The Incidence of Tariffs

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Introduction

A period of decreasing poverty and income inequality across countries during the last three decades was accompanied with a trend of increasing within-country inequality (Atkinson, Piketty and Saez 2011; Lakner and Milanovic 2016). The growing concentration of income at the top end of the distribution combined with the declining share of labor relative to that of capital in national income was associated with a pronounced rise in within-country inequality not only in many advanced economies but also in emerging and developing economies. This period was also characterized by the intensifying interconnectedness of the global economy, the expansion of international trade flows, significant trade liberalization efforts and the expansion of global value chains. The two coinciding trends sparked a heated debate on the contribution of globalization and trade to poverty and inequality.

The channels through which international trade affects poverty and income inequality are numerous. A widely accepted presumption is that trade can be a source of economic growth and as a result, an engine of development and poverty reduction (Winters and Martuscelli 2014). Trade allows countries to specialize in the production of goods and services which they can produce most efficiently and leads to better allocation of limited resources. Trade can contribute to the rise of economies of scale and scope and pro-competitive effects. Trade can also result in lower prices, a wider variety of goods and services available to consumers and new employment opportunities. Trade can facilitate the cross-border transfer of technologies, encourage innovation and help developing countries close their observed productivity gaps (Bustos 2011; Bloom, Draca and Van Reenen 2016). However, the existing literature also highlights numerous channels through which trade can adversely influence poverty and inequality (Goldberg and Pavcnik 2016; Pavcnik 2017). Trade can result in greater competition in import competing sectors and if these are intensive in unskilled labor, put a downward pressure on the wages of the unskilled and even result in loss of employment in these sectors (Autor, Dorn and Hanson, 2013; Pierce and Schott 2016). If trade favors the adoption of skill-biased technologies, it could exacerbate the downward pressure on the wages of unskilled workers (Burstein, Cravino and Vogel 2013). Market failures (e.g. if the poor are in remote locations and disconnected from markets; have limited access to finance; labor market frictions), may mean that the gains from trade do not reach the poorest segments of the population (Atkin and Donaldson 2015; Goldberg and Pavcnik 2003; World Bank and WTO 2017).

Given these numerous channels, the existing empirical evidence does not capture a systematic relationship between trade and poverty/inequality. As a result, the question whether trade is beneficial for the reduction of poverty and inequality remains an empirical one and the overall impact is found to be highly context specific. The outcome depends on the degree and nature of the trade shocks, the industry and the location in which these occur, the skill composition of workers in liberalized industries, broader economic conditions and the presence of market failures. In this context, the biggest challenge faced by policy makers is to define and adapt policies that boost the pro-growth effects of trade while minimizing the adverse effects of trade on vulnerable population groups and maximize the poor's benefits from the economic opportunities created by trade.

At the moment, we have little to no information available about the incidence of existing trade policies for households at across income distribution. Key questions for which we lack answers include: Are existing trade policies progressive or regressive? Do the poor bear a disproportionate burden of trade policy distortions already in place? How do countries compare against each other? If trade policies are

regressive, what would be the policy changes that could tilt the playing field in favor of pro-growth and pro-poor aspects of trade?

Database on the incidence of tariffs

Despite the vast and ever-growing body of economic literature that explores the distributional and poverty impacts of trade and trade policies, information and studies on the incidence of trade policies is scarce. The few existing studies make use of household survey data available for some countries to account for the heterogeneity in consumption expenditures and earnings of households across the income distribution and assess the incidence of trade policies. Furman, Russ and Shambaugh (2017), for instance, show that U.S. tariffs tend to be regressive, i.e. higher, on average, on goods where low-income households concentrate their expenditure. They estimate that the burden of U.S. tariffs on the bottom 10^{th} percentile of households is more than five times higher than at the top 10^{th} percentile. In contrast, Nicita, Olarreaga and Porto (2014) estimate that for their sample of six Sub-Saharan Africa countries, existing trade policies benefit poor households more than rich households. This is because protectionist measures in place increase the price of goods sold by the poor, compensating for the decline in purchasing powers and the strong Stolper-Samuelson effect which tends to favor skilled labor. Systematic, cross-country studies on the incidence of trade policies on consumers do not exist.

In this context, the main objective of this paper is to develop a comprehensive, cross-country database on the incidence of tariffs for households across the income distribution. We match household survey data on expenditures with data on tariffs at the detailed level. Key data sources used are the following: an extensive set of household surveys from the World Bank and tariffs and trade data from the World Bank WITS database.

Household surveys for 107+ countries capture detailed information on the structure of household expenditures. The surveys cover 19 advanced economies, 67 emerging and developing economies and 21 low income countries, accounting for about 6 billion of the world's population. The household surveys differentiate between 108 different categories of consumption goods and services and provide considerable detail on agricultural products that contribute a large share of the consumption expenditure of the poor.

In a first step, we develop a correspondence between the product classification of the household surveys and the Harmonized System (HS6 2012) – the classification at which tariffs and trade data are defined. In a next step, by combining detailed product-level information on tariffs, imports and household consumption shares, we estimate average tariffs faced by households across the income distribution and develop different measures of the regressivity/progressivity of tariffs (Kakwani Index, Gini index, Concentration index). Results show that, in most countries, tariffs are regressive and poor households bear a disproportionately higher burden of these policies than rich ones.

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