

## APPENDIX B

### Background to the Selection of Trade-Related Indicators

Trade policy can take many different forms: tariffs, quotas, nonautomatic licensing, antidumping duties, countervailing duties, tariff-quotas, subsidies, and so forth. As widely shown in the literature, reforms related to traditional trade policy (border controls on trade in goods and regulations of services) can help accelerate integration into the world economy and strengthen an effective growth strategy. However, they cannot ensure its success (World Bank 2006b, chapter 2). Other elements that may constrain trade (and by extension, growth) need to be highlighted, including (i) a country's access to the global economy, (ii) the overall business and institutional environment, and (iii) trade facilitation (mainly for customs and other logistics, but also selected infrastructure and skills).

Access to global markets for the goods produced by the world's poor, such as agricultural products and textiles and apparel, is reflected in the database. The problems of escalating tariffs, tariff peaks, and quota arrangements that systematically limit market access and skew incentives against adding value by poor countries are also examined to the extent allowed by data availability.

Including the behind-the-border reform agenda implies that the set of relevant variables affecting trade outcomes is potentially very large. For example, it may be argued that any policy that affects how businesses operate domestically may also affect whether, and how much, they export and import. Some of these factors may have a disproportionate effect on trading firms versus nontrading ones. Foreign firms may face higher transactions costs in a poor governance environment than local firms because the latter may be able to use informal methods to do business. These differential effects, however, are often hard to quantify. The indicators chosen for the WTI are wider than what would normally be thought of as pure trade policy, but include as much as possible those with close links to international trade, as highlighted in the literature. While a full literature survey is not provided here, some empirical work supporting the choice of certain indicators is mentioned below. Regulations on business and commerce and the general state of governance are believed to play a significant role in hampering or promoting trade (Bolaky and Freund 2004; de Groot and others 2004; Anderson and Marcouillier 2002; Dollar and

Kraay 2003; Levchenko 2004; Souva and Rowan 2005; Islam and Reshef 2006).<sup>1</sup> The quality and performance of logistics services also have a significant effect on trade competitiveness (Hausman, Lee, and Subramanian 2005; Limão and Venables 2001; Subramanian and Arnold 2001).<sup>2</sup>

Qualitative, subjective, or perception indicators from non-Bank surveys have been excluded from this project due to the difficulty in assessing their methodology and validity. Also, the Bank's qualitative trade ratings that originate from the Bank country economists and are part of the annual Country Policy and Institutional Assessment exercise have been excluded for similar reasons as well as due to the existing publication restrictions of such indicators for non-IDA countries.

Within each broad category of indicators, a representative indicator has been identified to highlight the salient features of policy/outcome evolution, based on a qualitative judgment by the project's team about its methodological robustness, relevance to policy makers, and theoretical linkages among groups and within groups. The choice of highlighting representative indicators rather than constructing composite indicators had been originally made mainly for purposes of transparency and simplicity. Nonetheless, for all categories, the preselected representative indicators turned out to be highly correlated with composite category indexes, which the project team estimated on a previous dataset (updated through June 2007) following the standard principal component analysis (PCA) methodology.<sup>3</sup>

Another notable feature of these indicators is that the trade policy, business, and trade facilitation indicators appear significantly correlated across these same groups. This is not surprising, as it would be expected that a country committed to trade integration in the global economy would have a liberal trade policy regime, a favorable business and institutional environment, and good trade facilitation. Nonetheless, the only mild degree of such correlations is also reassuring, as it provides evidence that each group offers valuable information not fully embedded elsewhere.