

Research at a policy making institution: Launching research at the ECB

VITOR GASPAR and JUAN LUIS VEGA*

JEL classification: A110

Keywords: Economic Research, Monetary Policy Making, ECB, Eurosystem

1. INTRODUCTION

The history of Greek culture from the 7th century B.C (i.e. Thales) to the 3rd century B.C (i.e. Plato, Aristotle and Euclid) is both splendid and amazing. During this historically short period of time remarkable people laid the foundations of philosophy, mathematics, natural sciences and history. Behind the emergence of the Greek genius there was a culture of critical thinking and rational debate which has been at the roots of scientific research ever since.

An exception to the tradition of critical thinking and rational debate provides an interesting story. The Pythagorean School was devoted to the transmission of the message, the doctrine of its founder, its master from one generation to the next. The objective was to transmit it unadulterated, unchanged, inviolated. Pythagoras was revered and everything was attributed to him. The Pythagorean coined the phrase: “He said it himself.”

According to the school everything could be expressed in terms of numbers (integers) or ratios of numbers. They were aware of the fundamental numerical ratios – 4:3, 3:2 and 2:1 – and of the relation between the length of the legs and of the hypotenuse of rectangular triangles (for example, 3:4:5). Now the study of rectangular triangles with legs of unit length led to the finding of the irrationality of the square root of two. The Pythagoreans referred to such lengths as “alogon” meaning “not a ratio”. However, “alogon” also meant “not to be spoken”. According to tradition the School would have prohibited the revelation of the secret on the penalty of death. Eventually, the secret was given away by Hippasus, a member of the School. As the saying goes, “he died at sea as an impious man”. In other words Hippasus was assassinated.

* European Central Bank, e-mail: vitor.gaspar@ecb.int; juan_luis.vega@ecb.int.
The authors are grateful to the many colleagues at the ECB and at Eurosystem National Central Banks who have made insightful comments and suggestions, from which the paper has greatly benefited. Any remaining errors are of course our sole responsibility. Views expressed are those of the authors and do not necessarily represent those of the European Central Bank or the Eurosystem.

The discovery of lengths which are not numbers destroyed the Pythagorean programme of arithmetising “geometry”.¹

Karl Popper – from whom we borrowed this story² – puts forward the conjecture that the geometrical method at Plato’s Academy was linked to an attempt to face the problem of incommensurability. Popper quotes tradition as referring to an inscription placed over the gates of Plato’s Academy in Athens saying: “Nobody untrained in Geometry may enter my house”. According to Popper, the development of the geometrical method – eventually leading to the Euclidean geometry – was motivated by Plato’s aim at substituting a geometric picture of the world for the Pythagorean arithmetic theory of the world. His programme was fulfilled by Euclid’s “Elements”. The development of a geometrical picture of the world – in turn – lies at the root of modern science of Copernicus, Kepler, Galileo, Newton, Einstein and, more recently, Witten.

This story vividly illustrates a fundamental fact about human knowledge. That is, dramatic progress often follows the attempt to solve problems arising from the realization that prevailing conceptions are mistaken. Modern physics is being pushed forward by the realisation that its two main theories, General Relativity and Quantum Mechanics, cannot both be right. Edward Witten’s string theory is precisely aiming at re-unifying the theoretical framework of Physics.

Rational debate and critical thinking lie at the heart of scientific research. Scientific knowledge can only be tentative and conjectural. To quote Einstein: “Whoever undertakes to set himself up in the field of Truth and Knowledge is shipwrecked by the laughter of the Gods.”

This paper is about research in Economics. More specifically about research in Economics undertaken at a policy-making institution. In the last four years it has been our privilege to be associated with the launching of research at the European Central Bank (ECB). Therefore, it is only natural that the main focus of the paper is on research at the ECB (and also in the Eurosystem³). Research can be defined as the activity leading to the production of pieces of analysis contributing to the expansion of scientific knowledge. The most reliable signal of quality of research comes from publication in academic refereed journals. The scientific impact – in turn – may be measured, for example, by the number of citations. Research activities in policy-making institutions – and in the ECB, in particular – are characterized by their policy orientation. In line with the tasks and

1. One can only wonder how far it would have been possible to go if they had conjectured that “algon” were just another kind of numbers. Conceivably it could have led to a Cartesian co-ordinate revolution many centuries earlier.
2. Popper refers to this story and his own conjectures around it as “a highly uncertain historical hypothesis”. He goes on, however, to offer circumstantial evidence. See KARL POPPER, “Plato and Geometry” in *The World of Parmenides: Essays in Pre-Socratic Enlightenment*, Routledge, London and New York, 1998, and “The Nature of Philosophical Problems and their Roots in Science” in *Conjectures and Refutations: the Growth of Scientific Knowledge*, Routledge, London, 1963.
3. The Eurosystem is composed by the ECB and the National Central Banks (NCBs) of the European Union (EU) that have adopted the euro. The Member States that have adopted the euro constitute the euro area.

functions of the respective institution, policy orientation induces a clear tilt towards applied research. In other words, at a policy-making institution, research aims at providing the decision-making bodies and staff with relevant knowledge, analyses, models and tools. Research also contributes to *communication* with external agents, first and foremost, academics and other researchers, but also policy-makers and politicians, the media and the public at large. Finally, the contribution of research to human resources' development and to the reputation of the institution needs also to be highlighted.

Launching research at the ECB has been challenging. The ECB is a new institution lying at the centre of a new system of central banks, the Eurosystem. The institution preceding the ECB – the European Monetary Institute – did not establish a strong research tradition. However, it has been possible to build upon the track record of the best performers among the national central banks. The challenge to the Eurosystem was that of using those roots to develop a solid research culture enabling the production of significant, applied policy-relevant research. This mission was all the more urgent given that the tasks and functions of the Eurosystem were to be carried out within a new entity: the euro area. Increased knowledge about the functioning of the euro area was, therefore, particularly important. Research in the Eurosystem takes place according to a decentralised model. That promotes a diversity of viewpoints and a constructive, rational debate on policy-relevant issues. The story told at the beginning of the Introduction suggests that this is a fundamental element of strength for research in the Eurosystem.

The paper is structured as follows: Section 2 will give a very short overview about the organisation of research in the Eurosystem. Section 3 will present some preliminary, tentative evidence on the research output. Given that the ECB was created only on 1 June 1998, and the lags associated with publication of research output the focus will have to be on the Working Paper Series. Some comparisons between the Eurosystem and the Federal Reserve System will be provided. Section 4 will conclude.

2. RESEARCH IN THE ECB AND IN THE EUROSISTEM

A clarification is in order. Research activities in policy-making institutions do not necessarily cluster into an autonomous, single organisational unit. Moreover, when – like in the case of the European Central Bank – there is an autonomous research department, a substantial part of its resources will be devoted to activities related to, but distinct from, doing research strictly speaking (as defined above). These activities include, *inter alia*: 1. policy briefing; 2. answering 'ad hoc' questions from decision-making bodies, other business areas, or the outside world; 3. forecasting; and 4. speech-writing. Furthermore, even where such an autonomous organisational unit exists it does not hold a monopoly of research. Research is by its very nature a very open activity. It is, therefore, not useful to look at Research as the output of one specific organisational unit. Instead, the focus has to be put on research activities independently from their correspondence to specific organisational units.

In our view there is a broadly shared consensus in the Eurosystem about the characteristics of its Research activities. Unlike academic research, the final aim of research conducted at Eurosystem institutions is to contribute, directly or indirectly, to monetary policy decision-making and to the conduct of the other tasks and functions of the Eurosystem. Therefore, there is a clear tilt towards applied, policy-relevant research. Otherwise, the quality-standards are exactly the same professional standards applying, in general, to academic research in Economics. In this respect, publication in external academic refereed journals is considered as the most reliable signal of quality.

Research in the Eurosystem is conducted according to a decentralised model. All Eurosystem participants are fully autonomous in conducting and evaluating research. There is no need for system-wide rules since external academic standards are accepted by all. Given the fact that many areas of common interest exist, decentralisation entails competition and creation of critical mass. It fosters quality and diversity of perspectives, which in turn is essential for a fruitful, rational debate on policy issues. The decentralised model of organisation of research activities within the Eurosystem closely matches the institutional set-up for decision-making inside the ECB's Governing Council (that is one member, one vote). In a decentralised setting specialisation patterns will emerge as the result of choices made autonomously by the various institutions. There is a clear perception that enforced specialisation would be detrimental for the quality of research in the Eurosystem.

The existence of common areas of interest leads quite naturally to collaboration when specific needs are identified. A decentralised set up is therefore not incompatible with collaboration between researchers affiliated to different institutions in the System or with co-operation between institutions. In this respect, joint efforts at bilateral and multilateral collaboration within the Eurosystem are constantly pursued following a diversity of models (most of which include the participation of external researchers). These collaborative efforts are organised according to three general principles: i) decentralisation of work in line with the autonomy of the participants; ii) participation open to all Eurosystem institutions and fully voluntary; and, iii) an environment for research compatible with a diversity of approaches. Moreover, there is mutual awareness in the System about on-going and planned research activities.⁴ Indeed exchange of information is the most important co-ordination device when it comes to research in the Eurosystem.

In some cases more structured forms of institutional collaboration may be justified. For example, there may be a research topic which is clearly of interest for all Eurosystem participants. Additionally, the topic may be such that important synergies may be identified. For example, there are cases where a euro-area wide perspective needs to be founded on a deep knowledge of the institutional and structural characteristics of the national economies. In such a case the Eurosystem may decide to take joint initiatives. Such initiatives may take the form of Eurosystem Research Networks.

Between 1999 and 2002 the Eurosystem collaborated intensely in the context of the

4. The Heads of Research of the Eurosystem exchange their work programmes regularly and occasionally meet to exchange views on research activities.

Monetary Transmission Network. Monetary Transmission was chosen as the first topic for a Eurosystem Research Network because: First, there was a clear common interest (the issue is crucial to understanding the functioning of the euro area economy and, in particular, how decisions about the conduct of monetary policy affect economic outcomes). Second, there was a clear interest in ensuring an euro area perspective founded on deep knowledge of the institutional and structural characteristics of the national economies. Moreover, there were multiple data-sets that could be explored, using a variety of approaches, most of which were produced in the central banks themselves.

It is worth looking at this first experience of collaboration in Eurosystem Research Network format. In our view, the Monetary Transmission Network has been extremely successful. It led to the first set of systematic evidence on the transmission mechanism in the euro area drawing, at the same time, on both macro-level and micro-level data. The findings within the Network allow, at the macro-level, a comparison between the characteristics of the transmission mechanism between the euro area and the US and also among the individual member states. Evidence at the micro-level led to findings on the credit channel.⁵

Moreover, the Network led to an impressive scientific output. It includes the publication of twentyfour working papers and presentations at meetings organised by the National Bureau of Economic Research (NBER), the American Economic Association (AEA) and the European Economic Association (EEA). Publication is forthcoming in a volume to be released by Cambridge University Press. Publication of papers surveying the results is foreseen in the *European Economic Review*, *Journal of Money Credit and Banking* and the *Oxford Review of Economic Policy*.

It seems clear to us that the findings of the Monetary Transmission Network were relevant for the most relevant stakeholders of Eurosystem research: the policy-makers. Moreover, the Network contributed to the academic visibility of research in the Eurosystem and the research produced achieved a very high quality standard as testified by the corresponding list of publications.

3. ECONOMIC RESEARCH AT THE ECB: A CLOSER LOOK

In this section we analyse the publication of economic research by the ECB from 1999 to mid-2002. The final goal is to get a sense of the quantity and quality of research work conducted at the ECB during the period. The focus is on research output published in the ECB Working Paper Series and its comparison with the two working paper series published by the Federal Reserve Board (i.e. Finance and Economics Discussion Series and International Finance Discussion Papers).

5. The papers produced in the context of the Monetary Transmission Network were published in the ECB Working Paper Series, numbers 91 to 114. ANGELONI, I., A. KASHYAP, B. MOJON and DANIELE TERLIZZESE, 2002, *Monetary Policy in the Euro Area: Where Do We Stand?*, ECB Working Paper 114 provides an overview.

Whilst representing work still in progress (i.e. not final), publications in working paper format constitute probably the most timely indicator of research output for which information can be obtained on a broadly comparable basis. Timeliness and comparability do come at a price, though. First, an analysis based on working papers publication can only be partial, as research output may take other forms which do not necessarily involve pre-publication in working paper format (typically research articles by staff in central banks' bulletins, ad-hoc publications and/or publication in series other than working papers series). Second, and more important, unlike analyses based on journal publications, a quality-adjusted measure of output (subjective as it may be) cannot be provided. Nonetheless, below some attention is tentatively paid to this important aspect.

The ECB Working Paper Series was launched in early 1999 (less than one year after the creation of the ECB) to disseminate economic research on issues that are relevant, though with different degrees of immediacy, to the concerns of the ECB monetary policy. The Series, which is refereed, invites submissions of research work by staff and by visiting scholars participating in any of the various ECB visitors programmes. Papers produced in the context of ECB-led research initiatives and/or presented at research conferences/workshops organised by the ECB are also eligible for submission. 73 working papers were published in 2001, up from 8 in the initial year and 32 in 2000. Until the end of June, 42 working papers had already appeared in 2002.

Although it is premature to pass a final judgement, what has been accomplished in such a short period of time is -in our view- most remarkable from a number of perspectives. First of all, the ECB has quickly established itself as a leading contributor to the publication of economic research work within the Eurosystem. Secondly, research output by the ECB -a new-born central bank conducting monetary policy in a newly created economic area- already compares well to that produced by the Federal Reserve Board in terms of quantity and quality of output, topics covered and relative impact. The long track record of economic research at the Federal Reserve Board, dating back at least to the mid-sixties, makes it an ambitious benchmark against which own achievements can be assessed. And finally, a third important and distinct achievement -again, in the authors' view- is the consolidation in this period of an open model for the research activity at the ECB and, more particularly, for the ECB Working Paper Series. Unlike the two series run by the Board, the ECB Series is open, under certain conditions, to researchers (other than co-authors of staff) not affiliated to the ECB. This is part of the ECB's broader commitment to a continuous and active exchange with the academic world, including researchers based on universities, research centres and other policy-making institutions. The aim being, as the ECB President has put it, to take advantage of 'the large, and sometimes unexploited, potential gains from trade in ideas between practitioners and academics'⁶.

In the remainder of this section, we provide some quantitative evaluation of the three claims above.

6. W.F. DUISENBERG (1998): Introductory Statement to the ECB-CFS Conference Monetary Policy-Making Under Uncertainty, available at <http://www.ecb.int>.

3.1. A leading contributor to economic research within the Eurosystem

The ECB's contribution to the publication in working paper format of economic research work within the Eurosystem is illustrated in the upper panel of Table 1. The panel reports the number of working papers published by Eurosystem institutions in the period 1997 to mid-2002. This period (and, particularly the years 2000–2001) has witnessed an extraordinary boom in the publication of economic research by Eurosystem central banks, with the number of working papers increasing by a factor of 2.6 between 1997 and 2001 (i.e. 265 WPs published in 2001 against 101 in 1997). Whilst most national central banks have expanded their research output significantly, the ECB's contribution in most recent times – both direct (i.e. own publications) and indirect (i.e. promotion of joint Eurosystem research efforts) – has been instrumental in this respect.

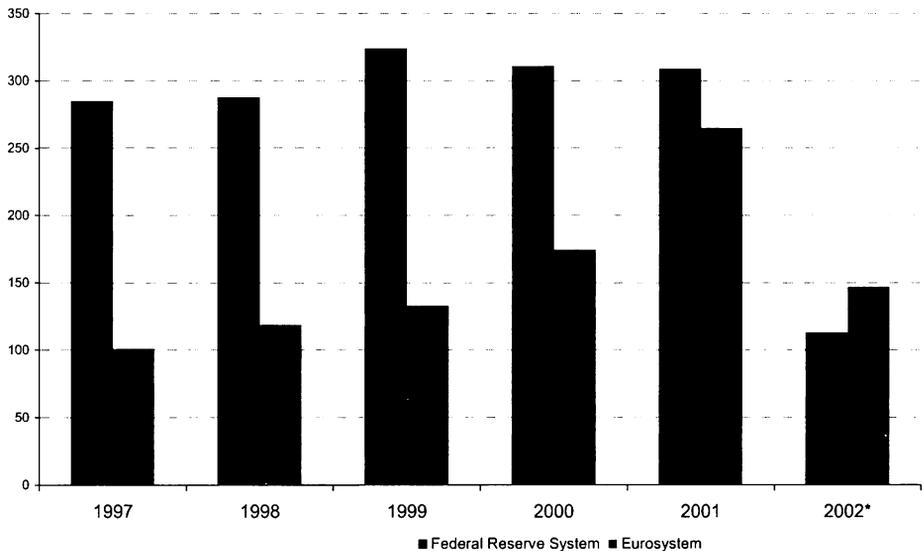
Table 1: Publication of working papers in the Eurosystem and the Federal Reserve System

	1997	1998	1999	2000	2001	2002*
European Central Bank	–	–	8	32	73	42
Oesterreichische Nationalbank	1	12	3	4	13	9
Banque Nationale de Belgique	–	–	–	12	6	15
Suomen Pankki	20	31	31	38	43	20
Banque de France	8	7	16	6	9	1
Deutsche Bundesbank	5	3	7	10	20	15
Bank of Greece	0	0	0	0	0	0
Central Bank of Ireland	5	4	5	5	6	1
Banca d'Italia	23	21	18	28	46	11
Banque Centrale du Luxembourg	–	–	0	0	2	2
De Nederlandsche Bank	11	8	15	14	16	10
Banco de Portugal	–	8	6	6	10	8
Banco de España	28	25	24	20	21	13
Eurosystem	101	119	133	175	265	147
Fed Board	84	84	92	92	84	44
San Francisco	14	17	21	26	32	5
Minneapolis	15	14	7	19	15	10
Kansas	12	9	13	11	15	3
Dallas	13	5	14	6	10	1
Atlanta	17	22	23	28	27	10
St. Louis	23	23	23	32	25	9
Chicago	25	26	32	31	24	7
Cleveland	20	23	19	16	19	5
Richmond	9	9	9	12	7	0
Boston	8	9	11	5	6	2
New York	17	22	38	19	28	8
Philadelphia	28	25	22	14	17	9
Federal Reserve System	285	288	324	311	309	113

* Until end-June 2002

It is worth noting the dynamism of publication of research in the Eurosystem contrasts with the stationary picture shown in the bottom panel of Table 1, coming from the Federal Reserve System. For the latter, only a modest increase was experienced during the period (i.e. 309 WPs published in 2001 against 285 in 1997). This reflects the fact that economic research at the Federal Reserve System is at a more mature stage. Indeed, despite the most recent trends, publication of economic research at Eurosystem institutions, as shown in Figure 1, continued to lag around 15% behind the Federal Reserve System in 2001, when measured by the number of working papers published. The figures in the table also appear to suggest that this gap will be closed further in 2002, a development which -in our view- is most welcomed.

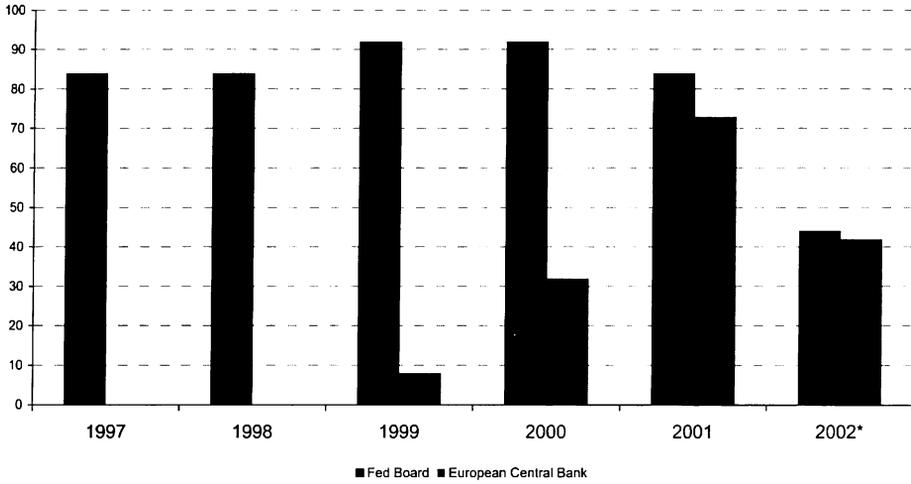
Figure 1: Publication of WPs by the Eurosystem and the Federal Reserve System



3.2. ... which compares well with the Federal Reserve Board

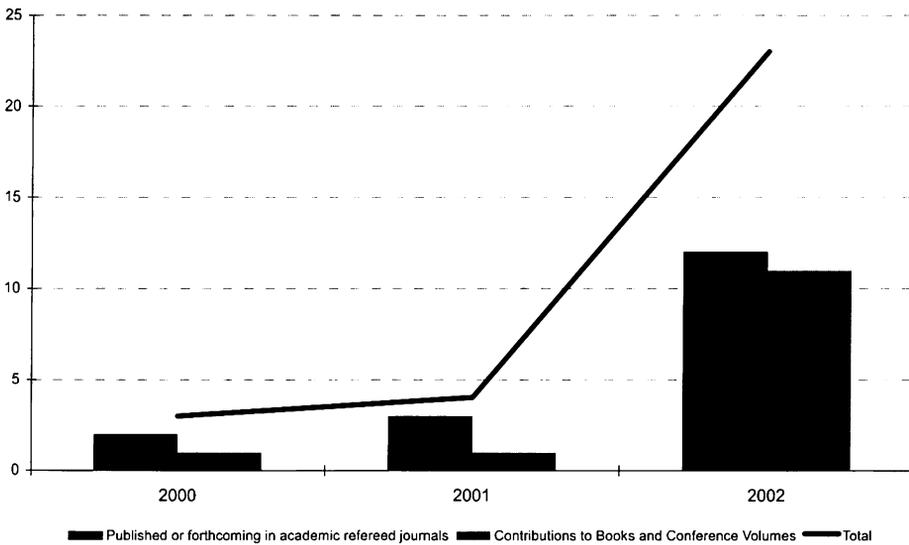
Table 1 and Figure 2 show that the ECB is nowadays well placed not only within the Eurosystem but when compared to the Federal Reserve Board. In terms of number of working papers published, the ECB's share in the Eurosystem total (i.e. around 27.5% in 2001) is at present only slightly below the share that the Board represents within the Federal Reserve System (i.e. around 29% on average during the period 1997–2001). Hence, the gap between the Federal Reserve Board and the ECB is of an order of magnitude similar to the gap between the Federal Reserve System and the Eurosystem, and closing fast.

Figure 2: Publication of WPs by the ECB and the Board



* Until end-June 2002

Figure 3: Outside Publication of ECB WPs by staff



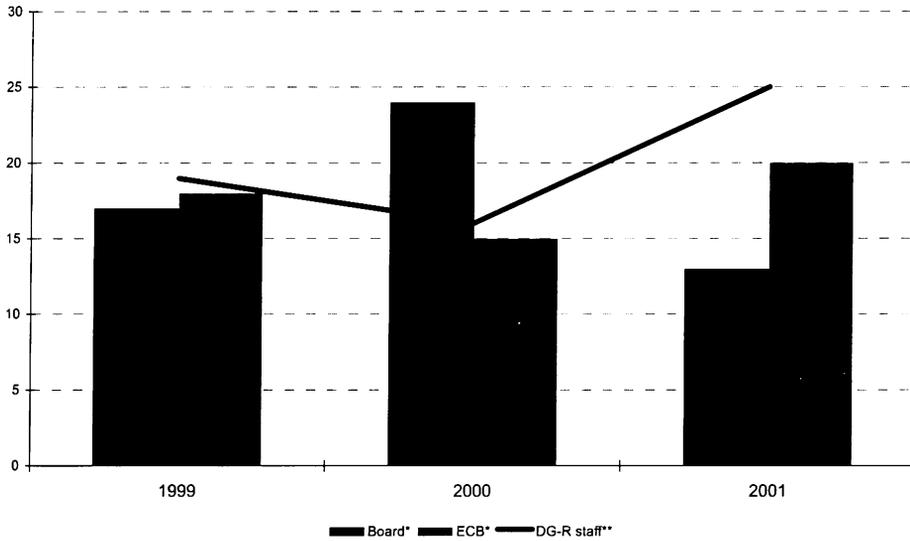
As regards quality, Figure 3 shows the number of working papers by ECB staff⁷ which have been published or are forthcoming in outside publications, distinguishing between publications in academic refereed journals and contributions to books. The former is considered to be the appropriate benchmark against which the quality of the Series must be assessed.⁸ With information until end-June 2002, up to 17 papers by staff that had appeared in the ECB Working Paper Series will be published in academic refereed journals by the end of the year; of which 12 will be published in 2002. Another 13 papers have already been published or are forthcoming, 11 of them in 2002, as contributions to books edited by leading academics. From this perspective, 2002 – only three years after inception – seems to be the year in which the Series has definitely taken off.

We do not have information comparable to that shown in Figure 3 available for the two working paper series run by the Federal Reserve Board. However, Figure 4 shows some figures for the period 1999–2001 concerning publications by staff in outside journals. In particular, for the ECB and the Federal Reserve Board the figures refer to articles published by staff affiliated with both institutions in outside journals listed in *Econ-Lit*.⁹ For the period as whole, both institutions appear to be broadly comparable on this account: 53 articles published by staff affiliated with the ECB versus 54 by staff affiliated with the Board.

The Figure also includes publication record of staff currently affiliated with the ECB Directorate General Research. These figures are not directly comparable to the former in that they are based on current affiliation rather than on affiliation at the time of publishing. This distinction is important for a forward looking evaluation of a young, still growing, department which is the main contributor to the research activity at the ECB. In this respect, the figures reflect a tremendous potential: staff currently affiliated with the Directorate General Research published a total of 60 articles in outside refereed journals during the 1999–2001 period.

7. Staff papers constitute a subset of all ECB Working Papers, representing approximately two thirds of the total during the period under analysis.
8. Although information is not included in the chart, ECB WPs have appeared, *inter alia*, in *Journal of Econometrics*, *Journal of Monetary Economics*, *Journal of Applied Econometrics* or *Review of Financial Studies*.
9. Typically, the affiliation in the database corresponds to the authors' affiliation at the time of publication of a given paper. Note also that articles by staff in central bank's bulletins and journal articles by Board members have been excluded from these computations.

Figure 4: Staff articles in outside journals



* Based on reported affiliation. Source EconLit
 ** Based on current affiliation

Concerning topics covered, Figure 5 classifies JEL codes reported for papers published in the ECB Working Paper Series. “Macroeconomics and Monetary Economics” is the best represented topic in the Series, followed by “Mathematical and Quantitative Methods”. “Financial Economics”, “International Economics” and “Microeconomics” come afterwards. The relative importance of topics is probably a good indicator of the tilt towards policy-oriented applied research which characterizes research activities in policy-making institutions. Somewhat surprisingly though, research on structural issues that constitute the framework in which monetary policy operates are not particularly well represented, as evidenced by the small shares that topics such as “Labor and Demographic Economics”, “Economic Development, Technological Change and Growth” or “Public Economics” represent.

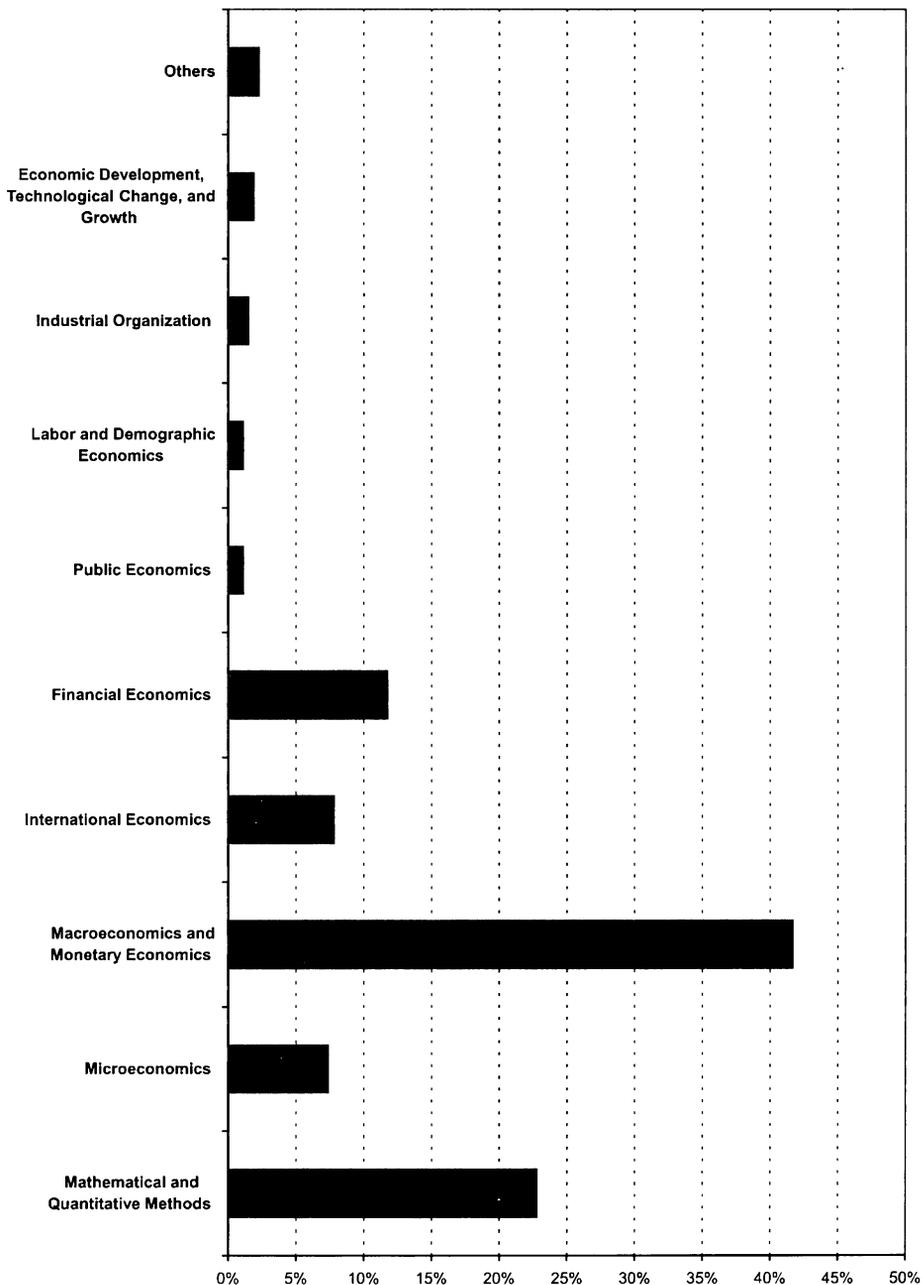
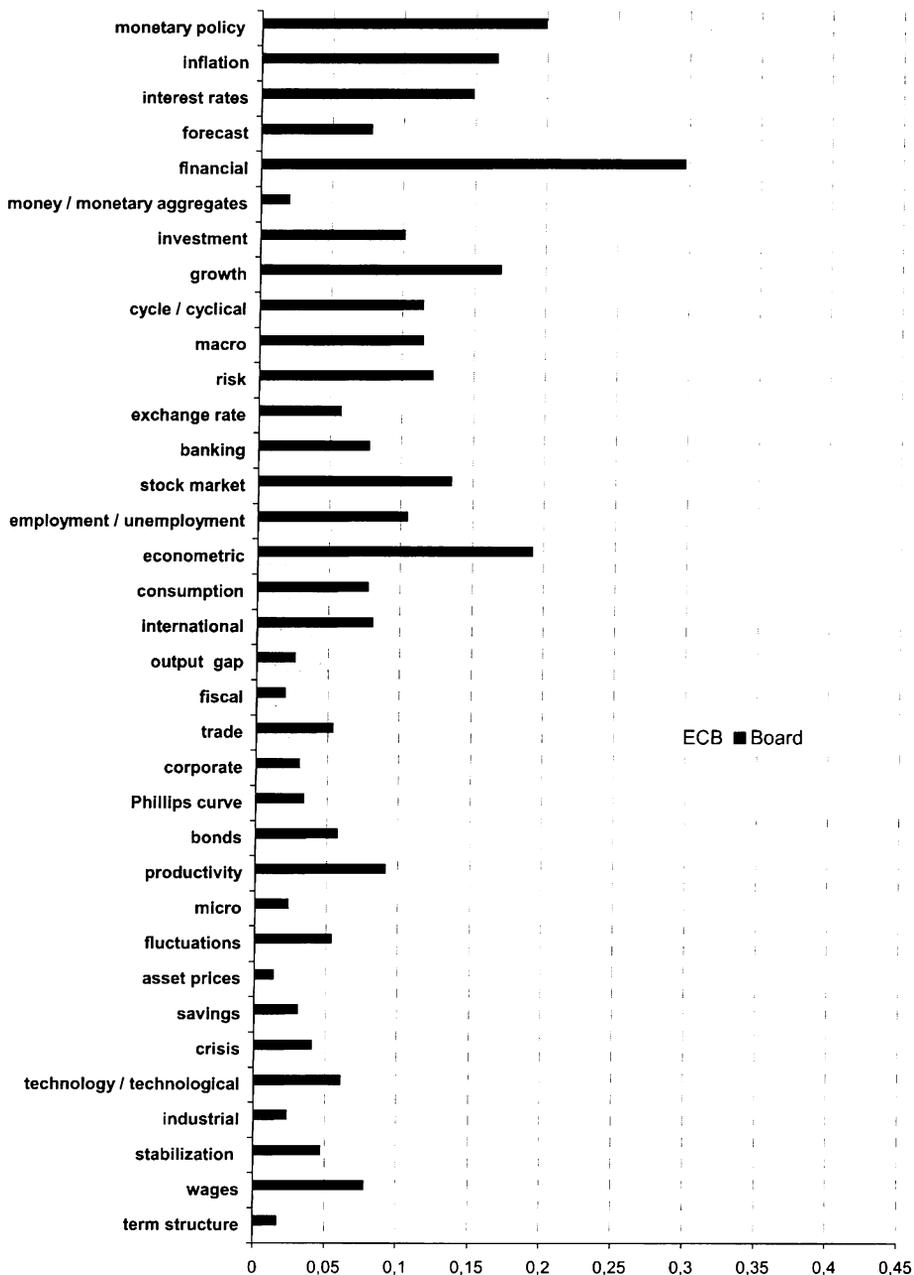
Figure 5: ECB Working Paper Series: JEL Classification

Figure 6: Some key words in the Federal Reserve Board and ECB WPS



Lacking similar information for the two Board Series, Figure 6 tentatively tries to make some comparison by showing the relative frequency (i.e. controlling for the relative sizes) with which a number of key words appear in the titles or abstracts of the working papers published by both central banks. Whilst the general picture is one of important similarities, a number of differences are also worth highlighting. The ECB Series appears to be more narrowly focused on monetary policy issues than the two Board series, which have in turn a much wider coverage of other important topics (financial, econometric methods, international...). 22 out of the 35 words covered appear more frequently in the Board Series. According to this indicator, the ECB WPS pays in relative terms more attention to 'inflation', 'interest rates', 'forecasts' and, particularly, 'money/monetary aggregates'.¹⁰ By contrast, a lot of attention is paid (again, in relative terms) by the Board to 'financial', 'growth', 'employment/unemployment', 'productivity', 'economic fluctuations', 'technology' and 'stock markets'.

Finally, concerning dissemination of research output, very little comparable information exists. Table 2 refers to the Research Papers in Economics Database (*RePEc*). The table shows the number of abstract views and file downloads over the last three months (i.e. April to June 2002) of top-25 Working Papers within each series. Focus on top-25 papers allows controlling for the different sizes of the respective series. Overall, the figures in the table suggest broadly similar degrees of attention in many respects.

Table 2: Number of abstract views/file downloads over the last three months of top-25 Working Papers within each series

	ECB	Federal Reserve Board	
		International Finance	Finance and Economics
Abstract views	2175	1875	2475
File Downloads	975	600	750

Source: *RePEc*

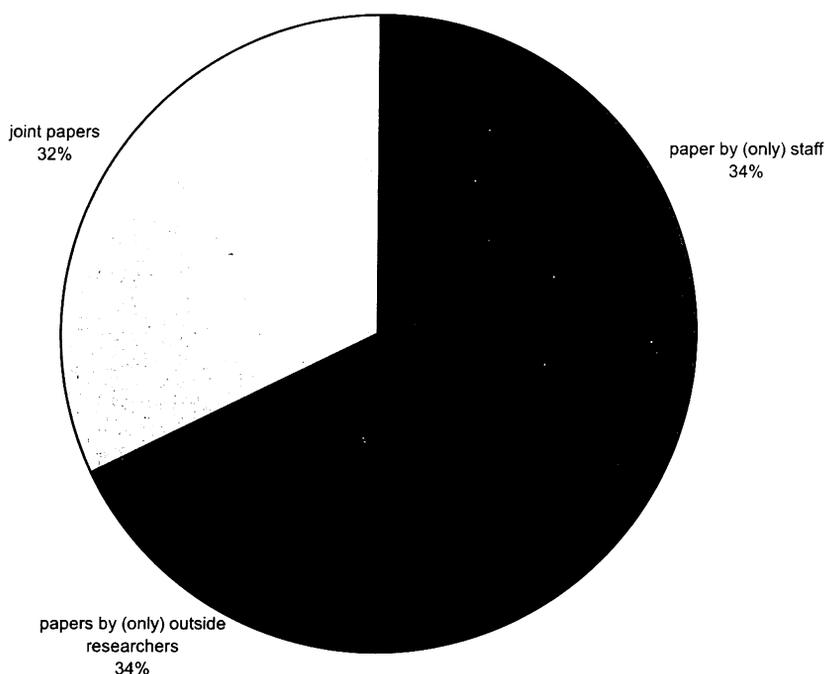
3.3. An open model for research

As highlighted above, a third important and distinct feature which should be emphasised is the open character of the ECB Working Paper Series and, more generally, of the research activity at the ECB. As shown in Figure 7, around one third of the papers published in the Series in the period 1999 to mid-2002 did not involve direct ECB staff participation. The figure classifies ECB working papers according to staff involvement into: i) papers involving only ECB staff; ii) joint papers between ECB staff and outside researchers; and iii) papers not involving ECB staff. Categories i) + ii) constitute staff pa-

10. Money/monetary aggregates is the only word that appears more frequently in absolute terms (i.e. without correcting for respective sizes) in the ECB WPS.

pers in a strict sense.¹¹ Category iii) are papers by non-ECB staff, corresponding to: i) papers by non-ECB staff presented at workshops/conferences organised by the ECB; and, papers authored by ECB research visitors and/or Ph.D. students participating in the ECB Graduate Research Visitors Programme.

Figure 7: ECB Working Paper Series: Classification of papers according to staff participation

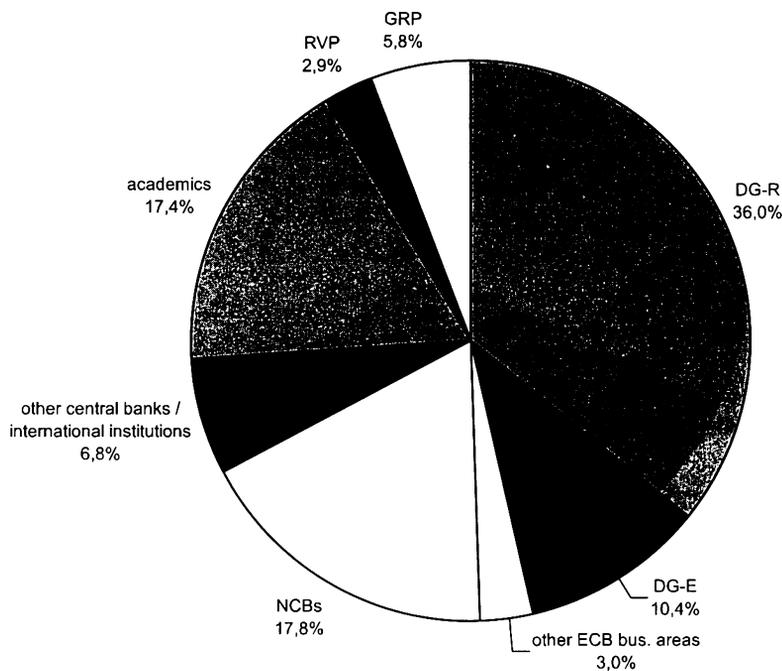


Rather than papers, Figure 8 classifies authors of ECB WPs according to their affiliation into eight categories: i) ECB staff in the Directorate General Research (DG-R); ii) ECB staff in the Directorate General Economics (DG-E); iii) staff from other ECB business areas; iv) staff from Eurosystem NCBs; v) staff affiliated with other central banks and international institutions; vi) academics; vii) visiting researchers (RVP); and viii) Ph.D. students participating in the ECB Graduate Research Programme. The last five categories correspond to non-ECB staff, whose contribution to the Series turns out to be approximately the same size as ECB staff's contribution. This makes the Series a very open outlet for pre-publication of economic research produced by non-ECB researchers. Contributions by non-ECB staff may take a number of forms: i) co-authorship of papers

11. It needs to be noticed that, when this factor is taken into account, research output by Fed Board staff (as measured by number of WPs) still exceeded ECB staff's research output by a factor of 1.7 in 2001.

with staff; ii) papers produced whilst visiting the ECB in the context of the various ECB visitors programmes (notably the ECB Research Visitors Programme and the ECB Graduate Research programme); and iii) papers produced in the context of ECB-led research initiatives and/or presented at research conferences/workshops organised by the ECB.

Figure 8: ECB WPS 1999–2002: Classification of authors according to affiliation



Concerning ECB staff participation, economists in the Directorate General Research are by far the most active contributors to the Series, followed by economists in the Directorate General Economics. Staff from other ECB business areas also contribute, though to a more modest extent. Until end-June 2002, a total of 80 papers authored or co-authored by DG-R staff had been published in the Series. That represents more than half of all ECB Working Papers and, notably, more than three quarters of those papers authored or co-authored by ECB Staff.

4. CONCLUSION

Research is fundamentally based on the realisation that all knowledge is fallible and conjectural. Policy, in turn, is an on-going activity. The complexity of policy-making means that policy-makers have to face the “burdens of judgement”. Specifically faced with alternative paradigms, limited information, difficult views about the current state and prospects of the economy, policy-makers have to come up with a view allowing for the conduct of systematic policy. Policy-makers are very much like sailors in Neurath’s boat. That is, they face up to the task of re-building the boat in the middle of the ocean while floating on it.

Research plays a key role. We have started with a reference to the Greek genius – we shall conclude with another. Heraclitus is quoted as having said:

“He who does not expect the unexpected will not detect it: for him it will remain undetectable and unapproachable”.

A key concept for a prudent central banker is to be open and ready to face the unexpected.

SUMMARY

A short overview of the organisation of research in the Eurosystem and in the ECB is provided in the paper together with some preliminary, tentative evidence on the research output. Given that the ECB was created only on 1 June 1998, and the lags associated with publication in journals, the focus is on research output published in working paper format. Some comparisons between the ECB and the Board of Governors of the Federal Reserve System are also provided.

ZUSAMMENFASSUNG

Dieser Artikel gibt einen kurzen Überblick über die Organisation der Forschungsaktivitäten im Eurosystem und der EZB und unternimmt eine erste und vorläufige Bestandsaufnahme der bislang veröffentlichten Forschungsergebnisse. Da die EZB erst am 1. Juni 1998 gegründet wurde und angesichts der Verzögerungen, die mit einer Veröffentlichung in einer wissenschaftlichen Zeitschrift verbunden sind, liegt der Schwerpunkt auf den Forschungsergebnissen, die in Form von Arbeitspapieren veröffentlicht worden sind. In diesem Zusammenhang werden einige Vergleiche zwischen der EZB und dem Board of Governors des Federal Reserve Systems angestellt.

RÉSUMÉ

Cet article passe brièvement en revue l'organisation de la recherche dans l'eurosysteme et à la BCE et donne un premier aperçu de la recherche produite. Etant donné la création récente de la BCE, le premier juin 1998, et les délais nécessaires à la publication dans les revues scientifiques, l'article se concentre sur la recherche publiée sous la forme de documents de travail. Il fournit également une comparaison de la BCE et du Board de la Réserve Fédérale américaine.