

Services exports and offshore outsourcing: an analysis of contributing factors and implications

Abstract

The thesis deals with different categories of services exports with special focus on services exported through offshore outsourcing arrangements. As revealed from extant literature, offshore outsourcing is one of the primary ways of exporting newly emerging varieties of services exports (Finance, Information & communication, Other Business Service). The questions we seek to answer in the thesis are:

Part 1: What are some of the factors which contribute to growth in services exports? Do the factors vary across categories? Are there significant differences in the growth trends observed for services exports across countries?

Part 2: Has the growth in IT services exports (exported mostly through offshoring and offshore outsourcing) coincided with greater integration (usage-linkage and integration) of IT in the Indian economy? What are the key drivers of higher IT services exports and what are the factors that influence IT services integration?

Part 3: How do hidden costs of offshore outsourcing influence a firm's decision to offshore and how may firms interact strategically in their offshoring decisions? Is herding in favour of offshoring to a particular destination a possibility even if it has higher production costs?

The first part explores the factors associated with services exports and brings out the difference between the factors associated with traditional (travel and transportation) and those associated with newly emerging (modern) services exports. The significant difference between the OECD and NonOECD countries is captured in the regression analyses for the growth trends of newly emerging services exports. The distinct difference in associated factors contributing to information technology services exports is inferred along with differences in factors driving traditional and modern services exports. While traditional services exports are found to be influenced by merchandise exports and the real effective exchange rate, modern services exports are found to be affected by factors such as IT infrastructure, GDP growth or the income level. Growth in IT services exports is found to be insulated from the effects of both merchandise exports growth and GDP growth while growth in other business services exports depends on merchandise trade which may be explained by their role in supporting other activities.

iii

In the second part we study the IT and ITeS services sector in detail for India and compare India's experience with that of other developed and developing countries. India has seen phenomenal growth in IT services exports through the channels of offshoring and offshore outsourcing. Various policies have also been implemented to foster the growth of this sector. There is a common perception that an expansion in IT output and exports would not only help raise productivity and create employment but would also have wider ramifications for the overall economy through backward and forward linkages and increased domestic usage of IT sector output in other sectors of the economy. Inputoutput analysis for India, however, reveals that both backward and forward linkages between the IT sector and other sectors of the economy have been stagnant and declining over time. Regression analyses are undertaken to identify the factors important for greater IT services integration and IT

exports separately. The results reveal that better IT infrastructure, a supportive policy and regulatory environment, increased national income and improvements in higher education are key factors behind higher IT integration. Further, the empirical analysis shows that IT exports are facilitated by low taxes, low labour compensation, the size of the non-IT services sector and a colonial past (i.e., wherein a large pool of English speaking professionals makes a country ideal for sourcing cheaper IT inputs by cost saving UK and US firms). Factors like contract enforceability are found to be relatively less important.

The third part theoretically analyses a specific problem with respect to offshore outsourcing, namely: offshoring production to a destination with imperfectly known hidden costs. We try to analyse this issue at a micro (firm) level and obtain factors that are important for the firm in running a successful offshore professional relationship. These complement the macro factors that are obtained in the preceding parts of the thesis as contributors to IT services exports. It is found that at the firm level, uncertainty about hidden costs can play a crucial role in a client firm's decision to offshore and thereafter in choosing the offshoring destination. Starting with a Cournot duopoly model, a Bayesian game is constructed with signals of imperfect precision to analyse the strategic interaction between two firms in their decision to offshore. Information asymmetries with respect to the hidden costs across firms drive their strategic interaction and may also lead to herding in the choice of offshore destinations.

iv

The main findings of the thesis can be summarized as follows. There is a distinct difference in the factors that facilitate the growth of newly emerging services exports versus traditional services exports and there is also a distinct difference in the growth trends for services exports, especially emerging services exports between OECD and Non-OECD countries. Offshore outsourcing which is an increasingly important source of services exports for many developing countries is facilitated by low labour costs, tax holidays and a large pool of English speaking labour force. In order for countries endowed with these attributes to emerge as lucrative offshoring destinations, there is a need to influence perceptions about hidden costs associated with offshoring by signalling the presence of a conducive business environment and by ensuring political stability. To complement this at the firm level, reputation derived by successful delivery of projects in the past, successful partnership with MNCs, global presence and a reputation of abiding by contract norms can play an important role in signalling low hidden costs. This helps in building a credible professional relationship by convincing clients about the abilities of the offshore business partner. It is also found that perceptions about increased domestic productivity in India owing to the growth of the IT sector have not materialized. IT integration is quite limited in India and is lower than that in other developed and developing nations. In order to improve IT integration, India requires better IT infrastructure, improvements in higher education, ability to adopt more sophisticated production techniques and a supportive regulatory environment.

In sum, the thesis highlights the importance of both country-level macroeconomic factors as well as firm and industry level microeconomic factors which influence exports of emerging services such as IT and BPO services. Thus, complementary policy initiatives are required at the macro and micro levels to foster growth in this sector. In addition, spillovers and productivity gains from IT services cannot be presumed with a highly export-oriented IT services sector. Linkages with the rest of the economy may remain limited unless specific policies are undertaken to develop supporting input industries such as IT hardware and electronics and to increase domestic demand for such services.