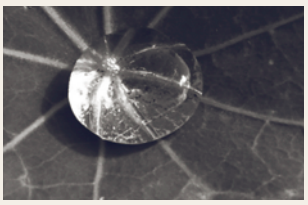
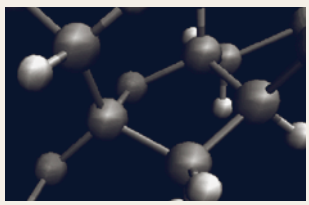





innovation

RECOMMENDATIONS FOR CLOSING EUROPE'S INNOVATION GAP

AMCHAM EU

AMERICAN CHAMBER OF COMMERCE
TO THE EUROPEAN UNION

RECOMMENDATIONS FOR CLOSING EUROPE'S INNOVATION GAP

Companies of US parentage remain committed to Europe. US firms not only invest over $964 billion in Europe and support over 3.6 million jobs[1], Europe is still by far the top destination for US R&D activity overseas. 63.2% of US companies' foreign R&D investment takes place in Europe[2] and it is also the breeding ground for innovative ideas and practices.

AmCham EU defines innovation as the successful commercial exploitation of new ideas. This means incorporating new technologies, design and best practice to enable business to compete effectively in the global environment. In the widest sense, innovation includes development of new products and services (product innovation), new ways of working (process innovation), and new commercial arrangements, business models and ways of eliciting the best from people and resources.

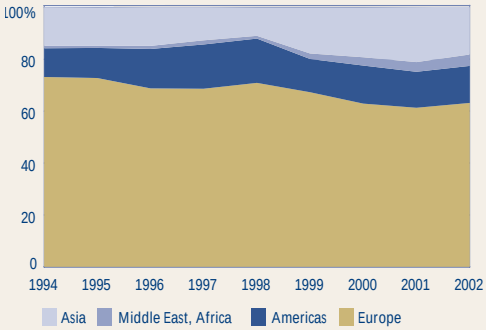
To encourage this trend and further boost the European economy the American Chamber of Commerce to the European Union (AmCham EU) supports a Europe that will:

- create a more conducive business environment for innovation across the European Union and
- commit funding to Research & Development (R&D).

To achieve this, AmCham EU offers this analysis of key sectors currently at the heart of EU policy and priorities regarding innovation. Changes in regulatory approaches could substantially contribute to R&D investment in Europe, directly impacting on Europe's ability to innovate.

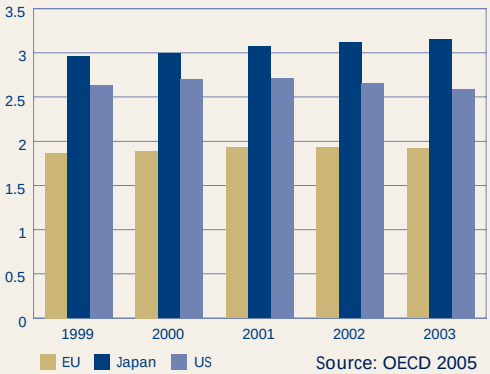
On average, according to a recent EU Scoreboard[3], 'the EU invests about a third less in research than the US' while 'emerging countries like China and India are fast becoming world-class centres of research and innovation'. Moreover the US and Japan are still far ahead of the EU25 in terms of innovation with 70% of the innovation gap being, in statistical terms, largely explained by lagging EU performance in three areas; USPTO patents, population with a tertiary education and information and communication technology investment.

Geographic distribution of US firms' overseas R&D



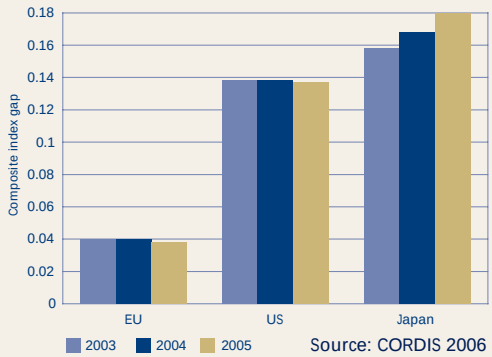
Source: US Department of Commerce 2005

R&D expenditure as % of GDP



Source: OECD 2005

EU25 innovation gap towards US, Japan and EU15



Source: CORDIS 2006

over 75% of new R&D sites planned for the next three years will be established in China and India and by 2007 Ch

the labour productivity in the total manufacturing sector reach

a 0.1% increase in R&D boosts output per capita growth by 0.3-

it costs around €10.000 to obtain patent protection in the USA, it co

to reach the Lisbon goal of three percent GDP expenditure o

the EU spent €195 billion on R&D in 2004, Japan spent €12

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With a well-educated work force, leading edge technology capabilities, renowned universities and research institutes, the EU has a strong capacity for innovation. Yet, despite these favourable elements, it faces numerous challenges to creating greater economic growth and competitiveness. In January 2006, an independent expert group set up by the Commission and headed by former Finnish Prime Minister Esko Aho concluded that 'if Europe cannot offer an innovation-friendly market for the creative outputs of its business, then those businesses will fail to thrive or will go elsewhere'.

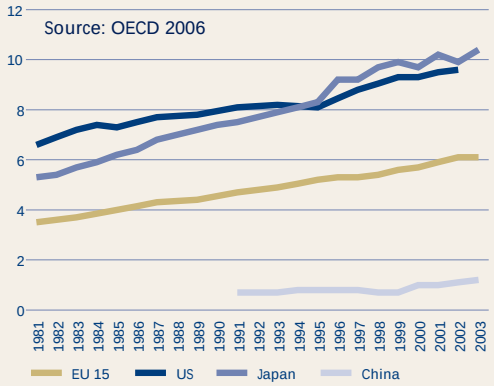
In September 2006, the European Commission launched a broad-based, 10 point innovation strategy. This underlines that 'Europe does not need new commitments from Member States but political leadership and decisive action'.

Europe is currently not operating an 'innovation-friendly marketplace' for many sectors compared to third countries. To cite a few examples, excessive product liability laws are impeding companies from developing new products. A lack of harmonised international standards for energy-efficient technologies is holding back the success and use of such technologies. Basing state aid rules not on specific market failures, but on size, geographic location and country of ownership of a company distorts the level playing-field that companies need to innovate.

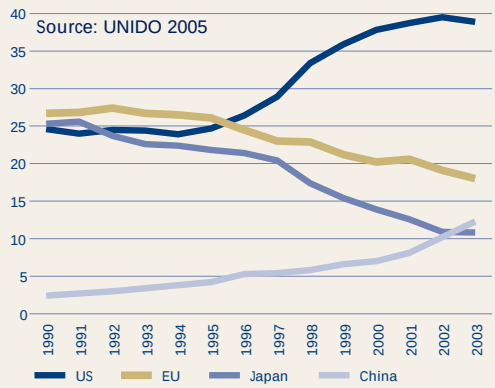
As Mr. Aho affirms, 'Policy measures should recognise that large firms are essential for the innovation system. The recent trend of concentrating resources on SMEs ignores the natural ecology of industry'. His report makes recommendations that if implemented will have positive and concrete impacts.

AmCham EU welcomes the Aho Report as a step in the right direction. AmCham EU companies are committed to Europe. Our companies are keen to invest in a Europe that produces cutting edge technologies and innovation breakthroughs, improving the quality of life of its citizens and those around the world. Recognising the boundless potential that Europe possesses and the obstacles that it needs to overcome, we offer our recommendations across specific sectors to further push Europe to achieve its potential and maintain a competitive edge in the world economy in the face of fast developing competition.

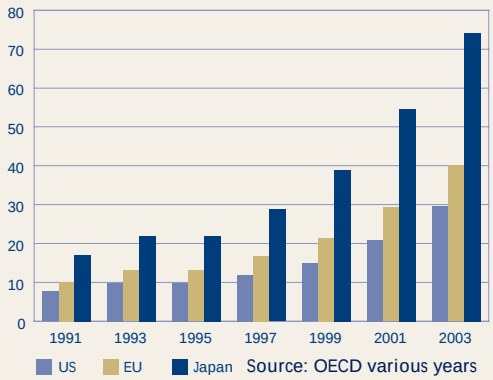
Researchers per thousand employed



Location of world's high-technology manufacturing output 1990-2003



China's R&D percentage expenditures relative to the US, Japan and the EU



hina and India will account for 31% of global R&D staff, up from 19% in 2004.
ed €45,000 whereas it added up to €63,000 in the high-tech manufacturing sector
-0.4%
sts €50.000 alone to achieve protection in only 8 EU countries
n R&D the EU will need to attract a further 700,000 researchers
0 billion, the US spent € 252 billion and China €16 billion

INNOVATION POLICY RECOMMENDATIONS

AGRICULTURE & FOOD

Goal: Facilitate the bringing to market of novel foods and food technologies

Impact:

- Consumer health and the sustainable production of crops can both be improved by the use of new technologies in food and agriculture. The necessary regulatory framework needs to be in place for this to happen. This is currently not the case in biotechnology.

Recommendations:

- Effective use of, development of, and a more practical trading regime for biotechnologies would not only greatly contribute to the economy, but also to the environment.
- Authorisation of novel food ingredients should move towards coordination and eventual mutual recognition at an international level.
- Regulators and industry must work together to progress the common goal of strengthening consumer confidence in the use of novel technologies in food.

COMPETITION

Goal: Increase innovation through state aid

Impact:

- Current state aid rules are not targeted at innovative companies and too often support inefficient national champions, impeding Europe's overall competitiveness. Although investment in R&D is directly linked to economic growth only 12% of the total amount of European state aid was allocated to R&D[4]. Effective competition, by its very nature, breeds innovation, whereas financial support used incorrectly can do the opposite.

Recommendation:

- State aid should be approved exclusively as a response to specific market failures and allocated according to a company's innovation potential. Size, geographic location and country of ownership should not be criteria for state aid.

CONSUMER AFFAIRS

Goal: Maintain a fair product liability regime

Impact:

- Imposing overly protective and excessive product liability laws deter companies from creating new products. For example an increase in product liability cases in the UK saw insurance premiums rise by 30-40% in the field of public liability insurance[5]. This, added to actual legal costs, has meant that many companies spend more money on product liability than they do on R&D.

Recommendation:

- The current EU approach strikes the right balance between consumer protection and company liability. Changing this balance will discourage companies from investing in developing new products. In the US product liability claims cost the average family of four $3,550 per year in added costs on goods and prevent new products from coming on the market[6]. We should not evolve a similar system in Europe.

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DIGITAL ECONOMY

Goal: Cut red tape that stifles innovation in on-line services

Impact:

- Information and communication technology (ICT) is one of the most R&D intensive industries in the EU accounting for 25% of business R&D expenditure[7]. As a result ICT is one of Europe's fastest developing sectors. Extending regulatory rules from broadcasting to the internet in the proposed review of the Television without Frontiers Directive could inhibit companies from innovating in this fast-moving sector which is expected to grow from one percent to six percent of the market share by 2009[8].

Recommendation:

- Allow the market a period of time to develop self-regulation and then, if necessary, address any persistent market failures that can then be identified through regulation.

Goal: Support a modern flexible approach to spectrum management

Impact:

- Allocating spectrum for specific uses and/or with specific technical attributes limits the technologies that could operate within certain frequency bands and impedes innovation and technological advancement.

Recommendation:

- Change the EU's approach to spectrum management to promote the full potential of innovative electronic communications services. Technology neutrality is one such modern approach - which promotes the flexible allocation of spectrum without designating the technology which can be used.

ENERGY

Goal: Develop and manufacture increasingly energy efficient technologies

Impact:

- High costs, lack of harmonised international standards, and unrecognised voluntary agreements all impede the success and use of effective energy efficient products and technologies.

Recommendations:

- Identify those financial instruments that can best promote the adoption of energy-efficient technologies and products.
- Negotiate and adopt global energy efficiency standards to spur competitiveness. The rapid development of China will see their CO_2 emissions increase by 65% between 2001 and 2010[9]. If China were to use existing energy efficient technologies in just four industrial sectors, they would cut their total energy consumption by 10% and emissions by 488 million tonnes[10].
- Deploy both voluntary measures and legislation in pursuing greater energy efficiency. The Energy Star symbol which is awarded to energy efficient products avoided the equivalent of 23 million cars worth of greenhouse gas emissions being released in 2005 while saving the average family $450 dollars from their utility bills[11] demonstrates how effective voluntary measures can be.

ENVIRONMENT

Goal: Promote the safe management of chemicals

Impact:

- Excessive bureaucracy in the REACH directive and possible 'gold-plating' by Member States will stifle innovation and disastrously impact employment and capital investment in a sector that employs 1.9 million people and invests €31.4 billion annually in Europe[12].

Recommendations:

- A balance between environmental and social goals' impact on innovation is necessary to pursue a more balanced policy.
- Better coordination is necessary among institutions to ensure that complex legislation does not impose unnecessary costs on industry and on the EU economy.

INSTITUTIONAL AFFAIRS

Goal: Foster better regulation to spur growth

Impact:

- Sensible legislation – minimising bureaucracy and maximising policy impact – will encourage economic growth and jobs. Commissioner Verheugen recently stated that the cost of complying with European legislation for business could be as much at €600 billion per year[13]. The World Bank reports that a strong improvement in business regulations could lead to a 2.3% increase in average annual growth for poor performing countries.

Recommendations:

- The EU institutions must fully implement commitments to carry out impact assessments on all new proposals, giving sufficient weight to economic, competitiveness and international trade implications.
- Stakeholders should be consulted from the beginning of the process.
- Simplification should increase clarity and legal certainty. Both substantive and textual changes to existing laws should be part of the simplification process. The aim should be to reduce inconsistencies and overlaps in legislation and to strengthen the link between EU legislation and existing international agreements.

INTELLECTUAL PROPERTY

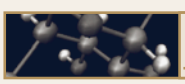
Goal: Protecting ideas and the consumer

Impact:

- IP infringements have increased significantly in recent years, the OECD now estimates that 5-7% of global trade is in counterfeit goods[15]. This has put consumers at risk, undermined legitimate businesses and threatened Europe's competitiveness and innovation capacity across sectors. Tragically, 192,000 people in China died in 2001 as a result of using counterfeit pharmaceuticals[16].

Recommendations:

- Emphasise the need for EU Support for the European Patent Litigation Agreement proposal as a concrete way to provide a European framework for patent litigation.
- To keep research, investment and skills in Europe, support is needed for the EU–US Action Strategy for the Enforcement of IPR in third countries.



RESEARCH

Goal: Improve EU research funding procedures and incentives

Impact:

- Emerging economies such as China and India are drawing investment in research away from the EU. China is on track to match EU R&D spending by 2010 with a growth rate of around 10% per year between 1997 and 2002[16]. Over 75% of new R&D sites planned for the next three years will be established in China and India and by 2007 China and India will account for 31% of global R&D staff, up from 19% in 2004[17].

Recommendations:

- The tendering process for the EU's Framework Programmes needs to simplified.
- Make innovation-oriented regulations more transparent and less bureaucratic to allow researchers to concentrate on research.
- Ensure cohesion between different sources of funding (EU, national, regional etc.) to make the most of the funds available.

SECURITY

Goal: Foster more innovation in security technologies

Impact:

- Although security is a global issue, the potential for EU-US cooperation has not been fully exploited. Security funding also has positive spillovers into civilian research, the internet being the most obvious example in recent years.

Recommendation:

- Review the EU-US research agreements to better enable US participation in EU security technology development. It does not make sense for the EU to expend its budget on non-sensitive research that has already been conducted elsewhere.

SOCIAL AFFAIRS

Goal: Promote efficient economic migration

Impact:

- Foreign companies will invest in the European Union as long as they can recruit and transfer employees from inside and outside the EU to fill labour shortages.
- Europe must compete to attract the best people (eg. researchers). For the EU to reach its three percent target for R&D it needs an extra 700,000 researchers[19]. The US is adept at attracting the best minds with over 7.8 million highly skilled expatriates based in the US compared to 4.7 million in the EU[20].

Recommendation:

- The legal framework for economic migration needs to be harmonised to operate at the speed of the job market, allow companies to attract and retain the best talent and enable workers to work and live throughout the EU with a single set of requirements.

TRANSPORT

Goal: Further R&D cooperation between the EU and industry

Impact:

- R&D investments are key to maintaining and enhancing the competitiveness of the European road transport industry and providing the basis for integrated technical solutions addressing concerns associated with the road transport system, in particular safety and the environment.

Recommendations:

- R&D should focus on making the road transport system more efficient while enhancing environmental performance and safety. The benefits of Hydrogen fuel cells are well documented, but intelligent vehicles also have a great deal of potential in terms of fuel efficiency, reduced congestion and accident prevention. The US Department of Transportation estimates that the introduction of three types of collision avoidance systems would save 17,500 lives in the US per year and prevent 1.1 million accidents[21].
- Research programmes should focus on strategic areas for the future competitiveness of the industry.
- There is a need for detailed research, development and demonstration programmes for clean fuels and vehicles (eg, Hydrogen and Fuel Cells) and intelligent road vehicles.

References

1 Hamilton & Quinlan 2005
2 US Department of Commerce 2005
3 CORDIS 2005
4 European Commission 2006
5 UK Office of Fair Trading 2003
6 Tillinghast-Towers Perrin 2005
7&8 Commissioner Reding 2006
9&10 International Institute for Sustainable Development 2005
11 Energy Star 2006
12 CEFIC 2005
13 Commission Vice-President Verheugen 2006
14 World Bank 2006
15 OECD 2005
16 Fulbright & Jaworski 2006
17 European Commission 2005
18 Booz, Allen & Hamilton and INSEAD 2006
19 European Commission 2005
20 OECD 2005
21 US Department of Transportation

The American Chamber of Commerce to the European Union (AmCham EU) is the voice of companies of American parentage committed to Europe towards the institutions and governments of the European Union. It aims to ensure a growth-oriented business and investment climate in Europe. AmCham EU facilitates the resolution of EU-US issues that impact business and plays a role in creating better understanding of EU and US positions on business matters.

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