal arrangement between higher education institutions which are based on equity and where collaboration takes place through coordination. The arrangements exceed loose cooperation, since an additional administrative layer is created above the participating organisations. On the other hand, the arrangements are not meant to lead to amalgamation, at least not in the foreseeable future.

The study is interdisciplinary in nature, attempting to relate approaches from international political economy to theories in the fields of public and business administration. The empirical analysis was based on four case studies of higher education consortia, located in Europe and in Southeast Asia. This paper situates the subject of study in the contemporary context of globalisation and ongoing regional integration and it provides a theoretical framework for inter-organisational cooperation in higher education. On the basis of the results of the empirical data analysis, answers to the research questions will be provided, the theoretical notions will be confronted with reality and the conclusions of the study will be presented. This paper will mainly address the following questions:

- 1. What features of international higher education consortia can explain the performance of these consortia?*
- 2. What type of mechanisms can be adopted by international higher education consortia in order to increase performance?*

The global context of international cooperation in higher education

The assumption that the nature of internationalisation activities in higher education has changed and that the emergence and increase of international higher education consortia was related to processes of globalisation and regionalization formed a starting point in this study. In order to provide a sound background for the study of higher education consortia, the meaning of the concepts of globalisation and regionalisation and their relation to (international cooperation in) higher education were first analysed. In the literature, globalisation appears to be approached from different temporal perspectives. These approaches were identified as geographical, political, cultural and institutional in nature. On the basis of these approaches globalisation is defined as a process in which basic social arrangements become disembedded from their spatial context due to the acceleration, massification and flexibilisation of transnational flows of people, products, finance, images and information (Beerrens, 2003). This process is also apparent in basic social arrangements within and outside universities. Regionalisation was approached as a subset of globalisation, where a similar process of disembedding is occurring, but where arrangements become re-embedded in a regional context.

On the basis of the general exploration of the concept of globalization, four broad themes in higher education can be identified in which globalisation manifests itself, and which in turn contributes to the growth of international inter-organisational arrangements:

- *the increasing interconnectedness between universities and increasing flows between them.* Universities as well as society as a whole have become better connected through technological advancement and this enables and stimulates universities to engage in relationships with other universities. This is also the case for universities from different countries and this process enabled and stimulated the activities normally placed under the heading of 'internationalisation of higher education';
- *the changing relationship between the university and the state.* The 'competition state' promotes international collaboration as they become less tied to the national regulatory and financial context. International cooperation is enabled through increasing institutional autonomy which gives universities more margins to operate internationally. Universities are also motivated to operate in a more entrepreneurial way and gain more (though still marginal) opportunities for acquiring international sources of funding.
- *the threats to diversity versus the rationality of standardisation;* although globalisation might pose a threat to the diversity of educational systems and traditions, it also promotes the standardisation and harmonisation of national structures and methods. Both directions promote collaboration between universities. The acknowledgement of diversity promotes linkages in order to learn from each other's structures and methods, while the rationality of standardisation enables universities to collaborate more closely, without cooperation being hampered by national peculiarities.
- *the identity of universities in a globalised world.* From this perspective, universities and higher education become more 'footloose' and less tied to the national institutional contexts. This can be the case for the university as an organisation but also for the content and methodology of education, which becomes – in the words of Smith - "tied to no place or period, but becomes context-less, a true melange of disparate components drawn from everywhere and nowhere" (1990: 177).

The shifts taking place in these four themes due to processes of globalisation have been identified as the major drivers behind the emergence of international inter-organisational arrangements. Although it is argued that globalisation and regionalisation processes are significant, one also need to acknowledge that in many ways, society is still very much rooted in nationally constructed institutions. This is especially true for universities, of which the majority were established and developed in a national institutional context. The study shows that this paradox – in which universities face global opportunities while being strongly embedded in national institutional environments – also becomes apparent in higher education consortia.

The paradox of cooperation in a global environment

For the study of cooperation between organisations, various disciplinary perspectives can be applied. There are theories from policy studies and political science on policy networks, perspectives on cooperation from international relations theorists, approaches from sociology such as social network analysis and psychological and anthropological perspectives on cooperation. Also in the field of higher education

research various studies on cooperation have been conducted. An exploration of approaches in various disciplines, ultimately led to theories from strategic management and international business. Here, after the strong increase in inter-firm constellations like strategic alliances and joint ventures in the 1980s, a wide range of studies on international cooperation between firms has emerged. In examining determinants of consortium performance, the study focuses on a unique aspect associated with the characteristics of partners involved in an alliance, namely inter-organisational diversity (Parkhe 1991). An interesting paradox, which forms the core of the argument, is that alliances or consortia are based on both compatibility as well as complementarity. It is suggested that performance is likely to be enhanced when organisations are able to manage the paradox involved in choosing a partner that is different, yet similar. Different, in the sense that the resources of the universities in a consortium are complementary to each other; similar, meaning that the backgrounds of the participating universities are compatible with each other. Successful consortia thus require partners who possess similar characteristics on certain dimensions and dissimilar characteristics on other dimensions.

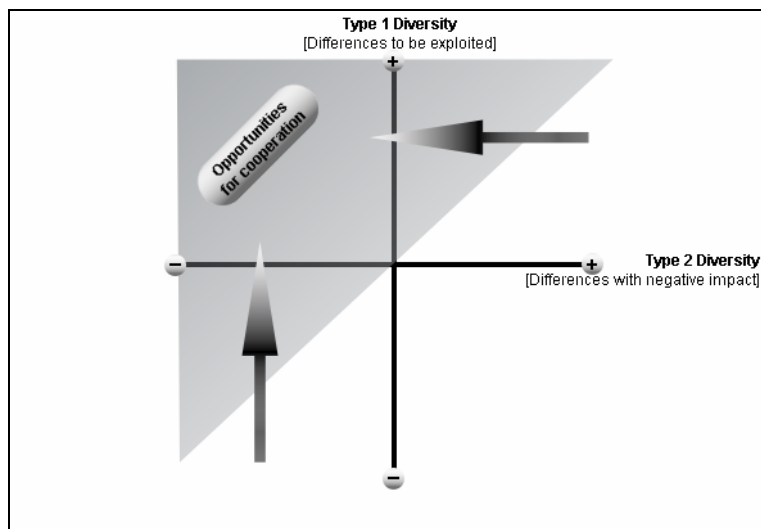
This principle can be traced back to two theoretical perspectives on firms, or in this case, universities. The idea that organisations cooperate in order to gain access to resources finds its origins in the resource based view of the firm (RBV). In the RBV (Wernerfelt, 1984; Barney, 1991), organisations are seen as a bundle of resources. The RBV introduced an alternative perspective for the prevailing models of strategic management in the 1980's, where emphasis was placed on analysing a firm's opportunities and threats in the competitive environment (Caves and Porter, 1977; Porter, 1980, 1985). This model claims that firms within a particular industry are identical in terms of the resources they control and the strategies they pursue and that, where heterogeneity occurs, this will be very short lived because resources are highly mobile. According to Barney (1991), the RBV substitutes these for two alternative assumptions. First the RBV assumes that firms within an industry may be heterogeneous with respect to the strategic resources they control. Second, the perspective assumes that these resources may not be perfectly mobile across firms, and thus heterogeneity can be long lasting. The RBV thus suggests that a degree of heterogeneity tends to be sustained over time (Peteraf, 1993). Some resource characteristics that prevent firms from moving toward resource homogeneity have been identified as: imperfect mobility, imperfect imitability, and imperfect substitutability (Barney, 1991). The resource-based view claims that the rationale for alliances is the value-creation potential of firm resources that are pooled together (Das and Teng, 2000). Reciprocal strengths and complementary resources, or a 'fit' between partners are identified as a premise for successful consortia. A key implication of the RBV is that organisations will search for partners that will bring about some sort of fit or synergy between their resources and those of their targeted partner. This view can also be applied to cooperation between universities. The strategic resources of a university that are interesting for international partners can be very diverse, ranging from physical resources like research facilities or library collections, to educational resources such as specific programmes or teaching methods, human resources, or more symbolic organisational resources like reputation and prestige. Although these are not traded on factor markets, these can be accessed through engaging in a cooperative arrangement.

The theoretical origins of the second issue – compatibility – can be traced back to economic sociology. The argument that more compatible partners will be more successful in collaboration is related to Evans' (1963) 'similarity hypotheses': the more similar the parties, the more likely a favourable outcome. While the resource-

based view propagates an economic rational perspective on organisational behaviour, sociological theories look upon the university as an institution embedded in powerful cognitive, normative and regulative structures (Scott, 1995). In neo-institutional theories and embeddedness theories, the social, political and cultural environment is brought in. Much of embeddedness research seeks to demonstrate that market exchange is embedded in larger and more complex social processes. This builds on Polanyi's (1945) notion of embeddedness which puts forward that "the human economy is embedded and enmeshed in institutions, economic and noneconomic". The institutional embeddedness of organisations provides opportunities as well as constraints for their behaviour. On the one hand the context they are embedded in provides them legitimacy, clarity, relationships with their stakeholders etc. On the other hand, it places organisations in an 'institutional straightjacket' or an 'iron cage' (DiMaggio and Powell, 1983). This is what Uzzi labels the paradox of embeddedness: the same processes, by which embeddedness creates a requisite fit with the current environment, can paradoxically reduce an organisation's ability to adapt (Uzzi, 1997: 57). In this way, traditional 'core competencies' have the potential to become 'core rigidities' that inhibit subsequent adaptation and success (Leonard-Barton, 1992). This notion, if applied to inter-organisational combinations, claims that the differences in the institutional environments where the organisations come from, can impact cooperation in a negative way. Interorganisational differences that can frustrate the performance of the collaboration are frequently related to the historical conformance of universities to their national institutional environment and to organisational structures, procedures and routines that have emerged and have become institutionalised in this national context.

The resulting paradox of cooperation becomes even more apparent if Parkhe's (1991) terminology of Type I diversity and Type II diversity is used. The former refers to the diversity in resources, which positively affects the performance of cooperation. The latter type of diversity entails the differences in institutional contexts in which the universities are embedded and is assumed to negatively influence cooperation. This paradoxical situation is illustrated by the figure below.

Figure 1: the paradox of cooperation



The problem however, with the theoretical framework above is that once a consortium is established, its level of performance would be set (as long as the composition of members would not change). However, like any other organisation, consortia can adapt to changing circumstances. In other words, consortia can employ mechanisms to enhance compatibility and complementarity in situations where these are not optimal. Mechanisms to cope with a lack of complementarity – which I have termed strategic coping mechanisms – are instruments that make a better fit of resources between the members possible. This can for instance take place by making the resources of the various members transparent, by stimulating individuals from member universities to exploit complementary resources more effectively or by acquiring resources that can exploit complementarity between member universities. Institutional coping mechanisms on the other hand, are employed to lessen the effect of the contextual differences of the participating universities in order to increase the compatibility between the participants.

In sequential terms, one can thus approach cooperation as a process where a joint decision on consortium objectives and a corresponding portfolio of activities is made, and where subsequently, activities are implemented in order to make use of value creating resources. After the implementation starts, the consortium can let those activities take their course, with a particular performance as the end result. However, pressures for efficiency and effectiveness will create a demand for more complementarity, which in turn will be handled through the employment of strategic coping mechanisms. Also, pressures for conformity and resistance will create a demand for greater compatibility, for which institutional coping mechanisms will be employed. The employment of such coping mechanisms will then improve the end result of the collaborative activities.

The framework above enables us to formulate four basic hypotheses on cooperation in consortia:

EXPLANATORY PROPOSITIONS:

- 1:** *The higher the level of complementarity between partners in a consortium, the higher the level of performance of the consortium.*
- 2:** *The higher the level of compatibility between partners in a consortium, the higher the level of performance of the consortium*

EXPLORATORY PROPOSITIONS:

- 3:** *In case of insufficient complementarity, consortia will employ strategic coping mechanisms in order to enhance performance.*
- 4:** *In case of insufficient compatibility, consortia will employ institutional coping mechanisms in order to enhance performance.*

From theory to practice: methodology and operationalisation

Research design

This study is based on both quantitative and qualitative data obtained by a case study approach. It is also based on a combination of explanatory and explorative research which is based on the results of my theoretical framework. The explanatory part is based on the two basic explanatory propositions which can be tested on the basis of a sound operationalisation of the concepts of performance, compatibility and complementarity. The explorative part is aimed at exploring the ways consortia

adapt to circumstances of incompatibility and a lack of complementarity, with the objective to identify specific types of institutional and strategic coping mechanisms.

A case study approach was chosen in order to detect the relations between compatibility, complementarity and performance. It is necessary to understand the nature of the consortia and the context it operates in. Yin (1984: 23) defines a case-study as "an empirical enquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between the phenomenon and context are not clearly evident; and in which multiple sources of evidence are used". These criteria also apply to this research and hence justify the case study approach. The next question then relates to the number of case studies and the choice of case studies. In my opinion, a limited amount of cases (in this study: 4) enables us to make general claims on the relation between compatibility, complementarity and performance, while the sample remains small enough to conduct in-depth analysis of the cases. The choice of case studies was rather problematic because the theory does not concern the visible features of consortia. Beforehand it was for instance not possible to make a selection of complementary and in complementary consortia and compatible/incompatible consortia. If these concepts would be directly visible, four case studies could have been chosen that would fit in this two by two matrix. This forced me to take a rather random sample of consortia. In the end a choice was made for a sample of consortia that are very diverse in size (ranging from 4 to 38 universities), consortia that existed for at least five years, and consortia that possess a rather high level of visibility. Since Europe shows a high level of activity in the field of inter-university cooperation, this region was a logical region to focus on. To not focus solely on European developments, one consortium was chosen outside Europe. The choice was made for Southeast Asia because the ASEAN region also displays a rather high level of integration and because some prior knowledge about higher education in this region already existed. Other obvious criteria were that the consortia should still be active and that the consortia would be willing to actively cooperate in the research. Ultimately this led to the choice for four consortia:

- Coimbra Group: a consortium of 38 traditional comprehensive universities spread over Europe, including countries outside the EU.
- European Consortium of Innovative Universities: a consortium of ten innovative and entrepreneurial universities spread over Western Europe.
- ALMA Network: a group of four universities from the Meuse Rhine Euregion covering parts of the Netherlands, Flanders, Wallonia (respectively, the Dutch and French speaking part of Belgium) and Nordrhein Westfalen (Germany)
- ASEAN University Network: a consortium of 17 comprehensive universities from the ten ASEAN member countries.

The data were obtained through a survey of the individual members of the participating universities. We received 188 questionnaires (a likely response of 39.2%) from 61 universities in 38 countries. In addition, to analyse the development of the consortia over time, their origins and the mechanisms that they employ, I interviewed a limited number of persons that represent the consortium as a whole (instead of the participating university). Also documents were used like memorandums of understandings, strategic plans, policy plans, minutes of meetings and workshops, etc.

Operationalisation and research instruments

In the operationalisation phase, the main concepts are translated and broken down into measurable items. Resources that determine the level of *complementarity* and factors that control the level of compatibility had to be deduced from secondary

sources and logical reasoning. For the case of complementarity, the resource based view does list particular types of strategic resources, and these have consequently been 'translated' for the case of universities¹. For this list of strategic resources respondents were asked to state whether these form an important motive for cooperation and whether they were present at the partner universities. The combination of these two questions for the total list of resources forms the measure for complementarity. For the operationalisation of *compatibility*, other typologies and categorisations of institutions were used (Ingram and Clay, 2000; Ingram and Silverman, 2002) and again, applied these for the specific cases of universities². Respondents were asked to state whether differences in these items negatively or positively affected cooperation and whether the consortium could be seen as homogeneous or heterogeneous for this specific item. Eventually, this leads to a certain level of compatibility. For *performance* three different measures were used. The first is 'Consortium Performance': a combined measurement of the importance and attainment of the consortium objectives. These formal objectives obviously differ for each of the consortia. Because measuring performance in this way makes performance dependent on the level of ambition of the consortium, the respondent were also asked to indicate the impact that cooperation within the consortium has had on a list of core activities of universities³. This second performance indicator was termed 'Individual Performance'. The third measure of performance, 'Relational Performance', is not so much related to the results of cooperation but to the process of cooperation. In this measure, respondents were asked how satisfied they were with the communication, coordination, the division of responsibilities and the commitment within the universities and among the universities. In the further presentation of the results of the analysis, only the first performance indicator will be used in this paper. The second indicator did not provide sufficient variation to include it the further analysis and interpretation of the data. On the basis of both the quantitative and qualitative data, the third indicator was found to actually be an intervening variable rather than a dependent variable (see next sections).

Since the concept of coping mechanisms in the research is a concept that needs to be explored in this study, this cannot be operationalised in a detailed way. Respondents were however asked if measures were taken for a list of possible obstacles in cooperation and if so, what kind of measures and by whom the measures were taken. Unlike the previous concepts, which were mainly measured through indications on a five point Likert Scale, the questions on the measures

¹ The following sources for complementarity were identified: proximity of a partner university; country of a partner university; access to new student markets; language of instruction in a partner university; financial resources of a partner university; physical infrastructure and facilities of a partner university; academic quality in research of a partner university; academic quality in education of a partner university; management and leadership quality in a partner university; the existing external relations of a university; the reputation of a partner university; standard of the use of ICT in a partner university.

² The following sources of incompatibility were identified: heterogeneity of legislation on higher education and the national higher education systems; heterogeneity of national culture of the countries in which the universities are located; heterogeneity of conceptions of academic work and ideas about how academic work should be organized; heterogeneity of the division of authority between government / universities / faculties / academics; heterogeneity of formal organisational procedures of the universities; heterogeneity of the character of the universities (based on size, scope and age).

³ These core issues were: the quality of teaching; the quality of research; the socio-economic development of the region; the quality of organisation & management; the competencies of the graduates; the reputation of the university; the enrolment of students; the university's access to funding.

taken, were open questions. As indicated above, three sources were used: questionnaires for the individual members of the participating universities, interviews for the consortium representatives and documents of the consortia. The questionnaire was designed on the basis of the operationalisation of the concepts above. In addition, questions were asked about the position of the respondent, his or her involvement in the consortium, and his/her affinity with internationalisation and international cooperation. The questionnaire was sent to all known university members that are or were involved in consortium activities. The questionnaires could be filled out on printed questionnaires as well as on a web based questionnaire and were sent in October 2002, with a reminder in December and the closing date in January 2003. The interviews were loosely structured and focused on the establishment of the consortium, the general development of the consortium and the changes that have taken place in the strategies and policies of the consortium on specific items related to complementarity and compatibility. Documents were obtained through the secretariats or offices of the consortia, through web searches and through articles published in journals.

Performance in higher education consortia: confronting theory with reality

Although this paper will not present a detailed analysis of the data (see Beerkens, 2004), a summary is presented in the two tables below. The values of the dependent and independent variables are given in weighted Z scores in table 1. The relation between 'Consortium Performance' and the independent variables is presented in table 2 and expressed in the R² and the Beta coefficients that resulted from the multiple regression analysis.

Table 1: Performance Indicators and Independent Variables (weighted Z scores)

Performance Indicators:	ALMA	AUN	Coimbra	ECIU
Overall Consortium Performance	-0.49	0.42	0.42	-0.42
Independent variables:				
Complementarity	-0.23	0.42	-0.02	-0.17
Institutional Fit	-0.40	0.31	0.18	-0.09

Table 2: R² and Beta coefficients of regression equations

	ALMA	AUN	Coimbra	ECIU
R ²	.398	.144	.301	.118
Beta (Complementarity)	-.279	.331	.322	.327
Beta (Institutional Fit)	.567	.063	-.089	.072

The analysis of the quantitative data made apparent that our theoretical models of cooperation did not predict the performance of cooperation and explain the process of cooperation to a full extent. This could to a large extent be explained on the basis of the qualitative data obtained from the questionnaires, interviews and documents. In this section we will reflect on the theoretical approaches and the proposed models of cooperation.

Universities and the Resource-based view

Our proposed relation between complementarity and compatibility was based on a resource-based view of universities. This approach stems from the field of strategic management where it has become popular as a counterpart of prevailing strategic management theories on competitive advantage in the 1980's that took the external environment as their point of departure. The resource-based view on the firm argues that firms can achieve competitive advantage if they possess the right resource base and that this competitive advantage can be sustainable if its strategic resources are valuable, inimitable, immobile and not substitutable. A resource-based view on inter-organisational arrangements perceives collaboration between organisations as an opportunity to gain access to these strategic resources, resources that would otherwise not be available to a firm because they are valuable, immobile, inimitable and not substitutable. Two valid questions on the use of this approach in this study are whether this strategic management perspective can also be applied to universities and whether it is applicable to Higher education consortia.

Strategic management principles have frequently been applied to universities and have amply been used in higher education research. The resource-based view however is rarely applied in the study of universities or university management. An explanation for this could be that strategic resources are hard to identify in contemporary universities. Obviously, the quality of education and research are important resources, but at the same time they are difficult to identify, let alone measure. Furthermore, many universities also try to distinguish or market themselves by emphasising other resources such as location, facilities or their external relations. It became apparent in this study that the quality in education and research and the reputation of partner universities are the most important characteristics to look for in possible partners for cooperation. According to the respondents, cooperation in the consortia has the most positive impact on the university's reputation. This seems to point to the impression that membership and cooperation in Higher education consortia is partly symbolic in nature, and that overall no real value is added to the resource bases of the participating universities. The reluctance and perceived needlessness of transferring authority to the consortium level and the unwillingness of partners to (financially) commit themselves strongly to consortium activities supports this impression.

The resource-based view sees the exchange of resources as the most important rationale for cooperation and for engaging in Higher education consortia. It was observed that it is not fully in line with reality to perceive Higher education consortia merely as vehicles for obtaining strategic resources. Although using this perspective in this study has proved to be useful, other approaches to cooperation in consortia are also applicable. Higher education consortia can for instance also be perceived as vehicles to reduce transaction costs, something that was mainly seen in the case of Coimbra. Through integration of specific activities, transactions such as student mobility and staff exchange can take place in an administrative framework by which such transactions can be executed more efficiently. Another, more political, rationale for cooperation is also apparent in some of the case studies. This is the collective representation of universities vis-à-vis international and regional authorities such as the EU or ASEAN. By operating collectively, consortia can open up policy channels to gain better access to these authorities. From the point of view of this rationale, Higher education consortia act as associations (in the meaning of representative bodies or lobby organisations as defined in chapter four). Another rationale is more instrumentally in nature: universities simply cooperate because this is demanded by several financial providers. Many of the EU programmes in education and in research

provide funding for cooperative research and education under the condition that applications come from multiple universities from multiple countries.

In spite of these alternative explanations, the resource-based view as a new way of looking at cooperation has been valuable. Inherent to strategic management research, the resource-based view is prescriptive in nature, and therefore it makes us aware of the opportunities that arise through cooperation in an international context. At the same time, it makes clear that from this perspective, these international opportunities remain rather unexploited by the consortia that were analysed in this study. Sometimes this was because universities simply did not aim for it. In other cases, it has become clear that many universities – and countries – are not yet prepared or able to engage in intense and close collaboration with foreign partners.

Universities and their Institutional Embeddedness

The lack of willingness or capacity to be involved in close and intense cooperation is related to the institutional contexts in which the universities operate and have developed. This institutional perspective was used to support the notion that members in a consortium also have to share some similarities in order to cooperate. This proposition was based on the assumption that universities are, much more than for instance firms, embedded in their (nationally and organisationally moulded) institutional contexts. The study has shown that this assumption does not need to be rejected. The impact on cooperation is however less straightforward than expected.

First, it has become clear that different institutional forms influence cooperation in different ways. In all consortia that were studied, the impact of centralised institutional forms like national laws and organisational rules were perceived to have a negative impact on cooperation. This was much less the case for decentralised institutional norms like culture, norms and beliefs. The latter were by many seen as one of the interesting factors involved in cooperation. Academic and cultural diversity thus can – with the right attitude – be a main source of complementarity instead of incompatibility.

It was also observed that non-academics seem to place more emphasis on the institutional differences in their assessment of the performance of the consortia (while academics seem to place more emphasis on complementarity factors). This would mean that the institutional embeddedness of the university is more apparent in the eyes of non-academics than for academics. This could be explained by the reasoning that the activities on which academics cooperate are of a more universal nature than is the case for non-academics. In this respect it would be interesting to compare cooperation in different academic disciplines. Sciences for instance could be assumed to be less context related and more universal than social sciences and humanities, and would therefore, in this line of thinking, present less sources of incompatibility in cooperative activities.

In general, there is not a strong relation between performance success and compatibility. Only in the cases where the institutional fit between the universities is perceived as low, this has hampered cooperation. This leads us to the conclusion that a minimum level of institutional fit is required, but that universities and their staff are very well capable to handle obstacles that arise due to incompatibility. On the other hand, it was also observed that most consortia do not pursue very close cooperation and tight integration. It is likely that if the intensity of cooperation increases, the discrepancies in institutional contexts become more apparent and

more obstructive to cooperation. In this regard it is useful to keep attention for compatibility factors in cooperation, especially in cases where tight integration is foreseen, such as (private) joint ventures set up by universities from different countries and (future) mergers between higher education institutions from different countries.

This conclusion and the data do not necessarily point to a convergence of the institutional contexts of universities. On the contrary. The differences in national institutional contexts are still widely apparent and still substantially influence the activities of universities in the eyes of the respondents in this study. What can be observed however, is that universities also become embedded in regional contexts. Naturally, this regional institutional context is likely to become a bigger influence in the case where regional institutions are stronger. Even though the national context is evidently predominant, for European universities the regional context has an increasing influence on a university's behaviour. In the case of ASEAN the building of regional institutions is still in an earlier stage compared to Europe, but aspirations like joint accreditation and joint credit transfer systems gives the impression that this region is going to a similar direction (albeit not necessary in the same speed). What is especially relevant for the study is that adaptation to this regional context is beneficial for the performance of consortia. The consortia that were very much connected to regional (political) institutions and that had adapted their activities to the programmes and policies (and the available funding) of these institutions (e.g. the European programmes for mobility and cooperation), seem to be more successful. Thus, like in organisational studies, where the adaptation to the external environment of organisations is seen as an important determinant for an organisation's performance, this argument can be extended to consortia as well: regional Higher education consortia that adapt to their regional environment are more successful.

But also internally, Higher education consortia can be approached from an organisational point of view. If Higher education consortia are seen as a specific type of organisations, characteristics can be detected that are also typical for universities as specific types of organisations. Van Vught (1989: 52-54) in this respect points to the authority of professional experts, the knowledge areas as the basic foci of attention and the related organisational fragmentation, and the extreme diffusion of decision making power. These characteristics are also apparent in Higher education consortia. The 'leadership driven' character of these consortia can then partly explain the dissatisfaction found by academics in the consortia. In the case of universities van Vught (1989: 54) puts forward an argument that can easily be extended to Higher education consortia:

Confronted with detailed regulation and with an extreme restriction of their behaviour, the scientists and teachers within the higher education institutions (and in our case: Higher education consortia; EB) may feel the disillusionment of not being able to explore the paths their professional consciousness stimulates them to go.

The process of collaboration

Above, also a perspective on cooperation in sequential terms was given. Cooperation was approached as a process where a joint decision on consortium objectives and a corresponding portfolio of activities was made, and where subsequently, activities were implemented in order to make use of value creating resources. After projects are implemented, the consortium can let activities take their course, with a particular

performance as the end result. However, in the implementation phase, pressures for effectiveness and efficiency will call for more complementarity, while pressures for conformity and resistance demands greater compatibility between the partners.

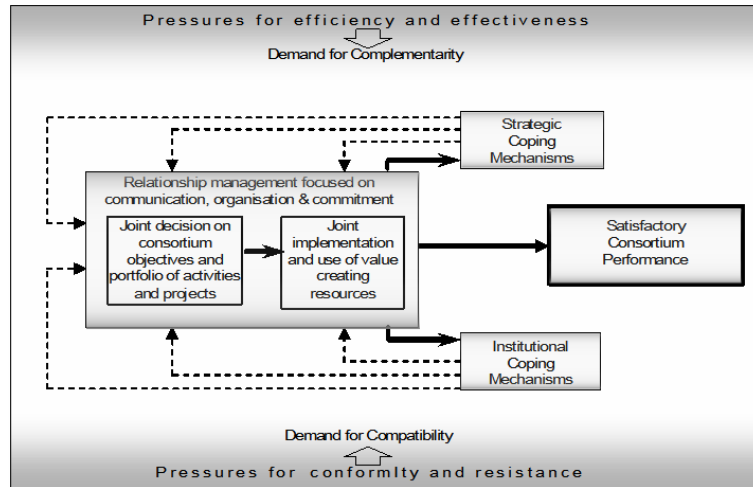
This approach has proved useful as a way of looking at cooperation, but nevertheless it does include some flaws. First of all, it looks at the consortium as a whole, while it might be better to perceive the consortia under investigation in this study as a collection of cooperative activities. One of the dimensions that was distinguished was the fact that the HEC's are multi-point alliances, engaged in a wide array of activities. This is also likely to result in different outcomes and different levels of success for different consortium activities. But it is also possible that different types of activities develop in different ways and that it therefore is difficult to develop a general sequential model for the process of cooperation in consortia. It was observed that in some projects in some consortia, the consortium as a whole plays an important role in the initiation of the projects and the facilitation in the early stages, but where they continue more or less outside the framework of the consortium after they have matured.

The most evident flaw in the approach has been the lack of attention that is paid to the relations between partners. This of course is because relational performance was initially regarded as a performance indicator. It has however become clear through the case studies that the relations among the individuals of the member universities play an important role (in the employment of complex coping mechanisms) and therewith have an impact on the achievement of the consortium objectives. Because of the importance of the relations between the persons involved, communication, organisation and commitment within the consortium become imperative factors in the ultimate outcomes of cooperation. The attention for relational issues should therefore also be incorporated in the model. Improving the relations between those involved in the consortium activities is best focused on the provision of sufficient and good communication, providing a clear organisational structure for the activities and promoting commitment of the member universities and their representatives. The attention for the relational issues should be apparent throughout the process of cooperation, from the decision making on the broad objectives to the implementation of concrete activities.

A final adjustment that has to be made to this sequential model of collaboration and coping mechanisms is the inclusion of 'feedback loops'. Once coping mechanisms are employed, this does not automatically lead to the progress or finalisation of projects, but coping mechanisms frequently imply that the consortium needs to take a step backwards. This can take the form of seeking new members, of finding new objectives or new activities, applying different incentives in the implementation of activities. In some cases this would imply minor adjustments, while in others this might lead to a whole new direction of the consortium. These mechanisms will then be employed in the expectation that the activities will develop correctly after implementing them. If new problems are encountered due to incomplementarity or incompatibility, new coping mechanisms need to be employed and one needs to return to the appropriate phase. Subsequently the consortium attempts to arrive at the ultimate result which is satisfactory enough for the members. The last statement also adds an important issue. Most of the objectives of consortia are rather ambiguous and do not contain a specific and concrete end result. Consortia will not always continue until optimal results are achieved but they will strive to an end result where there is a consensus on the adequacy of the level of goal achievement. In other words, consortia appear to be more geared towards the performance

satisfaction than towards the performance optimisation. The resulting sequential model of cooperation is portrayed in figure 1.

Figure 2: A sequential model of cooperation



An explanatory model of collaboration

In our explanatory model of collaboration and coping mechanisms, it was argued that there is a positive relation between complementarity and performance and between compatibility and performance. The case studies have shown that this is the case only under particular conditions.

Performance will be affected positively by the existence of complementarity under the condition that the complementary resources are actually recognised, utilised and exploited, which can be accomplished if the appropriate strategic coping mechanisms are employed. In turn, strategic coping mechanisms can be more effectively applied if there is adequate communication, organisation and commitment. The proposed positive relation between complementarity and performance can thus be maintained under the condition that the suitable coping mechanisms are employed in order to recognise, utilise and exploit the complementarity in resources. Furthermore, this positive effect will benefit from the presence of good communication, clear organisation and a high level of commitment.

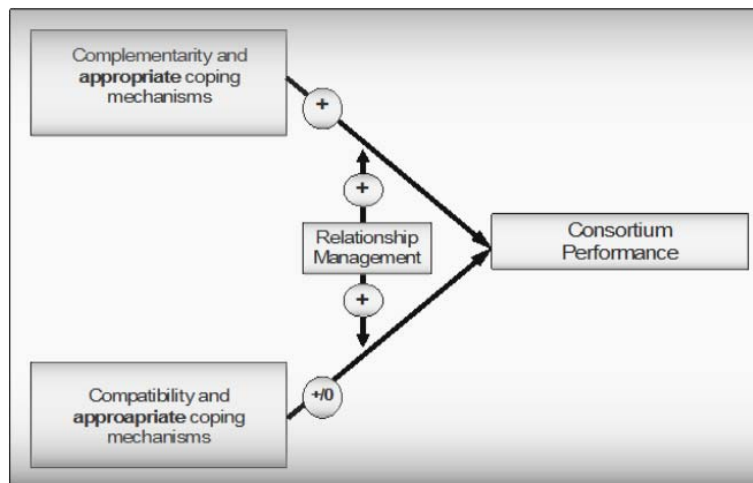
Compatibility is also related to performance, but not as linear as proposed. In this case, it might be better to claim that the level of incompatibility is negatively related to performance. For the achievements of objectives, a minimum level of compatibility is needed. If the level of institutional fit is insufficient, this negatively influences performance. If minimum requirements are met, this influence diminishes. However, it is uncertain whether this is the case for more complex forms of integration of activities. It remains likely that the need for a good level of fit becomes all the more necessary if complex forms of cooperation are aimed for. In our cases, the activities within the frameworks of the consortia in general do not require a high level of integration. It is probable that if tight integration is required, the compatibility of institutional contexts does affect the success of cooperation. According to the complexity of the cooperation, consortia can employ institutional coping mechanisms in order to make differences transparent, to communicate them to the persons involved. More complex institutional coping mechanisms can be employed when it is

necessary to reduce or totally nullify the differences. Such complex mechanisms encompass mutual adjustment or incorporation of differences. Again, such complex mechanisms require adequate communication, organisation and commitment.

The employment of coping mechanisms will thus not always have a (positive) impact, but they need to be suitable for the level and nature of incomplementarity or incompatibility encountered in the course of cooperation. It is thus the mixture of existing complementarity and compatibility with the appropriate strategic and institutional coping mechanisms that affect performance. Furthermore, the effectiveness of the employed coping mechanisms will benefit from good relation management in the form of ample communication, clear organisation and sufficient commitment.

This brings us to the final and most significant change to the model: the quality of relationship management as an intervening variable. Relation management refers to the measures that consortia take in order to improve communication, the creation of a stable and clear organisational structure and the increase of commitment. A good communication strategy and a clear and transparent organisation of a relatively stable nature support processes of socialisation in sub units of the consortium which then will reflect on the consortium as a whole. It is argued here that consortium management is a combination of the employment of coping mechanisms to increase complementarity and compatibility in combination with 'relationship management', that is the facilitation of the rise of commitment through communication and organisation. If this relationship management is conducted satisfactorily, more complex coping mechanisms can be employed, and in turn, complementarity and compatibility between members can be better exploited which again increases the chances for success for the consortium as a whole.

Figure 3: An explanatory model of cooperation



The alteration of our perception on the relations between complementarity, compatibility and performance lead to the revised model displayed in figure 3. Compatibility thus matters up till a specific level and coping mechanisms need to be appropriate for the level of complexity of the objectives. The new variable in the model is the quality of relationship management, or in other words, the satisfaction with the communication, organisation and commitment in the consortium.

Furthermore, the importance of this added variable increases as the complexity of the objectives increases.

This model differs substantially from the hypothesized explanatory model on four points:

- The model only attempts to explain consortium performance in the meaning of the attainment of substantial consortium objectives, and does not focus on the impact of cooperation on individual member universities.
- The employment of institutional and strategic coping mechanisms in the new model do not impact the performance of cooperation autonomously. Their impact on the performance in the revised model is situated in their appropriateness or suitability in relation to the level and nature of (in-) complementarity/(in-)compatibility.
- The relation between compatibility and performance is no longer assumed to be linear. In the new model it is claimed that a particular minimum level of compatibility is required in order for the consortium to perform.
- The most obvious change is the inclusion of 'relation management', where the management of the relations between those persons involved in consortium activities positively improves the effectiveness of the coping mechanisms that are employed.

Conclusions: critical factors in the performance of consortia

It was argued that the performance of these consortia can be explained on the basis of the complementarity in the consortium, the compatibility in the consortium and the coping mechanisms employed by the consortium. On the basis of the comparative analysis of the case studies, the following critical aspects of higher education consortia can be identified:

First, the consortium has to exist of members that possess resources which are strategically valuable for the other members. In plain language, this means that the partners in a consortium have to be able to offer each other something. If this would not be the case at all, the consortium as a vehicle for resource exchange would be pointless. In general it was observed that various sources of complementarity can nearly always be found between groups of universities. The fact that complementarity is present however, does not always mean that they are known by the right persons and that they are utilised and exploited.

This brings us to the second aspect. Sources of complementarity need to be accompanied by the appropriate strategic coping mechanisms. These coping mechanisms are aimed at the acquisition, identification, dissemination and exploitation of complementary resources. In general, closer cooperation and tighter integration requires more complex coping mechanisms that are aimed at the exploitation of complementary resources. This can be done by creating sufficient incentives and motivations for staff of universities to commit themselves to consortium activities. This can be accomplished by adapting the consortium activities to the existing activities in the universities, by adapting them to wider regional programmes in order to access funding or by creating internal (financial) incentives or obligations to become active in the consortium activities.

A third critical aspect of higher education consortia is related to the differences in the institutional contexts in which the members operate. It was claimed that higher

compatibility in the consortium leads to higher performance of the consortium. It was however observed that the condition of compatible backgrounds is valid in order for cooperation to be successful. For less complex forms of cooperation, only a minimum level of institutional fit has to be present in the consortium. It is argued however that when cooperation becomes more complex, a higher level of institutional fit becomes necessary.

The fit between institutional contexts however, is not something that universities fully control. They can however employ institutional coping mechanisms in order to deal with the problems that arise through difference, in order to lessen those differences or in order to abolish the differences. Dealing with obstacles generally occurs through information on existing differences in institutional contexts of the members, and through familiarisation with existing institutional contexts through meetings, seminars or courses. Another way of efficiently dealing with such obstacles is to set up joint administrative structures to efficiently deal with specific exchange requirements. The more complex institutional coping mechanisms are aimed at actively changing the differences between members. Here one can refer to mutual adjustment of universities and the abolishing of differences through incorporation of these differences.

Additional characteristics that contribute to the performance of higher education consortia are related to what we have termed relationship management. In the case of close cooperation and tight integration this becomes more important. Relationship management refers to the measures that consortia take in order to improve communication, the creation of a stable and clear organisational structure and the increase of commitment. A good communication strategy and a clear and transparent organisation of a relatively stable nature support processes of socialisation in sub units of the consortium which then will reflect on the consortium as a whole.

A final point that can be made here is that a consortium, like any other organisation, needs to adapt to its internal and external environment. This means that when the activities are compatible with the prevailing norms and beliefs in the universities, and with the ongoing developments on the regional level, they are more likely to be successful. However, when this results in a risk avoiding strategy, this will not always correspond with the strategic global needs and opportunities that a consortium and its universities face in an increasing competitive environment. The seizing of those opportunities frequently requires taking risks that are not in line with traditional views of the university, but that will more effectively exploit the complementarity in the consortium.

Closing Remarks: Global Opportunities and Institutional Embeddedness

This study analysed the performance of higher education consortia in the context of opportunities universities face in the contemporary environment. The behaviour of universities across national and organisational boundaries is fascinating as universities can be considered organisations that are strongly embedded in their national and organisational contexts. This paradox manifested itself in higher education consortia as well. In this respect, the main focus was on the 'diversity paradox' in international cooperation, where partners need to be 'similar yet different'. This study showed that inter-organisational arrangements do not only have to balance similarity and diversity, but also have to find the right balance in the

margins between conformity and innovativeness, ambition and reality, and the adages of 'cooperating to compete' and 'cooperating to cooperate'.

It was shown that conformity to both the internal context of participating universities and the external regional context has been a successful strategy in cooperation. Conformity to existing structures might, however, restrict universities in their entrepreneurial behaviour. Universities, and the consortia they are involved in, can decide to avoid the risks of new innovative ventures through compliance with existing policy actors and prevailing attitudes of their stakeholders. This also relates to the balance that needs to be found between ambition and reality. It was observed that activities which correspond with widespread and prevailing ideas, beliefs and attitudes have been more successful than those that challenge the existing order. This however can lead to situations where opportunities and complementary resources in consortia are not (fully) exploited. If ambitions are set too high however, one runs the risk of too much resistance which can ultimately lead to a lack of concrete activities. The adage of 'cooperating to compete' has been repeatedly coined in order to typify the contemporary inter-organisational arrangements in business, but also in higher education. The replication of business models under the heading of strategic alliances, joint ventures and consortia in the field of higher education has illustrated this. Arguments were presented that supported the perception of the contemporary environment as increasingly (internationally) competitive. The study has however indicated that the adage of 'cooperating to cooperate' shows more conformity with existing ideas of the university, at least in the consortia that formed the case studies in this research.

In retrospect, it can be concluded that the opportunities that are available, or could be available, in higher education consortia (and probably also in other inter-organisational arrangements) are rarely fully exploited. The most successful forms of cooperation are still based on rather loose structures that do not significantly impact the organisations of the member universities. This does not imply that they fail in their task, since a tight integration of activities is not part of their agenda. Where this is the case, non optimal outcomes of projects or activities are more likely. Close cooperation between organisations that attach considerable value to their autonomy and independency will be very difficult, since university leaders will be hesitant to delegate authority to a higher level and academics will be hesitant to shift their loyalties.

Nevertheless in the national domain, national circumstances have frequently led to a move from voluntary cooperation towards imposed amalgamation. Parallel developments on the global or regional level are not likely to occur in the near future, but pressures for increased efficiency and effectiveness alongside demands for broader international opportunities for staff and students are likely to push universities into closer and more solid arrangements with foreign partners. Together with an increasing emphasis on entrepreneurialism and the copying of business practices, this might lead to unanticipated arrangements between universities in the future. If such developments are accompanied by closer integration in the political and European domain, and also in that of higher education, such as in the European Bologna process, obstacles in the way of integration are also likely to be reduced. For now however, it is clear that cooperation in fields where it is seen as an inherent part of academia is more likely to be the standard than when cooperation is moulded on a business-like model. The cooperation that places emphasis on cross-cultural exchange and intercultural learning for students and staff is still most successful, at least in the higher education consortia in this study.

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