Cover letter and Research Statement of Marion Laboure for
NBER Post-Doctoral Fellowship Program on Long-Term Fiscal Policy

The purpose of this NBER Post-Doctoral Fellowship Program on Long-Term Fiscal Policy would be to deepen significantly my research on the link between aging and “reference class forecasting”. This is a unique opportunity for me to be in Cambridge to enrich my research by interacting with the NBER economic faculties. I want to enrich my research through a more micro-economic analysis of government decision and policy making (including game theory).

Besides research I am also deeply interested in public finance. I conducted my PhD research on Public Finance and Economic Growth at the Ecole Normale Superieure. I have also worked 6 years in public finance both in public (European Commission and Central Bank of Luxembourg) and private (Barclays) institutions.

The sustainability of the pension system is being challenged in most developed countries. While the system was set up at the time of economic growth, policymakers are facing both economic slowdown and aging of the population. In order to correct for further long-term imbalances, policymakers can only take unpopular measures such as delaying retirement age, increasing contribution on current working population or decreasing pensions.

The problem is further accentuated in a small open economy where the future is much harder to predict. Some economies benefited from a strong migration of young workers which helped to balance the pension, but they may not be replicated to the same magnitude in the future. Similarly, the size of the workforce and the age pyramid are moving targets as the comparative attractiveness of the local economy and wages can create strong inflows of workers in both the directions from the larger neighbouring countries.

As a result, it is rather difficult for the policy makers to first forecast the future and the magnitude of the challenges and then to decide which policy is currently the best for implementation. The issues may look far away and less tangible, especially for social welfare and aging issues such as pensions with a twenty-thirty years' horizon and a large time gap between decisions making, policy implementations and observed outcomes.

There is an incentive mis-match between short to medium term popularity and re-election and taking necessary decisions to affect the long-term sustainability of the system. Besides, there are multiple theoretical political reasons explaining why it is difficult to influence policies and put in place reforms such as the fear or public opinion, the "free rider theory" (Alesina & Drazen (1991), Velasco (2000)), the lobbyist activity (Tornell, 1998), the "pork barrel" problem or the "optimism bias".

The "Planning Fallacy" theory first developed by Kahneman & Tversky (1979) underlines the phenomenon in which the predictions about how much time would be needed to complete a future task, displays an optimism bias and underestimates the time needed. This phenomenon occurs regardless of the individual's knowledge that similar previous tasks have taken longer to complete than generally planned (Buehler (1994), Kruger (2014), Koole (2000)).The bias only affects predictions about one's own tasks; when outside observers predict task completion times, they show a pessimistic bias, overestimating the time needed (Buehler (1995}, Buehler (2002)). Lovallo & Kahneman (2003) proposed an expanded definition as the tendency to underestimate the time, costs, and risks of the future actions and at the same time overestimate the benefits of the same actions. According to this definition, the planning fallacy results in not only time over-runs, but also cost over-runs and benefit shortfalls.

The theories behind “reference class forecasting” were developed by Kahneman &Tversky. They found that human judgment is generally optimistic due to overconfidence and insufficient consideration of distributional information about outcomes. Therefore, people tend to underestimate the costs, completion times, and risks of planned actions, whereas they tend to overestimate the benefits of those same actions. Such error is caused by actors taking an "inside

view", where the focus is on the constituents of the specific planned action instead of the actual outcomes of similar ventures that have already been completed.

Kahneman & Tversky concluded that regardless of the distributional information, risk is perhaps the major source of errors in forecasting. Based on this, they recommended that forecasters "should, therefore, make every effort to frame the forecasting problem so as to facilitate utilizing all the distributional information that is available" (Kahneman & Tversky (1977)). Using distributional information from the previous ventures, similar to the one being forecasted, is called taking an "outside view". Reference class forecasting is a method for taking an outside view on the planned actions.

In our paper, we use the "reference class forecasting" approach to study the evolution of a small open economy's pension's equilibrium between 2015 and 2060, in order to reduce the policy making biases. This involves the following three steps. First, we start by identifying a reference scenario of past, similar, continuous economically successful visible trend: the 'Successful economic reorientation'. Then, we establish a probability distribution for our reference scenario and create two alternative scenarios: the 'Progressive convergence to normal', and the 'Perfect storm'. We then assess a set of policy actions and assess their impacts in each of these scenarios. It leads to discussions on risk assessment under uncertain outcomes, where policymakers can have a rationale debate about "insuring" for the future economic volatility.

This paper also addresses a modelling issue specific to small open economies: how to forecast and assess future contribution and liabilities when a large proportion of the workforce is made of either cross-border workers or recent emigrants. These migrants or cross-border workers work for a short period of time, yet are entitled to receive pensions and other social benefits at least partially. It is further challenging as the churn of cross-borders is very important. For example, assuming 100 cross-border workers in year N and the same number in year N+1, a large proportion of the 100 workers in the two years will be different persons.

To address this challenge of forecasting future liabilities, we use a highly innovative modelling taking into account not only population aging but also yearly cohort of cross-border workers and their entitlement to partial pension in the future. It not only allows us to assess the state liabilities but also the evolution of age pyramid with a significant portion of new migrants.

The purpose of this paper is to provide a unique modelling of pensions in a small open economy, using a process that leverages game theory, to make decisions under high volatility and uncertainties.

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PHD IN ECONOMICS WITH c.6Y EXPERIENCE IN ACANDEMIA, CENTRAL & INVESTMENT BANKS

PROFESSIONAL EXPERIENCE

HARVARD UNIVERSITY — *Boston, United States*
Economist (Visiting Scholar), Economics department — *2016-*
Research focused on public finance, international finance and monetary policy
Teaching: Public Finance and Monetary Economics & Game Theory & Capital Markets
Working paper: Making Decision Planning work for Pensions in a Small Open Economy; Does Composition of Government Expenditure Matter for Economic Growth?
Invited by Dr K. Rogoff

CENTRAL BANK OF LUXEMBOURG — *Luxembourg, Luxembourg*
Economist, Economics & Research department — *2014-2016 (2 years)*
Research focused on public finance in the euro area and Luxembourg
- Built econometrics models to forecast Luxembourg pensions and age-related expenditure
- Produced ad-hoc economic and policy analysis in preparation of ECB Governing Council
- Research on sovereign wealth funds and structuring of Luxembourg financial assets

Produced in depth analysis of 2015 fiscal reform & budget and presented central bank conclusions to the Parliament

BARCLAYS — *Paris, France*
Global Economist, Economic Research department — *London, UK*
Research focused on Public Finance and Europe — *2010-12 (3 years)*
- Responsible for several research publications: "La Semaine" (weekly research on European economics), "Tracking the French Recovery" (monthly research on French economy) and "Global Traders Guide" (weekly analysis and forecasts on major economic indicators)
- Rebuilt econometrics models to forecast French and Euro area monthly/quarterly macro indicators (household consumption, industrial production, unemployment, public finance)
- Analysed market and economic trends, commented on fiscal policy developments in France and Eurozone

Presented during the bi-annual meeting with the French Treasury and Minister of Economics Barclays's projections for the French Economy in 2010 and 2011

EUROPEAN COMMISSION — *Brussels, Belgium*
Research Assistant, JM Barroso's cabinet – European Political Strategy Centre — *2009-10 (~1 year)*
Research Assistant to Dr. Martin Larch, Dr. Tassos Bellesiotis and Dr. Vitor Gaspar
- Performed a quantitative analysis on the efficiency of fiscal policies in the OECD countries
- Monitored closely economic and financial conditions of selected European countries
- Assisted the Director of BEPA in doing research work, compiling and organizing data on various issues including sovereign Credit Default Swaps

Assisted in one published research paper on fiscal policies in OECD countries and two articles published in the European Commission newsletter

EDUCATION

ECOLE NORMALE SUPERIEURE (PARIS SCHOOL OF ECONOMICS) — *Paris, France*
PhD in Economics — *2013-16*
Thesis: 3 essays on public finance and growth under supervision of Dr Emmanuel Taugourdeau

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE — *London, UK*
MSc. (Research) in Economics (specialty International Economics) — *2013*
Dissertation: *Sovereign Risk, Secondary Market and the Euro Area Crisis"* (awarded Distinction)
MSc. in International Relation & EU Politics with High Merit — *2009*
Dissertation: "How to explain differences in the level of intensity in European Governments' response (stimulus packages) to the financial crisis?" (awarded Distinction)

PARIS DAUPHINE UNIVERSITY — *Paris, France*
MSG in Economics & Management — *2008*
Exchange student at Vienna U of Economics (WU Wien) with avg grade of 1.55/5 ~1st Class Honour
BSc in Mathematics, Economics & Management — *2007*

TEACHING EXPERIENCE

HARVARD *Cambridge, US*
Public Finance and Monetary Economics (undergraduates) *2016-*
Capital Markets for undergraduates (undergraduates)
Game Theory (graduates)

SCIENCES PO PARIS *Paris, France*
Macroeconomics (undergraduates) *2012-*

PARIS DAUPHINE UNIVERSITY *Paris, France*
Microeconomics (graduates) *2011-*

LANGUAGES & IT SKILLS

French	Mother tongue
English	Fluent (studied and worked in London)
German	Good working knowledge (studied one year in Vienna and worked in Luxembourg)
Spanish	Beginner knowledge
Software	MS Office, Latex
	Statistics software (EViews, Stata, R and Matlab)
	Databases (Bloomberg, Reuters, Haver Analytics and Datastream)

ARTISTIC EDUCATION & HOBBIES

REGIONAL CONSERVATORY OF MUSIC *Lyon, France*
Diploma in Music Performance and Music Theory (~"Gold Medal") *1992-2004*
Won several prizes in regional and national competition in Piano:
1st prize - France National Contest – 2000 / 1st excellence prize - DIME – 1999
2nd prize - France National Contest – 1999 / 3rd prize - "Young Musician" Contest – 1998

Hobbies: Actress in several sitcoms, Scuba diving license (PADI Open Water – SSI Advanced Adventurer), Dancing (Bronze diploma in waltz from Tanzschule Prof. Wagner in Vienna Austria**)**, Aeronautic & planes (Pilot's license level 1), Wine (WSET level 4). Travelling the world!

ARTICLES AND PAPERS

Marion Laboure (2016). How Can Low Inflation Impact France Public Finance? An Empirical Investigation on Eurozone Countries.

Marion Laboure and Emmanuelle Taugourdeau (2016). Does Composition of Government Expenditure Matter for Economic Growth?

Marion Laboure (2016). Tax Tilting or Tax Smoothing? Evidence From European Countries.

Marion Laboure (2013). How would a debt restructuring by a country of the euro zone affect the monetary union? *Barclays*

Tassos Belessiotis, Vítor Gaspar and Marion Laboure (2010). Sovereign CDS and Bond Spreads in the Euro Area since the Outbreak of the Global Financial Crisis. BEPA Monthly Brief. February 2010, Issue 34.
http://ec.europa.eu/bepa/pdf/publications_pdf/see_also/n34_-_feb_2010.pdf

Research assistant to Martin Larch. Fiscal performance and income inequality: Are unequal societies more deficit-prone? Some cross-country evidence. European Commission Economic paper. 414, June 2010.
http://ec.europa.eu/economy_finance/publications/economic_paper/2010/pdf/ecp414_en.pdf

Marion Laboure (2009). Economic Stimulus Packages: How to Explain Differences in the Level of Intensity in European Governments' Response to the Financial Crisis?. Paper.ssrn.com. http://ssrn.com/abstract=1570522

REFERENCES

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Dr Vitor Gaspar, PhD
International Monetray Fund
Head of Fiscal Affairs Department
VGaspar@imf.org

Dr Laurence Boone
Economic advisor of French President F. Hollande
lau_boone@gmail.com

27 November 2012

Letter of Reference for Marion Labouré

TO WHOM IT MAY CONCERN

Marion Labouré asked me to write a letter of reference in the context of her application to continue her studies for a Ph. D. degree in economics at the European Institute. I am very happy to offer strong support for her application.

Marion worked and conducted research for me at the European Commission's Bureau of European Policy Advisers (BEPA) from October 2009 to March 2010, following the completion of a Master's degree in European Studies at the London School of Economics. Marion was one of the two research trainees BEPA selects each year among thousands of applications and she was quite impressive.

Her professional behavior in the office, capacity to learn and work in autonomy and her diligence for the work was exemplary.

Marion worked in BEPA during a period when the financial crisis was at its worst. During this period BEPA was asked to produce a stream of research material for the Commission President and his inner circle on a wide variety of financial stability questions. Marion collaborated with me (and with others) in preparing this material and the necessary statistical background. Some of this work was in the form of European Commission analytical notes; some was presented in the in-house publication *BEPA Monthly* and in BEPA's *Economics News*. Marion made an excellent contribution in gathering the necessary material on CDSs, for example, in particular during the deepening of the financial crisis in the early part of 2010. She drafted the text and she demonstrated intelligence, knowledge, research skills and maturity in all this work; inevitably, she was fully trusted to produce the material in a timely and reliable manner. Marion also spent a large part of her work on analytical and quantitative support for the BEPA economists, gathering and organizing data, producing statistical analysis and building spreadsheets in Excel. She also worked with a colleague on a research paper examining fiscal performance and income inequality which was published by the European Commission.

I enjoyed working with Marion because she worked independently, has a strong background in quantitative methods, and I could trust her to produce work of excellent quality and without delays. She was efficient, knowledgeable and dedicated and she is among the few *stagiaires* I have met who shown such a strong appetite for research and took the work very seriously.

Marion was always a trustworthy presence at the office. Her skills extended beyond economics to a pleasant disposition and openness. She did very well in the multicultural/multilingual environment of the office. She never missed work and showed great interest in the policy debates which dominated discussions during that period. I believe she learnt a lot about the practical side of economics and the nature of political economy, thus building further on her wider background of political science, management and international relations.

Since her departure of the Commission, I kept in contact with Marion. I am very impressed by her progress and current trajectory. I am a recipient of Marion's research at Barclays Capital, which keeps improving in quality both in terms of width of coverage (I am receiving more and more articles) and depth (quality of the analysis). In a very short time span, Marion established herself as a key economist covering France. As an illustration, even my colleague Marco Buti, Director-General for Economic and Financial Affairs, is a recipient and active reader of her research.

In conclusion, Marion has all the required quantitative background and intellectual capacity to study in the most demanding and technical programs, and also has the ambition, tenacity and real interest for research to successfully continue her studies for a Ph. D. in Economics in the most demanding institutions. I also believe she has the potential to build leadership in a research field and gather consensus and followership from her peers (as she is already proving through her research at Barclays Capital). In that regards I am highly supportive of her application and believes she has all the required qualities to succeed in her further studies and research.

Dr Tassos Belessiotis

Adviser, DG Enterprise, European Commission

EU Visiting Fellow at the European Union Studies Program, Yale University

Paris, 15 April 2016

Letter of Reference for Marion Labouré

Dear Sir or Madam,

Marion Labouré asked me to write a letter of reference in the context of her application to a PostDoc in economics at Harvard. I am very happy to offer strong support for her application. Marion is an extremely driven, hard working and talented researcher and would do very well in your department.

Marion was one of my PhD students from September 2013 to March 2016, following the completion of a Research Master's degree in Economics at the London School of Economics. I was very impressed as Marion managed to finish her thesis in a very short delay of two years while working full time at the Central bank of Luxembourg where she got funding from.

I was very pleased to have Marion as one of my first PhD students. It was a real honour and pleasure to supervise her for these two and a half years. She worked independently, has a strong background in quantitative methods, and I could trust her to produce work of excellent quality and without delays. Her previous background (in banking) allows her to be particularly efficient in collecting, sorting and analysing data. She was efficient, knowledgeable and dedicated. She is among the few PhD students I have met who shown such a strong appetite for economics issues, research and took the work very seriously.

I can describe her as a very smart, decided, careful, conscientious and hard working person. Also, I have really appreciated that during all this time she had been always carefully listening the advice that I was providing her with. This is just sensational to ask someone something and realise a couple of days later that the things are done and modified as you asked for.

Her skills extended beyond economics to a pleasant disposition and openness. She did very well in the multicultural/multilingual environment of the office. She never missed work and showed great interest in the policy debates which dominated discussions during that period. Last but not least she is very personable and great to work with.

In conclusion, Marion has all the required quantitative background and intellectual capacity to study in the most demanding and technical programs, and also has the ambition, tenacity and real interest for research to successfully continue her studies for a PostDoc in Economics in the most demanding institutions. I also believe she has the potential to build leadership in a research field and gather consensus and followership from her peers (as she is already proving through her research at the European Commission, Barclays, the Central Bank and the London School of Economics). In that regards I am highly supportive of her application at Harvard and believes she has all the required qualities to succeed in her further studies and research.

Dr Emmanuelle Taugourdeau
National Center for Scientific Research (CNRS)
Ecole Normale Supérieure
Paris School of Economics



To Whom It May Concern,

Ms. Labouré has asked me to write a letter of recommendation on her behalf for the PhD program in economics. I have kept in contact with Marion since our collaboration at the European Commission, and I am very pleased by her latest progress and accomplishments, it is therefore my pleasure to recommend her.

During our work at the commission, I advised Marion to enroll in a PhD in economics, which will play on her strength and help her launch a successful career in academic economic research. In the end, Marion decided to join the economic research team at Barclays Capital to strengthen her knowledge and research skills and refine her research project before starting her doctoral studies.

I have read Marion's recent research on European public finance and French fiscal policy and I am very impressed by her latest contribution. She is displaying a very promising level of depth and is ready to enroll at the most demanding programs and continue to contribute to the research in that space. For all these reasons, I believe that I am in a solid position to assess her qualities and support her application.

When we collaborated, Ms. Labouré had just completed her Master's degree in European studies at the London School of Economics. At the commission, she worked directly for me and for my team. We quickly recognized her uniqueness, as she was doing an excellent job that was usually completed by PhD level trainees. She clearly stood out in that she had a diverse background in both business economics and politics. I was also impressed by the strong international exposure she had acquired, having studied in France, Austria and then in the UK. Based on these encounters, and given her intellectual talents, I'm convinced that Ms. Marion would be a wonderful addition in your program.

I remember that when Ms. Marion first arrived at the Commission, she had less training in economics than our usual research assistants. Yet she worked diligently to remedy these weaknesses and improve her command of economics. As I myself have a PhD in economics and served as Research Director at the European Central Bank, Europe's equivalent of the Federal Reserve, I was amazed to see how quickly she learned and embraced the new topics. I was also greatly impressed by the quality of her research, which was comprehensive and precise.

During her time at the commission Marion worked on financial stability analysis and also collaborated on our research on fiscal policy. I received excellent feedback from all the senior research officers she worked with, who were impressed by the intellectual quality of her work. Near the end of her training program, Marion had reached such a high level of proficiency that she was able to co-author a short article with me summarizing our work on the Credit Default Swap. In this case, Marion, who is very invested in public service and the economic policy debate, made a significant contribution to economics, and specifically European public finance. My whole team was greatly amazed by the intellectual quality of her work. I still remember Marion as a very enthusiastic and committed searcher and would enjoy collaborating with her again in the future.

Today, both the US and Europe are facing strong economic challenges, and it is necessary that we generate capable researchers and economists who can understand these problems and help us resolve them. I believe Marion is one of these people. In addition to being such a great scholar, she has a deep attachment to public service, and it is important that such talented practitioners obtain the best possible education, as she would do at your institution. Thus, I strongly recommend her.



Vitor Gaspar