

Firm Participation, Learning and Innovation in Heterogenous Value Chains of IT-enabled Services

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Summary

Global value chains (GVCs) are a reflection of the increasing interconnectedness of economies. Many firms delegate their non-core activities to external firms in the country (outsourcing) or to captive or external firms abroad (offshoring or offshore outsourcing respectively). The fragmentation of production processes allows developing countries to participate in GVCs without having to develop the full range of capabilities of the chain. The most recent wave of GVCs concerns the outsourcing and offshoring of information technology-enabled services (ITES), referring to services that can be delivered at distance using IT in the delivery process. Developing countries have increasingly become offshore destinations for these services, as their governments have begun to develop their ITES industry to take advantage of the opportunities presented by participation in GVCs, such as job creation, access to new markets and potential learning benefits. However, competing in value chains at the global level appears challenging for less developed countries, and recent studies suggest that participation in value chains at the national or regional market level may offer more feasible business prospects. Furthermore, firms that participate in GVCs need to continuously learn to enhance their competitiveness. This raises questions about the learning mechanisms available, in particular, the role of value chain client learning and the role of the national innovation system (NIS) (i.e. how actors, linkages and institutions within a country contribute to knowledge development). Understanding how developing countries can successfully participate in GVCs has become an important subject for policy makers and forms the fundamental question that motivates this thesis.

In this respect, the aim of this dissertation is to shed light on the case of the South African ITES sector, for which empirical evidence remains scant. In particular, it analyses the characteristics and drivers of firm participation in local, regional and global value chains of ITES, and the mechanisms of firm learning and innovation. To this end, qualitative and quantitative data were collected through interviews and a questionnaire survey, respectively. Interviews were held with 47 third-party ITES providers and with 35 industry stakeholders. A firm level survey was conducted, yielding information on 76 South African based third-party (non-captive) ITES providers. The mixed methods approach allows for the triangulation of the research findings and for the research objectives to be examined from a more holistic perspective.

The findings show that service providers in South Africa not only serve clients in offshore markets (e.g. in the UK or Australia) (engage in GVCs), but also serve clients in the domestic and regional markets (e.g. in Namibia or Kenya), connecting these

service providers to local and regional value chains respectively (engage in LVCs and RVCs). A gradual international market development pattern is observed for (mainly) South African firms that start in LVCs, and gradually expand into RVCs and or GVCs. Participation in GVCs is associated with ISO compliance, membership of an industry association, affiliation to a foreign corporate group, and skills intensity. Findings suggest that ISO standards and involvement in networks, such as affiliation to a foreign group or an industry association, may not be as common in LVCs and RVCs as in the case of GVCs. The lack of information on business opportunities and clients, and not having connections overseas to secure partnerships are the main self-perceived obstacles to GVC participation. Overall, in addition to quality standards associated with GVC participation, the importance of accessing international market knowledge and connecting to clients (e.g. through industry bodies, group affiliation or managerial experience) needs to be emphasized as well.

The analyses on the mechanisms of learning in value chains and innovation show that governance structures between the client firm and service provider, especially relations based on trust and partnership, positively influence learning in various fields and across all value chains. Relations based on forms of control and monitoring by the client firm facilitate learning only in the field of IT, and only in GVCs. Client learning (especially IT learning) is positively associated with the introduction of new to the market innovations. A positive relation also exists between new-to-market innovation and for learning through the innovation system. GVC participation is thus not the only vehicle for capability building for innovation, and VC learning fostering innovation is also evident for firms active in LVCs and RVCs.

GVC participation, in conjunction with firm resources and NIS learning, also create useful learning avenues beyond strict innovation outcomes, such as the development of a service delivery competence (i.e. knowledge of the service, industry, and client requirements). Overall, firms in RVCs and LVCs report fewer immediate learning effects, especially with regard to the transfer of human resources from clients compared to firms in GVCs and rely more heavily on (constrained) internal firm resources. Finally, multiple feedback loops exist between the NIS and GVC participation with regard to their role in capacity building at the firm level and in the wider ITES sector.

Overall, the dissertation conveys the message that rather than focusing only on the offshoring of services from firms in developed countries to firms in developing countries (considered in the literature as the current wave of GVCs), attention should be paid to heterogeneous value chains of ITES, and what these different value chains imply for developing country firms. LVCs and RVCs allow firms to enter the ITES sector and could potentially provide a space for learning for domestic firms that seek

to upgrade to GVCs. To assist these firms in the development of capabilities and potential inter-chain upgrading, a stronger NIS is required. A major conclusion of this dissertation is that learning in value chains and learning from the NIS are both important for capability building at the firm level. From a policy perspective, strengthening the NIS is key to tackle current challenges facing the South African ITES sector (e.g. shortages of skills and lack of industry interactions) and can positively influence the development of firms' internal resources, promote GVC participation, and facilitate learning in GVCs.