Stimulating UK-China collaboration on innovation

This evidence briefing is aimed at policymakers concerned with stimulating collaboration between UK and Chinese high-tech firms. Engaging with China will be an important element in the development and growth of the UK economy. However, the challenge for UK companies is to identify and develop relationships with compatible business partners in China.

Key findings

A more focused approach to business support is needed to bridge the gap in perceptions, expectations, business processes and business models between UK and China. There is tremendous potential to leverage resources beyond government support and involve multiple stakeholders to work together, including intermediary organisations and knowledge-brokers.

For many years China has been in the spotlight in the global innovation system, and the complementary innovative capability between the UK and China much explored. The UK has strengths as a location for Research and Development (R&D) and scientific discovery, but its main challenge is how to exploit innovative ideas and develop new products. In contrast, Chinese firms are known for adapting the ideas of others and building on these ideas at home.

Many UK companies (63 per cent) and Chinese companies (60 per cent) surveyed have collaborated on innovation projects with international partners in the past three years. UK companies’ international partners are mainly from the USA (42 per cent), India (24 per cent), Europe (excluding the UK) (37 per cent) and China (19 per cent). The top partner choices for Chinese firms are USA (35 per cent), Europe (excluding UK) (21 per cent) and Japan (11 per cent).

Only 19 out of 242 Chinese firms have recently collaborated with UK firms. Moreover, there is a discrepancy between UK and Chinese firms’ perceptions of bilateral collaboration on innovation projects (see table below).

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<th>UK firms’ perception of collaboration with Chinese firms</th>
<th>Chinese firms’ perception of collaboration with UK firms</th>
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<tbody>
<tr>
<td>Own contribution</td>
<td>1. Marketing</td>
<td>1. R&amp;D</td>
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<tr>
<td>(Ranked top 3)</td>
<td>2. R&amp;D</td>
<td>2. Technology</td>
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<tr>
<td>Partners’ contribution</td>
<td>1. Manufacturing</td>
<td>1. R&amp;D</td>
</tr>
<tr>
<td>(Ranked top 3)</td>
<td>2. Distribution</td>
<td>2. Sales</td>
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One possible explanation of this discrepancy is that the term R&D has different connotations in Chinese firms, as it can refer to various types of investment, including investment in a new building.

Barriers to International Collaboration

Many reasons have been put forward by UK companies for showing lack of interest in finding an international partner. These include:

• Don’t see any benefit from collaboration
• Happy with the current partner
• In-house growth
• Innovation is driven internally in this very UK centric organisation
• Our market is purely domestic
• Strong intellectual property needs to be protected
• The UK market is big enough
• We can source partners in the UK
• No ability to predict the future

Although many Chinese firms have collaborated or are seeking collaboration on innovation projects with foreign companies, most of them are passive, expecting foreign companies to approach them. Many Chinese firms don’t know how to go about finding an international partner, and in particular know very little about UK firms.

Future collaboration
Compared to UK firms, Chinese firms without recent experience of international collaboration are much more eager to work with an international partner in the future, and 78 per cent aim to establish an international partnership in the next three years.

The top four areas of expertise that UK firms are seeking from their future international partners include:
• R&D
• Technology and component
• Distribution
• Manufacturing

The top four areas of expertise that Chinese firms are seeking from their potential collaborators include:
• R&D
• Sales
• Technology and components
• Marketing

Policy implications
Some UK companies still need general business support, such as training on Chinese language and culture and participation in trade delegations, in order to break down the barriers to collaboration with Chinese companies. However, many UK companies need more focused business support to identify a suitable business partner in China. Such support requires business advisors who have specialist knowledge and cultural awareness as well as willingness to adopt a hands-on approach to business support. The opportunity for the UK government is to tap into business support resources and expertise beyond the public sector, such as business consultants, intermediary organisations, knowledge brokers and social enterprises.

Brief description of the project
The team conducted questionnaire surveys with 242 Chinese high-tech companies (located in Beijing, Shanghai and Shenzhen) and 150 UK high-tech companies, primarily operating in life sciences (biotech, pharmaceutical and medical devices) and information and communication technologies (computer hardware, software, data storage and processing, and telecommunication). The team also conducted detailed case studies of 12 Chinese pharmaceutical and medical devices companies. (The full report is available at: www.rhul.ac.uk/Management/Research/Chinese-firms/index.html).

Further information
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