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## Determinants of Exports in Developing Countries

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### I. INTRODUCTION

According to the orthodox classical economist as well to the modern liberal view trade is equivalent to an engine of economic growth. Exports promotion strategy is often in accordance with the principle of comparative advantage, when a country specialises in a product, which it can produce competitively. The goods become available to the community of the world at cheaper prices. The markets are extended. The internal and external economies are attained. Income and employment levels expand. Consequently process of economic development is facilitated. In a nutshell, putting more emphasis on the promotion of exports would permit the optimal allocation of world resources and, therefore, returns from trade sector depend upon accelerating growth of exports.

The proposition of FDI led exports growth is controversial in empirical literature. But the role of domestic investment is believed to be much important for export expansion strategies. In any case the importance of FDI, if any, cannot diminish the role of productive investment from the domestic economy. While private domestic investment can be regarded as a permanent and reliable channel to enhance production capacity, investment in public sector has been considered important, for example in roads, communication and other public goods and services that are essential to stimulate private investment. Furthermore, government has a decisive role through support for research and contract with foreign buyers as well as in facilitating access to credit to both directly and indirectly exporting terms.

Funke and Holly (1992) argue that the majority of the previous approaches have emphasised demand factors. Such models have generally been rather unsuccessful in explaining long run trends in export performance.<sup>1</sup> The study takes into account both supply side and demand side factors and applies the model to the West German manufacturing sector using quarterly data over the period 1961.1 to 1987.4. The findings of the study suggest that supply side factors are much more important for explaining export performance than demand side factors.

Togan (1993) investigates the changes in the structure of export incentives in Turkey from 1983 to 1990. The export incentives are export credits, tax rebate scheme, premium from the “Support and Price Stabilisation Fund”, duty free imports of intermediates and raw materials, and exemption from the value added tax, foreign

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<sup>1</sup> See the debate between Landesman and Snell (1989) and Holly and Wade (1991), for example.

exchange allocations, exemption from the corporate income tax and other subsidies. The study finds that during the 1980s the level of the economy-wide subsidy rates and that of inter-industry dispersion of incentives has substantially been lowered. The study also finds that the Turkish export- and import-competing industries have benefited from the export incentives more than the other sectors.

In a comprehensive study Riedel, Hall and Grawe (1984) investigate quantitatively the determinants of export performance in India on the basis of time-series analysis over the period 1968-1978. The study analyses the effects of relative price of exports, relative domestic demand and domestic profitability on export performance. The dependent variable used is the ratio of indexes of constant price exports to industrial production. Exports are expressed as a ratio to output in order to account for the effect of expansion of production capacity. The results support the view that domestic market conditions strongly influence export behaviour. The variable measuring domestic profitability or relatively domestic demand is found to be statistically significant in explaining export behavior in 23 of 30 sectors. Relative price, incorporating export policy incentives and the exchange rate turn out to be statistically significant in only 10 of the 30 sectors. However, relative prices tended to be significant in those sectors where comparative advantage is presumed to be strongest, for example, ready-made garments, carpet weaving, handicrafts and metal products. The study has the loophole of using short period. It requires a long period for better estimates.

A more recent study of Sharma (2001) investigates exports determinant in India using annual data for 1970-98. The study uses simultaneous equation framework. The results of study suggest that demand for Indian exports increase when its export price falls in relation to world prices. Furthermore, the real appreciation of the rupee adversely affects Indian exports. Exports supply is positively related to the domestic relative price of exports and higher domestic demand reduces export supply. Foreign investors appear to have statistically no significant impact on export performance, although the coefficient of FDI has a positive sign.

Hoekman and Djankov (1998) analyse the magnitude of change in the export structure in Central and Eastern European countries. The study investigates the relative importance of processing (subcontracting) trade, imports of input, and FDI as determinants of the countries' export performance in European Union markets. The findings of the study suggest that in most countries export of intermediate goods and machinery drive the changes in export structure. Local enterprises apparently exploit the opportunity to acquire foreign inputs and know-how in order to improve production quality, thereby expanding their export market share in the European Union.

The study observes that FDI has been concentrated in the sectors where the Central and Eastern European countries do not have a revealed comparative advantage (that is, they are not relatively specialised in terms of their export share in Eastern Union markets). Of the five countries for which data are available, Poland is the only one with a significant positive association between FDI and exports structure. The negative relationship for the other countries implies that FDI could be a force for change. Foreign investors must perceive the industries concerned to be viable in the median term, and over time this FDI may lead to greater changes in the countries' export composition. Thus FDI complements efforts by domestic industries to restructure and upgrade production facilities.

It appears from the above review that studies on export determinants are mostly based on country specific factors as export expansion schemes, subsidies, etc. There is hardly any study that conducted panel data estimation on export determinants for a large number of developing countries.

The present study aims to find out the internal and external determinants of export promotion in a large set of developing countries. In this study we will follow panel data estimation procedure for 75 developing countries. The rest of the discussion is organised as follows: Section II explains the model and framework of analysis: Section III introduces the data set and the construction of variables. Section IV puts forward the main findings from empirical analysis. Section V presents a summary results with some policy implications.

## II. METHODOLOGY

In this chapter, we formulate a framework of analysis to determine the effects of various factors on exports in developing countries, which we have taken in our sample. The underlying objective is to explain the rational behind exports.

In the export function we consider all those factors that can potentially play a meaningful role in the determination of exports in the developing countries. Export promotion strategies have a great deal in trade liberalisation regime. On one hand, developing countries are facing twin deficits, namely, fiscal deficit and trade deficit. On the other hand, external debt crises create further financial problems. In such sorry state of financial crises, the sole of FDI inflow is not sufficient. But the expansion of export sector for the improvement of financial disturbance also needs to be addressed. In this respect, we identify various determinants of exports. Export growth is basically determined by external factors, for this we employ two variables FDI and real exchange rate. However, exports are also affected by domestic factors. In this respect we incorporate GDP, GDP growth rate, indirect taxes, communication facilities, savings, industrialisation, labour force and official development assistance. Specified equation for export promotion is as follow.

$$EX_{it} = f(FDI_{it}, GDP_{it}, GROW_{it}, SAV_{it}, OD_{it}, IT_{it}, EXCH_{it}, TV_{it}, TP_{it}, VAD_{it}, LF_{it}), \dots \quad (2)$$

where the subscript  $i$  ( $=1, \dots, n$ ) represents country and  $t$  ( $= 1, \dots, T$ ) the period of time (years). The variables appearing in the equation are defined as follows.

- $EX$  = Exports as a percentage of GDP,
- $FDI$  = Foreign Direct Investment as a percentage of GDP,
- $GDP$  = Gross domestic production in constant prices of 1989,
- $GROW$  = Annual percentage growth rate of GDP,
- $SAV$  = National savings as a percentage of GDP,
- $OD$  = Official development assistance as a percentage of GDP,
- $IT$  = Indirect taxes as a percentage of GDP,
- $EXCH$  = Real exchange rate. It is obtained by multiplying the nominal exchange rate by US CPI and divided by domestic CPI,
- $TV$  = Number of televisions per 1000 persons,
- $TP$  = Number of telephones per 1000 persons,

$VAD$  = Industry value added as a percentage of GDP,  
 $LF$  = Total labour force,

### **Justification of Exports Determinants**

#### *Production Level*

It is the supply side determinant of exports [see Bertil (1968)]. The higher level of production is the main cause of export expansion, because surplus of output can be exhausted in international markets. In a close economy surplus of production leads to fall in prices, which, in turn, creates pessimism among producers. In an open economy such surpluses create foreign reserves by exporting production. So we expect the positive impact of GDP on exports growth. In empirical literature Kumar (1998) confirms the positive impact of GDP on exports.

#### *Production Growth*

Growth of the GDP is an indicator of future potential and sustainability of production level. Growth is more valid determinant of exports as compare to GDP because it measures the sustainability of output levels. So we expect positive impact of GDP growth on exports expansion.

#### *Real Exchange Rate*

A fall in the relative domestic prices due to exchange rate depreciation makes exports cheaper in international markets resulting in increased demand for exports, therefore we expect the positive impact of real exchange rate on export growth.

#### *Communication Facilities*

In this era, when time is shrinking, the importance of communication facilities has become more important. For the measurement of communication facilities we employ two variables, namely, the number of television sets and the number of telephones sets in use. These two variables have also been justified in empirical literature [Kumar (1998)]. Expansion of such facilities has favourable effect for exploration and excess to the world markets. Hence we expect the positive impact of provision of such facilities.

#### *Indirect Taxes*

The effect of this variable is expected to be adverse on production decisions. But we cannot rule out the possibility of positive effect on exports due to fiscal incentives by government. Specifically, if government provides tax exemptions for the expansion of exports sector, higher rate of indirect taxes can have the negative effect on domestic demand resulting in exportable surplus.

#### *Official Development Assistance*

Large size of official development assistance implies is likely to facilitate growth of infrastructure, which in turn will favourably affect investment climate. We expect positive effect of this variable on export growth.

### *Savings*

Generally, in developing countries the proportion of savings used for non-productive factors, for example purchasing of jewellery, property, etc. is larger. Therefore higher savings result in large volume of goods made available for exports. So we expect positive impact of this variable on exports.

### *Industrialisation*

The agricultural output is subjected to uncertainty, particularly because of operation of nature's vagaries. Accordingly, now a day, just on the basis of agricultural output no country has greater incomes and outputs. On the other hand, it is the industrialisation that results in maximum utilisation of natural and human resources of the country and industrial output is more or less stable. Thus industrialisation will provide greater stimulus to output and national income of the country. Industrialisation also promotes agriculture sector and agriculture uplifts the industrial sector. The industrial development will have the effect of developing the allied and related sectors.

The situation of persistent deficit in balance of payments is attributed to concentration in agriculture exports, falling prices of exports, the imports restrictions by rich countries and the increasing import bill due to increased demand for oil and manufactured products, etc. Through industrialisation a country can enhance industrial production; replace the agriculture exports by the industrial exports, which command reasonable and stable prices in the world markets. Moreover, industrialisation reduces dependence on imports by initiating the process of import substitution. Keeping in view all such arguments, we conclude that industrialisation has favourable effect on exports.

### *Labour Force*

Optimum utilisation of resources depends upon the labour force. Labour force positively determines production levels. In developing countries large volume of labour force in agriculture sector can be transferred in industrial sector without affecting the output of agriculture sector, because this sector is confronted with the problem of disguised unemployment. Such labour force can be properly utilised in industrial sector that in turn expand export sector. In empirical literature, Pfaffermayr (1996) justifies the positive impact of labour force on exports.

Skilled labour force is the source of competitiveness in production and lower cost of production. Many developing countries exploit the advantages of skilled labour force for competitiveness in export sector. At the same time many developing countries have unskilled labour force. The effect of unskilled labour force is opposite on competitiveness in export sector. Hence we can have positive or negative effect of labour force on exports.

### *Foreign Direct Investment*

In empirical literature the role of FDI in exports promotion is controversial. Many studies [e.g. Pfaffermayr (1996)] find positive effect of FDI on exports. The main reason underlying is the export oriented MNCs. Since government provides facilities for export promotion, such facilities also attract foreign investors. In order to promote exports

government can adopt FDI-led export growth strategies with twin objectives of capturing the benefits of both FDI inflow and exports growth. On the other hand, many studies find insignificant or weak impact of FDI on exports [see Hoekman and Djankov (1997)]. Such studies point out that the role of FDI in export promotion in developing countries remains controversial and depends crucially on the motive for such investment. If the motive behind FDI is to capture domestic market (tariff-jumping type investment), it may not contribute to export growth. On the other hand, if the motive is to tap exports markets by taking advantage of the country's comparative advantage, then FDI may contribute to export growth.

### III. DATA AND ESTIMATION PROCEDURE

The data for this study have been taken from *World Development Indicators (WDI) 2005*. Originally a sample of 155 countries was selected but after screening process 75 countries was chosen for which data on most of the variables were available for at least 15 years. For each variable expressed in terms of ratios to GDP, both the level of the variable and the GDP are measured in US dollar at current prices.

Gross foreign direct investment is measured as percentage of GDP. Gross foreign direct investment is inflows of foreign direct investment recorded in the balance of payments financial account.

Official exchange rate is measured as the period average of the number of local currency units per US\$. Official exchange rate refers to the actual principal exchange rate and is an annual average based on monthly averages determined by country authorities or on rates determined largely by market forces in the legally sanctioned exchange market. To convert the nominal exchange rate into real exchange rate we multiply the nominal exchange rate with the US CPI and divided it by domestic CPI.

Gross national savings, defined as gross domestic savings plus net income and net current transfers from abroad, are measured as percentage of GDP.

Official development assistance and net official aid record the actual international transfer by the donor of financial resources or of goods or services valued at the cost to the donor, less any repayments of loan principal during the same period. Aid dependency ratios are computed using values in U.S. dollars converted at official exchange rates.

Industry value added is measured as percentage of GDP. It comprises of value added in mining, manufacturing, construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources.

Total labour force comprises people who meet the *International Labour Organisation (ILO)* definition of the economically active population: all people who supply labour for the production of goods and services during a specified period. It includes both the employed and the unemployed members of labour force. While national practices vary in the treatment of such groups as the armed forces and seasonal or part-time workers, in general the labour force includes the armed forces, the unemployed and first-time job seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

Telephone mainlines are measured as the number of lines per 1,000 persons. Telephone mainlines are telephone lines connecting a customer's equipment to the public switched telephone network. Likewise television sets are also measured as the number of sets in use per 1,000 persons.

Net indirect taxes are measured as percentage of GDP. These taxes are the sum of indirect taxes less subsidies. Indirect taxes are those taxes payable by producers that relate to the production, sale, purchase or use of the goods and services. Subsidies are grants on the current account made by general government to private enterprises and unincorporated public enterprises. The grants may take the form of payments to ensure a guaranteed price or to enable maintenance of prices of goods and services below costs of production, and other forms of assistance to producers.

We now discuss estimation procedure for our model. The use of pooled time-series and cross-section data provide large sample that is expected to yield efficient parameter estimates. Since political, structural and institutional characteristics vary from country to country, imposing a single relationship to all units is likely to suppress information. In order to overcome this problem we will use the approach of uniform shifts. The econometric literature suggests two approaches for uniform shifts [Green (1993); Kmenta (1986) and Maddala (1977)] the fixed effects and random effects model. In the present study we will follow fixed effects model.

#### IV. EMPIRICAL RESULTS AND INTERPRETATION

In this section we report the empirical results based on pooled data for 75 developing countries over the period 1970 to 2004. We select a large set of developing countries for empirical investigation. The panel data model is estimated by allowing the deterministic shifts across the countries. Since the model uses panel data, it is likely to suffer from autocorrelation as well as heteroskedasticity. Both are removed by applying appropriate econometric techniques. The results of estimation are presented in Tables 1a and Table 1b.

Table 1a

*Parameter Estimates of the Fixed Effects Model*

Variables	Fixed Effects	Variables	Fixed Effects
FDI	0.000261 (1.4945)	EXCH	3.96E-06 (17.48)*
GDP	7.15E-20 (4.91)*	T P	0.000326 (6.41)*
Grow	0.012143 (4.05)*	TV	9.85E-05 (4.66)*
SAV	0.389982 (15.66)*	LF	0.242757 (2.72)*
OD	0.164817 (8.38)*	VAD	0.003333 (10.27)*
IT	0.037753 (2.08)*	AR (1)	0.73764 (38.16)*
R <sup>2</sup>	.948	A. R <sup>2</sup>	.943
D W	1.999	F	651

Note: The numbers in parentheses are the computed *t*-values. The statistics significant at 5 percent level are indicated by \*.

Table 1b

*Country-specific Intercepts of the Fixed Effects Model*

Countries	Fixed Effects	Countries	Fixed Effects	Countries	Fixed Effects	Countries	Fixed Effects
Angola	0.3600 (0.05)	Sri Lanka	0.0387 (1.43)	Dominican Republic	0.0035 (1.92)	Paraguay	0.0399 (1.51)
Argentina	-0.2537 (-4.84)*	Lesotho	0.0238 (1.92)	Algeria	-0.1484 (-4.24)*	Saudi Arab	0.0667 (1.87)
Burundi	-0.1263 (-2.33)*	Madagascar	-0.0073 (-1.57)	Ecuador	-0.0678 (-3.04)*	Senegal	0.0756 (0.90)
Benin	0.0305 (1.04)	Mexico	-0.0957 (-3.13)*	Egypt, Arab Rep.	-0.0626 (-0.73)*	Sierra Leone	-0.0282 (-0.89)
Burkina Faso	-0.1391 (-2.53)*	Mali	-0.0270 (-1.62)	Fiji	0.3478 (1.90)	El Salvador	-0.0623 (-0.49)*
Bahrain	0.1172 (0.16)	Mozambique	-0.1410 (-2.35)*	Gabon	0.0560 (1.57)	Swaziland	0.4597 (2.80)*
Belize	0.2091 (0.99)	Mauritania	0.1474 (0.39)	Ghana	-0.0494 (-1.91)	Chad	-0.0494 (-1.76)
Bolivia	-0.0824 (-2.71)*	Mauritius	0.2353 (0.44)	Gambia, The	0.1963 (0.21)	Thailand	-0.0860 (-2.46)*
Brazil	-0.2813 (-4.87)*	Malaysia	0.1935 (0.02)	Guatemala	-0.0414 (-2.29)*	Togo	0.1706 (0.05)
Botswana	0.0342 (1.58)	Niger	-0.0381 (-1.81)	Guyana	0.5325 (2.80)*	Trinidad & Tobago	0.0141 (2.50)*
Chile	-0.0753 (-3.05)*	Nigeria	0.0240 (2.04)*	Honduras	0.0640 (1.08)	Tunisia	0.0999 (0.88)
China	-0.2870 (-4.00)*	Nicaragua	0.2144 (0.19)	Haiti	-0.1013 (-2.39)*	Turkey	-0.3606 (-5.14)*
Cote d'Ivoire	0.1189 (0.46)	Nepal	0.1300 (0.64)	Indonesia	-0.0519 (-2.69)*	Tanzania	0.0195 (1.35)
Cameroon	-0.0316 (-2.06)*	Pakistan	-0.0813 (-2.75)*	India	-0.1803 (-3.29)*	Uganda	-0.1126 (-2.29)*
Congo, Rep.	0.1106 (0.90)	Panama	0.0640 (0.89)	Iran, Isl. Rep.	-0.2925 (-3.87)*	Venezuela, RB	-0.1151 (-3.58)*
Colombia	-0.1646 (-3.66)*	Peru	-0.1853 (-4.21)*	Jamaica	0.1500 (0.83)	South Africa	-0.0653 (-2.99)*
Cape Verde	-0.0362 (-1.57)	Philippines	0.0214 (1.98)*	Jordan	0.2677 (1.76)	Zambia	-0.0100 (-1.96)
Costa Rica	0.0478 (1.35)	Papua N. Guinea	0.1359 (0.70)	Kenya	0.0220 (1.28)	Zimbabwe	-0.0476 (-2.25)*
Czech Republic	0.0092 (1.71)	Poland	-0.1806 (-3.38)*	Korea, Rep.	-0.1602 (-3.36)*		

Note: The numbers in parentheses are the computed *t*-values. The statistics significant at 5 percent level are indicated by \*.

In literature the first and foremost determinant of exports is FDI. However, in empirical literature the effects of FDI on exports are controversial. Our study finds positive but insignificant impact of FDI on export growth. The success stories of East and South East Asian countries suggest that FDI is a powerful tool of export promotion because multinational companies (MNCs) through which most FDI is undertaken have the well-established contacts and the up-to-date information about foreign markets. However, the experience of these countries cannot be generalised to all developing countries given the lower level of infrastructure and the rigidity in both the factor as well



as commodity markets. Furthermore, the role of FDI in exports promotion in developing countries remains controversial and depends crucially on the motive for such investment. If the motive behind FDI is to capture domestic market (tariff-jumping type investment), it may not contribute to export growth. On the other hand, if the motive is to tap exports markets by taking advantage of the country's comparative advantage, then FDI may contribute to export growth to the extent permissible under the prevailing policy regime. By now it is well known that an outward oriented regime encourages export-oriented FDI while an inward-oriented policy regime attracts FDI mainly to capture domestic rather than exports markets.

The effect of GDP and GDP growth on exports is highly significant with positive sign. The level of production can be utilised at domestic and international level at the same time. The developing countries have relative advantages for agriculture goods. They can exhaust benefits of lower cost production by export growth policies. Moreover, large size of GDP creates environments for investment decisions.

According to the regression results real exchange rate positively affects export. It turned out to be the most significant variable affecting export. Our empirical estimates are consistent with theory as well as empirical evidence found in other studies [e.g. Sharma (2001)].

In the globalisation era, when the value of time is most important, the need of wide spread communication facilities is becoming most important. For the measurement of communication facilities we employed two variables, namely, number of Televisions and number of Tele phones. The effects of expansions in communication facilities are positive and both the variables turned out to be significant. Thus expanding the net of such facilities is helpful in exploration of new international markets. Further, these make easy to access the world markets. As developing countries' exports are concentrated in few markets they can reap the benefits of global communication facilities. The results are in line with Kumar (1998).

As expected, the effect of labour force on exports growth is positively significant. The results are consistent with the findings in Pfaffermayr (1996).

The effect of official development assistance variable is also positively significant. This variable reflects the development phenomena. Exports are favorably affected by development expenditures. Because it is the sign of government positive behavior and the future expectations of exporters that export facilities would become stronger. Indirect taxes are also positive associated with exports. The proportion of indirect taxes varies for different goods. So it is not necessary that indirect tax is high for exportable goods. Furthermore, government provides tax exemptions to exporters. These are the reasons that this variable does not adversely affect exports.

The results show that increase in savings significantly contributes to exports. Higher savings imply lower interest rates that promote investment opportunities. The investment is the key channel for export growth. In developing countries government provide many incentives for export promotion strategies. The domestic investment take place in different sectors but it is much responsive in trade sector to incentives provided by government. After the activism of WTO developing countries are enhancing export oriented investment schemes. These are the arguments that support our hypotheses of investment led export growth. The empirical results also support our hypotheses. Over

and above, savings are the source of removal of internal and external gaps in developing countries. As two-gap theory explains saving-investment and exports-imports gaps in developing countries, large savings are the source of removal of domestic gap that in turn remove external gap by enhancing export growth.

The industrialisation variable is highly significant in explaining export growth. The importance of industrialisation for developing countries is obvious because production levels in agricultural remains unstable due to uncertainty of weather conditions and pest attacks and, hence, on the basis of agricultural output alone a country cannot expand its exports potential. The results signify the importance of industrialisation as means of sustained exports growth.

## V. CONCLUSION

The objective of this study has been to find out the main factors that are important in the determination of exports in developing countries. For this purpose the study used a fairly large sample of panel observations for 75 developing countries over the period 1970-2004. The data are derived from the *World Development Indicators (WDI) 2005*. Fixed effects (country specific intercepts) model is employed for the estimation of the relationship of exports with its potential determinants based on the panel data. A number of conclusions can be drawn from the study, which are summarised as follows.

- It is of critical importance to maintain a high and sustainable economic growth rate. Evidence has shown that a sustainable growth patterns promotes exports.
- Development of the net of communication facilities is crucial not only in promoting economic growth, as is well known, it is also important for sustained exports performance. This finding strengthens the case for subsidising the communications industry.
- A stable exchange rate policy has to be ensured in order to avoid the exchange-rate risks associated with the assets, import prices and profit considerations of direct investor in developing countries.
- Developing countries need to replace agriculture exports by the industrial exports, which command reasonable and stable prices in the world markets. Moreover, the industrialisation will reduce dependence on imports by initiating the process of import substitution.

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## Comments

Although a large number of studies exist on determinants of exports but a cross-country study on this aspect of exports, specifically for developing countries, is hard to find. The authors deserve appreciation for venturing into this area.

The paper is technically very sound. I hope that following suggestions would help the authors to remove minor shortcomings.

The authors find that depreciation of real exchange rate has a positive influence on exchange rate. To support the finding they make a reference to Marshal-Lerner condition. It is note worthy that Marshal-Lerner condition is about the impact of depreciation of nominal exchange rate. Though nominal and real rate are related through price indices, still drawing a direct inference about impact of depreciation of real exchange rate from Marshal-Lerner condition is perhaps not correct.

The authors recommend that developing countries should replace industrial exports with agricultural exports. This implicitly implies that developing countries do not enjoy comparative advantage in agricultural exports. Some discussion on this issue, supported by literature, will make the recommendation more forceful.

The paper recommends that a stable exchange rate policy has to be ensured in order to avoid the exchange rate risk attached to the assets, import prices and profit considerations of direct investor in developing countries. However the results obtained from econometric investigation do not suggest such an inference, the results only show that depreciation of real exchange rate has a positive influence on exports. The authors may consider taking off the recommendation.

Table 4.2(b), that shows fixed effects for 75 countries, and is spread over three pages, if included as appendix, would perhaps make reading through the paper more convenient.

Finally, there appears to be a typographical error in the following statement on page 15. "Depreciation of domestic currency makes its exports cheaper and exports expensive" This should read "Depreciation of domestic currency makes the country's exports cheaper and imports expensive".

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