

PROTECTIONISM AND NATIONALISM VERSUS OPEN INNOVATION: A CHALLENGE FOR EUROPE'S INNOVATION DIPLOMACY

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Is the politics of open innovation naive?

Europe has embarked upon a fierce strategy of open innovation. The idea is “to open up the innovation process to all active players so that knowledge can circulate more freely and be transformed into products and services that create new markets, fostering a stronger culture of entrepreneurship” (see [EU 2016](#)). In other words, a free flow of knowledge is expected to benefit all. But Europe and its open innovation strategy are confronted with protectionist and nationalist tendencies, which do not favour such openness. These tendencies exist internally in many Member States where anti-European political forces are gaining power, with the UK Brexit vote as a prime example. “We are better off on our own.” Externally, we see these tendencies in the Americas, where president Trump is the loudest proponent, but certainly not the only one, and in Asia where international innovation collaboration is always well embedded in national competitive strategies.



It is not unlikely that the protectionist and nationalist tendencies will gain force over the next decade or so. The pressures from migratory workers at the bottom of the labour market, from globalisation on the middle classes in western countries and from the accelerated use of fully automated machines (robots, artificial intelligence), will feed protectionist tendencies as long as there is no strong countervailing discourse that receives wide political recognition and allows effective action on these issues.

Against this background, the European open innovation strategy may seem rather naive, even when we support the premise that openness in the end maximises the benefits for all. At the very least, the open innovation strategy faces many challenges which demand clever responses from Europe's politicians and innovation diplomats. The following paragraphs will explore the nature of these challenges and will outline a possible response from European foreign policy.

Stakeholders

Open innovation and the free flow of knowledge are important for companies working in advanced technology fields, for which innovation depends on a wide range of interdisciplinary research and development inputs. This kind of R&D inputs is usually “collected” from around the world. Large companies often have R&D labs in different countries, each with their specific collaborations with universities and public research organisations. Other necessary knowledge inputs are acquired by incorporating high-tech start-up companies. Smaller companies are part of value networks which often



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span large parts of the globe. Advanced technology companies are constantly scanning the world for start-ups which own relevant intellectual property and other knowledge assets.

Universities and public research organisations have a strong interest in open innovation and the free flow of knowledge. The free flow of knowledge between researchers around the world guarantees access to the best research and best people to bring knowledge forward. Knowledge interactions with companies brings the actual use of the research results forward, which is one of the best ways to show their relevance and to justify the use of tax-payer's money.

Over time most high-tech industries have developed not only extensive global production networks, but also strong global innovation platforms (see extensive discussion in 6CP conference 2014). Knowledge development has become deeply embedded in these platforms, and any drastic change due to protectionist measures will lead to painful consequences and a long period of adjustment to the new international relations.

However, when it comes to sharing knowledge, countries like China and Brazil have always had a keen eye for self-interest in the process of globalisation. Protectionist actions might to a certain extent be justified, in the case of developing countries, sometimes to protect vital local production (agriculture) against world market competition or to allow special conditions for building capacities in industry. The World Trade Organisation has special provisions for such cases. But it appears that now western countries, which have been the driving force behind opening the world of trade and knowledge, are entering a new period in which a large part of the constituency has lost faith in globalisation and the related free flow of knowledge, people and capital. Some even have lost faith in science itself. Voices to put self-interest on top are becoming louder (Trump, Brexit and populist movements in many European countries).

The consequences

Open innovation as a global principle is no longer self-evident. What will this mean for the European strategy? Regarding research and development, it may be expected that growing nationalism and protectionism will lead to further strengthening of already strong players which can cover a broad range of relevant research fields. In view of the scale and scope effects which also reign research and development, it must be expected that only countries like the USA, China, Germany, France, and the UK will be able to maintain broad leadership. India, Brazil, Russia and other larger players which are already facing a gap will have a very hard time keeping up. Smaller players with recognised strengths in certain fields (like Sweden, the Netherlands, Spain, Canada, etc.) might aim for further specialisation to keep their strongholds. But in an increasingly hostile environment they may also risk losing access to valuable knowledge inputs, which is so far guaranteed by their involvement in global innovation platforms. Countries which are lagging in several fields of science and/or development and/or production and newcomer countries might experience political pressures to apply protectionist measures to the max, which most likely results in even further lagging.



The international knowledge environment of companies will rapidly become more complex. Nationalism and protectionism and the resulting fragmentation of global innovation networks will lead to the need to fulfil special conditions before market access is granted. These are not necessarily import tariffs, but may also be measures such as local production content requirements, forced technology transfer and adherence to an increasing number of localised standards (see [ITIF 2016](#)). Different rules and regulations around the globe will then become serious barriers to global market access.

In such an environment, Europe's open innovation strategy will face serious challenges. Major players around the world will not be prepared to collaborate and exchange knowledge under similar conditions of openness. Reciprocity is the minimum requirement for a level playing field. And a level playing field is the minimum requirement for a successful European open innovation strategy. European high-tech and other knowledge assets need to be valued in the context of international relations and generally require a stronger awareness in foreign policy. Location of high-tech development and production is no longer a company decision, but has become a major factor in the competitive strategy of many countries. To face the protectionist demands, companies will increasingly ask for political support from their home-country and in the case of European companies also from the European Union.

What should Europe do?

Europe can maintain its open innovation strategy on the condition that it is well embedded in foreign economic and trade policies. Open innovation is of high value within the Union (see for example the [JIIP 2015 report](#)), and it is a good starting point for collaboration with other countries. But, as was said above, reciprocity is no longer self-evident. Important international governance bodies such as the World Trade Organisation (WTO) and the World Intellectual Property Organisation (WIPO) face problems to move forward, partly because high-tech trade and intellectual property rights are becoming more important as sources of disagreement in negotiations between countries. It must be expected that the role of these bodies will (temporarily?) diminish and that a myriad of bilateral and multilateral agreements will come in place. It is also likely that such agreements will not have the broad scope WTO and WIPO are seeking, but are much more targeted at a specific field of technologies (e.g. solar cells, batteries or stem-cells). The result may be a very complex configuration of agreements with different scope and geographical coverage. At the same time, we may expect the growth of one-sided protectionist measures to protect vital fields of technology against competition which is seen as unfair and might be threatening national champions.

The European Union cannot escape from such developments. On the contrary, the pressures are growing to implement measures that protect European interests. One of the most striking examples is how Europe lost production of solar PV panels to China in a period of 10 years and is now fighting to increase production in Europe again. Punitive import tariffs on Chinese solar panels are applied. The open innovation strategy requires a careful balancing of free exchanges of knowledge on the one hand and protective measures on the other. The first should be the rule, the latter the exception. Open innovation is not the self-evident principle, but something which needs to be carefully



built, very often on a case-by-case basis.

The consequence is a rapid increase of the demands on science, technology and innovation diplomats. The growing complexity requires from them an increased understanding of the technologies involved and of how the value networks of production and trade which drive these technologies are distributed around the world. This understanding is a necessity to be able to propose measures and actions which in the long run will be beneficial to all parties. And even more so to explain the need for such measures and actions to politicians. Pursuing the open innovation strategy will rapidly increase the need for innovation diplomats which are well trained in issues of technology development and production and trade networks. Building trusted relationships based on scientific collaboration is not good enough anymore.

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