

## Research Statement

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I am a Ph.D. candidate at Toulouse School of Economics with an interest in contributing to the debates on the health care financing and health service policy. The world spends a significant and increasing share of its resources on health care. The debates on the models of financing health system and the methods of paying physician salaries continue all over the world. Nevertheless, there is still no consensus on the ideal choice of financing mechanisms.

My current research applies the theory of incentives and mechanism design to contribute to the above debates. My job market paper explores the debate of “fee-for-service versus pay-for-performance” over the physician compensation methods. I find that if the payer can observe the physician’s productivity to control the quality, there is no need to pay for the services. A payment based on the performance coupled with a fee per patient is sufficient to induce optimal physician effort. However, if the payer cannot observe the physician’s productivity, in order to efficiently screen the types, the lower productivity physicians should be rewarded with less money on their performance, and instead, we want to contract on the services provided. I provide an argument for the criticism on the shortcomings of the service-based fees. More importantly, I also provide a rationale for the continued use of this payment even though the serious problems of this payment method have been widely acknowledged.

The second chapter of my dissertation, which is co-authored with David Bardey at the Universidad de los Andes, Bogotá, Colombia and Sanxi Li at Renmin University of China, addresses the three-party contracting problem among the payer, the patient and the physician when falsification of diagnosis are considered (e.g., misrepresenting the diagnosis for the patient to justify the services or equipment furnished). We focus on the mechanism design problem when patient and physician submit the diagnosis to the payer through a bargaining process without side-transfer. We show that it is sufficient that one of them tells the truth; but whether it is better to ask the physician to report or to ask the patient to report depends on the coarseness/fineness of the payment system. Moreover, we show that if the payer can ask the two parties to report the diagnosis in order, the advantage of the veto power of the second agent allows the payer to achieve the first best outcome.

My secondary field is Development Economics. The third chapter of my dissertation, which is co-authored with Ju Qiu, my colleague at Toulouse School of Economics, examines whether migration crowds out informal risk-sharing contracts and leads to less consumption insurance in Thai villages. Our idea is that migration may be used as a cash-in-advance contract between the household and the child. The household invests upfront in exchange for future state-contingent remittance which changes the income process of the household. We use the panel from Townsend Thai Annual Surveys (1997-2010). The hypothesis of no selection bias is rejected at within village insurance market level, which supports our conjecture that migration changes the risk-sharing contracts within village. After the bias are corrected, our results show that migration crowds out informal risk-sharing within village and even leads to less consumption insurance in Thai villages.

In future work, I intend to continue the research on performance-based payments. How to design a relative-performance-based payment which rewards physicians according to how well they perform relative to their peers? Does it perform better than the absolute-performance-based payment for the benefit of the society? Can we take my model to the data and estimate the welfare gains from the introduction of various performance-based contracts? These questions are currently on my research agenda.