

LAMBERT REVIEW OF BUSINESS-UNIVERSITY COLLABORATION

RESPONSE BY THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

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1. Introduction

LSE welcomes the opportunity to contribute to the examination of business-university collaboration undertaken by the Lambert Review. In the first section we provide a brief introduction to the London School of Economics and Political Science (LSE) and its overall business-relations strategy. The second section responds directly to the set of questions identified by the Review and provides examples of collaborations and evolving organizational practice. We conclude by making some comments regarding possible improvements.

2. Overall Strategy and Relationships

The future health of universities is critically dependent on the development and maintenance of strong partnerships on equitable terms between all the stakeholders involved. As part of this process, LSE actively engages with business organisations across the range of the social sciences. LSE's business (or corporate relations) strategy seeks to develop long-term partnerships with commercial organisations, which allow collaboration to occur on all levels and to exploit synergies between them. The goal is to provide partners with a service stream cutting across research collaboration, knowledge exchange, executive education, graduate recruitment, consultancy and industry networking on the basis of sustained business funding streams.

LSE has a strong web of relationships with business. The majority of these are with large corporations with a similar global perspective. Ongoing corporate relations and business development activities at LSE pursue partnerships with commercial organisations to fund independent academic research and teaching activities. A second aim has been to enhance the interaction between theoretical inquiry and practical application of social science analysis and knowledge. Thirdly, efforts have been made to link the identification and development of new business-funded areas of independent academic research to the School's intellectual strategy, its teaching offerings, the acquisition of research commissions, as well as the marketing of advisory and proprietary research services.

LSE was founded on the very notion of the application of knowledge to political and economic endeavour. Interaction with both business and government is deeply embedded in the institution. The School has produced generations of business and government leaders and its alumni are represented in most large corporations. The School's exclusive focus on the social sciences directly addresses key Lambert review areas of concern: business, finance, organisation and trade are core research objectives. In contrast to the natural sciences, engineering and medical HEIs, LSE's research outputs usually do not lend themselves to discrete exploitation in patents or licenses. Key value for business lies in the provision of research-based intelligence, policy advice and graduate recruitment. Knowledge transfer has historically occurred through research contracts, informal knowledge exchange and individual consultancy.

In the last 10 years, LSE has actively developed new strategies for more intensive collaborations with business and the corporate sector. This has included the creation of a Corporate Relations Unit; a commercial subsidiary, Enterprise LSE Ltd; and services to external users such as conferences, events and graduate placement. We have also made substantial investments in alumni relations, fundraising and student recruitment activities. These activities are seen as interrelated and aimed at building a seamless and semi-permeable interface with a range of stakeholders.

Given the prevailing funding environment for higher education, LSE has been entrepreneurial in cultivating new stakeholder relationships in support of its core mission. We see business collaborations as a vital tool to engage business as enablers and users of basic research rather

than exclusively as 'purchasers' of exploitable IP. We view knowledge transfer as the product of long-term engagements between business and universities. Exploitation flows from the successful creation of basic research infrastructure linked to tailored dissemination. Business investment in such infrastructure is vital for building knowledge value chains.

LSE has successfully created a significant number of research and teaching partnerships and actively pursues commercial exploitation of research findings. A key factor in successful collaboration has been relationship and project management focused on bridging the cultural divide between universities and business. Modes of delivery to business need to be supportive of both commercial requirements and academic independence. Knowledge transfer is a service stream and we believe this has important implications for how universities manage process without losing sight of their core objectives of public, independent research and teaching. A shared understanding of the usefulness of academic-business collaboration is vital for building collaboration, as is the recognition of the different objectives and needs of academic and commercial organisations. Successful business development in universities creates holding-environments, which facilitate knowledge-exchange but provide some insulation from commercial pressures.

The global higher education environment is evolving rapidly and many universities have become more proficient at operating at the interface to business. International academic networks are also increasingly important and knowledge transfer will more and more be delivered out of such networks to global business organisations. LSE has actively pursued and established international partnerships to enable joint delivery of business-facing education (e.g. Cardean, TRIUM EMBA), as well as cross-border research and teaching joint ventures through formalised institutional "alliances", notably with Columbia University, in New York City. Current EU funding streams accelerate the formation of such networks. We believe future business-university collaboration at the global level will be between networks of industrial practice and related networks of analytical know-how. Professional management of these networks will become essential for successful business-university collaboration.

We feel it is vital for business to understand the direct applicability of the social sciences to enterprise and innovation. Businesses, whether large or small, are today operating in a global environment and need to develop competencies in understanding the socio-economic dynamics shaping their operating space. Commercial organisations, like universities, are facing new pressures from different stakeholders and cannot ignore their social and political role – be it in local regeneration or global policy formation. The LSE, and the social sciences in general, have the capability to deliver value to business particularly in helping them understand the cultural, political and social forces impacting on areas such technology, human resources, trade, international relations and security, and global governance. The social sciences can also offer a wealth of applied methodologies and analytical tools to support business practice.

The LSE has long focused on making problem-solving skills and research-led intelligence available to industry. However, we believe UK business needs to significantly broaden and deepen its efforts to access and use these resources to engage more productively with the knowledge economy.

3. Direct Response to Lambert Review Questions:

3.1. Identifying Excellence and Best Practice / Examples of Business-University Collaborations:

3.1.1. *Use of existing IP*

Dissemination of existing IP occurs through a variety of channels, which distribute and publish academic publications or research output generated as part of ongoing research strategies. Some examples are direct exploitation in economics, financial markets, operational research, information systems and industrial relations. Publication generally proceeds via academic journals and publications, and are thus not commercially exploited *per se*. It is difficult to pinpoint specific evidence of industry's use of basic research output at the micro level, but we are aware that LSE's work routinely contributes background IP for more applied offerings.

LSE has collaborated with an international consortium of universities and cultural institutions to build a digital platform called Fathom for disseminating public IP and continues to contribute to the portal hosted by Columbia University. Joint work is underway with Columbia to further exploit the significant resources created through this venture, which has been a leading-edge example of international, cross-disciplinary investment in a project involving academic and non-academic organisations.

3.1.2. *Joint Ventures / Collaborations*

The LSE pursues a significant number of joint ventures in research and teaching. A number of new partnerships have been formed and a range of other forms of interaction explored. Research and teaching-oriented partnership programmes have emerged as a key platform for collaboration. Partnerships focus on harnessing basic research competencies in applied areas such as finance and management and making outputs available to business audiences in a targeted fashion. Corporate partners are invited to participate in research design and are offered access to research findings through a variety of dissemination channels – working papers, expert workshops, public lectures, seminars, conferences and briefings.

Our research collaborations tend to be problem-led and aimed at building pools of expertise through targeted partnership funding. Targeted funding enables rapid assembly of internal research teams by providing for teaching buy-outs and project management support.

Most business-collaborations are programme-based and housed in either academic departments or research centres. Business fellows are widely embedded in departmental research and teaching activities as a result of significant 'revolving door' arrangements between LSE and economic governance, central banking and international monetary institutions, as well as industry and the third sector. Most departments have visiting fellows programmes and regularly appoint business fellows.

The School arranges a variety of graduate and postgraduate internships and placements. Our central careers service liaises with all major employers and specialist recruitment fairs are regularly organized. The careers service collaborates directly with departments and the students union. Departments have

developed their own active placement programmes. A particular emphasis has been on placing highly qualified PhD graduates into specialized research units in the financial services and industry. The LSE Financial Markets Group has very strong ties with financial institutions and receives dedicated funding for its PhD programme from a number of firms.

3.1.3. Examples

- **Centre for the Analysis of Risk and Regulation (CARR) / Financial Risk Management Programme**

CARR was created in 1999/2000 with funding from a range of public and business sources. Partners include BP; PwC; Deutsche Bank and Aon. The Centre pursues academic research into risk management and regulation and provides partners with a stream of knowledge transfer on operational, environmental and compliance risk management in both the private and the public sector. Each partner funded specific specialist research areas with backbone funding provided by the ESRC. The Centre publishes *Risk and Regulation*, a quarterly magazine for business audiences.

A related financial risk management programme and associated chair in risk management funded by an industry partner is also in place at the Financial Markets Group. It collaborates with CARR and other departments in offering an interdisciplinary MSc in Management and Regulation of Risk. The degree has successfully established itself as a leading professional qualification for risk managers. It was developed as a result of dialogue between the School and Deutsche Bank on recruitment needs in strategic financial risk management. LSE and Deutsche Bank collaborated on curriculum development and Deutsche provides practitioner-led modules and internships alongside the academic course. (*Finance and Accounting/Financial Markets Group/Law/Sociology*)
(<http://www.lse.ac.uk/Depts/carr>)

- **UBS Pensions Research Programme**

The Pensions Research programme is a 5-year research partnership with UBS aimed at developing high-quality research on key aspects of old-age provision – demographics, household behaviour, public policy and fund management. The programme disseminates findings and provides research-based intelligence to inform public policy debate, compare fund management techniques, and improve pension fund governance. Tailored executive seminars for a variety of audiences are developed with UBS as part of the funding arrangements. Branded working papers and information are disseminated through a dedicated website. (*Financial Markets Group/Economics Department*)
(www.lse.ac.uk/ubs)

- **IAM Hedge Fund Management Research Programme**

The Hedge Fund Management Research programme was developed with sponsorship funding from International Asset Management. It funds a dedicated research group investigating key challenges of hedge fund management, regulation and performance. It pursues independent and public research. Findings are disseminated to academic and professional audiences via joint expert seminars, conferences and branded working papers. (*Financial Markets Group*)
(<http://fmg.lse.ac.uk/research/programdetail.php?researchid=6&pageid=3>)

- **Media@lse / LSe-lab**

Media@lse is an academic department created to provide a nexus for media and communications-related research and teaching in the School. Dixons provided sponsorship funding for a key chair in new media and the internet. The department has partnered with a leading US institution, the USC Annenberg School of Communication, to deliver a joint two-year MSc in global media management. **Media@lse** is currently developing the **LSe-lab**, an incubator unit for innovation research and practice in cooperation with a number of corporate partners.
(www.lse.ac.uk/collections/media@lse)

- **Global Dimensions**

The Global Dimensions programme was created with sponsorship funding from BP as a gateway to globalisation research at LSE. It features a dedicated research stream, a high-profile public lecture and seminar series (which has attracted, *inter alia*, Bill Clinton, Kofi Annan, Gro Harlem Brundtland and many others), a Distinguished Visiting Fellows programme (recent appointments include former heads of government Amato, Zedillo and Cardoso), a briefing series and a dedicated web library and clearing house.

Global Dimensions has also funded an international trade policy programme which hosts international business-policy-academe roundtables on trade policy issues and the ongoing WTO round. Events have been hosted in New York, Delhi, Shanghai, Moscow, Hong Kong and Singapore. (*Centre for the Study of Global Governance*)
(www.lse.ac.uk/collections/globalDimensions)

- **European Economic Governance Programme**

Business sponsorship from Siemens funded the creation of a programme in European economic governance, which pursues applied research into the evolution of economic governance in post-monetary union Europe. The programme actively contributes to ongoing policy debates, provides for business-government-academe links and hosts senior business roundtables on the design of the European Constitution. (*European Institute*)

- **Moving Markets Programme**

The Moving Markets programme is a consortium-funded hybrid research and consultancy project looking at strategic developments in the clearing and settlement industry. Partners are London Clearing House, CapGemini, Euroclear and Shell. The project has a strong focus on the evolution of technological platforms and organizational forms in the industry. Findings are initially disseminated to the consortium on a proprietary basis but are also integrated into academic output. A dedicated webportal is made available exclusive to consortium members. A key benefit of the consortium approach is research access to commercially sensitive areas. The project is run on a commercial basis via LSE's subsidiary company Enterprise LSE. (*Information Systems*) (<http://is.lse.ac.uk/movingmarkets/default.htm>)

- **LSE Health and Social Care**

LSE Health and Social Care bundles health-related research at the LSE and is active in commissioned research, consultancy and executive education. Research contracts are held from a variety of business and international organizations. The Centre is a clearing house for international health policy and economics and has attracted significant funding from industry while retaining as a priority its independence and freedom to publish via a substantial flow of 'traditional' research programmes. (*Social Policy*) (<http://www.lse.ac.uk/Depts/lsehsc>)

- **Complexity Research Group**

The Complexity Research Group pursues research into systems integration and management. It has an established group of industrial partners and offers regular knowledge exchange activities. Current partners include Shell International Ltd, Rolls Royce, BT, Norwich Union (Life) with additional funding from the EPSRC. (*Information Systems/ Social Psychology*) (www.psych.lse.ac.uk:16080/complexity)

- **Computer Security Research Centre**

The Computer Security Research Centre has a focus on applied information systems research in the areas of key public infrastructure, interoperability, encryption and information security. Current and past partners include BT, Deutsche Bank, Abbey National Group, 3i, Citigroup, Eaglestar and others. The Centre develops tailored software solutions, provides consultancy services and runs regular workshops and conferences. A consortium-based industry project on anti-money laundering is currently being launched. (*Information Systems*) (<http://csrc.lse.ac.uk/default.asp>)

- **Cities Programme**

The Cities Programme was created to foster interdisciplinary collaboration between architecture, engineering and social science. It

was launched in partnership with OveArup and features an urban design studio, a professional MSc degree in City Design and a broad stream of knowledge-exchange activities. The programme also provides consultancy services to both the private and public sectors. A joint venture is currently being launched to harness commercial consulting opportunities and provide funding for the ongoing development of the programme. (*Sociology/Geography and Environment*) (www.lse.ac.uk/collections/cities/)

3.1.4. *Informal Knowledge Exchange*

Informal knowledge-exchange is deeply embedded in the School. Departments, research centres and individual academics continually and routinely engage with business audiences. A significant proportion of informal knowledge-exchange happens at the programme level described above. All such programmes have developed dedicated channels of knowledge exchange through regular publications aimed at the non-academic audience, public events and practitioner workshops. There also exist numerous department-based informal links to business and alumni. Large quantities of informal and formal research output are made available through the School website.

Specifically, LSE hosts a longstanding public lecture series organized and funded centrally. It provides a public platform for disseminating findings from all research areas at the School and specifically targets public and professional audiences. There is also a series of joint public lectures with professional and industry associations and LSE regularly hosts a number of industry conferences and seminars.

Several targeted senior business briefings have been developed:

iXXi (9/11) hosts regular breakfast briefings on the evolving global political and security situation and attracts senior business audiences and foreign policy/security professionals.

The Centre for Economic Performance hosts the **Senior Business Forum**, which organizes roundtables on economic policy; competitiveness; productivity and labour market dynamics. The Centre hosts a significant number of business fellows annually and publishes a dedicated magazine, *CentrePiece*, with a wide non-academic readership.

Dilemmas in Competitiveness

This programme features a sustained schedule of seminars, roundtables and conferences on corporate responsibility and engaged both senior business and NGO audiences.

3.1.5. *Formal Contracts*

Research and sponsorship contracts are part of the wider contractual framework for all research funding, adapted for specific funding streams across both funding source and project types. Business-facing contract templates have been specifically designed in-house to protect IP, recover the full economic costs of activity and ensure wide dissemination of outputs. Compliance and financial management functions are shared across funding streams to ensure institutional

consistency and strategic alignment. Exclusively commercial relationships are contracted by Enterprise LSE Ltd., the School's wholly-owned trading company.

Within this over-arching framework, the School offers tailored development of contractual arrangements to corporate partners appropriate to the type of business collaboration.

IP is generally retained, but licenses to use are negotiated regularly where they will promote public access to research. Collaborations are priced according to the level of academic involvement, targeted dissemination and knowledge-transfer required.

All *proprietary* research-related funding (and exploitation of marketable IP) with contingent third-party IP acquisition is managed through Enterprise LSE, and IP pricing is negotiated in these instances on commercial terms.

LSE's Research and Project Development Division handles all non-commercial business development and research funding activities. These include European Union grants; UK government grants; research council and charity grants; business development and corporate contracts as well as partnership development of "alliance"-based teaching and research collaborations with other HEIs globally.

All post-contract administration, project implementation and budget control is managed at the Divisional level: the Division bundles research funding acquisition, research assessment support and project delivery functions.

3.1.6. *Regional links*

LSE has numerous links with the London region and its business community. The School is member of *London First* and retains a seat on its board. It has a long-standing relationship with the Corporation of London, delivering research services on a wide range of issues, including regional development; transport; local government funding; inward investment; strategic urban development; as well as the role of London as a financial centre. Strong ties also exist with the Greater London Authority. LSE collaborates with variety of agencies in London, including local councils, the Metropolitan police, the National Audit Office and the Serious Fraud Office. New templates for collaboration are currently being explored with the London Development Agency.

LSE has created a dedicated research and consultancy platform for London-related activities. **LSE London** is the principal centre for research on London and its region and includes staff from Geography and Environment; Social Policy; Economics; Government; Law, Sociology and the Cities programme. It offers direct access to research outputs and policy intelligence on all aspects of the London economy. Commercial needs are met through diverse consultancy services managed by Enterprise LSE. Clients include London-based companies like BP; British Telecom and British Gas.

LSE collaborates with Goldman Sachs, BP and the Technology Colleges Trust on delivering student tutoring services and Saturday school sessions aimed at supporting local secondary education and attracting students from London boroughs into higher education.

A dedicated publication, *LSE in London*, has been published and widely disseminated to raise public and business awareness of the London related services and activities at the LSE.

3.2. Barriers against strengthened collaboration?

3.2.1. *Management / Organisation*

Professional management structures supporting the School's relationship with business and other stakeholders have long been in place at LSE and have evolved over time. As an early adopter of this approach, we recognized many years ago the need for a coherent and streamlined structure for our externally-facing organisational units and have actively attracted, developed and retained professional teams in fundraising and alumni relations; research and business development; corporate relations; and academic partnerships.

Corporate Relations and Project Development

External relations management functions are co-located and coordinated centrally. In order to support and augment its relationships with business, the School created a **Corporate Relations Unit** in 2000. Embedded in the **Research and Project Development Division** to ensure an appropriate contractual, financial and policy compliance base, and to exploit synergies arising from existing research funded by business (over £13m through 50+ business-funded research contracts in the last five years; business funding represents 18% of all research contracts and grants secured over the same period), the Corporate Relations Unit is active in developing long term partnerships between the School and business organisations. This has involved developing a long-term corporate relations strategy aimed at creating the necessary templates, infrastructure and programme modules to allow academic departments to routinely access corporate research funding, initiate knowledge-exchange activities and to disseminate research findings to specialist audiences.

New collaboration funding attracted in the last full financial year amounted to £1.2m. Annual turnover over the past 5 years from business-LSE research collaborations averaged some £3m. Maximising overhead retention in a difficult external environment has to some extent allowed the School to fund the expansion of business-facing activities and related professional staffing needs.

The Corporate Relations Unit is responsible for rationalising and integrating School activities impacting on relationships with business. This has included fostering coordination with the **Office of Development and Alumni Relations** and the **LSE Foundation, Inc.** (based in the USA) in reaching key alumni in the business sector in both Europe and the US. There has been close collaboration in developing hybrid programmes with **Enterprise LSE**, aimed at harnessing both research funding and deploying related consultancy expertise. Overall, the Unit is active in supporting departments create the necessary programme infrastructure and develop long-range corporate-facing research perspectives. The Unit is responsible for monitoring all corporate programmes and related contractual delivery and compliance.

Research and Project Development Division

The Research and Project Development Division encompasses research and contract management, corporate relations and partnership/alliances units. Dedicated senior business development managers are in place for each strategic area. Senior managers of the Division are also represented on the boards of the LSE Foundation, Inc and Enterprise LSE.

Enterprise LSE

Enterprise LSE (www.enterprise-lse.co.uk) was established ten years ago to enable and facilitate commercial application of the School's expertise and intellectual resources. A wholly owned subsidiary of LSE, the company offers a professional interface with the academic community via services such as consultancy, customized corporate executive education programmes, and decision support. Enterprise LSE's client list includes over 50 British-based business clients. Enterprise LSE has also developed and delivered commercial projects and joint ventures such as accredited online learning for executives (UNext), and country intelligence reports for financial markets (IDEA Global). Net profits are covenanted to the School: some £400k in the last financial year. Enterprise LSE has engaged in a number of spinouts and joint ventures. It currently holds equity in several business ventures aimed at exploiting directly marketable IP such as decisions support software, emerging markets expertise, and urban development know-how. Enterprise LSE has acted as the equity vehicle for a number of international joint ventures in online-education and distance learning, including a developing relationship with Duke Corporate Education (a US-based company largely owned by Duke University) aimed at providing global tailored corporate training programmes.

Other external relations activities

A number of other units are active in external relations, and development strategies are actively coordinated to exploit synergies:

The **Office of Development and Alumni Relations** coordinates all alumni relations, fosters alumni networking and pursues philanthropic fundraising

The **Press and Information Office** coordinates all public relations, press and information services.

The **Conferences and Events Office** coordinates all events and conferences and provides a commercial conference hosting service.

The **LSE Foundation, Inc.**, the **LSE Centennial Fund, USA** and the **LSE Foundation, Canada** coordinate all development activities in the Americas and act as vehicles to attract *inter alia* business funding from US and Canadian corporations

3.2.2. Coordination

Central management units form the management "hub", with departmental and research centre administrators as the "spokes", of a carefully managed approach. Implementation of individual business-focused projects is generally managed by departmental and research centre administrators. The aim has been

to develop decentralised delivery structures. Central management of strategic business relations is handled by the Corporate Relations Unit, with an emphasis on coordination of academic priorities and other externally facing development. Priorities are developed both at departmental and central level and set by consultation. Business development activities have been guided by the concern that they remain supportive of basic research and teaching missions, are aligned with the long-term research strategies of academic departments, and are consistent with wider, long-term LSE strategic plans.

The School is currently involved in a major review of its senior management structures under the leadership of Sir Anthony Battishill and Sir Michael Lickiss. A key focus is to ensure continual improvement of the delivery and coordination of business services. We are also in the process of conducting a full-scale audit of all knowledge transfer activities in the context of “third-stream” policies.

3.2.3. *Barriers*

LSE has continually expanded its business collaborations through the organic growth of a professional business development infrastructure.

The main barriers currently are a systemic lack of resource for recruitment of professional management talent within the existing HE personnel structures; residual cultural issues in both universities and business, and the competing pressures on academic colleagues to deliver to an ever-widening range of stakeholders.

LSE has aimed to overcome resource constraints by pursuing robust overhead retention rates on business-related collaborations and reinvesting related income in strengthening project management capabilities. The School has also actively developed conceptual approaches to strategic public management of higher education in an effort to position itself as an leading global social science resource.

While we have strong relationships with business we feel that the value of academic research continues to be under-utilised by UK commercial organisations.

3.2.4. *Resource Allocation*

Synergies are actively harnessed by leveraging Research Council-funded research in collaboration with business and other organizations. Business contributions to core Research Council funding often allows for the creation of a specific focus on the application of basic research, while funds from a number of HEFCE initiatives have been deployed predominantly towards funding long-term infrastructure, organisational development and physical project environments.

LSE has recently created the Applied Interdisciplinary Research Laboratory (AIREAL) to create flexible accommodation for a variety of externally funded applied research activities, spin-off development and knowledge exchange. Amongst current projects housed there are the LSe-lab, and the Global Dimensions and Complexity Programmes.

3.2.5. *Technology Transfer*

Technology transfer is applicable to LSE only in a wider sense. Active transfer of organisational and analytic 'technology' (in the form of methodologies and research tools) – predominantly but not exclusively towards public sector, policy, and international organizations as well as the financial markets - occurs in all research areas.

Our critical mass of expertise in economics, econometrics, financial economics and corporate finance translates into strong relationships with a range of financial institutions, including the Bank of England, the Financial Services Authority, the Corporation of London and a host of other private and public bodies.

3.2.6. *IP arrangements*

The School retains all IP in principle unless explicitly created in proprietary modes via Enterprise LSE. As with many other British universities, the School is currently reviewing its IP arrangements and protections in the light of developments in the global HE sector and the emergence of a global knowledge market.

3.3. Recruitment relationships, graduate profiles and talent pool

3.3.1. Quality of graduates and skill profiles

LSE graduate and postgraduate programmes are amongst the best in the world. Access to degrees is highly selective with a ratio of ca. 25:1 applicants to offers for Masters degrees. LSE's student body is 39% UK, 17% EU with the remaining 45% from overseas. LSE attracts students from 120 different countries which makes it one of the most international universities in the world. Consequently we place graduates in employment around the world and into a wide range of positions and industries. The overwhelming majority of students find immediate placement either into occupation or further education.

3.3.2. Communication of business needs and curriculum collaboration

Because of its international reputation, LSE is a preferred recruitment source of many international corporations. The LSE has long-standing relationships with all major employer groups and consults actively on graduate profiles. The Careers Service provides central support while most departments actively pursue placement activities. Individual graduate profiles are made available via departmental websites and information sources. In addition, several departments have created a number of industry-supported degree programmes in economics, finance, and risk management, media and information systems. These are often embedded in wider collaborations as a result of LSE's ambition to interrelate all aspects of business-university collaboration. We feel that recruitment efforts by business are serious and thriving, and have not detected any skill gaps in our graduates.

To the contrary, our ongoing dialogue with corporate partners has allowed us to integrate quickly new professional practices and skill sets into existing or new degree programmes. The School also has a very active student recruitment unit, which manages our international student intake.

3.3.3. Cultivating talent and recruitment relationships

We monitor our teaching programmes constantly and are confident of the graduate talent pool provided to both the private and public sectors. The range of relationships we have with corporate partners enable ongoing dialogue on curriculum development, innovative programme design and work experience/placement services.

A key issue for the social sciences is to equip young academic staff with the diversified skill sets they will need to engage with the widening range of stakeholders. We view our research collaborations with business as an ideal training ground for young researchers and actively involve them in relationship management; professional presentations and consultancy activities. We strongly feel that these activities and skills are essential for creating attractive career paths for talent in the social sciences.

3.4. Financial infrastructure and needs

3.4.1. *Effectiveness of existing arrangements*

As stated above, we actively leverage existing traditional funding streams to enable business-facing developments. We welcome recent government initiatives to augment funds available to universities for building requisite infrastructure. Looking forward, it will be essential to 'routinize' backbone funding streams for business development activities, staffing and infrastructure. If the vision of an entrepreneurial public university is to be realised, guaranteed funding needs be made available to insulate some core areas from commercial pressures. We believe a public stakeholder model is realisable with professional university management and highly-leveraged public funding.

3.4.2. *Effect of R+D tax credits*

There has been a significant change recently in charitable giving from certain business sectors in particular due to changes in corporate governance and shareholder cultures. Corporate charitable foundations now routinely discharge philanthropic giving along set priorities. This has led to a separation of community from research funding. As an indirect result, LSE now collaborates with a number of businesses in delivering educational community services, e.g. our Saturday schools.

We feel this separation provides for a welcome focus on research collaboration as adding value to the knowledge economy, as it has forced many businesses to justify research sponsorship as a genuine business investment – a generally positive side-effect. We currently have no specific information on whether business partners are harnessing R&D tax efficiencies as effectively as they might.

We feel that problems and obstacles of routine access to business funding for collaboration persist in certain parts of the British business culture. Short-termist shareholder-value culture can discourage open-ended research collaborations. More effective exploitation and extension of R&D tax credits as well as recognition of university collaboration as a key R&D activity may stimulate businesses to engage more substantially.

The LSE accesses charitable giving by US corporates through our US-based fundraising vehicles. This has proved critical to the long-term development of business relations in the US and has enabled international business funding under local tax regimes – 100% tax credits on some types of philanthropic giving have been key to the culture of giving in the US.

4. Recommendations and Observations

We believe that the interlinked approaches and easily understood structures outlined above (business-funded research, corporate relations development, and use of Enterprise LSE as a vehicle when appropriate, together with close, formalised collaboration with our fundraisers) have served both business and the LSE well to date.

Crucial to improving this externally focused approach will be:

- the continued willingness of business actors to understand the key role of the social sciences - and their increasing overlap with the natural and other sciences – to their future prosperity;*
- their willingness to deal on level terms with universities on issues such as intellectual property, dissemination and freedom of publication where this is an integral part of the university-business relationship;*
- and to embrace the growing professionalism of the university sector in these same areas.*

LSE intends to build aggressively on our current platforms and enhance further its relationships with business.

Specifically,

1. We note the increasingly strong supportive framework for universities and business to work together to drive innovation, and acknowledge that Government has worked hard to encourage collaboration between universities and business.
2. However, Government needs to do more to assist universities recover the full economic costs of business - university interaction when it is articulated through a contractual relationship.
3. “Third Stream” funding is welcome, but is still insufficient to promote real acceleration of the increasingly differentiated missions of the university sector. We are also concerned that this funding stream may be increasingly difficult to access for research-intensive universities. We consider this unwise and shortsighted. “Research-intensive” universities need encouragement of this kind in much the same way as the currently targeted “less research-intensive” institutions.

4. Accordingly, there should be more explicit recognition and understanding by both Government and business of individual university's missions and capabilities, not least their diverse patterns of relationships with local, regional, national and international business. The Lambert review will already be well aware that no university is identical to another, and we encourage the Review to build on this knowledge in its report. There is no "one size fits all" set of answers.
5. LSE has few cultural or structural barriers to the further development of its relationships with business, although we recognize that this is an evolving challenge that will continue to require us to adapt accordingly. For example, collaborative work with is often extremely time-consuming for the individual academic involved, compared with the typical Research Council-funded grant. We need to do more to acknowledge this, and to integrate work of this kind into both academic career paths and everyday working life.
6. We note, however, that certain business sectors remain reluctant to engage in such relationships on equitable terms. Examples of problem areas in certain sectors include the ongoing difficulty experienced by all universities in indirect costs recovery: the university as a "soft touch" syndrome; and reluctance to view universities' increasing determination to protect and exploit their IP as a positive development that signals a growing professionalism in our sector.
7. It is often said that universities do not understand the business world; while there is without doubt some truth behind this cliché, it is also too often the case that the business contact does not understand the university.