

THE MODERATING EFFECT OF INTERNATIONAL EXPERIENCE ON THE RELATION BETWEEN CULTURAL DISTANCE AND VIETNAMESE ENTERPRISES' EXPORT INTENSITY

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ABSTRACT

International business scholars often argue that cultural distance between export and import countries is negatively related to firm's export intensity because of costs of liability of foreignness. The role of managers' experience in the foreign activities of firm is ignored. Relaxing this argumentation, we hypothesize that the manager's international experience is likely to moderate the negative relationship between cultural distance and firms' export intensity. The data extracted from the World Bank of 345 export firms is used to test the proposed hypotheses. Both Tobit and OLS regressions reveal that with controlling characteristics of firm, the negative effect of cultural difference on export intensity of firm with the low level of international experience is higher than on that with the high level of international experience. The study provides managerial implications to international business literature.

Keywords: export intensity, enterprise, international experience, cultural distance, moderating effect.

1. INTRODUCTION

Export plays a critical role in economic development of a nation due to its positive impact on the amount of foreign currency revenue, which sustains trade balance, stimulate production, and employment creation (Franco, 2013). Hence, this research stream is paid attention by several scholars over the past decades. Theoretically, transaction cost theory (Hennart, 1991) is often used to investigate the issues related to the export activities of the enterprise (Franco, 2013; Greenaway et al., 2004).

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According to transaction cost theory, when entering international markets, enterprises might suffer various transaction costs due to cultural differences, regimes between exporters and importers. Drawing on transaction cost theory, several studies revealed that the higher cultural differences between export and import countries the lower level of trading intensity (e.g., Alaoui and Makrini, 2013). However, theoretical and empirical findings from previous studies have based on the assumption: the important role of manager's international experience is not taken into account. We argue that firm managers are able to play an essential role when enterprises export to countries with cultural differences. High experience managers could overcome uncertainty and difficulties when exporting to countries with high cultural differences between home and host countries is high. Therefore, international experience of managers is able to play an important role in explaining the relationship between cultural divergence and firm's export intensity.

Transaction cost theory (Hennart, 1991) is applied to develop arguments relating to the role of managers' experience in the relation between cultural distance and firm's exports. This study complement theoretical arguments to indicate the importance of international experience in exporting activities of firms as cultural difference is high. In addition, the study also provides empirical evidence about the moderating effect of managers' international experience in the relation between cultural distance and export intensity.

2. THEORY AND HYPOTHESIS

Transaction cost theory of Hennart (1991) and some previous studies stressed that the higher cultural distance between two countries is, the lower level of firm's export intensity is. This argument does not take the role of manager's international experience

into account. Drawing up transaction cost theory, we argue that the international experience of manager is likely to moderate the relationship between cultural distance and firm's export intensity. Our study develops the hypotheses on the aforementioned relationship, combining insights from transaction cost theory with research on culture in IB literature.

2.1. Cultural distance and export of enterprise:

According to transaction cost theory of Hennart (1991), cultural distance between two countries relating to strategic export of the enterprises. This implies that cultural difference is likely to affect the export activities of enterprises in foreign market. It means that when exporting to foreign market, enterprises often deal with the difficulties due to differences in culture. This increases the cost of management and of transaction in foreign market.

From the theoretical points of transaction cost theory, we argue that cultural distance between export and import countries is higher, the export of enterprises is lower because of increase in transaction costs. This argument is explained with the following two reasons. First, each country has its own culture, this generates an cultural difference as an firms entry in a foreign country (Slangen et. al., 2011). This difference becomes larger in the context between a Western and Eastern countries. This leads to increase the cost of management as importing countries approach in foreign market.

Second, the higher cultural distance also implies that negotiation between firm and partners in the host countries is more difficult due to the fact that each country has their own views of cultural aspects (Beugelsdijk and Maseland, 2011). In general, the higher cultural distance between two countries is more difficult in cooperating with

distribution system. There are two reasons to explain for this argument. The first reason comes from the distribution system since they do not understand about the cultural aspects, working style of foreign enterprises. Therefore, distribution does not dare to cooperate with enterprises unless they understand the enterprise clearly and have the similar culture with them (supposed that other elements stay constant).

The second reason comes from the view of exporting enterprises, they cannot take risks to cooperate with partners coming from the importing countries unless they have cooperated with these partners before or have known well about the culture of local people. They are afraid of the risk that can happen in payment processing, conducting the contract regulations and the procedure in merchandise exchange. Hence, this study claimed that exporting decreases when the cultural distance between two countries become higher. The above reasons lead to the result that the higher cost for export activities from the export country to the import country will happen when the cultural distance of them is too wide. In conclusion, the wide culture distance of import and export countries will hinder the export activities of enterprises due to the high cost of transaction. The first hypothesis can be suggested as follows:

Hypothesis 1: The higher level of cultural distance between export and import countries, the lower level of firm's export intensity.

2.2. The interaction between cultural distance and experiences of manager

The first hypothesis expected that the cultural distance has the negative correlation with the export of enterprises. This study also claims that the negative correlation between cultural distance and export depends on the international experience of the managers. It can be explained that the higher cultural distance decreases the export of enterprises if managers of firm have less international

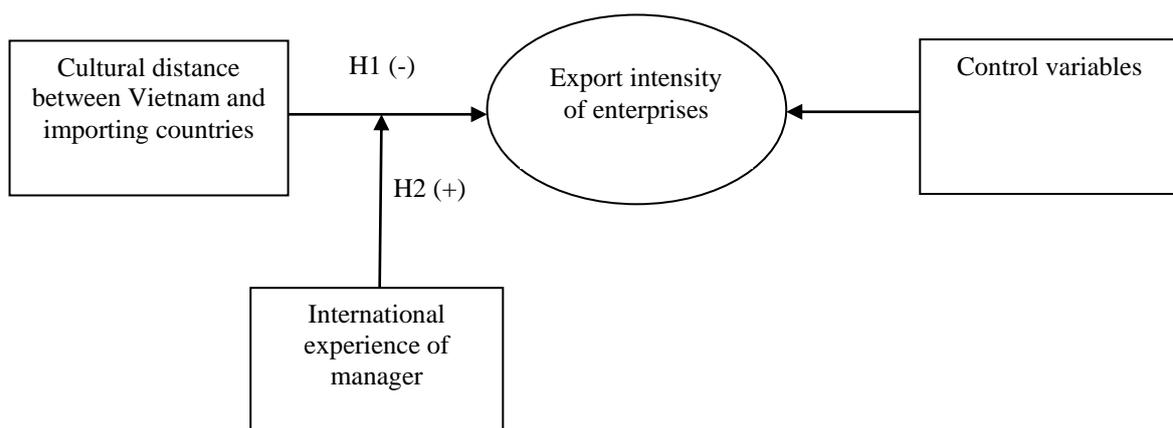
experience. There are two reasons that can explain for this argument. First, the enterprises with manager who have many experiences will have the ability to approach and deal with more customers in the countries with high cultural differences. Furthermore, they can apply the appropriate plans and strategies of export, and timely response with the difficulties driven from the differences in culture. In contrast, the abilities to solve these similar problems of the less international experienced managers would be limited. Secondly, comparing to the enterprise which has the fewer experienced managers, the enterprises with the managers who possess more experiences may have the ability to connect the local partners since they have the wider business network, and understand well about the regulations and working style of importing countries' partners. Therefore, the possibility to get the successful contracts in these countries will be higher. These arguments above lead to the second hypothesis:

Hypothesis 2: The negative effects of cultural distance on the export of firm with high international experienced managers may be lower than that with less international experience.

Based on these arguments, the theoretical model of the study is summarized in

Figure 1

Figure 1. Theoretical Model



3. RESEARCH METHODS

3.1 Data:

To test the hypothesis of the research model, this study uses the data from two sources. The first source comes from the World Bank. This data is a part of the investigation of enterprise in the East Asia and Pacific Ocean of World Bank in 2009.

The selected firms were then used as the frame for the selection of a sample with the aim of obtaining interviews at firms with five or more employees as the World Bank' plan. The overall investigation includes all non-agriculture industries (group D), according to the group classified by ISIC Revision 3.1, construction (group F), services (group G and H), traffic and express, storage and communication (group I). This definition does not include these follow industries such as financial intermediaries (group J), real estate and real estate leasing activities (group K excludes group 72, communication technologies being added to the overall research), and all public sectors. In particular, the manufacture industry has 5 groups, authors will interview from 120 to 145 enterprises for each group. The total number of enterprises investigated was 1.503 observations. Among these group, food production, garment and weaving were constituted the highest proportion with 52.86%. The sizes of enterprise were classified into 3 groups: small enterprises have about 5 to 19 employees, medium enterprises have about 20 to 99 employees and large-scaled enterprises have more than 99 full-time employees. The observed enterprises belonging to 14 provinces which are divided into five major areas namely The Red River Delta (Ha Noi, Hai Duong, Hai Phong), North Central Coast (Thanh Hoa and Nghe An), Mekong River Delta (Can Tho, Long An, Tien Giang), South Central Coast

(Khanh Hoa and Da Nang), Southeast region (Ho Chi Minh city, Binh Duong and Dong Nai).

With respect to this study, the objective of the study is export enterprises. Among the observed enterprises, there are 345 enterprises that could meet the research requirements. Therefore, the sample number is 345. In which, there are 123 enterprises from food industry (accounted for 35.7%), 118 enterprises from fiber, fabric and weave industry (accounted for 34.3%), 76 enterprises from garment (accounted for 22.1%), 28 enterprises from process and metal fabrication (accounted for 7.9%). These enterprises export their products to 34 different countries around the world. This information allows authors to determine and investigate the distance culture between Vietnam and others 34 countries.

The second source of secondary data comes from Hofstede's website where the comparison of six cultural dimensions of many countries were presented including Vietnam and other 34 importing countries in this paper would be collected (<https://geert-hofstede.com/national-culture.html>).

3.2 Variables and measurements

Dependent variable is the export intensity of Vietnamese enterprises (Y), which is measured by the proportion between export revenue and total revenue enterprises. Such proportion ranged from 12.1% to 68.4%. The higher proportion means that enterprise get better the turnover from exporting activities.

Independent variables: Cultural distance (X_1) is the distance between Vietnam and importing countries. This variable was measured based on the differences of 6 cultural dimensions calculated by Hofstede (1980). These include Power Distance,

Individualism, Masculinity, Uncertainty Avoidance, Long-term Orientation and Indulgence. These six dimensions were scale from 0 to 100 (percent) by Hofstede. The more six dimensions of the country have, the higher of Power Distance, Individualism, Masculinity, Uncertainty avoidance, Long-term Orientation and Indulgence they gain. And then, the method of Kogut and Singh (1988) will be used to measure the cultural distance between Vietnam and import countries. The ratio of distance was determined by the following formula:

$$CD_{vj} = \frac{\sum_{i=1}^6 \{ (I_{ij} - I_{iv})^2 / V_i \}}{6} \quad (1)$$

In which:

CD_{vj} : The coefficient of cultural difference between Vietnam and importing countries.

I_{ij} : The i^{th} cultural aspect coefficient of j^{th} importing countries

I_{iv} : The i^{th} cultural aspect of Vietnam, V is abbreviation of Vietnam

V_i : the variance of the i^{th} cultural aspect coefficient

Based on the formula (1) and secondary data on the national culture from Hofstede's website (1980) mentioned in Section 3.1, the cultural gap index is calculated. The value of this index changed from 0.102 to 3.174 which mean that the greater index revealed, the greater cultural distance between Vietnam and importing countries.

Moderating variable: *The international experience of the managers (X_2)* is measured by the number of years manager of firm work in foreign markets up to 2009. The greater values of this factor represent that the managers have been long time in business management position and international experience.

According to previous studies, exporting enterprises are also influenced by other factors (Franco, 2013) include:

- The company size (X_3) is measured by the value of the natural logarithm of full-time employees working in the enterprises. The higher values mean the larger size of enterprises.

- Experience of firm (X_4) is measured by the number of years since the establishment of enterprises up to 2009.

- ASEAN (X_5) Importing countries belonging to the free trade area (AFTA) where the tariff, import procedures and other barriers are reduced compared to outsiders. Hence, when trading among such community, the importing and exporting activities of Vietnam enterprises can be more favorable. This variable is measured by an indicator variable: Vietnam and the ASEAN importing countries received value 1, otherwise the value is 0.

- Industry (X_6) is measured by dummy variables in which enterprises of food industry, spinning, weaving, fabric and garment receive 1, others include outsourcing industry and metal fabrication will receive a value of 0. Food industry, fibers, textiles, fabrics and garments have exporting advantages due to cheaper production. Meanwhile, manufacturing industry and the metal fabrication are limited due to weak technical and scientific qualifications which caused lower competitive advantages. Due to its limitation, raw materials and outsourcing products are typically exported in such industries. Therefore, in this paper the authors expect that industry variable and exporting volume would have positive correlation.

3.3 Estimation Methods

With the measure of the above mentioned dependent variable, this study is using nonlinear regression-Tobit to estimate the impacts of these factors on Vietnam enterprises' exporting volume. Estimating equation is expressed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta X_1 * X_2 + \beta_3 X_3 + \dots + \beta_6 X_6 + \varepsilon \quad (2)$$

In which:

Y is the dependent variable (exporting volume of enterprises), β_0 is the intercept coefficients of the model (the value of Y when all values of X are 0), $\beta_1, 2$ are respectively the estimated coefficients of cultural distance and experience of the management; $X_{1,2}$ are the values of the independent variable and adjustment variable; β is the estimated coefficient of X_1 and X_2 interaction. β_{3-6} respectively estimated coefficients of moderate variables, X_{3-6} respectively are the values of the moderate factors, ε is the error of the regression model. Attributes of the independent variables and moderate variables in this model are summarized in Table 1.

Table 1. The characteristics of the independent and moderate variables

Mark	Interpretation	Measurement methods	Expectation
X ₁	Cultural distance	Hofstede's six dimensions (1980) and Kogut and Singh's measures (1988) to calculate cultural distance between Vietnam and importing countries.	-
X ₂	Manager's experience	The number of their working years in related to business activity as managers up to 2009	+
X ₃	Enterprise's size	Natural logarithm of full-time employees working in the enterprises	+
X ₄	Operation time	Years from establishing up to 2009	+
X ₅	Member of ASEAN	Indicator variables: Vietnam and the ASEAN importing countries received value 1, otherwise the value is 0	+
X ₆	Industry	Measured by dummy variables: value 1 for the food, fibers, fabric and garment industries, 0 for the outsourcing and metal fabrication industries	+

4. RESEARCH RESULTS

4.1 Description of statistics and Correlation matrix

Figure 3 shows the mean, standard deviation, variance magnification factor (Variance Inflation Factor - VIF) and the correlation between the variables in model. Analyzing outcomes of the correlation matrix in Table 2 shows that the correlation among independent variables is low (<0.8).

The highest correlation coefficient is -0.19 revealed the correlation between the size of enterprises and experience of managers. The testing value shows that all variables have VIF values being lower than the "threshold" value of 10.0 . Hence, there is no multi-collinearity when investigating all these variables simultaneously in a research model (Hair et al., 2006) which means that there is no deviation making any biases about value estimation of variables. To the correlation coefficient between independent and dependent variables namely cultural distance and export volume is negatively correlated (0.18). Meanwhile, the experience of the manager has a positive correlation to exports with a correlation coefficient of 0.04 at a statistical significance of 5% . Othes variables have no statistic significance ($p > 0.1$).

Table 2. Mean, Standard Deviation and Correlation of the variables in the model (n = 345) ¹

Variables	VIF	Mean	Standard Deviation	1	2	3	4	6	7
1 Enterprises' export (%)	1,26	34,1	34,2						
2 Cultural distance	1,21	1,97	2,78	-0,18**					
3 Firm size	1,15	1,88	2,32	0,17	0,02				
4 Enterprise's experience	1,23	2,45	1,57	0,10	-0,05	0,01			
6 Manager's international experience	1,19	2,25	2,49	0,04*	0,05	-0,19	0,09		
7 ASEAN member	1,10	0,55	0,28	0,13	0,04	0,11	0,04	0,02	
8 Industry	1,23	0,58	0,31	0,01	0,03	0,02	0,14	0,05	0,12

** and ** presents the values of statistical significance at the 5% and 1%, respectively*

¹ *The value of standardized variable*

(Source: the output from Stata)

4.2 Results and discussion

Estimated results of Tobit nonlinear regression model on the impacts of managers' international experience to the relationship between cultural distance and exports are presented in Table 3.

Model 1: Model 1 shows the impacts of these moderate factors on export of enterprises. Pseudo-R² of the model is 0.090 and fair valuing ratio is -1033,4. Besides, P-value is 0.000 means that the statistical significance of the model has been reached. It is showed that the enterprise with larger size would have better exporting capacity presenting by the estimated coefficient of "size" variable at 5% of statistical significance ($\beta_4 = 0.015$; $p < 0.05$). In contrast, other moderate variables include time of operation, ASEAN member, and industry revealed the irrelevant relationship to exports (at least in statistics) due to its estimated coefficients showed non-statistical significance ($p > 0,1$).

Table 3. The results of moderating effects of international experience on the export intensity of firms

	Model 1		Model 2		Model 3		Model 4		Marginal effect	
	Co-efficient	t	Co-efficient	t	Co-efficient	t	Co-efficient	t	Co-efficient	t
Constant	3,17**	3,80	3,01**	3,71	3,33**	3,62	3,55*	3,82	3,48*	3,35
Independent variable										
Cultural distance (CD)			-0,26**	3,55			-0,61**	3,91	-0,53**	3,67
Manager's international experience (ME)					0,50*	2,50	0,72*	2,45	0,58*	2,56
CD*ME							0,39*	2,49	0,28*	2,45
Moderate variables										
Size of enterprise	0,015*	2,53	0,016*	2,53	0,016*	2,49	0,017*	2,65	0,010*	2,53
Firm experience	4,03	1,57	3,81	1,49	3,64	1,28	4,11	1,23	3,56	1,40
ASEAN member	0,06	1,32	0,08	1,22	0,08	1,25	0,19	1,43	0,06	1,40
Industry	2,10	0,27	2,11	0,98	2,14	0,90	2,12	0,38	1,79	0,52
Log likelihood	-1033,4		-1024,6		-1019,2		-1001,2			
Pseudo R ²	0,090		0,109		0,114		0,122			
N	345		345		345		345			
P-value	0,000		0,000		0,000		0,000			

* and ** denote the values of statistical significance at the 5% and 1% respectively
(Source: the output from Stata)

Model 2 and 3: The results of these models showed in Table 3 are impacts of independent variables, moderate variables, interacting variables and control variables to export of enterprises. It is showed that the cultural distance and managers' experience in Model 2 and 3, Pseudo-R² are 0,109 and 0,114 respectively. In addition, compared to Model 1, the Logarithmic coefficients in Models 2 and 3 also increased to 1019.2 and 1024.6 respectively. These numbers mean that testing results are better explained in Model 1 when considering the influences of cultural distance and managers' experience to export of enterprises. Showed results from model 2 and 3 reveal that cultural distance and export have inverse correlation at 1percent-statistical significance ($\beta_1 = -0,26$, $p < 0,01$), however manager's experience and export show the positive correlation at 5percent-statistical significance ($\beta_2 = 0,50$, $p < 0,05$). Moderate variables' coefficients in model 2 and 3 are similar to model 1 at the same statistical significance.

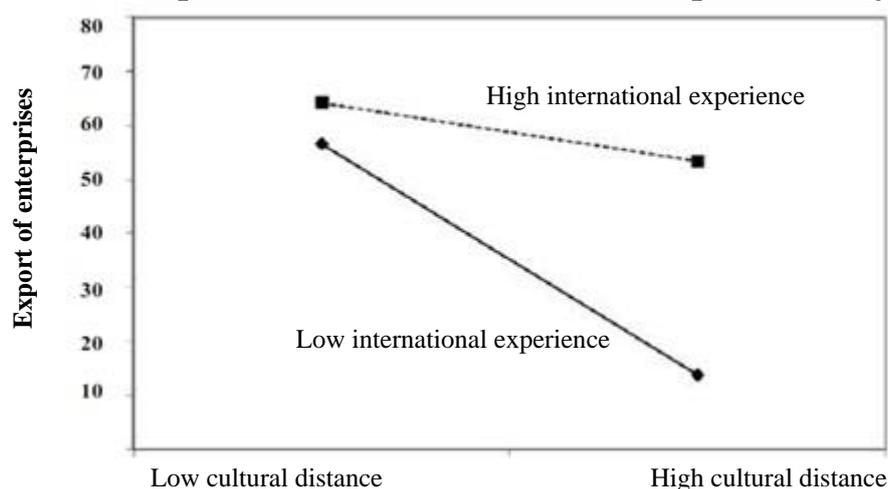
Model 4: Model 4 reveals statistic results of cultural distance, manager's experience and moderate variables (between cultural distance and managers' experience) to export of Vietnamese enterprises. The Pseudo-R² and Logarithmic coefficient increased to 0,122 and -1001,2 respectively. Besides, P-value is 0,000 which means that the model has statistical significance at one percent. In model 4, there is no difference in the impact of moderate variables to export compared to model 1. The results from model 4 could be clarified in following details:

- Cultural distance shows negative correlation to export of enterprises at the 1percent-statistical significance ($\beta_1 = -0,61$, $p < 0,01$). Such result means that Hypothesis 1 is absolutely confirmed in statistics. In addition, the interaction between managers' experience and cultural distance presents positive correlation at 5 percent-statistical significance ($\beta_2 = 0,72$, $p < 0,05$; $\beta = 0,39$, $p < 0,05$). These results are totally met the expectation of hypothesis 2 which means that negative correlation cultural distance and managers' international experience to

export of the enterprises with experienced managers are lower than enterprises with less experienced managers. Such result is empirical evidence for hypothesis which was formed by Hennart's Transaction Cost Theory (1991), which means that experienced managers could minimize the inverse correlation between cultural distance and export of enterprises. The last column of Table 3 reveals the marginal impacts of cultural distance, managers' international experience, moderate variables to export of enterprises (with the values of β and P are $\beta_1=-0,53$, $p<0,01$; $\beta_2=0,58$, $p<0,05$; $\beta_3=0,28$, $p<0,05$ for cultural distance, managers' international experience and moderating variables, respectively). Such coefficients mean that if coefficient of cultural distance between Vietnam and importing countries increase 1 unit, export intensity would decrease 0,53 unit. However, in the case of enterprises with experienced managers, exporting to cultural different countries would be improved 0,28 unit. All of these results were showed in Figure 2.

- Besides, OLS model was used to test the reliability of Tobit model. In which, there is no difference between Tobit regression and OLS tests with β -values and P-values are $\beta_1=-0,62$, $p<0,05$; $\beta_2=0,58$, $p<0,05$; $\beta_3=0,41$, $p<0,05$ for cultural distance, managers' experience and moderate variables respectively). In brief, Hypothesis 1 and 2 have been entirely confirmed in both theoretical and empirical base.

Figure 2. The moderating effect of managers' international experience on the relationship between cultural distance and export intensity



5. CONCLUSION AND LIMITATIONS

Based on Transaction Cost Theory (Hennart, 1991), to develop the hypothesis about regulating influences of manager's experience to negative relation between cultural distance and export intensity of enterprises in Vietnam. The results of OLS and Tobit regression on 345 enterprises have revealed that when comparing the negative correlation coefficient (between cultural distance and exporting intensity), the enterprises with experienced managers showed a lower coefficient than their counterparts with less experienced. Based on the result, it is showed that larger size of enterprises would allow more export obtained by the enterprises. Thereby, to increase export volume to various cultural countries, exporters should clearly acknowledge their foreign partners' cultures such as their hobbies, culture of customers, business environment and traditions, where exporters are going to export to. To do that, exporters should employ experienced managers who have more understandings about importer's culture. Then, applying strategic export plans and negotiating methods to decrease implicit and potential risks, and strengthening export volume.

These implications also show some limitations of this paper. First, the research has not revealed all full periods of data for exporting volume due to its fluctuation times by times. In this paper, authors have just collected data from the point of periods, and could not show all of changes. Second, export is also affected by exchange rate, but this study could not consider this variable since it is time series data while all of data used in the paper are spatial information. Therefore, for further researches in the future, time series or panel data should be used to develop foundation for making policies and building theories related to exporting activities. Third, when exporting to developed countries, culture could be simultaneously changed as the development of national economy however in this paper such changes have not been mentioned and considered. Last, there are various factors which could affect exporting enterprises such as competitive advantages, foreign policies and so on, which are

not mentioned in this paper. These limitations allow further researches to be able to consider such factors for better recommendations and sympathetic policies for exporting organizations.

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