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Does trade globalization induce or inhibit corporate transparency? Unbundling the growth potential and product market competition channels

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ABSTRACT

Trade globalization may affect corporate transparency via multiple channels, with potentially opposite signs. We aim to empirically disentangle these channels by tracking evolution of corporate transparency for 4061 listed firms in tradable sectors in 49 countries during 1992–2005. By using detailed tariff schedules, we measure changes in growth opportunities and product market competition enabled by foreign and domestic trade liberalizations, respectively. On the one hand, higher growth opportunities engendered by foreign trade reforms are disproportionately associated with better corporate transparency in industries that depend more heavily on external financing. On the other hand, greater product market competition engendered by domestic tariff reductions has no significant impact on corporate transparency.

1. Introduction

World trade has been growing faster than world GDP during the last three decades. The strong growth of cross-border trade results from multiple sources. Some of the reductions in trade barriers come from multi-lateral trade negotiations under the auspices of the World Trade Organization/GATT. An example is the termination of import quotas on textiles and garment products by the United States, Canada and the European Union in 1995 under the Multi-fiber Agreement and Textile and Clothing agreement. Some trade liberalizations come from regional free trade agreements. Two prominent examples are the formation of the North America Free Trade Area and the enlargement of the European Union to include some former Soviet bloc countries. But many other countries have formed regional trade blocs or are in the process of negotiating one. Finally, world trade also expands as a result of many unilateral trade reforms. Unilateral tariff cuts by China, Colombia, and India are examples in the last category. Because the rapid pace of trade globalization has significantly altered the business landscape that firms operate in, this paper studies its effect on corporate transparency.

The question would have been less interesting if trade globalization had a clearly defined uni-directional effect. However, in theory, freer trade in goods and services represents two different facets and can have ambiguous effects on corporate transparency. On the one hand, it generates more product market competition for firms (when home countries' barriers to imports are reduced). On the other hand, it also generates more growth opportunities (when partner countries' trade barriers are reduced).

The effect of greater product market competition on corporate transparency is itself ambiguous. When there is no cost of disclosure, high quality firms may want to disclose to distinguish themselves from lower quality competitors, resulting in full disclosure (see Grossman and Hart, 1980). But as argued in Verrecchia (1983), there could be proprietary cost of disclosure, and firms may want to hide some information from competitors. In the end, the predictions will vary with the structure of the market and the relative benefits and costs to the discloser, the competitors, and financial investors (see Verrecchia, 1990).

Greater trade globalization also enhances firms' growth opportunities by reducing barriers to exports to foreign markets. The effect of greater growth opportunities on corporate transparency is less controversial. The literature generally concludes that the effect is positive. For example, Durnev and Kim (2005) find that firms' disclosure practices are positively related to growth opportunities and need for external financing, for a cross-section of 500 international firms in year 2001. A standing

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challenge in this literature, however, is to find exogenous measures of growth opportunities, as discussed in Durnev and Kim (2005).[1]

Rather than estimating a single net effect of trade liberalization on corporate transparency, we estimate separate effects from greater product market competition (through reductions in home country trade barriers) and those from greater growth opportunities (through reductions in export barriers to foreign markets). We examine the effect of trade liberalization on corporate transparency for 4061 firms in 49 countries during 1992–2005. On the effects of product market competition, we find more competition has no significant impacts on corporate transparency. On the effects of export growth potential, we find strong evidence that more foreign trade liberalization disproportionately leads to more firm transparency in industries that depend heavily on external financing. These different results suggest that it is important to unbundle these effects in an empirical strategy.

A key contribution of this paper is to identify a relatively exogenous source of variation in firms' growth potential, namely, changes in foreign trade barriers at the sector-country-year level (due to changes in foreign government policies). In empirical work, growth potential is often measured by a market-to-book ratio. But this measure suffers from the issue of endogeneity. For instance, one may observe a positive association between transparency and market-to-book ratio, but the direction of causality can go from transparency to growth.[2] To mitigate the endogeneity concerns, some studies have also used lagged sales or similar measures to proxy for growth opportunities (e.g., Khanna et al., 2004; Durnev and Kim, 2005). But lagged sales and corporate transparency may still be simultaneously affected by unobservable firm characteristics. Alternative measures of growth opportunity at the sector level have since been proposed: Fisman and Love (2004) use US sectoral growth, while Bekaert et al. (2007) use the global sectoral price-to-earnings ratio.

Compared with these existing measures of growth opportunities, our new measure of growth opportunities — changes in foreign tariffs — has the following advantages. First, foreign trade liberalization represents an unambiguously favorable shock to a firm because it raises the firm's future profitability, but is relatively exogenous to any particular firm's disclosure behavior, as it results from policy changes in foreign countries.[3] Second, foreign trade liberalization is an important source of improving growth potential for firms around the world. As mentioned earlier, trade globalization has been taking place at a rapid speed during the last three decades, through unilateral liberalization, regional trade agreements, and multilateral trade liberalization. Third, tariff rates are available at a highly disaggregated level across products, countries and years. There are over 5000 products by the Harmonious System 6-digit classification. Even after some aggregation to match other variables, this sector classification is still much finer than is typical in the literature, and is standardized across all countries. This disaggregated country-sector-year variation will be particularly useful for our identification strategy. For example, trade and financial liberalization may occur simultaneously, but financial liberalization generally varies by country and year rather than at a highly disaggregated level.

We then further interact this growth opportunity shock with a particular dimension of firm heterogeneity in terms of their intrinsic dependence on external finance, whose construction follows the methodology developed by Rajan and Zingales (1998) (but at a more disaggregated SIC 4-digit sector classification). By focusing on this relatively exogenous source of growth potential, and examining differential effects of this shock on firms with different degrees of reliance on external finance, we can shed more light on the causal effect of growth potential on firms' corporate transparency. This framework also helps us to more directly test the paper's key hypothesis: a reduction in trading partners' tariff rates improves firms' growth opportunities, which may induce firms to improve transparency if they need to rely on external financing to expand operations so as to exploit the increased growth opportunities.

Our measure of domestic trade barriers also provides a more direct measure of product market competition. Empirically, product market competition is often measured by an industry concentration ratio, such as by the Herfindahl–Hirschman Index. However, because the concentration ratio is an endogenous outcome variable, its connection with the degree of competition is ambiguous.[4] As Guadalupe and Perez-Gonzales (2011) point out, "the general merchandise industry is highly concentrated around industry leaders, such as Wal-Mart and Target, and at the same time extremely competitive." The take-away point is that a direct measure of barriers to entry is preferred to an indirect measure such as industry concentration ratio.[5]

Our dependent variable — corporate transparency — conceptually refers to availability of firm-specific information to outside investors. Following Bushman et al. (2004), it includes the effects of "corporate reporting, private information acquisition and information dissemination." In order to capture this broad concept, we do not rely on any single indicator and instead employ three different measures that complement each other.

The first is an outcome-based metric, namely, the average accuracy of earnings forecasts by stock analysts (conditional on other factors that may also affect forecasting accuracy). The basic idea is that, other things equal, better corporate transparency should allow analysts to make accurate forecasts. The same variable has been used in the earlier literature to gauge corporate transparency (e.g., Lang et al., 2003, 2012). As Lang et al. (2012) put it: "The accuracy of their (analyst) forecasts is likely also a function of the transparency of the firm's information environment, including both the effects of their private information acquisition as well as firms' disclosure policies". Since a key to the validity of this measure is to hold other things equal, we follow the literature to control for variables that could directly affect accuracy of earnings forecasts such as firm size, ADR listing, and earnings volatility.[6] Our second and third measures are the degree of earnings management and the number of disclosed accounting items, respectively. These two measures look at the "input" side of transparency, or actions taken by firms, and serve as useful complements to earnings forecast accuracy. For example, this can alleviate concerns that an improved earnings forecast might be the result of greater earnings management instead of a true improvement in the quality of transparency.

As it turns out, for those firms that are more dependent on external financing, the reduction in trading partners' tariffs disproportionately improves forecast accuracy, reduces earnings management and

[1] For example, Durnev and Kim (2005) point out: "identifying truly exogenous parameters is difficult; therefore the results presented below must be interpreted with caution" (p. 1484).

[2] It is easy to think up a story that features reverse causality: a firm may choose to improve its corporate transparency for reasons unrelated to any change in growth potential, but such improvement should nonetheless help that firm to obtain more external financing and therefore to realize more growth. The market-to-book ratio rises as a result. Aside from reverse causality, both market-to-book ratio and a firm's transparency outcome could also be driven by a common third factor. Moreover, even at a conceptual level, the link between a firm's market-to-book ratio and its growth opportunity is weak (Erickson and Whited, 2000; Alti, 2003). Hence what we need is not merely an instrumental variable for market-to-book ratio, but a separate measure that can reasonably be linked to growth potential and is exogenous with regard to corporate transparency.

[3] Large firms from large countries may have influence on tariffs in foreign countries (Gawande et al., 2006). To increase our confidence that foreign tariff schedules are exogenous, we perform two robustness checks. First, we exclude from our sample those exporting firms from the G-7 countries (United Kingdom, Canada, France, Germany, Japan, and Italy) plus the two largest emerging market economies, China and India. Second, as an alternative, we also look at a sample of smaller firms from each country. In both cases, we obtain the same results as in the baseline.

[4] As Demsetz (1973) points out, in the absence of barriers to entry, "concentration of an industry's output in a few firms could only derive from their superiority in producing and marketing products." Baumol (1982) and Schmalensee (1989) hold the same view that a high concentration ratio does not necessarily reflect a low degree of competition.

[5] Xu (2012) uses US domestic tariffs to instrument import competition in the US market when examining the effect of import penetration on US firms' capital structure. Balakrishnan and Cohen (2011) also use the changes of US tariffs as exogenous shocks to examine how product competition affects the financial misreporting of US firms. We will instead examine the effect of import tariffs on corporate transparency in a cross-country setting.

[6] An American Depositary Receipt (ADR) is a negotiable security that represents securities of a non-US firm that trades in the US financial markets. Our time-varying firm-specific ADR variable is based on data from the Bank of New York.