

Perspectives on economic research at a central bank



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EUROSYSTEM

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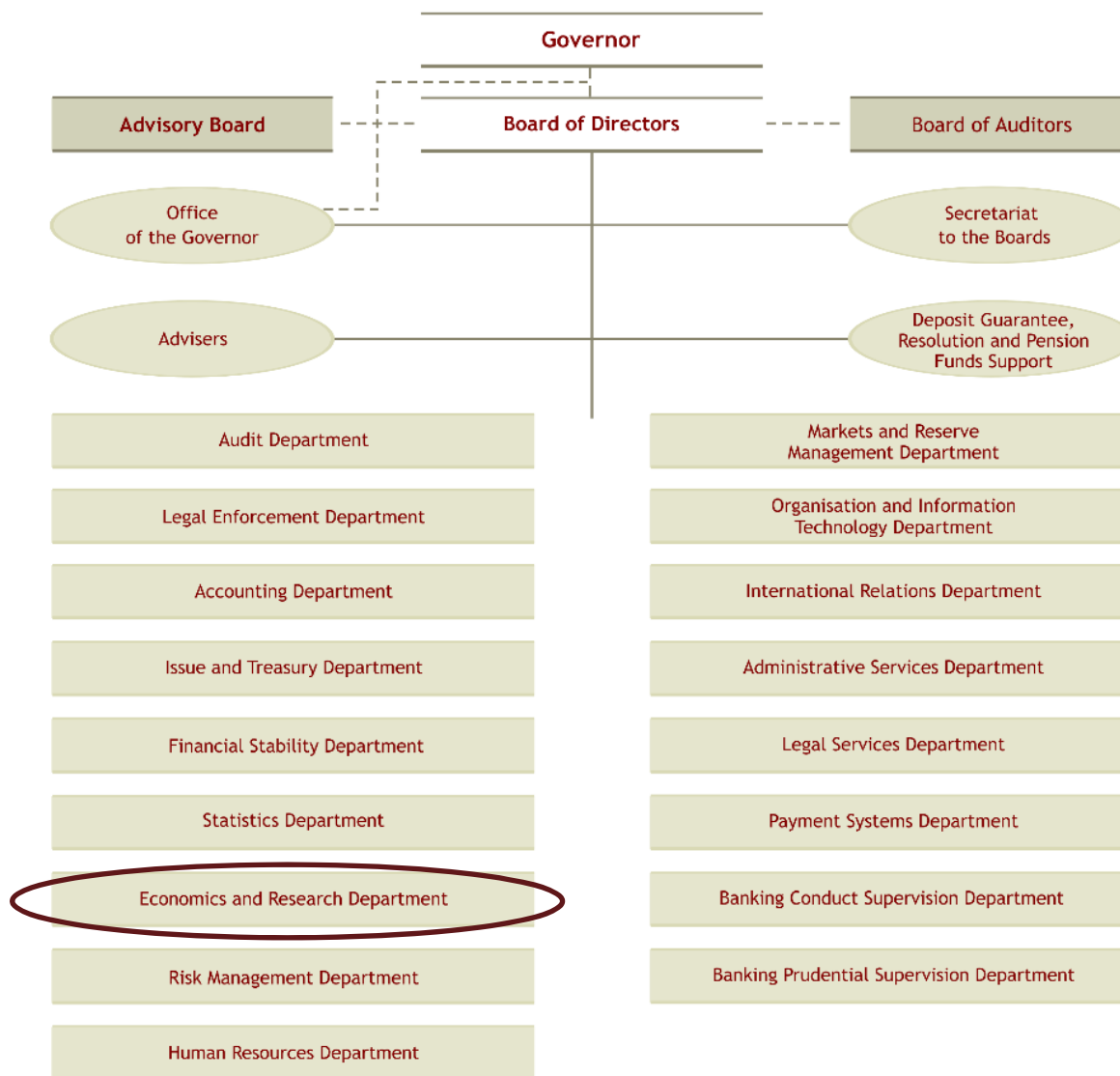




- 1. The Economics and Research Department at Banco de Portugal**
- 2. The need to be at the frontier of economic research**
- 3. Access to information and tools**
- 4. Exchange of views between economists and researchers**
- 5. Some examples**



1. The Economics and Research Department (DEE) within Banco de Portugal





1. Main functions of DEE

Mission of Banco de Portugal

- i. Providing price stability within the euro area
- ii. Maintaining financial stability

Responsibilities of DEE

- i. Advising the Governor and the Board on monetary policy decisions by the Governing Council of the European Central Bank
- ii. Intervention within the decision-making bodies of the Eurosystem and the European System of Central Banks, in particular at the Monetary Policy Committee and its subgroups
- iii. Independent analysis of the Portuguese economy (monitoring, forecasting, public finance, financial intermediation, structural issues) with appropriate methodologies
- iv. High quality research published in international refereed journals on various topics: macroeconomics, econometrics, labour markets, financial intermediation



2. The need to be at the frontier of economic research

High quality advice needs knowledge

Three main sources of knowledge

- Formal learning
- Experience
- Interaction

Examples

- What is our opinion on the Asset Purchase Programme (APP)?
- What is the expected impact of external conditions on the Portuguese economy?



2. The need to be at the frontier of economic research

General hiring policy of the Department

- Hire among the best students of the best Portuguese universities
- Hire very good candidates in the international job market of young research economists
 - at the Allied Social Science Associations (“ASSA meetings”)
 - at the Simposio de la Asociación Española de Economía

A heterogeneous mix of economists

- About a dozen of researchers (junior, principal, consultant)
- Most are from Portugal, but also from Italy, Bulgaria, Bolivia, India, China
- All other economists also do research or applied economics



2. The need to be at the frontier of economic research

The career we offer shares features with that of an university economics department in Europe

- **An initial competitive position (“assistant professor”)**
- **Followed by regular evaluations based on**
 - Publication output ranked according to the ECB ranking of economic journals
 - Contribution to policy discussion and BdP’s publications
 - Subject to minimum requirements and tenure
- **With two additional positions (“associate professor”, “full professor”)**
- **Progression is based on an evaluation by an external committee of experts in area of research of the candidate**



2. The need to be at the frontier of economic research

Day-to-day life of an economist at DEE

- **Research on topics of own expertise**
 - Monetary Economics, Macroeconomics, Financial intermediation, Labour market, Economic growth, International economics, Econometrics
- **Participating in seminars by visitors and internal (weekly) seminar Exchange**
- **Attending courses on various topics (roughly two per year given by Tim Kehoe, Deborah Lucas, V.V. Chari, Anjan Thakor, Cristina Arellano, Andy Atkeson...)**
- **Organising or attending biennial conferences on four topics**
- **Structuring and doing policy analysis and advising the Governor and Board**
- **Plus the boring stuff all organisations have to do!**



3. Access to information and tools

Banco de Portugal manages a set of very detailed and encompassing data sets

- *Central de Responsabilidades de Crédito (CRC)*
- *Central de Balanços (CB/IES)*
- **Data set on new loans to non-financial corporations**

Data from other sources

- *Quadros de Pessoal (Ministério da Solidariedade, Emprego e Segurança Social)*
- *Segurança Social (Instituto de Informática da Segurança Social)*
- **Third party suppliers (SNL, Bloomberg, Reuters, etc.)**

Strong IT needs – hardware, software, people



4. Exchange of views

“Exchange” internal seminar over lunch

- Weekly seminar where all internal issues are discussed
- Policy questions
- Topics to be discussed with the Governor and the Board
- Research questions
- Material for the publications

Research seminar

- Once or twice a week
- Open to the research community

DEE Forum



4. Exchange of views

Independent and quality publications

- Economic Bulletin
- Banco de Portugal Economic Studies
- Working Papers / Occasional Papers
- Spillovers





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4. Exchange of views

Conferences on various topics



ECONOMETRIC METHODS FOR BANKING AND FINANCE

Call for Papers | 12 - 13 September 2014 | Lisboa



7.^a CONFERÊNCIA DO BANCO DE PORTUGAL DESENVOLVIMENTO ECONÓMICO PORTUGUÊS NO ESPAÇO EUROPEU

Convite à apresentação de comunicações | 2014



6th CONFERENCE ON FINANCIAL INTERMEDIATION

10-11 July 2015 | Lisboa



BANCO DE PORTUGAL CONFERENCES

Program Evaluation, Minimum Wage,
and Firms Financing and the Labour Market

Praia D'El Rey | 15 - 16 June 2013



8th CONFERENCE ON MONETARY ECONOMICS

11-13 June 2015 | Lisboa





BPLim is the new microdata research laboratory

A research structure of DEE located at the Banco de Portugal premises in Porto



Main objective is to support the production of research projects and studies about the Portuguese economy



Main characteristics

- **Repository of micro datasets for the Portuguese economy**
- **Detailed metadata**
- **Computational platform**
- **Team of researchers with expertise on microdata and techniques for microdata analysis**
- **Conferences, workshops and short courses**
- **Training of new researchers**



5. Example #1 (Antunes et al.)

Sistema Interno de Avaliação de Crédito (SIAC)

Instrument to assess credit quality of firms

Many different applications, including:

- Monetary policy refinancing operations – collateral assessment
- Assessment of bank loan portfolio quality

Method to select variables from a battery of balance sheet ratios and macro factors

Segregation of firms into 10 different groups

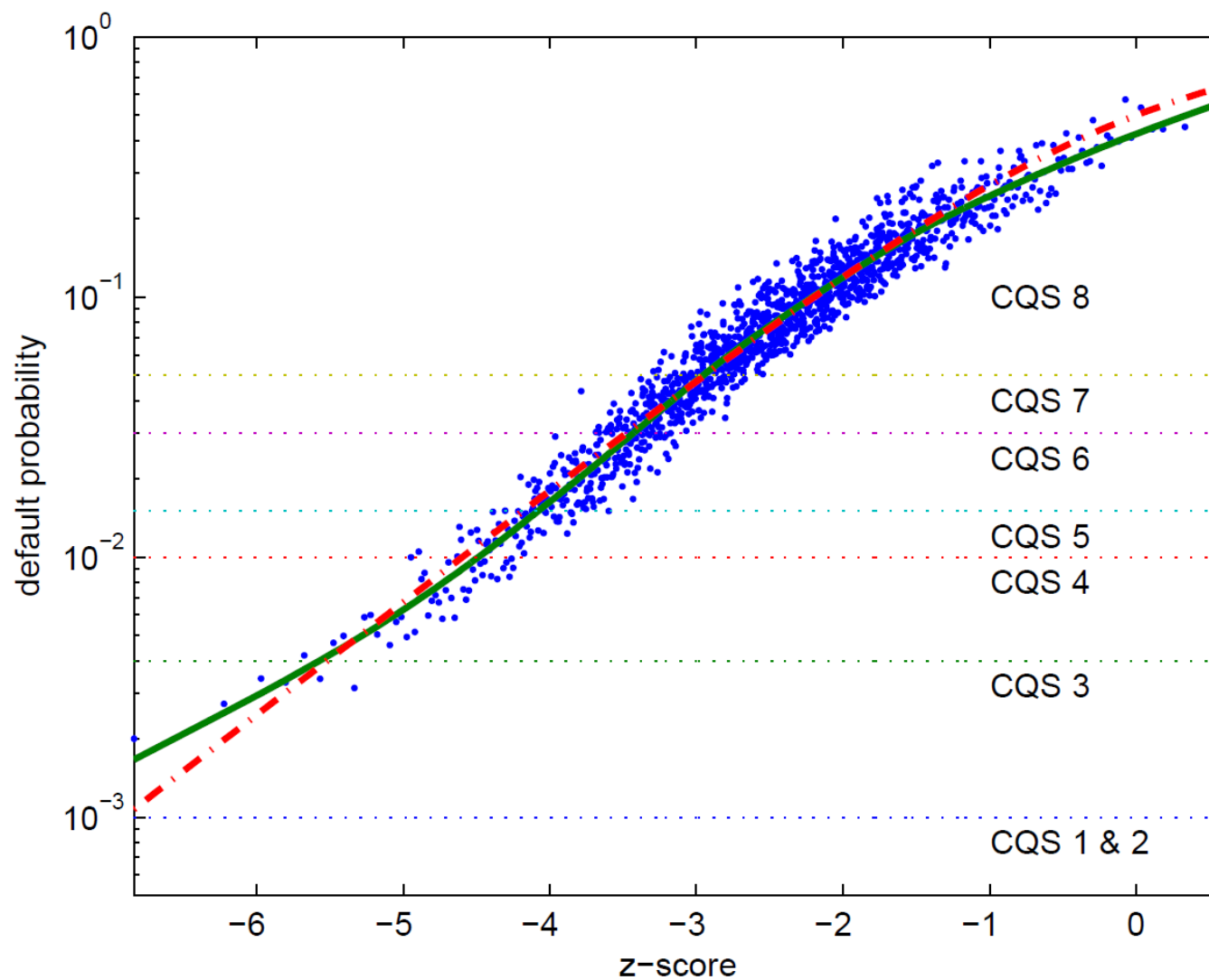
Estimation of Logit models

Calibration to the Eurosystem's Credit Quality Steps 1 to 8

Additional testing and validation



5. Example #1 (Antunes et al.)





Wage gender gap: how to account for it?

Three tentative explanations:

1. Worker heterogeneity
2. Firm heterogeneity
3. Job heterogeneity

Gelbach decomposition with high-dimensional fixed effects:

$$Y = X\beta + \gamma G + \varepsilon$$

$$Y = X\beta + D\theta + F\varphi + L\lambda + \varepsilon$$

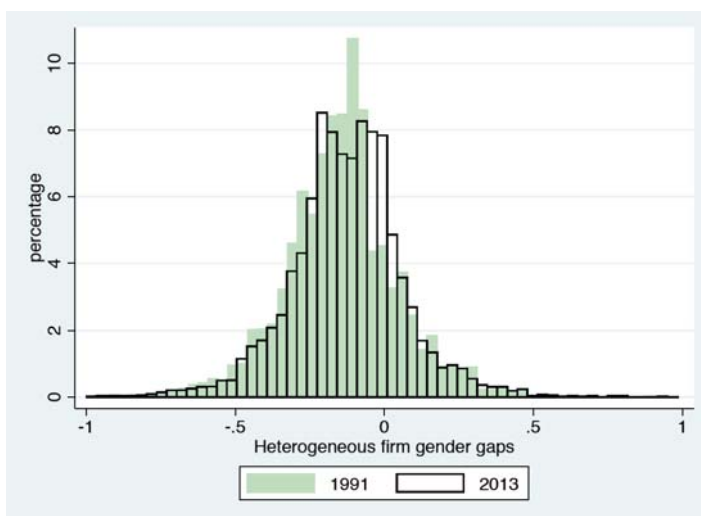
$$\hat{\gamma} = \hat{\delta}_\theta + \hat{\delta}_\varphi + \hat{\delta}_\lambda$$



5. Example #2 (Cardoso et al.)

Results show that:

- 2/5 of the wage gender gap can be attributed to the allocation of men and women to different firms and different jobs
- The remaining gap remains unexplained and could be due to different issues (psychological traits affecting bargaining power; unavailability for long hours; pure discrimination; etc.)



gap	worker fe	firm fe	job fe
-0.2560	-0.1547	-0.0580	-0.0433

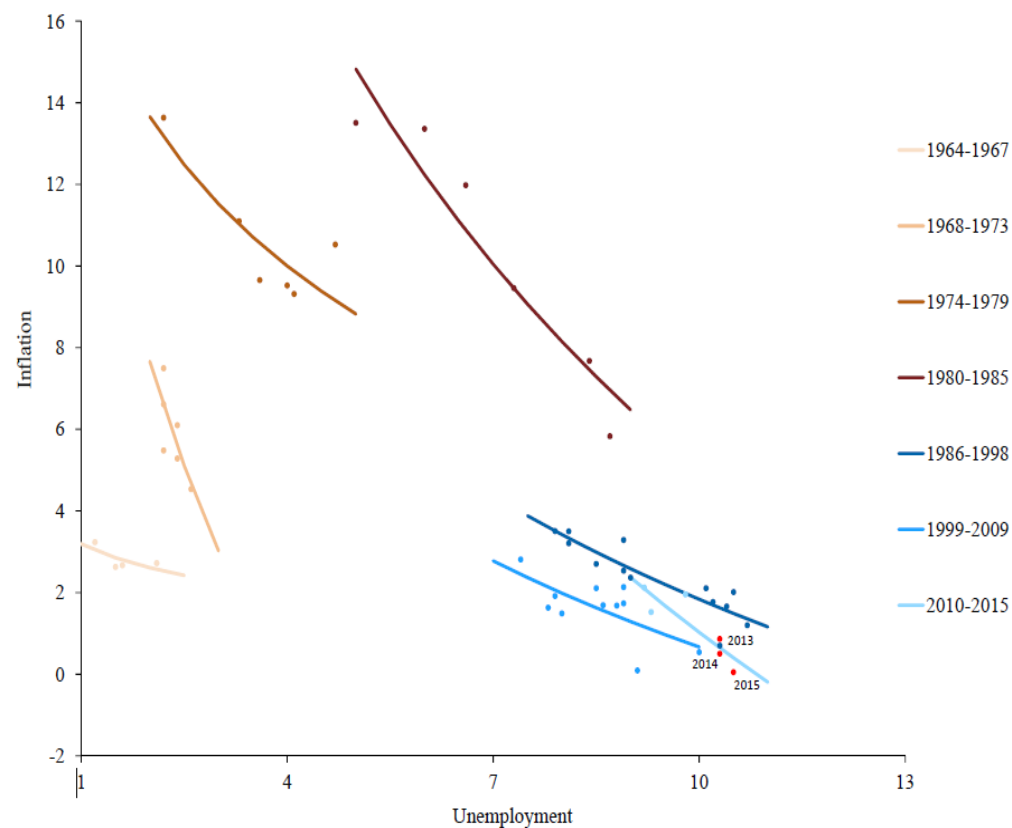
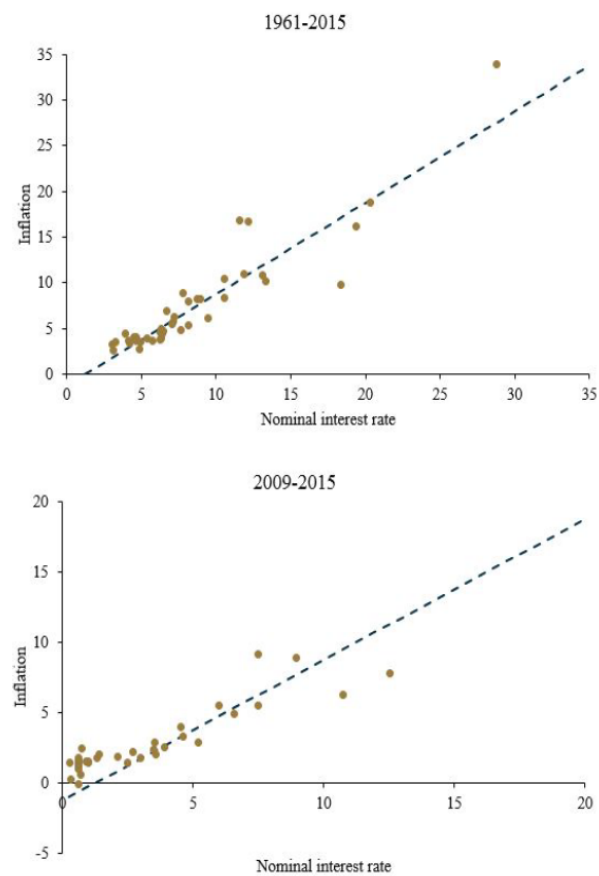


The use of the Phillips curve in the context of policymaking

- Do Phillips curves still show a trade-off between inflation and unemployment (as a measure of slack)?
- For the US, Germany, France and Japan the data points with unemployment and inflation are a sequence of shifting short-run Phillips curves
- There is still monetary neutrality: interest rates and inflation move one-to-one in the long run
- So what is the best response to move inflation back to target in current environment?
 - Current situation looks a lot like the long run
 - Trade-off between **short-run accomodation** and **long-run inevitability of having higher interest rates**



5. Example #3 (Teles et al.)





All these articles are out in the April issue of Banco de Portugal Economic Studies

There are currently 164 research/applied studies in various stages of development

These studies span many areas:

- **Macro theory; macro quantitative**
- **Transmission of monetary policy**
- **Financial intermediation**
- **Fiscal policy**
- **International trade**
- **Labour and product markets**
- **Quantitative and econometric methods**



More information

- Banco de Portugal website www.bportugal.pt
- *Relatório externo de avaliação do DEE*
<https://www.bportugal.pt/pt-PT/EstudosEconomicos/Publicacoes/outras/Biblioteca%20de%20Tumbnails/Relat%C3%B3rio%20Avalia%C3%A7%C3%A3o%20DEE.pdf>
- **Economic Bulletin**
<http://www.bportugal.pt/pt-pt/estudoseconomicos/publicacoes/boletimeconomico/Paginas/BoletimEconomico.aspx>
- **Banco de Portugal Economic Studies**
<http://www.bportugal.pt/en-US/EstudosEconomicos/Publicacoes/RevistaEstudosEconomicos/Pages/default.aspx>



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Thank you!