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### Academic Entrepreneurialism and Private Higher Education (in a Comparative Perspective) (DRAFT)

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### **<u>1. PUBLIC AND PRIVATE INSTITUTIONS: THE KEY FEATURES OF</u>** <u>"ENTREPRENEURIAL" UNIVERSITIES AS A WIDER CONTEXT</u>

It seems very difficult to analyze private universities in Europe (including those selected to be analyzed as the EUEREK case studies) in the context of entrepreneurialism in the form the concept has emerged in the basic literature and available case studies. The private sector in higher education in Europe, with several exceptions (such as e.g. Portugal and Spain), from the point of view of both numbers of institutions, share of enrolments in the sector, and study areas offered, has been an educational phenomenon of the transition countries. In some countries (such as e.g. Sweden or the Netherlands), nominally "private" institutions are funded in practice with public money, in various forms, under different umbrellas and with different allocation models applied. Consequently, leaving the discussion on what "privateness" and "publicness" of an institution means for a different occasion, the paper will be largely based on experiences of the private sector from transition countries.

At the same time, the conceptual framework currently used to analyze "entrepreneurialism" in higher education seems somehow restricted in use to public sector institutions, and rightly so. Very few scholars ever refer to private institutions in their discussions of entrepreneurship. And if they do, they often mean selected top US universities (as Burton Clark in Sustaining Change in Universities where he called Stanford "the foremost entrepreneurial university in the world" in the last half of the 20<sup>th</sup> century, 2004: 135 – but in the context of public institutions briefly studied such as MIT, University of Michigan at Ann Arbor, UCLA, North Carolina State University and Georgia Institute of Technology, Clark 2004: 133-166). Clark's classical case studies in Creating Entrepreneurial Universities (1998) were all about European public universities and the only one that stood out - The Chalmers University of Technology in Sweden - had indeed "opted-out" of the Swedish public education system but remained funded by the state ("under a 15-year contract with the national Ministry of Education, Chalmers would continue to receive annual state support based on formulas commonly used across all the universities", as he immediately explained, Clark 1998: 84). On European grounds, not only experiences with private higher education have been very limited – but also the emergent concepts related to entrepreneurialism derived from analytical work on the public sector and rarely touched on the Shattock and Williams (in Shattock 2004) applied a concept of private sector. "entrepreneurialism" to (somehow alien) universities in transition countries - in Russia. But again they were public universities. Barbara Sporn, while analyzing "building adaptive universities" (2001) focused on four public (the University of Michigan at Ann Arbor, UC Berkeley, St. Gallen Universität in Switzerland and Wirtschaftsuniversität Wien in Austria) but also on two private institutions, including one vocationally-oriented in Europe (New York University and Universita Bocconi in Milano, Italy).

The present paper, in more theoretical terms, is based on the conceptual work on "entrepreneurial" and "proactive" universities by Clark (1998, 2000, 2001, 2004a, 2004b), "self-reliant" and "enterprising" universities (by Shattock 2000, 2004a, 2004b, 2005 and Williams 2004) and Sporn's notion of "adaptive" universities (1999a, 1999b, 2001). In empirical terms, it is based on case studies of entrepreneurial universities, largely from Western Europe (and Central and Eastern Europe), mostly but not only EUEREK case studies. We will have a closer look at

entrepreneurialism of private institutions studied within the EUEREK project in the context of what Clark, Shattock, Williams and Sporn suggest mostly for the study of public institutions. Therefore we need a context of entrepreneurialism to view the EUEREK studies of private institutions.

The EUEREK case studies of private institutions have included: the University of Buckingham (UK), Jönköping University (Sweden), TCUM – Trade Cooperative University of Moldova (Moldova), UCH – the Cardenal Herrera University (Spain), WSHIG – the Academy of Hotel Management (Poland), and the University of Pereslavl (Russia). They are relatively young institutions: almost all were founded in 1990s – in the UK (1976), Poland (1993), Russia (1993), Sweden (1994), Moldova (1993), and Spain (2000). Almost all are located outside of capital cities. The reasons for founding them varied from political/ideological (UK), individual's passion (Poland, Russia), political/regional (Sweden), and religious/confessional (Spain). As the EUEREK report on the University of Buckingham puts it,

The reasons for establishing an independent (i.e. private) university in the UK were for its founders an increasing uneasiness about the alleged weakened autonomy of the British university system that was implied by the growing reliance on state funding, and – as they saw it – the over-regulation of university affairs by the University Grants Committee, together with the idea that university students who paid fees would be better motivated than students in the state system (EUEREK case study: University of Buckingham).

#### And elsewhere:

the concept of an independent university was essentially political in the sense that it was a reaction against a belief that universities were being subjected to increased and undesirable state controls, and the design of the academic programme was conservative and driven by academic values which were soon to be challenged by the world of mass higher education (EUEREK case study: University of Buckingham).

What seems absolutely crucial from the perspective of entrepreneurialism is that they represent, in general, fundamental reliance on tuition fees as a source of income: almost 100 percent (Spain), 94-99 percent (Poland), 72 percent (Russia), 70 percent (UK) and Moldova (exact data n.a.). Not surprisingly, the exception is Sweden (0 percent). Small research groups are formed in the UK and Spain but no major financial impact of them is actually reported. Also no endowment income is reported, and sometimes strong reliance on bank loans occurs (Poland, UK). In almost all cases (especially in interviews), such characteristic expressions as "to survive", "survival", "uncertainty about the future" etc occur. As the first vice-chancellor of Buckingham put it in an interview,

you can't run an independent university on fees alone. Buckingham has no other source of income, no endowment income, and it tries to survive on fees alone. The University does not have enough income and it is desperately struggling to survive. If there is not enough money, its solution is to cut somewhere. There is no money to do research (EUEREK case study: University of Buckingham). Do private institutions in the EUEREK sample view themselves as entrepreneurial? The Polish case develops a complexity of the issue in Poland and Central and Eastern Europe where generally few or no public subsidies are available for the private sector:

Academic entrepreneurialism in a strict sense of the term would be difficult to apply to the Polish private sector institutions – which are completely reliant on external funding, and almost completely, in the vast majority of cases, cut off from state subsidies for both research and teaching. In the case of WSHIG, state subsidies in the last 10 years were 0 PLN. Entrepreneurialism in this context, paradoxically, might have a new meaning: independence from student fees, through closer links with the industry, selling services and research results, engaging in EU-funded projects and programs, perhaps especially important in financial terms – enrolling international students etc. Complete reliance on student fees from Polish students would mean the danger in financing the institution every year, as the student numbers go up and down.

Out of necessity, while entrepreneurialism in the public sector means growing reliance on non-core funding, including student fees and state and industry research funds, in the private sector the single most important factor may be the widening of educational offer and international students paying fees a few times higher than local students. In the case of Poland, the aim of every private institution is to have both BA and MA studies rather than merely BA studies (to keep students for 5 instead of 3 years); to have as versatile an educational offer as possible within the operating license from the Ministry; and to bring students from abroad (EUEREK case study: WSHIG - Poland).

There is an interesting note from the vice-chancellor of Buckingham which could be referred directly to the Polish case: if entrepreneurialism meant risk-taking, especially financial risks, with the possibility of going bankrupt by the institution (or its founder), then both Buckingham and WSHIG would be very entrepreneurial indeed. In the context of the present EUEREK study, entrepreneurialism is a much wider context, though, and applies mostly (and rightly so) to public institutions which seek additional funding, are innovative etc. (and which generally do not risk going bankrupt). Interestingly, in Poland where there exist over 300 private higher education institutions, no more than 2-5 have actually went bankrupt (in technical terms: were closed down by the Ministry) in the last 15 years. As the vice-chancellor says,

My definition of entrepreneurialism is of an entity that takes risks – which if they fail may lead to bankruptcy – in a competitive market. By that definition Buckingham is the only entrepreneurial university in the UK, because the state – via its funding and research councils – pumps some £10 billion annually into the universities, it sets their prices, it fixes their numbers of students according to quotas, and it will never allow a university to go bankrupt (vide Cardiff during the 1980s) (EUEREK case study: University of Buckingham).

The Spanish EUEREK case study confirms that the institution regards itself as entrepreneurial:

The interviewees were convinced that the university is becoming increasingly entrepreneurial and that changes in organisational structures have favoured this trend.

Furthermore, when compared with other universities within the Foundation, they believe that theirs has evolved further. ... In general the interviewees thought that entrepreneurship is actively encouraged at the UCH, and that, despite the fact that there are some areas where it is easier to encourage entrepreneurial attitudes, in general it can be said that an entrepreneurial culture exists (EUEREK case study: UCH - Spain).

It is interesting to note, though, discrepancies between descriptions (and feelings) given by academic staff on the one hand and managers, rectors or deans on the other. To quote the Spanish case study again:

"Most of the entrepreneurial activities have an educational and religious purpose. Mostly they do not cover costs and they are not obliged to although it is also true that some activities generate profits which are used to set off losses incurred by others" (Academic Staff), as opposed to "Our entrepreneurial activities are entirely motivated by economic factors. They form the basis for future funding" (General Manager) (EUEREK case study: UCH - Spain).

At Buckingham, the first vice-chancellor claims that "Buckingham is probably the least entrepreneurial university in the country" while others claim that it is quite entrepreneurial. In Poland, Russia and Moldova, no feelings about being specifically entrepreneurial were reported – instead references to being "innovative", "unique" etc. (especially in comparison with some old-style vocational public institutions) were made.

The common feature of the EUEREK private institutions are is that they are very small or relatively small institutions within respective national higher education systems (of a size from a few hundred students in the UK, Russia – to a few thousand students in Moldova, Poland, Sweden, and Spain).

(Note: in the majority of generalizations about EUEREK private institutions, the private university in Sweden – Jönköping University – does not fit, though, so unless otherwise stated, the Swedish case is a separate case – the most important difference is in funding; as opposed to all other EUEREK private institutions, Jönköping University does not charge student fees and has full access to public research funds which, from a comparative perspective, makes it similar to public sector institutions. It reminds of the Chalmers University of Technology in Sweden as analyzed by Clark: nominally a private institution, with full access to public funding on equal terms with other public universities).

In most EUEREK cases studied, they are vocationally-oriented and have small research ambitions (and, at the same time small research opportunities). In most cases, they are almost fully dependent on student fees and have very small or zero public subsidies. Often, they are born out of visions and ambitions of entrepreneurial individuals (academics and non-academics). The Russian case study mentions the role of the "strong leadership of the founder of the University" as a crucial factor and a source of its success. As the Polish case study puts it,

WSHIG's opening and development has been driven by a single motive of its founder: to provide affordable higher education in the area for which there was no education available a few decades ago: tourism, hospitality, and culinary arts. There has been a

vision of its founder, implemented over 13 years now, with huge organizational and financial success, against the odds (EUEREK case study: WSHIG - Poland).

### 2. DEMOGRAPHICS OF PRIVATE HIGHER EDUCATION AND THE PRIVATE SECTOR IN CENTRAL AND EASTERN EUROPE

The global demographics of private higher education is the following: the major center of the sector is East Asia, with about 80 percent of all students enrolled in privates in Japan, South Korea, Taiwan, and the Philippines; in the USA (surprisingly) – only 20 percent; in Western Europe – on average 10 percent or less; in Latin America – over 50 percent in Brazil, Mexico, Colombia, Peru, and Venezuela, and finally in Central and Eastern Europe, and some post-Soviet republics – where the most rapid growth took place after 1989. In most transition countries, both higher education enrollments in general, and the share of the private sector in overall enrollments changed dramatically. A table on changing enrolments in 1989-1999 is given below:

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Czech Rep.	16.6	17.2	16.0	16.6	17.5	18.6	19.8	21.1	22.1	23.7	26.0
Slovakia	13.4	14.3	14.1	14.6	15.4	17.1	18.3	19.5	20.3	21.5	22.5
Poland	16.0	17.0	17.1	18.6	21.2	24.0	27.2	30.8	34.8	39.2	42.8
Hungary	12.2	12.1	12.3	12.9	14.1	15.8	18.0	19.7	25.2	27.5	28.9
Slovenia	23.1	22.9	25.5	26.1	18.2	30.1	31.3	34.4	44.0	51.0	
Croatia Macedonia	17.4	18.1	18.1	20.1	21.2	21.2	22.2	23.5	24.2	25.1	26.1
Yugoslavia	19.3	17.6	16.0	16.2	15.7	16.3	17.1	17.0	17.5	17.0	19.7
	22.2	20.6	17.6	18.7	18.4	18.4	20.2	21.6	23.6	23.6	27.1
Albania	6.9	7.8	8.8	11.0	10.2	9.7	10.2	11.5	11.8	12.5	12.7
Bulgaria	22.0	26.2	25.7	27.0	28.1	30.3	33.7	34.9	34.1	35.2	34.7
Romania	7.2	9.2	11,3	12.8	13.5	13.5	17.5	18.6	19.1	21.3	23.4
Estonia	36.1	34.4	32.2	29.1	28.2	28.9	31.7	34.9	38.3	42.5	45.5
Latvia	20.5	20.5	20.8	19.1	17.9	18.3	21.6	31.1	35.9	42.0	46.5
Lithuania	27.8	26.5	22.8	21.3	20.7	21.1	22.8	25.9	30.5	34.4	39.2
Belarus	22.9	23.0	22.5	22.7	21.8	21.9	22.7	23.9	25.6	28.4	30.0
Moldova	16.2	15.7	14.9	13.2	12.7	12.9	13.7	14.2	18.3	19.9	20.8
Russia	24.8	24.6	23.9	22.5	21.8	21.6	22.4	23.5	25.6	28.0	31.4
Ukraine	22.3	21.7	21.1	20.1	19.2	20.3	20.8	22.2	25.5	28.0	29.7

Armenia	19.3	20.1	19.5	16.9	13.5	16.6	15.2	15.0	15.3	16.0	16.0
Azerbaijan	11.9	12.6	13.1	12.3	12.0	11.5	12.7	13.3	12.8	13.4	14.5
Georgia	19.1	21.7	23.8	26.2	19.4	28.6	26.1	27.0	26.2	26.0	29.0
Kazakhstan	18.1	18.7	17.7	17.7	16.9	16.9	16.6	16.2	18.7	20.4	23.3
Kyrgyzstan	13.2	12.9	11.5	11.5	10.7	11.2	12.9	15.3	19.0	24.8	29.8
Tajikistan	11.5	11.9	11.6	11.6	11.2	11.9	11.8	12.1	11.9	11.3	11.5
Turkmenistan	10.2	9.9	8.6	8.6	8.1	7.8	6.4	5.7	5.0	4.4	3.9
Uzbekistan	15.0	15.2	13.4	13.4	11.3	9.4	7.6	6.6	6.1	6.0	6.2

Table 1: Higher education enrolments in Central and Eastern Europe (gross rates, percent of 19-24 population). *Source:* A Decade of Transition: the MONEE Project, CEE/CES/Baltics, UNICEF Innocenti Research Centre, 2001 found in Pachuashvili (2006).

The enrollments in the private sector were also changing, both in the 1990s and in the last 5 years. For the last five years, see the table below:

Table 2: Private Higher Education Enrolments as the Share of the Total Enrolments in Central Eastern European Countries

	1999- 2000	2000- 2001	2001- 2002	2002- 2003
Albania	0.0	0.0	0.0	0.2
Belarus	14.9	13.0	14.0	17.3
Bulgaria	11.5	11.5	12.6	13.4
Croatia	1.4	1.4	2.3	2.7
Czech Republic	0.3	1.0	1.5	3.2
Estonia	25.2	25.2	22.0	20.3
Hungary	14.1	14.3	14.0	14.2
Latvia	12.7	12.7	18.8	22.9
Lithuania	1.4		2.4	4.5
The FYR of Macedonia	0.0	2.3	0.0	3.5
Moldova	13.1	22.6	25.0	20.0
Poland	28.4	29.9	29.4	29.4
Romania	29.6	28.9	25.2	23.3
<b>Russian Federation</b>	7.0	10.0	14.5	12.1
Slovak Republic		0.7	0.7	0.4
Slovenia	5.1	4.3	1.6	2.9
Ukraine	7.5		10.5	12.0

*Source:* CEPES Statistical Information on Higher Education in Central and Eastern Europe, at <u>http://www.cepes.ro/information\_services/statistics.htm#1</u>, found in Pachuashvili (2006).

Also the number of private higher education institutions was growing substantially. The data below show the numbers of private and public institutions for the academic year 2003-2004:

Country	Number of institutions						
	Public	%	Private	%	Total		
Albania	11		2		13		
Belarus	43	73.0	16	27.0	59		
Bosnia and Herzegovina							
Bulgaria	37	72.5	14	27.5	51		
Croatia	84	85.7	14	14.3	98		
Czech Republic							
Estonia	13	35.0	24	65.0	37		
Hungary	31	45.6	37	54.4	68		
Latvia	30	61.2	19	38.8	49		
Lithuania	31	64.6	17	35.4	48		
The FYR of Macedonia	3	60.0	2	40.0	5		
Moldova	15	36.6	26	63.4	41		
Poland	126	31.5	274	68.5	400		
Romania	55	45.1	67	54.9	122		
Russian Federation	654	62.5	392	37.4	1,046		
Slovak Republic	23	92.0	2	8.0	25		
Slovenia	59	68.6	27	31.4	86		
Ukraine	821	81.5	187	18.5	1,009		

Table 3: Number of higher education institutions in countries of Central and Eastern Europe and South East Europe (academic year 2003 - 2004).

While Western Europe has not in general witnessed the emergence (or substantial strengthening, depending on the country) of the private sector in higher education, in Central and Eastern Europe (CEE), for a variety of reasons, the private sector emerged as a tough competitor to the most often traditional, elitist, faculty-centered and quite often inaccessible public sector.

In several transition countries, the public sector had actually produced the private sector (through academic faculty using parallel employment opportunities), to a large extent, at least initially, instead of reforming itself. The virtually unheard-of before privatization of higher education often meant the creation of (new) private institutions by the faculty from the public sector (and Poland, Russia and Moldova are here good examples studied within the EUEREK project). The questions concerning legitimacy of new arrivals to the educational arena have been raised from the very beginning; especially that in some transition countries privates were born in a sort of post-1989 legal vacuum. But the common feature in most of countries in CEE with substantial enrollments in the private sector is the interplay of cooperation and competition: even though private institutions themselves compete with public ones, they most often share with their competitors the majority of their faculty.

In CEE, current impressive growth of the private sector and its increasing social legitimacy testified by high enrolments can be viewed through at least double lenses: firstly, through global ideas of "off-loading" the state (with respect to the whole spectrum of public services, with old-age pensions, healthcare services, and higher education in the forefront; see Kwiek 2007, forthcoming), increasing delinking of public educational institutions from the state (especially in terms of funding – through seeking non-state income for both teaching and research), public sector institutions increasingly resembling private sector companies (new management styles, new forms of

accountability etc) – all these are often warmly received by local reformers and strongly supported by international advisors and/or funders for social and educational reforms (see especially Kwiek 2006 and Kwiek 2005); and secondly, the major part of growing legitimacy for the private sector in CEE derives from the fact that the public sector has been both unwilling and unable to meet the (social, political, and economic) demand of the massification of higher education. In those CEE countries in which the level of enrollments in the private sector now is exceeding 20 percent, the state-funded public sector was often merely not able to accommodate growing amounts of students and meet their educational needs.

The growing legitimacy of the private sector means its growing social recognition: in the course of the last 15 years, as in the case of Poland, the sector has often strengthened institutionally and academically, got accredited by national (and/or international) accreditation bodies, while the public has often accepted it as a legitimate part of the educational landscape (in the EUEREK case studies, the changing relationships between WSHIG and the state authorities, and between WSHIG and AMU provide good examples). Its social recognition is additionally strengthened by the financial support of the public: the private sector in the region (as in the University of Buckingham in the UK) is almost fully reliant on student fees (see the case studies of Poland, Russia, and Moldova for more details). In the period of 15 years, one can hardly imagine privates being merely illegitimate diploma mills as happened to be the case in many transition countries in the beginning of the 1990s: following the developments in Western Europe, transition countries are increasingly involved in new accreditation and quality assurance undertakings on national levels - which have already been applied to the private sector in some countries as well. In Poland, new accreditation procedures have been strong with respect to both the public and the private sector; and the most important gate-keeping mechanism was the Ministry's right to allow selected institutions to run second-level (MA-level) courses. In the first decade of the existence of the private sector (1990s and the beginning of 2000s), the right to grant MA degrees was the most important distinctive feature between more and less academic institutions (at the same time, almost whole public sector has the right to run MA courses).

Global trends indicate that the role of the private sector in teaching and research is on the rise, market forces are a significant part of the educational and research landscape and the competition for students, public and private research funds, and competition between institutions and faculty is an important factor. Both globally and in the CEE region, private higher education and market forces in education are part of the problem and part of the solution.

In Central and Eastern Europe the private sector in education is growing considerably: the number of private higher education providers has been sky-rocketing in recent years and the number of students enrolled is reaching (in some countries, like Poland and Romania) the level of 30 per cent, and in others (like Estonia or Moldova) almost 25 per. The role of the private sector in the countries of Central and Eastern Europe – considering its ability to adapt to the new societal needs and new market conditions combined with the drastically underfunded and still unreformed public institutions with limited capacities to enroll larger numbers of students – is bound to grow. That is the major difference with Western European educational systems. Private institutions represent a wide variety of missions, organizational frameworks, legal status and relations to the established institutional order. There are significant differences between particular countries of the region, too. It actually does not matter much for the private sector in higher education how market reforms are advanced in other sectors of economy although it seems to

matter a lot for the public sector in higher education.

The social-democratic ideals of a widely developed welfare state with its lavishly state-funded social services, including generally state-supported higher education, may soon have to be combined in various parts of Europe with strong market incentives, and with substantial non-state, non-core funding, as in all other parts of the public sector. In higher education, the market forces in operation seem already much stronger in most new EU than in most old EU countries. Also, the social reforms about to be introduced in several countries of Central and Eastern Europe are much more market-oriented than most reforms attempted in old EU countries in general (Poland with its multi-pillar pension scheme introduced in 1999 is a good example). Together with the global spread of the neo-liberal market economy and the gradual marketization of higher education (outside of the old EU, though – at least in comparative perspective), the number of for-profit institutions, for-profit branches of non-profit institutions, virtual institutions, corporate universities and IT certifications centers is growing rapidly, possibly bringing about a revolution in social conceptions about what higher education is (see Newman et al. 2004).

In the last half a century in Europe, despite immense growth in enrollments, and moving towards massification and near-universalization, public higher education remained relatively stable from a qualitative point of view and its fundamental structure remained unchanged. No major changes occurred that were as revolutionary as the changes we may be currently witnessing. What we may be seeing today might – although does not have to – be only the very beginning of these transformations, though. The forces of change worldwide are similar and they are pushing higher education systems into more market-oriented and more competitive arenas (and certainly towards less state regulation). As Frank Newman put it, "every student now has multiple and differing choices. Every college and university faces new competitors" (Newman 2001: 4). For centuries. "the market" had no major influence on higher education. Most modern universities in the world were created by the state and were subsidized by the state. Most students attended public institutions and most faculties worked in public institutions. Today market forces are invading higher education worldwide: while the form and pace of change is different in different parts of the world, this change is happening everywhere. And in CEE countries they often come as part and parcel of a much wider neo-liberal agenda and as a result of powerful globalization pressures. More market, less regulation, especially in the transition economies: the state forces may be becoming increasingly weak as the evolution of higher education towards the market continues. These market forces may be of different strength in different places around the world, but they most probably cannot be easily stopped - which puts all "local" (national) higher education systems in a new position and opens them to international "markets".

### **<u>3. THE DIVERSIFIED FUNDING BASE: POSSIBLE SOURCES OF SUPPORT</u></u>**

Explaining the structure of the paper: Barbara Sporn discusses five factors enhancing adaptation at specialized European universities which lead in five directions: externally focused mission, differentiated structure, collegial management, institutional autonomy, and diversified funding (Sporn 2001: 27). Michael Shattock discusses six key words highlighting the characteristics that successful universities have to demonstrate: they are competitiveness, opportunism, income generation and cost reduction, relevance, excellence, and reputation (Shattock 2000: 96-103). We could discuss the private sector represented in the EUEREK case studies in the context of the two above sets of features, related to "adaptive" universities and "successful" universities (Shattock

2003). But we will base our further analysis this time on Clark's "pathways to transformation", revisiting his classical formulations. In brief, according to Clark in *Creating Entrepreneurial Universities* (1998), entrepreneurial universities are composed of five elements which form an irreducible minimum:

- (1) A *strengthened steering core*: internal organization of the university. Strong steering mechanisms needed. Entrepreneurial universities need to become quicker, more flexible, and especially more focused in reactions to expanding and changing outside demands. That core must embrace **both central managerial groups** *and* **academic departments,** operationally reconciling new managerial values with traditional academic values
- (2) An *expanded developmental periphery*: interactions with university's environment, outside organizations and groups. These include **professionalized outreach offices** (that work on knowledge transfer, industrial contact, intellectual property development, continuing education, fundraising), **interdisciplinary project-oriented research centers** (as departments alone cannot do all the things that universities now need to do) etc. The centers mediate between departments and the outside world.
- (3) A *diversified funding base*: the university always needs greater financial resources: it particularly needs **discretionary funds**. They raise money from a second major source (research councils: grants and contracts) and a third-stream income sources "that stretch from industrial firms, local governments, and philanthropic foundations, to royalty income from intellectual property, earned income from campus services, student fees, and alumni fundraising. Third-stream sources represent true financial diversification. They are especially valuable in providing discretionary money, beyond overhead charges and top-sliced sums extracted from research grants".
- (4) The *stimulated academic heartland*: excellent research is performed in traditional departments. Departments are basic units where most academic work is done. Innovations need to be accepted in departments, otherwise institutions proceed largely as before (traditionally).
- (5) The *integrated entrepreneurial culture*: a culture that embraces change, a modified belief system, a culture of entrepreneurialism in every university unit (Clark 1998: 8-10).

Let us begin with Clark's first element. With reference to the financial underpinnings to the entrepreneurial university, there are three streams of income:

- (1) mainline support from government
- (2) funds from governmental research councils; and
- (3) all other sources lumped together as "third-stream income" (Clark 2004a: 77).

The global movement in the last twenty years has been toward the second and the third streams of income; in the specific case of private institutions, it is crucial to underlie the role of the third stream (all other, largely non-governmental, sources of income): also, much more importantly, private institutions would find it hard to be entrepreneurial as institutions and to have entrepreneurially-minded academics – without its faculty and academic units competing (globally

and nationally) for outside research funding. The role of competition with others – institutions and individual academics alike – is fundamental for the entrepreneurial character of an academic institution. We mean here both **internal competition** (for research and other development funds) and **external competition** for other outside funds. At entrepreneurial universities, vast part of managerial practices is devoted to manage competing units and academics in terms of human resources, to manage non-core outside funding in financial terms, and to manage resulting tensions between academic units, between the center and departments, through e.g. various "top-slicing" and "cross-subsidizing" techniques. With somehow always scarce research funding (as it always is at entrepreneurial universities, as most EUEREK case studies confirm that there are no limits in academic financial expectations), inventing and re-inventing for departments and the center fair and transparent formulas seem crucial. If procedures are non-transparent, or unfair to some academic units, management loses a lot of time and energy in managing tensions which in other conditions should not appear.

A negative scenario of development of private institutions studied within the EUEREK project, from the perspective of entrepreneurialism, would be their status of (merely) teaching institutions. To the extent possible, the research dimension should be present in the private sector, and made visible, to the academic world generally. Case studies of Polish and Russian (as well as Macedonian and Ukrainian) – private – entrepreneurially-minded universities show that the road to excellence in research for them is difficult to achieve, especially with scarce outside funding at the beginning, but prestige and reputation of an institution appears when significant research is being done, including especially internationally relevant research. Only few private institutions in Poland have reached that level – but they have top candidates and best graduates (in the Polish context, it also often means that these institutions are allowed to offer PhD studies in selected areas, in acknowledgement of their core staff employed and national categorization in research output; WSHIG studied for EUEREK does not have research ambitions). Not surprisingly, investing in research brings more, and especially better, students to these institutions.

The access of EUEREK private institutions to public subsidies is very limited and private R&D investments in private higher education institutions are marginal (again the Swedish case is exceptional and testifies to different senses of "privateness" of higher education – at the Jönköping University, the level of public subsidies is equal to public universities). The situation in Poland is typical for the private sector:

The general problem of Polish higher education, and the Academy representing the public sector is not an exception here, is that very low public subsidies for research (public sector) and research projects (for both sectors) is not supplemented by private funding for research in either of the two sectors. The Academy/industry cooperation is certainly well developed: but it is the hospitality and tourism industry for which WSHIG is not doing research but providing students for on-the-job training. The net gain of WSHIG from this cooperation in financial terms is minimal. The real gain is in the prestige of WSHIG – cooperation with best hotel chains – and potentially in increasing student enrollments, especially in comparison with other schools from the same areas of studies. Consequently, under current Academy/industry relationships, research money is almost exclusively state money – which is not available in practical terms, as the competition for grants is based on the research track of applicants, low in the case of WSHIG as in the

*case of the vast majority of the private sector institutions* (EUEREK case study: WSHIG - Poland).

In more general terms, financial diversification of an institution is also healthy *academically*: the general rule is simple – as Clark put it, "it is better to have more money than less", or elsewhere: "more income is always needed: universities are expensive and good universities are very expensive" (Clark 1998: 26). The diversified funding base of an entrepreneurial university means a portfolio of patrons (national and international, private and public, long-and short-term) to share inevitably rising costs. Entrepreneurial universities aggressively seek third-stream sources, as testified by all European case studies, and it is a very powerful trend in the Netherlands, the UK, Sweden, Finland, as well as in several transition countries including Poland. Internal university reforms and restructuring, including closures and mergers of academic units, are increasingly "finance-driven". The third source of income is becoming crucial for public institutions; some components of them are also fundamental for the vitality (development or survival) of private institutions.

### The sub-streams of the "third source" of income (in Clark) are the following:

(a) *Other government sources* – these are other than the income from the core-support department, usually the Ministry of Education or of Science. Government agencies, other than the core-support department, want to receive useful services from most entrepreneurial universities; these government agencies include: those devoted to health, defense, transportation, agriculture, economic development; there are also similar departments useful in regional and city governments; and there are funding agencies within such organizations as the EU.

Most of these directions of cooperation and outside source of income could be tried out by private sector institutions. Cooperation with local and central governments in the long run could bring private institutions closer to the state and its agencies (bringing reputational rather than directly financial gains).

**(b)** *Private organized sources* – particularly business firms, philanthropic foundations, and professional associations; they include professional associations in e.g. accounting, firms with which universities may engage in contract research and contract education; firm-specific research or training/retraining.

### And, very importantly

(c) University-generated income – for example, alumni fund-raising, research contracts, profits from patents. Each subcategory offers numerous possibilities, and the three major sources together imply virtually no limits on possible streams of support. Some but not all universities that are transforming turn heavily to student tuition, but it is not the only substantial alternative to state support; in reality, it may be the fourth or fifth in terms of magnitude, Clark claims. Some proactive universities turn to business firms in major way, but, on the other hand, many show industry sources only as a minor item in their lists of income sources. There are several categories here:

The first category is income from endowment: it offers the highest degree of discretionary

expenditure (more freedom and less regulation in spending). The second category – **alumni fundraising**. The third source of self-generated income – **student tuition and fees**. The fourth – **earned income** from campus operations, possibly modeled on the Warwick University example ("earned-income policy" of the 1990s introduced by Michael Shattock and his team, and beyond). The "earned income" sources included academic-driven activities (fee-paying teaching and research contracts); spin-off activities, sales of services, property leasing, printing and library services; stand-alone activities such as conference center operations; self-financing activities expected only to break even e.g. student residences, food services etc. The fifth source of earned income is **royalty income** (inventions and intellectual property).

Certainly, the most interesting categories to be considered by private institutions are endowment, student tuition, and campus-driven operations, including research contracts. It is important to stress the UK movement towards more realistic pricing of research activities run on externally-funded individual research projects – the so called "full economic costing", in which all elements of actual costs incurred by the university are taken into consideration so that the university actually never spends more than gets for a given research project, which has often been the case in low-price cultures of European public universities (see the box below).

## Example 1. Managing University Finances: Full Economic Costing (FEC) of individual research projects (the UK):

In the long term, university research needs to become financially more secure and sustainable – and this includes improving costing and pricing practices (including changing the excessively lowprice culture). The Full Economic Cost of a research project includes: direct and indirect costs; space/estates charges; depreciation; and an adequate recurring investment in infrastructure such as university's central library, university administration, etc. As from September 2005, the UK Research Councils will be paying 80% of the Full Economic Costs of Universities' research. Along with a better understanding of their costs, universities are being encouraged to price more realistically – and therefore some funders are likely to see increases in the price of research over the next few years. ... The system used by the universities to arrive at their Full Economic Costing builds on the Transparent Approach to Costing (TRAC). TRAC is now the standard method used for costing in higher education in the UK. ... TRAC FEC is much more visible to all academics who apply for research grants. They now have to understand that research incurs costs greater than direct marginal costs, and how to use their institutional systems, which will apply it to their project applications. They need to be more aware of TRAC; and of the full range of resources required to carry out the research; and they need to understand how the institutional rates are used in costing their projects. In reality, TRAC FEC imposes very little extra work on academic staff. (Arnold et al, 2006: 56-58; for more information, consult www.ost.gov.uk/research/dualsupport.htm, and www.hefce.ac.uk/finance/costing).

In this context, Clark's suggestion for entrepreneurial universities is the following: "A high degree of **financial dependence on a single mainline source** is a flawed way to develop modern universities, especially proactive ones. The interests of national and regional governments multiply and change. University support ... can readily slide down the government's list of priorities. Often higher on the scale are health, welfare, primary and secondary education, foreign affairs, defense, environment, and issues of the day which have large constituencies or interest

groups more effective than the university lobby. Universities then learn about the enduring downside of single-source dependency. ... Enterprising universities know better: they learn how to shape, even control, their financial underpinnings by diversifying their sources of income" (Clark 2004a: 83). As will be shown below in more detail, the EUEREK private institutions rely heavily on tuition fees; and, as in Poland, private institutions are not eligible (in theory or in practice) for any public funding.

The case studies of Warwick University in the UK (outside of the EUEREK project but crucial for understanding the phenomenon of entrepreneurialism, Shattock's "earned income policy" etc, together with e.g. Twente University in the Netherlands) show the crucial role of all academic units being involved in seeking outside research (or other – consulting, fees from international students) funds. Separate units increasingly become separate small (academic and business) units, "rewarded" and "punished" for their entrepreneurialism (as Williams noted, "managers who take risks and are successful are rewarded. Failure and passivity are penalized, 2004: 87). The culture of entrepreneurialism, indicated as an irreducible element of entrepreneurial organizations, means that virtually all units are involved, including the usual laggards, social sciences and the humanities.

In Poland, most entrepreneurial units, unfortunately often with negative effects on the quality of teaching (and subsequently research) were exactly departments of social sciences – especially political sciences, sociology, psychology and business-related but not strictly economic areas. The Warwick example of financial management is given below in a box.

Example 2: Financial management: seeking possible outside opportunities and academic units viewed as small business units (the University of Warwick, as formulated by its vice-chancellor):

"The strategy is relatively simple. Encourage all sectors of the university to look outwards at possible opportunities, establish profit sharing arrangements that stimulate each sector to maximize their turnovers/bottom-lines, put in place managerial mechanisms which do not confound the academic virtues with the financial virtues ... and put in place mechanisms that can take risks. The end result is a suite of 'businesses', most of which are based within the academic departments. The provision of graduate training, short courses for the commercial sector, recruitment of overseas students and the research grant/contract income raises threequarters of the EUR 160 million each year. Without doubt much of this enterprise is focused within a small number of large players – the Warwick Business School, Warwick Manufacturing Group, Economics and Law - but virtually all academic units are involved. Some of the science departments have focused part of their overall activity upon commercial linkages for research and development, others in the humanities and social sciences have focused upon recruiting overseas students. It has become part of the culture and the financial flows are critical to the survival of many of the academic units. Quite separately, the university has developed many of its facilities for use outside the immediate undergraduate teaching year. Warwick Conferences attracts over 100,000 visitors and has a turnover of EUR 20 million" (Sir Brian Follett, Vice-Chancellor of the University of Warwick, at a 2000 OECD/IMHE conference in Paris "Beyond the Entrepreneurial University?").

The possible new income sources for entrepreneurial universities in the context of the European

case studies include: support from other public agencies, support from public agencies at other government levels, support from large business firms, engagement with small- and medium-sized firm, philanthropic foundations, professional associations, university endowment income, university fund-raising from alumni and willing supporters, student tuition and fees, applied to foreign students, graduate students, continuing education students etc.

In the entrepreneurial set of academic thinking, customers-students of the emergent private sector are more happy to pay what is required and get what they want – than to pay less and get less. Private institutions as providers of services seem to have better reputation if they do not underprice and undercharge its services (as in some European case studies: renting conference centers, sports facilities etc; in the UK, the phenomenon is called the academic "low price culture". It is prevalent at most public, even entrepreneurially-minded universities in Europe; on the other hand, many private universities charge full recovery costs plus substantial surplus, both in teaching students and renting its facilities to outsiders. The Polish case of 300 private universities of which only 3-5 went bankrupt in the last 15 years and which are aggressively developing their infrastructure and study offer confirms the absence of the phenomenon of underpricing in the private sector. In Russia, as Shattock stresses (Introduction to 2004a: 31), "an extremely important contribution to Russian university entrepreneurialism was the central government's decision to allow universities to admit fee-paying students"; it is exactly the Polish case, with some differences (such as legal limitations in the number of part-time fee-paying students: up to 50 percent of all non-fee-paying regular students at an institution as a whole).

Other sources of new income fro entrepreneurial universities include earned income from campus operations, academically driven activities plus spun-off, stand-alone, and self-financing activities and royalty income from patented and licensed invention and intellectual property.

As Clark stresses, **non-core sources often feed and encourage one another**. National and provincial government departments may offer joint support for particular programs; business firms and professional associations may share costs of certain courses; wealthy private supporters may contribute funds to build endowment; tuition gained from foreign and graduate students may be used to reduce costs for domestic undergraduate students. And the greatest gain in independence comes from having university-generated and directly controlled sources of income. The financial management of departments vis-à-vis the center is viewed as crucial. Most entrepreneurial institutions studied stress the role of cross-subsidizing of those departments or units which – at a given time – are not as financially successful as other departments or units. The idea is that perhaps they will be successful at some point, with new research directions or teaching offer. In the medium run, heavy cross-subsidizing of particular units is not possible. They have to be closed or, much more often, restructured and merged. An EUEREK example from the London School of Hygiene and Tropical Medicine is given below in a box.

# **Example 3.** Financial management: devolved budgets and resource allocation (LSHTM):

"Each department has responsibility for managing its own budget. Total School income is allocated between the central administration and the academic departments on a formula basis which takes account of student numbers and RAE money, and which is varied according to the costs of the departments (e.g. it takes account of the costs of laboratories in terms of cost and use of space). The need for cross-subsidy is recognised. (Currently, demographers and nutritionists are being subsidised because of their value in helping the School attract research grants). Departments are permitted to build up reserves which can be carried forward from year to year and from which they can support staff with bridging finance between research grants and contracts. On the other hand, the possibility of the School being destabilised by large expenditures from departmental balances is controlled by setting departments very tight expenditure budgets" (EUEREK case study: LSHTM, 25).

In financial management, the role of overheads is crucial. Their level differs between institutions, and within institutions – between e.g. social and natural sciences. Quite often (as in Poland), overheads for natural sciences are 30 percent of total grant awarded, and for social sciences and the humanities 20 percent of total grant awarded (for most EU projects, it is 20 percent). Overheads of 50 percent are not uncommon in the US, especially in medical and pharmaceutical research, and especially for non-tenured, mostly self-financing contracted staff who without grants have to leave an institution. There are special cases when funders require smaller overheads e.g. 10 percent. A similar issue is financial management of money-making departments (e.g. law, economics, and political sciences) in most transition countries where charging fees from part-time students is allowed by law. The standard division of income both in Poland is the following: 50 percent goes for the center (university as a whole), and 50 percent is left at a department. Example of dealing with overheads is given below in a box, by the London School of Hygiene.

### Example 4. Financial management: dealing with overheads (LSHTM):

"Overheads given by the UK research councils were raised to 46% on the staff costs of a grant, but a further review of research council figures to achieve Full Economic Costing (FEC), beginning in 2006, and offering much higher overheads but on a new formula, makes forecasting overheads from UK sources very difficult. The School has a very entrepreneurial approach to its apportionment of overhead moneys. Normally in the UK the central administration ("the institution") will retain up to 50%, passing on the other 50% to the department which might reapportion its share between its own central budget and the grant holder). The School used to retain only 10% centrally but now allocates the whole overhead to the department, thus encouraging the department to negotiate hard with the awarding authority for high overheads, and giving departments and grant holders substantial additional sums, over and above the central recurrent allocation. Departments may therefore themselves devolve such funds to their own research units, thus encouraging initiative taking at yet lower levels. In one department, for example, the department took one third and the grant holder two thirds of the overhead income" (EUEREK case study: LSHTM, 25-26).

The University of Nottingham, one of the most entrepreneurial ones in the UK (together with Warwick) and the most entrepreneurial among the UK EUEREK case studies, stresses the role of fees from international students, including overseas graduate students. The Graduate School (opened in 1994 there) is market-driven and responsive to national and international resource allocation procedures. The financial management rule is clear: funding allocations from the center to particular schools are directly related to the earnings they bring to the center; consequently, the incentive is to generate more additional revenues to the school, and the university as a whole. At the same time, instead of somehow mechanistic top-slicing of additional revenues, the University is allowing schools to keep their income gross – but require them to pay the costs of central services they consume and a proportion of central strategic budgets. The UK gives a good example of changes in financial management of outside funding: the move towards a model of Full Economic Costing (FEC) and a Transparent Approach to Costing (TRAC), described above, is in the same direction. No other European countries seem to go so far in this direction. It seems to early to judge the success of this approach; especially intriguing would be the fate of cross-subsidized units within universities - in most European case studies crosssubsidization still comes naturally; most entrepreneurial universities studies are not required by their national governments and funding agencies (as in the UK) to go beyond the traditional procedures of top-slicing of profits and cross-subsidizing of financially laggard departments.

The details from the University of Nottingham are given below in a box.

# Example 5. Maximizing income from student fees and funding allocations within an entrepreneurial university (The University of Nottingham):

Like overseas students the fees of postgraduate students are not regulated by the government and in addition research postgraduates help to underpin the research work of the university. In 1994 a Graduate School was established. The School is **pro-active in maximising postgraduate numbers via a rigorous marketing and recruitment strategy, in further developing research training programmes and in coordinating student applications to, and links with, research councils.** 

Funding allocations to academic Schools are related directly to the earnings they bring to the University, thus increasing the incentive of generating additional revenue. Until 1998 central services were funded by a top-slice from the University's gross income with an agreed sum then being allocated to academic budget units. Now, Schools receive their income gross and are then required to meet the cost of the proportion of (a) central services they consume (e.g. energy, maintenance, library and central services) and (b) strategic budgets held centrally. The aim is to increase the transparency of the cost of providing services, thus encouraging the individual services to be more efficient and effective. A central strategic fund was retained to support new initiatives and investments. Schools are encouraged to support the advancement of their own strategic plans through the creation of comparable procedures within their own budgets" (EUEREK case study: The University of Nottingham, 5-6).

What are a university's key assets for income generation? Michael Shattock (once the Registrar at Warwick University and a person responsible for its tremendous success as an entrepreneurial institution from mid 1980s onwards), stresses that "the most successful universities **academically** are also the most successful at **generating external income**" (Shattock 2004b: 225). The key

assets are management capability, academic reputation, location, staff and buildings. Many of these assets are interdependent – but **management capacity is the first to identify**, he claims.

At Warwick, the essential body for managing earned income was a board, which mirrored a company board, called the "Earned Income Group". "it operated as far as possible like the managing board of a company, meeting every two months, monitoring the income streams, considering business plans for new ventures or claims for investment or re-investment in activities to increase earnings and launching enquiries into areas where a fall in income was apparent. ... It provided: a mechanism of coordination; a management authority (especially important when income streams did not meet forecast); a stimulus for new activities; a source of ideas for improved 'business' practice; a final 'decision' point for evaluating risk". Such a board should not have a final authority – it had two masters, the first representing the academic community, and the second – the financial authority of the university (Shattock 2004b: 232-233). There is a number of key principles of income generation, based on the experiences of the implementation of the "earned income policy" at Warwick, as adapted in a box below. Most of them are applicable to private institutions as guiding principles. It is especially important to stress the role of **non-financial gains of earned-income policies**, in institution's prestige or reputation.

**Example 6: Financial management at entrepreneurial universities – key principles of income generation (adapted from Shattock):** 

• A university's business is to be **academically successful**, not to run a successful business.

• The test is whether the university can generate a surplus or "profit" on the income, either a **monetary profit** or some real and **tangible academic gain**.

• The non-state income must contain a surplus element for **re-investement** in reinforcing existing academic activities or pump priming new ones.

• Income streams must be **clearly identified** and managed as if they are independent "businesses".

• Income and surpluses, or "profits", need to be **shared between the center and the departments** – there need to be incentives and the benefits should be shared.

• If the university outsources its "profitable" activities it will lose a large element of the surpluses.

• Resources need to be **invested** to achieve a financial return.

• **Charging policies** should be an important element of the "business" strategy (universities have a strong tendency to undercharge).

• Internal privatization – turning heavily subsidized services into "profit" centers.

• Recognizing the importance of **process** over **unstructured entrepreneurialism** in managing identified income streams.

• Generating income is 90 percent "perspiration" and 10 percent inspiration: individual academic entrepreneurs are high risk.

(Adapted from Shattock 2004b: 228-232)

Incentives for staff and academic units to be entrepreneurial rather than to be traditionalist are crucial – this is confirmed by numerous case studies in Europe. Incentives do not have to be

financial only; they can be reputational (distinction), academic career-related and time-related (e.g. smaller teaching loads for those successful in research). Certainly, too heavy top-slicing of additional outside income is an inhibitor to entrepreneurialism of both units and academics. As stressed by Williams (the author of the notion of "the enterprising university") and Kitaev below, there is a balance between individual's gains and institution's gains, both in financial and reputational terms: "If individual members of staff working in universities receive little in the way of rewards for effective innovation there is no good reason for them to make any special effort in areas of activity that do not advance their own careers, and if the university receives no additional resources there is little incentives for it to set up organizational structures that promote entrepreneurial activity" (Williams and Kitaev 2005: 139).

In most EUEREK cases, the private institutions studied have low (or no) financial incentives for staff (as the Buckingham study put it, "by comparison with other higher education institutions salaries are not incentivised and only two posts carry a salary of more than  $\notin$ 73,500"); they represent low research profile and are often ineligible for public research grants. Academics are not entitled to the reduction in teaching hours nor are rewarded financially for their interest in research (the Polish and Spanish cases are perfect examples here). They have relatively uncomplicated financial management, no research-focused incentives for the staff, few teaching-focused awards for the academics. As the Spanish report states,

unlike in public universities, the lecturers who carry out research work or similar activities are not awarded personal economic incentives or given a reduction in teaching hours. Some interesting opinions on the subject included: "In theory, the teaching workload can be reduced to compensate for research work, but this is not done, even though it is set out in the Strategic Plan" (General Manager). "Economic incentives [are used] as a research support (not as an individual incentive). Teaching workloads are not reduced as a result of doctoral programmes or research work" (Head of Research Institute) (EUEREK case study: UCH – Spain).

Most often, *the* primary source of income is student fees and *the* primary cost is staff salaries. At Buckingham,

the University's primary source of income was student fees. Its primary cost, particularly because of its commitment to small group teaching, was staff salaries. In recent years, with the Department of Information Sciences having successfully raised grants, and with the addition to the university of a research active Education group, its income from research grants and contracts has amounted to 10 per cent of turnover (EUEREK case study: University of Buckingham).

In a similar vein, in the Polish case study,

The dynamics of the growth of income from teaching vs. growth of income from research clearly shows the standard pattern of development of most private institutions in Poland in the last decade: the private sector is a teaching sector, and often more than 99 percent (as in the case of WSHIG until 2002) of income comes from student fees. Enrolling more students in financial terms means a bigger income from tuition fees. At the same time state subsidies for both teaching and research remain constant – and equal null, as in the

whole private sector. In the six years analyzed, only in the last two years (2003 and 2004) the income from tuition fees was lower than 99 percent. The trend which could be confirmed in the future – greater reliance on the income other than tuition fees – is very important for the future of WSHIG (EUEREK case study: WSHIG - Poland).

The example of how the private sector can be funded is provided by the Polish case. In general, there was dynamic growth in student numbers in the last 15 years in Poland, from 400,000 (1990) to 2,000,000 (2005); similar dynamic growth have been reported in the number of private higher education institutions (there were 6 in 1990 – but 301 in 2004); 30 percent of students are enrolled in the private sector (2005). Public higher education is funded through the state budget and tuition fees from part-time students (for full-time students there are no fees). State funding for higher education as a percentage of GDP in the period 1995-2004 was slightly below EU-average: between 0,75 and 0,89 percent (2004: 1 percent). In 2004 it reached 9 billion PLN (2,25 billion EUR). The structure of major sources of income (teaching, research) is the following: both public and private institutions obtain the vast majority of income from teaching activities: public institutions receive 82 percent from teaching, and private ones almost 100 percent (96 percent in 2005). The income from research is 13 percent for public institutions and 0,4 percent for private institutions. Consequently, the (private sector in Poland is almost fully a teaching sector.

The structure of funding for teaching is the following: public institutions – state budget (71 percent), tuition fees (22 percent), other sources (7 percent). For private institutions, there is no state funding, and tuition fees represent 96 percent of their income. Generally, what goes to public institutions is 82 percent of all income from teaching, accompanied by 100 percent of public subsidies for teaching, 51 percent of student fees charged and 92 percent of funds from other sources.

The structure of funding for research is the following: research is funded mostly by the state (there are limited links with the industry, especially in the university sector). Almost all income from research goes to public institutions (99,4 percent). The private sector is non-eligible for most slots of state research funds (except for competitive research grants which, in statistical terms, are non-available in practice). Consequently, at WSHIG studied as an example: until 2002, over 99 percent of total income came from student fees (in 2004 - still 94 percent). The proportion of income from research for 13 years has been 0 percent (no income was ever reported in its history). The structure of income from teaching was the following: state subsidies 0 percent, student fees 100 percent.

Thus, in general, this fundamental dimension of an entrepreneurial university – having a diversified funding base – does not seem to work for the EUEREK private institutions studied (Jönköping University in Sweden being an exception). Their abilities (and opportunities) to use the "third source" of income, especially (perhaps most welcome) "university-generated" income, are very limited, as confirmed by detailed statistical data in each of the relevant EUEREK case studies. Their high degree of financial dependence on a single source of income (namely, student fees) makes them easily prone for financial problems. In general, they are able to compete for public or private research funds in a very limited degree; being largely teaching institutions, even if allowed by national laws to be state-subsidized in research, they are not able in practice to compete with public universities. Separate units are rarely rewarded (or punished) for their entrepreneurialism and rarely act as separate business units, as is often the case with most

successful public entrepreneurial universities. They do not seem to have incentive policies to support their staff in seeking non-core source of income – in this case, other than student fees. They do not have government funds – but also most often do not have access to government agencies as sources of third-stream income, private organized sources (such as business firms, philanthropic foundations etc) and do not use policies to support university-generated income. The share of their income from alumni fund-raising, research contracts, patents, endowment or earned income from campus operations is negligible, in most cases not even marginal. There is no mutual feeding and encouragement between non-core sources of income, observed by Clark for public universities. There is also no major need to keep a fair balance between the center and the units through elaborate top-slicing and cross-subsidizing techniques. In the context of a diversified funding base, if entrepreneurialism is to be taken seriously in the private sector, the non-core income would be the income from any other sources than student fees, leading to smaller dependence on this currently single most important source.

### **<u>4. THE STRENGTHENED STEERING CORE</u>**

The second element of the entrepreneurial university (in Clark's classical formulation) is an administrative backbone stretching from central bodies to major faculties and to departments and institutes. Balancing influence across multiple levels is an almost constant problem in entrepreneurial universities, Clark stresses. New ventures include new interest groups; more aggressive departments seek more autonomy; central bodies worry about integration of the whole institution and about how to support weak departments. In seeking a balance, faculty **participation in central councils is a critical component** – improved steering capacity depends considerably on collegial connections between academics and administrators in daily operations and both become responsible for the legitimacy of funding. Shared governance is essential, but in new or adapted forms. The role of strong core administrators - accompanied by strong strategic committees - is emphasized in many case studies. See a box on the details of managing structures and decision-making processes at small private university (Buckingham) below, which is different from bigger institutions such as Warwick, Nottingham or Twente. Each of the three schools there is treated as three business divisions, each is responsible for maximizing its financial return (largely from teaching). The decision process at Buckingham is quick and comprises only five people.

### Example 7. Management structure at a small private university (Buckingham):

"Buckingham has a very traditional UK constitutional structure – a Council as its governing body, a Senate and three Schools (faculties). The Council has been very traditional in its approach and has contributed little in terms of strategy (other than a natural concern about the financial state of the University) or, as would have been the case in a comparable private US college/university, to fundraising. The Senate is similarly a traditional academic body. Each recent vice-chancellor has changed the organisational structure from having five faculties each with budget holding deans to a second model of budgets being devolved to 12 programme directors, all answerable direct to the vice-chancellor, to a third model, introduced by the present vice-chancellor of the three Schools, with three budget holding deans. As the Director of Finance puts it: "Buckingham has three academic Schools, and we look at them as three business divisions. Each is responsible for making the maximum financial return and growing their business." "The decision-making process at the University is quick and comprises five people: the VC, his deputy and the three Deans. We meet every week for two to three hours, so we do make good progress and good academic decisions in that sense. We get on very well. I don't think we get anywhere near as making good decisions on the administrative and operational side. I guess we need a chief operating officer who can assume the managerial aspect. But we have less constraints than you can expect in a larger organization" (EUEREK case study: University of Buckingham, 14-15).

In most general terms, there can be identified three basic university management structures and styles: collegial, bureaucratic and entrepreneurial (Williams: 2004: 84-92). Collegial management means that the academic staff or their representatives take all important decisions through a process of consensual decision making – until a broad agreement about the way forward is reached. The processes of consultation are inevitably time-consuming, and decisionmaking process is slow. In hard times, though, it is almost impossible to reach agreement about where cuts should be made - except for a situation of a "misery for all". Bureaucratic management, in turn, means a form of organization in which everyone in a management hierarchy has freedom to act within prescribed limits – decisions are taken quickly but a small number of individuals at the apex make final decisions and there is a we/they feeling of alienation in an institution. Entrepreneurial forms of management are most likely to be found when the institution needs to generate income or to enhance its reputation in a variety of different ways - in order to prosper or to survive. Universities or departments which are able to keep any income they earn are most likely to behave entrepreneurially. According to Williams, "the key to entrepreneurial management styles is an understanding and management of risk. Managers who take risks and are successful are rewarded. Failure and passivity are penalized".

In most EUEREK cases, institutions have to deal with a high level of risks on a daily basis; *the* major risk is a financial one, related to student number figures (and student fees). But as Shattock explains, in universities "risks may be academic or reputational as well as financial" (2005: 19). The Polish case study explains:

WSHIG has been operating under constant risk in recent years. The major risk has been financial – will the income from student fees cover the expenditures, especially including debt installments to the banks. WSHIG has been investing heavily in its infrastructure. As other private institutions, only from its own sources, with no state subsidies. WSHIG's rector was doing wonders to be able to pay back the bank loans in time (also using his private assets). The second risk has been student enrolments (EUEREK case study: WSHIG - Poland).

At Buckingham, in a similar vein, what is meant by risk is financial risk:

The most important risk to the University is financial. With a small research portfolio, academic risk is restricted to the student take up of degree programmes. In that sense the University is operating on a knife edge of risk (EUEREK case study, University of Buckingham).

There are also other forms of risks involved in EUEREK private institutions: the competition in the areas of studies (public institutions suddenly opening the same specializations/programs or modifying the existing ones – and running them without charging student fees); state regulations, and prestige (reputation). In the Polish case, the risks included:

state regulations concerning employment relations in the private sector: who and on what terms can be employed as the core senior faculty. The solution found by the whole sector in general – almost retired and retired professors – has always been in danger; but it has worked perfectly in all the years of operation of WSHIG. ... Another risk has been related to prestige and reputation. WSHIG had to fight for its reputation starting from scratches. Several times it was severely attacked e.g. by the press. These attacks are dating from the 1990s; later on, with huge investments in infrastructure, they were not repeated. Finally, with the state accreditation granted in September 2005, WSHIG has been fully protected against the press attacks (EUEREK case study: WSHIG - Poland).

A box below shows the role of risk management at the example of the London School of Hygiene and Tropical Medicine: monitoring performance at individual levels by heads of departments (and at the same time members of strategic management team) seems crucial there; risk management focuses on outside grants (and EU grants in this context are regarded as risky).

# Example 8. Structured risk management (finances and reputation) at entrepreneurial universities (LSHTM):

"The School is subject to both academic and financial risk, and engages in structured risk assessment. The academic risks are primarily reputational. ... It has discontinued large scale consultancy work. But if a major research programme in a third world country funded by an international agency like WHO or the gates Foundation were to be conducted ineffectively the reputational impact would be considerable and would potentially effect other research grant and contract applications. This would have a particularly severe impact on an institution so dependent on external grant and contract income. For this reason the school places great emphasis on monitoring performance, The Director pushes the heads of departments in the SMT (senior management team) and they monitor performance at individual levels. The dependence on non-HEFCE income makes the School subject to exceptional financial risks as compared to the majority of UK universities. The risk derives not only from a failure to attract grants, contracts or student numbers which can be partly mitigated by the 3:1 ratio of non-permanent to permanent staff, but from cumulative failures to manage effectively the grant end contract income which has been received. For example, in 1994 the School received 43 grants from the EU. Not only did these grants carry very low overheads but they carried high coordination costs if the School was the contractor. The School regards EU grants as "risky" (EUEREK case study: LSHTM, 23).

Again, it is important to stress the role of non-monetary dimensions of entepreneurialism, such as reputation of an institution. An entrepreneurial university will, as Williams puts it, "reward departments and individual members of staff according to their success in bringing resources or reputation into the institution. Activities that are unable to make a net surplus, in either income or institutional reputation, are discontinued" (Williams 2004: 86-87). Again in general terms, as the case studies of entrepreneurial universities show (also the Russian cases discussed in the Shattock's volume in which Williams published his paper), there is always some degree of collegiality and some bureaucracy – but the shift in managerial styles reported in Europe in the last 20 years is away both from collegiality and from bureaucracy, and towards entrepreneurial styles of management. In practice, the shift means e.g. that the vice-chancellor has acquired increased managerial powers; that he is now supported by a small but very powerful strategic management group that determines the strategic directions and ensures links between the vicechancellor's office and the university staff. Universities introduce clear Resource Allocation Models (RAMs), supervised by these teams, which allocates the income of the university among the university units and determines what percentage of the commercial income shall be treated as indirect costs and what are "top-slicing" procedures. Usually, a formula basis is used - but its exact components are constantly under review (and discussion).

Resource allocation models used in entrepreneurial universities studied have strategic implications for the nature of an institution: they become more centralized or more decentralized. Through the allocation of resources, some strategic decisions are followed to the detriment of others, as Jarzabkowski stresses (Jarzabkowski 2002: 5). Hard choices have to be made, and they are being made using allocation models. The example of strategic decisions is the route followed by Warwick University between 1992-1998: "Warwick has consistently pursued goal-oriented actions related to research excellence, income-generation, capital expansion and growth of the Science Faculty" (Jarzabkowski 2002: 12). Resource allocation procedures and the functions of

major strategic committees at Warwick are described below in a box.

## **Example 9: Resource allocation procedures and the role strategic committees** (Warwick):

"There are three main strategic committees, Strategy Committee, Estimates and Grants Committee (E&G) and Earned Income Group (EIG), which are responsible for strategic planning, financial decision-making, income generation, resource allocation, and monitoring and control. As they have overlapping senior management membership and are chaired by the VC, the senior PVC, and the Registrar respectively, they enable strong central control and coordination of strategic action. Resources are maintained in a central pool that is distributed through Strategy Committee as part of the annual financial planning process. During the financial planning process, resources are allocated in accordance with overarching University priorities. For example, developments in capital infrastructure are allocated to some departments and activities over others because they favor the growth strategies of the University. Strategy Committee is supported by E&G for academic resource allocation and EIG for income generation. ... Profit-sharing mechanisms between the center and departments, including a 'super-surplus' retained by high income-generating departments, are an incentive that reinforces a culture of entrepreneurialism. Top-slicing of profits enables senior management to finance strategic initiatives and cross-subsidize departments with lower income-generating capacity. The centralized nature of these key committees provides the center with a mechanism for acting strategically at the overarching University level in matters of resource allocation" (Jarzabkowski 2002: 12-14).

Effective entrepreneurial universities are **neither extremely centralized nor decentralized**; they are administratively strong at the top, the middle, and the bottom. The decentralized entrepreneurial university is certainly Warwick University; the centralized one, on the other hand, is Twente University in the Netherlands (also an object of Clark's and other's case studies). They introduce professionalized clusters of change-oriented administrators at all levels – development officers, technology-transfer experts, finance officials, sophisticated staff managers – to help raise income and establish better internal cost control. Entrepreneurial universities **develop a new bureaucracy as a key component of their (entrepreneurial) character**.

It is important to avoid the conception of overpersonalized leadership, though: the European case studies of entrepreneurial universities clearly indicate that strong and devoted leadership is not enough to introduce, or sustain for the future, structural changes. The CEO kind of management, the authoritarian figure, does not endure. As Clark phrased it, based on his 14 global case studies, "enterprising universities ... are characterized by collegial entrepreneurialism" (Clark 2004a: 85). Also none of the case studies of successful entrepreneurial universities in Europe reported the crucial role of charismatic leaders in the long run; in the medium run, they were able to start transformations. Consequently, the case studies available show the crucial role of **strong** "University Management Teams" (or bodies with similar names and functions) in Europe – who interact with both governing bodies above and the academic body (departments, schools etc) below where the real work, and real transformations, are done. University management teams, or senior management teams, report to governance boards or boards of management. The pivotal role of these strong teams was stressed at e.g. LSHTM, Twente University, Strathclyde University, WSHIG in Poland. See a box on governance at LSHTM below.

### Example 10. Governance structures at LSHTM:

"As the Registrar and Secretary described, the SMT [senior management team] is the major strategic driver in the School though it consults widely. It has a separate research SMT that brings a wider spread of participation from around the School. The SMT generally works in a strongly consensual way, but the changes in departmental structure in 1997 and 2002 and the creation of the post of Dean of Studies are examples of leading from the front. Above the SMT is a Board of Management, a lay body "which stops us becoming too introverted and instead looks at changes that might be coming up externally". The Board is also required to be accountable to HEFCE as the governing body of the institution. Below there is a School Senate, a reformed body from a previous Academic Board on which all professors and readers were ex-officio members. The new Senate has 30 rather than the previous 90 members and has a wider participation from the staff" (EUEREK case study: LSHTM, 22).

Similar transformation in management structures are reported in numerous case studies of most successful institutions, both academically, reputationally, and financially. Senior management teams are reported to be *the* decision-making bodies, responsible to governing bodies. The list of team members is getting longer and may include, apart of vice-chancellor, pro-vice-chancellors, registrar etc – also research finance officers or research contracts officers. See a box on LSHTM.

### Example 11. Recent changes in management: LSHTM

"Key changes to the management of the School were introduced in the late 1980s by a Dean ... who operated very much in a chief executive mode. He introduced the concept of a Senior Management Team (SMT), which has continued to be the decision-making body in the School (subject of course to the constitutional powers of the governing body). This now consists of the Director, deputy Director, the three heads of departments, the Director of the Teaching Programme and the Secretary and Registrar. In 1990 the posts of College Secretary and Registrar were merged to provide a single unitary head for the administration and over time new posts of Director of Planning and Resources and Budget Manager have been created to strengthen the central administration. Additional top posts include a Management Information Systems Officer, a Project Manager and a Computer Support Officer (both for the distance learning programme), and a Research Finance Officer and a Research Contracts Officer (both in the Research Grants and Contracts Office). This has produced a strong central management team." "There is no doubt that the operation of the SMT, meeting weekly, lies at the heart of the successful management of the School. It conforms precisely to Clark's "strengthened steering core" mechanism, which he saw as an essential ingredient to his case studies of entrepreneurial universities (Clark, 1998); it contains academics and administrators, it consults downwards and recommends upwards, it brings together academic, financial and property strategy, and controls resource allocation. A feature of the changes in management described above has been the School's flexibility and pro-activeness in responding to a changing external environment, and at each stage strengthening the management expertise to ensure the School was able to respond effectively to external pressures. The same could be said for the changes in academic structure and organization" (EUEREK case study: LSHTM, 20).

The details of new management structures at two entrepreneurial universities (University of Nottingham and University of Manchester) are given below. Nottingham's management structure is similar to that of Warwick: a strong management board plus strategic committees. Committees deal with specific issues, day to day management operations are done by the management board; the role of the university council is reduced but consultations are performed through committees. There is a balance between bottom-up initiatives – and top-down strategic guidance.

## Example 12: Managing the university: management board and strategic committees (Nottingham):

"In 1995 a new streamlined committee and management structure was introduced. Day to day management issues at the University are the responsibility of the Management Board, which meets weekly. This group also initiates strategy. It currently comprises the Vice-Chancellor, the six Pro-Vice Chancellors, the Chief Financial Officer and the Registrar. Two Pro-Vice Chancellors are responsible for research and knowledge transfer; the other four are responsible for (i) staffing, students and access, (ii) teaching and learning, (iii) infrastructure and capital development, and (iv) internationalisation and Europe. The Management Board is a sub-committee of the Strategy and Planning Committee, a committee of the University Council, which is legally responsible for all the strategic decisions of the University. These arrangements correspond to the strengthened steering core identified by Clark in his widely read book Creating Entrepreneurial Universities. A number of committees deal with specific issues. The University planning processes aim to strike a balance between consultation, bottom-up initiative and top-down strategic guidance, with emphasis on a team approach. Once the central management group has set policies and budgets, a high degree of discretionary authority is devolved to local managers to deliver their aims within available resources and University policies and quality control procedures (EUEREK case study: The University of Nottingham, 3).

Management structures at Manchester University are more traditional but seem equally effective, especially to the strong position of vice-chancellor and his management team. Its governance structures include the Board of Governors, to which the president and the vice-chancellor (one person) reports; the Senate is the principal academic authority and its responsibilities are limited to academic issues – it is chaired by the president and the vice-chancellor; there is also General Assembly (a rare body at entrepreneurial universities studied), with limited powers; finally, the registrar and the secretary (one person) serves as a secretary to the board, the senate, and the general assembly – and at the same time serves as the head of administration of the university, responsible to the president and vice-chancellor for providing administrative support. Most importantly, the president and vice-chancellor is the CEO of the university and he/she is responsible for the establishment and the composition of his/her management team. In more general terms, although the Senate and the general Assembly do exist, their powers are limited and power is located in the university's core management team headed by a vice-chancellor. Interestingly, heads of schools (deans of faculties) are members of the management team as vicepresidents - which ensures that there are few hierarchical layers between academic activities in schools (departments) and senior management of the university. The details are below.

### **Example 13. New Governance Structures at Manchester University:**

The university has chosen to emphasise the executive nature of the post of Vice Chancellor by designating the office holder as 'President' and key executives as 'Vice Presidents'. Key elements of the university's governance structure are:

• The **Board of Governors**, responsible for Finance, Personnel and Health and Safety. This is the closest analogy to the Board of a company. **The President and Vice Chancellor reports to the Board of Governors** 

• The **Senate**, which is the principal academic authority of the University and is responsible for the promotion of research and for the regulation and superintendence of the education and discipline of the students. **The President and Vice Chancellor chairs the Senate.** 

• The **General Assembly**, which is a non-executive body that provides a communications channel between the University and its major stakeholders. Headed by the Chancellor, a media personality, an ambassador and publicist for the University, no executive authority

The **Registrar and Secretary** (one person) appointed by the Board in consultation with the Senate serves as Secretary to the Board, the Senate and the General Assembly, and is also the Head of the Administration of the University, responsible to the President and Vice-Chancellor for the provision of the administrative and support services required for the effective and efficient conduct of the business of the University.

The University's executive management is headed by the **President and Vice Chancellor** (the same person) who is appointed by the Board following consultation with the Senate and is responsible to the Board for the effective and efficient management of the University, for the conduct of its business generally and for the achievement of institutional objectives. The **President and Vice-Chancellor is in effect, the Chief Executive Officer of the University and can also establish**, with a composition and in a manner satisfactory to the Board, **a management team to assist him or her in fulfilling the functions of the office**.

This senior management team of Vice Presidents is made up of the Deans of Faculty plus additional Vice Presidents with corporate functions: Teaching and Learning; Innovation and Economic Development; Research; and External Relations. The Vice President for Research formally manages research along with the associate deans of research for each faculty, who meet once every two weeks. The University also has a Research Office that handles research administration. The Research Office has 4 teams: a graduate team; a contracts team; a systems and operations team (FEC); and a policy team, which oversees RAE [Research Assessment Exercise] external review, processes. Research Quality is not centrally managed, but the planning and accountability cycle connects performance directly to RAE requirements.

Having the Deans of Faculty on the senior management team as Vice Presidents ensures that there are relatively few hierarchical layers between academic activity and senior management. The Faculty Deans have the executive and financial powers for the academic management of the Faculties and are supported by the associate Deans (for Undergraduate and Postgraduate Teaching, Research and External Relations) and the Heads of Schools that sit within the faculties. The main budget holders are the Vice Presidents and Deans of the 4 faculties plus the (central) registrar (Arnold et al, 2006: 74-75).

In general terms, the strengthened steering core means the operationalized reconciliation of "new managerial values" and "older academic values". If these values are not reconciled, institutions feel tensions which require top management's attention. The idea (operationalized e.g. at Manchester University) that heads of schools and deans are members of a senior management team at the central level brings academic units and their representatives closer to the central management. The tensions can be smaller as it is the job of deans and heads of schools to keep explaining actions taken at the senior administrative level (in Polish public universities, deans of faculties – but not head of departments, smaller academic units – form a body of all deans at a central level, cooperating closely on a weekly basis with the rectorate, chief management body). As in the example below, from Nottingham, it is not easy to reconcile academic and managerial values:

### **Example 14: Entrepreneurialism and academic values (Nottingham):**

"The basic organisational model of the university is one in which the central management of the university gives schools a degree of devolution with transparent income and cost models. There has been a wish to set up an environment that encourages academic staff to make their judgments about what they can do well and where their strengths and niches are. "At the same time we try to hold that together in a corporate framework is one of the challenges of our sort of organisation. So we are trying to create that arrangement of funding and to an extent management to help ideas coming forward." The current management is from the Heads of School through the Pro-VCs into the Management Board. The Pro-VCs both sift and challenge the ideas, and also facilitate ideas coming forward from Schools, which are reviewed at the senior executive level for approval of support. However, managing university staff is a notoriously difficult exercise, especially when at least some aspects of marketing and entrepreneurial activities seem to conflict with deeply held academic values. Effective power in a university is intrinsically and inevitably deeply embedded in academic staff of the institution, because only they have the expertise to make it work. The pro-vice-chancellors at Nottingham devote a considerable amount of time in proselvtising within the institution" (EUEREK case study: The University of Nottingham, 8-9).

The case studies show three methods to minimize tensions between the center and base academic units, the third being used by both the first and the second as well:

- (a) **Pursuing flat structure**, eliminating intermediate units (faculties), to minimize barriers between the center and the base units (departments) the example is the University of Warwick, the University of Joensuu (Finland) or the vast majority of Polish private institutions (the case study of WSHIG in Poznan provides a good example: there is the rector and his small team of collaborators and departments). There are no deans; its departments and research centers have direct contact with the center which consists of the vice-chancellor's office and a number of central interlocked (through some overlapping participation) committees certainly the best example of a successful flat management structure in Europe is Warwick.
- (b) Keeping three-level arrangements, increasing authority and responsibility of

existing multiple levels (the center – faculties – departments) – the example is Twente University (the Netherlands) and the Chalmers University of Technology (Sweden). A traditional basic structure – a small central office headed by the rector, president or vicechancellor; faculties headed by deans; and departments chaired by heads. The difference with traditional collegial structures is stronger personal authority in line positions and, at the same time, greater collegial authority in academic committees. This is thus the combination of stronger individual authority of rectors, deans and heads, combined with stronger collegial authority of committees and higher professionalization of central administration. The new bodies comprising the two increased authorities are "university management groups" or "university management teams". There are dangers that too much power given to the departments may lead to the gradual disintegration of the university as a whole (the university as an aggregate of entrepreneurial units and individuals, as former Twente University rector stresses).

(c) **Professionalization of administration all along the line**, and particularly at the center, as exhibited at entrepreneurial universities in Europe which have flat structures as well as those which keep the traditional three-level arrangements. Multiple non-academic tasks are increasingly being performed by well-paid experts and specialists, rather than amateurs recruited from former or current academics: the units include especially finances, student affairs, alumni and fundraising affairs. More and more previously unknown administrative posts are being created: in the Polish case, units for EU structural funds, units for EU research programs, units for technology transfer, university foundations to promote its brand etc (as the Poznan University case study shows).

Most case studies available, both from Europe and the USA, indicate that the issue of **academic autonomy and academic collegiality** in managing entrepreneurial universities cannot be forgotten in most successful cases. There are many cases of excessive centralization and examples of getting rid of (sometimes already remnants of) academic collegiality. The best examples of this trend are given from Australia and New Zealand (the Monash case study by Simon Marginson (2000); *The Enterprise University* cases studies edited by Marginson and Considine (2000); case studies reported by Janice Newson and Jan Currie in *Globalization and the University* (2000), Jan Currie (2000) etc).

Certainly the movement in general, in all public and private sector institutions, not merely entrepreneurial ones, is away from powerful senates and general assemblies and towards strengthened rector's/vice-chancellor's offices at the central level. In many countries (among transition countries, especially the Balkan countries should be mentioned: Bosnia and Herzegovina, Macedonia, Kosovo), there is a substantial – and paralyzing, dangerous to the healthy existence of academic institutions – devolution of authority down to faculties; the university is a loose federation of (almost) autonomous faculties. Consequently, few comprehensive reforms are possible. The idea of "integrated university" – a strong center and weaker faculties and departments – has been promoted in the Balkans for several years now, with very limited success. The governance structures at Twente University, an example of an entrepreneurial *and* decentralized university, are given below.

### Example 15. Governance at Twente University, the Netherlands:

The UT consists of five **faculties**, which offer a range of bachelor and master courses. Each faculty is headed by a dean, who is appointed/suspended/dismissed by the Executive Board (*College van Bestuur*), after hearing the Faculty Council (a representative advisory body of the faculty with members representing staff and students). The dean has to be a professor, and is member of the University Management Team (UMT). The five faculties are the result of a reorganisation a few years ago, when ten faculties were consolidated into five.

There are six **'spearhead' research institutes**. Each institute is headed by a scientific director who is appointed/suspended/dismissed by the Executive Board), after hearing the **University Council** (a representative advisory body with members representing staff and students). The scientific director has to be a professor and is member of the University Management Team (UMT). Each institute has to have a supervisory board and an advisory board. There are several central **service departments** to support both education and research at the UT.

The **Supervisory Board** of the UT consists of five members who are appointed for a four-year period.27 The Supervisory Board reports to the minister. The **Advisory Board** is an external sounding board for the preparation of strategic policy. Its members are appointed by the Executive Board. The Advisory Board can set up a scientific board that can give advice on science policy of the UT. The **Executive Board** consists of three members: the chairman of the board, the rector (UK equivalent: vice-chancellor), and the vice-chairman. In general terms, the chairman is responsible for overall coordination, strategy and personnel policy, the rector for education and research, and the vice-chairman for the financial affairs, infrastructure and operational matters. In principle, the Executive Board functions as a collegiate body in which the three persons hold equal positions – no hierarchical structure is operative. The Supervisory Board appoints the members – after a hearing by the University Council. The Executive Board is responsible for the administration and management of the university. It can establish procedures for the appointment of deans, scientific directors, professors and senior staff. ...

In addition, there also is a **University Management Team** (UMT), which consists of the Executive Board, the deans of the faculties and the scientific directors of the research institutes. The chair of the Executive Board is also the chair of the UMT. Strategic policy is made in consultation with the UMT. The UMT was created to some years ago to strengthen the links between academia and administration, to strengthen the collectivity of the UT, to increase legitimacy of institute-wide policies. The UMT can set up a Steering Group Research (consisting of the scientific directors of the research institutes and the rector), in which university research policy is coordinated and prepared. In the same vein, the UMT set up a Steering Group Education (consisting of the deans and the rector magnificus). ...

Within this new organisational structure a decision making process was introduced in which the deans and the scientific directors form the university management team, together with the Executive Board. While the Executive Board is ultimately responsible, the UMT sets out the strategic direction of the university. The result of all the changes is a "flat" organisation, which can respond directly and collectively to developments in the social-cultural, political or economic environment of the university (Arnold et al, 2006: 38-39).

In small private institutions, both governance and management structures and procedures may be simplified to the extreme. They are often reported in new private institutions in transition countries which have sometimes appeared out of nowhere, with no international or public subsidies, and which have been constantly in danger of collapsing (WSHIG is a perfect example). The culture of financial survival, as reported in Spain, Russia, Moldova, and Poland, has been very strong. The consequences for management styles and managerial practices are described in a box below: decisions are taken by 1-5 people, there is no collegiality and all major and most even minor decisions are actually taken by rectors/owners/funders. These simplified management structures seem to be possible only in relatively small institutions, with no major research ambitions and those which are relatively non-competitive places for staff. There are virtually no research funds available and consequently most academic decisions are relatively non-controversial teaching-related decisions. A box below describes a Polish case.

## Example 16. Simplified management structures in a small entrepreneurial private institution in Poland (WSHIG):

The Academy has a stable organizational and management structure: the founder and the owner (Professor Roman Dawid Tauber) has been its rector in the whole period. All key decisions concerning WSHIG are taken by the rector. There is no Senate as the Academy is too small - but key academic decisions are confirmed by WSHIG's Scientific Board, meeting 3-4 times a year (WSHIG is located in one building, with central administration on the same premises with lecture halls, library and professional training sites. Rector and his management team is able to intervene at an time, should any issues of concern arise). The management team is small and very effective; it comprises rector and three vice-rectors. All senior administrative staff, including vice-rectors, has been working for WSHIG for a decade or more. The key for the success of WSHIG is the loyalty of its staff, both administrative and academic. Staff happens to complain but keeps working for WSHIG usually for many years, sometimes changing academic or administrative units every few years. Also senior academic staff, especially core full-time professors, have been employed for many years now (5-10). In a small-size academic institution like WSHIG it is still possible for it rector to make all major decisions; and to make many minor decisions. From an academic point of view, vice-rector for academic affairs suggests the way to proceed, usually accepted by both rector and finally by the scientific board (EUEREK case study: WSHIG, 15).

The administration of entrepreneurial institutions studied managed to fuse new managerial values with traditional academic values; in no successful cases reported, the attempts to eradicate the traditional academic values and to replace them with managerial ones succeeded (a different story are "corporate universities", private for-profit institutions, active largely in very selected areas of studies and research, including computing, accounting, business law etc; somehow surprisingly, this sector has been fully neglected in major case studies of entrepreneurial universities available on a European scale; they were studied separately, e.g. within the ongoing PROPHE "Program on Research of Private Higher Education" at SUNY/Albany). The reason seems to be that it is the traditional discipline-related departments where both major teaching and research is still being done. It is expected to be so in the future.

What do the agents of change/transformation do - those leaders located in the strengthened

managerial core of entrepreneurial universities? They (Clark 1998: 137-138) seek other patrons in funding, work to diversify income and enlarge the pool of discretionary money available to an institution; seek out new infrastructure units (academic and administrative alike) that reach across old university boundaries, reach the outside world of firms and companies. They are necessary for the task of cross-subsidizing fields and degree levels, taxing richer programs and aiding those less fortunate (top-slicing the profits). So they seek to subsidize new activities and try to enhance old valuable programs. The steering core is responsible for keeping the right balance between rich and poor departments. Another example of successful managing by a senior management group comes from Strathclyde University (called there a "university management group"), see a box below on its composition and modes of operation.

## **Example 17: "University Management Group" at Strathclyde University (as formulated by its vice-chancellor):**

"The 'strengthened steering core' is essentially demonstrated through the operations of the University Management Group (UMG), as the key group through which al major decisions can be quickly progressed. Like most major UK universities, Strathclyde has a Senate, which is responsible for all academic matters within the university and a Court or Governing Body, which is responsible for the management of the university's resources. The UMG ... is the key management body that undertakes the formulation of major policy and oversees the operational management of the university on behalf of the Court and Senate.

The UMG is chaired by the Principal and has a statutory membership of 10 comprising, in addition to the Principal, the Vice-Principal, the Pro-Vice-Principal, a Deputy Principal, the Secretary to the University and the five Deans of Faculty. ... The Group meets fortnightly and works to a tight, fully prepared agenda. It has its own Secretariat to prepare the business for its discussion. Decisions taken by UMG are reported to Senate and Court on a regular basis" (Sir John Arbuthnott, quoted in Clark 2004a: 25).

As reported from Twente University, the decentralization of the university and its entrepreneurialization may reach its limits. As its rector highlights, and entrepreneurial university can become too entrepreneurial and too decentralized: the discretionary funding base can become substantive enough to allow the base units to follow their own course of action, without reference to the overall institution. The base units can become self-supporting groups that can act as individual entrepreneurs. The entrepreneurial university should not become a university of entrepreneurs (Clark 2004a: 40).

The opposite direction – centralization – was taken in making the University of Warwick a model of European academic entrepreneurship: the core is strong and centralized, and departments are basic units, there are no deans or faculties. It is at Warwick that an idea – and then university policy – of the "earned income" was formulated. An "Earned Income Group" became *the* instrument for entrepreneurialism, working on adding new sources of university revenues (in short: companies should not *give* us money, we want to *earn* it; as Michael Shattock put it: "we had to find ways to generate funding from other sources; we did not see why people or companies would simply give us money so we decided to earn it"). The "earned income policy" worked in the following way: the group was "top-slicing" various incomes generated by various units, it expected a "profit" from other units, professional managers were hired to run various units.

Accounts were closely studied for current performance against set targets; successful performances were praised. Several accounts e.g. student residences were expected to merely break even but all the others had to operate under the dictate of earning income, according to overall "earned income" university policy. The university committees were allocating sums to departments and were controlling faculty positions. The committee system is described below:

Example 18: The committee system as a strategic part of university management (Warwick):

"Without extensive decentralization to faculty and departmental levels, Warwick has effected collegial steerage by means of these central committees in which senior officers, some lay members of the council, and faculty members share responsibilities. With faculty clearly involved, hard choices can be made in supporting new initiatives and realigning traditional allocations of resources. The core incorporates the academic heartland into the center. In this structure, a university can be entrepreneurial without the CEO (the chief executive officer), the vice-chancellor in this case, necessarily being entrepreneurial. ... The third and current V-C, Sir Brian Follett (1993-) believes he was selected not because he was an entrepreneur, nor did he seek the position to become one. With a strong academic background in chemistry and biology, and experience in national science councils and funding bodies, his personal mission emphasized the strengthening of the sciences at Warwick. In short, steering capacity has been institutionalized in a committee structure that blends lay council members, elected academic representatives, and senior administrative officers" (Clark 1998: 23).

The innovative "flat management structure" introduce at Warwick has been very successful but it would not be possible to go forward without a (somehow complementary) system of powerful centralized committees, as described in a box on resource allocation models and committees above. Below, there is another description, without reference to finances.

### Example 19: The "flat management structure" at the University of Warwick:

"A *strengthened administrative core* ... arguably is the most important of all the pathways taken to transform Warwick. In the balance between central control and departmental autonomy, **this core is relatively centralized**. ... Warwick argued that, yes, strong departments are needed – we have them and will nurture them – but **we particularly want a strong center that will stand for the overall institutional interest and offer an effective guiding hand.** 

As part of this posture, the university has not created faculties as a strong form of organization between center and department: in 1995 despite increasing pressure from growth in size and complexity, faculty deans were notable for their absence. The institution prides itself on a "flat structure" of center and department. Departments have remained the building blocks of the university and their chairs have a significant role. The chairs relate directly to the vice-chancellor and such senior administrative offices as the registrar and finance officer. They also do not relate to a single apex committee, a structure we observe later in other settings, but to a set of interrelated central committees, knitted together by overlapping membership, consisting of a small cadre of senior administrators together with a small group of professors elected by colleagues to play central roles. This web of interlocked central committees has become the heart of Warwick's capacity to steer itself" (Clark 1998: 21).

How to achieve strong management? There are several ways described on the basis of case studies of entrepreneurial institutions. The first method is to strengthen the role of vice-chancellor or principal. Other ways include the creation of deputy vice-chancellors as full-time, permanent or fixed-term appointments. Additionally, directors of finance and human resources are now usually key members of the senior management team (described several times in the present report). The key **corporate functions** of planning, estates, finances, human resources, learning and information, corporate services are likely to be represented alongside with the academic functions of teaching and learning, research and enterprise. These recent phenomena in management styles are described in more detail in a box below.

#### **Example 20:** Achieving strong management at entrepreneurial universities:

The first method is to **strengthen the role of Vice Chancellor or Principal**. Advertisements and job descriptions increasingly emphasise the roles of Chief Executive, Chief Accounting Officer and 'Chief Architect' of the strategic vision and positioning of the institution. They seek a track record in leading strategic change in the same (or parallel) large, multi-million pound businesses. ... The terms of office for Vice Chancellors appear to be getting shorter (typically five-year renewable terms, although this is not universal) and there is also some evidence of movement between institutions among experienced post-holders either within the UK or between the UK and other countries. ...

Other strengthening factors include the creation of Deputy Vice Chancellors as full-time, permanent or fixed-term appointments... This role may include line management responsibilities for Heads of School or Deans of Faculty. In addition, a range of other roles is being incorporated into Senior Management Teams including that of Pro Vice Chancellor, Assistant Vice Chancellor, Executive Dean or Head of Division or College. ... The kinds of portfolios carried in these positions are widening beyond the traditional areas of Teaching and Learning, Research, Resources, Libraries and Information Services and Estates to include External and Community Relations, Knowledge Transfer and Enterprise, Partnerships, Advancement, and Human Resources. ... A new role of 'Director of Corporate Services' or similar, may be emerging, mirroring The recruitment for this position, as well as a range of specialist professional roles arrangements that already exist in some continental European universities. such as Director of Development, Marketing and Public Relations, Finance and Human Resources, is increasingly likely to be from outside the higher education sector. ... Directors of Finance and Human Resources are now usually key members of the Senior Management Team, although institutions have been slower to recognise the strategic role of the 'people side' of their business than the financial side" (Middlehurst 2004: 272-273).

To sum up the role of the "strengthened steering core" in entrepreneurialism of the private institutions studied: there does not seem to be the need of balancing influences across multiple levels of these institutions, there does not seem to exist the need to keep a constant balance between particular departments through the intervention of the center. In contrast to public entrepreneurial institutions (and even more, in contrast to the whole public sector in higher education), the role of faculty participation in central councils is severely reduced. Collegial management unheard connections between academics is of. and and administrators/management/founders/owners are limited. The center is constantly dealing with risk the management and understanding of which is crucial; and *the* risk, to manage on a daily basis, is the financial one. The role of bringing resources (through keeping or increasing the number of students) seems more important than the role of bringing reputation to private institutions studied. In terms of management structures, as in public entrepreneurial universities, private institutions have powerful centers, strong management groups, usually comprising very few administrators. In decision-making, the role of collegial bodies seems, in most cases, marginal (most often, if they nominally exist, their formal approval is sought). Most private institutions do not use resource allocation procedures to make strategic choices about their future direction. Also no major impact of a new bureaucracy is reported: both the number, and the role, of development officers, technology transfer experts, special staff managers, fundraising officers, is small. The role of strategic committees, so fundamental for managing entrepreneurial universities studied in this section (especially at Warwick and Nottingham), seems minimal. In transition countries, a unique features is that management in the private sector is dealing, to a large extent, with academics working (in a parallel manner) in the public sector. Consequently, the fusion of managerial and academic values is both more and less feasible: more, because academics bring in the traditional collegial attitude prevalent in public institutions; less as most of them come to the private sector not for (research and teaching) satisfaction – but in order to make more money, and they can quit any time. In other countries studied, this could not happen (the UK, Spain). The management structures are nominally three-level arrangements (center – faculties – departments) but in practice they seem to be flat (center – departments, as at Buckingham), and in smaller institutions, even center – academics, with no intermediaries (WSHIG in Poland).

## **<u>5. THE EXTENDED DEVELOPMENTAL PERIPHERY</u>**

The third element of entrepreneurial universities in Clark's formulation is its extended developmental periphery (which seems quite limited in scope, operations and importance at traditional universities). In the private sector studied within the EUEREK, academic peripheries also play a very limited role: most case studies do not mention their existence at all.

In general term, there is an increasing number of operating units that are not traditional, discipline-centered departments. These units particularly take the form of **interdisciplinary and transdisciplinary research centers (or research institutes in the US and the UK)** focused on a wide range of societal problems. The extended periphery can also be units of teaching outreach, under such labels as continuing education, lifelong education, distance education, and professional development. These research and teaching instruments cross old university boundaries to bring in new students and new kinds of research. Such base units have natural allies in the steering core – among agents of change located in the center.

These new entrepreneurial units fundamentally change the character of the university, adding new dimensions to traditional (departments – faculties – the center) or newer, flatter structures (departments and the center). They require different managing styles as they are often non-permanent, contract-funded units, staffed most often by non-tenured contracted academics. These styles are more flexible, relationships between the center and peripheral units become much less formal and less bureaucratic – one of the reasons is that these peripheries are the units where outside research funds are being invested. Examples come from the University of Manchester:

## Example 21. Managing entrepreneurial units: the role of parallel, non-permanent research institutes (University of Manchester):

In order to simplify the university structure, the University has reduced the number of faculties to four. ... But the university has also established a number of research institutes that create a matrix structure like those recently established at Loughborough University. ... The institutes are run separately from the faculties and are designed to support interdisciplinary research. The vast majority of institute's academics are drawn from the schools though some research and technical staff will be attached to the Institutes themselves, working on specific project grants. Each institute was required to put forward a business plan. Most are funded though competitive research grants and contracts, though the faculties also make some resources (cash or in kind – e.g. time) available from their own budgets.

The Institutes are not permanent structures. They must be pan-faculty, have proven international excellence and a clear delivery plan. Staff are still line-managed through the Schools. It is not yet clear the extent to which the institute structure will lead to increased specialisation. ... The strategy has been flexible. ... Management procedures in the new university are reported to be agile and more flexible, with fewer layers of bureaucracy. For example, individuals not Committees are held to account for key decisions. Committee structures are now less common on the Executive and Corporate levels, which tend to use ad hoc advisory groups where necessary. Whilst this may appear less democratic, it does enable university management to respond much more quickly to new Programme establishment for example. Committees are more prevalent in the faculties, however (Arnold et al., 2006: 78-80).

The crucial role of new research centers in the case studies of European entrepreneurial universities (not in the private sector, though) is overwhelming – and universally reported. Research centers increasingly attract more outside funding in the form of grants and contracts. Their existence confirms **a dual structure of most entrepreneurial institutions**: traditional academic departments (and disciplines of teaching and research) and transdisciplinary and non-traditional research centers (and transdisciplinary research; sometimes teaching – but then mostly postgraduate programs and short courses). These academic peripheries can come under the structure of departments, or be accountable directly to the center (as is the case in Poland where most new research centers are accountable academically and financially directly to vice-rectors for research, avoiding any hierarchies of departments and faculties, and deans and heads of departments, as the AMU case study shows). The UK examples from LSHTM and Warwick show their operational location within departments, though; see boxes below on managing academic peripheries, fundamental to the entrepreneurial character of these universities.

# Example 22: Management of academic peripheries: the crucial role of new research centers (LSHTM):

"The School has also established some interdisciplinary research centres under the departmental structure (i) to maximise the research benefits of the multiple disciplines spread across departments, (ii) to provide a focus for research and development of an integrated and coherent research agenda in areas where work is dispersed across the School, (iii) to provide for promotion of new areas of research activity not covered within the research programme of any one department, and (iv) to attract new sources of funding. These include the European Centre on Health in Societies in Transition, a Malaria Centre, a Collaborative Centre for the Economics of Infectious Diseases, and a Centre for Ageing and Public Health. Some of these have benefited from the School's Academic Initiative Fund. In addition to these cross-departmental centres each department will have four or five designated research units that may have some devolved budgetary responsibility" (LSHTM, 22).

The UK example (from Warwick) gives also an interesting illustration of the claim that research centers can be formed in the social sciences and the arts, apart from the science component. They are heavily involved in raising second- and third-stream funds. See a box below for details.

Example 23: Research centers at entrepreneurial universities, examples from the social sciences, the arts, and the sciences (University of Warwick):

Departments at Warwick, virtually without exception, have been busy developing research centers to further their own subjects, necessitating the raising of funds from second- and third-income streams. Such efforts have not simply been left to "science and technology," where large amounts are most likely to be available. ... The social science component consisted of nine departments and schools and over 20 research centers. ... The numerous research centers operating largely under the departments and schools included ones on legal research, health services, philosophy and literature, as well as on macroeconomic modeling, comparative labor studies, ethnic relations, democratization, women and gender.

The arts component showed nine departments and schools and six research centers. The departments consisted of history, history of art, classics and ancient history, English and comparative literature, French, German, Italian, theatre studies, and film and television; the research centers included one in general humanities research as well as more targeted ones in cultural studies, social history, and the Renaissance. The entrepreneurial spirit shows through in these departments and centers.

The science component was constituted by nine departments and schools and five research centers. ... The research centers included the large Centre for Advanced Materials Technology which has joint research projects with such major British industrial partners as Rolls Royce and British Gas, as well as foreign collaborative ventures in such countries as Sweden, France, Belgium, and Japan (Clark 1998: 28).

Just as each new source of funding requires a university office, so the new units of the developmental periphery require specialized offices to develop their activities. Numerous administrative units paralleling the many research and teaching units of outreach are part of what makes the entrepreneurial university a proactive place, Clark claims (Clark 2004b). Apart from traditional departments, new academic units appear and increasingly become entrepreneurial – within the limits of each institution.

The new peripheries take two basic forms: (a) new administrative offices, and (b) new academic units. The appearance of new specialized administrative offices is closely related to new tasks of the institution, unknown to the institution in its traditional structures and funding opportunities. New offices (and posts) include: grants and contracts office; research and innovation offices (see a box below):

### Example 24: Research and Innovation Office (Plymouth):

"The University's Research and Innovation Office (RIO) was established to maximise collaboration with industry, business, public sector, research and community-based partners. RIO provides access to the expertise of academic and specialist technical staff, entrepreneurship support to turn new ideas unto business opportunities, intellectual property management and spin-out companies, consultancy and project management expertise, new research projects and technologies, Centres of Excellence and Knowledge Transfer Partnerships. RIO also provides support to staff in identifying and securing commercial and non-commercial research funding. The University has 800 academics and RIO currently assists around 100 staff members in making applications, to have them costed and get them approved" (EUEREK case study: The University of Plymouth, 26).

They also include various offices related to new academic programs, such as "entrepreneurship support programs" as described below. Other new units mentioned by Clark (2004: 86) include the office of industrial relations, the alumni offices, the retail services office, the conference and special events office, the continuing education office, the capital projects office. They all make sense at entrepreneurial universities, they are all closely related to the third stream of university funding discussed above, and they are all needed. Clark calls them "new bureaucrats of change" – who increasingly replace old traditional civil servants at transforming public universities.

### Example 25: Entrepreneurship Support Program (Plymouth):

"For staff who aim to turn their ideas into business opportunities the University has established an Entrepreneurship Support Programme. The programme is claimed to be practical and innovative and it involves (i) teaching entrepreneurship (i.e. workshops equipping students and staff with practical entrepreneurial and enterprise skills), and (ii) practical entrepreneurship (i.e. the opportunity to set up a business in practice, in an environment with private sector mentor support). The University provides funding to support staff and students in developing their business ideas, and currently this includes 'proof of concept' ideas and enterprise fellowship award" (EUEREK case study: The University of Plymouth, 26). New funding opportunities contribute to the emergence of new peripheral supporting units. The role of the grants and contracts office at London University LSHTM is described below in a box. Interestingly, LSHTM research income comes mostly from non-tenured staff working on grants and contracts. As a research grants and contracts office there explains: "A high proportion of the School's research grant income is actually acquired by people who are not tenured staff, and therefore those people are entirely supported out of the research grant that they can get. If they can not attract research grants, they do not get paid. That is very different from a traditional university. A bridging fund has been created for people who are between grants, but that is decided by the Departments" (EUEREK case study: LSHTM, 13).

Similarly, the role of (new peripheral) offices dealing with intellectual property issues and academics' consulting activities is discussed below in a box based on a the University of Nottingham case study. Interestingly, these issues were reported as very difficult to deal with, and as often creating considerable tensions. Sometimes ethical codes, or codes of good practices, were reported in case studied as either being in process or badly needed by the management.

### Example 26: Managing intellectual property issues and consultancies (Nottingham):

"Nottingham continuously tries to **transfer good ideas into patentable and marketable products**, and it has invested in commercialisation of intellectual property. Knowledge transfer and its commercialisation is a major plank of Nottingham's strategy. Like most UK universities it aims to do this through exploitation of intellectual property created within the University, The importance attached to these activities is demonstrated by the creation of a **Research and Innovation Services Office, which now employs 45 people. Two of the six pro-vice-chancellors have responsibilities for research and knowledge transfer**." "The University has what it considers an attractive royalty sharing scheme, whereby members of **staff responsible for the creation of commercially exploitable intellectual property receive 40 per cent of any income generated**. The university is cautious about starting new spin-out companies having discovered that they are much easier to create than to wind up if they fail to generate a financial surplus income" (EUEREK case study: The University of Nottingham, 6-7).

"The university has a traditional approach to consultancy work by individual members of staff. Academic staff are allowed to spend up to 50 days a year in private paid consultancy. They have to pay full cost for any university facilities used in providing the consultancies and they are advised to insure themselves against civil or other liabilities since the University will not accept responsibility. The University also requires staff to disclose whom they are working for and when they are doing it but they do not need to disclose how much they are paid. This enables the University to monitor the amount of such work that is being done but 'we don't need to know the private arrangement' (ibid). The University takes the view that some external consultancy work, as well as helping members of staff to supplement their ungenerous academic salaries, helps to broaden their experience of the real world in their areas of expertise (EUEREK case study: University of Nottingham, 7).

The academic structure as reported by case studies on entrepreneurial universities is changing substantially owing to these new peripheries, both academic and administrative. New boundary-spanning academic units (research centers and institutes) link themselves much more easily to the

outside world (and outside funding) – as opposed to the traditional, disciplinary-centered departments. A clear example of research policy aimed at keeping research institutes, as separate from departments and faculties, at the forefront, is given by Twente University; see a box below for more details.

# Example 27: Research strategy at Twente University: performance monitoring and strategic selectivity

With regard to research policy, the UT will position itself as a leading European research university. Four key elements of the research strategy are

• Strengthening the UT-"spearhead" policy. The UT will redistribute resources towards excellent and strategically relevant research – *i.e.* excellent groups will be rewarded. The UT will invest selectively. Selection criteria will be developed by the University Management Team, based on scientific excellence and fit with the UT mission. In 2010 the UT will have no more than six "spearhead" research institutes. In its research funding policy, the UT will distinguish between programmes of these institutes in terms of quality, relevance and valorisation and collaboration in joint research programmes (especially collaborations between technical and non-technical/social disciplines). This UT profile should result in increased income from national and international programme-based funding

• A systematic and transparent quality assurance policy based on impact analyses at the level of capacity groups. The method of impact analysis at chair group level is yet to be established, but will be linked as closely as possible with internationally accepted techniques. The UT intends to use the impact scores of each chair as a basis for self-assessments to be carried out as part of external research reviews – which can be held at the discipline level or institute level

• A targeted research infrastructure policy, coordinated in the framework of the collaboration between the three technological universities in the Netherlands, and in the regional context

• **Positioning research in research institutes and education in faculties**. A clear distribution of responsibilities between scientific directors of research institutes and deans of faculties will be formalised. The UT aims to enhance the long-term development of the institutes and to test them against output in terms of quality, relevance and earning capacity. Realistic targets will be agreed for the institutes. **Research areas that continually fail to meet the target or fail to reach a sufficient quality will be phased out (gradually)** (Arnold et al, 2006: 42).

Young faculty often seem much more interested in working in multidisciplinary centers, clusters or programs rather than in traditional disciplinary departments (a perfect example of "thematic" thinking about universities' role is given by Lapland University, Finland – multidisciplinary research around "northern issues", as reported by a Finnish EUEREK study).

To sum up: the role of extended developmental peripheries in the private institutions studied is marginal; new transdisciplinary research centers are sometimes reported but they do not change the character of these institutions and their (rare as it is) existence do not lead to introducing new management styles or new internal resource allocation procedures. They do not form parallel, increasingly powerful university structure. They do not seem to attract new sources of funding, they are not engaged in aggressive seeking new research areas, as in the public sector. Also the role of new administrative units, so crucial to public entrepreneurial institutions studied, by comparison, is marginal. Most of new posts and new units in the public sector are related to new opportunities of research funding, or the exploitation of research results, innovation, or international off-campus teaching, or royalty rights etc. In private institutions studied, the need for these units is still very small, although they do sometimes appear (offices for EU structural funds in Poland, EU research or Tempus officers in Russia and Ukraine etc). The balance of power in management is not changed by new peripheral research (or teaching) units. There are few people working on research grants, without employment contracts, and there is no need to have bridging policies ready for this staff category. They do not have major (or in most case – any) problems with managing intellectual property issues or consultancies. There do not seem to exist clear research targets and funding for particular units does not seem to be based on meeting the targets, or bringing additional research-related revenue to the institution. Consequently, at the moment, the extended developmental periphery seems almost absent from the picture of the private sector in Europe, at least as studied in the EUEREK case studies.

## 6. THE STIMULATED (ACADEMIC) HEARTLAND

The fourth element of Clark's entrepreneurial universities recognizes that strong universities are built on strong departments. Entrepreneurial universities become based on entrepreneurial departments – places attractive to faculty, students, and resource providers. Research centers and institutes proliferate and may change the balance of power at an institution – they have most often many more opportunities for outside funding, and are directly related to the university management center (also owing to their successes in attracting funding; this proximity to the center, as reported by case studies, is most often informal). But apart from academic peripheries, traditional departments do count, and this is where most teaching and research is reported to be taking place.

The issues of developing new knowledge from entrepreneurial activities, the dissemination of (new) knowledge and knowledge exploitation and technology transfer mechanisms look quite similar in most of the EUEREK private institutions studied. Except for the Swedish case of Jönkoping, none of the institutions have science parks or significant (either public or private) research funds. Interviewees mention teaching, seminars and books as their contribution to the knowledge transfer. There is no *major* difference in this context between Buckingham, WSHIG in Poland, UCH is Spain or the TCUM university in Moldova: they are mostly teaching institutions, with strong vocational component of studies. In the Spanish case, though, there is an idea to set up an Office for the Transfer of Research Results – and there are already two institutes where the dissemination of research work is located. As the Polish case study explains the role of research and teaching,

WSHIG is a special case of fully professionally-oriented educational institution. Being both a private institution, and a almost completely teaching (as opposed to teaching and research) institution, WSHIG does not intend – by its mission – to develop or disseminate new knowledge or intend to get involved in knowledge transfer. ... If any knowledge transfer could be mentioned, it would be the knowledge provided through short-term courses to professionals already working in the areas of studies represented by WSHIG. The role of research at WSHIG, both according to its mission and in practice, is marginal. But nevertheless WSHIG has published a few dozens books and collective volumes in its areas of interest. As a vocationally-oriented teaching institution, WSHIG does not see the reason to get involved in research not related to its major areas (EUEREK case study: WSHIG - Poland).

Or as in the case of Buckingham,

Buckingham is not a research active university though most of its staff are engaged in research so that its contribution to the knowledge society is mainly through its students. The student population is not, however, large. The impending developments in the business school promise a contribution to the regional knowledge economy but have yet to be realized (EUEREK case study: University of Buckingham).

The EUEREK private institutions studied do not have strong "academic heartland" as they are predominantly teaching institutions.

In more general terms, and with respect to the public sector, entrepreneurship is reported not to belong to a few disciplines or subject areas – it has come to characterize virtually all academic fields (and such big universities as Twente and Warwick are best examples here, even though they represent two extreme poles in management structures: decentralization and centralization). The following features from academic departments are reported to reveal their growing entrepreneurialism (the Warwick case): the melding of periphery into the core; the extensive building of research centers under departments; the construction of a university-wide graduate school; and the introduction of an imaginative and highly attractive research fellowship scheme (Clark 1998: 27).

Departments do not fade away at entrepreneurial universities; instead, as traditional knowledge territories expand, their **supporting units become more important**. What the old departments are willing to do gets done anyway; what they oppose, though is slowed down or eliminated along the way, Clark stresses. Departments are still the places where both most teaching and traditional research is done.

The most frequent mistake made in attempts to transform universities is for a management team to proceed on its own without involving faculty and their departments from the outset, Clark claims (2004b). Some departments can and will move faster than others in understanding the benefits of entrepreneurial actions, their own as well as those located elsewhere in the university. Most social science and humanities departments may underestimate the role of new peripheral supporting units, and criticize their running costs (e.g. technology transfer or contracts and grants offices). Generally, science and technology departments lead the change, enabled by sources of support directly available to them and prepared by their experience in administrating costly projects, labs, and equipment.

Departments positioned to raise income should be encouraged to do so by other departments, and thereby to contribute to the welfare of the entire university as well as their own. It is then a

second-order problem to work out who decides what share of the enhanced resources each gets. It is here that the whole complicated issue of **"top-slicing" and "cross-subsidizing" appears, and may cause substantial tensions within an organization**. Both Clark's case studies and other European case studies of entrepreneurial universities show that there is uneven spread of entrepreneurialism within an institution, with various speed of change, most often depending on external opportunities. While in Western Europe and the US, apparently the most enterprising parts of the traditional academia (Clark's "academic heartland") are in the science and technology areas, in most transition countries as confirmed by case studies available the most entrepreneurially-minded units, departments, institutions, as well as academics, are those "soft" areas: economics, law and business, management, marketing, sociology, political sciences. These are the areas in which the largest part of private sector operate, and in which public sector runs its most enterprising study programs for fee-paying students (all Polish, Russian, and Moldavian case studies confirm this tendency). Also the availability of grants, including international research grants, in these areas seems considerable.

As evident from EUEREK case studies, in transition economies "soft" disciplines, including especially economics and business and social sciences, are much more easily fundable, and consequently are much more agents of entrepreneurial changes in academic institutions. Managing resource allocation in entrepreneurial universities studied is most often operationalized through committees: small and medium sized. As the box below explains,

#### Example 28: Resource allocation in the entrepreneurial university: small to mediumsized committees

One aspect of the discussions was to understand the decision-making styles most appropriate to resource planning within an entrepreneurial university. Professor Clarke emphasised that universities could enhance their decision making for resource planning and allocation by emphasising university enterprise and strategic initiative funding. This promotes **the concept of collegial enterprise whereby a unique partnership is formed between central senior management and academic staff via a small to medium-sized committee**. Committee decision making should be transparent and provide quick feedback to the university. This allows university ownership of the decisions made by such a group. "Top slicing" (from university budgets) for strategic initiative funding is an important concept the collegial entrepreneurial university may use in its resource decision making. Such strategic initiative funds allow institutions to quickly change direction as the environment changes and permit the formation of temporary inter-disciplinary research groups that, if successful, could develop into permanent structures such as research institutes (Sharma 2004: 112-113).

"Support units play a fundamental role in resource allocation and planning. In particular, **planners, institutional researchers and the finance office staff** are critical in developing and maintaining **decision support systems**. Support areas should also be given due recognition in the sharing of proceeds from the entrepreneurial activities, since again they make a very valuable contribution through the enrolment of fee-paying students and providing them with other student services support" (Sharma 2004: 117-118).

An excellent example of financial management with respect to the earned income – a crucial component of the third stream of university income, perhaps most valuable to the university from the standpoint of its entrepreneurial character – is provided by the University of Warwick. The university, administered through the system of central committees, has a strong capacity to "top-slice" the profits and to "cross-subsidize" (for a variety of reasons) less financially successful departments which makes it possible to help those departments which cannot easily raise their money or to support new academic or administrative undertakings. As Shattock explains in a box below:

# Example 29: Financial management: "top-slicing" and "cross-subsidizing at an entrepreneurial university (University of Warwick):

"The earned-income approach at Warwick is muscled by a strong capacity to "top-slice and cross-subsidize." This capacity is the backbone of **the ability to come to the aid of departments (and specialties within them) that cannot readily raise money on their own, and to back completely new ventures**. As the registrar explained to European rectors in a 1994 conference (Shattock, 1994a, p. 4): 'Some departments, e.g., the Business School and Engineering, are more obviously capable of generating external income than say Sociology or the History of Art but because, once the departmental share is separated off, the **university's share [the top slice] is simply pooled with government funds and allocated on academic criteria, all departments benefit.** It is accepted that it is to the university's advantage that **those departments that can generate income should support those departments that are simply unable to do so [the cross-subsidy]'.** Departments that regularly have monies taken away in this fashion are, of course, not always happy about it. The center then has to have the power and legitimacy to say "it is accepted" because this is the way we build the university as a whole" (Clark 1998: 24; see also Shattock on the earned income policy in 2004b: 225-235).

Private EUEREK institutions often do not have detailed strategic plans: in the Spanish case of UCH, there is a strategic plan for the whole foundation running schools, secondary schools and 3 universities, and a new strategic document for the institution; in the Polish case study, there is no strategic plan as the institution is reacting to changes in the local (Poznan) educational market – the most important goal, from both an academic and financial perspective, for 12 years, was to have the right to provide MA studies; this goal was realized only in 2005, with the decision of the Ministry of Education. The University of Buckingham case study does not mention any strategic plans, nor do the Moldavian or the Russian (Pereslavl) case studies. The exception is the Swedish case in which the first strategic plan is reported to date from 1995. As a vice-rector in the Spanish case study of UCH explains,

We have the Foundation's mission document. The universities have their own operational regulations, which used to be called Statutes. Recently, a Strategic Management document has been created. The change in the Foundation's management has meant that policy is now implemented via a Strategic Plan. New approaches are obviously required in the changing environment. Although the mission is still the same, the ways to achieve it change (action unit) ((EUEREK case study: UCH – Spain).

Although most EUEREK private institutions studied do not have specific strategic plans, they mention similar factors which are relevant to determining actual mission and working strategies of their institutions. The first and the basic factor is the competition with public universities, mentioned in all case studies (Russia, Poland, Spain, UK) except for Moldova and Sweden. While most cases do not mention academic cooperation with public institutions (except for the specific cases of Moldova, Poland, and Russia where professors often have parallel jobs in both the public and the private sector – which means cooperation through sharing the same staff), the Swedish case is again different:

There does not exists such a thing as 'negative competition.' We compete with Chalmers, Linköping, and even KTH" the Rector emphasized. JU is not only competing, but also actively cooperates. For example, JU cooperates with higher education intuitions in Kalmar, Växjö, Vänerby, Helsinki. The Rector noted however that: "We cooperate mostly within research areas, and not much on a general level" (EUEREK case study: Jönköping University - Sweden).

Certainly, almost all of these institutions are not involved in research more than marginally, so the Swedish-like cooperation in the area of research is rather unlikely to occur, as confirmed by the case studies. The competition with public institutions, in the context of the general lack of access (in theory or in practice) to public research funds, means the competition for students and their fees. It is very clear in the Polish case of WSHIG and the Spanish case of UCH.

Consequently, the second factor relevant for the mission and strategy of private institution studied (except for the Swedish case) is the uncertainty about student enrolments – as enrollments may be going down (or their national/international composition may be changing, as in the UK case) or be fluctuating. As the general manager quoted in the Spanish case study put it, "the factors which affect private universities are based on the amount of resources, i.e. it is the students themselves who guarantee the minimum amount of revenue required to survive". The Polish case study makes the crucial role of student enrolments in university policies clear and stresses why it is so important for Polish institutions to have both BA- and MA-granting rights:

The worst year was 2000, with a drop in first-year students from almost 600 to below 400. Next years has been steadily better. In all years 1993-2005, the most important factor for future existence of WSHIG were the rights to provide MA studies. After years of applications, finally in 2005 the right was granted. This right would have been a significant competitive advantage 5-10 years ago; today it has become a must to be able to compete for students (as the labor market still does not view BA degree as "full higher education"). With MA rights, WSHIG is able to have a chance for a much less stressful future (EUEREK case study: WSHIG - Poland).

Additionally, both in Spain and in Moldova, Poland and Russia, changing government policies, state or ministerial authorizations, changing laws on higher education, accreditations and permissions are extremely important as mission-determining factors. In these countries, government decisions make a lot of differences to private institutions. In the UK, by comparison, Buckingham seems fairly independent from UK educational policies (even though it is equally dependent on student fees).

What is reported in public institutions: despite internal competition, entrepreneurial universities report a high degree of internal cooperation, especially in grants applications, cannot be confirmed in EUEREK private institutions. Because the access to research funds is very limited, so is both internal and external competition. Cooperation seems to concern teaching rather than any other activities. The role of competition at entrepreneurial universities is widely reported to be crucial. The competition is mostly for research funds, especially outside sources of income. The overall effect of growing competition in sciences and the humanities alike is reported in case studies as extremely positive, even though the picture of institutions most successful in this competition differs substantially from that of traditional, non-competitive academic places. There is a strong implication coming from the vast majority of case studies that without competition for funds, entrepreneurial universities would not become entrepreneurial, even though they could be top in their respective disciplines and excellent in research done and teaching provided. Implicitly, the abundance of funds (a rather theoretical case) or non-availability of outside research funds may substantially block university transformations. Somehow "fortunately" (for the growing entrepreneurialism of best universities in Europe and the US), (research and other) funding is always inadequate; best universities cost most. The positive effect of the competitive nature of grant funding is recognized here, in an academic voice form LSHTM: "There was also a recognition of the competitive nature of this market and the extent to which competition could be beneficial. 'The competitive nature of grant funding has a very positive effect on the quality of research work. In applying for research grants you are more forced to really think about your hypothesis and possible outcomes, including possible publications that can come out of it, which is a positive thing. I think that scientific breakthroughs are going faster today partly because of the competitive nature of funding" (EUEREK case study: LSHTM, 18). The role of collaboration and competition is described below.

#### **Example 30.** Collaboration and competition at entrepreneurial universities:

Collaboration with other institutions, often competitors, is an important element in generating grant and contract income. One senior lecturer stated that: "competition and collaboration overlap very much. I try not to be redundant because obviously the finances are in limited supply, so if you want to make as quick progress as possible, even though you are competing with somebody, you try to keep communication with others going and you try to take parallel paths to the competitors, but not overlapping ones. For instance, with one colleague I was competing, but we are now working on two different sides of a project (I tried to separate both sides), and because there is limited funding we can collaborate, e.g. I can try to use one of his findings for my side of the project. And there is no need for us to be doing the same experiment, and hopefully the whole community is aware of that to avoid overlap. It is essential that you do this, also when you apply for funding agencies because you are supposed to be aware of others' work as much as possible" (EUEREK case study: LSHTM, 15).

The EUEREK private institutions studied – as opposed to most public universities in Europe (except for e.g. Oxford and Cambridge) – often promote close personal contacts between students and staff: they usually have low student:staff ratios, and provide small-group teaching (Spain, UK). In transition countries, case studies show that staff:student ratios can be higher, though: there are many students but few academics, especially few full-time and senior staff (Poland,

Moldova). The mission statement of Buckingham is the following: "to provide high quality, personal, small-group teaching for our community of UK and international students, and to deliver an excellent student:staff ratio". As the UK report put it, *Buckingham promotes close personal contacts between staff and students, and claims that staff have a relatively strong sense of commitment to the institution.* The Spanish case mentions "personalized attention" directed to students, and the UK report stresses what Buckingham officially stresses: "elite' small group teaching philosophy". The dedication of the institution to students, and to teaching, was explicitly formulated by the vice-chancellor of the University of Buckingham:

I was educated at London University, I spent four years at Newcastle University, and I also spent over 20 years at either Oxford or Cambridge, and Buckingham is a better university than any of those because it focuses on a university's USP, namely teaching. Research can take place anywhere, but if a university fails to teach properly then the student's experience is irretrievably damaged. Buckingham has, therefore, used its very real entrepreneurialism to foster the one thing it should, namely its task to teach. In a year when strikes are taking place throughout the sector (an inconceivable thing at Buckingham) we know we are dedicated to our students (EUEREK case study: University of Buckingham).

In the EUEREK private institutions studied a variety of modes of studies are available (full-time, part-time, weekends); despite, at least in some countries, flexibility in opening new programs wherever necessary, there seems to have been a stable study offer in the last 10 years, despite oftraised need to expand the institutional profile. No major changes in governance and organizational structures in the last 10 years were reported in most institutions studied. They provide wide opportunities for on-the-job-training, work experience for a large proportion of students (especially in Poland, UK, Russia, and Spain). As the Spanish case study explains,

The UCH also offers work experience placements in companies. The university encourages its students to go on these placements and encourages businesses to collaborate with them. During the 2003-2004 academic year, there were a total of 2,442 placements in 1500 companies (EUEREK case study: UCH - Spain).

Also in Poland practical training is at the core of WSHIG's activities.

On-the-job training makes an essential party of the Academy curriculum. Students can and are able to check their theoretical knowledge and put it into practice. The training takes place in various hotel industry units all over the country and overseas. The training is organized in accordance with a contract signed between the Academy and any hotel industry unit (EUEREK case study: WSHIG - Poland).

What is especially important is on-the-job training abroad, in which WSHIG is unbeatable (especially compared with its two new public competitors in the area of tourism in the same city of Poznan); as the Polish report states,

Ever since the beginnings, WSHIG has always organized training abroad, mainly in France, Britain, Greece, Switzerland, Belgium, Italy, Turkey and in the United States. The Academy covers the costs of accommodation and boarding and it refunds the costs of traveling. Training is organized by virtue of an agreement signed by the Academy and a hotel, restaurant or travel agency. The training period varies from 3 to 18 months (EUEREK case study: WSHIG - Poland).

There are often people with professional prestige (non-academics) among part-time staff. The feeling of being disadvantaged compared to public institutions is reported in interviews (especially with respect to research funding). Graduates are sometimes reported to become institution's staff (Poland, Russia). Institutions are most often non-eligible for public funding: Poland (both for teaching and research), UK (for teaching), Russia (both for teaching and research), Spain (for teaching). The Swedish case shows full availability of public funds for both teaching and research. Often the eligibility for public research grants in theory does not mean that research grants are awarded to them in practice (because the competition with elite public research universities is most often lost). The same resource allocation as in public institutions is reported only in Sweden. As in other countries of Central and Eastern Europe, keeping several academic posts by the staff of the private sector is reported (Poland, Russia, and Moldova).

All institutions stress the role of having close links with companies; unfortunately, quite often these links do not bring additional money to institutions, although they are important for the prestige in the community and for student-placements and graduates-placements. In the Spanish case, these links are relatively strong and are supported by the regional ministry for business, university, and science.

### 7. INSTITUTION-WIDE, INTEGRATED ENTREPRENEURIAL CULTURE

The last element of the entrepreneurial university within Clark's framework is the "entrepreneurial culture". Organizational culture, seen as the realm of ideas, beliefs, and asserted values, is the symbolic side of the material components featured in the first four elements, Clark claims. It is the work culture that embraces change. It may start as a (relatively simple) institutional idea which later one gets elaborated into set of beliefs and finally becomes a culture of an institution. It is a crucial component for entrepreneurial transformations, the first four elements being merely means. In the case studies analyzed, the founding idea was "the earned income" idea as conceived after the Thatcher financial cuts at Warwick University (and especially by its Registrar at that time, Michael Shattock) over 20 years ago; the idea of "the entrepreneurial university" as conceived vaguely at Twente; the idea of commitment to "innovation" back in the 1980s at the Chalmers Institute of Technology in Sweden (and optingout of the Swedish state system in 1994); the idea of following "northern issues" at Lapland University; or the idea of delinking from state funds and state bureaucracy, as reported to be at the foundations of the creation of Buckingham University. Sometimes the emergent culture stems from individual visions, as reported in many institutions in transitions countries. WSHIG in Poland, whose founder and owner wished the education in catering industry, culinary arts and hospitality management to be made available at a higher education level (which was not available when he was getting his education in Poland), is a good example of how individual's idea can be transformed into whole institutional culture within a decade a half. The importance of sharing a vision for an institution is reported in case studies available as very important. See a box on LSHTM at London University below:

#### Example 31: The role of sharing a vision (LSHTM):

"The School does not have the money-making entrepreneurialism, but the School is very academically entrepreneurial in constantly looking for new sources of funding and keeping that going. Many people in this School are very altruistic, they are interested in the School's mission, **improvement of health worldwide. They really believe in it, that's what motivates them.** You have to be creative and inventive to be able to do that, you have to keep your research and funding going. If that is entrepreneurialism, then we are good at that" (EUEREK case study: LSHTM, 18).

Or as a Polish case study of WSHIG confirms, private academic institutions can be run by a single motive of their founders and owners, as part of the realization of their dreams (the transition countries in particular): WSHIG's opening and development has been driven by a single motive of its founder: to provide affordable higher education in the area for which there was no education available a few decades ago: tourism, hospitality, and culinary arts. There has been a vision of its founder, implemented over 13 years now, with huge organizational and financial success, against the odds (EUEREK case study: WSHIG). The role of a single, overarching vision in transforming (most case studies) or creating (WSHIG) a university is most fundamental. It needs to be complemented by a strong regional dimension which is very important for most entrepreneurial universities studied; in Sweden or the Netherlands, it is as crucial as teaching and research. Example from Twente University is given below.

### Example 32: Management of the "third task": reaching the region (Twente University):

The UT has (by far) achieved the most spin-offs of any Dutch university. In its Institute Plan, the UT "intends to intensify its valorisation policy in the coming period to set itself apart as the most entrepreneurial university in Europe." Based on its mission and profile, the UT will establish a three-track policy. This involves, first, the conversion of knowledge into industry. The UT policy is aimed at both existing and new firms. Existing firms are stimulated to locate themselves on or in the vicinity of the campus. The UT promotes the creation of new firms in its core research areas. ... Second, it involves the encouragement of entrepreneurship by staff and students, building on existing elements. The third element is the establishment of a Knowledge Park (Kennispark Twente) adjacent to the campus. The Twente Knowledge Park is perceived as the conclusion of a growth process set in motion through the entrepreneurial university concept. It is a joint initiative of the province Overijssel, the surrounding municipalities and the UT, supported by the regional development agency (Oost NV), aimed at creation of highquality employment in Twente. Knowledge Park Twente offers state-of-the-art infrastructure (physical, ICT, human), facility sharing, etc. The idea is that proximity induces interaction and inter-organisational and/or interdisciplinary collaboration. The ambition is to generate 500 new knowledge-intensive jobs and ca. 30 new firms by 2008, and 10,000 jobs by 2020. ... The UT intends to be an Open University: making research facilities available for businesses (on commercial terms), and involving partners in university research (Arnold et al, 2006: 44-45).

An example of a university which is unable to compete with other top national universities in research but was innovative in teaching comes from Buckingham University, the only private university in the UK. The University problems began, though, when, inter alia, Bologna process introduced clearly 3 years for BA level studies. The descriptions used in many interviews conducted at EUEREK private institutions include: innovative, imaginative, unique, pioneering, student-focused, on-the-job training, labor market needs, good value for the money, students come first, personal approach, elite, different etc. As the Buckingham study put it, "the University of Buckingham describes its desired image as following: innovative, supportive, intellectually rigorous, personal, multicultural, and pioneering". The university brochure puts it:

this innovative new two-year programme is thought to be unique in UK Higher Education in giving students the opportunity to set up and run their own business. We are offering an inter-disciplinary programme that will develop the qualities of leadership, entrepreneurship and innovation in our students. The programme will offer an integrated, holistic and pragmatic approach to business, constantly linking the classroom to the marketplace (EUEREK case study: University of Buckingham).

Also in Poland, the mission statement of WSHIG makes it clear that it is a unique institution:

The mission of WSHIG is to educate students at higher level in the area of tourism and recreation in such a manner that WSHIG graduates should possess humanistic knowledge – allowing to get to know human needs and understand social processes reflected in tourism and recreation; should possess the knowledge from natural sciences – providing the basis to understand the system man/environment, as well as economic, organizational and legal knowledge enabling the evaluation and conscious use of mechanisms typical of market economy (EUEREK case study: WSHIG - Poland).

# Example 33. Entrepreneurialism in teaching in the private sector: three years in two (Buckingham):

"Buckingham's most distinctive features are its small size in relation to the conventional British university and its two-year bachelor's (honours) degree in contrast with the standard three-year programme in England and Wales. The two-year fast-track degree programme was an innovative feature, made possible by the adoption of four intensive 10-week terms per year (without the extended holidays of other universities), so that students complete 80 weeks over a two-year period compared to the 72-80 weeks of normal contact typified by the three-year programme of other universities. Buckingham students thus gain a normal 3-year degree in just two years. The four-term student year was combined with a three-term teaching year for academic staff (each member having one study term per year free of teaching or administrative duties). The two-year degree programme has been especially appealing to overseas students, since it offers a cheaper alternative to paying three years' full-cost tuition fees at state-subsidised British universities. The University offers a range of flexible entry points in January, April, July and September. Students in the Humanities have the option to 'stretch' the two-year degree to three years to satisfy Bologna requirements. Buckingham promotes close personal contacts between staff and students, and claims that staff have a relatively strong sense of commitment to the institution" (EUEREK case study: University of Buckingham, 1).

In most EUEREK cases, the private institutions studied are quite responsive to the labor market needs, as well as to student market needs (they show good flexibility in opening new programs or adapting existing programs in he cases where accreditation and licensing procedures make it difficult to open new ones, especially compared with programs available from the public sector). They often employ a small number of core full-time staff and many more part-timers than the public sector. They often have a strong regional and local focus (both for students and for business links). And as stressed above, in most cases, their national and international roles in both teaching and research are marginal. As in the case of Buckingham: "Buckingham is not a research active university though most of its staff are engaged in research so that its contribution to the knowledge society is mainly through its students. The student population is not, however, large".

## **8.** CONCLUSIONS

Let us try to summarize the conclusions point by point.

1. The EUEREK private institutions studied view themselves less entrepreneurial than public ones. Their access to research funds (especially public) - which most often determines the appearance of the entrepreneurial culture – is very limited. But they are often very successful teaching institutions. Their major concern is to survive as they are heavily dependent on student fees and they experience fluctuations in enrolments. Their mission and strategy is self-determined rather than influenced by state policies; and it is usually difficult to transform. No major relationships between changes in governance and organizational structures and the emergence of the entrepreneurial behavior were reported. The major sources of non-core/non-state funding in almost all cases are student fees; no major changes in income structures were reported in recent years. No major academic risks are being taken by staff and institutions, but often financial risks are taken by institutions. Compared with the public sector, few examples of the development of new knowledge from entrepreneurial activities are reported. Apart from teaching, few examples of other major kinds of dissemination of knowledge are reported. Also a limited number of mechanisms of knowledge transfer/knowledge exploitation is reported. Generally, there is a nonsupportive climate for developing knowledge exploitation (additionally, they are mostly teaching institutions). There is competition with other institutions mostly for students (and for their fees) and not in research. Financial incentives or award systems for staff are generally marginal. Inhibitors to entrepreneurialism have clearly national dimensions (different history and tradition, reasons to found an institution, funding regimes, tax regulations etc).

2. In general, having a diversified funding base does not seem to work for the EUEREK private institutions studied. Their abilities (and opportunities) to use the "third source" of income, especially (perhaps most welcome) "university-generated" income, are very limited. Their high degree of financial dependence on a single source of income (namely, student fees) makes them easily prone for financial problems. In general, they are able to compete for public or private research funds in a very limited degree; being largely teaching institutions, they are not able in practice to compete with public universities. Separate units are rarely rewarded (or punished) for their entrepreneurialism and rarely act as separate business units, as is often the case with most successful public entrepreneurial universities. They do not seem to have incentive policies to support their staff in seeking non-core source of income – the income other than student fees.

They do not have access to government funds – but also most often do not have access to government agencies as sources of third-stream income, private organized sources (such as business firms, philanthropic foundations etc) and do not use policies to support university-generated income. The share of their income from alumni fund-raising, research contracts, patents, endowment or earned income from campus operations is negligible, in most cases not even marginal. There is no mutual feeding and encouragement between non-core sources of income. There is also no major need to keep complicated resource allocation formulas in funding particular departments, or the need to keep a fair balance between the center and the units through elaborate top-slicing and cross-subsidizing techniques. In the context of a diversified funding base, if entrepreneurialism is to be taken seriously in the private sector, the non-core income would be the income from any other sources than student fees, leading to smaller dependence on this currently single most important source.

3. The role of the "strengthened steering core" in entrepreneurialism of the EUEREK private institutions studied: there does not seem to be the need of balancing influences across multiple levels of these institutions, there does not seem to exist the need to keep a constant balance between particular departments through the intervention of the center. In contrast to public entrepreneurial institutions, the role of faculty participation in central councils is severely reduced. Collegial management is rare, and connections between academics and administrators/ management/founders/owners are limited. The center is constantly dealing with risk the management and understanding of which is crucial; and *the* risk, to manage on a daily basis, is the financial one. The role of bringing resources (through keeping or increasing the number of students) seems more important than the role of bringing reputation to private institutions studied. In terms of management structures, as in public entrepreneurial universities, private institutions have powerful centers, strong management groups, usually comprising very few administrators. In decision-making, the role of collegial bodies seems, in most cases, marginal. Most private institutions do not use resource allocation procedures to make strategic choices about their future direction. Also no major impact of a new bureaucracy is reported: both the number, and the role, of development officers, technology transfer experts, special staff managers, fundraising officers, is small. The role of strategic committees, so fundamental for managing entrepreneurial universities seems minimal. In transition countries, a unique features is that management in the private sector is dealing, to a large extent, with academics working (in a parallel manner) in the public sector. The management structures are nominally three-level arrangements (center faculties – departments) but in practice they seem to be flat (center – departments), and in smaller institutions, even center - academics, with no intermediaries.

4. The role of "extended developmental peripheries" in the EUEREK private institutions studied is marginal; new transdisciplinary research centers are sometimes reported but they do not change the character of these institutions and their existence does not lead to introducing new management styles or new internal resource allocation procedures. They do not form parallel, increasingly powerful university structures. They do not seem to attract new sources of funding, they are not engaged in aggressive seeking new research areas. Also the role of new administrative units, so crucial to public entrepreneurial institutions studied, by comparison, is marginal. Most of new posts and new units in the public sector are related to new opportunities of research funding, or the exploitation of research results, innovation, or international off-campus teaching, or royalty rights etc. In private institutions studied, the need for these units is still very small, although they do sometimes. The balance of power in management is not changed by new

peripheral research (or teaching) units. There are few people working on research grants, without employment contracts, and there is no need to have bridging policies ready for this staff category. They do not have major (or in most case – any) problems with managing intellectual property issues or consultancies. There do not seem to exist clear research targets and funding for particular units does not seem to be based on meeting the targets, or bringing additional research-related revenue to the institution. Consequently, at the moment, the extended developmental periphery seems almost absent from the picture of the private sector in Europe, at least as studied in the EUEREK case studies.

5. Almost all private institutions studied are involved in research only marginally. The competition with public institutions, in the context of the general lack of access (in theory or in practice) to public research funds, means the competition for students and their fees. The second factor relevant for the mission and strategy of private institution studied is the uncertainty about student enrolments – as enrollments may be going down or be fluctuating. What is reported in public institutions: despite internal competition, entrepreneurial universities report a high degree of internal cooperation, especially in grants applications, cannot be confirmed in EUEREK private institutions. Because the access to research funds is very limited, so is both internal and external competition. Cooperation seems to concern teaching rather than any other activities. The role of competition at public entrepreneurial universities is widely reported to be crucial. The competition is mostly for research funds, especially outside sources of income. The overall effect of growing competition in sciences and the humanities alike is reported in case studies as extremely positive, even though the picture of institutions most successful in this competition differs substantially from that of traditional, non-competitive academic places. There is a strong implication coming from the vast majority of case studies that without competition for funds, entrepreneurial universities would not become entrepreneurial, even though they could be top in their respective disciplines and excellent in research done and teaching provided. Private institutions do not take part in this race for external funding, though.

6. The use of the concept of "entrepreneurialism" for the studies of private institutions requires further adaptations. In the case studies analyzed, out of (Clark's) five constitutive elements of the entrepreneurial university, perhaps two-three could be confirmed to exist: the strengthened steering core, the integrated entrepreneurial culture (and perhaps, in some cases only, the stimulated academic heartland). No diversified funding seems to be reported, and no extended peripheries seem to be observed. Further conceptual analyses, and corresponding case studies of private institutions in other countries, would be useful for further clarifications.

## 9. BIBLIOGRAPHY

• EUEREK case studies: 25 universities from Poland, Moldova, Russia, Spain, the United Kingdom, Finland, Sweden, for the project "European Universities for Entrepreneurship – Their Role in the Europe of Knowledge", 6<sup>th</sup> Framework Programme of the European Union (2004-2007), Coordinated by the Institute of Education, University of London (Michael Shattock, Gareth Williams, Paul Temple), most already publicly available from <u>www.euerek.info</u>. Universities included: Finland – Helsinki School of economics, University of Lapland, University of Tampere; the United Kingdom – London School of Hygiene and Tropical Medicine (LSHTM), University of Buckingham, University of Nottingham, University of Plymouth; Sweden – Lund

University, Jönköping University, Umea University, KTH; Spain – Cardenal Herrera University, Miguel Hernandez University, Technical University of Valencia, University Jaume I of Castellon, University of Alicante, University of Valencia; Moldova – Alecu Russo State University of Balti, Moldova Academy of Economic Studies, Moldova State University, Moldova Trade Cooperative University; Poland – Poznan University, Poznan University of Economics, Academy of Hotel Management and Catering Industry; Russia: University of Pereslavl, BIBIM Irkutsk, Higher School of Economics-Moscow.

• Other case studies of entrepreneurial universities in Europe, especially Twente University (Holland), Warwick University and Manchester University (the UK) and universities studied by Burton Clark (1998 and 2004), Shattock (2004a), Arnold et al.(2006), Jablecka (2001), Jarzabkowski (2002) etc (detailed references below).

Arnold, Erik, and Jasper Deuten, Rapela Zaman (2006). Four Case Studies in University Modernisation: KU Leuven, Twente, Manchester and Loughborough. Enschede: Technopolis.

Bennett, Brian (2002), "The New Styles Boards of Governors – Are They Working?, *Higher Education Quarterly*, vol. 56. no. 3.

Breneman, David W. (2005), "Entrepreneurship in Higher Education", New Directions for Higher Education, no. 129, Spring 2005.

Chambers, J. Barry (1999). "The American University in Bulgaria as an Entrepreneurial University". *Higher Education in Europe*. Vol. XXIV. No. 1.

Clark, Burton (2005), "The Character of the Entrepreneurial University", *International Higher Education*, Winter 2005.

Clark, Burton (2004a). Sustaining Change in Universities. Continuities in case studies and concepts. Maidenhead: Open University Press.

Clark, Burton (2004b). "Delineating the Character of the Entrepreneurial University". *Higher Education Policy*. No. 17.

Clark, Burton (2001). "The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement". *Higher Education Management*. Vol. 13. No. 2.

Clark, Burton (2000). "Collegial Entrepreneurialism in Proactive Universities". *Change*. Jan/Feb. 200. Vol. 32. Issue 1.

Clark, Burton (2000). Creating Entrepreneurial Universities. Organizational Pathways of Transformation. New York: Pergamon Press.

Curie, Jan (2002), "Australian Universities as Enterprise Universities: Transformed Players on a Global Stage", In: *Globalisation: What Issues are at Stake for Universities* (available on-line).

Dearlove, John (2002), "A Continuing Role For Academics; The Governance of UK Universities in the Post-Dearing Era", *Higher Education Quarterly*, vol. 56, no. 3.

Deem, Rosemary (2001), "Globalisation, New Managerialism, Academic Capitalism and Entrepreneurialism in Universities: is the local dimension still important?", *Comparative Education*, vol. 37, no. 1.

Doane, Dudley J. and Brian Pusser (2005), "Entrepreneurial Organization at the Academic Core: The Case of Summer Sessions", *New Directions for Higher Education*, no. 129.

Gallagher, Michael (2000). *The Emergence of Entrepreneurial Public Universities in Australia*. Canberra: Department of Education.

Hellawell, David and Nick Hancock (2001), "A case Study of the Changing role of the Academic Middle Manager in Higher EducationL between hierarchical control and collegiality?", *Research papers in Education*, vol. 16, no. 2.

Jablecka, Julita (2001), "Entrepreneurship, Innovation, and Quality: The Successful Strategy of a Newly Established Institutions: The Example of Wyzsza szkola Biznesu-National Louis University in Nowy Sacz", *Higher Education in Europe*, vol. Xxvi, no. 3.

Jarzabkowski, Paula (2002), "Centralised or Decentralised? Strategic Implications of Resource Allocation Models", *Higher Education Quarterly*, vol. 56. no. 1.

Johnson, Rachel (2002), "Learning to Manage the University: Tales of Training and Experience", *Higher Education Quarterly*, vol. 56. no. 1.

Kristensen, Bente (1999), "The Entrepreneurial University as a Learning University", *Higher Education in Europe*, vol. Xxiv, no. 1.

Kwiek, Marek (2006), *The University and the State. A Study into Global Transformations*. Frankfurt a/Main and New York: Peter Lang.

Kwiek, Marek (2005), "The University and the State in a Global Age: Renegotiating the Traditional Social Contract?" *European Educational Research Journal*. Vol. 4. No. 4. December.

Kwiek, Marek (2004), "The Emergent European Educational Policies Under Scrutiny. The Bologna Process From a Central European Perspective". *European Educational Research Journal*. Vol. 3. No. 4. December.

Lazzeretti, Luciana and Ernesto Tavoletti (2005), "Higher Education Excellence and Local Economic Development: The Case of the Entrepreneurial University of Twente", *European Planning Stuides*, vol. 13, no. 3.

Mallon, William (2004), "Disjointed Governance in University Centers and Institutes", *New Directions for Higher Education*, no. 127, Fall 2004.

Marginson, Simon (2000), Monash: Remaking the University, Allen & Unwin.

McNay, Ian (2002), "Governance and Decision-making in Smaller Colleges", *Higher Education Quarterly*, vol. 56, no. 3.

Middlehurst, Robin (2004), "Changing Internal Governance: A Discussion of Leadership Roles and Management Structures in UK Universities", *Higher Education Quarterly*, vol. 58, no. 4.

Mora, José-Ginés (2001), "Governance and Management in the New University", *Tertiary Education and Management*, vol. 7. no. 2.

Newman, Frank, and Lara Couturier, Jamie Scurry (2004). *The Future of Higher Education*. *Rhetoric, Reality, and the Risks of the Market*. San Francisco: Jossey-Bass.

Pashuashvili, Marie (2006), *The Politics of Educational Choice: Explaining the Diversity in Postcommunist Higher Education Policy Choices*, Paper presented at the First Annual Doctoral Conference, April 2006.

Poole, David (2001), "Strategically Managing Entrepreneurialism: The Australian University Experience", *Higher Education Quarterly*, vol. 55, no. 3.

Salmi, Jamil and Arthur Hauptman (2006), "Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms", a presentation at IREDU conference on economics of education, Dijon, June 2006.

Salter, Brian (2002), "The External Pressures on the Internal Governance of Universities", *Higher Education Quarterly*, vol. 56, no. 3.

Schutte, Frits (1999). "The University-Industry Relations of an Entrepreneurial University: the Case of the University of Twente". *Higher Education in Europe*. Vol. XXIV. No. 1.

Sharma, Raj (2004). "Performance-Based Funding in the Entrepreneurial North American and Australian Universities". *Journal of Higher Education Policy and Management*. Vol. 26. No. 1.

Shattock, Michael (1988), "Financial Management in Universities: the Lessons from University College, Cardiff", *Financial Accountability and Management*, vol. 4. no. 2. Summer 1988.

Shattock, Michael (2000), "Strategic Management in European Universities in an Age of Increasing Institutional Self-Reliance", *Tertiary Education and Management*, vol. 6. no. 2.

Shattock, Michael (2002), "Re-Balancing Modern Concepts of University Governance", *Higher Educatuon Quarterly*, vol. 56. no. 3.

Shattock, Michael (2003), Managing Successful Universities, Buckingham: SRHE.

Shattock, Michael, ed. (2004a). *Entrepreneurialism and the Transformation of Russian Universities*. Paris: UNESCO IIEP.

Shattock, Michael (2004b). "Generating Non-State Income in European Universities". In: Shattock 2004a.

Shattock, Michael (2004c), "The Lambert Code: Can We Define Best Practice?", *Higher Education Quarterly*, vol. 58, no. 4.

Shattock, Michael (2005), "European Universities for Entrepreneurship: Their Role in the Europe of Knowledge. The Theoretical Context", *Higher Education Management and Policy*. Vol. 17. No. 3.

Steier, Francis A. (2003), "The Changing Nexus: Tertiary Education Institutions, the Marketplace and the State", *Higher Education Quarterly*, Vol. 57. No. 2.

Shore Cris, and Susan Wright (2004), "Whose Accountability? Governmentality and the Auditing of Universities", *Parallax*, vol. 10, no. 2.

Sporn, Barbara (2001), "Building Adaptive Universities: Emerging Organisational Forms Based on Experiences of European and US Universities", *Tertiary Education and Management*, vol. 7. no. 2.

Sporn, Barbara (1999a), "Towards More Adaptive Universities: Trends of Institutional Reform in Europe", *Higher Education in Europe*, vol. Xxiv, no. 1.

Sporn, Barbara (1999b), Adaptive University Structures. An Analysis of Adaptations to Socioeconomic Environments of US and European Universities, London: Jessica Kingsley.

Tapinos, E., and R.G. Dyson and M. Meadows (2005), "The Impact of the Performance Measurement Systems in Setting the 'Direction' in the University of Warwick", *Production Planning and Control*, Vol. 16. No. 2.

Tapper, Ted and Brian Salter (2004), "Governance of Higher Education in Britain: The Significance of the Research Assessment Exercises for the Funding Council Model", *Higher Education Quarterly*, vol. 58, no. 1.

Teixeira, Pedro N, D. Bruce Johnstone et al. (2006), *Cost-Sharing and Accessibility in Higher Education: A Fairer Deal?*. Dordrecht.

Temple, Paul (2005), "The EFQM Excellence Model®: Higher Education's Latest Management Fad?", *Higher Education Quarterly*, vol. 59. no. 4.

Temple, Paul (2006), "Intervention in a Higher Education Market: A Case Study", *Higher Education Quarterly*, viol. 60, no. 3.

UNESCO. (2005). "Statistical Tables. Gross Enrolment Ratios, Tertiary". Available at http://www.uis.unesco.org/TEMPLATE/html/HTMLTables/education/ger\_tertiary.htm.

UNESCO-CEPES. (2004). "Statistical Information on Higher Education in Central and Eastern Europe 2003-2004". Available at <u>http://www.cepes.ro/information\_services</u>/statistics.htm.

Williams, Gareth, ed. (2004), *The Enterprising University. Reform, Excellence and Equity*, London: Open University Press and SRHE.

Williams, Gareth (2004). "The Changing Political Economy of Higher Education". In: Shattock 2004a.

Williams, Gareth and Igor Kitaev (2005). "Overview of National Policy Contexts for Entrepreneurialism in Higher Education Institutions". *Higher Education Management and Policy*. Vol. 17. No. 3.

Yielder, Jill (2004), "Management and Leadership in the Contemporary University", *Journal of Higher Education Policy and Management*, vol. 26, no. 3.

Ylijoki, Oili-Helena (2003), "Entangled in Academic Capitalism? A case-study on changing ideals and practices of university research", *Higher Education*, vol. 45.