Foreign Banks and the Business Environment in Transition: A Cointegration Approach

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Abstract

The contribution of foreign banks to the development of the financial sectors in emerging markets, and especially the transition economies of Central and Eastern Europe, is well-known. The purpose of this paper is to focus on an area of foreign bank influence that has thus far been missing from the extant literature: the effect of foreign banks on the broader business environment in transition. In addition to improving financial intermediation and broader access to credit, has the presence of foreign financial institutions helped to shape a better business environment in the long-run? Or did foreign banks retard local institutional development and thus worsen the overall business environment? Using cointegration techniques across a sample of 21 transition countries from 2000 to 2012, we find that foreign bank entry had a positive impact mainly on trade costs and time to start a business. The policy implications are that business environments can be improved by facilitating foreign bank entry rather than restricting it.

Keywords: business environment, foreign bank entry, cointegration, Central and Eastern Europe

JEL codes: G15, O16, P33

1. Introduction

The contribution of foreign banks to the development of the financial sectors in emerging markets, and especially transition economies, has been well-documented, focusing on the role of foreign banks in mitigating financing constraints on firm entry (Ayyagari et al., 2008) or in contributing to transition processes in a broader sense (Naaborg et al., 2004). While some papers have highlighted the danger of foreign banks, in the sense of transmitting financial shocks from developed economies (Cetorelli and Goldberg, 2011), for the most part the literature is in agreement that foreign bank entry has been a positive in the transition from communism to capitalism.

However, the bulk of work done examining the effects of foreign banks in transition has focused solely on their financial effects, and less on their institutional ones. The purpose of this paper is to address this gap in the literature and examine how foreign banks may have contributed to a specific facet of transition beyond purely financial matters. Building on an earlier model (Hartwell and Michael, 2015), this paper will examine the effects of foreign bank entry in transition on the development of the business environment in these countries. In addition to improving financial intermediation and building financial access where none existed prior to transition, did foreign financial institutions also help shape a better business environment in transition economies? Put another way, there is ample empirical and theoretical evidence that foreign banks brought in knowhow once they moved into the transition countries of the east, but did they also bring in knowledge of how a business environment should be run? This is a plausible question, given that foreign banks are often the first foreign firms to move into an emerging market, as was the case in transition; being the first exposure that formerly-communist policymakers encounter, banks thus have a unique ability to transmit expectations from foreign businesses on how a business environment should operate.

The contribution of this paper to the literature regarding both foreign bank entry and transition economics is multi-faceted: in the first instance, there has been little theoretical work done on what are the actual determinants of a country business environment which, in reality, is a manifestation of public administration. Why does a country have a longer waiting time at customs than another, or why

is one country perceived as more competitive? This paper will examine this issue specifically in relation to transition, where nearly every country began with a tabula rasa business environment. Secondly, there is also little theoretical or empirical work done on how foreign banks can influence the environment around them beyond merely facilitating credit, and this paper will make a major contribution to our understanding of how financial institutions can influence other institutions. Finally, research into business environment metrics has often ignored the properties of the data, including non-stationarity; this paper attempts to rectify this gap through the application of cointegration techniques to understand the true long-run relationships between foreign bank entry and the business environment in transition.

The rest of the paper as is follows: the next section takes a look at some of the admittedly scarce literature surrounding foreign bank entry and business environment, while Section 3 sets up the model and estimation strategy, Section 4 offers the results, and Section 5 concludes with some policy recommendations.

2. Literature and Theory

A country's business environment is regarded as a sub-set of the broader "investment climate" that prevails within an economy, with the business environment pertaining to the legislation, regulation, and administration pertaining to starting and operating a business. While the conception of business environment has become standard in economic policymaking and international technical assistance, there is however a dearth of research on the determinants of an effective business environment. Indeed, most work that exists focusing on specific facets of the business environment and their contribution to broader economic metrics rather than offering a theoretical approach into what factors would directly influence a country investment climate. A notable exception to this trend comes from the OECD (2007), which outlined a basic approach focused more on entrepreneurship than the broader business environment. Their model of demand (market opportunities), supply (presence of skills), and market mechanisms to mediate supply and demand offers a rudimentary way to understand which variables can determine the overall business environments. However, this approach remains in the realm of theoretical, as few economists have taken up the challenge of testing this framework.

Given this lack of work on what exactly determines a country business environment, it is little wonder that there is no examination on the effects of financial institutions on crafting a country's business environment. Recent research from Asturias et al. (2015) has moved us closer to understanding the channels that a foreign bank would utilize to influence the business environment, concentrating on the fact that entry barriers and financial frictions are substitutable. Their work shows that improvements to the financial system have a larger impact on output when entry costs are high, and in many ways, financial sector reform can attain the same effect as removing entry restrictions. However, even this work-in-progress does not explore how one path (improved financial intermediation) interacts with the other (reducing barriers to entry).

Even more recent work from Hartwell and Michael (2015) comes closest to the issue that we are examining, the effect of foreign banks in improving a country business environment. Examining a large database of developed and developing countries, they develop a thesis that foreign banks can bring in know-how and management techniques that are simply absent from their target market, in addition to contributing financial depth, thus improving the business environment. Their results show, across a broad swath of business environment metrics, that foreign banks do indeed correlate with better business environments, although the biggest gains are in areas that generally require financial intermediation.

Theoretically, the results that Hartwell and Michael (2015) found for all countries should be even more pronounced in the transition economies in Central and Eastern Europe (CEE) and the former Soviet Union (FSU), where foreign banks filled a large institutional void left after the collapse of communism. Having neither a financial system nor a business environment, foreign banks were amongst the first foreign institutions to enter the newly-transitioning countries, exposing policymakers to "Western" expectations on how business should be conducted. Thus, these institutions would not have only had a major effect on the development of financial sectors, they also could have acted as ambassadors of good practice, transmitting know-how and professionalism that translated into better

business environments. And as Asturias et al. (2015) surmise, the removal of financial frictions may have also encouraged firm entry, which then would feed into more demand for business environment improvements.

3. The Model

3.1 Model and Data Description

In order to examine the relationship between business environments and foreign bank presence in transition, a variety of econometric methods will be utilized. The base model relates a series of business environment variables to foreign bank entry:

$$Y_{it}^* = \alpha X_{it} + \rho ForeignBank_{t-1} + \varepsilon_{it}$$
 (1)

Where Y is the specific facet of the business environment in country i, X is a vector of macroeconomic controls, and Foreign Bank is the lagged size of foreign bank claims in a given year (taken from Bank for International Settlements data). The lag, at one year, of bank claims is included to alleviate simultaneity issues and hopefully isolate the effects of foreign bank presence on the myriad of business environment metrics. Given the extremely varying size of the variables, all are expressed in log form.

The Y variables, representing a country's business environment, are modified from Hartwell and Michael (2015) but include:

- Competitiveness Ranking: From the World Economic Forum's annual rankings, this number captures 12 sub-components and measures competitiveness as the inputs which determine productivity in a country.
- Days to Start a Business: Taken from the World Bank's "Ease of Doing Business" rankings, this indicator is simply the number of days it takes to open/register a limited liability corporation in the largest business city of a particular city (in practice, often the capital city).
- Strength of Legal Rights Index: Also from the Doing Business database, the index measures the degree to which legislation protects the rights of borrowers and lenders and facilitates lending in a particular jurisdiction. It is coded from 0-12, with higher numbers showing stronger legal rights in collateral and bankruptcy.
- Time to Export or Import: Recorded in calendar days, these two measures cover how long the process for either exporting or importing a container takes throughout document preparation, inland transport and handling, customs clearance and inspections, and port and terminal handling.
- Cost to Export or Import: The companion measure to time, the cost of export/import is calculated as the fees levied on a 20-foot container, in U.S. dollars. This measure includes all fees associated with the four stages of export/import noted in the previous indicator.

Arrayed against these dependent variables, in addition to our metric of interest (foreign bank presence) are a series of macroeconomic and country-characteristic controls. However, in the economics literature, only Hartwell and Michael (2015) having created a plausible set of macroeconomic and policy controls that would account for a country's business environment. Their paper examined GDP per capita (following Djankov et al., 2002), population size, openness, inflation, and government growth as possible determinants of specific traits of the business environment, outlining how each particular variable would affect the various facets of the business environment such as time to import or number of days to start a business. Via these controls, they were able to cover many of the other possible determinants of business environment outlined above, with GDP proxying for general economic health of country, growth of government proxying for government size, population size representing inherent transaction costs in a country, and inflation and openness acting as a proxy for government policies more generally.

Following on the lead of this earlier work, this current paper includes all of these possible determinants of business environment success or failure, with the exception of swapping out the

World Bank's trade as a percentage of GDP measure for the constructed "openness" ratio that was used in the earlier paper. More importantly, here we extend the analysis by including several additional metrics that could plausibly determine a country's business environment. In the realm of more general controls, we include in this analysis the extent of resource rents in an economy as a percentage of GDP, which can create "Dutch Disease" effects and retard development of non-extractive industries, thus creating a more difficult business environment; this is also the case in many transition economies, where extractive industries have come to both dominate the economy (Russia, Azerbaijan) as well as creating a powerful vested interest against liberalization. Going in the other direction, we also include here gross tertiary enrollment, included to capture human capital effects demand for a better business environment.

As we are focusing on transition countries exclusively, this analysis will also encompass possible determinants of business environment that would be specific to a transitioning economy, including: democratic change, captured here by the Polity IV "polity" measure which quantifies the extent of political openness and institutional development in a transitioning society. The transition from communism to capitalism was not just an economic one, as political institutions also moved from a one-party state to pluralism, and this change could have affected the business environment developmental path in each country. An expanding voice in the political process could have increased the demand for ease of doing business by entrepreneurs, although, conversely, it also could have allowed populist policies which are harmful to business (e.g. minimum wage laws or protectionism). Finally, although not necessarily specific to transition economies, we have also included the surface area of the country as another indicator of size which may capture scale and transport cost effects in a different manner than population size. The transition process not only entailed changes of institutions, but in many cases changes of borders, with the collapse of the Soviet Union into 15 separate countries, the division of Yugoslavia into six (and eventually seven) new countries, and the peaceful divorce of Czechoslovakia into two separate polities.

The data utilized in this paper covers 21 transition economies on an annual basis over the period 2000-2012 (the World Bank Doing Business indicators start only in 2003, while the World Economic Forum data goes back to 2000). Data was collected from the World Bank, ICRG, and the IMF and World Bank World Development Indicators for the macroeconomic controls.

3.2 Data Diagnostics and Choice of Estimator

Econometric estimation of the model shown in Equation 1 must take into account the exigencies of the data, and with several dependent variables, a "one-size-fits-all" estimator is not possible. This is especially the case in regards to fundamental issues such as the presence of a unit root, which can create spurious or inconsistent regressions unless corrected for. Diagnostic tests on the data were conducted using the Levin Lin Chu (LLC) test for a common unit root and the Im, Pesaran, and Shin (IPS) test, Phillips-Perron (PP) test, and the Augmented Dickey-Fuller (ADF) test to test for an individual unit root. Results shown in Table 1 below confirm that the majority of our dependent variables are non-stationary at their levels and are integrated at the order I(1). Indeed, as Table 1 shows, three dependent variables (Competitiveness Rank, Time to Start a Business, and log Cost to Import) are considered non-stationary in three of the four utilized unit root tests, while three others (Time to Export, log Cost to Export, Time to Import, and Regulatory Quality), have a "split decision" on their stationarity. In these cases of mixed results, a further Hadri (2000) unit root test was performed as a tie-breaker, which confirms that the series with split decisions are non-stationary.

In regards to dependent variables, while the log of foreign bank entry appears to be stationary at its levels (in contrast to the earlier Hartwell and Michael (2015) paper), other macroeconomic controls appear to exhibit a unit root. In particular, GDP per capita, tertiary enrollment, and a country's surface area all are integrated on the order of I(1), while the Polity IV indicator exhibits some slight non-stationarity (shown in the LLC test and in a separate Hadri test, not reported). All other variables are stationary and integrated at I(0).

Table 1: Results of Unit Root Tests

	LLC		IPS		PP		ADF		Order of
Variable	statistic	p- value	statistic	p- value	statistic	p- value	statist ic	p- value	Integration
Competitivenes s Rank	-5.03	0.00	0.06	0.52	42.69	0.44	45.32	0.34	I(1)
Time to Start a Business	-9.55	0.00	0.16	0.57	46.68	0.21	45.49	0.254	I(1)
Time to Export	-69.16	0.00	-4.15	0.00	30.26	0.26	28.55	0.33	I(1)
Cost to Export (log)	-6.76	0.00	0.90	0.82	69.64	0.00	36.31	0.72	I(1)
Time to Import	-36.76	0.00	-1.48	0.07	28.05	0.57	27.96	0.570	I(1)
Cost to Import (log)	-4.91	0.00	1.06	0.86	36.10	0.65	22.65	0.990	I(1)
Foreign Bank Claims (log)	-1.76	0.04	-2.24	0.01	68.83	0.01	67.65	0.007	I(0)
Population (log)	-12.55	0.00	-4.00	0.00	101.49	0.00	76.60	0.001	I(0)
Surface area (log)	-0.31	0.38	-0.57	0.29	5.03	0.54	8.28	0.220	I(1)
GDP per capita (log)	0.46	0.68	-3.22	0.00	49.59	0.20	73.46	0.002	I(1)
Resource rents as percentage of GDP (log)	-5.61	0.00	-3.04	0.00	79.91	0.00	77.12	0.000	I(0)
Polity IV	2.18	0.99	-2.70	0.00	57.57	0.01	62.38	0.000	I(0)
Growth of General Government Expenditure	-12.34	0.00	-4.63	0.00	138.72	0.00	117.7 7	0.000	I(0)
Trade as percentage of GDP (log)	-3.50	0.00	-3.55	0.00	70.65	0.00	85.60	0.000	I(0)
Tertiary enrollment	-2.20	0.01	0.39	0.65	13.51	1.00	47.32	0.260	I(1)
Inflation (log)	-32.42	0.00	-42.55	0.00	1564.3	0.00	230.3	0.000	I(0)

Source: author's calculations

Given these results, in order to provide consistent estimation, we are faced with either differencing the data or utilizing any number of cointegration methods. As differencing would likely wipe away much of the information that we are after, the choice of this paper is to apply cointegration techniques to understand the long-run relationships between our variables and the business environment. As we need to establish cointegration amongst our non-stationary variables in order to use these techniques, however, I apply the Kao (1999) residual panel cointegration tests, in order to test for cointegration of the three main independent variable offenders *vis a vis* the six non-stationary dependent variables. The results of this test, shown in Table 2, show that cointegration is indeed achieved amongst the variables that are non-stationary and have weak stationarity.

Table 2: Results of Panel Cointegration Tests

Kao Test							
Cointegrating Variables	t-statistic	probability	cointegration?				
Competitiveness Ranking, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-1.37	0.08	Yes				
Export Cost, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-5.79	0.00	Yes				
Import Cost, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-5.942	0.00	Yes				
Time to Export, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-5.66	0.00	Yes				
Time to Import, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-5.71	0.00	Yes				
Time to Start a Business, GDP per Capita, Polity, Surface Area, Tertiary Enrollment	-4.21	0.00	Yes				

Source: author's calculations

These results allow us to use an ordinary least squares model corrected for the cointegrating vectors which, in this instance, will be the panel dynamic ordinary least square (PDOLS) model of Mark and Sul (2003). According to Mark and Sul (2003:655), PDOLS should "allow for individual heterogeneity through disparate short-run dynamics, individual-specific fixed effects and individual-specific time trends." The usage of PDOLS in this context follows the approach of Brambila-Macias and Massa (2010), Kakkar and Yan (2011), and Canale et.al (2014), and will be employed for the dependent variables that exhibited unit roots.

4. Results

The results of this empirical analysis are shown in Table 3 in Appendix. Across all specifications and, surprisingly, all metrics, the results are uniform: foreign bank presence aids in the improvement of all facets of business reform, confirming the results of Hartwell and Michael (2015) on a larger sample of developed and developing countries. However, these effects take some time to work their way into the system, as the beneficial effects of foreign bank entry are often not seen until three years later or even five years later; in fact, it is only for the cost of importing goods that foreign bank presence has an immediate and significant effect, while for other metrics the effect is insignificant (competitiveness, time to start a business, cost of exporting) or have the "wrong" sign (time to import and time to export). The inclusion of longer lags of foreign bank presence corrects this anomaly uniformly, once again pointing to the fact that bank entry can encourage a better business environment in the longer term.

Indeed, against each dependent variable, the longer-term effects of foreign bank entry have a strong economic and statistical effect, with the strongest results in regards to a country's competitiveness rank and the time it takes to import goods. For example, if a country were to double its stock of foreign bank claims at time *t-3*, this would correspond to an increase in its competitiveness ranking of approximately 3.45 places closer to the top. Similar results hold for each metric, with only time to start a business showing improvement at a longer lag (at least five-years) of foreign bank entry (prior to that, foreign bank entry has a beneficial impact but is insignificant) and, as noted above, import cost showing immediate results that seem to taper over time. These results hold up in the presence of the full set of macroeconomic and country-specific controls, which behave for the most part as expected: more trade leads to better trade administration through familiarity, while larger countries (by population) have more difficult business environments on average.

As a robustness test for these results, it is interesting to note the impact of other possible determinants that are specific to transition countries. In the first instance, accession to the EU was a

goal for many of the countries in this sample, possibly shaping the course of a particular business environment as the country converged on EU standards. Conversely, some countries in our database were unlikely to ever achieve EU accession (Tajikistan or Azerbaijan), and thus it is plausible that their business environments pursued a more independent path. To account for this reality, a dummy variable was included that takes the value of 1 in the year a country entered the EU (and every year thereafter) and 0 if otherwise. Various leads and lags will be experimented with to account for preparation effects.

The results of this test are shown in Table 4 in Appendix, and the addition of an EU dummy does not alter the basic time structure or magnitude of foreign bank influence; indeed, in many areas, it strengthens the relationship, as in the significantly lower cost to export seen at the first lag of foreign bank presence. The only major difference that can be evidenced from this test is that foreign bank influence on time to start a business appears to take longer to work its way through an EU country, as reductions in these burdens only occur after 5 years (rather than 3 years in the earlier regressions), but at the same level and significance.

As a final robustness test, perhaps it was not the economic conditions, EU accession, or presence of foreign banks that contributed to the improvement of the business environment in transition, but the transition process itself; that is, perhaps it was the package of reforms that these countries were undergoing as part of transition that were the prime movers of improving the investment climate. To test this possibility, we re-run the dynamic OLS regressions with an additional regressor, the EBRD's indicator for "governance and enterprise restructuring," as a proxy for a country's overall enterprise sector reforms. This index, as with all EBRD indicators, is coded from 1 to 4.33, with a 1 showing no change from communist times and a 4.33 showing convergence with Western European standards of corporate governance. The results of including this indicator are shown in (streamlined) Table 5 in Appendix, and, while restructuring is incredibly important for business environment metrics, it does not vitiate the results of foreign bank entry. The only metric which is affected by the inclusion of the governance index is the log cost of exporting, which is now marginally significant at a one-year lag and insignificant at 3 years, while the index itself is statistically insignificant as well. In all other cases, the relationship between foreign bank entry and an improved business environment holds.

5. Conclusions

The results shown above confirm earlier work done in Hartwell and Michael (2015) on the effect of foreign bank entry on a country's business environment, but are much stronger than this earlier work. Focusing exclusively on transition economies, we find that foreign bank entry, especially if seen from a longer-run trend (3 years or more), contributes positively to various facets of a country's business environment, including its competitiveness and the time it takes to trade. These results were robust to inclusion of various macroeconomic and country-specific traits that could be plausibly hypothesized as having an effect on the business environment.

The research that may follow from this paper is also promising and varied, but would likely continue to focus on understanding how policies, institutions, and macroeconomic conditions feed through to the overall business environment. Indeed, as noted throughout this paper, the dearth of work explaining *why* a particular country has a longer time to start a business than another is an interesting omission from the political economy literature. With a longer time-series of various business environment metrics, and through the use of appropriate estimation techniques (including accounting for possible endogeneity), such issues could be easily tackled, but only with a supporting theoretical framework. These results will then help to guide better policy in emerging markets and in developed economies. As shown in this preliminary analysis, there is already an obvious recommendation to encourage foreign financial institutions to enter a country, given their beneficial role in the business environment.

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Appendix

Table 3: Effects of Foreign Bank Presence on the Business Environment, PDOLS Specification

Table 3. Effects of Fole		eness Rank	Time to	Start a	Time to Import	
	1	2	3	4	5	6
Foreign Bank Claims (-1)	1.42		-0.002		2.52	
	1.62		0.07		8.12**	
Foreign Bank Claims (-3)		-3.45				-0.76
		4.12**				2.89**
Foreign Bank Claims (-5)				-0.10		
				2.60**		
GDP per capita	-4.57	-8.93	-0.46	-0.37	-1.12	0.45
	2.32*	5.03**	5.80**	4.60**	3.31**	1.30
Population	76.59	56.87	6.23	5.43	-58.65	-78.93
	2.66**	2.23*	5.89**	5.07**	4.47**	4.23**
Surface Area	10388.21	10110.60	221.23	208.19	-1407.79	-1045.99
	3.36**	2.92**	2.96**	2.88**	3.50**	2.46*
Trade to GDP	4.45	-3.14	1.43	1.35	-4.33	-4.42
	1.51	1.05	11.88**	9.45**	7.64**	5.97**
Government Growth	0.04	-0.17	0.008	0.006	-0.02	0.07
	0.45	2.22*	2.50*	1.55	1.99*	5.15**
Resource Rents to GDP	2.80	5.15	-0.12	-0.15	1.07	1.41
	3.08**	5.24**	2.55*	3.00**	6.12**	7.18**
Inflation	51.87	78.81	-0.55	-0.44	6.11	5.51
	5.91**	9.52**	2.23*	1.48	3.58**	2.82**
Tertiary Enrollment	-0.13	-0.3	0.007	0.001	0.29	0.28
	1.28	3.54**	2.52*	0.21	12.49**	8.47**
Polity IV	-0.95	-4.36	0.2	0.17	-0.19	0.91
	0.68	3.93**	7.40**	4.49**	0.65	4.99**
n	214	214	191	191	158	158
Adjusted R-squared	0.93	0.94	0.87	0.87	0.98	0.98
cointegrating trend	linear and	linear and	linear	linear	linear and	linear and
	quadratic	quadratic			quadratic	quadratic
long-run variance	11.56	11.82	0.06	0.06	0.18	0.382

	Cost to In	nport (log)	Time to	Export	Cost to Ex	port (log)
	7	8	9	10	11	12
Foreign Bank Claims (-1)	-0.06		0.16		-0.01	
	3.45**		12.96**		0.69	
Foreign Bank Claims (-3)		-0.01		-0.02		-0.01
		2.49*		3.17**		2.52*
GDP per capita	-0.001	-0.08	-0.06	0.07	0.03	0.11
	0.05	4.15**	4.30**	6.36**	2.22*	9.25**
Population	-0.30	0.13	-2.35	0.22	-0.38	-0.74
	0.61	0.27	4.73**	0.42	1.59	3.36**

Surface Area	-159.54	-187.37	135.20	124.20	-135.06	-180.26
	4.60**	5.97**	4.78**	8.67**	7.91**	6.06**
Trade to GDP	-0.13	-0.11	-0.16	-0.21	-0.3	-0.35
	2.68**	3.35**	6.95**	9.42**	11.30**	18.16**
Government Growth	0.006	0.01	-0.002	-0.002	-0.001	-0.001
	4.83**	9.95**	5.12**	4.83**	1.77*	11.61**
Resource Rents to GDP	0.04	0.05	0.03	-0.002	0.04	-0.02
	2.42*	5.94**	5.42**	0.36	6.18**	5.04**
Inflation	0.54	0.38	0.39	0.52	0.90	1.13
	3.57**	3.13**	6.02**	11.03**	16.34**	22.43**
Tertiary Enrollment	0.001	0.003	0.02	0.01	0.002	0.005
	1.33	2.83**	14.46**	10.58**	1.87*	8.75**
Polity IV	0.03	0.03	-0.04	-0.01	0.04	0.02
	2.25*	2.72**	4.09**	1.24	4.43**	2.27*
n	158	158	158	158	158	158
Adjusted R-squared	0.96	0.96	0.97	0.97	0.97	0.97
cointegrating trend			linear	linear	linear and	linear
	linear	linear	and	and	quadratic	and
			quadratic	quadratic		quadratic
long-run variance	0.004	0.004	0.0003	0.001	0.0003	0.0004

Note: absolute values of t-stats are under the coefficients, with * signifying significance at the 10% level and ** at the 1% level.

Source: Author's calculations

Table 4: Robustness Tests including EU Accession

	•	itiveness ink	Time to Start a Business		Time to Import	
	1	2	3	4	5	6
Foreign Bank Claims (-1)	1.81		0.007		3.28	
	2.08*		0.28		9.85**	
Foreign Bank Claims (-3)		-3.85				-0.67
		4.33**				2.61**
Foreign Bank Claims (-5)				-0.11		
				2.87**		
EU dummy	3.66	3.90	-0.15	-0.18	1.19	1.44
	2.92**	3.31**	2.39*	2.93**	1.95*	2.80**
n	214	214	191	191	158	158
Adjusted R-squared	0.93	0.94	0.87	0.87	0.98	0.98
cointegrating trend	linear and quadratic	linear and quadratic	linear	linear	linear and quadratic	linear and quadratic
long-run variance	11.56	11.94	0.06	0.06	0.18	0.374

	Cost to Im	port (log)	Time to	Export	Cost to Ex	kport (log)
	1	2	3	4	5	6
Foreign Bank Claims (-1)	-0.06		1.23		-0.02	
	3.14**		3.31**		3.67**	
Foreign Bank Claims (-3)		-0.02				-0.004
		3.40**				1.78*
Foreign Bank Claims (-5)				-2.07		
				12.46**		
EU dummy	0.22	0.21	1.83	2.92	0.14	0.17
	2.42*	2.21*	2.64**	7.88**	5.29**	4.69**
n	158	158	158	158	158	158
Adjusted R-squared	0.96	0.96	0.98	0.98	0.97	0.96
cointegrating trend			linear	linear		
	linear	linear	and	and	linear	linear
			quadratic	quadratic		
long-run variance	0.004	0.004	0.22	0.39	0.003	0.003

Note: absolute values of t-stats are under the coefficients, with * signifying significance at the 10% level and ** at the 1% level. Macroeconomic controls are retained in the regressions but not shown in interests of space.

Source: Author's calculations

Table 5: Robustness Tests including Enterprise Restructuring

	Competitiveness Rank		Time to Start a Business		Time to	Import
	1	2	3	4	5	6
Foreign Bank Claims (-1)	1.12		-0.050		2.82	
	1.26		2.82**		8.98**	
Foreign Bank Claims (-3)		-3.36		-0.09		
		3.76**		3.73**		
Foreign Bank Claims (-5)						-1.85
						8.70**
EBRD governance and enterprise index	-8.70	-13.13	0.04	-0.19	-1.12	-5.53
	3.35**	5.49**	0.88	3.46**	1.45	5.91**
EU dummy	3.36	3.46	0.09	0.09	1.32	1.35
	2.71**	2.95**	4.28**	3.93**	2.31*	4.59**
n	214	214	191	191	158	158
Adjusted R-squared	0.93	0.93	0.9	0.89	0.98	0.98
cointegrating trend	linear	linear	linear	linear	linear	linear
	and	and	and	and	and	and
	quadrati	quadrati	quadrati	quadrati	quadrati	quadrati
	С	С	С	С	С	С
long-run variance	11.58	11.94	0.02	0.01	0.17	0.296

	Cost to In	nport (log)	Time to	Export	Cost to Export (log)	
	1	2	3	4	5	6
Foreign Bank Claims (-1)	-0.05		1.25		-0.02	
	3.34**		3.35**		1.87*	
Foreign Bank Claims (-3)		-0.04				0.003
		2.87**				0.24
Foreign Bank Claims (-5)				-1.54		
				8.94**		
EBRD governance and enterprise index	0.002	-0.001	0.62	-3.10	-0.03	-0.03
	0.03	0.01	0.64	3.60**	1.08	0.77
EU dummy	0.21	0.20	1.83	1.08	0.17	0.16
	2.25*	2.08*	2.60*	3.37**	4.90**	3.50**
n	158	158	158	158	158	158
Adjusted R-squared	0.96	0.96	0.99	0.98	0.96	0.96
cointegrating trend	linear	linear	linear and quadrati c	linear and quadrati c	linear	linear
long-run variance	0.004	0.004	0.23	0.39	0.003	0.003

Note: absolute values of t-stats are under the coefficients, with * signifying significance at the 10% level and ** at the 1% level. Macroeconomic controls are retained in the regressions but not shown in interests of space.

Source: Author's calculations