

# Essays on technical change and efficiency in a transition economy

Citation for published version (APA):

Pham, N. Q. (2022). *Essays on technical change and efficiency in a transition economy: the case of Vietnam*. [Doctoral Thesis, Maastricht University]. Boekenplan. <https://doi.org/10.26481/dis.20220428pn>

## Document status and date:

Published: 01/01/2022

## DOI:

[10.26481/dis.20220428pn](https://doi.org/10.26481/dis.20220428pn)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

# Summary

*Doi Moi*, a Vietnamese term meaning “*renovation*” marked the beginning of Viet Nam’s transition from a centrally planned to a more market-driven economy. Initiated in 1986, *Doi Moi* became a major phenomenon in Viet Nam during 1986–1990. Its main aim was to transform the country’s entire economic system, which involved ownership transformation where state-owned enterprises were reformed and privatized, financial liberalization which allowed foreign investment from overseas, and trade opening - which were important driving forces for growth. This thesis comprises five essays investigating the roles of technical change and efficiency that make these driving forces of the economic growth of Viet Nam more likely.

The history of the Vietnamese economy has been a continuous historical process, in which many policies, be they dictated by the economic conditions or dominated by ideological views, had a substantial influence on economic development. Our studies strongly support the evolution of the Vietnamese economy as a bottom-up process, in which the ideological viewpoint of the role of state-lead development still holds today. However, the poor performance of SOEs does not provide evidence in support of the current SOE reform giving the leading role to the state sector.

Thus, to understand how the ownership transformation could contribute better to economic growth and hence further accelerate the efficiency of the economy, our investigation on the optimal choice of privatization shows that mass and rapid privatization (as opposed to the current gradual approach) does contribute to welfare improvement, and in the long run, such privatization will lead to skill shortages in the economy. This suggests that the current skill situation of Viet Nam’s labour force might become a ‘bottleneck’ for Viet Nam’s economic growth. Viet Nam needs to improve her current technical and vocational education and training system to match the demands of the labour market.

Acknowledging that the FDI inflows boost exports and then economic growth, during the last twenty years, Viet Nam’s policies on foreign investment have been conducted on these grounds. However, our results indicate that Viet Nam should shift the focus from the quantity towards the quality of FDI. Trying to find some evidence on the efficiency impact of FDI in Viet Nam, we investigate both the intra-industry and the inter-industry linkages for both the manufacturing and the service sectors. Our results indicate that backward spillovers tend to be important, though there is little evidence of spillovers in the case of services sectors.

Along with ownership transformation and financial liberalization, *Doi Moi* has accelerated trade opening as never before. Our study on the economic history of Viet

Nam shows that integration in the international market was inevitable. Being deeply integrated into the world economy raises the issue of international competition between Viet Nam and other countries. To address the relationship between innovating and exporting performance, the thesis uses firm-level data for Viet Nam and introduces three indicators capturing innovation: product, process, and modification. Moreover, it provides relevant insights that can assist policymakers in dealing with the method of privatization. Our results indicate that on top of the comparative advantages that push Vietnamese exports, a policy to encourage innovation activities by SMEs should be in place. This makes sense in an SME-dominant economy that is integrating into the global market via international trade. Furthermore, the government should pay particular attention in its innovation strategy to the breakdown of innovation into the development of new products, the adoption of new production process/technology, and the modification of existing products.

Finally, our results highlight opportunities and barriers in applying a particular process innovation in rice cultivation, the so-called Large-scale Field Model. This makes sense in an agrarian economy, which is integrating into the global market via international trade, as adoption of this process innovation can have significant welfare effects.