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John Gathergood,

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21 January 2024

Dear Sir or Madam,

I write to recommend Kien Hoang-le for admission to your MRes / PhD programme.

I have known Kien for approximately one year since he began working for me as a full-time research assistant on a project funded by the Nuffield Foundation. This is a very demanding project with a large project team (involving colleagues at Harvard, Warwick and Yale) and I was keen to hire only very competent and professional research assistants to the project. I was delighted to be able to hire Kien. Over the past year I have interacted with Kien at least weekly during project meetings, and have had many opportunities to see the quality of his work.

Kien studied for his bachelor degree BSc Economics at Vietnam National University prior to embarking on the MSc Finance programme at Nottingham. Kien achieved a first class equivalent degree in his undergraduate study, and a distinction in his MSc Finance, including a distinction for his dissertation.

Kien’s dissertation is an exceptional piece of work for an MSc Finance student. His research explores the impact of a long-term risk (pollution exposure) on mortgage credit costs in the U.S. housing market by utilising the Home Mortgage Disclosure Act (HMDA) and the Toxic Release Inventory (TRI) dataset. In the baseline result, the analysis identifies a modest premium in mortgage rate spreads for properties exposed to carcinogens, which is consistent with the impact of other long-term risks.

The study also examines how carcinogen exposure affects mortgage interest rates across different racial groups, lender types (bank vs. non-banks), and loan purposes (refinancing vs. new purchase). The findings reveal varying impacts among racial groups, with Black and African American applicants experiencing a higher mortgage credit premium due to carcinogen exposure, exacerbating environmental disparities in the financial sector. The study also finds that lender types and loan purposes do not significantly alter the relationship between carcinogen exposure and mortgage credit costs.

This work is particularly impressive in execution of the data analysis and econometrics. Kien has very advanced skills in both econometrics in theory and in implementation. For example, his dissertation is fully executed in R using advanced regression methods. The full repository of code is fully publicly available via GitHub, serving not only as a public record of his work but also as a learning resource for other researchers and students.

Building on his MSc dissertation, Kien encloses a research proposal that is extremely impressive. He has identified a pressing and broad interest topic, together with a potentially very significant contribution to the literature. For a pre-PhD student, the clarity of his writing and precision of his ideas is very impressive indeed.

My experience of working with Kien is that he has been an exemplary research assistant and real asset to the project. He has worked with a high degree of independence and innovation. Kien was specifically tasked with undertaking analysis of pension contribution data for a short report authored in collaboration with a UK pensions provider as part of the Nuffield-funded programme of research on the implications of automatic enrolment pensions. This report is due to be launched in late January 2024 and Kien rightly has the status of sole author. Not only has he authored the report with a high degree of independence, but he also has interacted extensively with the pension provider in meetings, project delivery planning, press material and communications. Kien has very strong soft skills in these areas, which will be a significant asset in his intended area of study in which interaction with businesses and policymakers is very likely.

I think Kien’s application to your program presents a fantastic opportunity for your department to recruit a fabulous young scholar who will bring energy, drive and enthusiasm to your department and will be successful on the program. I thoroughly recommend his to you and hope you offer him entry and a full scholarship. I hope that this reference is helpful for you in making your decision.

Best Regards,



Professor John Gathergood

Professor of Economics