# CHAPTER 14

# ECONOMICS

# **Doctoral Theses**

# 01. DANG (Archana) **Economic Analysis of Health Issues in India.** Supervisors : Prof. J.V. Meenakshi and Parikshit Ghosh <u>Th 24444</u>

## Abstract

# (Not Verified)

This dissertation examines aspects of overnutrition in Urban India. It consists of three essays. The first essay has two objectives: firstly, to understand how individuals make food choices that involve inter-temporal trade-offs between the utility that agent gets in present, and health benefit in the future (also known as time preferences) using a theory model. Secondly, to empirically test the predictions of the theory, using a primary survey. The theory predicts that individuals who are more present bias or are impatient have poorer health outcomes—i.e. they are either underweight or over-nourished, assuming both time-inconsistent and time-consistent preferences. The empirical results are consistent with our theory (and pertains only to overweight or healthy individuals): they indicate that a low discount factor or higher present bias is predictive of identifying individuals who are overweight or obese. The second essay investigates the predictors of the coexistence of an overweight child (5-15-year-old) and overweight mother within the same household, using a primary survey. We find that households with older children, and boys are more likely to have an overweight child and overweight mother (OC-OM) pair relative to households with a non-overweight child and non-overweight mother (NOC-NOM). Households with higher socio-economic status are more vulnerable to being OC-OM relative to households with NOC-NOM. Finally, households spending higher on eating out are more likely to have OC-OM pairs. The third essay examines the relationship between Body Mass Index(BMI) and sector and physical intensity of work among urban working adults in India. We show that those in sedentary occupations have a relatively high BMI. We find that the increase in BMI originates from those who are already heavy. We find evidence that rise in BMI is driven by decline in energy expenditure for men and women and increase in energy intake is also pivotal for men.

#### Contents

1. Introduction 2. Role of time preference in explaining burden of malnutrition: evidence from Urban Delhi 3. Predictors of dual burden of

malnutrition within households: evidence from Urban Delhi 4. Labour market engagement and the mass index of working adults: evidence from India 5. References . Appendix figures and Appendix tables

# 02. DUA (Sonal)

# Mergers and Acquisitions in India: A Quantitative Analysis of Recent Patterns and Their Determinants.

Supervisor :Prof. Aditya Bhattacharjea <u>Th 24441</u>

### Abstract

# (Not Verified)

The thesis assesses three objectives to understand the determinants of sharply rising merger and acquisition activity in India over the period, 1998-2017. The first objective explores determinants of intra-industry and interindustry merger activity separately, in both manufacturing as well as services sector. The results show that in the services sector, substantial intra-industry merger activity is driven by foreign competition and higher future growth prospects. The inter-industry merger activity is driven by higher profits. In the manufacturing sector, intra-industry mergers are driven by stress of lower market valuations, and inter-industry activity is prevalent during stable industry growth. The second chapter captures heterogeneity in motives of mergers based on product market competition. Specifically, it analyses if determinants of mergers are different between high concentrated and less concentrated industries; and between industries with strategic substitute and strategic complement interactions. Our results show that in highly concentrated and less concentrated subgroups, intraindustry merger activity is driven by tough competition from imports and stress of lower market valuations. Inter-industry merger activity in the former group is nudged by higher profits; while, in the latter by the stress of lower market valuations. In industries with strategic substitutes interactions, firms invest heavily in mergers to secure their market share against foreign players. In industries with complements interactions, firms seem to accommodate with the foreign players. Among these industries, mergers are driven by consolidation motives as they are prevalent in fragmented industries. The third chapter analyses determinants at the firm level. The acquirers, as well as target firms, are studied in top 10 merger intensive industries. Results show that better performing firms are more likely to go for acquisitions; and firms that have potential to grow in the future, but are struggling at present owing to low profits or losses, are more likely to be targeted.

### Contents

1. Introduction 2. Data construction and variables considered 3. What motivates mergers and acquisition in India? An industry level analysis 4. The role of product market competition in determining merger investment decisions 5. Firm level determinants of mergers and acquisitions in India 6. Main findings and policy implications 7. Bibliography.

03. GARG (Niti Khandelwal) Analysis and Measurement of Productivity Across Sectors and Countries. Supervisor :Prof. Pami Dua <u>Th 24437</u>

#### Abstract (Not Verified)

This study focuses on the measurement of productivity and its analysis across sectors and countries. Using a comprehensive model of productivity, the study examines determinants of productivity in both panel framework as well as for the particular case of Indian economy. In this analytical framework, the study examines three broad issues as follows. The first issue investigates the trends in labour productivity of the eight largest developing and seven developed economies of the Asia-Pacific region and examines its determinants over the period 1980-2014. Using panel cointegration and Group-Mean FMOLS estimation, the study finds that physical inputs, technology, institutional quality and macroeconomic variables are significant determinants of labour productivity of both the groups of economies although the share of agriculture in GDP affects labour productivity of only developing Asia-Pacific economies. The second issue examines the trends and determinants of labour productivity of the two broad sectors-industry, and services, and their main components, namely, manufacturing and market services sub-sectors in the case of major developing and developed economies of Asia-Pacific over the period 1980-2014. Using panel cointegration and group-mean FMOLS techniques, the study finds that significant differences in the determinants of productivity both across sectors and developing and developed groups of economies. Finally, the third issue analyses and compares estimates of labour productivity growth and total factor productivity growth for the Indian economy at both aggregate and sectoral level as provided by four different databases viz., India KLEMS (IKLEMS), Asian Productivity Organisation (APO), Penn World Tables PWT9.1 and Total Economy Database (TED) over the period 1981-2015. It investigates determinants of productivity growth of the Indian economy at both aggregate and sectoral level based on estimates of productivity from the four datasets using GMM estimation technique. The study finds robust determinants of productivity growth at both aggregate and sectoral level.

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1. Introduction 2. Determinates of labour productivity: comparison between developed countries of the asia pacific region 3. Sectoral analysis of productivity in developing and developed countries of the asia pacific region 4. Measurement and analysis of productivity growth in the Indian economy 5. Summary .conclusions and Bibliography.

# 04 GUPTA (Divya) **Public Policies for Gender Equality and Child Care.** Supervisor :Prof. Rohini Somanathan <u>Th 24438</u>

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1. Introduction 2. Impact of ABAD 3. Utilisation of child care services 4. Conclusion and Bibliography.

 NANDI (Aurodeep)
Fiscal Issues in India Through the Lens of Dynamics Stochastic General Equilibrium Modelling.
Supervisor :Prof. Pami Dua Th 24442

### Abstract (Not Verified)

The key motivation of this thesis has been to study contemporary issues in Indian fiscal policy, and its interaction with monetary policy, using Dynamic Stochastic General Equilibrium (DSGE) modelling. The thesis covers three key issues - first, it explores the implications on fiscal policy transmission when governed by India's fiscal deficit targeting rule; using a bespoke DSGE model for the Indian economy. The second issue explores the impact on fiscal policy transmission had India instead adopted a counter-cyclical fiscal rule - modelled on the lines of the recent recommendations by the Fiscal Responsibility and Budget Management (FRBM) Review Committee. A comparative analysis of the impact of the current fiscal rule versus the counterfactual counter-cyclical fiscal rules is studied, and policy conclusions drawn. The third issue focusses on the restrictions that India's fiscal deficit targeting rule imposes on the parameter space of the central bank for ensuring determinacy. Having established the constraints on monetary policy 'activeness' in targeting inflation; the study evaluates the impact of differing levels of monetary policy 'activeness' on fiscal policy transmission. These studies foray into relatively fresh territory for Indian economy literature, with only a handful of papers investigating fiscal policy transmission through a DSGE framework - an increasingly popular workhorse for theoretical macroeconomic research. To the best of the author's knowledge, existing studies have yet to make a serious attempt in modelling the fiscal rule to capture India's fiscal deficit targeting framework. Neither is there much literature for the Indian economy on the implications of shifting from a pro-cyclical fiscal policy to counter-cyclical framework, and the ensuing impact on fiscal policy transmission. Fiscal-monetary policy interaction under the government's fiscal deficit targeting rule and RBI's flexible inflation targeting framework, analyzed through the lens of DSGE modelling, also remains a new contribution to the existing literature.

#### Contents

1. Introduction 2. Fiscal policy transmission in India under deficit targeting rule 3. What if India's fiscal rule were counter cyclical? 4. Fiscal deficit targeting alongside flexible inflation targeting in India 5. Conclusion and way forward 6. Bibliography.

06. SINGHAL (Aditi)

Economic Analysis of Electoral Behaviour and Political Institution in India.

Supervisor : Dr. Sugata Bag <u>Th 24443</u>

#### Abstract

#### (Not Verified)

The thesis has three empirical essays. The first one (Chapter 2) analyses the relative importance of partisan ties of the electorate vis-à-vis their candidate ties in case of Indian national elections from 1977-2014. The second essay (Chapter 3) discusses the relevance of 'political reservation' and 'regionalism' in determining political outcomes, particularly, the re-election probabilities of the incumbents, in case of national elections from 1977-2014. The third essay (Chapter 4) discusses how the perception of voters' about the performance of one of the political institutions can influence their perception about the performance of another political institution, working at different levels of the hierarchy, using data from India Human Development Survey, 2011. Results from Chapter 2 highlights that there exist significant disadvantage to an incumbent party as well as to an incumbent candidate, in terms of lower vote share and re-election probabilities in the subsequent election. The results are also indicative of stronger partisan alignments of the electorate than candidate alignments. From the results of Chapter 3, we observe that an incumbent candidate is at a lesser disadvantage than an incumbent party, in reserved constituencies, pointing towards stronger candidate ties in these constituencies. The other result, on 'regionalism' highlights that the political fortunes of national parties are significantly and negatively affected by the advent of regional parties, in terms of lower vote share and probabilities of them winning the next election. However, at the same time, the incumbent national parties have been still doing better than the incumbent regional parties. Finally, the results from Chapter 4 highlights the positive causal effect of having confidence in Gram Panchayat on the level of confidence in state government. The result indicates the importance of perception formation at the ground level and how it can reflect into confidence in the higher levels of hierarchy.

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1. Introduction 2. Overview of thesis 2. Strength of partisan and candidate ties of Indian electorate 3. Political effect of reservation and regionalism in India 4. Confidence in state and rural local government in India 6. Conclusion and Bibliography.

# 07. THOMAS (Naveen Joseph) Education, Occupational Choice and Labour Force Participation. Supervisors :Dr. Mausumi Das and Parikshit Ghosh <u>Th 24440</u>

# Abstract ( Not Verified)

The thesis seeks to explore theoretical issues in education, occupational choice and labour force participation from a developing country perspective. We consider two broad themes for our analysis. The first is the role that Small and Medium Enterprises (SMEs) play in the process of development of a country. The second is centered around the severely low female labour force participation in India and the associated concern of welfare of women. The thesis is organized into five chapters. The first chapter provides an introduction to each of these themes while also providing a broad overview of the theoretical models in the following chapters. The second chapter deals exclusively with the first theme and we posit a general equilibrium overlapping generations model to analyze the role of SMEs in structural transformation and poverty alleviation. The third chapter uses the Nash Bargaining solution to analyze the puzzle of low female labour force participation in India and the role of cultural hurdles to women's participation in paid work. The fourth chapter looks at the welfare of women in patriarchal societies to see if welfare loss to women in such societies is compensated by the welfare of their children. We do this by positing an overlapping generations model where we track the welfare of women in the long run in patriarchal societies and make comparisons with nonpatriarchal societies. The fifth chapter concludes the findings from each of the previous chapters, suggests policy interventions and discusses possible extensions to the models.

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1. Introduction 2. Is small beautiful? Role of small and medium enterprises in economic development 3. Intra household conflict and female labour force participation 4. The sacrificial lamb: a possible trade off between women's welfare and children's prosperity under patriarchy 5. Conclusion and Bibliography.

08. VERMA (Saumya) Impact of Climate Change on The Indian Economy. Supervisors :Prof. Shreekant Gupta and Surender Kumar <u>Th 24439</u>

# Abstract ( Not Verified)

The climate of India and that for the rest of the world is changing and for the worse. This dissertation comprises three interconnected essays that examine the impact of climate change on the Indian economy, especially agriculture. In the first essay, using a unique panel dataset for 23 major Indian states from 1961-2016, we estimate the impact of rainfall and temperature on growth rate of state domestic product (SDP), per capita SDP and output for key sectors such as agriculture, industry and services. In the second essay, using a district level panel dataset from 1966-2011, we estimate the impact of inter annual fluctuations in rainfall and temperature on inefficiency in agricultural production disaggregated by major crop categories, namely, cereals, pulses, oilseeds, sugarcane and cotton. Inter alia, our results indicate significant non-linear effects of weather on inefficiency in cereal production. In the third essay we estimate a stochastic production function for rice, sorghum and pearl millet to decompose the impact of climate change on mean and variance of yields, controlling for agricultural inputs. Our results differ by crop and the nature of the climate extremes, namely very hot/cold or very wet/dry. This essay highlights the role of climate change in rendering crop yields unstable. In conclusion, using past data these essays demonstrate the negative impact of climate change on economic growth in India and on the productivity of agriculture, a key sector of the economy. Looking ahead as climate change becomes more pronounced and pernicious our research highlights the importance of climate proofing the Indian economy through greater emphasis on adaptation.

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1. Introduction 2. Data 3. Impact of climate change on economic growth in India 4. Weather climate and total factor productivity: evidence from Indian agriculture 5. Does climate change make foodgrain yields unpredictable? Evidence from India 6. References 7. Appendix A 8. Appendix figures 9. Appendix tables.

# M. Phil Dissertations

09. TIWARI (Krittika) Impact Of Indirect Taxes On Long Run Growth. Supervisor : Dr. Mausumi Das