

# Age, Linguistic Distance and Export Market Demand Learning: The Case of Colombia

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## What Is the Issue?

A growing empirical literature has documented that demand-learning is an important determinant of export market survival and growth. In this case study, we ask whether there is demand-learning among Colombian exporters and if so, do language and distance to the export market affect demand-learning rates? We contribute to the literature by examining whether there is a relationship between demand learning, linguistic and geographic distance. Colombia is an interesting example as the country has signed 12 free trade agreements since 2000 ([MINCIT and y Turismo, 2018](#)), which enabled exports to increase from 10 billion dollars in 1995 to 37 billion dollars in 2017 ([DANE, 2018](#)). From 1992 to 2008, the share of global exports from middle and low-income countries more than doubled from 21 to 43% ([Hanson, 2012](#)). It is expected that by the middle of the century, trade with developing countries will overtake trade between developed countries ([Hanson, 2012](#)). As firms from emerging economies become increasingly important players in the global marketplace, it is imperative to understand the factors that determine their success and failures in export markets. Finally, the signing of a peace deal with FARC (Revolutionary Armed Forces of Colombia) rebels in 2016 put an end to a 50 years civil war. As it becomes safer to trade with other countries, there is significant potential for economic growth through international trade. In fact, between July 2017 and July 2018, Colombian exports grew by 15% ([DANE, 2018](#)). Colombia is a trading partner with Canada. Canada and Colombia have Free Trade Agreement (FTA) that was signed in 2008 and enforced in 2011. In 2019, Canada's total export to Colombia was \$935,742,635, and more than 50% of the exports are in agri-food. Canada's food processing sector exported \$38,150,783 of processed food in 2019, which accounts for 0.10% of food manufacturing's export ([Gov, 2020](#)).

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## What Did the Study Find?

We find that firms exporting to countries with a high common language index update their beliefs more in the face of a positive demand shock than firms exporting to countries with different languages. In line with [Eaton et al. \(2008\)](#), our results suggest that firms exporting into nearby markets may be more uncertain about their profitability and thus react more to shocks. Evidence of demand learning can have important policy implications. For instance, diplomatic relations and trade missions can help reduce the transaction costs of communication in terms of language and culture. By helping exporters develop relationships, policymakers can reduce uncertainty in the new market and promote demand learning from firms exporting to countries with different languages. Our results also suggest that 70% of Colombian exporters exit the export market within the first year. This finding is consistent with [Berman, Rebeyrol, and Vicard \(2019\)](#); [Eaton et al. \(2014\)](#); [Timoshenko \(2015\)](#), among others. For example, [Eaton et al. \(2007\)](#) find that nearly half of Colombian firms who started exporting in 1997 stopped the following year. Firms that survive beyond the first year grow rapidly, increasing the volume of exports by 60% from age 1 to age 10. Firms that experience positive demand shocks expand and export larger volumes in subsequent periods. In line with the age-dependence hypothesis, older exporters update their quantity exported in the following periods by smaller amounts than younger firms. Policies that help young firms to avoid early exit can be welfare enhancing ([Arkolakis, Papageorgiou, and Timoshenko, 2018](#)). [Arkolakis, Papageorgiou, and Timoshenko \(2018\)](#) find that age-dependent subsidies financed through lump-sum taxation lead to an initial decline in welfare and an increase in the long-run as they prevent young firms who should survive under full information from exiting because of adverse demand shocks early on. “In particular, age-dependent subsidies allow young firms to avoid early exit and thus to benefit consumers through access to a larger number of varieties” ([Arkolakis, Papageorgiou, and Timoshenko, 2018](#)). This is particularly important for the small and medium enterprises that are characterized by constraints in international operations because of their limited financial, marketing and managerial resources. However, in the absence of learning, such policies are not welfare-enhancing ([Arkolakis, Papageorgiou, and Timoshenko, 2018](#)).

## How was the Study Conducted?

We use a unique transaction-level dataset from Colombian Customs that contains information on the value and quantity of exports by firms to various destinations. Transaction-level data allows us to examine firm behaviour over time and to identify firm beliefs from destination and firm-specific characteristics. To assess whether demand learning is present among Colombian exporters, we follow a two-step estimation strategy that allows us to identify firms’ beliefs, or conditional expectation of demand in future periods, and how beliefs change as firms receive new signals about demand in the foreign market ([Berman, Rebeyrol, and Vicard, 2019](#)). To do so, we control for time-varying supply-side characteristics (i.e., productivity and marginal cost changes) and destination-specific costs (i.e., transportation costs). Once we identify firms’ beliefs, we examine how beliefs change as firms: 1) export to destinations with higher linguistic and geographic distance; and 2) get older.

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