

# Stock Market Liberalizations and Export Dynamics

## Online Appendix

Melise JAUD\*    Madina KUKENOVA†    Martin STRIEBORNY‡

This version: April 27, 2022

---

\*World Bank; E-Mail: [mjaud@worldbank.org](mailto:mjaud@worldbank.org)

†Webster University Geneva; E-Mail: [kukenova@webster.ch](mailto:kukenova@webster.ch)

‡University of Glasgow, Adam Smith Business School, Room 469, Main Building, University Avenue, Glasgow, G12 8QQ, United Kingdom. E-Mail: [martin.strieborny@glasgow.ac.uk](mailto:martin.strieborny@glasgow.ac.uk)

## Appendix A1: Stock Market Liberalizations - Country List

(some of the countries below do not enter our regressions due to the lack of data for some of the control variables)

**Domestic stock market opened up to foreign investors during 1980-1997:** Argentina, Bangladesh, Brazil, Chile, Colombia, Cote d'Ivoire, Ecuador, Egypt, Ghana, Greece, Iceland, India, Indonesia, Israel, Jamaica, Japan, Jordan, Kenya, Malaysia, Malta, Mauritius, Mexico, Morocco, New Zealand, Nigeria, Oman, Pakistan, Peru, Philippines, Portugal, Saudi Arabia, South Africa, South Korea, Spain, Sri Lanka, Thailand, Trinidad and Tobago, Tunisia, Turkey, Venezuela, and Zimbabwe.

**Domestic stock market opened up to foreign investors prior to 1980:** Australia, Austria, Barbados, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Singapore, Sweden, Switzerland, United Kingdom, and United States

**Domestic stock market remained closed to foreign investors until 1997:** Algeria, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Costa Rica, Dominican Republic, El Salvador, Fiji, Gabon, Gambia, Guatemala, Guyana, Haiti, Honduras, Iran, Kuwait, Madagascar, Malawi, Mali, Nepal, Nicaragua, Niger, Norway, Paraguay, Rwanda, Senegal, Sierra Leone, Syria, Togo, Uruguay, and Zambia.

## Appendix A2: Conceptual Foundations of the Distance to Comparative Advantage

The theoretical foundations for measuring distance between exported product’s factor intensity and exporting country’s factor endowment are based on the Heckscher-Ohlin theory of international trade. According to a long-standing idea within this theoretical framework, international trade in multiple commodities can be explained by a “product chain of comparative advantage” that ranks the products in order of their factor intensities. In a two-country model without factor price equalization, the relative factor endowments determine which end of this product chain comprises exports of a given country (Jones 1956-57, Bhagwati 1972). Deardorff (1979) extends the idea to a more realistic world of multiple products and multiple countries. In this higher-dimension case, the product chain of comparative advantage effectively breaks into several segments, one for each country. In particular, countries are arranged along the product chain in accordance with their relative factor endowments, with each country exporting the products within its own segment and importing all the others. Each country thus specializes in exporting products whose relative factor intensity broadly corresponds to the relative factor endowment of this country.<sup>1</sup>

Our approach should be seen as complementary to the literature examining the alternative Ricardian theory that stresses technology rather than factor endowments as a possible source of comparative advantage in international trade (Eaton and Kortum 2002, Costinot 2009, Costinot et al. 2012).<sup>2</sup> It would go beyond the scope of our paper to make a substantial contribution to the theoretical debate regarding the Ricardian and Heckscher-Ohlin sources of comparative advantage. Clearly, both workhorse models of international trade are important in our understanding of international trade flows. Our emphasis on factor endowments is a pragmatic decision motivated by data availability at a highly disaggregated level in a broad cross-country setting.<sup>3</sup> Any empirical work focusing on a particular source of comparative advantage might naturally be subject to omitted variable biases. Morrow (2010) makes an important contribution in this regard, showing that omitting Ricardian forces do not bias tests of the Heckscher-Ohlin model, at least in his data. At the same time, Morrow (2010) finds some evidence that ignoring Heckscher-Ohlin forces can lead to biased tests of the Ricardian model.<sup>4</sup>

---

<sup>1</sup> Like in the two-country case, this reasoning is valid only if factor price equalization does not hold and the world is thus divided into multiple diversification cones. In Heckscher-Ohlin framework with more products than production factors, equalization of factor prices would namely lead to indeterminacy of both production and trade (see also Dornbusch et al. 1980). More recent papers on diversification cones include Schott (2003, 2004) and Xiang (2007).

<sup>2</sup> Eaton and Kortum (2002) develop and quantify a modern Ricardian model of international trade with many countries, extending the seminal two-country model of Dornbusch et al. (1977). In principle, their framework can be combined with the factor endowment theory of comparative advantage by including other immobile factors of production than labour (Eaton and Kortum 2002, p. 1744). Costinot (2009) indeed develops a multifactor generalization of the Eaton-Kortum framework. However, the part of model in Costinot (2009) that focuses on factor endowment as the main source of comparative advantage is not quite identical with the Heckscher-Ohlin approach – e.g., it provides predictions on the cross-sectional variation of aggregate output rather than the factor content of trade. Costinot et al. (2012) further extend the modern Ricardian framework and quantitatively explore comparative advantage in a sample of 21 countries and 13 industries. Their framework could also be reconciled with factor endowment as the source of comparative advantage. However, the authors seem to prefer the Ricardian interpretation and also provide some evidence supporting it (Costinot et al. 2012, p. 597ff).

<sup>3</sup> Costinot et al. (2012) provide a modern interpretation of the revealed comparative advantage in the context of the Ricardian theory, testing it in a sample of 21 rich and middle-income countries and 13 broadly defined industries.

<sup>4</sup> To be fair, Morrow (2010) himself calls the evidence about potential bias in empirical work focusing on Ricardian comparative advantage “weak and mixed”. Costinot et al. (2012) show evidence for the orthogonality of Ricardian and Heckscher-Ohlin motives in their data, although this is not the main focus of their paper.

Some scholars recently stressed the different dimensions of institutional quality as another possible source of comparative advantage. Nunn and Trefler (2014) provide an overview of this literature. In our paper, we rely on a measure of comparative advantage that is linked to the multiple-products and multiple-countries version of the Heckscher-Ohlin theoretical framework through the concept of the chain of comparative advantage described above. We thus do not attempt to address the question of the relative importance of factor endowments versus institutional factors as driving forces of the comparative advantage in this paper.

#### **Additional references not cited in the main text**

- Costinot, Arnaud, 2009, "An Elementary Theory of Comparative Advantage," *Econometrica* 77(4), pp. 1165-1192.
- Costinot, Arnaud, Dave Donaldson, and Ivana Komunjer, 2012, "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," *Review of Economic Studies* 79, pp. 581-608.
- Dornbusch, Rudiger, Stanley Fischer, and Paul A. Samuelson, 1977, "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *American Economic Review* 67, pp. 823-839.
- Dornbusch, Rudiger, Stanley Fischer, and Paul A. Samuelson, 1980, "Heckscher-Ohlin Trade Theory with a Continuum of Goods," *Quarterly Journal of Economics* 95(2), pp. 203-224.
- Eaton, Jonathan, and Samuel Kortum, 2002, "Technology, Geography, and Trade," *Econometrica* 70(5), pp. 1741-1779.
- Morrow, Peter M., 2010, "Ricardian-Heckscher-Ohlin Comparative Advantage: Theory and Evidence," *Journal of International Economics* 82(2), pp. 137-151.
- Nunn, Nathan, and Daniel Trefler, 2014, "Domestic Institutions as a Source of Comparative Advantage," in Gopinath, Gita, Elhanan Helpman, and Kenneth Rogoff, eds.: *Handbook of International Economics, Volume 4* (Amsterdam, The Netherlands: North Holland).
- Schott, Peter K., 2003, "One Size Fits All? Heckscher-Ohlin Specialization in Global Production," *American Economic Review* 93(3), pp. 686-708.
- Schott, Peter K., 2004, "Across-Product Versus Within-Product Specialization in International Trade," *Quarterly Journal of Economics* 119(2), pp. 647-678.
- Xiang, Chong, 2007, "Diversification Cones, Trade Costs and Factor Market Linkages," *Journal of International Economics* 71, pp. 448-466.

### Appendix A3: Revealed Factor Intensities

Revealed factor intensities of product  $k$  are calculated as weighted averages of factor endowments of all countries that export this product. Let us take as an example the physical capital intensity. The relative country-level endowment with physical capital is captured by capital/labour ratio, i.e. by the physical capital per worker in a given country ( $\kappa = \frac{K}{L}$ ). The revealed physical capital intensity of good  $k$  is then calculated as:

$$\hat{\kappa}_{k,t} = \sum_c \omega_{ck,t} \kappa_{c,t},$$

where  $\kappa_{c,t}$  is country  $c$ 's capital/labour ratio at time  $t$ , and the weights  $\omega_{ck,t}$  represent the following variant of Balassa's index of revealed comparative advantage:

$$\omega_{ck,t} = \frac{X_{ck,t}/X_{c,t}}{\sum_c X_{ck,t}/X_{c,t}},$$

with  $X$  denoting exports.  $X_c$  represents value of all products exported from country  $c$  and  $X_{ck}$  is the value of exports of product  $k$  from country  $c$ . Weighting countries' factor endowments by the revealed comparative advantage rather than by the simple export shares allows us to account for distortions due to differences in countries' size. Hausmann, Hwang, and Rodrik (2007) and Cadot, Tumurchudur, and Shirotori (2009) provide numerical examples.

Intuitively, the weight  $\omega_{ck,t}$  will be higher for countries with a higher  $X_{ck,t}/X_{c,t}$  ratio, i.e. for countries where product  $k$  represents a higher share in the country's overall exports. Consequently, the more a given country specializes in exporting a given product, the higher influence has the factor endowment of that country on the revealed factor intensity of that product. The physical capital intensity of a given product is thus revealed to correspond to capital/labour ratio of those countries that specialize in exporting the product. The revealed human capital intensity and land intensity of product  $k$  are calculated in a similar way.

The index of revealed comparative advantage goes back to the seminal paper by Balassa (1965), where the denominator of the index represents the share of product  $k$  in the world trade (see also discussion in Yi 2003, p. 78). The approach of Cadot, Tumurchudur, and Shirotori (2009) builds upon the methodology introduced by Hausmann, Hwang, and Rodrik (2007), using instead the sum of product  $k$ 's shares across all exporting countries ( $\sum_c X_{ck,t}/X_{c,t}$ ) in the denominator of  $\omega_{ck,t}$ . This normalization ensures that the weights add up to one when aggregating across all countries that export a given product:  $\sum_c \omega_{ck,tz} = \sum_c \frac{X_{ck,tz}/X_{c,tz}}{\sum_c X_{ck,tz}/X_{c,tz}} = \frac{\sum_c X_{ck,tz}/X_{c,tz}}{\sum_c X_{ck,tz}/X_{c,tz}} = 1$

A potential bias could emerge due to the fact that the factor endowments of the exporting country also enter the computation of the revealed factor intensity (RFI) and consequently of the distance to comparative advantage. As a robustness check, we drop the data from the exporting country when computing RFIs. The RFIs thus become country-product-time specific. We then use the distance to comparative advantage computed from these alternative RFIs in our estimations. Our results are robust and available upon request.

#### Additional references not cited in the main text

Yi, Kei-Mu, 2003, "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy* 111(1), pp. 52-102.

## Appendix B1: The Cox Proportional Hazard Model

The duration of a country export for a given product is defined as the time (measured in years) when a trade relationship has been in existence without interruption. The distribution of durations can be characterized in terms of the hazard function which is defined as the instantaneous probability that a trade relationship ends at time  $t$  given that it has survived until time  $t-1$ :

$$h(t|X) = Pr(T = t|T \geq t, X), t = 1, 2, \dots \quad (1)$$

The Cox Proportional Hazard Model assumes that the hazard rate is the product of an unspecified baseline hazard function, which depends only on time, and the exponential function of the covariates:

$$h(t, x, \beta) = h_0(t) \exp(X' \beta) \quad (2)$$

This specification assumes that the covariates affect the hazard function independently on time the trade relationship exists, shifting by the same magnitude all points of a baseline function. The coefficients can be interpreted as semi-elasticities, as they measure the effect of a change in the right-hand side variables on the log of the hazard rate. Due to this structure, the Cox Proportional Hazard Model is very versatile and can fit various models. The baseline hazard can vary across different groups, called strata, but the vector of parameters is restricted to be the same:

$$h_j(t, x, \beta) = h_{j0}(t) \exp(X' \beta) \quad (3)$$

Since the baseline hazard function remains unspecified, only the order of duration provides information about the unknown parameters. The model is estimated by maximizing a partial likelihood function with respect to the vector of parameters  $\beta$  without specifying the form of the baseline hazard function  $h_0(t)$ . The estimated parameters reflect the relationship between the explanatory variables and the hazard function (i.e., the risk for a trade relationship to end).

There are several issues related to the duration analysis which need to be addressed. First, observations may be right-censored. This is the case when trade relationships are still in progress in the final year of the sample period. The Cox Proportional Hazard Model can handle right-censored observations. Second, observations may be left-censored, which means that we cannot determine the date when they were initiated. In this situation, the actual length of the spells cannot be determined. To mitigate this problem, we estimate the model after dropping the left-censored observations, that is, the observations for which trade flows were recorded before 1980. Third, some trade relationships may have several periods of continuous exporting (spells). An exporter can enter the market, export for a while, exit and re-enter again. Such consecutive exits may be interrelated. The first exit may increase probability of the following exits. To account for this issue, we introduce a variable “number of spells” indicating the number of trade relationships for every country-product pair.

## Appendix B2: Fixed Effects versus Stratification in the Cox Proportional Hazard Model

In a non-stratified Cox Proportional Hazard (PH) Model, all export spells would share a common underlying hazard rate  $h_0(t)$ . In a stratified Cox PH Model, the baseline hazard rate is allowed to vary across different groups (strata). Let us define strata at the product level, allowing export spells of different products  $k$  to have different underlying hazard rate  $h_{0,k}(t)$ . The overall hazard rate of product  $k$  would then write:

$$h(t|X) = h_{0,k}(t) \exp(X.\beta).$$

Let us now use product fixed effects instead. This means keeping underlying hazard rate uniform across products but including among regressors a set of dummy variables that are equal to one if the observation belongs to product  $k$  and zero otherwise. The overall hazard rate of product  $k$  would then write:

$$h(t|X) = h_0(t) \exp(X.\beta + \alpha_k D_k),$$

with  $\alpha_k$  being the estimated coefficient for the dummy variable  $D_k$  and dummy variable  $D_k$  itself being equal to one for any export spell related to product  $k$ .

This expression can be rewritten as:

$$h(t|X) = h_0(t) \exp(X.\beta) \exp(\alpha_k D_k) = \overline{h_{0,k}(t)} \exp(X.\beta),$$

with  $\overline{h_{0,k}(t)} \equiv h_0(t) \exp(\alpha_k D_k)$ .

Using fixed effects can be thus interpreted as a particular case of stratification, which assumes that baseline hazard rates differ across products merely by the factor of proportionality.

## Appendix B3: The Cox Proportional Hazard Model with Time-Varying Covariates

In the Cox Proportional Hazard Model, covariates have a proportional effect on hazard rate and do not change over the spell life:

$$h(t, x, \beta) = h_0(t) \exp(X' \beta).$$

We can relax this assumption by using the extended (time-dependent) Cox model which incorporates time-varying effects of specific covariates by interacting these covariates with some known functions of time:

$$h(t, x, \beta) = h_0(t) \exp(X' * g(\beta, t)),$$

where  $g(\beta, t)$  is a specific function of time. If  $g(\beta, t)$  is a simple function, it can be written as  $g(\beta, t) = \beta * g(t)$ .

Stata allows us to estimate the extended (time-dependent) Cox model by adding to the standard command *stcox* the option *tvc* to define time-varying covariates and the option *tevp* to define the functional form for  $g(t)$ . More specifically, we would like to allow our three main variables of interest (distance to comparative advantage, stock market liberalization dummy, and their interaction term) to have time-varying effects on hazard rate. For  $g_i(t)$  we use a default option, setting  $g_i(t)$  to be a linear function of time:  $g_i(t) = \beta_i + \gamma_i * t$

$$h_{ck}(t) = h_{0,k}(t) \exp[g_1(t)StMLib_{c,t_0} + g_2(t)StMLib_{c,t_0} * distance_{ck,t_0} + g_3(t) * distance_{ck,t_0} + \mathbf{Y}_{ck,t_0} \phi + \varepsilon_{ck,t_0}]$$

In the first sub-column of column (1) in [Table XVII](#), we present coefficients  $\beta_i$  (our standard Cox model coefficients). In the second sub-column of column (1) in [Table XVII](#), we present coefficients  $\gamma_i$  (the coefficients for time-varying components). For a given independent variable, significant coefficients with the same (opposite) signs in both sub-columns imply that the effect of the variable on the hazard rate gets stronger (weaker) over time. An insignificant coefficient in the second sub-column suggest that the effect of a given variable is constant over time.



## Appendix C: Economic Magnitude of the Main Interaction Term

(DCA = distance to comparative advantage)

Country	Year when DCA measured	Date of StM Lib	DCA value (top 25%)	DCA value (bottom 25%)	Difference DCA	Coef(Lib x DCA) x Difference DCA =0.152 x Difference DCA
Argentina	1984	1989	4.049	1.212	2.836	0.431
Bangladesh	1986	1991	2.072	0.858	1.215	0.185
Brazil	1986	1991	1.689	0.493	1.196	0.182
Chile	1987	1992	2.995	0.305	2.690	0.409
Colombia	1986	1991	2.995	0.139	2.856	0.434
Ecuador	1989	1994	2.249	0.114	2.134	0.324
Egypt	1987	1992	2.007	0.214	1.793	0.273
Ghana	1988	1993	1.874	0.669	1.205	0.183
Greece	1982	1987	4.014	0.867	3.147	0.478
Indonesia	1984	1989	2.466	0.212	2.253	0.343
India	1987	1992	1.471	0.482	0.990	0.150
Iceland	1986	1991	4.645	1.360	3.285	0.499
Israel	1988	1993	4.353	1.162	3.190	0.485
Jamaica	1986	1991	2.798	0.686	2.112	0.321
Jordan	1990	1995	1.789	0.266	1.523	0.231
Kenya	1990	1995	1.886	0.298	1.588	0.241
Korea(republic of)	1987	1992	3.722	0.883	2.839	0.432
Sri Lanka	1986	1991	2.091	0.487	1.604	0.244
Mexico	1984	1989	2.162	0.376	1.785	0.271
Malta	1987	1992	2.575	0.734	1.841	0.280
Mauritius	1989	1994	2.910	0.198	2.712	0.412
Malaysia	1983	1988	1.474	0.376	1.098	0.167
New Zealand	1982	1987	3.791	1.312	2.480	0.377
Pakistan	1986	1991	1.875	0.120	1.755	0.267
Peru	1987	1992	2.459	0.122	2.337	0.355
Philippines	1986	1991	3.078	0.594	2.484	0.378
Portugal	1981	1986	2.430	0.458	1.972	0.300
Thailand	1982	1987	1.858	0.177	1.681	0.255
Trinidad & Tobago	1992	1997	2.360	0.679	1.680	0.255
Tunisia	1990	1995	2.340	0.642	1.698	0.258
Turkey	1984	1989	2.847	0.404	2.444	0.371
Venezuela	1985	1990	2.689	0.423	2.266	0.344
South Africa	1991	1996	2.120	0.382	1.738	0.264
Zimbabwe	1988	1993	1.934	0.073	1.860	0.283
<b>Mean Magnitude</b>						<b>0.314 (%)</b>
<b>Median Magnitude</b>						<b>0.291 (%)</b>

## **Appendix D: Alternative Measures of Stock Market Liberalization - Tables I-IX**

Tables I to IX re-run the estimations from Tables 4-6 in the main text, replacing the official liberalization dummy by three alternative measures of stock market liberalization - a first sign liberalization dummy and two versions of a continuous variable capturing the stock market liberalization intensity at the industry-country level. Table I, II, III correspond to Table 4 in the main text, Table IV, V, VI correspond to Table 5 in the main text, and Table VII, VIII, IX correspond to Table 6 in the main text.

## **Appendix E: Alternative Measures of Legal Environment - Tables X-XIV**

Tables X to XIV re-run the estimations from Table 8 in the main text, replacing the sample split based on the variable Legal System and Property Rights by sample splits based on Efficiency of Judicial System (an assessment of the “efficiency and integrity of the legal environment as it affects business, particularly foreign firms” produced by the country-risk rating agency Business International Corp.) in Table X, Rule of Law (an assessment of the law and order tradition in the country produced by the country-risk rating agency International Country Risk - ICR) in Table XI, Risk of Expropriation (an ICR’s assessment of the risk of “outright confiscation” or “forced nationalization”) in Table XII, Repudiation of Contracts by Government (an ICR’s assessment of the “risk of modification in a contract taking the form of repudiation, postponement or scaling down” due to “budget cut-back, indigenization pressure, a change in government, or change in government economic and social priorities.”) in Table XIII, and Investor Protection (average value of Rule of Law, Risk of Expropriation, and Repudiation of Contracts by Government) in Table XIV.

## **Appendix F1: Additional Control Variables and Structural Changes - Table XV**

Columns (1)-(3) of of [Table XV](#) add several control variables that could be correlated with our main interaction term. Column (1) controls for the possibility that the strength of domestic currency affects exports differentially, depending on individual products’ alignment with the comparative advantage of the exporting country. We thus add both real exchange rate and its interaction with distance to comparative advantage into the set of control variables. In column (2), we control for the possibility that the entry of foreign investors affect exports of differentiated products differently from the exports of homogeneous products. Here we add interactions of stock market liberalization both with a dummy for differentiated products and with a dummy for products that are reference-priced in trade publications. The omitted dummy is the one for homogeneous products, i.e. the products bought and sold via organized exchanges (see Rauch 1999 for details). The direct effects of both product dummies are captured by the product strata effects. In column (3), we control for the fact that governments receiving a loan from the International Monetary Fund are often obliged to implement economic reforms that could both improve the countries’ overall export performance and affect the alignment of countries’ export portfolio with their comparative advantage (e.g., if IMF-induced reforms affect the corporate governance of the exporting firms). We thus include both an IMF dummy that is equal to one if the exporting country is subject to an IMF program during the duration of a given export spell and an interaction of this dummy with distance to comparative advantage into our set of control variables. In the first three columns of [Table XV](#), our main interaction term maintains its positive sign and statistical significance. Among the four

additional interaction terms, only the interaction between stock market liberalization and dummy for differentiated products included in column (2) is statistically significant. The negative impact of this control variable on the export hazard rate suggests that the entry of foreign investors promotes long-term export survival disproportionately more in the case of differentiated products.

In column (4) and (5) of [Table XV](#), we control for the possibility that the speed with which countries' export portfolios move closer towards their respective comparative advantage varies over time due to various global and country-specific structural changes (technological progress, globalization, processes of information diffusion and/or learning about foreign markets, time-varying corporate procedures, etc.). In column (4), we include interaction of distance to comparative advantage with the time trend. As the time is here the year of the initiation of the export spell, the direct effect of the time trend is captured by the time (i.e., spell initiation year) fixed effects. In column (5), we go a step a further and allow for the possibility that trajectories of structural change differ across exporting countries. In particular, we include country-specific time trends and their interactions with distance to comparative advantage into the set of control variables (coefficients not reported for space reasons). In both column (4) and column (5), the estimated coefficient for our main interaction term remains positive and significant. The entry of foreign investors into the domestic stock market thus seems to push export portfolios towards the comparative advantage of the liberalizing countries even after controlling for underlying structural changes captured by the differential impact of global and country-specific time trends.

## **Appendix F2: Alternative Clustering, Stratification, and Fixed Effects - Table XVI**

[Table XVI](#) provides a series of econometric robustness tests related to alternative methods for clustering the standard errors, stratification, and the use of fixed effects. For a better comparison, the first column reports the estimation from the column (4) of [Table 3](#) in the main text. In second column, we cluster standard errors at the level of exporting country rather than at the country\*time level, addressing the econometric issues raised by Bertrand, Duflo, and Mullainathan (2004). In the third column, we cluster the standard errors simultaneously alongside both exporting-country and time dimension, following the two-way procedure suggested by Cameron, Gelbach, and Miller (2006). As the only difference among these three estimations relates to the way how the standard errors are computed, the point estimates are the same in columns (1)-(3) of [Table XVI](#).

In columns (4)-(7) of [Table XVI](#), we use alternative versions of fixed and strata effects (for the difference between the two, see [Online Appendix B2](#)). In the fourth column, we replace the product stratification by the product\*time stratification. This approach controls for all observable and unobservable effects that could vary both across products and over time, like the level of competition for a given product in the world market. Our proxy for such competition (number of suppliers - a variable that is included in the full set of controls) is thus absorbed by these more stringent strata effects in column (4) of [Table XVI](#). In the fifth column, we apply the product\*country stratification that controls for various trade policies at product-country level (e.g., export subsidies) that could affect long-term survival of individual products from individual countries in the world market. In the sixth column, we replace separate time and exporting-country fixed effects by the interacted (exporting-country)\*time fixed effects. This set of fixed effects controls for all influences that vary both across exporting countries and over time and consequently absorbs the direct effect of

several control variables included in the full set of controls (total exports, GDP per capita, factor endowments).<sup>5</sup> In the seventh column, we take the contrary approach to columns (4)-(6) where we applied stricter sets of strata and fixed effects, and we instead refrain from the use of any strata or fixed effects. In all columns of [Table XVI](#), our main interaction term remains positive and significant.

### Appendix F3: Timing Issues in the Survival Framework - Table XVII

In [Table XVII](#), we address several issues of timing that arise in the context of examining the effects of stock market liberalization events in the econometric framework of long-term export survival. In the first column, we allow for the possibility that the effect of our main variables of interest is not constant but gets stronger or weaker over the export spells' lifetimes.<sup>6</sup> The direct effect of stock market liberalization seems indeed to be time-varying. Allowing foreign investors to acquire equity stakes in domestic firms decreases the overall hazard rate of exports from the liberalizing country to the world market (negative and significant coefficient for stock market liberalization in the first sub-column of column (1) in [Table XVII](#)) and this effect gets stronger over time (negative and significant coefficient for stock market liberalization in the second sub-column of column (1) in [Table XVII](#)). At the same time, the entry of foreign investors disproportionately increases the hazard rate for products far away from the country's comparative advantage (positive and significant coefficient for our main interaction term in the first sub-column). This differential effect seems to be constant, getting neither stronger nor weaker over the duration of export spells (insignificant coefficient for the main interaction term in the second sub-column). [Online Appendix B3](#) provides technical background for these interpretations of coefficients in the two sub-columns of column (1).

In the second column of [Table XVII](#), we follow the export spells only until 1997 rather than 2006, unifying the time spans for stock market liberalization dates and export spells. In the third column of [Table XVII](#), we drop those observations where stock market liberalization occurs during the lifetime of a given export spell, i.e. we drop those export spells that were only "partially treated" by the ability of foreign investors to acquire equity stakes in domestic firms. In the fourth column of [Table XVII](#), we use the Efron method (Efron 1988) to handle tied-spells termination events.<sup>7</sup>

---

<sup>5</sup> By contrast, the (exporting-country)\*time fixed effects do *not* absorb the direct effect of stock market liberalization. The liberalization dummy is not measured in the year when a given export spell started but instead equals one if the liberalization event occurred before or during the spell. This variable is thus spell-specific instead of varying solely across countries and time.

<sup>6</sup> The use of time-varying covariates in the Cox survival framework prevents convergence in the presence of large sets of fixed effects. In the first column of [Table XVII](#), we therefore drop time and exporting-country fixed effects and keep only stratification at the product level.

<sup>7</sup> Tied-spells termination events occur when two or several export spells end at the same time, violating one of the assumptions of the continuous-time Cox Proportional Hazard Model. In other estimations, we are using instead the standard Breslow method (Breslow 1974) that requires substantially less computing time.

Table I: Stock Market Liberalization First Sign - Alternative Financial Channels

This table corresponds to Table 4 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a dummy capturing the first sign of liberalization (the earliest among the following three dates: the year of official liberalization, the year of issuing the first ADR, the year of the first country fund launch). The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. External finance dependence at the industry level is defined as capital expenditures minus cash flow from operations, divided by capital expenditures, for the median firm in a given industry. Banks is a proxy for the domestic banking development in the exporting country, measured as the ratio of the bank credit to private sector over the country's GDP. Stock markets is a proxy for the depth of domestic stock market in the exporting country, measured as the ratio of the stock market capitalization over the country's GDP. Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) All	(2) Lib	(3) All	(4) Lib	(5) All	(6) Lib
StM liberalization first sign x Distance to comparative advantage	0.125*** (0.017)	0.149*** (0.024)	0.109*** (0.017)	0.145*** (0.026)	0.071*** (0.022)	0.087*** (0.029)
StM liberalization first sign	-1.006*** (0.041)	-1.437*** (0.052)	-1.045*** (0.042)	-1.438*** (0.055)	-1.296*** (0.053)	-1.336*** (0.058)
Distance to comparative advantage	0.076*** (0.011)	-0.002 (0.016)	0.040*** (0.014)	-0.058** (0.023)	0.037* (0.019)	0.026 (0.022)
StM liberalization first sign x External finance dependence	-0.197*** (0.031)	-0.211*** (0.040)				
Banks x Distance to comparative advantage			0.106*** (0.037)	0.146*** (0.053)		
Banks			0.073 (0.106)	-0.270* (0.140)		
Stock Markets x Distance to comparative advantage					0.023 (0.042)	0.011 (0.060)
Stock Markets					-0.007 (0.096)	-0.030 (0.107)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	85,675	45,699	77,986	41,271	37,056	32,892

Table II: Stock Market Liberalization Intensity (closest year) - Alternative Financial Channels

This table corresponds to Table 4 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investible index and IFC Global index available for a given industry-country pair in a year that is closest to the official year of the stock market liberalization. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. External finance dependence at the industry level is defined as capital expenditures minus cash flow from operations, divided by capital expenditures, for the median firm in a given industry. Banks is a proxy for the domestic banking development in the exporting country, measured as the ratio of the bank credit to private sector over the country's GDP. Stock markets is a proxy for the depth of domestic stock market in the exporting country, measured as the ratio of the stock market capitalization over the country's GDP. Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)		(2)		(3)		(4)		(5)		(6)	
	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib
StM liberalization intensity (closest year) x Distance to comparative advantage	0.252*** (0.047)	0.201*** (0.046)	0.262*** (0.048)	0.201*** (0.046)	0.262*** (0.048)	0.228*** (0.048)	0.197*** (0.046)	0.228*** (0.048)	0.197*** (0.046)	0.186*** (0.047)	0.197*** (0.046)	0.186*** (0.047)
StM liberalization intensity (closest year)	-1.258*** (0.096)	-1.478*** (0.099)	-1.473*** (0.096)	-1.478*** (0.099)	-1.473*** (0.096)	-1.682*** (0.102)	-1.548*** (0.096)	-1.682*** (0.102)	-1.548*** (0.096)	-1.538*** (0.098)	-1.548*** (0.096)	-1.538*** (0.098)
Distance to comparative advantage	0.078*** (0.010)	0.020 (0.015)	0.045*** (0.014)	0.020 (0.015)	0.045*** (0.014)	-0.022 (0.025)	0.020 (0.020)	-0.022 (0.025)	0.020 (0.020)	0.016 (0.023)	0.020 (0.020)	0.016 (0.023)
StM liberalization intensity (closest year) x External Finance Dependence	-1.127*** (0.176)	-1.149*** (0.194)		-1.149*** (0.194)								
Banks x Distance to comparative advantage			0.099** (0.040)		0.099** (0.040)	0.091 (0.062)		0.091 (0.062)				
Banks			-0.122 (0.106)		-0.122 (0.106)	-0.095 (0.132)		-0.095 (0.132)				
Stock Markets x Distance to comparative advantage									-0.003 (0.061)		-0.003 (0.061)	
Stock Markets									0.168 (0.115)		0.168 (0.115)	
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	58,794	28,739	58,794	25,528	21,728	25,528	21,728	18,783	21,728	18,783

Table III: Stock Market Liberalization Intensity (average) - Alternative Financial Channels

This table corresponds to Table 4 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investable Index and IFC Global Index, using the average values of indices available for a given industry-country pair. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. External finance dependence at the industry level is defined as capital expenditures minus cash flow from operations, divided by capital expenditures, for the median firm in a given industry. Banks is a proxy for the domestic banking development in the exporting country, measured as the ratio of the bank credit to private sector over the country's GDP. Stock markets is a proxy for the depth of domestic stock market in the exporting country, measured as the ratio of the stock market capitalization over the country's GDP. Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c*t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	All	Lib	All	Lib	All	Lib
StM liberalization intensity (average) x Distance to comparative advantage	0.207*** (0.045)	0.160*** (0.045)	0.200*** (0.048)	0.175*** (0.048)	0.169*** (0.045)	0.160*** (0.047)
StM liberalization intensity (average)	-1.270*** (0.089)	-1.607*** (0.093)	-1.468*** (0.089)	-1.802*** (0.092)	-1.749*** (0.089)	-1.749*** (0.092)
Distance to comparative advantage	0.078*** (0.010)	0.013 (0.014)	0.039*** (0.014)	-0.034 (0.025)	0.004 (0.020)	-0.006 (0.022)
StM liberalization intensity (average) x External Finance Dependence	-1.084*** (0.159)	-1.046*** (0.180)				
Banks x Distance to comparative advantage			0.125*** (0.039)	0.106* (0.062)		
Banks			-0.159 (0.105)	-0.313** (0.137)		
Stock Markets x Distance to comparative advantage					0.038 (0.062)	0.058 (0.063)
Stock Markets					0.196 (0.123)	0.176 (0.127)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	58,794	25,528	21,728	18,783

Table IV: Stock Market Liberalization First Sign - Alternative Non-Financial Channels

This table corresponds to Table 5 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a dummy capturing the first sign of liberalization (the earliest among the following three dates: the year of official liberalization, the year of issuing the first ADR, the year of the first country fund launch). The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Trade openness is defined as the sum of country's exports and imports divided by its GDP. Trade liberalization is a dummy variable based on trade liberalization dates from Wacziarg and Welch (2008), who updated the previous database by Sachs and Warner (1995). Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		
	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	
StM liberalization first sign x Distance to comparative advantage	0.145*** (0.020)	0.144*** (0.025)	0.124*** (0.017)	0.147*** (0.024)	0.143*** (0.020)	0.141*** (0.025)	0.105*** (0.017)	0.158*** (0.029)									
StM liberalization first sign	-1.085*** (0.044)	-1.489*** (0.052)	-1.060*** (0.040)	-1.494*** (0.051)	-1.082*** (0.043)	-1.487*** (0.052)	-0.917*** (0.044)	-1.383*** (0.057)									
Distance to comparative advantage	0.320*** (0.097)	-0.297** (0.134)	0.092*** (0.019)	-0.045* (0.026)	0.329*** (0.097)	-0.261** (0.133)	0.057*** (0.012)	0.014 (0.018)									
GDP pc x Distance to comparative advantage	-0.030** (0.012)	0.035** (0.016)			-0.030** (0.012)	0.027 (0.016)											
Trade openness x Distance to comparative advantage			-0.019 (0.026)	0.073** (0.037)	-0.009 (0.026)	0.065* (0.037)											
Trade openness			-0.142* (0.073)	-0.295** (0.120)	-0.156** (0.075)	-0.279** (0.121)											
Trade liberalization x Distance to comparative advantage																	
Trade liberalization																	
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	85,675	45,699	85,675	45,699	85,675	45,699	85,675	45,699	85,675	45,699	85,675	45,699	85,675	45,699	85,675	45,699	45,699



Table V: Stock Market Liberalization Intensity (closest year) - Alternative Non-Financial Channels

This table corresponds to Table 5 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investable index and IFC Global index available for a given industry-country pair in a year that is closest to the official year of the stock market liberalization. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Trade openness is defined as the sum of country's exports and imports divided by its GDP. Trade liberalization is a dummy variable based on trade liberalization dates from Wacziarg and Welch (2008), who updated the previous database by Sachs and Warner (1995). Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib	All	Lib
StM liberalization intensity (closest year) x Distance to comparative advantage	0.277*** (0.049)	0.207*** (0.048)	0.255*** (0.048)	0.210*** (0.047)	0.261*** (0.050)	0.202*** (0.049)	0.220*** (0.050)	0.208*** (0.053)	0.277*** (0.049)	0.207*** (0.048)	0.255*** (0.048)	0.210*** (0.047)	0.261*** (0.050)	0.202*** (0.049)	0.220*** (0.050)	0.208*** (0.053)
StM liberalization intensity (closest year)	-1.525*** (0.097)	-1.729*** (0.099)	-1.501*** (0.095)	-1.734*** (0.098)	-1.509*** (0.097)	-1.725*** (0.099)	-1.311*** (0.099)	-1.592*** (0.104)	-1.525*** (0.097)	-1.729*** (0.099)	-1.501*** (0.095)	-1.734*** (0.098)	-1.509*** (0.097)	-1.725*** (0.099)	-1.311*** (0.099)	-1.592*** (0.104)
Distance to comparative advantage	0.181** (0.092)	-0.177 (0.143)	0.119*** (0.020)	0.008 (0.029)	0.187** (0.091)	-0.147 (0.141)	0.050*** (0.011)	0.025 (0.016)	0.181** (0.092)	-0.177 (0.143)	0.119*** (0.020)	0.008 (0.029)	0.187** (0.091)	-0.147 (0.141)	0.050*** (0.011)	0.025 (0.016)
GDP pc x Distance to comparative advantage	-0.013 (0.011)	0.023 (0.017)			-0.009 (0.012)	0.019 (0.017)			-0.013 (0.011)	0.023 (0.017)			-0.009 (0.012)	0.019 (0.017)		
Trade openness x Distance to comparative advantage			-0.061** (0.028)	0.021 (0.042)	-0.057* (0.029)	0.016 (0.042)			-0.061** (0.028)	0.021 (0.042)	-0.057* (0.029)	0.016 (0.042)				
Trade openness			-0.101* (0.061)	-0.200** (0.094)	-0.105* (0.062)	-0.190** (0.094)			-0.101* (0.061)	-0.200** (0.094)	-0.105* (0.062)	-0.190** (0.094)				
Trade liberalization x Distance to comparative advantage													0.069*** (0.019)	0.069*** (0.019)		
Trade liberalization													-0.642*** (0.044)	-0.642*** (0.044)		
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	65,266	28,739	65,266	28,739	65,266	28,739	65,266	28,739	65,266	28,739	65,266	65,266	28,739	28,739

Table VI: Stock Market Liberalization Intensity (average) - Alternative Non-Financial Channels

This table corresponds to Table 5 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investable index and IFC Global index, using the average values of indices available for a given industry-country pair. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Trade openness is defined as the sum of country's exports and imports divided by its GDP. Trade liberalization is a dummy variable based on trade liberalization dates from Wacziarg and Welch (2008), who updated the previous database by Sachs and Warner (1995). Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c*t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	All	Lib	All	Lib	All	Lib	All	Lib
StM liberalization intensity (average) x Distance to comparative advantage	0.230*** (0.047)	0.159*** (0.046)	0.208*** (0.046)	0.165*** (0.046)	0.214*** (0.048)	0.153*** (0.047)	0.178*** (0.048)	0.171*** (0.050)
StM liberalization intensity (average)	-1.526*** (0.090)	-1.831*** (0.090)	-1.502*** (0.088)	-1.840*** (0.089)	-1.510*** (0.090)	-1.827*** (0.090)	-1.340*** (0.093)	-1.733*** (0.096)
Distance to comparative advantage	0.182* (0.093)	-0.279** (0.142)	0.114*** (0.020)	-0.005 (0.029)	0.185** (0.092)	-0.245* (0.140)	0.049*** (0.011)	0.014 (0.016)
GDP pc x Distance to comparative advantage	-0.013 (0.011)	0.035** (0.017)			-0.009 (0.012)	0.029* (0.017)		
Trade openness x Distance to comparative advantage			-0.053* (0.029)	0.034 (0.042)	-0.050* (0.030)	0.025 (0.042)		
Trade openness			-0.109* (0.063)	-0.251** (0.098)	-0.113* (0.064)	-0.236** (0.098)		
Trade liberalization x Distance to comparative advantage							0.071*** (0.019)	-0.024 (0.030)
Trade liberalization							-0.645*** (0.045)	-0.512*** (0.057)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	65,266	28,739	65,266	28,739	65,266	28,739

Table VII: Stock Market Liberalization First Sign - Alternative Channels Combined

This table corresponds to Table 6 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a dummy capturing the first sign of liberalization (the earliest among the following three dates: the year of official liberalization, the year of issuing the first ADR, the year of the first country fund launch). The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3, Table 4, and Table 5 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) All	(2) Lib	(3) All	(4) Lib	(5) All	(6) Lib
StM liberalization first sign x Distance to comparative advantage	0.103*** (0.017)	0.154*** (0.029)	0.121*** (0.020)	0.142*** (0.027)	0.066*** (0.024)	0.081*** (0.030)
StM liberalization first sign	-0.862*** (0.045)	-1.322*** (0.058)	-1.059*** (0.044)	-1.435*** (0.056)	-1.288*** (0.054)	-1.327*** (0.059)
Distance to comparative advantage	0.054*** (0.012)	0.015 (0.019)	0.271*** (0.099)	-0.302** (0.143)	-0.035 (0.151)	-0.100 (0.167)
StM liberalization first sign x External finance dependence	-0.189*** (0.031)	-0.210*** (0.041)				
Trade liberalization x Distance to comparative advantage	0.034* (0.018)	-0.071** (0.029)				
Trade liberalization	-0.644*** (0.041)	-0.546*** (0.056)				
Banks x Distance to comparative advantage			0.133*** (0.038)	0.082 (0.061)		
Banks			0.026 (0.112)	-0.159 (0.154)		
Stock Markets x Distance to comparative advantage					0.008 (0.044)	0.002 (0.065)
Stock Markets					0.085 (0.109)	0.044 (0.119)
GDP pc x Distance to comparative advantage			-0.028** (0.013)	0.027 (0.018)	0.009 (0.018)	0.016 (0.020)
Trade openness x Distance to comparative advantage			-0.024 (0.027)	0.058 (0.042)	0.009 (0.039)	-0.000 (0.047)
Trade openness			-0.076 (0.076)	-0.150 (0.134)	-0.242 (0.154)	-0.189 (0.158)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	85,675	45,699	77,986	41,271	37,056	32,892

Table VIII: Stock Market Liberalization Intensity (closest year) - Alternative Channels Combined

This table corresponds to Table 6 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investable index and IFC Global index available for a given industry-country pair in a year that is closest to the official year of the stock market liberalization. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3, Table 4, and Table 5 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	All	Lib	All	Lib	All	Lib
StM liberalization intensity (closest year) x Distance to comparative advantage	0.198*** (0.049)	0.186*** (0.052)	0.250*** (0.050)	0.219*** (0.050)	0.197*** (0.049)	0.179*** (0.051)
StM liberalization intensity (closest year)	-1.025*** (0.100)	-1.302*** (0.105)	-1.462*** (0.097)	-1.673*** (0.103)	-1.545*** (0.098)	-1.529*** (0.100)
Distance to comparative advantage	0.049*** (0.011)	0.025 (0.016)	0.148 (0.097)	-0.191 (0.158)	0.083 (0.208)	0.058 (0.234)
StM liberalization intensity (closest year) x External Finance Dependence	-1.237*** (0.171)	-1.248*** (0.189)				
Trade liberalization x Distance to comparative advantage	0.069*** (0.019)	-0.028 (0.030)				
Trade liberalization	-0.645*** (0.044)	-0.506*** (0.058)				
Banks x Distance to comparative advantage			0.126*** (0.040)	0.057 (0.066)		
Banks			-0.155 (0.110)	-0.018 (0.135)		
Stock Markets x Distance to comparative advantage					-0.018 (0.073)	0.014 (0.078)
Stock Markets					0.254** (0.128)	0.231* (0.134)
GDP pc x Distance to comparative advantage			-0.008 (0.012)	0.020 (0.020)	-0.009 (0.025)	-0.004 (0.028)
Trade openness x Distance to comparative advantage			-0.070** (0.032)	0.024 (0.047)	0.021 (0.067)	-0.021 (0.072)
Trade openness			-0.071 (0.064)	-0.134 (0.101)	-0.234* (0.135)	-0.190 (0.141)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	58,794	25,528	21,728	18,783

Table IX: Stock Market Liberalization Intensity (average) - Alternative Channels Combined

This table corresponds to Table 6 in the main text, but it replaces the liberalization dummy based on the official year of the stock market liberalization with a continuous variable capturing the intensity of stock market liberalization at the industry-country level. The liberalization intensity is computed from IFC Investable Index and IFC Global Index, using the average values of indices available for a given industry-country pair. The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3, Table 4, and Table 5 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) All	(2) Lib	(3) All	(4) Lib	(5) All	(6) Lib
StM liberalization intensity (average) x Distance to comparative advantage	0.159*** (0.047)	0.153*** (0.050)	0.185*** (0.050)	0.162*** (0.050)	0.161*** (0.048)	0.138*** (0.050)
StM liberalization intensity (average)	-1.064*** (0.094)	-1.463*** (0.099)	-1.455*** (0.091)	-1.788*** (0.093)	-1.740*** (0.091)	-1.728*** (0.094)
Distance to comparative advantage	0.049*** (0.011)	0.015 (0.016)	0.138 (0.097)	-0.269* (0.158)	0.039 (0.208)	0.028 (0.236)
StM liberalization intensity (average) x External Finance Dependence	-1.204*** (0.157)	-1.171*** (0.178)				
Trade liberalization x Distance to comparative advantage	0.072*** (0.019)	-0.022 (0.030)				
Trade liberalization	-0.648*** (0.045)	-0.520*** (0.057)				
Banks x Distance to comparative advantage			0.152*** (0.039)	0.063 (0.066)		
Banks			-0.191* (0.110)	-0.214 (0.141)		
Stock Markets x Distance to comparative advantage					0.039 (0.076)	0.112 (0.073)
Stock Markets					0.280** (0.137)	0.217 (0.140)
GDP pc x Distance to comparative advantage			-0.007 (0.012)	0.028 (0.020)	-0.003 (0.024)	0.001 (0.028)
Trade openness x Distance to comparative advantage			-0.069** (0.031)	0.024 (0.047)	-0.011 (0.068)	-0.092 (0.068)
Trade openness			-0.076 (0.067)	-0.166 (0.107)	-0.241* (0.145)	-0.175 (0.149)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65,266	28,739	58,794	25,528	21,728	18,783

Table X: Stock Market Liberalization and Long-Term Export Survival, Below and Above of the Median of Judicial Efficiency

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Columns (1)-(3) show results for the whole sample and columns (4)-(6) for the subsample of countries that experienced stock market liberalization during the 1980-1997 period. Columns (1) and (4) report results for all countries with available data on the legal index "Judicial Efficiency". Columns (2) and (5) report results for countries with below-median value for this legal index. Columns (3) and (6) report results for countries with above-median value for this legal index. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1) All	(2) All	(3) All	(4) Lib	(5) Lib	(6) Lib
	legal index available	legal index below median	legal index above median	legal index available	legal index below median	legal index above median
StM liberalization x Distance to comparative advantage	0.082*** (0.026)	0.050 (0.030)	0.191*** (0.051)	0.069** (0.029)	0.042 (0.042)	0.097** (0.040)
StM liberalization	-1.447*** (0.053)	-1.518*** (0.065)	-1.317*** (0.098)	-1.658*** (0.061)	-1.568*** (0.085)	-1.736*** (0.085)
Distance to comparative advantage	0.029 (0.018)	0.038* (0.020)	-0.059 (0.043)	0.036* (0.019)	0.026 (0.028)	0.068** (0.027)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,005	27,553	10,452	32,992	15,119	17,873

Table XI: Stock Market Liberalization and Long-Term Export Survival, Below and Above of the Median of Rule of Law

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Columns (1)-(3) show results for the whole sample and columns (4)-(6) for the subsample of countries that experienced stock market liberalization during the 1980-1997 period. Columns (1) and (4) report results for all countries with available data on the legal index "Rule of Law". Columns (2) and (5) report results for countries with below-median value for this legal index. Columns (3) and (6) report results for countries with above-median value for this legal index. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c*t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)		(2)		(3)		(4)		(5)		(6)	
	All	legal index available	All	legal index below median	All	legal index above median	Lib	legal index available	Lib	legal index below median	Lib	legal index above median
StM liberalization x Distance to comparative advantage	0.082*** (0.026)		0.002 (0.029)		0.373*** (0.050)		0.069** (0.029)		0.009 (0.034)		0.177*** (0.039)	
StM liberalization	-1.447*** (0.053)		-1.511*** (0.060)		-1.525*** (0.120)		-1.658*** (0.061)		-1.709*** (0.078)		-1.649*** (0.089)	
Distance to comparative advantage	0.029 (0.018)		0.050*** (0.019)		-0.258*** (0.051)		0.036* (0.019)		0.075*** (0.022)		-0.058* (0.035)	
Full set of controls	Yes		Yes		Yes		Yes		Yes		Yes	
Exporting country FE	Yes		Yes		Yes		Yes		Yes		Yes	
Time FE	Yes		Yes		Yes		Yes		Yes		Yes	
Product stratification	Yes		Yes		Yes		Yes		Yes		Yes	
Observations	38,005		30,238		7,767		32,992		20,835		12,157	

Table XII: Stock Market Liberalization and Long-Term Export Survival, Below and Above of the Median of Risk of Expropriation

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Columns (1)-(3) show results for the whole sample and columns (4)-(6) for the subsample of countries that experienced stock market liberalization during the 1980-1997 period. Columns (1) and (4) report results for all countries with available data on the legal index "Risk of Expropriation". Columns (2) and (5) report results for countries with below-median value for this legal index. Columns (3) and (6) report results for countries with above-median value for this legal index. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)		(2)		(3)		(4)		(5)		(6)	
	All	All	All	All	All	All	Lib	Lib	Lib	Lib	Lib	Lib
	legal index	legal index	legal index	legal index	legal index	legal index	legal index	legal index	legal index	legal index	legal index	legal index
	available	below median	below median	above median	above median	available	below median	below median	above median	above median	above median	above median
StM liberalization x Distance to comparative advantage	0.082*** (0.026)	0.002 (0.029)	0.002 (0.029)	0.373*** (0.050)	0.373*** (0.050)	0.069** (0.029)	0.009 (0.034)	0.009 (0.034)	0.177*** (0.039)	0.009 (0.034)	0.177*** (0.039)	0.177*** (0.039)
StM liberalization	-1.447*** (0.053)	-1.511*** (0.060)	-1.525*** (0.120)	-1.525*** (0.120)	-1.525*** (0.120)	-1.658*** (0.061)	-1.709*** (0.078)	-1.709*** (0.078)	-1.649*** (0.089)	-1.709*** (0.078)	-1.649*** (0.089)	-1.649*** (0.089)
Distance to comparative advantage	0.029 (0.018)	0.050*** (0.019)	0.050*** (0.019)	-0.258*** (0.051)	-0.258*** (0.051)	0.036* (0.019)	0.075*** (0.022)	0.075*** (0.022)	-0.058* (0.035)	0.075*** (0.022)	-0.058* (0.035)	-0.058* (0.035)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,005	30,238	30,238	7,767	7,767	32,992	20,835	20,835	12,157	20,835	12,157	12,157



Table XIII: Stock Market Liberalization and Long-Term Export Survival, Below and Above of the Median of Risk of Repudiation

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Columns (1)-(3) show results for the whole sample and columns (4)-(6) for the subsample of countries that experienced stock market liberalization during the 1980-1997 period. Columns (1) and (4) report results for all countries with available data on the legal index "Risk of Repudiation". Columns (2) and (5) report results for countries with below-median value for this legal index. Columns (3) and (6) report results for countries with above-median value for this legal index. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)		(2)		(3)		(4)		(5)		(6)	
	All	legal index available	All	legal index below median	All	legal index above median	Lib	legal index available	Lib	legal index below median	Lib	legal index above median
StM liberalization x Distance to comparative advantage	0.082*** (0.026)		0.043 (0.029)		0.144*** (0.056)		0.069** (0.029)		0.042 (0.039)		0.130*** (0.038)	
StM liberalization	-1.447*** (0.053)		-1.595*** (0.063)		-1.156*** (0.105)		-1.658*** (0.061)		-1.696*** (0.076)		-1.661*** (0.088)	
Distance to comparative advantage	0.029 (0.018)		0.041** (0.019)		-0.045 (0.058)		0.036* (0.019)		0.029 (0.023)		-0.003 (0.034)	
Full set of controls	Yes		Yes		Yes		Yes		Yes		Yes	
Exporting country FE	Yes		Yes		Yes		Yes		Yes		Yes	
Time FE	Yes		Yes		Yes		Yes		Yes		Yes	
Product stratification	Yes		Yes		Yes		Yes		Yes		Yes	
Observations	38,005		30,838		7,167		32,992		21,845		11,147	

Table XIV: Stock Market Liberalization and Long-Term Export Survival, Below and Above of the Median of Investor Protection

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Columns (1)-(3) show results for the whole sample and columns (4)-(6) for the subsample of countries that experienced stock market liberalization during the 1980-1997 period. Columns (1) and (4) report results for all countries with available data on the legal index "Investor Protection". Columns (2) and (5) report results for countries with below-median value for this legal index. Columns (3) and (6) report results for countries with above-median value for this legal index. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1) All		(2) All		(3) All		(4) Lib		(5) Lib		(6) Lib	
	legal index available	0.082*** (0.026)	legal index below median	0.034 (0.029)	legal index above median	0.209*** (0.057)	legal index available	0.069** (0.029)	legal index below median	0.039 (0.041)	legal index above median	0.127*** (0.039)
StM liberalization x Distance to comparative advantage												
StM liberalization		-1.447*** (0.053)		-1.563*** (0.062)		-1.268*** (0.110)		-1.658*** (0.061)		-1.670*** (0.078)		-1.687*** (0.088)
Distance to comparative advantage		0.029 (0.018)		0.041** (0.018)		-0.131** (0.056)		0.036* (0.019)		0.036 (0.023)		-0.064* (0.036)
Full set of controls	Yes		Yes		Yes		Yes		Yes		Yes	
Exporting country FE	Yes		Yes		Yes		Yes		Yes		Yes	
Time FE	Yes		Yes		Yes		Yes		Yes		Yes	
Product stratification	Yes		Yes		Yes		Yes		Yes		Yes	
Observations	38,005		31,216		6,789		32,992		21,197		11,795	

Table XV: Robustness Checks I - Additional Controls

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. The real exchange rate is taken from the World Development Indicators database. The data identifying products as homogenous (omitted category), differentiated, or price-referenced in trade publications are from Rauch (1999). The IMF dummy captures whether a given country was a subject to the IMF program (i.e., received an official IMF loan) in a given year and is constructed based on data from the International Monetary Fund. Other variables are defined in Table 3 in the main text. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting country)\*time ( $c*t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)
	Lib	Lib	Lib	Lib	Lib
StM liberalization x Distance to comparative advantage	0.218*** (0.031)	0.152*** (0.027)	0.126*** (0.026)	0.237*** (0.035)	0.218*** (0.037)
StM liberalization	-1.760*** (0.069)	-1.556*** (0.062)	-1.610*** (0.055)	-1.794*** (0.063)	-1.815*** (0.065)
Distance to comparative advantage	-0.010 (0.050)	0.007 (0.017)	0.009 (0.021)	0.171*** (0.047)	0.149*** (0.046)
Real exchange rate x Distance to comparative advantage	0.009 (0.025)				
Real exchange rate	0.104*** (0.033)				
StM liberalization x Differentiated products		-0.245*** (0.035)			
StM liberalization x Price-referenced products		-0.041 (0.033)			
IMF dummy x Distance to comparative advantage			0.015 (0.033)		
IMF dummy			-0.461*** (0.055)		
Time trend x Distance to comparative advantage				-0.011*** (0.003)	
Exporter-time trend x Distance to comparative advantage					Yes
Exporter-time trend					Yes
Full set of controls	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes	Yes
Observations	23,829	42,634	45,699	45,699	45,699

Table XVI: Robustness Checks II - Clustering, Stratification, and Fixed Effects

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972). Variables are defined in Table 3 in the main text. Regressions in columns (1)-(3) control for exporting-country and time fixed effects, and also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. In column (4), we replace product stratification by the more stringent product\*time stratification. In column (5), we replace product stratification by the more stringent product\*(exporting-country) stratification. In column (6), we replace the separate exporting-country and time fixed effects by the interacted (exporting-country)\*time fixed effects. Column (7) presents results without any fixed effects. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors are in parentheses. They are clustered at (exporting country)\*time ( $c * t_0$ ) level in columns (1) and (4)-(7). In the second column, they are clustered at the exporting country level. In the third column, we follow the two-way procedure suggested by Cameron, Gelbach, and Miller (2006) and cluster the standard errors alongside both country and time dimension. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Lib	Lib	Lib	Lib	Lib	Lib	Lib
StM Liberalization x Distance to comparative advantage	0.152*** (0.026)	0.152*** (0.054)	0.152*** (0.054)	0.146*** (0.028)	0.180*** (0.029)	0.168*** (0.028)	0.190*** (0.035)
StM liberalization	-1.697*** (0.054)	-1.697*** (0.087)	-1.697*** (0.150)	-1.734*** (0.064)	-1.351*** (0.055)	-2.296*** (0.059)	-1.130*** (0.065)
Distance to comparative advantage	0.004 (0.016)	0.004 (0.026)	0.004 (0.026)	0.031 (0.020)	-0.093*** (0.029)	0.001 (0.016)	-0.028* (0.015)
Full set of controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporting country FE	Yes	Yes	Yes	Yes			
Time FE	Yes	Yes	Yes		Yes		
(Exporting-country)*Time FE						Yes	
Product stratification						Yes	
Product*Time stratification						Yes	
Product*(Exporting-country) stratification				Yes			
Observations	45,699	45,699	45,699	45,699	45,699	45,699	45,699

Table XVII: Robustness Checks III - Timing Issues in the Survival Framework

The dependent variable is the hazard rate for an export spell of product  $k$  from country  $c$  to the world market that started at time  $t_0$ . All regressions are estimated using the Cox Proportional Hazard Model (Cox, 1972) and control for exporting-country and time fixed effects. Estimations also allow for different baseline hazard rate across products by defining product  $k$  as strata variable. Variables are defined in Table 3 in the main text. Column (1) presents results when we allow the effects of our main interaction term and its two components (StM liberalization x Distance to comparative advantage, StM liberalization, Distance to comparative advantage) to vary over the life of the spells. Appendix B3 discusses in detail the interpretation of the coefficients in the two sub-columns of the first column. Column (2) presents the results for the survival database constructed using exports data between 1980-1997. Column (3) shows the results of the estimation on a restricted sample that contains spells whose full length occurs after or before the liberalization episodes (i.e., dropping “partially treated” spells). In column (4), we use the Efron method (Efron, 1988) to handle tied-spells termination events. Full set of controls corresponds to column (4) of Table 3 in the main text. We report coefficients and not hazard ratios. Robust standard errors clustered at (exporting-country)\*time ( $c * t_0$ ) level are in parentheses. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
	tvc	1980-1997	dropping spells	tied-spells
StM liberalization x Distance to comparative advantage	0.120*** (0.042)	0.160*** (0.030)	0.110*** (0.021)	0.171*** (0.030)
StM liberalization	-0.717*** (0.069)	-1.810*** (0.061)	-0.973*** (0.042)	-2.058*** (0.060)
Distance to comparative advantage	0.013 (0.025)	0.010 (0.016)	0.008 (0.013)	0.012 (0.020)
Full set of controls	Yes	Yes	Yes	Yes
Exporting country FE	-	Yes	Yes	Yes
Time FE	-	Yes	Yes	Yes
Product stratification	Yes	Yes	Yes	Yes
Observations	45,699	45,699	33,110	45,699