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Trade Note 30

EXPORT PROMOTION AGENCIES: WHAT WORKS AND WHAT DOES NOT

The number of national export promotion agencies (EPAs) has tripled over the last two decades. While more countries made them part of their national export strategy, studies criticized their efficiency. EPAs have been retooled partly in response to these critiques. This note studies the impact of existing EPAs and their strategies, based on a new data set covering 119 developing and developed countries. Results suggest that on average they have a strong and statistically significant impact on exports. For each \$1 of export promotion, we estimate a \$300 increase in exports for the median EPA. However, there is heterogeneity across regions, levels of development and types of instruments. Furthermore, there are strong diminishing returns, suggesting that as far as EPAs are concerned small is beautiful.

EPAs are a popular instrument to boost exports

The first EPA –still existing– was created in 1919 in Finland, and in the mid-1960s EPAs became a popular instrument to boost exports and reduce trade deficits, under the auspices of the International Trade Center (a joint UNCTAD-GATT multilateral institution). By the early 1990s their efficiency began to be questioned (Keesing and Singer, 1991 and 1991a). EPAs in developing countries were criticized for lacking strong leadership, being inadequately funded, hiring staff without a client

orientation, suffering from government involvement, and especially for establishing EPAs in countries with antitrade policies¹. As a result, many development institutions withdrew their support to EPAs. Part of the blame for the failure of the early EPAs was put on the import substituting trade regimes that prevailed at the time. Overcoming such a strong antitrade bias was probably too much to ask of any specialized agency. However, more than a decade later, the trade-policy environment has significantly changed in the developing world and some EPAs have evolved.

The objective of EPAs is essentially to help potential exporters find markets for their products, as well as provide them with a better understanding of products demanded in different export markets. One can divide the services offered by EPAs into four broad categories: 1) country image building (advertising, promotional events, but also advocacy); 2) export support services (exporter training, technical assistance, capacity building, including regulatory compliance, information on trade finance, logistics, customs, packaging, pricing); 3) marketing (trade fairs, exporters and importer missions, follow-up services offered by representatives abroad); and 4) market research and publications (general, sector, and firm level information, such as market surveys, on-line information on export

markets, publications encouraging firms to export, importer and exporter contact databases).

The economic justification for government involvement in export promotion is based on the theory of asymmetric information and other market failures. Private firms alone will not provide foreign market information, as companies hesitate to incur research and marketing costs that can also benefit competitors. The same applies to pioneer exporters, who make a considerable investment in attempts to open a foreign market, cultivating contacts, establishing distribution chains, and other costly activities that can be used by their rivals (Hausmann and Rodrik, 2003). Higher uncertainty associated with trading across borders in markets with different legislation has also been put forward as a justification for export insurance schemes supported by the public sector. **From an economic perspective the argument for public funding of EPAs needs to be based on an assessment of the social costs and benefits associated with the activities of the EPA.** Social benefits are likely to be larger than the social costs if there are large positive externalities associated with higher current exports across firms, sectors or time and within the exporting country.

Empirical studies support the view that EPAs can be crucial for export success

Cross-country statistical analyses of the impact of EPAs on exports have not existed prior to this research. The exception is perhaps Rose (2005), who estimates the impact of the presence of an embassy or consulate may have on bilateral trade using a gravity model. Rose argues that as communication costs fall, foreign embassies and consulates have lost much of their role in decision-making and information-gathering, and therefore are increasingly marketing themselves as agents of export promotion. In a sample of twenty-two exporting countries—of which eight are developing countries—and around 200 potential trading partners Rose finds that for each additional consulate abroad, exports increase by 6 to 10 percent.

The bulk of the previous empirical literature focused on the effectiveness of agencies

in developed countries. One approach relies on surveys of exporters asking which programs they have made use of and their opinions of these programs and the success they have had in exporting. Kedia and Chhokar (1986), for example, found that export promotion programs in the United States have little impact, largely because of a lack of awareness about such programs. Seringhaus and Botschen (1991) surveyed the opinion of nearly 600 firms in Canada and Austria and found that export-promotion service use is low and that the programs are not tailored to the needs of exporters. Gencturk and Kotabe (2001) tested the link between program usage and export performance in a sample of 162 US firms and found that usage of export programs increases profitability, but not sales, which suggests that there are no externalities across firms and that export programs represent a transfer from agencies to the exporting firm. Gencturk and Kotabe also found that experienced exporters benefit from government programs in terms of profitability more than new exporters. **Despite their criticism of existing programs, these studies do support the argument, however, that EPAs are a response to a genuine need of small and medium-sized firms and that they can be crucial for export success.**

In the late 1980s, a World Bank report assessed EPAs in the developing world and argued that a consensus had emerged with a strong negative view of EPAs in developing countries (Hogan, Keesing and Singer, 1991). In a series of influential studies (Keesing and Singer, 1991, 1991a) the authors argued that EPAs had failed to achieve their goals and in many instances had a negative impact, except in those countries that already had favorable policies vis-à-vis exports, namely Singapore, Hong Kong, Korea, and Taiwan (Keesing, 1993). The alleged weaknesses were: EPAs were manned by poorly trained civil servants who were out of touch with their private-sector clients; these public institutions did not provide the incentives to ensure a high-quality service to exporters; agencies failed to address the major supply constraints on exporters, which were often not marketing-related, particularly in environments where import substitution policies prevailed.

Others (Hogan, 1991, de Wulf, 2001) argued that the key problem with EPAs was their lack of funding and that bad policy environments could be overcome by well funded EPAs, as the examples of Korea, China, and Taiwan in fact demonstrated, thus countering Keesing's argument. Hogan also argued that the one-size fits all solution often advocated by donors was ill-suited, and different environments required different structures. In spite of the strong criticisms, EPAs were not abandoned. In fact, the number of publicly funded agencies increased over the course of the 1990s. More recently, the development literature has taken a slightly more positive view of the potential role of export promotion agencies in poor countries. The rationale underlying the criticisms of Keesing and Singer (1991, 1991a) was that the early failures of EPAs were mainly due to import substitution policies that made the job of EPAs very difficult. In the 1990s, that strong bias against exports vanished, and prominent development economists have adopted a more benign view of EPAs. For example, in a study of how governments can promote non-traditional exports in Africa, one of the main recommendations of G.K.Helleiner (2002) –who led the study– was to create an adequately funded EPAs to help exporters overcome the costs and risks of entering unfamiliar and demanding international markets (Helleiner, 2002).

From a survey of 295 small-and-medium-sized sporadic and permanent exporters in Chile, Alvarez (2004) provided evidence on what types of programs, institutional set-up, and financing are more likely to succeed. While trade shows and trade missions did not affect the probability of being a successful exporter, a program of exporter committees showed a positive and significant impact. Such committees are composed of a group of firms with common objectives in international business, which cooperate on research, marketing and promotion. Macario (2000) identified the policies that determine successes and failures in Brazil, Chile, Colombia, and Mexico. On the basis of interviews with successful exporters, she sets out various recommendations for export promotion agencies: they should be directed at firms with new products or who are entering new markets; they should emphasize cost-sharing to

ensure that programs are used only by those truly dedicated to export; support should be given for a maximum of 2-3 years so that it does not turn into a subsidy; programs should be submitted to external evaluation; agencies work best when they are subject to a mix of public and private management. In his survey of the early literature, de Wulf (2001) stressed the importance of emphasizing on-shore activities. EPAs have traditionally focused on off-shore activities, such as information gathering, trade fairs, and trade representation, thus often neglecting the importance of home-country supply conditions. Well-targeted support to potential exporters could have large impacts.

Our analysis suggests that today's EPAs are effective in boosting exports

In mid-2005 we conducted an 18 question survey of EPAs around the world⁴. Through the ITC website (www.intracen.org/tpo) we obtained a database with contact information. We complemented this list with the help of many World Bank country economists who provided contact information for national EPAs. We contacted agencies or Ministries in 147 countries. In 31 countries we were informed that there was no national EPA. In turn, the survey was sent to 116 countries and 92 answered (of which 4 responded that they could not respond). Each of the 88 surveys that we received was followed up with phone conversations to confirm and clarify some of the answers. The survey contains five parts: i) institutional structure, ii) responsibilities of the agency, iii) the strategies followed, iv) resources and expenditures, and v) activities and functions. Hence the final sample of countries included in the data analysis was 119, of which 31 have no EPA.

Sample characteristics

- Around 10 percent of agencies surveyed are fully private; 5 percent are joint public private entities.
- 80 percent of the agencies are either the only export promotion agency in the country or clearly the largest and most important, although there are significant public and private agencies working in closely related areas.

- The principal strategy followed by 60 percent of the agencies surveyed is to increase aggregate exports, no matter which sector or how big or small the export volumes.
- The average budget of EPAs surveyed is around 0.11 percent of the value of exports of goods and services, with a standard deviation of 0.35 and a median of 0.04 percent.
- Public funding seems to predominate as a source of funding. Three quarters of the agencies surveyed had no private funding, and half had no income associated with the selling of their services.
- The largest share of spending is generally spent on marketing and market research, and publications.
- 41 percent of the agencies have offices abroad. In most regions agencies spend a small amount of their budget on offices abroad, with the exception of the OECD where on average 39 percent of the EPA budget is dedicated to offices abroad.

Our objective was to disentangle the impact of export promotion agencies, their structure, responsibilities, strategies, resources and activities on overall exports in order to understand what works and what does not. The first step was to explore whether there is any correlation between export promotion budgets and exports. The simple correlation of exports per capita on EPA budgets per capita revealed a clear positive association between these two variables. It also provided the predicted value obtained from the corresponding locally weighted regression (lowest), which provided us with some prima-facie evidence of which are the agencies that are underperforming in terms of exports per capita given their budgets. For example Rwanda would be expected to have a much higher level of exports given the budget of its EPA (underperformer), whereas the Irish agency would be expected to have a lower level of exports (over-performer).

But one has to be careful with the interpretation of this positive association. First, the sample might be biased, because it is restricted to the agencies for which we were able to find a local contact. It is also further restricted to those agencies that answered the survey, even though we had a perhaps surprisingly high 76 percent response rate. Second, because of the endogeneity of the export promotion budgets to exports, a correlation can exist between unobserved factors contributing to both the budget of EPAs and

exports, which will also result in spurious correlations.

We correct for sample selection bias using a selection equation (Heckman, 1979) that explains why some countries were not surveyed and why some agencies did not answer. Our experience collecting contact information for EPAs helped us identify variables that should be part of this selection equation. It was clear that in poorer and smaller countries it was more difficult to obtain contact information for the relevant Ministry or institution, and even when we did, it was difficult to get them to answer the survey. So GDP per capita and GDP became elements in the selection equation. The extent of aid per capita also seemed to be an important determinant as the EPAs in the poorest economies were substantially funded by bilateral and multilateral donors.

We deal with the endogeneity of export promotion by controlling for numerous determinants of exports that may be also correlated with export promotion budgets⁵. The control variables we considered are: GDP per capita, an index of trade restrictiveness imposed on imports, an index of trade restrictiveness faced by exports in the rest of the world, volatility of the exchange rate, an indicator of the export regulation burden that measures the number of days that it takes on average to comply with all necessary regulations to export goods, a dummy for landlocked countries, and regional dummies for Asia, LAC, MENA, SSA and the OECD⁶.

The basic export equation thus became:

$$\ln(Exp/pop)_c = \beta_0\beta_1\ln(Bud/pop)_c + \beta_2\ln(GDP/pop)_c + \beta_3\ln(T)_c + \beta_4\ln(MA)_c + \beta_5\ln(Vol)_c + \beta_6\ln Reg_c + \beta_7Locked_c + Dummies_R + e_c$$

where the β s are parameters to be estimated; Exp/pop_c are exports per capita in country c ; Bud/pop_c is the budget of the EPA per capita in country c ; GDP/pop_c is GDP per capita, T_c is an index of trade restrictiveness imposed by country c on its imports from the rest of the world; MA_c is an index of the market access trade restrictiveness imposed by the rest of the world on exports of country c ; Vol_c is the volatility of the exchange rate in country c ; Reg_c is the number of days

necessary to comply with all regulations and procedures required to export goods from Djankov, Freund and Pham (2006); $Llocked_c$ is a dummy that indicates whether the country is landlocked; $Dummies_R$ are regional dummies, and e_c is the standard white-noise.

We estimated the selection and export equations using a two-step Heckman model, namely the information maximum likelihood estimator. The full information maximum likelihood (FIML) is generally more efficient than the two-step approach, especially in the presence of high levels of correlation between the explanatory variables of the selection and main equations (the two exclusion restrictions we imposed are aid per capita and the log of GDP). However, the FIML failed to converge as we increased the number of explanatory variables. We therefore opted for reporting the two-step results throughout.

Generally, our estimates suggest that today's EPAs are effective in terms of having an impact on national exports. **For every \$ 1 in the EPA budget, on average there is an additional \$490 dollars of exports in LAC, \$227 in Asia, \$ 160 in the OECD, \$137 in SSA and \$96 in MENA, although the last two estimates are not statistically different from zero.** On average, exports increase with EPAs' budgets, even though our estimates suggest that at levels around 60 cents per capita the marginal efficiency starts declining.

All estimated coefficients have the expected sign. GDP per capita has a positive and statistically significant sign in all specifications suggesting that richer countries, with stronger and better institutions, export more. Countries with restrictive import regimes export less, capturing well known general equilibrium effects, but the sign is not statistically significant⁷. The restrictiveness faced by exporters in the rest of the world strongly reduces exports across all specifications with a slightly higher coefficient for developing countries when correcting for sample selection bias. Exchange rate volatility also has a negative impact on exports, although it is statistically significant only in the case of developing countries after correcting for sample-

selection bias. The number of days necessary to comply with export regulation in the exporting country has a negative, but insignificant impact on exports.

There is an inverted U-shape relationship between the impact of EPAs budget on exports and the budget of the EPA. This suggests – everything else equal— that very low or very high budgets may actually lead to lower efficacy. The maximum impact is achieved somewhere between \$0.60 and \$2.7 per capita. The estimates actually suggest that at very low levels of expenditures the impact of EPA's budget on exports may be negative. The estimated coefficients on EPA's budgets are much smaller than 1 and statistically different from 1. This further suggests that there are strong decreasing marginal returns in EPA budgets. Perhaps more importantly, the analysis also investigated the types of export-promotion institutions and activities that might have the largest payoffs.

What works and what does not?

- Results confirm some of the conclusions of the earlier literature. **EPAs should have a large share of the executive board in the hands of the private sector, but they should also have a large share of public sector funding.** In other words, a full privatization of EPAs does not seem to work. A single and strong EPA should be preferred to the sometimes observed proliferation of agencies within countries. Results also suggest that EPAs should focus on nontraditional exports or have some broad sector orientation, rather than attempt to promote overall exports. They should also focus on large firms that are not yet exporters (although this last result is statistically weak).
- There are some characteristics that seem to be particularly important for developing countries. For example, the export promotion activity of the agencies should be shared with other activities such as investment promotion and export financing. Similarly, they should focus

their expenditure on on-shore export support services rather than on country image or marketing and market research activities. Also, EPA offices abroad do not seem to have a positive impact on exports, again suggesting that agencies should focus on on-shore activities.

Last but not least, words of caution are warranted. First, regarding the methodology used to derive these conclusions, cross-country regressions cannot fully capture the heterogeneity of policy environments and institutional structures in which agencies operate, without running out of degrees of freedom. To complement our study and provide adequate policy advice, case studies are needed. Second, the large “returns” that we found on average to EPA’s expenditure do not provide a justification for those budgets on welfare grounds, as these will need some measurement of the externalities and net benefits associated with export promotion. Moreover, larger returns may be obtained by investing those resources in improving the overall business climate (infrastructure, education, etc.) and we do not provide such an analysis. Also, the evidence of diminishing returns to scale in EPA budgets in fact suggests that small is beautiful in this context. Our hope is that this empirical analysis provides guidelines in terms of institutional design, objectives, and activities of EPAs that can help maximize the impact of EPAs on exports.

Footnotes

1. Similar critiques emerged for EPAs in developed countries; see for example Kotabe and Czinkota (1992), a study of the United States sub-national EPAs.
2. Of the 73 export promotion agencies in developing countries surveyed only 21 had some budgetary support from multilateral donors in 2005, and in only 11 agencies the budgetary support from multilateral donors represented more than 25 percent of the total budget. In the case of one Sub-Saharan Africa agency more than 75 percent of its budget in 2005 came from multilateral donors.
3. Note that some of these externalities may travel across borders. It is clear that some of the benefits from export promotion activities can be captured by consumers in the importing country for whom search costs are reduced. This calls for multilateral interventions.
4. The questionnaire is available from the authors upon request.
5. Ideally we would like to find suitable instrumental variables, but it is difficult to find a good instrument for the export promotion budget that will not be correlated with exports.
6. GDP per capita is the average for the period 2000-2004 in 2005 constant U.S. dollars from the World Bank’s World Development Indicators; the indices of trade restrictiveness imposed at home and abroad are from Kee, Nicita, and Olarreaga (2006); the volatility of the exchange rate is measured by the coefficient of variation of the dollar to local currency exchange rate during the period 2000-2004 obtained from the World Development Indicators.
7. This result also suggests that in the early 2000s contrary to what was observed by Keesing and Singer (1991a) in the 1980s, the main constraint to export is no longer the anti-trade bias of the import regime.

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