

Difficulties in Job Creation and Exporting

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Evidence from aggregate and micro-level data shows that globally engaged firms are better than firms serving only domestic markets in various performance measures. However, inefficiencies in the business environment can affect firms' exposure to foreign markets. This note focuses on a particular aspect of business environment, namely, labor regulations, and analyzes their relationship with the decision to export. It shows that in countries where it is more constraining to create new jobs, a smaller fraction of firms choose to participate in export markets. This relationship is robust to inclusion of several factors that are likely to affect the exporting decision. The note also shows that among firms that export, those that find it more costly to create new jobs export less intensively. Finally, it shows that stringent labor regulations are more disruptive to firms that are in relatively more volatile industries. Most of the previous work on labor regulations has focused on efficient allocation of employment in economies. This note argues that labor regulations are also related to exporting.

Research based on cross-country data and recently available firm-level datasets shows that exporting is related to higher firm performance; examples in the international trade literature include Bernard et al. (2007) and Greenaway and Kneller (2007). One explanation for their high performance and significant contribution to economic development is the self-selection of efficient firms into foreign markets. However, a sound investment climate is required to complement firm-specific, technological, or market-driven factors for the self-selection process to work efficiently. Dollar et al. (2006) show that highly bureaucratic and corrupt governments, inefficient financial services, or low quality of infrastructure make it difficult for firms to expand into foreign markets in developing countries. In the absence of complementary regulatory reforms that improve the investment climate, focusing only on the elimination of trade barriers might not yield the expected gains from trade. This note focuses on the relation between a particular aspect of investment climate and exporting. It shows that firms that find it difficult to create new jobs due to stringent employment protection legislations (EPL) are less likely to participate in export markets.¹

This note uses the World Bank's Enterprise Surveys database.² The dataset covers firms from 26 countries from the Eastern Europe and Central Asia region (ECA).³ Two rounds of surveys were conducted in 2002 and 2005. The

2002 survey includes 1,617 firms from the manufacturing sector; the 2005 survey includes 3,678 such firms.⁴

The survey of firms is quite comprehensive. It includes various measures of firm performance and a rich set of questions on business environment. One section covers international trade. It includes questions on whether firms export their products and, if they do, what percentage of their sales are generated from exporting (export intensity). The survey includes another section regarding firms' employment levels. One question asks how much firms would adjust the number of their full-time workers if there were no restrictions in the labor markets for hiring and firing.⁵ This question is used to compute a potential growth rate of employment for each firm by dividing the difference between the actual employment level and the potential level by the average of these employment levels.⁶ This growth rate shows the deviation between the actual and potential employment level that stems from the frictions in the labor market. Next, the growth rate of each firm is weighted with its employment level to compute total job creation and destruction rates in each country. Finally, net job creation rate is calculated by subtracting job destruction rate from job creation rate. This measure shows the restrictiveness of EPL in creating new jobs.

Most studies that analyze the effects of labor regulations

resort to cross-country data in institutions and regulations using different data sources. This creates problems due to differences in measurement across countries. However, Enterprise Surveys use the same definitions across countries in unit of observations, the measures of firm performance, and labor regulations.

How are Difficulties in Job Creation Related to Exporting?

Determining the socially optimal level of regulation in labor markets is a challenging task. On one hand, a highly liberal labor market could lead to socially undesirable outcomes, such as underpayments of workers, layoffs without a reason, or forcing employees to work long hours. On the other hand, excessive regulations could make it difficult for firms to adjust their labor forces to changing economic conditions. Several studies have analyzed how employment protection affects job flows and firm performance.⁷ This note adds to that by analyzing the relationship between EPL and firms' decisions to export. It shows that in countries where firms find it more difficult to create new jobs due to stringent labor laws, a smaller fraction of them choose to expand into foreign markets.

Evidence from existing studies shows that export market entry is associated with significant changes in firm performance around the time export sales begin. In the data from Enterprise Surveys, employment levels of future-exporters grow by 13 percent before they start to export. This is four times higher than the growth rate of non-exporting firms. Bernard and Jensen (1999) analyze

the evolution of future-exporters among U.S. firms. They find that growth premium between future-exporters and non-exporters is 1.4 percent per year for employment and 2.4 percent for shipments. The rigidities in labor markets increase the costs of hiring workers, which reduces operating profits of firms. Lower profits lead to lower levels of competitiveness. In order to make exporting profitable, the disadvantage created by high hiring costs must be compensated with high productivity levels. As a result, a smaller share of firms finds it profitable to expand into

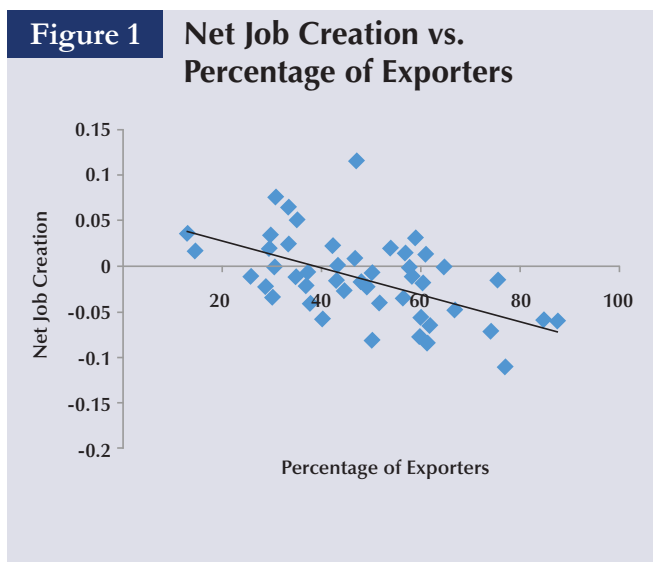
foreign markets. This result emerges in a recent theoretical model by Helpman and Itskhoki (2009).

For our sample of firms, the relationship between net job creation and percentage of exporters at the country level is negative (figure 1).⁸ A similar picture emerges when the same graph is plotted separately for each survey year. Since we want to understand the relationship between job creation and exporting, we can also use total job creation instead of

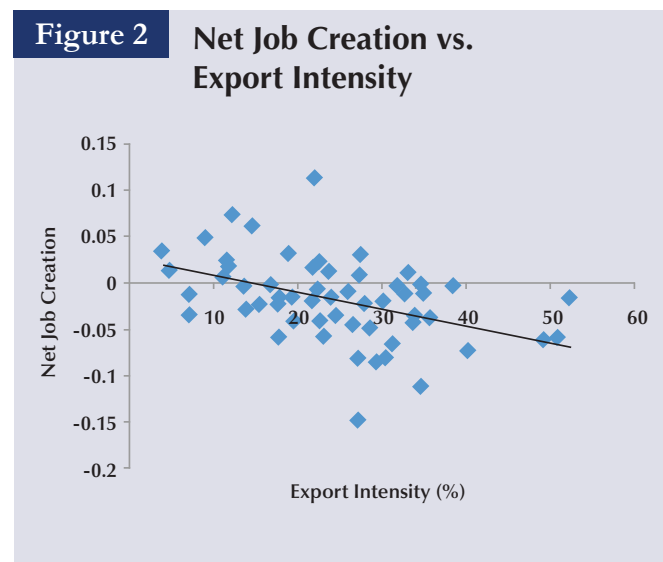
net job creation. This exercise gives similar results.

The decrease in competitiveness of firms caused by the rigidities in labor markets can also affect the share of revenues from exports (figure 2). Firms that could manage to enter foreign markets face fierce competition abroad for their products. Moreover, exporting is costlier than selling in the domestic markets due to additional transportation and trading costs. Hence, being competitive is crucial for their expansion in these markets. The finding presented in the graph is in accordance with this explanation. Firms in countries with stringent EPL export less intensively than firms in countries with more favorable EPL.

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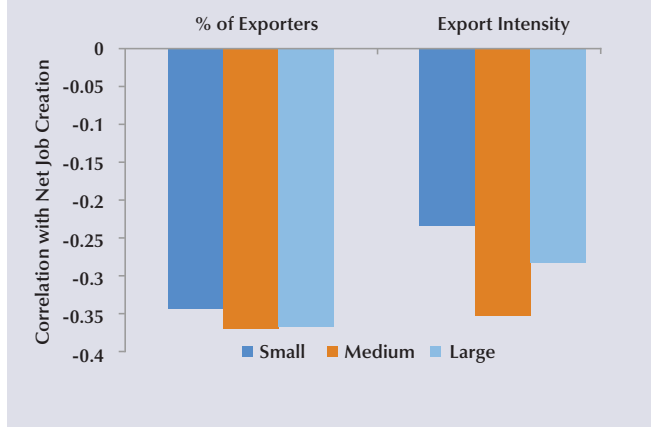


Source: Enterprise Surveys.



Source: Enterprise Surveys.

Figure 3 Net Job Creation vs. Fraction of Exporters and Export Intensities across Size Groups



Source: Enterprise Surveys.

Other Factors Affecting Exports

The decision to export can be affected by such factors as size, foreign ownership, or technology level of firms. If not controlled for, these factors can bias the relationship between rigidities in job creation and exporting. To see how size affects this relationship, firms are divided into three groups measured in employment levels: small (5-19 employees), medium (20-99 employees), and large (more than 100 employees). Evidence shows that the decision to participate in export markets is affected by firm size. Moreover, size can also be a determinant of how constraining EPL are for firms. Data from Enterprise Surveys show that small firms have a net job creation rate of 7.6 percent, which is almost four times higher than the level for medium-size firms. At each size level, there is a negative relationship between net job creation rate, fraction of exporters, and export intensities (figure 3).

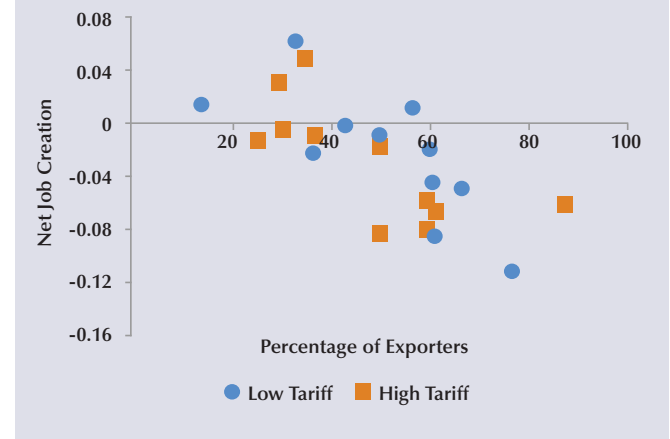
Trade policies are important in the decision to export. High values of tariff rates imposed by governments can lead to a low fraction of exporters in countries independent of the inefficiencies in business environment. Data from World Integrated Trade Solutions (WITS) show that the median tariff rate is 9.7 percent for the countries included in the analysis. We can divide countries into two groups: “Low Tariff” and “High Tariff,” where the former group includes countries with tariff rates less than the median level and the latter group includes countries with tariff rates higher than the median level. The relationship between net job creation and exporting is negative in either group (figure 4). A similar picture emerges if the cutoff tariff value is set as the 75th percentile of tariff rate distribution across countries.

How Do Manufacturing Industries Differ?

The analysis presented so far looks at the relationship between net job creation and exporting, combining all data from the manufacturing sector in each country. Industries are likely to vary in intrinsic volatility of demand and supply shocks. Hence, the effects of labor regulations might vary across industries. EPL might be more binding in relatively more volatile sectors as they would require more frequent labor adjustments. To test this hypothesis, intrinsic employment volatility of each industry must be identified. Following two recent studies by Micco and Pages (2007) and Haltiwanger, Scarpetta, and Schweiger (2008), this can be calculated as the relative job reallocation of each industry in the United States. Multiplication of this reallocation term with the net job creation rate for each manufacturing industry in each country gives a measure of the restrictiveness of EPL that change with the intrinsic volatility of the industry (*index of EPL restrictiveness*). In this analysis, industries that include at least ten observations are included so that the share of exporters and net job creation rates are not spuriously high or low.⁹ High levels of hiring and firing costs are more detrimental to export market participation of firms in industries that require more frequent labor adjustments (figure 5).¹⁰

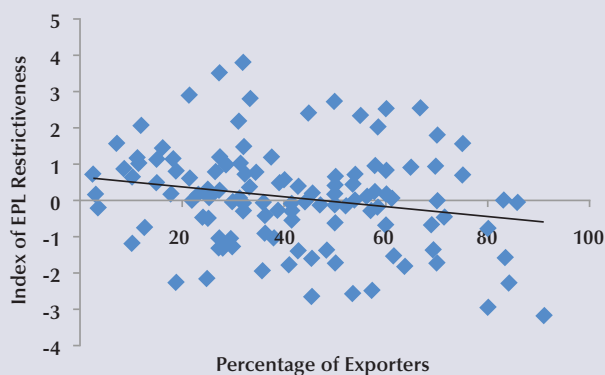
This note aims to shed light on the relationship between stringent EPL and exporting decisions of firms. It shows that in countries where firms are more constrained in increasing their employment levels, a smaller fraction of them find it worthwhile to participate in export markets. The findings presented here are purely descriptive. A more thorough analysis is required for causal relationships

Figure 4 Net Job Creation vs. Percentage of Exporters (by Different Tariff Policies)



Source: Enterprise Surveys and WITS.

Figure 5 Index of EPL Restrictiveness vs. Percentage of Exporters



Source: Enterprise Surveys and <http://econweb.umd.edu/~haltiwan>.

to be drawn. Seker (2010) provides a more elaborate empirical analysis of this relation. The findings presented in that paper and in this note provide new insight into why some countries experience low export performance. Using detailed, micro-level data, we now have evidence that stringent employment protection legislation is related to low export participation.

Notes

1. Within the rules and regulations set for governing the employment relationship between workers and firms, those that focus on hiring and firing of workers are often referred to as employment-protection legislations.

2. See www.enterprisesurveys.org for detailed description of the data and the methodology used for data collection.

3. The countries surveyed are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Macedonia, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkey, Ukraine, and Uzbekistan. In addition to these countries there are ten European Union (EU) members: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and

Slovenia.

4. The dataset covers major industries in the manufacturing sector, such as textiles, garments, food, metals, machinery, electronics, chemicals, wood and furniture, non-metallic and plastic products, paper, and printing and publishing.

5. The specific question is, “If you could change the number of regular full-time workers your firm currently employs without any restrictions (i.e., without seeking permission, making severance payments, etc.), what would be your optimal level of employment as a percent of your existing workforce?”

6. The details of the formulation are available in Seker (2010).

7. See Besley and Burgess (2004), Micco and Pages (2007).

8. Net job creation rate and percentage of exporters are not aggregated over the two survey years; hence, there are $26 \times 2 = 52$ observations on the scatter plots.

9. Using alternative values of 5, 30, or the exclusion of this threshold value did not affect the sign or the significance of the relation.

10. This graph only presents a simple relationship between the two variables. Controlling for country and industry fixed effects, Seker (2010) also finds a significant negative relationship.

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