

Wholesalers, wholesale markets, and symbiosis with the emerging logistics sector



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Introduction

This paper is a summary review of empirical knowledge about wholesalers and wholesale markets in symbiosis with 3PLS (third party logistics) in developing regions and the implications for policy.

The primary geographic focus is on developing and emerging market economies (Africa, Asia, Central and Eastern Europe, and Latin America), but also provides a comparison with the evidence regarding the evolution and roles 3PLS and wholesale markets in agrifood value chain development in the United States and Western Europe.

Our review on this subject is timely given that the midstream segments of output value chains have been identified as an important theme about which there is inadequate research and policy debate (Barrett et al. 2022) despite their importance to consumers and farmers. A crucial segment of the midstream is the wholesale sector. Estimates are that much, if not most, produce is handled by wholesalers and wholesale markets in developing regions.

Moreover, there has been growth and then transformation of the wholesale sector with urbanization and emerging modernization of retail as well as impacts of important public investments and regulatory policies. Finally, there remain important policy challenges and research gaps related to this topic that are an urgent agenda over the next decade - and beyond.

The central theme(s) of the review: policy implications and priorities for future research

In the following we outline the central themes of the review. In the discussion of each theme, we review existing literature including studies and analyses of implications, literature focusing on key policy debates related to that theme, and our own assessment of gaps in the empirical and food policy debates related to each theme.

For the discussion of each theme, we treat and distinguish the “micro versus meso”, that is, (1) wholesalers as individual firms in the wholesale sector versus (2) wholesale markets that comprise clusters of rural or urban wholesalers. We subsequently review (3) how these operate in symbiosis with third-party logistics (3PLS).

These three lenses are necessary for several reasons. On the one hand, the empirical literature on wholesale markets has frequently treated these as three separate themes (as in a firm versus a cluster of firms) but also related (as in wholesale markets conditioning individual wholesaler actions and performance).

On the other hand, policies and policy debates have also often treated wholesalers as firms or sector and wholesale markets as separate but related issues. They have treated individual traders or traders as a set in assessing the motivations and performance of wholesalers (such as in hypothesizing “exploitative traders” or in taxing individual traders) or in regulating for example the highway transit and security of wholesalers. But policies and policy debates have also treated wholesale markets per se (such as regarding licensing of traders and regulating (or deregulating) food trade to pass only via official wholesale markets, which have been major issues in India and Turkey, for instance).

The structure of the themes in the review is informed by our perception of the policy issues and the evolution of the empirical literature. The review is further inspired by Macchiavello et al. (2022) who distinguish between two strands of literature: (1) structure and conduct transformation of food value chains; and (2) empirical industrial organization (studying market performance issues). These strands have been “two ships passing in the night” and need to cross-pollinate and be discussed jointly. We thus take these two poles as the main themes of the review and, subsequently, detail a range of sub-themes and policy issues related to each theme.

Theme 1: Structural and conduct transformation of the wholesale sector: empirical studies, food policy implications, and gaps in research

Here we give a sketch of the main points and subthemes that will be treated in depth in a review paper.

First, there has been a line of work that analyzed the changes in structure of the wholesale sector - including diffusion of wholesalers and wholesale markets driven by urbanization, public investments, and “crowding in” of MSMEs into wholesale in the past several decades. Reardon et al. (2021) briefly review the broad trends and note that there have been two parallel processes of diffusion and transformation. On the one hand, there has been a spread of wholesale markets and a rise in their total volume, propelled by policies of substantial public investments (such as in China, Ahmadi-Esfahani et al. (1998) and in Ethiopia (Minten et al., 2014). Over time this has been followed by concentration over wholesale markets and an eventual reduction of the share of wholesale markets in the food economy as rising supermarkets being to disintermediate and buy direct from agribusinesses such as in Mexico.

On the other hand, there has been a proliferation of MSME wholesalers as food supply chains grew in volume and length with urbanization. These MSMEs trade in the spot market with only incipient quality differentiation and relational contracts. Over time this sector has begun to transform with “modernized wholesalers” or “specialized/dedicated wholesalers” that instituted contracts with farmers and differentiated quality per norms imposed by modern retail and processing clients, as, for example, in Mexico (Hernández et al. 2015) and China (Michelson et al. 2018).

The available evidence on this subtheme points out that there has been a primacy of food policies and public investments in supporting the development of wholesale markets and the spread of wholesalers towards more attention for addressing increasing market concentration in the downstream of the value chain which is affecting the functioning and organization of the wholesale sector.

Second, there has been a line of work that analyzed changes in the conduct of the wholesale sector. One line of analysis here focuses on changes in wholesalers’ institutional/commercial relations with farmers. An example in this context is work showing the demise of tied credit-output market relations between rice traders and farmers in various countries in Asia.

That work shows a mix of behavioral and organizational changes with the rise of “disintermediation” by wholesalers, sidestepping traditional village brokers and using their bases in secondary and tertiary city wholesale markets, plus the use of third-party logistics (3PLS) to source directly from farmers (Reardon et al., 2014).

Another line of research focuses on technological and commercial responses to various shocks such as climate risks (see e.g., Liverpool-Tasie and Parkhi, 2021 for the case of Nigeria) and disease outbreaks such as COVID-19 (see e.g., Narayanan and Saha, 2021 for India and Liverpool- Tasie et al. 2021b for the case of 3PLS in Nigeria). Commercial practice change and technology change are similar behavioral choices as noted by Barrett et al. (2010).

Theme 2: Empirical industrial organization of the wholesale sector

Empirical industrial organization studies focus on market functioning related to market power such as of monopoly, monopsony, and oligopsony; vertical bargaining of value chain contracts (both formal and relational); and the ways in which policies such as market regulations and infrastructure investments affect market performance. There have been a rich set of studies on these themes over several decades on wholesalers and wholesale markets, and intense related policy debates.

First, there has been a rich strand of literature on institutional constraints to market development and competitive, efficient performance. One part of this literature emphasizes the ways in which organizations constraints hobble

market development (see e.g., Fafchamps, 2004 on Africa). There have also been some reviews of competition and margins among wholesalers, such as the review for Africa by Dillon and Dambro (2017). This work has strong policy implications on how public investments in hard and soft infrastructure and regulations can affect competition and efficiency of the sector.

Another part of this literature focuses on how specific policy interventions and available infrastructure condition the degree of competition between and, hence, trade margins for wholesalers. In some studies, such as in Madagascar by Barrett (1997), the focus is on how general market policies such as liberalization can crowd in wholesalers without reducing trade margins, or how wholesale market regulations can have perverse effects on trade margins (see e.g., Minten et al. 2012 for the case of India). Other lines of work explore the effects of transportation costs and scale of trader operations on profit margins (e.g., Fafchamps et al., 2008, and Minten and Kyle, 1999). This latter work can be seen to be in the same family as the strand of work on wholesale market price integration as a function for example of transport costs and regulations (e.g., Moser et al. 2009).

Second, there has been a line of literature analyzing the effects of wholesale market regulation and deregulation on trader margins. This has been an intense debate in India, for example, regarding the “mandi reform” and delicensing (Chand, 2012). In Turkey, such a debate has taken place regarding how the rise of supermarkets influenced the outcomes of reforms of wholesale markets (Lemeilleur and Codron, 2011).

Research gaps and agenda

The review identifies research gaps in the sections of the themes above and then proposes a policy and research agenda in the concluding section.

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