EUROPE

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In 2011 the public policy environment remained unsettled and subject to rapid change. Uncertainty in the forecast for policymakers persists, placing ever greater emphasis on the need for clear analysis with real impact.

RAND Europe celebrates its 20th anniversary in 2012. To recognise our special year, Spotlight 2011 highlights some of our most recent work while reflecting on how RAND Europe has developed and remained relevant over 20 years. Our experience and knowledge of policymaking in Europe from the past gives us confidence that we can offer valuable insights for future decades.

The empirical studies that were our trademark 20 years ago have had real impact: some were truly ground-breaking, and the legacy of others, such as the POLANO project on the Oosterschelde storm barrier, will last for many decades to come. Our first permanent presence in Europe was the European-American Center for Policy Analysis, established in 1992, which followed our involvement in exploring the potential impact of the fall of the Berlin Wall and the collapse of Communism.

Many of the issues that we began investigating 20 years ago, such as transport, the environment, population and migration, and the future of work, are still important today. But as policy challenges have become more complex and public discourse about these problems more transparent, rigorous, objective research has become more necessary.

Spotlight 2011 features past and present research on pages six to fifteen, but let us briefly mention three pieces of work to illustrate our approach to informing relevant policy debates.

Transport is an ongoing challenge, and our work on high-speed rail is playing an important part in evaluating the potential take-up of such a service in the UK. The methodologies that we use can be applied to related evaluations in other European countries. Transport forms part of the wider climate change agenda, and we have been working to clarify what the public is willing to pay to reduce carbon emissions.

Communications policies and information networks have been a major strand of our work in Europe over the years, especially in telecommunications regulations and the development of broadband. With computing and data increasingly moving from desktop to the cloud, our work in 2011 has helped to inform the innovation and technology policy debate, including such critical issues as data security and privacy.
Research funders remain under pressure to justify expenditures and demonstrate an evidence base on which to make informed funding and strategy decisions. In 2011 we published the results of a study examining the intellectual, social and economic returns from cardiovascular research. We also explored alternative ways to allocate research funding, helping policymakers with decisions about how best to use constrained resources.

A review of 2011 would not be complete without mentioning the leadership change within the global RAND family. Michael D. Rich assumed the position of President and CEO of the RAND Corporation after James A. Thomson stepped down in November. We thank Jim for his contribution to RAND Europe’s legacy. We also look forward to working with our RAND colleagues under Michael’s leadership, as we continue to provide European policymakers with the objective research and analysis for which RAND Europe is justly proud.

Jonathan Grant  
President, RAND Europe

Hans Pung  
Vice President and Director,  
Defence and Security

Inside Spotlight

RAND in Europe is a timeline of signature research projects and organisational milestones (pages 4 and 5).

Back to the future (pages 6 – 15) presents highlights from some of the landmark reports that we have produced for European policymakers. It also shows how our most recent work builds on that legacy.

‘2011 in pictures’ (pages 16 and 17) provides a round up of a busy year.

The RAND Corporation President and CEO, Michael D. Rich, shares his vision for the future (page 18).

Meet the RAND Europe leadership team (back cover)

Our seventy researchers cover a wide range of policy areas. All projects are interesting, but not all could be featured in Spotlight 2011. Our completed research is available to view and download from our website, www.randeurope.org
1976: The POLANO study, completed for the Dutch government, is the first major piece of work by RAND for the European market.

1976: The RAND Corporation is formed as an independent not-for-profit organisation.

1989: German Chancellor Helmut Kohl invites RAND to join a group examining the future of German-American relations.

1989: RAND begins to work on social policy.

1992: A study of the performance of older light water nuclear reactors is one of the EAC’s earliest reports.


1992: The RAND Corporation is formed as an independent not-for-profit organisation.

1995: The EAC conducts an investigation into markets and society, comparing European and American experiences.

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1996: The FORWARD study gives the Dutch government an integrated analysis of the country’s freight transport needs.

1996: The RAND Corporation is formed as an independent not-for-profit organisation.


1997: The EAC is renamed RAND Europe.

1998: The air traffic forecasting model used by Europe’s air traffic coordination body is updated by RAND Europe.

1999: RAND Europe publishes Modalities of R&D Funding, which compares research funding across the EU.
2004: Publication of a report into the policy implications of low fertility in Europe begins a body of related work for RAND Europe

2006: RAND Europe conducts an analysis of the payback from UK arthritis research

2007: An evaluation of the operation of the EU’s Single Farm Payment scheme is published

2008: The report Radicalisation or Rehabilitation deepens understanding of extremist prisoners

2010: A report on drug supply reduction and drug-related crime in the EU adds to a growing portfolio of work

2011: Key Skills in Military Aircraft is the latest in a series of reports into the sustainability of the UK’s strategic industries

2001: The report A Comparison of Dutch and American Immigration Experiences explores the lessons to be learned for policymakers

2003: An evaluation of the London Patient Choice project begins

2008: RAND Europe’s Brussels office opens

2001: RAND Europe opens an office in Cambridge, UK
Disastrous floods in the 1950s prompted the Dutch government to begin constructing a series of sea defences along Holland’s southern coast. When the project reached the Oosterschelde, there were serious concerns over the potential for environmental damage.

The Dutch government commissioned RAND to study alternative solutions that would protect people and property, with special emphasis on the effects on the environment, security and commerce. The study, known as POLANO (Policy Analysis of the Oosterschelde), was completed in 1976.

Based on the study, the Dutch Cabinet recommended developing a storm barrier for the Oosterschelde. The largest construction of the entire project, the barrier took a decade to build and was completed in 1986. The Oosterschelde area is now a National Park.

RAND established the European-American Center for Policy Analysis in 1992. The collapse of Communism meant that policymakers in Europe faced a new set of challenges and possible futures. RAND had been working for the German government assessing European-American relations after the fall of the Berlin Wall, and this prompted the decision to create a permanent presence in Europe.

RAND’s EAC was set up in Delft and began by focusing on environmental and infrastructure issues. One of EAC’s first reports was on the performance of nuclear reactors in Europe.

Transport studies became a particular area of expertise for EAC. The 1996 FORWARD study of freight transport options for the Dutch government examined the benefits and costs of a broad range of strategies for mitigating the negative impacts of the expected growth in road freight transport while retaining the economic benefits.
Transport has continued to challenge policymakers as carbon emissions and energy efficiency have become increasingly significant. One option is high-speed rail (HSR), but providing HSR is very expensive and the environmental and economic benefits are disputed. Governments seeking to establish the case for HSR must understand the market for these services, which may be specific to their particular country.

RAND Europe, in collaboration with URS/Scott Wilson, developed models to predict demand for long-distance passenger travel in Great Britain. The 2011 study, Modelling Demand for Long-Distance Travel in Great Britain, provides a rich dataset for the analysis of long-distance mode choice decisions under a broad range of scenarios, and allows the identification of cases where new high-speed rail services may (or may not) act as an attractive substitute.

In collaboration with Atkins, RAND Europe is currently assessing the market potential for HSR in Norway. We are also working to develop further the next generation of travel demand models for Sydney, Australia, to ensure that they are capable of informing the evolving needs of policymakers.

Environmental solutions are not limited to rail travel and RAND Europe has examined other policy issues linked to the wider sustainability agenda in 2011.

One such important question is how much people would be willing to pay to combat climate change. To date, the UK government has valued the cost of carbon emissions based on how much people should pay, rather than how much they are willing to pay, or the value they place on carbon emissions reduction. An analysis of a series of RAND Europe studies suggests there is an opportunity for creating a large consumer surplus — a social benefit — by introducing a carbon tax to pay for the damage caused by carbon emissions.
Population and employment issues present an evolving challenge to European policymakers. An early research project by RAND’s EAC studied the effects of migration from the former Soviet Union, and this was followed by analysis of how the disintegration of the Soviet Union might impact on the retention of skills in the workforce.

In the mid-2000s, RAND Europe published a series of studies highly relevant to policy, that resonated with growing concerns about the long-term impact of demographic changes and EU expansion on welfare provision and access to work.

Low Fertility and Population Ageing, published in 2004, highlighted the potential consequences of falling EU fertility rates. The report identified that, while some policy interventions might slow the long-term decline in fertility rates, no single policy on its own could achieve this goal. It also highlighted the fact that the most appropriate policy mix might differ from country to country.

One way to combat population ageing might be by raising fertility. RAND Europe examined the potential role of Assisted Reproductive Technologies (ART) in increasing fertility. A study presented to the European Society of Human Reproduction and Embryology in 2006 concluded that the potential contribution of ART was similar to other policies aimed at increasing fertility rates, such as increasing state-supported child benefits.

Labour force participation rates for migrant women in Europe were seen to be low, and especially so in traditionally migrant receiving countries. In 2008 RAND Europe published a study for the European Commission on Migrant Women in the EU Workforce. The report identified the determinants of lower labour force participation for migrant women, and examined the causes of ‘deskilling’ among this group. It also explored how policies intended to promote equality of access to the labour market for women might fail to reach migrant women.
The economic crisis prompted another look at European labour force and social protection policies in 2011. Fertility also returned to the agenda, with its continuing consequences for policy.

In *Low Fertility in Europe*, RAND Europe updated its 2004 study to see whether fertility rates had recovered across Europe, and if so, why and what the policy consequences would be. Having examined a comprehensive data set for all 27 EU Member States and analysed five countries in depth, the report found that there was a general trend towards higher period fertility rates in Europe and confirmed a long-term trend that women are having children later in life. The report also identified that fertility rates among younger mothers have stabilised, which has led to the upswing in total fertility rates.

An ageing European population is irrefutable, and policymakers recognise that this could have significant consequences for patterns of work and retirement and the costs of welfare provision. Individual policies pursued by national governments to boost fertility have had little impact on the ageing trend, whereas wider economic, social and cultural factors seem to have had a more significant effect. Migration may also have played a part, albeit a limited one.

*Life After Lisbon* assessed policies linked to the EU’s Europe 2020 vision. It examined how the economic crisis has changed the landscape for policies aiming to promote labour force participation and tackle income inequality.

Workforce and employment issues will continue to pose challenges for policymakers in the future. RAND Europe has set up a ‘community of interest’ to explore policy issues in this area. Ongoing projects include examining active age management in Europe, the health and well-being of employees, and how safe workplaces are in Europe.
RAND’s European-American Center (EAC) made the study of telecommunications and information systems a priority on its research agenda in the early 1990s.

In a project funded by France Telecom, the team at the EAC examined equal access to US local telephone markets. Furthermore, the OECD funded a project to explore the role and impact of computer-based media in complex organisations, and subsequent work included analysing telecoms regulations and evaluating EU-financed telecoms and postal programmes in central and eastern Europe.

Over the last decade RAND Europe has provided strategic support and conducted analyses and evaluations to help policymakers keep pace with fast-moving ICT developments, especially on Internet-related issues concerning access and participation, and innovation and regulation.

In 2003 RAND Europe published a report for the European Commission, Enabling the Information Society by Stimulating the Creation of a Broadband Environment in Europe. The study focused on the role of broadband information networks and how governments could aid their development. It also described the challenges that might lie ahead, particularly looking at the different roles that public and private sectors might play and the legal and regulatory issues that could arise.

More recently RAND Europe has evaluated the effectiveness of self- and co-regulation of the Internet over traditional arrangements. And in 2009 we looked at the future ‘Internet Society’, assessing the possible socio-economic impacts of the connected world in which we live, as well as the changing business models that are likely to emerge over the next ten years. As the policy debates have widened in response to emerging ICT issues, RAND Europe’s established expertise has continued to develop.
Continuous advances in ICT mean that policymakers cannot sit still, but must constantly address a range of issues, both old and new. Challenges raised by developments in information technology, in particular those related to cloud computing, continued to loom in 2011.

Cloud computing has increasingly attracted interest as a way to deliver convenient, on-demand network access to computing resources, while offering scalability and operational efficiency. The European Commission’s Digital Agenda highlights the need to develop a pan-European ‘cloud strategy’, but several issues threaten to undermine the EC’s policy objectives.

RAND Europe explored the technological, operational and legal intricacies of cloud computing, taking into consideration the European dimension and the interests and objectives of all stakeholders (citizens, individual users, companies, cloud service providers, regulatory bodies and relevant public authorities). The team examined the security, privacy and trust challenges, and formulated recommendations for accountability, transparency, governance and implementation.

RAND Europe’s 2011 publication, *The Cloud: Understanding the Security, Privacy and Trust Challenges*, advises on policy and other interventions that should be considered to help ensure that European users of cloud environments are offered appropriate protections, and to underpin a world-leading European cloud ecosystem.

RAND Europe’s work on cloud technology extends beyond trust and security issues. One illustration is a study for the European Parliament which looks at promoting Internet-based innovation and competition in the EU, while respecting citizens’ rights to privacy. Other recent work highlights the use of the cloud by the public sector to consider the macro-economic implications for new investment and economic growth, as well as to achieve efficiencies in the delivery of public sector services.
Growth in international competition and constraints on resources mean that policymakers must identify the returns from investment in research. That means examining the way research is funded, how it is managed and how it is translated into practical applications. RAND Europe has published a number of key reports in this field.

*Modalities of R&D Funding: A Comparison of EU Member States* was a 1999 study funded by the European Commission. It examined trends in publicly funded research, and identified increased competition among researchers and increased autonomy from central control.

In 2004 RAND Europe published a landmark report examining the returns from biomedical research. *The Returns from Arthritis Research* was funded by the Arthritis Research Campaign (ARC, now Arthritis Research UK) and co-authored by the Health Economics Research Group (HERG). The report identified the researcher as the key driver of research translation. It also found that short, focused project grants seem to provide value for money.

In 2009 RAND Europe published a further report describing the RAND Assessment Impact Scoring System (RAISS). RAISS was developed as part of the project to produce a replacement for the funder’s end-of-grant reporting system. The impact map generated by the tool enables Arthritis Research UK to see the returns from individual grants and compare different types of grants.

RAND Europe’s work in the field of research policy analysis accelerated towards the end of the decade. HERG was a collaborator again, along with the Office of Health Economics, for another significant research project published in 2008. *Medical Research: What’s it Worth?* aimed to estimate the economic benefits of medical research in the UK. In 2010, work was published on bibliometric analysis, along with a review of how different countries evaluate the impact of university research.
Measuring the impact of research

There is increasing awareness of the importance of the knowledge economy to Europe’s future, but with more opportunities for investment in research than can be supported today, funders need better data and information on which to make important decisions.

2011 saw further significant work in the field for RAND, beginning with the publication of Project Retrosight, which deepens our knowledge of the ‘science of science’ to understand what works in research funding.

Project Retrosight was a multinational, four-year study that investigated the translation of basic biomedical and clinical cardiovascular and stroke research, and its impact on future work, policy, products and healthcare. The study was carried out by a consortium of research partners located in Australia, Canada and the UK, led by RAND Europe and HERG, and was based on a rich source of material taken from 29 carefully selected case studies of research grants awarded 15-20 years ago in these areas.

Project Retrosight used the ‘Payback Framework’, which provides a common structure for examining the research funding process and understanding research impact. Each of the case studies was developed using a range of methods, and they were systematically rated by an international panel of experts to determine the level of impact in each payback category.

Among the key findings were: there are variations between the impacts derived from basic biomedical and clinical research; there is no correlation between knowledge production and wider impacts; and the majority of economic impacts identified come from a minority of projects.

An investigation of alternatives to peer review as a means of allocating research funding was also published in 2011, along with analysis of the use of prizes in funding allocation. With pressures on funding unlikely to ease in coming years, RAND Europe’s work will continue to make an important contribution to the field.
The often charged debates in the fields of alcohol policy, drugs and illicit markets provide an important space in which RAND Europe has established an expertise. We have developed rigorous, objective analysis in this field over the last decade, working in integrated teams with the RAND Drug Policy Research Center, whose reputation in these areas dates back 20 years.

RAND Europe’s earliest work on drug policy in Europe included a study for the European Monitoring Centre for Drugs and Drug Addiction. A protocol was developed for conducting comparative studies of the roles, structures and coordination of drug demand reduction efforts across European nations.

In 2003 the Dutch Ministry of Health funded a RAND Europe study of cannabis policy options. The report, Cannabis Policy – Implementation and Outcomes, confirmed that there were often differences between formal cannabis policy and how the policy was implemented. The importance of building a stronger evidence base regarding the impact of policy on cannabis users was identified.

In 2006 the UK Home Secretary called for a review of the system for classifying illegal drugs. This turned the spotlight on the use of evidence in making these often controversial policy decisions.

The Evidence Base for the Classification of Drugs, commissioned by the UK House of Commons Select Committee on Science and Technology, examined the evidence base for the classification of illegal drugs in the context of the Misuse of Drugs Act 1971. It identified the main evidence associated with selected drugs and examined the use of that evidence in classifying each drug.

RAND Europe’s wider expertise in home affairs and criminal justice has been further focused on illicit drug policy research, including reports on the global market for illicit drugs (2009) and drug supply reduction and drug-related crime in Europe (2010). A dedicated team researching crime and justice policies has been in place at RAND Europe since 2009.
Europe continues to face complex cross-cutting challenges in the areas of crime, drugs and alcohol misuse, prison overcrowding and re-offending. The lack of adequate data limits robust analysis of policy options to address some criminal justice issues, yet rigorous analysis of policy options and their likely implications is especially crucial when budgets are limited and cost-effective interventions are needed to improve outcomes. RAND Europe is currently conducting research to help policy- and decisionmakers overcome these data and funding challenges.

In 2011 RAND Europe published a study for the European Commission that pioneered a blueprint for the future development of a European Crime Report (ECR) to help address data challenges and to facilitate countries learning from experience elsewhere. Given the transnational nature of much crime, RAND Europe examined existing crime and criminal justice data on which robust comparisons could be made across the EU Member States. Rather than collecting new data, the study recommended that the ECR could make use of the wealth of existing data through ‘smart aggregation’ – providing a framework for both highlighting and helping to overcome lack of data comparability.

In seeking to address funding challenges and the need for effective interventions, RAND Europe published the initial report from an early stage evaluation of the world’s first Social Impact Bond (SIB), implemented at Peterborough Prison in the UK. This SIB is a payment-by-results model in which private investors fund interventions to reduce reoffending. If reconvictions of released offenders decrease by an agreed amount, this should result in savings to government and wider benefits to society, and, consequently, investors receive a return on their investment.

This SIB is an innovative way to finance public spending in austere times. RAND Europe’s evaluation of its effectiveness as a funding model is providing the first empirical evidence to inform wider developments of the use of social impact bonds.
2011 in pictures

Images of RAND Europe’s trustees, staff, alumni, friends and supporters

Clockwise from top left: RAND Europe trustees present James A. Thomson with a token of appreciation for his 22 years of service as he steps down from leading the RAND Corporation; RAND Europe Board of Trustees meeting in London; Emma Disley presents research findings at the Cambridge Festival of Ideas; Jo Chataway with Julian Huppert, Member of Parliament for Cambridge; former staff reconnect at the annual gathering of the RAND Europe Alumni Association
Clockwise from top left: RAND Europe staff take part in the Chariots of Fire charity run; Art Kellermann, Director of RAND Health, delivered the inaugural Cambridge Centre for Health Services Research lecture at Addenbrooke’s Hospital (he is pictured here with Ellen Nolte and Martin Roland); Jerzy Buzek, President of the European Parliament (centre), was the guest speaker at RAND Europe’s Brussels reception; Richard Howitt, Member of the European Parliament, with Chris van Stolk and Tom Ling at the launch of the Workforce and Employment community of interest; RAND Europe’s annual Brussels reception; the annual Summer reception at Christ’s College, Cambridge
New leadership at the RAND Corporation

Michael D. Rich took over as President and Chief Executive Officer of the RAND Corporation in November 2011. He has a long association with RAND and was serving as Executive Vice President prior to his appointment.

“\textit{My ambition for RAND is for us to make a difference to people’s lives as directly as we can.}”

I am very proud to be the RAND Corporation’s fifth president and chief executive officer, taking leadership from James A. Thomson who recently stepped down after 22 years in the post. I have admired Jim’s commitment to Europe and trans-Atlantic relations, and share this as a priority.

I am excited about RAND’s prospects to continue delivering on our mission globally. With growing political polarization here in the U.S. and continued pressure on public spending in Europe, RAND’s dedication to non-partisan, rigorous and objective research on increasingly complex problems is more important than ever. In the United States and in our global reach, we see a real need for RAND-style work and the core values of quality and objectivity that inform all that we do.

A message from Michael D. Rich, President and Chief Executive Officer

Prior to my recent appointment, I served as a member of the RAND Corporation’s senior leadership team for two decades, approximately as long as RAND Europe has been around. I have seen how RAND Europe’s work has strengthened our wider reputation for quality research, while leading to diversification and growth for RAND – growth not only measured in economic terms, but in deepening our collective intellectual capacity and learning.

As 2012 unfolds I look forward to meeting many of you at RAND Europe’s annual outreach events in London, Cambridge and Brussels to help mark its 20-year anniversary. It is a significant milestone for RAND Europe and one to be acknowledged and celebrated.

\textit{Michael D. Rich}
Clients and research partners in 2011

Public Sector

**United Kingdom**
- Department for Environment, Food and Rural Affairs
- Department for International Development
- Department for Transport
- Department of Health
- Economic and Social Research Council
- High Speed Two Ltd
- Home Office
- Local Better Regulation Office
- Metropolitan Borough of Solihull
- Milton Keynes Council
- Ministry of Defence
- Ministry of Justice
- National Institute for Health Research
- NHS Sustainable Development Unit
- Ofcom
- Stabilisation Unit
- Transport for London
- UK Commission for Employment and Skills

**Other Governments and Ministries**
- Alberta Innovates – Health Solutions, CA
- armasuisse, CH
- Government of Qatar
- Ministry of Defence, FR
- Ministry of Education, Lifelong Learning and Religious Affairs, GR
- Ministry of Security and Justice, NL
- Ministry of the Interior and Kingdom Relations, NL
- National Rail Administration, NO
- Swedish Defence Research Agency
- Transport for NSW, AU

**European Institutions**
- Cedefop
- EC DG Employment, Social Affairs and Inclusion
- EC DG Health and Consumers
- EC DG Home Affairs
- EC DG Information Society and Media
- EC DG Internal Market and Services
- EC DG Justice
- EC DG Research and Innovation
- Eurofound
- European Agency for Safety and Health at Work
- European Defence Agency
- European Network and Information Security Agency
- European Parliament
- Europol
- Executive Agency for Health and Consumers
- Frontex

Foundations, Charitable Organisations, Universities and Others
- AIDS Foundation of Chicago
- Airey Neave Trust
- Association of American Medical Colleges
- Brunel University
- Cambridgeshire NHS Trust
- Center for the Study of Democracy
- Commonwealth Fund
- European Research Consortium for Informatics and Mathematics
- General Medical Council
- Graham Boeckh Foundation
- Health Foundation
- Leadership Foundation for Higher Education
- London School of Hygiene and Tropical Medicine
- National Association of Statutory Health Insurance Physicians, DE
- National Endowment for Science, Technology and the Arts
- OECD
- Office of Health Economics
- Responsible Gambling Fund
- Technical University of Denmark
- TNO
- Tommy’s the Baby Charity
- Trimbos Institute
- UK Drug Policy Commission
- University of Cambridge
- University of East Anglia
- University of Hull
- Wellcome Trust
- World Bank

Private Sector
- Accent
- Amgen
- Atkins
- Capgemini
- Deloitte
- Ernst & Young
- FTI Consulting
- GSK Biologicals
- Halcrow
- KPMG
- Merck
- Mott MacDonald
- MVA Consultancy
- Pfizer
- Ranmore Consulting
- Roche
- Royal Mail
- Significance
- STRATEC
- URS/Scott Wilson
- Van Keulen Advies
- Virgin Trains
- WSP UK