REPORT OF ACTIVITIES 2023

The Institute of Political Economy and Governance (IPEG) aims to become the center of reference for the Political Economy of the south of Europe. During 2023 we continue the implementation of the activities proposed in previous years. During this new period, IPEG continues strengthening its research base bringing together researchers from UPF, CREI, and ICREA working in the field of political economy and conflict with an interdisciplinary perspective. The IPEG faculty spans various disciplines and includes young researchers from economics, political science, history, etc. Currently, the center counts with the collaboration of 14 Researchers, 3 Postdocs, and 14/21 PhD students. The quality of our team and research is certified by counting with 8 ERC (European Research Council) grant holders, 6 ICREA Research Fellows, and 2 Research Professors of the BSE among our Researchers.

> **The Collaborators of IPEG include 14 Senior Researchers, 3 Postdocs, and 14/21 Ph.D. Students.**
> **The research team includes 6 ICREA Research Fellows, ERC-Grants recipients, and 2 BSE Research Professors**

Our goal is to conduct research to understand and prevent the collapse of states and societies. Inequality, social protests, terrorism, and wars are currently critical problems of our world. No society can sustain high levels of inequality without generating grievances, social violence and, potentially, collapsing their institutional set-up and dissolving their social contract. Our approach relies on an Evidence Based Perspective, using research frontier methodology and new, and very detailed, data (big data sources based on GIS, satellite data, text analysis, data from cell phones connections, etc.). We use frontier research data-driven analysis to provide a new perspective to the toughest problems of our society.

1) Scientific Committee

In accordance with the new research orientation proposed by the new direction, the new IPEG created a Scientific Committee in 2017, aligned with the new goals of the center, and composed by highly influential, and internationally recognized, scholars in the field of political economy. In December 2023 the Board of Trustees appointed a new member for the Scientific Committee. The current composition

of this Committee is:

- Ricardo Baeza-Yates, Director of Research, Institute for Experiential AI, Northeastern University
- Timothy J. Besley, Professor of Economics, W. Arthur Lewis Professor of Development Economics, London School of Economics.
- James D. Fearon, Professor of Political Science, Theodore and Frances Geballe Professor, Stanford University.
- David D. Laitin, Professor of Political Science, James T. Watkins IV and Elise V. Watkins Professor, Stanford University.
- Torsten Persson, Swedish Research Council Distinguished Professor, Institute for International Economic Studies.
- James M. Snyder, Professor of Government, Leroy B. Williams Professor, Harvard University.
- Guido Tabellini, Professor of Political Economy, Department of Economics, University of Bocconi.

Their role continues to be critical in shaping the research lines of the center and advising on the best strategies to reach the highest academic standards. The Scientific Committee advices informally on a permanent basis, depending on the issue at hand and their specific expertise.

2. Researchers

At this time the line-up of researchers of the center is the following:

Paula Bustos, (UPF and BSE) ICREA Research Professor. She has a PhD in Economics from Harvard. She specializes in Trade and Spatial Frictions Theme in the Structural Transformation and Economic Growth.

Caterina Calsamiglia, ICREA Research Professor. She has a PhD from the Department of Economics at Yale, and her research focuses on the political economy of school choice, affirmative action and welfare economics.

Antonio Ciccone (Professor at Manheim University, and former ICREA, UPF, and BSE), PhD Stanford University; working on education, Institutional development and conflict.

Ruben Durante (UPF and BSE), ICREA Research Professor, PhD Brown University, working on

media, conflict and identity.

Ruben Enikolopov, (UPF and BSE)**,** ICREA Research Professor, PhD in Economics from Harvard, specializing in the analysis of political institutions through experimental methods.

José G. Montalvo (UPF and Research Professor at the BSE), PhD Harvard University, working on education, Institutional development, conflict and electoral studies.

Albrecht Glitz (UPF and BSE), PhD University College London, working on wage inequalities, immigration, and institutions.

Gianmarco León (UPF and BSE), PhD University of California, Berkeley, working on voter behavior, selection and incentive mechanisms for public sector workers, conflict and human capital.

Humberto Llavador (UPF and BSE), PhD University of California-Davis, working on political economy, climate change and welfare economics.

Luigi Pascali (UPF and BSE), PhD Boston College, working on institutional development and conflict using historical natural experiments.

Maria Petrova, (UPF and BSE)**,** ICREA Research Professor, PhD in Economics from Harvard University, working on media and policy specialist.

Giacomo Ponzetto (CREI, UPF and BSE), works on the political economy of urban development, the political economy of globalization, strategic extremism, the political economy of transportation investment and the political economy of centralization and democratization.

3. Post-doctoral Students
The personnel of the center included 3 post-docs during 2023.

4. PhD Students
There were 14/21 PhD students working with the researchers at IPEG.

5. Visitors

Francesco Amodio (McGill University), Maurizio Mazzocco (UCLA), Rosario Ballatore (Bnaca d'Italia), Rafael Lalive (University of Lausanne), Miriam Artiles (Puc Chile), Gerard Padró-i-Miquel (Yale)

6. Research Activities: grants, seminars and conferences

Research grants:

During 2023 IPEG projects have continued receiving support from two competitive grants: the "Social Research Call 2020" of "la Caixa" Foundation; and project PANDE00090 (Pandèmies Call) from the Government of Catalonia.

Moreover, at the end of 2022 IPEG projects also started receiving support from the ERC-Adv grant 2022 from Marta Reynal-Querol. This support will continue until October 2027.

During 2023 IPEG organized the following seminars and workshops:

Seminars:

Noam Yuchtman (LSE), Martina Kirchberger (Trinity College Dublin), Leopoldo Fergusson, Erik Snowberg (UBC), David Atkin (MIT)

Other activities:

Reading Group in Media and Political Economy. The reading group on media economics is organized as a weekly meeting in which participants present either their own projects on topics related to mass media or discuss recently published papers on the topic. Overall, the group consisted of 24 participants.

 "Brainstorming Meetings" for PhD students in political economy at UPF. The idea of the meeting is to meet regularly students and professors interested in the application of data science techniques to political economy issues, to discuss research ideas and new data before starting a project. In these meetings they can discuss the potential of the proposed project. The meetings help also to increase the cooperation among students, and between students and professors.

Workshops:

Caterina Calsamiglia coorganized the 18th Matching in Practice Workshop (May 15-16, 2023) at the University of Lausanne. (program attached)

Paula Bustos coorganized the **Women in Economics mentoring and Networking Retreat**, held in connection with the EEA-ESEM 2023 Congress in Barcelona (August 27-28, 2023).

Ruben Enikolopov was a member of the Scientific Council of the **SSRC Workshop on the Economics of Social Media**.

Maria Petrova coorganized the **CEPR Political Economy of Populism Conference** (September 27-28, 2023).
The Conference on Political Economy of Populism organized by the CEPR Political Economy Programme (POE) and the Wheeler Institute for Business and Development, London Business School (LBS). The keynote speakers will be Timothy Besley (London School of Economics), Catherine de Vries (Bocconi), and Dani Rodrik (Harvard University).
The goal of the conference was to provide a forum for high-quality research on political economy and on populism bringing together top scholars in these fields from Europe and overseas and from within and outside the CEPR POE Programme.

Marta Reynal-Querol, Jose G.Montalvo organized the annual workshop **on** "**Political Economy of Development and Conflict IX".**

Virtual Development Economics Webinar: The virtual development economics seminar series (VDEV-CEPR-BREAD) is organized by Martina Björkman Nyqvist (Stockholm School of Economics and Misum), Robin Burgess (LSE), Giacomo De Giorgi (IEE/GSEM, University of Geneva), Garance Genicot (Georgetown University), Eliana La Ferrara (Harvard), Gianmarco León-Ciliotta (U. Pompeu Fabra, Barcelona School of Economics & IPEG), Karen Macours (PSE, INRAE), and Anthony Wambugu (University of Nairobi) with the support of CEPR.
It took place via Zoom bi-weekly on Tuesdays at 5pm Barcelona/Geneva/ Paris/Stockholm, 4pm BST, 11am EST, 8am PST.

IPEG also participated in the organization of several workshops of the **BSE Summer Forum,** a meeting point for international researchers across dozens of fields in Economics, Finance, Data

Science, and related areas.

Ruben Enikolopov coorganized the **Political Workshop in the BSE Summer Forum**.

Albrecht Glitz coorganized the **Migration Workshop in the BSE Summer Forum**.

Gianmarco León, coorganized the **Advances in Micro Development and Political Economy Workshop in the BSE Summer Forum**.

Maria Petrova coorganized the **Political Economy Workshop in the BSE Summer Forum**.

7. Research Lines, Laboratories and Large Projects:

As decided in the previous years we keep the four research lines.

Political Economy of Media.

Political Economy of Poverty, Inequality, Redistribution, and Social Mobility

Political Economy of Conflict and Globalization

Political Economy of Urbanization and Climate Change

Each research line has a PI and researchers who work on the topic. Some of the research lines have a laboratory with large projects connected. Ideally, we would have one Laboratory attached to each line.

During 2023, three of the research lines were active in terms of research. And during 2023 two of them had an active Laboratory:

-Political Economy of Poverty, Inequality, Redistribution and Social Mobility (Laboratory of Inequality)

-Political Economy of Conflict and Globalization (Laboratory of Conflict Prediction)

1st Research Line: Political Economy of Media:

PI : Ruben Durante

Researchers: Ruben Enikolopov, Maria Petrova

The main work has been on Research. Its laboratory is still not active. When active Maria Petrova will probably be the director.

2nd Research Line: Political Economy of Poverty, Inequality, Redistribution and Social Mobility:

PI : José G. Montalvo

Researchers: Caterina Calsamiglia, Ruben Durante, Ruben Enikolopov, Gianmarco León, Marta Reynal-Querol.

This is the most active and more productive line. This line concentrates not only on research publications but its laboratory held two important projects that are constantly expanding every year.

Laboratory of Inequality:

Main Researchers (director Laboratory): Jose G.Montalvo, Marta Reynal-Querol
Number of Projects: 3
Sponsorship:
ERC-Consolidator grant (Marta Reynal-Querol) until 2020
BBVA, Pandèmies, La Caixa Social Research, (Jose G.Montalvo), until early 2023.
ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027

The laboratory of Inequality has now two important data projects going on and a small third one. The first one is the original one that works with satellite data and is already consolidated. The second one was created in 2020 and was born as a result of a project related to COVID-19 that is described later.

Project 1: Using Satellite images to estimate inequality: an update
Sponsorship:
   ERC-Consolidator grant (Marta Reynal-Querol) until 2020
   ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027

Nightlight satellite images:

We have already consolidated the project, which builds inequality measures using satellite information, which for the first time will allow us to obtain very detailed and specific data about poverty, inequality, etc. for areas smaller than 1 square kilometer worldwide.

In the past, we worked to have the algorithms to develop this initiative and we implemented together with MareNostrum BSC-CNS and a team of engineers.

We have the first version of the data, computed at the country level, administrative level 1 for all countries in the world, at the grid level, and at the ethnic group level. And we have constructed measures of within and between groups inequality.

Satellite day images: **in collaboration with Ruben Enikolopov**

During 2023 we have not advanced a lot in this project. During 2022, we started moving into a more complex type of data which is satellite day images. For this purpose, we were in contact long time ago with Planet and Digital Globe, who is the firm that provides the images to Google Earth.

Our engineers worked on potential algorithms to deal with these images. This is a very difficult task since, opposite to nightlight data, daylight images are very heterogeneous in terms of the structures to be measured for proxying economic development. One way of attacking this problem is to use the information on the nightlight, which we know very well, to approximate rich and poor areas. Using this benchmark we can try to identify the specific characteristics of those areas in terms of structures like type of roofs, height of the buildings, etc. This part was delayed due to a lack of enough resources.

During 2022, we were in contact with Joshua Blumenstock from U.C. Berkeley School of Information and the Goldman School of Public Policy. He is the Director of the Data-Intensive Development Lab and the co-director of the Center for Effective Global Action. Blumenstock does research at the intersection of machine learning and empirical economics, and focuses on using novel data and methods to understand the causes and consequences of global poverty. In 2022 they developed microestimates of the relative wealth and poverty of the populated surface of all 135 low and middle-income countries (LMICs) at 2.4km resolution. The estimates are built by applying machine-learning algorithms to vast and heterogeneous data from satellites, mobile phone networks, and topographic maps, as well as aggregated and deidentified connectivity data from facebook. The work is published in PNAS. They allow us to use this data to calculate new measures of inequality.

Project 2: Real Time economics: using high frequency data to track inequality: *in collaboration with CaixaBank Members (Oriol Aspachs, Josep Mestres, Alberto Graziano)*

Sponsorship:

BBVA, Pandemies, La Caixa Social Research, (Jose G.Montalvo) until early 2023.

ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027.

We have continued with the collaboration effort with CaixaBank Research (we started in 2020) in order to analyze wage inequality in the context of the impact of COVID-19. We have also expanded the research lines that are explained below. The idea is to use payroll data to study the evolution of wage inequality before and after the confinement period. We have also analyzed the effect of public subsidies in taming the increase in inequality. The high frequency of the data allows for monitoring monthly the evolution of inequality, and producing a monthly report. The granularity of the data allows also analyzing the impact of the sectoral distribution of the Spanish economy on the evolution of general inequality, and studying the evolution of intergenerational and geographical inequality.

This project has introduced a new methodology to track inequality in real time, and is becoming an important data production of IPEG.

The Inequality Tracker is a pioneering project that aims to track developments in inequality and the role played by the welfare state in Spain in real time using techniques based on big data. It is a novel initiative carried out by a team made up of researchers from the Institute of Political Economy and Governance (IPEG) and CaixaBank Research that shows the enormous potential of the collaboration of researchers of private companies and research centers. **For this Project and collaboration, "UPF-Caixabank Economia en temps real", we have received the Premi Nacional al Partenariat Publicoprivat en R+I.**

Moreover, it is expanding in new lines of research that are explained below.

Objective 1, 2, 3 and 4 in collaboration with Ruben Durante

Objective 1. Development of a methodology to calculate high frequency inequality measures (Gini indices, Lorentz curves) using bank accounts information. Demonstration that the monthly observations (3 millions) have a distribution almost identical to the distribution of the Wage Survey of the INE and, therefore, it is representative of the universe of wages in the Spanish economy. For this purpose, we used the anonymized data of Caixabank which provides a very large source of information. The monthly Gini indices show that inequality increased drastically during several months after the beginning of the pandemic and stay high during many months. We should notice that, at that time, the most updated index of inequality available from wages referred to 2018 while we were calculating Gini indices for months of 2020. The continuous update of this monthly indicator has shown that by the end of 2021 the level of inequality has returned to the pre-pandemic level. We also show that between groups inequality did not increase significantly by gender. The between component of age increases significantly in April and May of 2020 to reduce its importance thereafter. The between inequality between foreign born and native workers increases drastically in March and stays up most of the months. The inequality between regions increases significantly between April and September of 2020. Finally, the inequality between rural and urban areas goes down significantly during all the months after April 2020.

Objective 2. We developed a methodology to analyze the heterogeneity of the recovery of consumption after the worst moments of the pandemic. For the purposes of this objective we had to use the information on bank accounts of households that could cover all their expenses. In general, this is not feasible using data from bank accounts of just one financial institution. For these reason, we decided to sign an agreement with a personal finance company (Fintonic), that aggregates the information of all financial institutions where households have accounts or credit cards. This strategy

allows to have a 360 view of the finances of households although it implies a significant reduction in sample sizes. Using these data, we show the heterogeneous behavior of Spanish consumers by income, age and balance account. Recent research proposes to target government's support to the groups of society that respond more to public policy actions, in order to mitigate the economic impact of the pandemic. Several papers have shown that, in some countries, low-income consumers have recover their spending faster than their high-income counterparts. This is the case of the US and the UK. Our results show that, in the Spanish case, there is not a significant difference in the recovery rate of spending in function of the income of the consumers. We also show the capability of data from financial aggregation and service applications to analyze timely and accurately many important economic issues.

Objective 3. Using data on the location of POS (TPV), and the expenditure using credit cards, we analyze the geographical evolution of expenditure around large metropolitan areas in Spain (Barcelona, Madrid, Valencia, Seville). The results show the usefulness of this type of data to analyze, almost in real time, the movement of population and economic activity. We find that the temporal evolution of the geographical distribution of expenditure across several large metropolitan areas in Spain shows a clear heterogeneity that delivers two patters related with the physical geography of the area. In one type of metropolitan areas the pandemic implied the movement of household expenditures outside of the center of the functional area (Barcelona, Valencia) in a higher proportion than in the others (Madrid, Seville). Secondly, the expenditure returned to the usual geographical pattern quite soon after the end of the pandemic in Madrid or Seville but it was still higher, during 2022, than before the pandemic in Barcelona and Valencia.

Objective 4. We have analyzed empirically and presented the first results on the impact of the most important economic policy measures approved during the pandemic: ERTEs and extended unemployment benefits; minimum guaranteed income (IMV); and ICO credits.

Objective 4.1. With respect to ERTEs we show how to construct a measure of monthly Gini indices that takes into account furlough schemes (ERTESs) and show that the market Gini index is much higher than the Gini index including furlough schemes around two months after the beginning of this measure. Government action was somewhat less effective in April, when the post-transfer Gini index reached its pick, about 11 points higher than in the same month of 2019. This was arguably due to the delay in the disbursement of subsidy and ERTEs in the early stage of the crisis, which temporarily left some of the most vulnerable workers without a safety net. Therefore, the main results show that, in the absence of the large public scheme activated soon after the beginning of the pandemic, earnings inequality would have risen dramatically. This tendency was mainly driven by the severe

effect of the pandemic on low-wage workers, many of whom suffered large wage cuts or lost their job altogether. The rise in inequality was especially strong during the lockdown months and gradually weakened following the reopening of the economy. The effect was especially pronounced among young people and immigrants, and in regions more dependent on sectors, like tourism, heavily affected by the mobility restrictions put in place to limit the spread of the virus. Comparing the inequality index before and after considering the public benefits we show that government transfers and furlough schemes were very effective at mitigating the rise in inequality, and at providing a much needed safety net to the most affected segments of the population.

Objective 4.2. With respect to the IMV, we are able to distinguish households that received the IMV and their cohort (basically the month in which they started receiving it). We are still working on this evaluation, which is extremely difficult, but we have already concluded that during the first year after the IMV the increase in hours worked of the recipients is not statistically significant from the control group. In addition, we have also found, that households receiving the IMV do not increase their banking activity and are still using a lot of cash in their transactions (even for the payment of electricity or phone bills which are usually paid by direct debit by most households).

In 2023 we have worked on objective 3 and 4.1 and 4.2. Moreover we done a collaboration with IVALUA to Study the impact of ERTO. The aim of the study is to analyze the impact of aid to those affected by ERTO and fixed-discontinuous contract (First call - March 2021: Order TSF/63/2021 and BDNS 554145 (105M) and Second call - July 2021 : Order EMT/157/2021 and BDNS 577895 (60M)) which was launched by the Department of Economy and Finance of the Generalitat of Catalonia due to the pandemic. In particular, the impact of ERTEs on the probability of employment and consumption has been assessed. The work plan consisted of three phases. In a first stage, the identification of the observations to be studied and the analysis of the coverage with respect to the beneficiaries of the aid was be carried out. In the second stage, the impact of the perception of ERTEs on employment and consumption was estimated. Finally, in the third phase, the final report was produced.

We plan to continue using this type of data to analyze in real time the impact of new public policies. In particular, we extended the line of research on the impact of the IMV to analyze the change in the conditions for receiving the IMV derived from the modification in the conditions of the program approved at the end of 2022 (people receiving the IMV could be working and receiving IMV if they did not make more than 60% of what they received as IMV). We also have created a publicly available measure of inflation inequality for each decile of the distribution.

Project 3: Optimization for Development: new line of research: Helena Ramalhino and Jessica de Armas

Sponsorship:

DKV finally does not sponsor this project

In line with the idea of applying Data Science techniques to analyze political economy problems, we explore an interdisciplinary project that applies optimization techniques to development/inequality problems. This is quite an unexplored area since researchers with knowledge of optimization techniques have usually worked on topics related with business operations. With the access to spatial information on variables related to infrastructure, education, etc. we started to develop this innovative new research line.

Helena Ramalhinho and Jesica de Armas are in charge of this line. During the past years this was very exploratory since it was not clear how this would be received either by the research or policy community. At the moment we have generated one piece of work using very detailed information for a Mexican urban center, Benito Juarez. This line has a lot of potential for policy application. Some outcomes of this research project have been published in PLOS ONE and have received very good feedback in conferences and among policy audience. In 2023 we have now decided to reactivated the project but instead of an independent laboratory, as one line among the inequality projects. The reason is that it addresses injustice and inequality topics but with a different perspective.

3rd Research line: Political Economy of Conflict and Globalization

PI: Marta Reynal-Querol

Researchers: Ruben Durante, Ruben Enikolopov, Jose G.Montalvo, Luigi Pascali.

This is becoming a very active line. This line concentrates not only on research publications but its laboratory held two important projects.

Laboratory of Conflict:

Main Researchers (director Laboratory): Ruben Enikolopov, Marta Reynal-Querol

Number of Projects: 2

Sponsorship:

ERC-Consolidator grant (Marta Reynal-Querol) until 2020

ERC-Starting grant (Ruben Enikolopov) until 2022

ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027

The Laboratory of Conflict has now two important data projects. The first one is the original one that we have been working for some years. The second one started in 2022.

Project 1: Sentiment analysis to predict conflict

Sponsorship:

    ERC-Consolidator grant (Marta Reynal-Querol) until 2020

    ERC-Starting grant (Ruben Enikolopov) until 2022

    ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027

As explained in previous Action Plans, we have started to work on conflict prediction. This is an extremely complicated topic that needs interdisciplinary work specially the collaboration of engineers. After a careful reading of the literature and after a special consultation with engineers and computer science specialists we decided in 2019 to start this novel project.

For the prediction idea we explored different lines of research: text analysis, sentiment analysis and Google searches. During the last years we have focused on text analysis.

The main novelty compared with existing literature was precisely the application of research frontier methods for the analysis of conflict prediction. The literature that has worked on this comes uniquely from social sciences. Although they tried to apply some techniques they have done it from a social science background with papers being, from a computer science perspective, extremely weak and not well developed. The collaboration with engineers allows applying very novel and sophisticated prediction techniques that have been used in other areas but never in conflict prediction, providing new and more precise results. We have been working with the methodology and algorithms, and during the past years, we have been trying to get the data we need to apply them. During 2021 we bought FACTIVA data sources. Moreover, in order to get access to PROQUEST dataset, we applied to a very competitive program to get free access to this data and our proposal has been one of the five research projects to be awarded a 6 months access to TDM studio. Access to this data started in 2021. During 2021 we worked using this methodology.

Results were not as promising as we expected, and although we improved previous literature, we did not consider them good enough. In 2022, we started exploring new methods, which includes the analysis using twitter. Given the unexpected issues raised this year with Twitter we postpone the advance on this. We have started working on the new project which it is briefly described below.

Project 2: Using News to predict conflict: In collaboration with Ricardo Baeza

Sponsorship:

    ERC-Advanced grant (Marta Reynal-Querol) from 2023 to 2027

    Potential Founder: Ramon Areces foundation

    Future: International Sponsorship: we are working with Ricardo Baeza on this.

Together with Ricardo Baeza, in 2023, we implemented a new methodology that we defined in 2022. We designed an application for analyzing how news changed over time. This is designed to discover how entities such as people and locations associated with a query change over time. By searching on time expressions extracted automatically from text, the application allows the user to explore not only how topics evolved in the past but also how they will continue to evolve in the future. The new application is developed based on the "Time Explorer", an application created by Yahoo Labs researchers with Ricardo Baeza in 2010.

We worked on this jointly with two PhD students, Elliot Motte and Federico Scabbia. To develop this ambitious project it is crucial to be able to work with FACTIVA (Full access). We have been developing different ways to get access to the data. Now we have 1% of what we planned to have to start the project. We are now trying to get a collaboration with some Bank. Banks are the only institutions that usually pay full access to data.

4th Research line: Political Economy of Urbanization and Climate Change

PI: Ruben Enikolopov
Researchers: Paula Bustos, Humberto Llavador, Giacomo Ponzetto, Marta Reynal-Querol
Main work has been on Research. Its laboratory is still not active.

Laboratory of Climate Change:

Main Researchers (director Laboratory): TBA

Projects: 2

Sponsorship:

ERC-Advanced grant (Marta Reynal-Querol)

AGAUR (joint with BSC)

Project 1: The effect of climate change using Satellite data
no sponsorship

Our plan was to use high-resolution satellite images with high temporal variability. The initial objective was to be able to locate and track the migratory movement of people caused by climate change, and its consequences. This is an issue that is considered very important but there has been little advances until today. After several conversation with Joshua Bloomenstock we realize that at the moment this is quite unfeasible.

Following the suggestion of Pep Martorell in last year's meeting, we started some conversation with Paco Doblas director of earth Sciences in BSC (Barcelona Supercomputing Center). After some discussion, we need to prepare a short project. This has been delayed due to the unfeasibility of our

initial idea for the project.

We have done a lot of brainstorming to be able to define this project. We have now a potential idea to collaborate with Mathias Thoenig (U. Lausanne). Once this is defined, we will meet with BSC to start a potential collaboration.

Project 2: Climate change, health and economic vulnerability

Sponsorship:

  AGAUR (joint with BSC)

This project is included in a proposal initiated by BSC:

The sub-project that they will develop with IPEG aims to address the interaction between the health impact of climate change and the socioeconomic variables. The main idea would be to identify the most vulnerable areas in which the impact of climate change could have more devastating effects. It is extremely important to define accurate policies that could have a real impact on these most vulnerable areas and individuals. For this purpose, we need very detailed data at subnational level. We have access to these data that will allow an analysis at the electoral census level. This project is in working progress.

NEW PROJECT: joint with BSC and Harvard's IQSS

The project is to create a new transversal program in the BSC, which covers the field of "Computational Social Sciences", directed by Prof. Mercè Crosas, which promotes research in social sciences based on the use of HPC and associated technologies. This program is joint with Harvard's IQSS and UPF's IPEG, and would have the following short-term objectives:

Position Itself in the European/national research ecosystem in social sciences, in particular in the use of data/HPC for these disciplines.

Participate in the proposal for the creation of a large data lake for social science research in Spain

The initial funding for the initiative would come from the BSC budget to cover the salary of prof. Crosas, and the contribution from IPEG. Possible financing should also be explored through Severo Ochoa, some contracts with companies, financing by Foundations potentially interested in this topic, and obviously competitive projects (mostly European).

We have not worked on this project during 2023.

Publications 2023 and forthcoming papers:

- **Bustos, Paula**, Comment on "Presidential Address: Demand-Side Constraints in Development: The Role of Market Size, Trade, and (In)Equality" by Pinelopi Koujianou Goldberg and Tristan Reed *Econometrica*, 91 (6), 2023, 1955–1958.
- **Caterina Calsamiglia** and Antonio Miralles, "Catchment Areas, Stratification and Access to better Schools, *International Economics review,* May 2023.
- *Gianmarco León*, Dijana Zejcirovic and Fernando Fernández, "Policy-Making, Trust and the Demand for Public Services: Evidence from a Nationwide Family Planning Program", *American Economic Journal: Economic Policy. forthcoming.*
- **Gianmarco León**, Erika Deserranno and Firman Witoelar, "When Transparency Fails: Financial Incentives for Local Banking Agents in Indonesia", *The Review of Economics and Statistics. Forthcoming.*
- **Gianmarco León**, André Gröger and Steven Stillman. "Immigration, Labor Markets, and Discrimination: Evidence from the Venezuelan Exodus in Perú", *World Development. Forthcoming.*
- **Maria Petrova**, "Are Political and Charitable Giving Substitutes? Evidence from the United States", M*anagement Science. Forthcoming.*
- **J. G. Montalvo, Marta Reynal,** O. Aspachs, A. Graziano and J. Mestres**.** Spending response to cash transfers to shield households from inflation: evidence from bank accounts. Forthcoming, *Economics Letters*
- **R. Durante,** N. Mastrorocco, L. Minale, and J. Snyder, Unpacking Social Capital, *The Economic Journal*.
- **R. Durante,** M. Djourelova, E. Motte, E. Patacchini, Media Slant and Public Policy Views, forthcoming *American Economic Review: Papers & Proceedings*
- **R. Durante**, M. Djourelova, G. Martin, The Impact of Online Competition on Newspaper: evidence from the Introduction of Craigslist, forthcoming, *Review of Economic Studies*
- **R. Durante,** F. Campante, E. Depetris-Chauvín, The virus of fear: the political impact of Ebola in the US, Forthcoming in the *American Economic Journal: Applied Economics*