UK University Commercialisation Survey: Financial Year 2003

Unico

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UK University Commercialisation Survey: Financial Year 2003

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Contents

Foreword

The data in this survey report for the financial year 2002-2003 are collected from 75 institutions. Although not as large as last year's sample, these respondents include 25 of the top 30 universities (by research income) and provide a valuable representation of UK universities commercialisation activity. UNICO is extremely grateful to all those that participated in this year's survey.

In summary, university technology transfer activity in the UK continues to prosper and receive the support of the academic community. In comparison with the previous year, the 2003 survey indicates that the average number of invention disclosures has increased by more than 72% per institution. The total licensing income generated has increased from £22.4m in 2002 to over £31.3m, and whilst the number of spinout companies has remained relatively constant at 151, (compared with 158 in 2002), more than half the spinouts created during 2003 were funded through external investment finance. The fact that universities are producing more "investment ready" ventures is indicative of the professionalism of its commercialisation activity and the productive links that have been forged with the investment community. These figures, however, pre-date the introduction of Part 7, Income Tax Earnings & Pensions Act 2003 (Schedule 22) and the effect of this legislation has yet to be determined. In this regard, UNICO has been working closely with the Inland Revenue to provide clarity for academic founders with respect to their tax position.

The survey illustrates, that whilst some UK universities are not engaged in the commercialisation of intellectual property in any substantial way, others are international benchmarks of excellence and commit significant resource to this area of activity. The number of FTE's working on technology transfer activities in individual institutions, for example, varied from zero to more than 30 in 4 institutions. Furthermore, 8% of respondents did not allocate any funding for the protection of intellectual property whereas others, (7%) spent over £750K each on this activity. A comparison with US universities indicates that UK universities are spinning out more companies, but generate less licence income (per unit of research funding).

In conclusion, technology transfer in the UK is flourishing, but the costs of undertaking this activity are significant, with £12.6m being spent on intellectual property protection alone. Whilst specific initiatives such as the University Challenge Seed Funds have been extremely valuable in supporting commercialisation activity in many universities, the availability of a permanent stream of funding would enable universities to adopt a more strategic approach to this activity and reap the longer term benefits of technology transfer.

As regards the future, UNICO is confident that its activities, together with those of Praxis and AURIL will continue to bridge the knowledge gap between the more well developed university technology transfer offices and those less advanced. In this respect UNICO's share of the £1m DTI funding provided for Training for Knowledge Transfer Practitioners has proved extremely valuable in promoting its new initiatives.

UNICO looks forward to continue working with its membership to promote technology transfer in UK universities.

Nick Bourne
On behalf of UNICO

Introduction

This report covers the third survey of UK University Commercialisation Activities. The study provides information on trends in the commercialisation of academic research by UK institutions. The report contains information on commercialisation in terms of invention disclosures, patenting, licensing and the creation of new spinout companies.

The research was conducted from March to August 2004 and asked institutions about their Commercialisation activities during the 2003 financial year. It was conducted on behalf of Unico, the organisation that represents technology exploitation companies of UK universities.

Executive summary

Commercialisation Office Activities

- Employment in commercialisation activities shows an upward trend. It has risen from an average of 6 FTEs per institution in FY2002 to 10 FTEs in FY2003 with a total of 709 FTEs being employed by the respondents during FY2003.

Invention Disclosure and Patents

- Invention disclosures have risen on average per institution. During FY2003, an average of 31 disclosures were received per institution compared to 18 during FY2002. In total, 2,157 invention disclosures were received by the respondents during the last financial year.

- The number of new patents filed and issued has increased on average per institution. During FY2003, 826 new patent applications were filed at an average of 11 per institution and 669 new patents were issued at an average of 10 per institution.

- A greater proportion of new patents were issued from countries outside of the UK. Just under a fifth of new patents were issued from within the UK.

- IP expenditure has risen on average per institution. During FY2003, £12.6 million was spent on protection at an average of £171K.

Licensing Activity

- Licensing activity has increased with the average number of LOAs executed rising from 5 per institution during FY2002 to 8 per institution during FY2003.

- The average amount of revenue generated from LOAs has risen significantly. During the 2003 financial year, £430k was earned per institution compared to £179K during 2002.

Spinout Company Activity

- The average number of spinout companies formed per institution has increased from FY2002 but remains in line with the level from the 2001 financial year. On average, 2 spinout companies were formed during FY2003 compared to 1 during 2002. In total, 151 new spinout companies were formed by the respondents during FY2003.

- A significant proportion of the spinout companies formed during FY2003 are part or fully owned by the institutions that formed them. 683 existing spinout companies have shares held in them by the institutions that created them.

- Over half of the spinout companies formed during FY2003 were funded through external investment finance. Of these, a greater proportion were formed through non-UCSF funding.

Summary Table

	FY2003		FY2002	FY2001
	Sum	**Mean**	**Mean**	**Mean**
FTEs	709	10	6	5
Invention disclosures received	2,157	31	18	14
Priority patent applications filed	826	11	9	8
Patents granted - Total	669	10	3	3
Patents granted - UK	118	2		
Patents granted - US	98	2		
Patents granted - Other	453	8		
IP protection expenditure	12,591,138	170,151	93,090	85,184
LOAs executed	596	8	5	4
Licence agreements executed	333	5		
Option agreements executed	101	2		
Assignment agreements executed	162	3		
LOAs yielding income	775	11		
License income received	31,370,187	429,729	178,992	165,836
Spinout companies set up	151	2	1	2
Spinout companies shares held in	140	2	1	2
Spinout companies raised through UCSF	34	1		

1. Commercialisation Office Activities

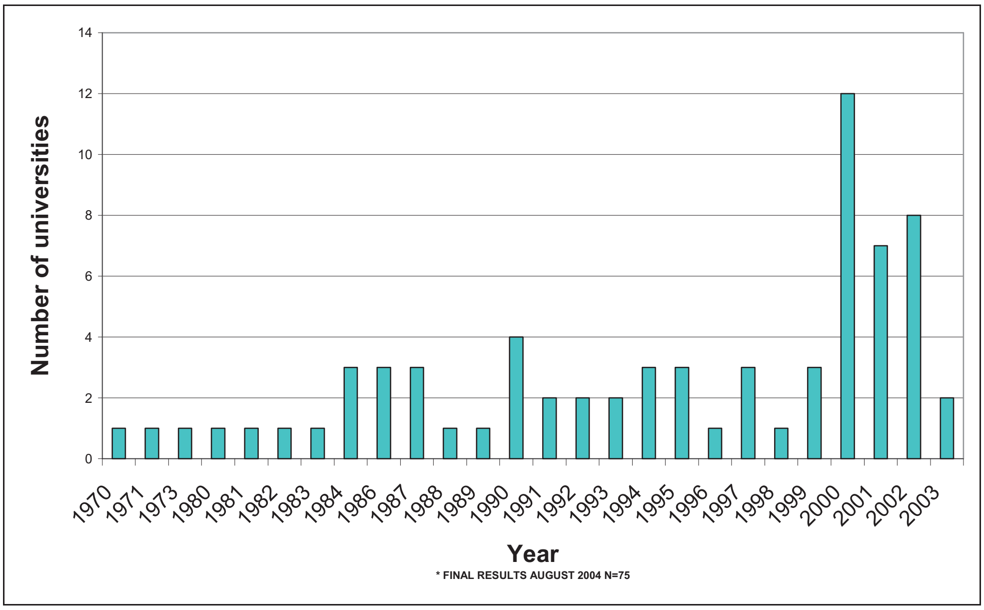
Commercialisation is the process through which research discoveries are brought to the market place and new ideas or discoveries are developed into new products, services or technologies that are sold around the world.

Universities and research institutions are increasingly recognised as being among the world leaders in the development of new scientific knowledge. The full potential of this knowledge is realised when it is converted into new and better products and services. This process is called commercialisation - the bridge between the worlds of science and business.

1.1 Initiation of University Commercialisation Activities

The number of institutions dedicating staff towards commercialisation activities has steadily increased since the early 1980s and continued throughout the 1990s (see Chart 1). The majority of institutions started their commercialisation activities between 1996 and 2003 with 12 institutions starting in 2000. By the end of the 2003 financial year (FY 2003), over 80 per cent of institutions have at least 2 full time equivalent employees in commercialisation activities.

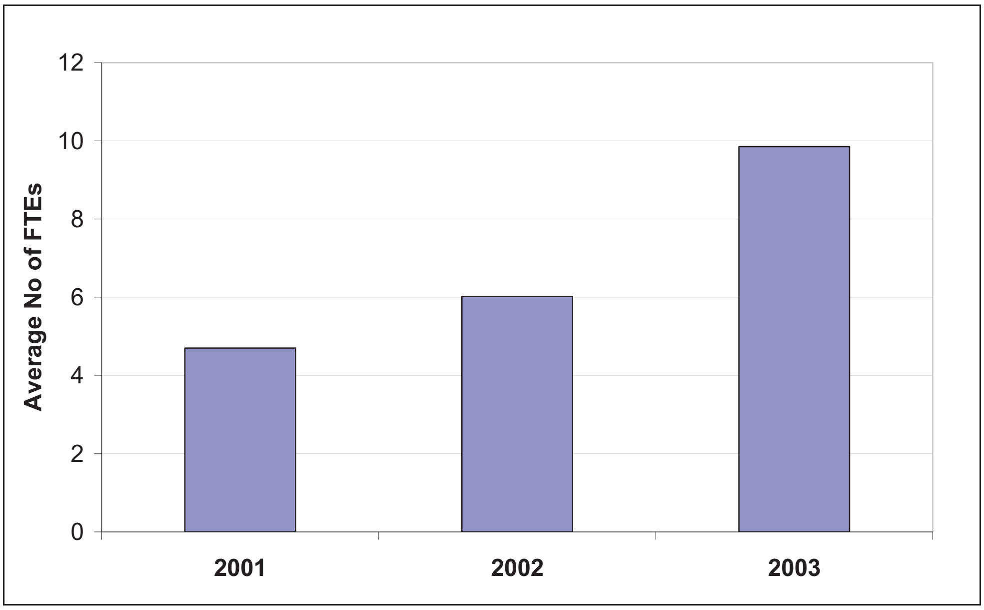
Chart 1: Year in which university started commercialisation activities*



1.2 Number of Full Time Equivalents Employed

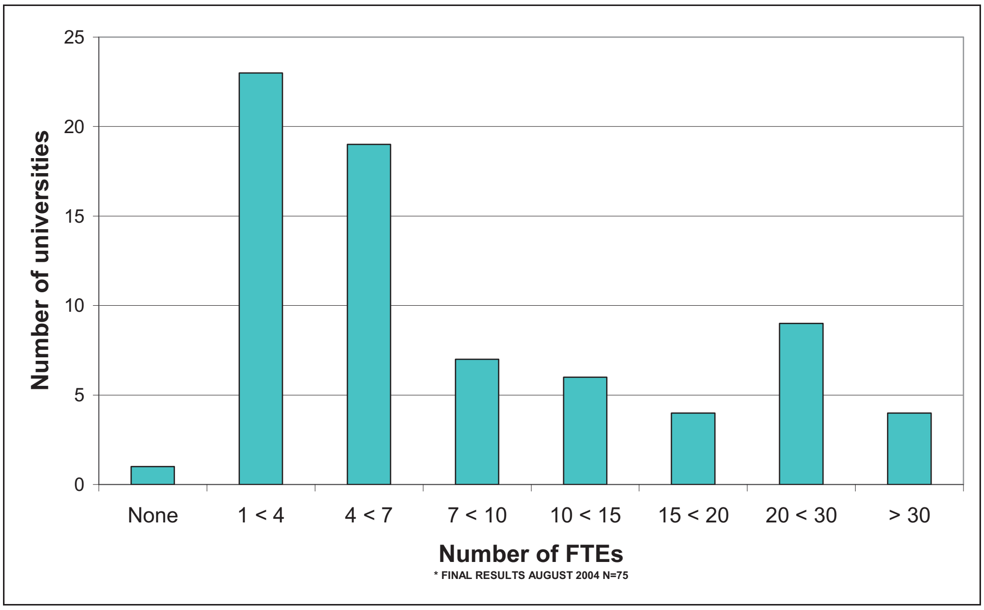
Employment in technology transfer and commercialisation activities has been increasing over the past few years. This is not surprising given the increase in commercialisation activity in recent years. Looking at Chart 2, there is a steady increase in the average number of full-time equivalents employed in commercialisation activities between 2001 and 2003. At the end of the 2003 financial year, the total number of **Full Time Equivalents** (FTEs) employed in technology transfer and commercialisation activities was 709 across all respondents. During FY2003, an average of 10 FTEs were employed per institutions, an increase of 4 from 2002 (average of 6 FTEs) and an increase of 5 from 2001 (average of 5 FTEs).

Chart 2: Average number of FTEs employed in commercialisation activities FY2001-2003



However, it is worth noting that the median value of 6 employees per institution might be more representative of the sample given that there is a great deal of variance in the number of FTEs each institution employs. During FY2003, it is noticeable that one institution had no FTEs working in their technology transfer and commercialisation activities whilst four institutions employed more than 30 FTEs in their operations (see Chart 3). The maximum number of FTEs employed by a single institution was 48.

Chart 3: Number of FTEs employed in commercialisation activities FY2003*

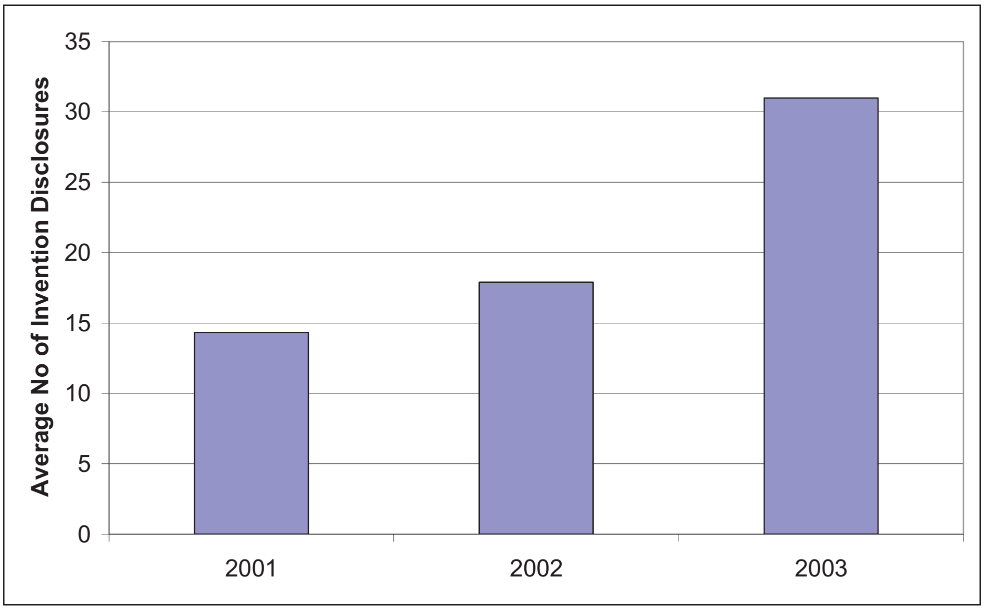


2. Invention Disclosures and Patents

2.1 Invention Disclosures

Invention disclosures have been increasing over the past few years and this can be seen on Chart 4. During FY2001, an average of 14 disclosures were made per institution, during FY2002, an average of 18 disclosures were made per institution and during FY2003, there was a significant increase with an average of 31 disclosures being made per institution.

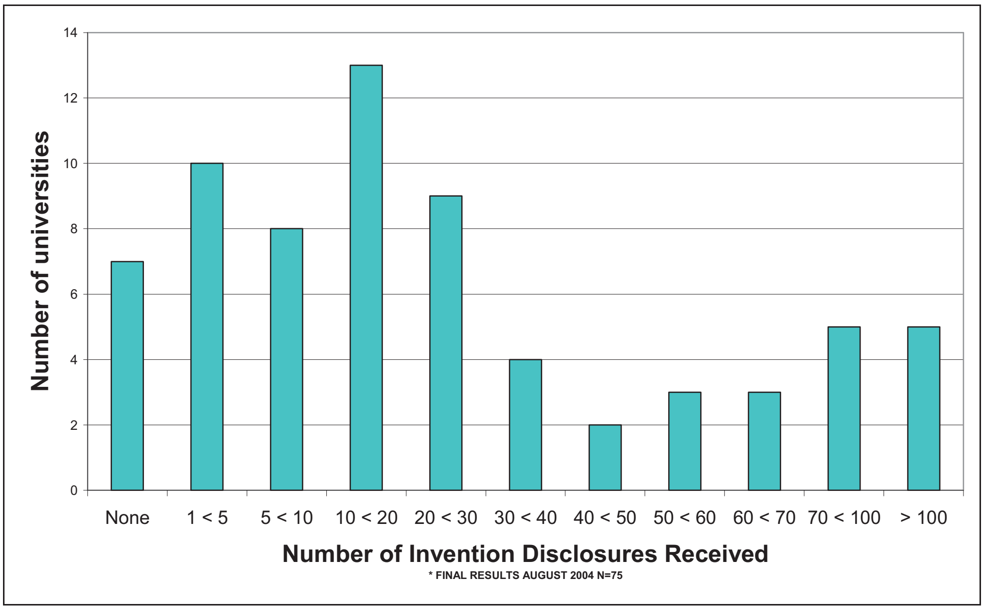
Chart 4: Average number of invention disclosures FY2001-2003



By the end of the 2003 financial year, 62 institutions[1] had reported 2,157 invention disclosures (see Chart 5). A tenth of all institutions reported no new invention disclosures while 13 per cent reported more than 70 new disclosures. The largest number of invention disclosures reported by a single institution was 192 – this figure is slightly higher than the maximum seen from the previous financial year (177).

[1] Please note this figure relates to the confirmed number of disclosures and does not take into account the respondents who did not have any disclosures or left the answer blank.

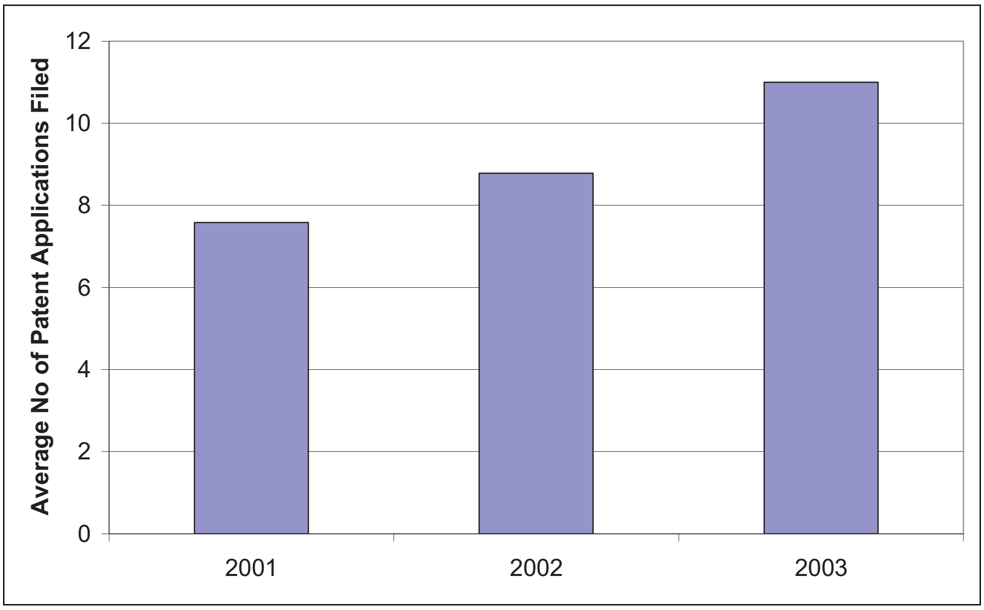
Chart 5: Invention disclosures received by respondents in FY2003*



2.2 New Patent Applications Filed

Given that the number of new invention disclosures has been on a increasing trend, it is no surprise that the trend for the number of new patent applications is also rising, but by less significant amounts. During the 2001 financial year, an average of 8 new patent applications were filed, the average rose to 9 during FY2002 and to 11 during FY2003 (see Chart 6).

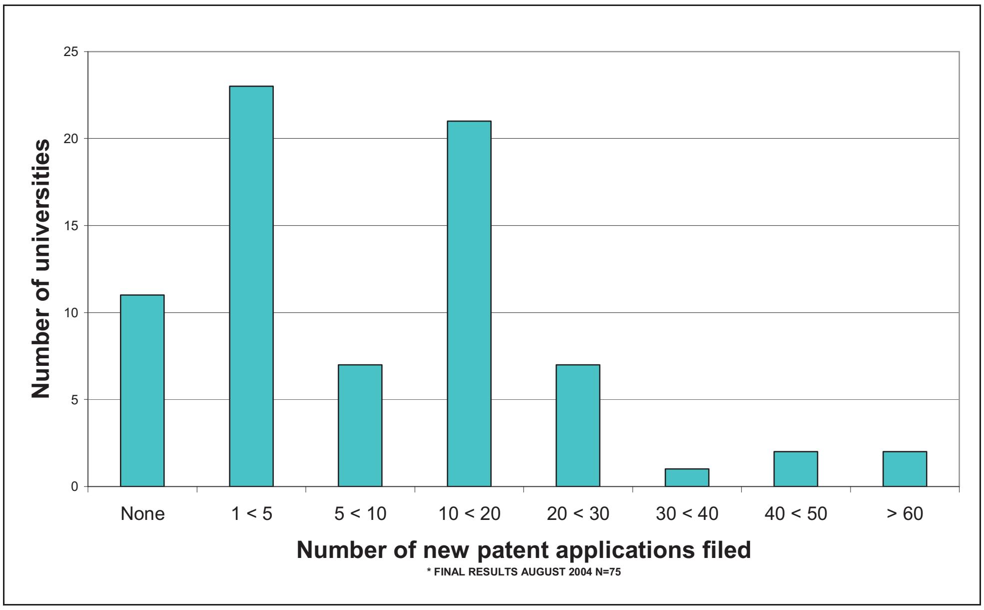
Chart 6: Average number of new patent applications filed FY2001-2003



826 new patent applications were filed during the 2003 financial year (see Chart 7) by the institutions taking part in the survey. 15 per cent of institutions filed no new applications while 4 per cent of institutions filed more than 40 new applications. The maximum number of new

patent applications filed by a single institution during FY2003 was 72 – significantly lower than FY2002 (112).

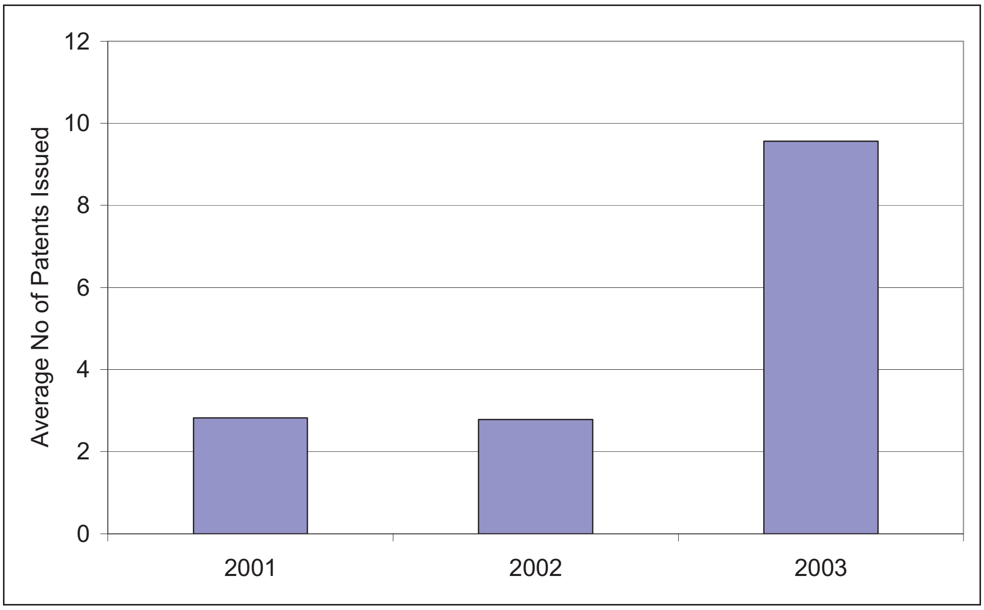
Chart 7: Number of new patent applications filed in FY 2003*



2.3 Patents Issued

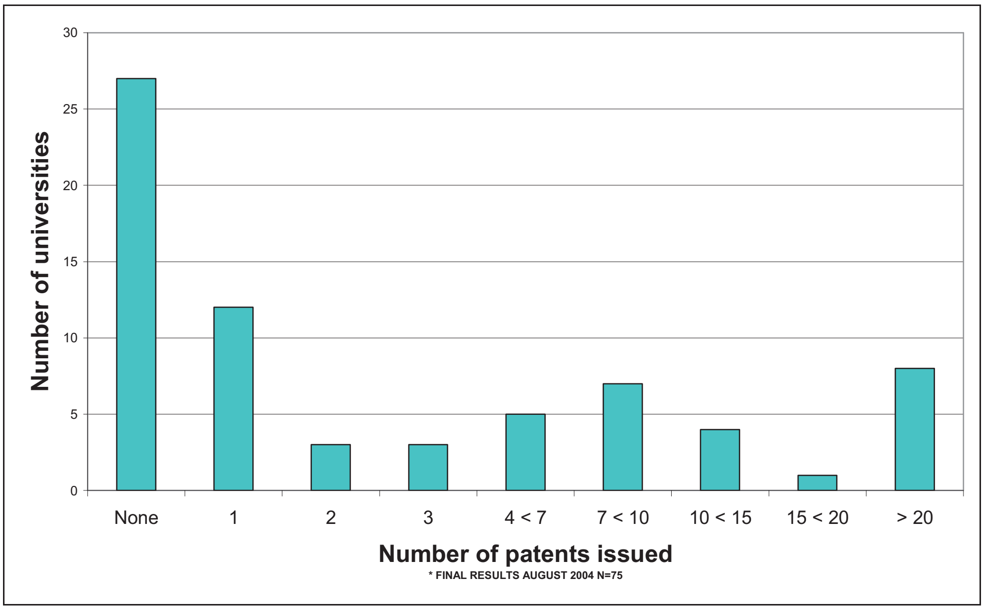
The number of patents issued during FY2003 has risen significantly from the previous two financial years. During the previous two financial years, an average of 3 new patents were issued per institutions compared to 10 during the 2003 financial year (see Chart 8).

Chart 8: Average number of new patents issued per institutions FY2001-2003



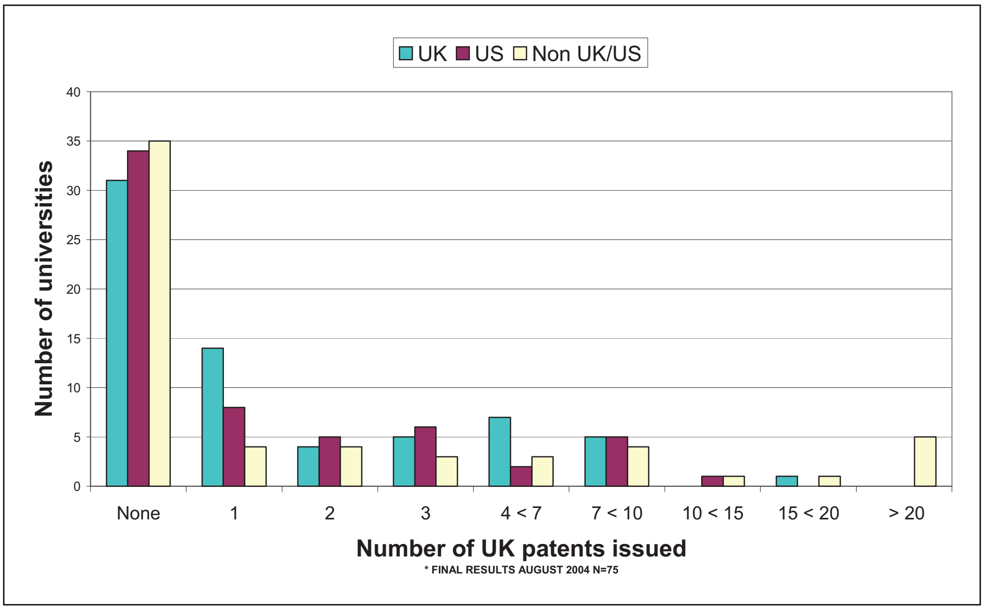
During the 2003 financial year, 669 patents were issued to a total of 43 UK institutions.[2] 36 per cent of institutions did not have any patents issued to them (see Chart 9) while11 per cent of institutions had more than 20 patents issued to them. The highest number of patents issued to an individual institution was 150 - accounting for just over a fifth of all new issued patents. Given this, the mean may not be such a representative figure and the median might show a better reflection of the data – this puts the average number of patents issued at 4.

Chart 9: Number of patents issued to UK institutions in FY2003*



Patents issued to UK institutions can vary by which country they originate from. Chart 10 shows that a healthy proportion of patents are granted to UK institutions from outside of the UK. 18 per cent of patents granted to UK institutions were from within the UK, 15 per cent from the US and 68 per cent were from other countries (Table 10).

Chart 10: Number of patents issued to UK institutions by country in FY2003*



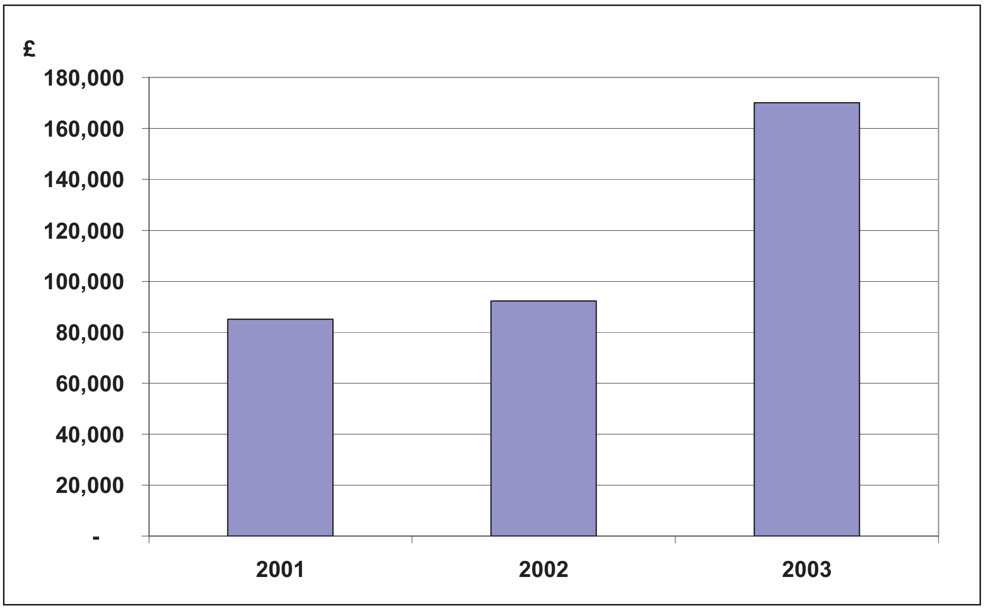
[2] Please note these figures relate to the number of confirmed patents. Therefore it does not take account of the respondents who left the answer blank.

2.4 IP Protection Expenditure

IP protection expenditure covers costs incurred for patent costs, external legal fees and specialist IP consultancy advice. Given that the number of patents being issued is increasing from year to year, it would be expected that the amount spent on IP protection would also increase from year to year. From Chart 11, we can see that the average amount spent by institutions on protection has been progressively increasing over the past three years. During FY2003, the average amount spent on IP expenditure was £170,151 – significantly higher than FY2002 (£92,345) and FY2001 (£85,184).

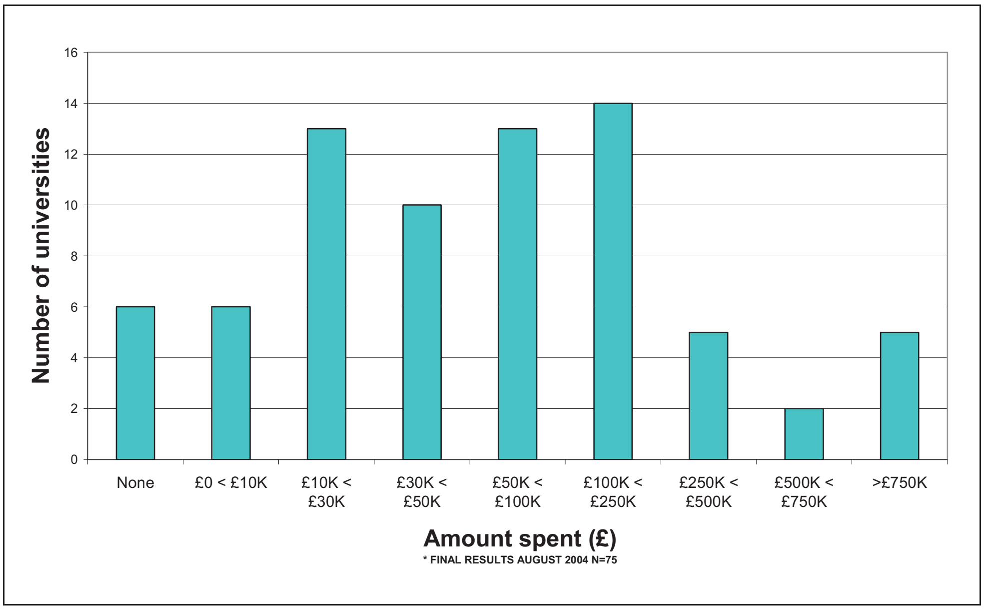
It is worth noting that for FY2003, the standard deviation was very large (£325K) and this would indicate that the median would be more representative of the sample than the mean. However, the median had a value of £51,768 during FY2003 compared to £20,000 during the 2002 financial year, also indicating that the amount spent per institution increased significantly.

Chart 11: Average amount spent on IP protection per institution FY2001-2003



A total of £12.6 million was spent on IP protection during the 2003 financial year. 8 per cent of institutions did not spend anything on protection while 7 per cent of institutions spent more than £750K indicating that a small proportion of institutions incurred hefty costs to maintain and develop their portfolio of patents. 56 per cent of institutions spent upto £100K on protection (see Chart 12).

Chart 12: Expenditure on IP Protection FY 2003*

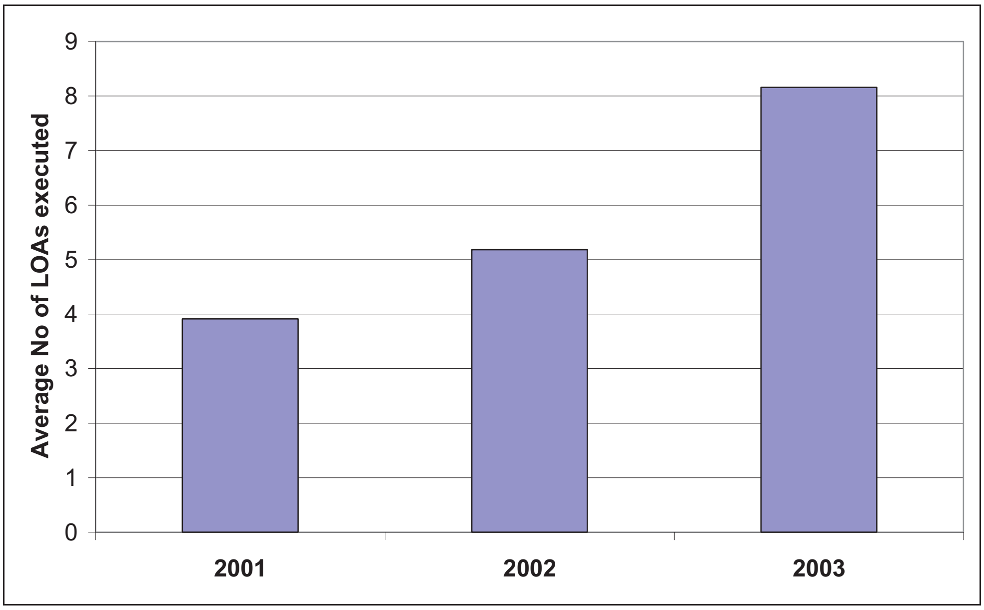


3. Licensing Activities

3.1 Number of LOAs executed

The average number of LOAs (licenses, options and agreements) executed by institutions is rising. Looking at Chart 13, we can see that there has been a continual increase over the past three years. During FY2003, an average of 8 LOAs were executed by institutions compared to 5 during FY2002 and 4 during FY2001.

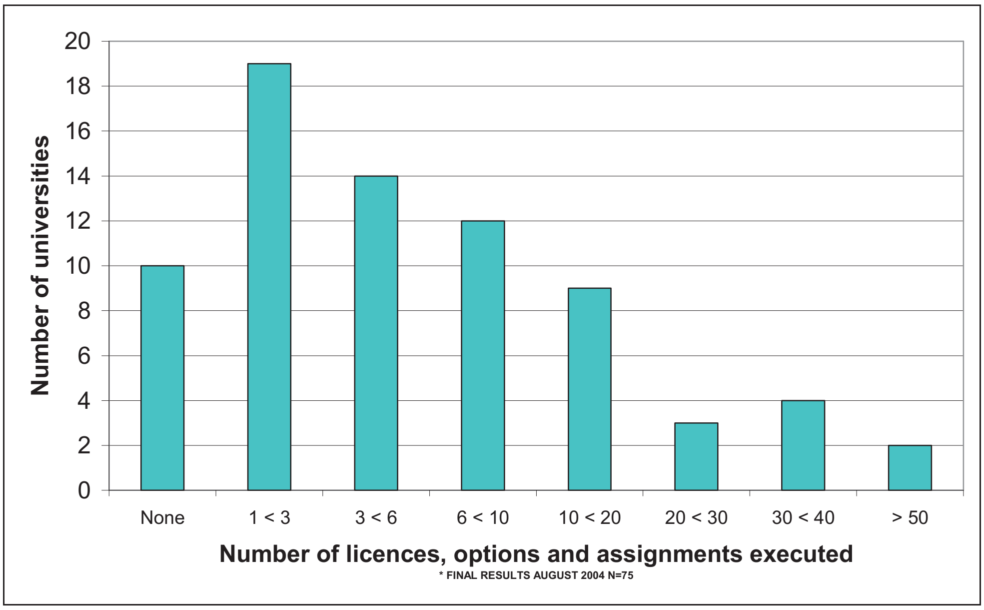
Chart 13: Average number of LOAs executed per institution FY2001-2003



The figures illustrated below exclude licence agreements related to software and biological materials. 63 institutions executed 596 LOAs during the 2003 financial year.[3] 13 per cent of institutions did not execute any LOAs while 3 per cent executed more than 50.

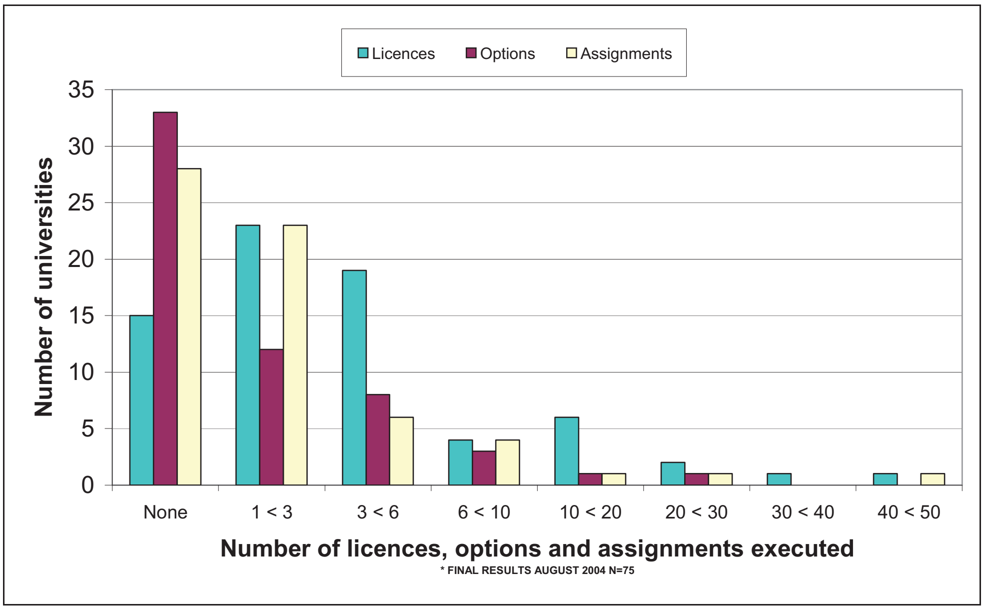
[3] Please note these figures relate to the number of confirmed agreements. Therefore it does not take account of the respondents who left the answer blank.

Chart 14: Total number of licences, options and assignments executed in FY 2003*



The proportion of agreements differs by the type of agreement. The majority of all agreements executed were licence agreements (see Chart 15). 333 licence agreements (56 per cent), 101 option agreements (17 per cent) and 162 assignment agreements (27 per cent) were executed. 44 per cent of all respondents did not execute any option agreements, 37 per cent did not execute any assignment agreements and 20 per cent did not execute any licence agreements.

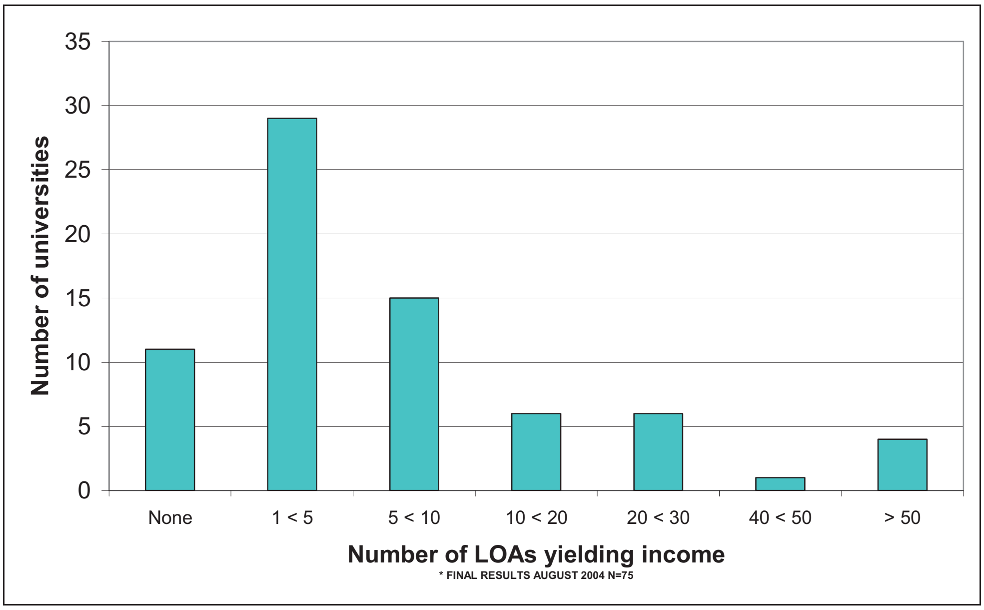
Chart 15: Total number of agreements executed in FY 2003*



3.2 Licensing Income

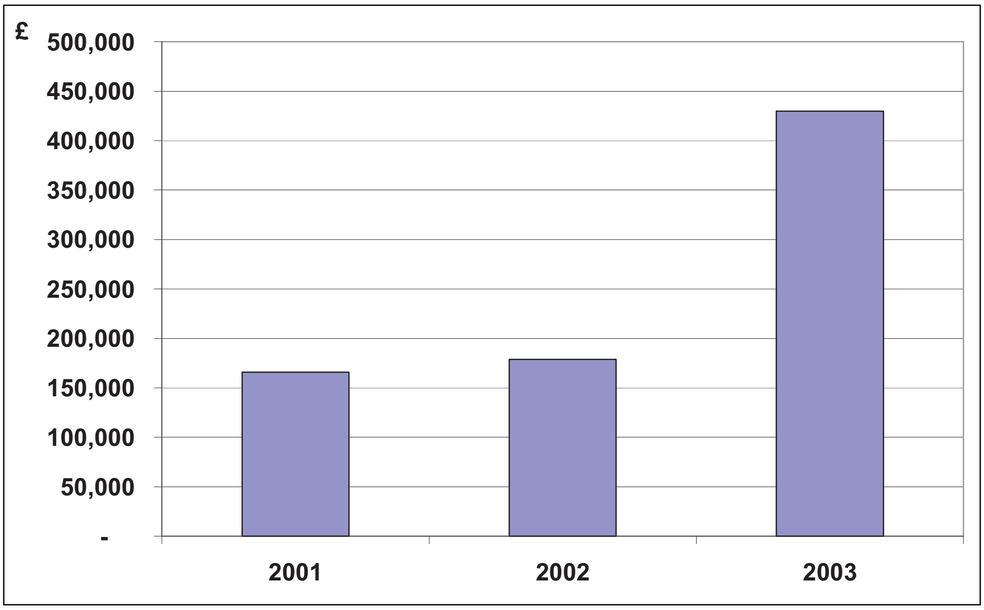
During the 2003 financial year, 81 per cent of the respondents had existing LOAs that yielded income (Chart 16). In total, 61 institutions had 775 LOAs that yielded income during FY2003.

Chart 16: Number of LOAs Yielding income in FY 2003*



The average amount of income received by institutions from LOAs has increased significantly. During FY2003, an average of £430K was received by each institution, significantly higher than the previous two financial years (FY2002: £179K and FY2001: £166K) – see Chart 17.

Chart 17: Average amount of income received from LOAs

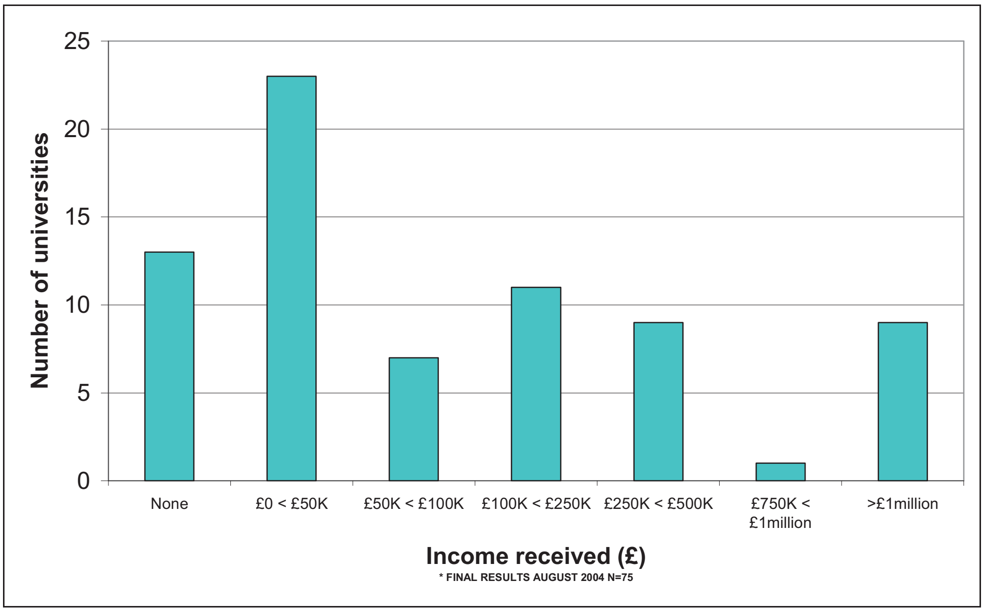


The total licensing income received[4] by 72 respondents in the 2003 financial year was £31.370 million. Given that there is a significantly large standard deviation, a median value of £52K might be a more accurate measure of the data given that the majority of institutions did not earn

[4] Including all option, up-front, annual, periodic, milestone fees and running royalties.

such large amounts. 17 per cent of the respondents did not earn any licensing income and 31 per cent earned up to £50,000. 12 per cent of respondents earned more than £1million.

Chart 18: Total amount of licence income received by institution*

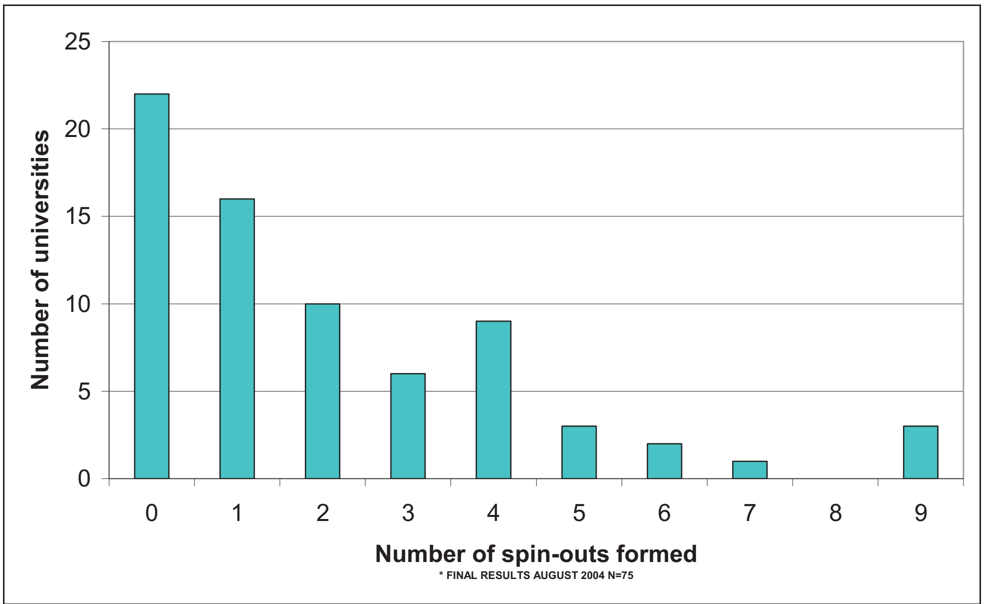


4. Spinout Company Activity

4.1 Number of Spinout Companies Set Up

50 institutions created 151 spinout companies (based upon IP and people within the institution) during the 2003 financial year (see Chart 19). 29 per cent of the respondents did not form any spinout companies while 55 per cent formed between 1 and 4 spinout companies. Only 12 per cent formed 5 or more with 3 institutions setting up 9 spinout companies.

Chart 19: Number of spin-outs formed in FY 2003*

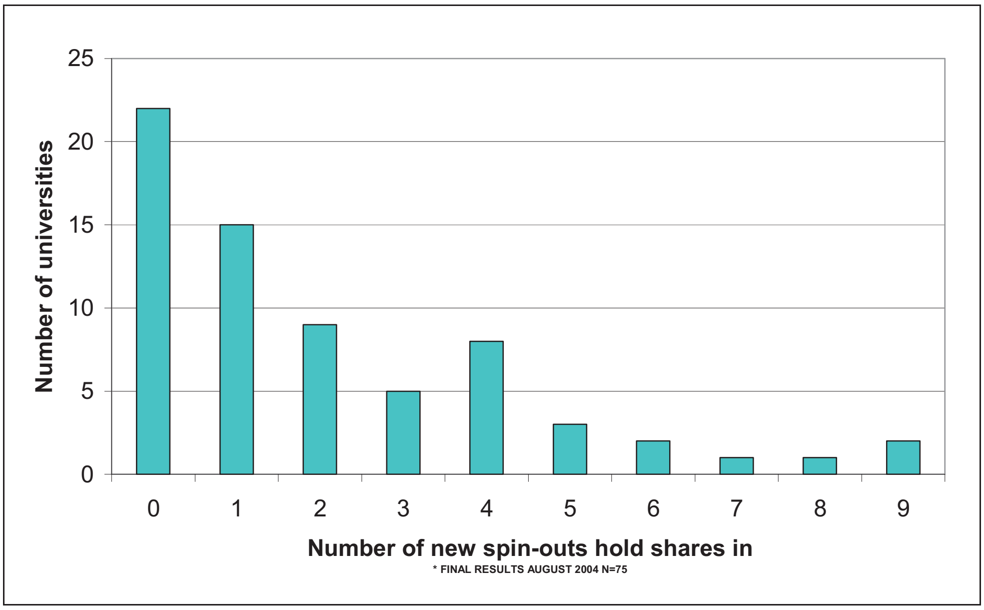


Among all the respondents, 2 spinout companies were formed on average per institution. Of the institutions that did form spinout companies, the average was 3. During the 2002 financial year, the average number of spinouts created was 1 and of the institutions forming spinouts, the mean was 3. However, there does appear to be some outliers in the distribution of this years data with 3 companies forming 9 spinout companies each.

4. 2 Number of Spinout Companies Shares Held In

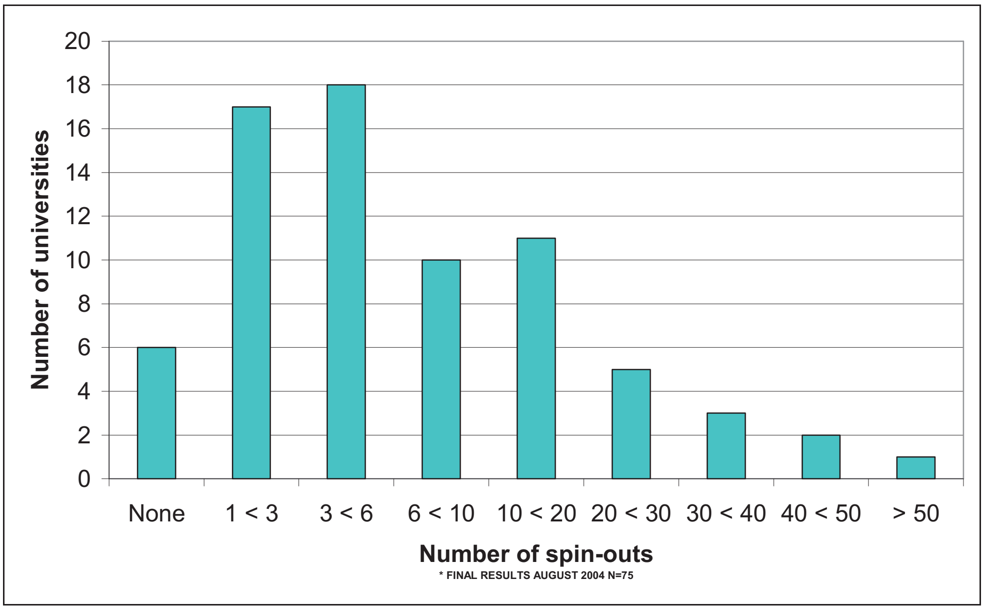
Of the spinout companies formed during the 2003 financial year, 140 (93 per cent) are part or fully owned by the institutions that formed them. 50 per cent hold shares in between 1 and 4 of the spinout companies formed during the year (Chart 13). The average number of spinout companies (created in FY 2003) that institutions hold shares in is 2. Two institutions hold shares in nine spinout companies.

Chart 20: Number of spin-outs formed in FY 2003 that institution holds shares in*



683 existing spinout companies have shares held in them by the institutions that created them (Chart 21). 8 per cent of institutions hold no shares in any of the existing spinout companies with 47 per cent holding shares in between one and six spinout companies. Given there is a large variance in the number of spinout companies formed, the median average of 5 may be more representative of the sample. The maximum number of spinout companies in which a single institution holds shares is 58.

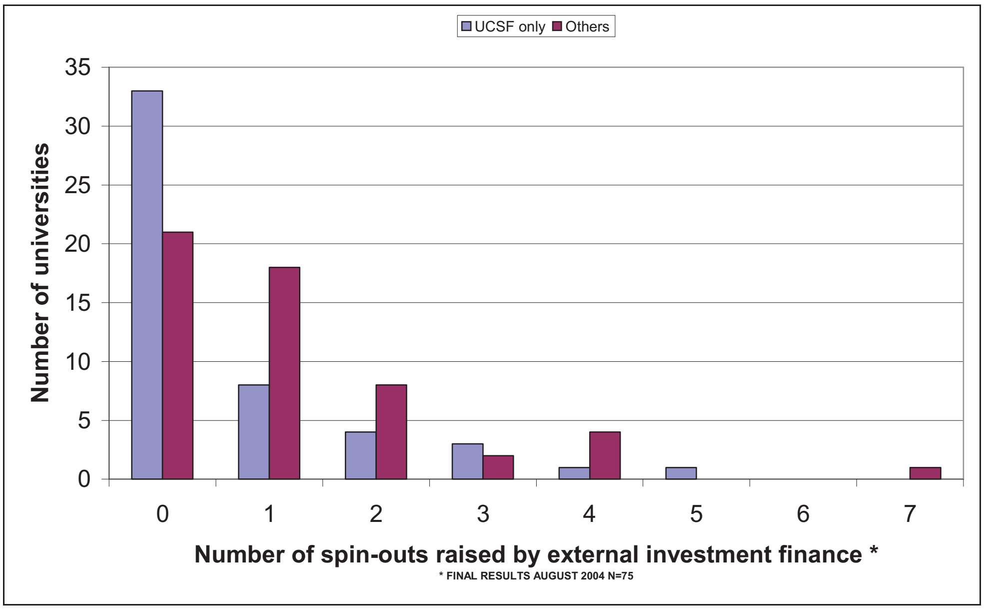
Chart 21: Number of existing spin-outs institution holding shares in at end of FY 2003*



4. 3 Number of Spinout Companies Raised by External Investment Finance

Over half (64 per cent) of the total spinout companies formed in the 2003 financial year were raised from external investment finance. In total, 54 institutions did not form any new spinout companies using external investment finance. Looking at Chart 22, we can see that of the spinout companies formed from external investment finance, a greater proportion was formed from non-UCSF (University Challenge Seed Fund) funding.

Chart 22: Number of spin-outs formed in FY 2003 raised by external investment finance*



In total, 34 spinout companies were formed from the UCSF and 63 from other sources of external investment. The maximum number of spinout companies formed from the UCSF by an individual institution was 5 and the maximum from other external investment sources was 7.

One spinout company was created on average though each institution that used the UCSF as a source of external investment finance and one company through other sources of external investment finance.

5. UK/US comparison

The Association of University Technology Managers (AUTM) also runs a similar survey that assesses the performance of technology licensing and transfer for US Universities, US Hospitals & Research Institutes, Canadian Institutions and Technology Investment Firms.

To this end we thought it would be interesting to compare results of UK Universities from the UK survey to the results of US Universities from the AUTM Licensing Survey[5]. Both surveys collect results from the 2003 financial year.

We took three key figures from the surveys, namely research income[6], licensing income and number of spin out companies and used these figures to produce comparable data.

LICENSING INCOME

US universities are creating more licensing income relative to their research income than UK Universities. For every pound of licensing income made by US universities, they have around £34 of research income. However, for every pound of licensing income made by UK universities, they have around £163 of research income. This can be seen in more detail in Chart 23 overleaf.

SPIN OUT COMPANIES

Conversely, UK universities are creating more spin out companies relative to their research income than US Universities. For every spin out company produced by UK universities, they have around £21 million ($38 million) of research income. However, for every spin out company created by US universities, they have around £56 million ($100 million). This can be seen in more detail in Chart 23 overleaf.

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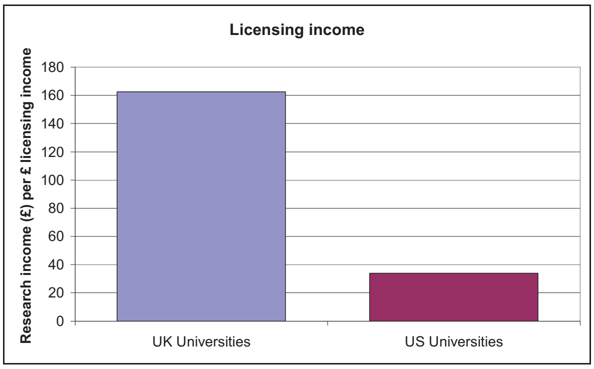
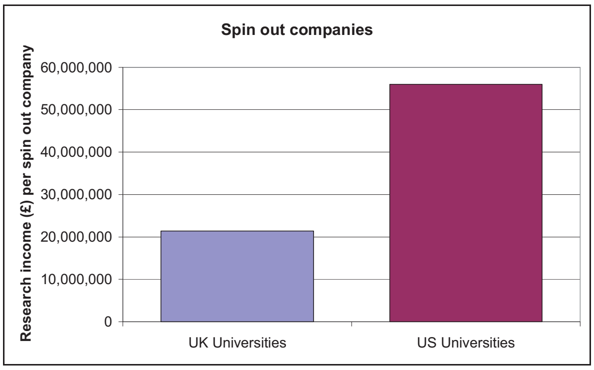
[5] The figures used in this section were taken from the AUTM's Interim Report of the AUTM Licensing Survey 2003.
[6] The UK figures were not taken from the survey and instead came direct from UNICO.

Chart 23: UK/US Comparisons[7]





	Research income per £/$ licensing income	
	UK Sterling	US Dollars
UK Universities	£162.51	$162.51
US Universities	£33.84	$33.84
	Research income per spin out company	
	UK Sterling	US Dollars
UK Universities	£21,376,937.06	$38,200,586.53
US Universities	£56,003,289.03	$100,077,357.09

[7] Exchange rate is taken from the Financial Times 13th October 2004.

Appendix 1

Methodology

The UNICO University Commercialisation survey was sent to 148 higher education institutions at the end of March 2004. It was sent to both members and non-members of UNICO. The survey was sent out by post but returns were accepted by post, fax and electronically. Had respondents not returned their completed survey by a fixed date, they were chased by telephone.

Respondents were asked to give data for the reporting period August 2002 to July 2003.

Fieldwork was closed on 5th August 2004. This included replies from 75 institutions and gives a response rate of 51%. It is worth noting that this is lower than the response rate in FY2002 survey of 84%. However, the drop off in responses was mainly from the institutions with lower research incomes. In fact, the 2003 sample contained all the top ten universities in terms of research income, 25 of the top 30 institutions and 37 of the top 50 institutions. It also contains the responses of four other research organisations. A full list of participants can be found in Appendix 2.

We do recognise that there may be some inconsistency in the population sampled between the FY2002 and FY2003 surveys. Whilst we feel this may overstate the size of some of the trends we believe the direction of the trends is still valid. UNICO is working with the universities to increase response rates year on year and will looking at measures to ensure better comparability in years to come.

Appendix 2

Participants

Universities
Aston University
Bournemouth University
Brunel University
Cardiff University
Coventry University
Cranfield University
Glasgow Caledonian University
Heriot-Watt University
Imperial College of Science, Technology & Medicine
King's College London
Leeds Metropolitan University
Middlesex University
Napier University
Oxford Brookes University
Queen Mary and Westfield College
Royal Academy of Music
Sheffield Hallam University
St George's Hospital Medical School
The London Institute
The Manchester Metropolitan University
The Nottingham Trent University
The Open University
The Queen's University of Belfast
The Royal Veterinary College
The University of Bath
The University of Birmingham
The University of Cambridge
The University of East Anglia
The University of Edinburgh
The University of Essex
The University of Glasgow
The University of Hull
The University of Keele
The University of Kent at Canterbury
The University of Lancaster
The University of Leeds
The University of Leicester
The University of Liverpool
The University of Manchester Institute of Science
The University of Newcastle-upon-Tyne
The University of Nottingham
The University of Oxford
The University of Paisley

The University of Plymouth
The University of Portsmouth
The University of Reading
The University of Sheffield
The University of Southampton
The University of St Andrews
The University of Stirling
The University of Strathclyde
The University of Sunderland
The University of Surrey
The University of Sussex
The University of Teesside
The University of Warwick
The University of Westminster
The University of Wolverhampton
University College Cork
University College London
University of Derby
University of Durham
University of Glamorgan
University of Gloucestershire
University of Luton
University of Manchester
University of Wales College Newport
University of Wales College of Medicine
University of Wales, Aberystwyth
University of Wales, Bangor
Other organisations
CCLRC (Council for the Central Laboratory of the Research Councils)
DSTL (Defence Science and Technology Laboratory) Porton Down
MRC (Medical Research Council) Technology
Natural Environment Research Council

Appendix 3

Questionnaire

Name of Institution:		
Contact name and contact details:		
Reporting Period:	*From:*	*To:*

1.	*In which year did your University establish its technology transfer activity?*	
2.	*What was the total number of Full Time Equivalents that were employed in your technology transfer and commercialisation activities at the end of the reporting year?*	
		DISCLOSURES & PATENTING
3.	*How many new invention disclosures were received by your technology transfer office?*	
4.	*How many new, priority patent applications were filed by your institution?*	
5.	*How many patents were granted/issued to your institution?*	*UK:* *US:* *Other:*
6.	*How much did your institution spend in protecting its IP on patent costs, external legal fees, and specialist IP consultancy advice in the reporting year? Please indicate if this is an estimate.*	*£*
		LICENSING
7.	*How many (a) Licence Agreements (b) Option Agreements (c) Assignment Agreements did your institution execute? (Please exclude software and biological material end-user licences under £1,000.)*	*(a)* *(b)* *(c)*
8.	*How many out of all your institution's existing Licence/Option/Assignment Agreements yielded income to your institution?*	
9.	*What was the total amount of Licence income received by your institution? (Please include option, up-front, milestone fees and running royalties.)*	
		SPIN-OUT COMPANIES
10.	*How many new spin-out companies did your institution set up? These are companies based upon IP and people in your institution?*	

11.	*Of the number in Question 10, how many does your institution hold shares in?*	
12.	*Of the number in Question 10, how many raised external investment finance?*	*UCSF only:* *Others:*
13.	*In how many existing spin-out companies did your institution still hold shares at the end of the reporting period?*	

Appendix 4

Responses

Q1. In which year did your University establish its technology transfer activity?

	All universities	
	Count	Col %
1970	1	1.3%
1971	1	1.3%
1973	1	1.3%
1980	1	1.3%
1981	1	1.3%
1982	1	1.3%
1983	1	1.3%
1984	3	4.0%
1986	3	4.0%
1987	3	4.0%
1988	1	1.3%
1989	1	1.3%
1990	4	5.3%
1991	2	2.7%
1992	2	2.7%
1993	2	2.7%
1994	3	4.0%
1995	3	4.0%
1996	1	1.3%
1997	3	4.0%
1998	1	1.3%
1999	3	4.0%
2000	12	16.0%
2001	7	9.3%
2002	8	10.7%
2003	2	2.7%

Q2. What was the total number of Full Time Equivalents that were employed in your technology transfer and commercialisation activities at the end of the reporting year?

	All universities	
	Count	Col %
None	1	1.3%
1 < 4	23	30.7%
4 < 7	19	25.3%
7 < 10	7	9.3%
10 < 15	6	8.0%
15 < 20	4	5.3%
20 < 30	9	12.0%
> 30	4	5.3%

Q3. How many new invention disclosures were received by your technology transfer office?

	All universities	
	Count	Col %
None	7	9.3%
1 < 5	10	13.3%
5 < 10	8	10.7%
10 < 20	13	17.3%
20 < 30	9	12.0%
30 < 40	4	5.3%
40 < 50	2	2.7%
50 < 60	3	4.0%
60 < 70	3	4.0%
70 < 100	5	6.7%
> 100	5	6.7%

Q4. How many new, priority patent applications were filed by your institution?

	All universities	
	Count	Col %
None	11	14.7%
1 < 5	23	30.7%
5 < 10	7	9.3%
10 < 20	21	28.0%
20 < 30	7	9.3%
30 < 40	1	1.3%
40 < 50	2	2.7%
> 60	2	2.7%

Q5. How many patents were granted/issued to your institution?

	All universities	
	Count - Total	Col %
None	27	36.0%
1	12	16.0%
2	3	4.0%
3	3	4.0%
4 < 7	5	6.7%
7 < 10	7	9.3%
10 < 15	4	5.3%
15 < 20	1	1.3%
> 20	8	10.7%

	All universities	
	Count - UK	Col %
None	31	41.3%
1	14	18.7%
2	4	5.3%
3	5	6.7%
4 < 7	7	9.3%
7 < 10	5	6.7%
15 < 20	1	1.3%

	All universities	
	Count - US	Col %
None	34	45.3%
1	8	10.7%
2	5	6.7%
3	6	8.0%
4 < 7	2	2.7%
7 < 10	5	6.7%
10 < 15	1	1.3%

	All universities	
	Count - Other	Col %
None	35	46.7%
1	4	5.3%
2	4	5.3%
3	3	4.0%
4 < 7	3	4.0%
7 < 10	4	5.3%
10 < 15	1	1.3%
15 < 20	1	1.3%
> 20	5	6.7%

Q6. How much did your institution spend in protecting its IP on patent costs, external legal fees, and specialist IP consultancy advice in the reporting year?

	All universities	
	Count	Col %
None	6	8.0%
£0 < £10K	6	8.0%
£10K < £30K	13	17.3%
£30K < £50K	10	13.3%
£50K < £100K	13	17.3%
£100K < £250K	14	18.7%
£250K < £500K	5	6.7%
£500K < £750K	2	2.7%
>£750K	5	6.7%

Q7. How many (a) Licence Agreements (b) Option Agreements (c) Assignment Agreements did your institution execute?

	All universities	
	Count - Total	Col %
None	10	13.3%
1 < 3	19	25.3%
3 < 6	14	18.7%
6 < 10	12	16.0%
10 < 20	9	12.0%
20 < 30	3	4.0%
30 < 40	4	5.3%
> 50	2	2.7%

	All universities	
	Count – License Agreements	Col %
None	15	20.0%
1 < 3	23	30.7%
3 < 6	19	25.3%
6 < 10	4	5.3%
10 < 20	6	8.0%
20 < 30	2	2.7%
30 < 40	1	1.3%
40 < 50	1	1.3%

	All universities	
	Count – Option Agreements	Col %
None	33	44.0%
1 < 3	12	16.0%
3 < 6	8	10.7%
6 < 10	3	4.0%
10 < 20	1	1.3%
20 < 30	1	1.3%

	All universities	
	Count – Assignment Agreements	Col %
None	28	37.3%
1 < 3	23	30.7%
3 < 6	6	8.0%
6 < 10	4	5.3%
10 < 20	1	1.3%
20 < 30	1	1.3%
40 < 50	1	1.3%

Q8. How many out of all your institution's existing Licence/Option/Assignment Agreements yielded income to your institution?

	All universities	
	Count	Col %
None	11	14.7%
1 < 5	29	38.7%
5 < 10	15	20.0%
10 < 20	6	8.0%
20 < 30	6	8.0%
40 < 50	1	1.3%
> 50	4	5.3%

Q9. What was the total amount of Licence income received by your institution?

	All universities	
	Count	Col %
None	13	17.3%
£0 < £50K	23	30.7%
£50K < £100K	7	9.3%
£100K < £250K	11	14.7%
£250K < £500K	9	12.0%
£750K < £1million	1	1.3%
>£1million	9	12.0%

Q10. How many new spinout companies did your institution set up?

	All universities	
	Count	Col %
0	22	29.3%
1	16	21.3%
2	10	13.3%
3	6	8.0%
4	9	12.0%
5	3	4.0%
6	2	2.7%
7	1	1.3%
8	0	0.0%
9	3	4.0%

Q11. Of the number in Question 10, how many does your institution hold shares in?

	All universities	
	Count	Col %
0	22	29.3%
1	15	20.0%
2	9	12.0%
3	5	6.7%
4	8	10.7%
5	3	4.0%
6	2	2.7%
7	1	1.3%
8	1	1.3%
9	2	2.7%

Q12. Of the number in Question 10, how many raised external investment finance?

	All universities	
	Count – UCSF only	Col %
0	33	44.0%
1	8	10.7%
2	4	5.3%
3	3	4.0%
4	1	1.3%
5	1	1.3%

	All universities	
	Count – Others	Col %
0	21	28.00%
1	18	24.00%
2	8	10.70%
3	2	2.70%
4	4	5.30%
5	0	0.0%
6	0	0.0%
7	1	1.30%

Q13. In how many existing spinout companies did your institution still hold shares at the end of the reporting period?

	All universities	
	Count	Col %
None	6	8.0%
1 < 3	17	22.7%
3 < 6	18	24.0%
6 < 10	10	13.3%
10 < 20	11	14.7%
20 < 30	5	6.7%
30 < 40	3	4.0%
40 < 50	2	2.7%
> 50	1	1.3%