



2010 Research Programme

Version of 1st March 2010

Bruegel's 2009 research programme was prepared in response to the intensification of the crisis and with the aim of preserving significant flexibility in the allocation of resources, and this was reflected in its structure. In 2010 Europe uncertainty has abated, but Europe will be struggling with the immediate aftermath of the crisis. Furthermore, the longer-lasting consequences of the shock will start unfolding at global level.

Consistent with the companion research strategy issues note, the 2010 programme is intended to address new priorities arising from this changing context while ensuring continuing research investment in areas of strategic importance for Bruegel. It is characterised by:

- A stronger emphasis on **global issues**. A relative strengthening of the emerging powers and a transformation of the structures of global governance are among the unmistakable consequences of the crisis. In accordance with Bruegel's mission, these changes need to be reflected in the research priorities;
- A cold-eyed analysis of Europe's **macroeconomic and structural challenges**. More than ever, there is a need for uncompromising research to anticipate problems, outline solutions and feed into the policy discussion.
- A continued investment in areas of significant policy relevance where Bruegel has started to build expertise and reputation such as the firm-level analysis of **competitiveness, innovation and financial regulation**;
- Further developments of research into the economics of **climate change and energy**, following the initial effort made in 2009.

This programme comprises five sections corresponding to broad research areas where Bruegel is or intends to be active:

- Governing the new global economy;
- Heightened macroeconomic challenges for Europe;
- Europe's quest for economic performance;
- Competition and regulation in a more interventionist Europe;
- Climate and energy in the post-Copenhagen context

As usual, flexibility within these research areas will be kept in order for Bruegel to be able to respond to events and adapt to changes in the policy agenda.

1. Governing the new global economy

There is a short-term and a long-term reason to assign new importance to global economics.

The short-term reason stems from the new geography of world growth: while it has generally resumed, it is markedly more buoyant in the emerging world than in the advanced world. But this pattern is not the result of a genuine rebalancing of the sort advocated by most economists: consumer demand has not substituted investment and exports in East Asia, exchange rates have not adjusted and global imbalances have not vanished. So the question remains whether a more sustainable pattern of growth is likely to materialise among the major economies, which factors may trigger its emergence, and what repercussions this may have for Europe.

The longer-term reason is that the crisis has accelerated the transition to a multi-polar world where the US and Europe play a less dominant economic role. This is bound to have economic and institutional implications and significant consequences for Europe.

In 2009 Bruegel contributed to this discussion through a series of events and papers, but on the whole focused more on European than on global issues. In keeping with priorities outlined in the companion research strategy issues note, it is intended to give more weight in 2010 and beyond to the global dimension and its interaction with the European dimension. This should result over the course of 2010 in three specific outputs:

- a) *Analyses of and proposals for G20 priorities*. This includes the preparation of a quarterly *G20 monitor* that would analyse the issues on the agenda of the G20, assess outcomes, and highlight the role in the G20 process of both advanced and emerging countries. In 2010 particular attention should be devoted to the views and the roles of India and China. Bruegel will also discuss the policy implications for Europe of the G20 coordination. EU countries are now engaged in two parallel exercises in economic policy coordination: one at the EU/euro-area level, and one at the G20 level. The two exercises have much in common, but they also have major differences and it is important, first, to ensure consistency between the two and, second, to ensure that Europe is able to effectively play its role in global coordination;
- b) An evaluation of the potential implications of *future global monetary arrangements*. The crisis and the reactions to it have prompted a revival of discussion on the future of the international monetary system. Possible blueprints for global monetary reform and their implications for Europe need to be assessed in conjunction with the discussion on the medium-term evolution of the global economy;¹
- c) A reflection on the reform of *global financial architecture* and corresponding potential disincentives to reserve accumulation behaviour in the emerging and developing world.²

Research on these issues, which is expected to deliver in 2010, will help strengthen partnerships and cooperation with overseas research and policy institutions and related initiatives, especially with the German Marshall Fund and the Peterson Institute for International Economics and through the Asia-

¹ This analysis will be conducted in cooperation with CEPPI, Paris, and should form the basis for a 2010-11 Bruegel contribution to the Bruegel-Peterson Institute for International Economics project *The transatlantic relationship in an era of growing pluralism*.

² Analysis under this item will also be part of a joint Bruegel-Peterson Institute for International Economics 2010-11 project on the *Trans-Atlantic relationship in an era of growing pluralism*

Europe Economic Forum and the G20 initiative launched in 2009 in cooperation with CEPPI, Paris, and ICRIER, Delhi.

Coordination: André Sapir. Participants : Ignazio Angeloni, Zsolt Darvas, Jean Pisani-Ferry, André Sapir, Garry Schinasi

2. Heightened macroeconomic challenges for Europe

As European economies slowly emerge from the recession, macroeconomic challenges abound. The implementation, pace, and coordination of exit strategies and the threat of fiscal crises feature at the top of the policy agenda, but even more daunting are potential output losses and the structural adjustment of several member-state economies whose growth relied on unsustainable domestic demand trends and current account deficits: the euro area also faces an acute internal adjustment problem as the weaker member countries are forced to embark on a long, painful and politically challenging time regaining their competitiveness, and a related growth-rebalancing problem that is bound to affect both deficit and surplus countries; and certain new member states and more broadly the emerging countries of central and eastern Europe have been the most affected by the crisis. In many countries, deep integration through trade and foreign investment and a heavy reliance on capital imports seem to have turned from growth engines into channels of transmission and even amplification of the recession. Major, sometimes deep, output declines and outlook revisions contrast with the relatively benign effects of the crisis in other emerging economies.

Building on our contributions to the discussion on stimulus packages in 2008 and on exit strategies in 2009, we intend to continue to monitor macroeconomic developments, and to address short- and medium-term policy issues as they emerge.³

In addition five particular issues deserve specific investigation:

- a) *The euro-area policy regime revisited.* Macroeconomic surveillance of euro-area member countries in the first ten years of EMU has been primarily focused on budgetary performance and crisis management was not part of the policy toolkit. While it is now widely agreed that this was much too narrow a focus and that other indicators need to be taken into account, defining and designing a policy system that is both more robust and better equipped to deal with crises is complex. It is intended to contribute to the discussion on the goals and procedures of reformed economic surveillance and crisis management.
- b) *Real exchange rates and price-cost competitiveness.* Relative competitiveness positions have changed significantly in recent years, both within the euro area and with respect to the rest of the world, with wide-ranging implications for European countries and for Europe's overall competitiveness. Assessing these positions first requires adequate indicators. Bruegel intends to review available indicators and contribute to help determine how to best base assessments on reliable comparative data.
- c) *The growth consequences of current-account adjustments.* Having reached external deficits of the order of magnitude of 10% of GDP or more, several Mediterranean countries and certain new member states, notably Baltic member states, are now undergoing reductions in

³ Including in response to potential EU Council Presidency demands and through regular briefing notes to the Economic and Monetary Affairs Committee of the European Parliament.

their current-account deficits. The question arising from this is what the growth consequences of these adjustments will be. Standard approaches to potential output do not consider external imbalances. Yet a sizeable current-account adjustment may have consequences for investment and thereby for potential growth.⁴ It is intended to explore this linkage and its implication for European economies, including spillover effects. A prospective analysis of the impact of high public debt on public and private savings will also be undertaken.

- d) *New growth models in central and eastern Europe.* The crisis is now prompting a re-examination of the region's growth model and its future. The question is: are the new member states still the dynamic catching-up markets they have been since the 1990s? Or are they bound to undergo a protracted adjustment phase? It should be noted, however, that performance in the recession is very uneven and that some of the deepest output declines result more from pre-existing weaknesses than from the global crisis. In cooperation with the *Wiener Institut für Internationale Wirtschaftsvergleiche* (WIIW Vienna) Bruegel is preparing a report on the growth prospects of the new member states after the crisis, scheduled for publication in spring 2010. The report will examine whether there was a dominant growth model in central and eastern Europe and whether it is in need of significant repair. This will serve as a basis for examining policy options for both the new member states and the EU as a whole.
- e) Vulnerabilities in the crisis have also highlighted the importance of *domestic economic and financial institutions* - especially central bank statutes, budgetary procedures - and their consequences for monetary and budgetary performance. The role of institutions in fostering macroeconomic stability will be studied and its relevance for the new member states is the focus of an ongoing project of Bruegel in cooperation with the OECD.

All projects are expected to deliver results in the course of 2010.

Coordination: Zsolt Darvas. Participants: Zsolt Darvas, Jürgen von Hagen, Benedicta Marzinotto, Jean Pisani-Ferry, André Sapir

3. Europe's quest for economic performance

Europe's economic performance was a concern before the crisis. It is even more so after it. Whether or not the growth and productivity potential can be increased is no longer a relative issue only, it has become a concern in absolute terms also, because a further weakening of growth potential could make public finance difficulties intractable, encourage capital outflows, and result in a true vicious circle of stagnation.

Building on earlier Bruegel research it is intended to contribute to the economic performance debate in three main areas:

- The drivers of innovation;
- The determinants of firm-level performance;
- Strategies for growth and employment

⁴ In other words, current-account imbalances may have an 'equilibrium' component in addition to the standard 'excess-demand' component.

3.1 The drivers of innovation

Bruegel has strengthened its research capacity in the field of innovation. It is scheduled to publish a further analysis of EU patent reform in early 2010 and plans further research developments in four areas:

- a) A deeper analysis of the interaction between large players and young innovators within the framework of *innovation ecosystems*. The focus of this project, which would build on research done in 2009, will be on the blend of competition and cooperation between large and small players in virtuous innovation ecosystems. The project will search for evidence on the relative roles of young innovative companies (YICs) and incumbents in the development of disruptive technologies and will analyse the importance of YICs and their role in ecosystems in particular technologies, most notably for green technologies, ICT and biotech;
- b) An assessment of the importance of *digital rights* for the competitiveness of Europe. Digital rights are increasingly a major issue in the economics of intellectual property rights and the project will investigate who are the stakeholders, who are the performers, and how the EU compares with the US and China;
- c) Research on the *globalisation of science*. The aim is to use quantitative indicators to document the emergence of new scientific powerhouses, their characteristics and the implication of their rise for the incumbent scientific powers. A question that will be particularly investigated is whether the EU is likely to emerge as a node in global scientific networks and what the implications of this are for innovation ecosystems;
- d) For the longer term, an analysis of the *governance of innovation* in Europe in comparison to other advanced and emerging economies. The focus will be on firm behaviour and in particular how firms respond to government policies.

Research on the first three items is expected to deliver results in the course of 2010. The fourth project is not expected to result in publications before 2011.

Coordination: Reinhilde Veugelers. Participants : Bruno Van Pottelsberghe, Reinhilde Veugelers

3.2 The determinants of firm-level performance

The crisis has resulted in an unprecedented collapse of trade and this has prompted speculations that the world economy is experiencing 'de-globalisation'. Recent analyses have shown that the trade collapse is not attributable to protectionism and they suggest that global supply chains have played a stabilising rather than an amplifying role. However, many questions remain as regards the medium-term impact of the crisis on industrial structures, global supply chains and the patterns of globalisation.

The Bruegel-led project *European Firms in a Global Economy* ('EFIGE') launched in 2008 was intended to provide firm-level evidence on patterns of internationalisation in seven European countries and to help analyse their determinants. It has gained further relevance in the present context and should help provide responses to several of the questions raised about the firms' responses to the crisis.

As the full survey constituting the backbone of the project is conducted in early 2010, it has now been expanded in order for the results to shed light on the impact of the crisis on the firms surveyed and on their responses. This survey, whose first results will be released in summer, is expected to provide the first systematic and consistent cross-country, firm-level evidence on a number of issues of major relevance for business and government.

Analysis of specific dimensions (e.g. firm size, productivity and internationalisation; skills and internationalisation; and financial constraints to internationalisation, to name but a few), will continue beyond 2010.

Bruegel also undertook in 2009 a project on the impact of internationalisation on executive pay. It is expected to deliver results in 2010.

Coordination: Gianmarco Ottaviano. Participants: Carlo Altomonte, Dalia Marin, Gianmarco Ottaviano

3.3 Strategies for growth and employment

Strategies for growth and employment are back on the policy agenda. There is an institutional reason for this – the proposed adoption of an EU 2020 strategy as a follow-up to the Lisbon strategy. There is a deeper economic reason too: it is becoming an overriding priority everywhere to avoid the transformation of temporary employment losses into permanent ones and to improve medium-term productivity growth prospects.

The EU's ambition to become a 'knowledge-based economy' remains and it has not lost relevance - quite the contrary, since even emerging countries are moving in this direction. The corresponding policy agenda is increasingly endorsed and acted upon by governments, but global conditions are changing fast and the EU's achievements are still meagre, which means that innovation-intensive and human capital-intensive companies do not necessarily have strong incentives to locate in Europe or remain located there. It is intended to map the main challenges and priorities in this field and to help understand how public policies affect firm behaviour in the field of innovation and research.

Bruegel has contributed to elaborating the growth policy agenda with research on education, finance, R&D, patents and young innovative companies. Building on these earlier contributions it intends in the short term to participate in the policy discussion with:

- a) *An analysis of the economic underpinnings of the EU2020 project.* The focus will be put on productivity developments, drawing on comparisons between the US, where productivity has continued growing during the crisis, and Europe, where firms have generally been hoarding labour and where productivity has often declined.
- b) *An investigation into the post-crisis labour-market challenges.* Here Bruegel intends to team up with the Bonn-based IZA institute. The project will analyse labour-market responses to the crisis in several European countries and how labour-market institutions (e.g. employment-protection legislation and the incidence of temporary contracts) have *shaped these responses*. It will discuss whether pre-crisis prescriptions such as 'flexicurity' need to be re-examined. Bruegel output is scheduled for late spring.

- c) A discussion of options for *improving the contribution of the EU budget to the growth strategy*;
- d) A reassessment of the different *European social models in the light of the crisis*, as initially planned for 2009. Earlier analyses had suggested that the Mediterranean and continental models were unsustainable, whereas both the Anglo-Saxon and the Nordic models appeared sustainable. Does the crisis show that only the Nordic model is really sustainable or is the picture more complex than that?

Research on these issues is scheduled to result in short-term deliverables in order to provide contributions to the discussion on the EU 2020 strategy.

Coordination: Jakob von Weizsäcker. Participants: Carlo Altomonte, Philippe Aghion, Benedicita Marzinotto, André Sapir, Jakob von Weizsäcker

4. Competition and regulation in a more interventionist Europe

As indicated in the issues note on research strategy, Bruegel needs to broaden its research portfolio to include competition and regulatory issues. This was true before the crisis and has become even more evident with it, as state intervention has increased and taken new, sometimes temporary and sometimes more lasting forms. It has become a priority to explore the new role of the state, its implications and its limits in the context of the European single market.

4.1 The new discussion on state intervention

Four specific lines of enquiry are intended for 2010:

- a) An analysis of *government intervention to promote national corporate champions*. This will build on previous Bruegel research on national champions and assess how national policies have been affected by the crisis. A particular focus will be put on patterns of equity intervention by government;⁵
- b) A discussion on *the possible new role of industrial policy*. A common view tends to reject targeted industrial policy as an impediment to competition and growth. The rationale for this view is that government initiatives that are not sector-neutral arbitrarily end up picking winners, often as a result of political lobbying. It is intended to explore and test empirically whether such industrial policy can take into account the global competitiveness and investment dimension, and thereby be growth-enhancing. Sectors important for the economy as a whole will be examined, such as network industries and key manufacturing industries. The conditions for making such an approach effective - e.g. the quality of the country's governance institutions - will also be analysed;
- c) An investigation into the linkages between *market leadership and technology leadership*. Market integration at EU and global levels continues to affect the market structure and competitive conditions of firms and forces firms to build competitiveness based on innovation and technology development. The study will rely on new firm-level data to assess how market leadership varies across sectors and evolves over time along a continuing process of market integration. It will allow a discussion of how important a strong position in

⁵ This analysis was initially planned for 2009 and should be available in spring.

technology is for building or sustaining market leadership. Consequences will be drawn for single market policy.

- d) An analysis of *the future of the CAP*. CAP reform is a traditional issue whose relevance regularly increases in the run-up to negotiations on the EU's multiannual financial framework, or 'financial perspectives', but both the enlargement of the EU to food-producing countries and changing global food-market conditions have created a new context whose consequences need to be assessed.

These projects are expected to deliver results over the course of 2010. On the basis of these contributions, and also beyond them, Bruegel intends to participate in the discussion on the single market agenda of the future and its contribution to European growth and prosperity.

Coordination: Reinhilde Veugelers. Participants: Philippe Aghion, André Sapir, Nicolas Véron, Reinhilde Veugelers.

4.2 The trade-offs of financial regulatory reform

Financial regulation has been on the global agenda for at least two years but priorities are still evolving. Concerns about immediate responses to the crisis have not abated as some reforms (especially those of capital-adequacy ratios and macrofinancial supervision) have moved to implementation stage. Deeper concerns have also arisen about the fundamental reforms required to ensure lasting financial stability while preserving the innovation potential of the financial industry and ensuring that it contributes to improving economic prospects. In the process, new discussions have emerged, for example about the boundaries between the financial subsectors; the optimal size of financial institutions; or the trade-off between financial stability and growth. So the policy debate continues to evolve.

This calls for a research strategy that combines participation in ongoing policy discussions and investment on three specific areas:

- a) *Macroprudential policy*. Macroprudential supervision is soon to be implemented in the EU and the US but many questions remain as regards its analytical underpinnings and operational framework. It is intended to examine the challenges of macroprudential supervision from an operational viewpoint and identify building-blocks useful for quantitative or qualitative assessment of sources of systemic risks;⁶
- b) *Microprudential reform*. The crisis has spurred a fundamental debate about the purpose and tools of prudential policy to prevent and manage financial-system instability. Taking into account strong global interdependence in this policy area, similarities and differences between the EU and US policy discussions will be analysed and the possibility of globally consistent policy outcomes will be explored. Particular attention will be given to issues of crisis prevention and crisis resolution, including the cross-border dimension. Policy reflections and consultations have begun in the US, the EU and some member states, especially the UK. The research, which will consist of a discussion of the options for limiting and addressing systemic risk, is intended to be a contribution to that process;⁷ there will also

⁶ This project should be conducted in cooperation with the Dutch central bank.

⁷ This should result in a contribution to the joint Bruegel-PIIE transatlantic project.

be an analysis of the impact of microprudential reforms on financial industry competitiveness.

- c) *The potential growth implication of banking reform.* Tighter banking regulation affects growth, employment and potential output through both a standard channel, and a new channel. The former addresses the mechanisms through which the new rules will affect the cost of capital, investment ratios and, ultimately, potential output. The latter focuses on access to external finance for cash-poor firms. Combining the two is expected to help shed light on an important trade-off involved in the design of banking regulation.

It is also intended to continue participating in discussions on global accounting standards and the governance of the International Accounting Standards Board and to help drafting a blueprint for financial integration of South-East Asian countries for the ASEAN Secretariat, drawing on the EU experience of financial and banking integration.

All projects are expected to deliver results in 2010.

Coordination: Nicolas Véron. Participants: Philippe Aghion, Benedicte Marzinotto, Garry Schinasi, Nicolas Véron

5 Climate and energy in the post-Copenhagen context

The Copenhagen climate-change conference did not deliver the agreement that would have ensured policy predictability at global level. The major emerging countries and the US have entered into some form of commitment to coordinated action, but considerable uncertainty remains as regards the future international framework of climate policies, with significant implications for business investment decisions. Unsynchronised action in different parts of the world is bound to create tensions, to revive discussions on the implications of climate policies for competitiveness, and to prompt initiatives in the field of trade policy. While Europe is the region where objectives and instruments are the clearest, it would be an illusion to consider that it will sail through without being affected by the global environment.

In 2009 Bruegel contributed to the discussion on climate-change policies, especially with two papers on their interaction with innovation and growth. This provides a basis for participation in the policy discussion in the aftermath of Copenhagen, for further investigation into the green-growth issue, and also for a broadening of our future research.

It is envisaged to address three main topics in 2010:

- a) Further investigations are called for on the *drivers of green innovation and growth and their impact on European industry and international trade.* Research here involves, first, a more thorough analysis of who (countries, companies, research institutions...) is active in clean innovation and how the major actors interact to bring clean technologies successfully to market, create jobs and capture value. An important question is whether these green ecosystems are local or global. Second, the role of government policy (through regulation, subsidies, carbon pricing, standards) will be explored empirically. Third, it is planned to investigate how to design efficient public-financing policies for green innovation;

- b) *Border Carbon Adjustments* deserve serious examination. Formally, these measures are to offset cost advantages that are enjoyed by exporters from countries with slacker environmental regulations than those pursued in the importing country, or to compensate domestic firms for their higher costs when exporting to such countries. The environmental argument for them is well known (the benefits of measures that reduce greenhouse-gas emissions are global while the costs of abatement are borne by the individual countries undertaking the abatement). But their compatibility with the global trade regime is disputed. For instance, there is a fear that such schemes may be exploited for protectionist purposes. The project is designed to clarify what is known about the economic aspects of such adjustments schemes and what is not, and to provide guidance for policy choices at European and global levels;
- c) Climate policy is likely to have significant *cross-country distributional effects*, both within Europe and at a global level. These effects are likely to influence national attitudes towards international agreements. The aim of this project is to identify more exactly the channels that determine distributional effects within the EU; this could also serve as a basis for a later examination of global distributional issues. Redistribution due to the allocation of permits, national industry structure, national factor endowment, innovation spillovers and macroeconomic effects will be examined from a static and a dynamic point of view.

Research in this field is expected to result in publications in the course of 2010. Flexibility needs to be retained in order to adapt to a still-to-be-determined post-Copenhagen agenda.

Coordination: Georg Zachmann. Participants: Philippe Aghion, Henrik Horn, André Sapir, Reinhilde Veugelers, Georg Zachmann