

DOCTORAL PROGRAMME

HEALTH CARE ACCESS AND DEMAND: ROLE OF HEALTH INSURANCE AND
HEALTH SERVICES TRADE

By

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Abstract

Providing access to affordable and equitable health care, is a goal which still remains a challenge for nations across the globe. Given the benefits of a good health care system, domestic policies as well as cross-border flows in health services can help improve access to the health care system. This thesis examines the channels for this impact on access to healthcare.

In the context of domestic policies, we examine the impact of a social health insurance scheme introduced by the government of India in 2008. Using a large nationally representative panel data based on a household survey and difference-in-difference estimation strategy, we find that RSBY increased the likelihood of hospitalization and led to a greater proportion of members in a household opting for hospitalization in case of long-term illnesses. We also find that RSBY households are more likely to get treated by a doctor for short-term illnesses. Our findings further show that monthly per-capita total out-of-pocket (OOP) expenditure of households increases. This occurs due to more patient-doctor contact among RSBY households and increased awareness on the part of the insured households regarding their healthcare needs. Using a quantile difference-in-difference estimation strategy, we also find that this increase in expenditure is higher at the top conditional distribution of OOP spending. On the other hand, the positive impact of increased hospitalization and treatment by a doctor is reflected by a decline in the number of days lost due to illness. Further, using a variety of robustness tests we ensure that the results are indeed driven by the implementation of RSBY.

In the context of cross border trade in health services, we present a model of trade in health services, adopting the Heckscher-Ohlin general equilibrium framework. We show that the price of health services increases under free trade in the country which is labor abundant, assuming that health services are labor intensive. We also show that, *ceteris paribus*, as the labor force decreases, exports of health services decline. This can be interpreted as a decline in the trade balance with a higher old age dependency ratio. This finding motivates us to empirically analyze the impact of an increase in the old age dependency ratio on the

exports, imports and trade balance (exports minus imports) of health services.

Data on demographic trends of OECD countries shows that the proportion of the population aged 65 and above has nearly doubled from 9 percent in 1960 to more than 17 percent in 2017. We then conduct a panel data analysis of OECD countries for the period 2005-2017 to find the impact of the old age-dependency ratio on trade in health services. Using dynamic panel data models, we find that old age dependency ratio has a negative and significant impact on the trade balance of health services and that the impact is more pronounced in countries with fewer hospital beds. The driving force behind this is the decline in exports of health services due to a higher old age dependency ratio. We interpret the latter result as reflecting the increased demand for healthcare when the old age dependency ratio in the home country increases, which crowds out exports of health services and increases imports from foreign countries. As the decline in exports is greater than the increase in imports of health services, there is a negative impact on the trade balance of health services.

This study contributes towards a better understanding of how domestic policies and cross border flow of health services can play an important role in improving access to health care and in achieving the goal of universal health coverage.