

(Preliminary draft)

Can Trade Policy Foster Growth and Development ?¹

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Ideas about trade policy and economic development seem to follow a cyclical pattern. From the period of decolonization until the 1970s, import substitution in manufacturing prevailed in developing countries' development strategies because it was thought to be synonymous with industrialization and thus to provide a key to development. The rise of the consensus on pro-growth trade dates back to the 1980s with the failure of self-centered import substitution strategies in Latin America as a major source of disappointment. Even if these strategies were found badly wanting, this did not imply that trade openness and outward-orientation would automatically and necessarily fuel growth. Yet, the simultaneous success stories of East Asian economies based on supposedly export oriented strategies (although perfect openness in East Asia is a myth, as convincingly explained by Bradford (1993) for instance) accounted for the swing of the pendulum away from self-reliance and towards outward-orientation. Moreover, casual empirical observation suggested that outward-oriented countries tend to perform better than inward-looking economies. As a result, trade liberalization became the mantra of development institutions.

The widely-held policy consensus on the beneficial impact of trade openness on growth provided an easy roadmap for developing countries: integration into the globalization process through trade liberalization was viewed as one of the major pillars of any sound development strategy and, most of the time, as an ultimate goal (Rodrik 2001). Although it has not fallen apart completely, the consensus is increasingly being questioned, leaving a number of countries at a loss as to the direction they should take to develop.³ At the same time, perceptions of globalization in the broader public are becoming increasingly mixed, even within former pro-globalization circles.

While globalization was more and more generally believed to provide the key to development, a number of developments led to the first cracks in the consensus. In particular, it became increasingly apparent that globalization also involves risks, with highly globalized emerging economies falling prey to deep economic crises. As a result, what was basically considered to be a settled issue is coming back to the forefront of economic debate. The return of some form of interventionism cannot, however, be compared to recommendations by advocates of ISI in the 1950s.

The aim of the present paper is to analyze the reasons for the recent erosion of the consensus⁴ and to suggest possible directions for policy recommendations. To that purpose it will examine the foundations of the former consensus (from a theoretical as well as an empirical point of view) as well as the criticisms addressed to it, and provide a brief survey of the recent empirical literature analyzing the relationship between trade and growth, with a view to inferring policy implications for less advanced economies. A major point to be made here is that, by contrast to a widely-held belief, the notion that trade (not to speak of trade liberalization) is good for growth (and development) is neither theoretically fully supported nor empirically proven.

¹ Paper prepared for the 5th SUSTRA Workshop on "European Governance and European Opinions on Trade and Sustainable Development" to be held in Paris on June 3 –4, 2004.

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³ Openness to capital flows is similarly being questioned.

⁴ For an account of the previous shift from one consensus to another, see Krueger (1997) or Baldwin (2003).

1. What the theory has to say about the trade-growth nexus⁵

Understanding the interaction between trade policies and economic performance has been one of the central concerns of development economics.

Although trade is not one of the so-called proximate sources of growth, as defined by Temple⁶ (1999), it may be seen as a catalyst of growth (Fontagné and Guérin 1999). Trade can merely exert an indirect impact on the sources of growth, namely factor accumulation and technological progress. Yet, theoretical arguments about the possible relationship between trade and growth are ambiguous at best. Some sound theoretical arguments support a move to more liberalized trade, while other, no less sound, arguments support protection from international competition for some industries (Hallak and Levinsohn 2004).

First it must be noted that in the traditional Heckscher-Ohlin-Samuelson (HOS) analysis, trade is expected to affect an economy positively through its impact on the level and composition of output without affecting long-run growth. In this context, trade-induced specialization and the optimal allocation of resources associated with it entail so-called static gains. Such gains are deemed to be static because once the specialization is completed according to comparative advantages, there are no more gains.

Further gains may obtain thanks to the expansion of markets resulting from opening up to trade. The exploitation of economies of scale may account for another type of gains, but these are again static.⁷

There are, however, many channels through which trade (and possibly, but indirectly, trade policy) may affect growth in a more persistent way. In particular, openness may be expected to have an impact on the rate of factor accumulation as well as on technological progress. By contrast to traditional models, the contribution of the new (or endogenous) growth models is, among other things, to allow for such dynamic gains of trade.

Endogenous growth models are based on the notion that there are no decreasing returns on investment. This may be due to technological change, positive externalities, etc. In particular technological change may lead to increasing returns on investment, thus putting an end to the necessary decline in the marginal productivity of capital. As a result, there is no reason for capital accumulation to stop. Grossman and Helpman (1991) further argue that freer trade may generate technological progress and thus help sustain growth through increased investment. Openness to trade may also be instrumental in increasing the rate of technology transfer and diffusion (Wang et al. 2004). Another channel through which trade openness may impact growth positively is through incentives to innovation. (Cardebat 2002). When opening up to trade, a country gets access to a larger market and is thus in a better position to maximize the returns to innovation. Because the incentive to innovate grows with the expected return, investment should rise as a result, and growth will accelerate accordingly.

Dynamic gains basically obtain through openness-induced innovation, technology transfers and efficiency enhancement. In this case any form of openness (be it through trade or FDI) may trigger such a virtuous circle. Yet, exports are usually thought to be the main channels through which the liberalization process may affect the output level and the rate of economic growth (this is the export-led growth hypothesis).

⁵ An important point worth noting is that what economic theory says and what it is made to say are often two different things.

⁶ According to Temple, the proximate sources of growth are investments in physical and human capital, as well as in research and development.

⁷ Lutz (2001) shows however that open-economy extensions to the neo-classical growth model may yield a positive impact of trade on growth in the case of small economies.

According to some authors (Dowrick 2001, for instance), two sorts of trade-growth models can be distinguished. In the first model, trade-induced specialization yields increases in productivity through learning by doing or other types of spillover effects. When a country specializes as a result of trade, it may benefit from economies of scale which in turn are likely to give rise to efficiency and productivity gains which guarantee that growth is made endogenous. In this model, specialization should develop according to comparative advantages and there is implicitly no reason why the Government should intervene to shape these advantages and to favor the development of one particular sector over another.

In the second sort of model, specialization takes place in activities that are characterized by higher rates of productivity growth. The positive impact of trade on growth does not result from specialization *per se* but from the specialization pattern resulting from the decision to open up to trade. It can immediately be seen that a positive impact is far from automatic. Some activities may allow countries to grow faster while others which are not associated with learning by doing may get them stuck in a low-growth trap. In very much the same vein, Lutz (2001) examines a number of theoretical examples where growth is endogenous but openness can have harmful effects on growth because of the type of trade-induced specialization. In this case, closing the economy may help the relatively backward economy grow faster (Berg and Krueger 2003)⁸. Of course, even if their rate of growth is lower, the low-skill countries are not necessarily worse off in terms of welfare. This is because free trade will make sure that all consumers enjoy the benefits of innovation wherever it is produced. If trade is not perfectly free, however, the location of innovation as well as the type of specialization matter for growth.

Be it as it may, an important lesson to be derived from endogenous growth models is that open economies specializing according to comparative advantages may do less well than under autarky. The direction of the impact of trade liberalization on growth depends on whether specialization is likely to push the economy's resources in the direction of activities that generate long-term growth or divert them from such activities (Rodrik 2001). Because all industries are not equal in their propensity for technological change, trade specialization can be expected to matter for economic performance. Specialization can be expected to be positive if it is associated with scale economies but this is not necessarily the case, moreover it can be expected to be negative if it leads to excessive vulnerability associated with the nature of specialization (Berthélémy and Chauvin 2000). As a result, there is scope for Government's interventions so as to create comparative advantages in favorable sectors. Yet, most development economists viewed this literature as basically irrelevant for developing countries.

Whatever the mechanics, the snag is that the potential positive impacts of trade on growth do not necessarily obtain. Increasing returns are not always easy to come by, they are not always associated with specialization. As a result, trade liberalization should not be expected to deliver more than what it can.

Another conclusion to be derived from the theoretical constructs points to the importance of enabling conditions as a prerequisite for positive effects of trade openness on growth as well as to the need for some kind of intervention or accompanying measures. All the positive impacts highlighted above will only obtain if a number of conditions are met. In particular, if knowledge is not transmitted freely across national boundaries, the country with a head start in the accumulation of knowledge will maintain and widen its lead. The only possibility for the laggard is to intervene to overcome the initial disadvantage (Dowrick 2001). As a result accompanying policies may be useful, and even necessary, for the positive impact to materialize.

⁸ This is in a way another version of the infant industry argument.

As for gains from trade liberalization, they are usually estimated using computable general equilibrium models. According to these models, trade liberalization (in the North) would primarily benefit the most advanced developing countries (rather than the least advanced countries). By contrast liberalization in the South is deemed to be beneficial to all.

The major message from this brief survey is that economic theory does not unambiguously support the claims of the proponents of greater openness, in particular open-economy endogenous growth models do not provide the ultimate proof by contrast to what is often claimed.

2. What empirical evidence tends to suggest

As is the case with economic theory, empirical evidence on the link between trade openness⁹ and growth is not as clear-cut as is often claimed. Incidentally, this makes the persistence of the consensus on the benefits of openness even more puzzling. Actually, since the theory does not fully support the existence of a systematic positive impact of trade openness on growth it should not come too much as a surprise that empirical findings are also quite mixed.

Until the mid-90s, the debate appeared to be almost settled. Early empirical evidence tended to support the notion that openness to trade promotes economic development. Among the most often cited empirical analyses, Dollar (1992) or Edwards (1998) conclude that openness to trade is a significant explanatory variable for the growth rate of real GDP per capita. Sachs and Warner (1995) also find a clearly positive impact of trade openness on growth, using a set of different measures of openness. These studies used either policy-induced openness or trade intensity. Trade is further found to promote productivity growth in developing countries (Coe et al. 1997).

Yet, casual observation does not fully support the widely-held consensus that trade liberalization is necessarily good for growth: while some countries seem to have benefited from such a policy, some others did not exhibit such promising results. At the same time successful countries, in East Asia in particular, cannot be said to be models of trade liberalization. On the basis of case studies, Berg and Krueger (2003) argue that while opening to trade does not guarantee faster growth, “one striking conclusion from the last 20 years of experience is that there are no examples of recent take-off countries that have not opened to an important extent as part of the reform process”. Also, as pointed out by Lutz (2001), there is basically no evidence that restrictions on trade are beneficial to developing countries’ growth. In other words, trade openness seems to be a necessary but not a sufficient condition for growth. This is of course important in terms of policy implications: as already suggested in the previous section, trade liberalization in isolation cannot solve all problems and should not be oversold as a result.

Overall, more rigorous empirical evidence also tends to be inconclusive. Empirical analysis suggests that the possible positive effects are not automatic.

A number of technical shortcomings plague the robustness of the results, in particular endogeneity and omitted variables. Among the major shortcomings of cross-country evidence the assumption that all countries share a common economic structure as well as a similar production technology ranks high. Differences in technology are likely to affect the pattern of specialization and this is also likely to affect the channels of growth. Technical reasons may compound the problem further (missing variables, inappropriate proxies, non-linearities, threshold effects, etc.).

Of course, one of the most important difficulties in trying to highlight a positive link between trade policy and growth is to find an appropriate way of quantifying trade regimes. Very often a policy variable is proxied by a “result variable”. Yet, while a high degree of openness is not necessarily the result of a trade liberalization move, trade policy liberalization may not be followed by a large

⁹ In empirical estimations, trade openness is often equated with the magnitude of trade flows.

increase in the volume of trade if the announced reforms are poorly implemented or counteracted by the enactment of alternative trade barriers. Actually implemented liberalization should be favored. As a result, it should not come as a surprise that trade liberalization is not necessarily associated, empirically, with higher growth.

In response to the inconclusiveness of empirical evidence, two directions have been taken. A first set of papers have tried to further improve measurement and estimation techniques, while a second strand of research has focused on the trade-growth nexus and sought to identify the possible reasons why the expected positive relationship may not systematically obtain (and under which conditions it may do so).

Because technical reasons may explain the disappointing results, more sophisticated empirical tests have been conducted on a wide array of samples of different sizes, for different time periods, and with different proxies for trade openness. Despite improvements, measurement problems continue to plague the robustness of the results. This is the main criticism by Rodriguez and Rodrik (1999). A number of other papers (Rodrik, Subramanian and Trebbi 2002) suggest that once methodological difficulties are addressed, there is no longer evidence of a significant connection between openness and growth.

More interestingly, some other studies chose to highlight the channels through which trade may impact growth, or alternatively focus on related aspects such as the impact of trade diversification or of trade structure. From a policy perspective, the avenues through which trade enhance growth are important. The main lessons from this recent research are summarized below.

A number of recent studies point to the importance of the pattern of trade. Plümer and Graff (2001) show that export specialization in certain good does have a significant impact on economic growth. In particular they find that competitive advantage trade in high –technology goods is most favorable for economic performance, while trade in mature goods has the lowest impact on economic growth. These results are in line with Sachs and Warner (1998) who reported a negative impact of comparative advantage in raw materials on growth. They are also consistent with other findings by Bensedoun et al. (2001) for instance who show that specialization in products facing a dynamic international demand is good for growth because it gives incentives to improve efficiency. Their results point to the need for some form of industrial policy in developing countries.

Similarly, the nature of Latin America's trading relations with the rest of the world is thought by some to explain the difference in economic performance with East Asia. Latin America remained an exporter of primary commodities while East Asia shifted to increasingly technology-intensive manufactured exports.

The impact of the areas of specialization (or export specialization) is however still hotly debated in the recent empirical literature and no conclusive evidence has emerged so far. In contrast to what is often thought, natural resource abundance appears to have a positive effect on growth, according to recent findings by Lederman and Maloney (2003). Export concentration by contrast is found to hamper growth (Sohn and Lee 2004).

Berthélémy and Chauvin (2000) approach the issue of specialization in a slightly different way and find that the degree of diversification affects the rate of growth, with more diversified economies growing more rapidly. This may be related to the rise in labor and human capital productivity triggered by a higher degree of diversification.

Another important lesson to be derived from the recent literature relates to the role of accompanying measures as well as of domestic conditions. As emphasized by Cardebat (2002) for instance, education and institutions can be shown to be key. In their absence, there is no way openness can give rise to the positive effects highlighted in the theory. Empirical evidence by Rodrik () stress the

importance of institutions. A number of studies converge on one conclusion and point to the importance of interactive terms which suggest that openness has to be combined with other policies in order to have an impact on growth.¹⁰

Other articles underline the wide diversity of situations with broad-based reform more effective in some cases and less in others (Wacziarg and Welch) 2003). As emphasized by Hallak and Levinsohn (2004), the economic environment under which trade policy is conducted may also matter. This point may be illustrated by the comparison between East Asian and Latin American economies. As recalled earlier, the former did not opt, contrary to what is often claimed, for full trade openness but proved selective in the way they opened their economies while maintaining some measures of import substitution. This suggests that it is not the overall level of protection but how protection was implemented that explains the differing experiences of the two regions. The relationship between trade openness and growth are much more complex than what linear regressions are able to capture.

It is worth stressing at this point that the impact of trade policy can be shown to be state-dependent. This means that a policy does not necessarily affect all countries in the same way. What is true for an emerging economy may not be true for a least advanced country. Recent empirical evidence indeed suggests that the level of development matters (Wang et al. 2004) : while countries at higher development stages may be more apt to absorb technology embodied in FDI, such is not the case for less advanced countries. By contrast, international trade appears to be more important (than FDI) as an engine of growth for low-income countries. Middle-income countries are able to benefit from both trade and FDI.

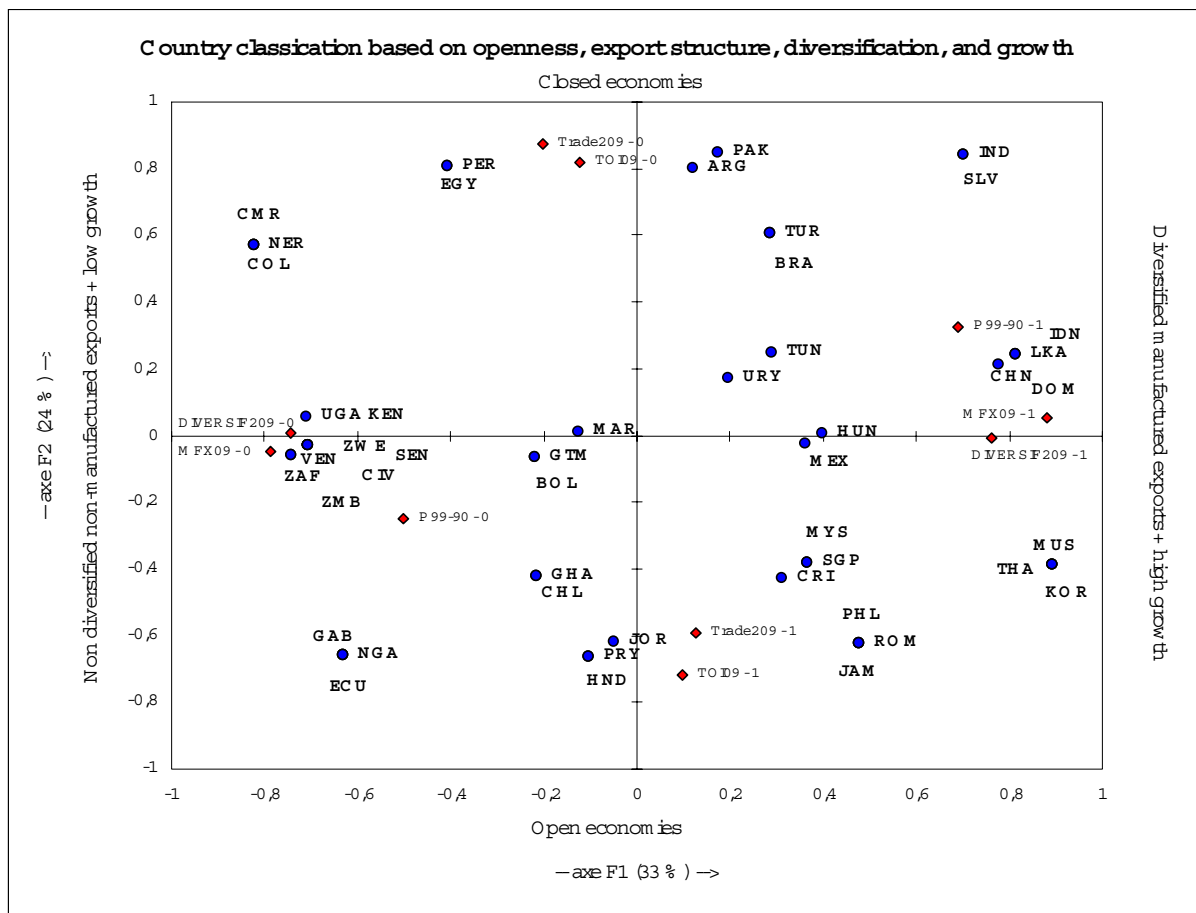
As for the channels through which trade may impact growth, according to Dowrick and Golley (2004), most of the dynamic benefits of trade are obtained through productivity growth, with a small contribution coming through increased investment. Rodrik (1995) shows that in the case of Korea in particular, trade is a prerequisite for high growth because it allows for a high rate of investment. Yet trade is a necessary condition for an acceleration of capital accumulation but not a sufficient condition for growth.

A multiple correspondence analysis (see figure) confirms the lessons that can be derived from the theoretical and empirical literature. The analysis is conducted on a sample of some 47 developing countries¹¹, using four variables related to trade openness and trade pattern, as well as one performance variable. The horizontal axis is a combination of the two trade pattern variables as well as of the performance variable, while the vertical axis combines the two trade openness variables. This simple exercise sheds light on a number of interesting issues. First, the two openness variables (a policy and a result variable) appear quite closely correlated although they are not perfectly similar. Moreover, they do not appear closely correlated with economic growth¹², while the pattern of trade (as reflected in the type of specialization and the level of export diversification) is closely associated with growth. High growth countries are characterized by manufactured exports and tend to be diversified, whether they are open to trade or not. A possible conclusion to be derived is that trade structure seems to matter more than openness; in other words the gains of openness (in terms of growth) tend to be largest for countries specializing in manufacturing exports. Yet, some additional (omitted) variables may also be at play and explain the differences in economic performance across countries. These observations should thus be interpreted with utmost care.

¹⁰ See Avallone and Nicolas (2003) for a recent survey on this issue.

¹¹ Argentina, Bolivia, Brazil, Cameroon, Chile, China, Colombia, Costa Rica, Dominican Republic, Ecuador, Egypt, El Salvador, Gabon, Ghana, Guatemala, Honduras, Hungary, India, Indonesia, Ivory Coast, Jamaica, Jordan, Kenya, Korea, Malaysia, Mauritius, Mexico, Morocco, Niger, Nigeria, Pakistan, Paraguay, Peru, Philippines, Romania, Senegal, Singapore, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, Uganda, Uruguay, Venezuela, Zambia, Zimbabwe.

¹² Growth and openness appear to be almost orthogonal.



Specialization per se does not seem to be really important, but specialization in some sectors rather than in others does appear to make a difference. While these findings may provide a rationale for some form of Government intervention (in the form of industrial policy following a strategic trade policy), the problem is that it may not be easy to determine which industries should be privileged because Governments are unlikely to know which industries will have a positive impact on their country's economic performance (Plümpner and Graff 2001).

Which policy implications for developing countries ?

Trade policy is still thought to be central to the design of development policy, yet the direction such policy should take is unclear, with successive shifts in the policy consensus between protectionism and import substitution on the one hand and outward orientation on the other. The major problem is that although no country has ever managed to develop without being to some extent integrated in world networks, it is equally true that no country has developed simply by opening up to trade and investment.

Following the failure of Latin American countries with import substitution, there was a dramatic shift towards outward orientation, and developing countries were increasingly induced to open up to trade (and capital flows). Despite some evidence to the contrary and weak theoretical underpinnings, the belief that trade openness contributes greatly to growth continued to be widely shared until recently. Recent attacks against the pro-liberalization consensus are the result of a rising disappointment with globalization and the observation of persistent situations of under-development. Yet they are unlikely

to lead to a swing of the pendulum back in favor of self-reliance and protectionism as was the case in the 1950s and 1960s.

As underlined by Edwards (1993), given the numerous shortcomings (later on highlighted by Rodrik and Rodriguez (1999)), it is difficult to believe that cross-country regression analyses have on their own played much of a role in the rising popularity of outward-oriented policies. It seems that the pro-globalization consensus was primarily based on ideology with no solid theoretical underpinnings. As shown above, both theory and empirical evidence convey an ambiguous message, namely that trade openness does not always enhance growth. The trade-growth nexus is apparently asymmetric: while the absence of trade openness may be an obstacle to growth, trade openness is not a guarantee that growth will obtain. As emphasized by Berg and Krueger (2004), the “negative results” can be counterproductive because the policy-maker is informed only that a certain generalization is not without exception; as a result the generalization can be ignored. Yet ignoring the exceptions can be as counterproductive.

The major lesson from the present paper is that both theory and empirical observations point to a more balanced stance.

First, empirical evidence should be interpreted and manipulated very carefully before being turned into policy implications. In particular the effects of trade policy are necessarily hard to disentangle from the effects of other policies such as macroeconomic stabilization, liberalization of the capital account, changes in the foreign exchange system or in the exchange rate policy, etc. This is of utmost importance as soon as policy implications are derived.

An important point is that openness should not be seen as a “magic bullet”. A number of obstacles may hamper the positive impact of openness. Such is the case for purely exogenous factors such as the geographic location of a country (whether it is landlocked or not) or its demographic situation. Moreover, trade policy should not be designed and implemented in isolation but seen as one piece of a larger puzzle. Trade policy cannot do much in isolation; it has to be integrated in a wider array of policies. It is both risky and counterproductive to make people believe that openness can solve all problems : creating excessive expectations is the best way to fuel disillusion.

A final point worth stressing at this stage is that trade policy is not the relevant instrument to solve development and poverty issues. Again, while it may enhance economic growth under given circumstances, it has to be associated with other (primarily redistributive) policies to help address inequality and poverty issues.

By contrast, both theory and empirical evidence point to the need to maintain some kind of differential treatment and to allow some form of intervention or protection. In the past, based on the premise that developing countries are different, exceptions were incorporated into the GATT: in particular article XVIII protected the less developed countries from the obligations of industrialized countries and permitted the adoption of tariffs and quantitative restrictions. Moreover they were entitled to benefit from Special and Differentiated Treatment. Even if trade may be expected to be positive for developing countries, this does not mean that they should not benefit from a special treatment.

Countries should definitely be treated differently according to their level and development and to their capacity to take advantage of openness-induced competition and specialization. In particular some form of help should be provided to developing countries so that they can shape up and be in a position to absorb the potential trade-induced benefits associated with technological change and other positive externalities. This means that some form of intervention should not be discarded altogether. Yet, rather than focus on picking winners for instance (which is by definition extremely tricky because Governments are not necessarily in the best position to identify which may be the most promising

industries), countries should be encouraged to avoid an excessive reliance on a limited number of primary commodities and to put in place a whole series of accompanying measures.

This calls for a redefinition of the developing country category, which should no longer be self-declaratory.

The answer to the question in the title is thus a qualified yes. Trade policy can help foster growth but under very specific conditions. In isolation, trade policy is powerless. Some form of intervention is clearly warranted with the aim of facilitating the development of positive spillovers and technological change.

Current cracks in (and attacks against) the consensus on the positive impacts of openness on growth should be deemed to be positive. Of course, there is a risk that this may lead to a return to excessive interventionism and protectionism, yet it may also be a blessing in disguise for the pro-globalizers who should adopt a more balanced stance and stop trying to oversell openness as the key to all development issues.¹³

References

Avallone, Nathalie and Françoise Nicolas (2003), “Théorie de la croissance : les leçons pour les pays en développement – Revue sélective de la littérature théorique et empirique”, *Document de travail CDC-IXIS*, n°2003-75/EI, September 2003.

Baldwin, Robert E. (2003), “Openness and Growth: What’s the Empirical Relationship?”, *NBER working paper*, No 9578, March.

Bensidoun, Isabelle, Guillaume Gaulier and Deniz Unal-Kesenci (2001), “The Nature of Specialization Matters for Growth: An Empirical Investigation”, *Document de travail du CEPII*, n°13, Décembre.

Berg, Andrew and Anne Krueger (2003), “Trade, Growth, and Poverty : A Selective Survey”, *IMF working paper*, February.

Berthélémy, Jean-Claude and Sophie Chauvin (2000), “Structural Changes in Asia and Growth Prospects After the Crisis”, *CEPII - Document de Travail*, No 00-09, July.

Bradford, Colin (1993), *A Reappraisal of the East Asian Development Experience: from trade-driven Growth to Growth-Driven Trade*, OECD Development Center, Paris.

Cardebat, Jean-Marie (2002), « L’ouverture, moteur du développement ? », *écoflash*, n°172, novembre.

Dollar David (1992), “Outward-oriented economies do really grow more rapidly : evidence from 95 LDC's, 1976-1985”, *Economic development and cultural change*, April, pp. 523-544.

Dowrick, Steve and Jane Golley (2004), “Trade Openness and Growth: Who Benefits?”, *Oxford Review of Economic Policy*, vol. 20, No 1, pp. 38-56.

Edwards, Sebastian (1998), “Openness, Productivity and growth. What Do We Really Know?”, *Economic Journal*, vol. 108, pp. 383-98.

Edwards, Sebastian (1993), “Openness, Trade Liberalization and Growth”, *Journal of Economic Literature*, vol. XXXI, September, pp. 1358-93.

¹³ By the same token, the revisions in the IMF pro-financial globalization consensus in response to recent attacks can be seen as a step in the right direction.

- Fontagné Lionel, Guérin Jean-Louis (1997b), “ L’ouverture, catalyseur de la croissance ”, *Economie internationale*, n°71, 3° trimestre, pp. 135-167.
- Frankel, Jeffrey, Teresa Cyrus et David Romer (1996), “ Trade and Growth in East Asian Countries : Cause and Effect ? ”, *NBER working paper*, n° 5732, August.
- Grossman, Gene and Elhanan Helpman (1991), *Innovation and Growth in the Global Economy*, Cambridge, MIT Press.
- Gundlach, Erich (1997), “ Openness and Economic Growth in Developing Countries ”, *Weltwirtschaftliches Archiv*, vol. 133, n°3, pp. 479-96.
- Hallak, Juan Carlos and James Levinsohn (2004), “Fooling Ourselves: Evaluating the Globalization and Growth Debate”, *NBER working paper*, No 10244, January.
- Lederman, Faniel and William Maloney (2003), “Trade Structure and Growth”, *World Bank Policy Research Paper*, No 3025, April.
- Lutz, Matthias (2001), “ Globalization, Convergence and the Case for Openness in Developing Countries : What Do We Learn From Open Economy Growth Theory and Empirics ? ”, *CSGR working paper*, 72/01, May.
- Michaely, Michael (1977), ”Exports and Growth: An Empirical Investigation”, *Journal of Development Economics*, vol. 4, n°1, mars, pp. 49-53.
- Plümper, Thomas and Michael Graff 2001), “Export Specialization and Economic Growth”, *Review of International Political Economy*, vol. 8, No 4, Winter, pp. 661-88.
- Rodriguez Francisco and Dani Rodrik (1999), "Trade policy and economic growth - a skeptic's guide to cross-national evidence", CEPR Discussion Paper, n°2143, may, 48 p.
- Rodrik, Dani (1995), “Trade Strategy, Investment and Exports: Another Look at East Asia”, *NBER working paper*, No 5339, November.
- Rodrik, Dani (2001), “Development Strategies for the 21st Century”, in Pleskovic B. And N. Stern (eds), *Annual World Bank Conference on Development Economics 2000*, The World Bank, Washington D.C.
- Sachs, Jeffrey and Andrew Warner (1995), “Economic Reform and the Process of Global Integration”, *Brookings Papers on Economic Activity*, vol. 1, pp. 1-118.
- Sachs, Jeffrey and Andrew Warner (1998), “The Big Push, Natural Resource Booms and Growth”, *mimeo*, janvier.
- Shafaeddin, S.M. (1994), “The Impact of Trade Liberalization on Export and GDP Growth in Least Developed Countries”, *UNCTAD discussion papers*, n°85, juillet.
- Sohn, Chan-Hyun and Hongshik Lee (2003), “Trade Structure and Economic Growth: A New Look at the Relationship between Trade and Growth”, *KIEP working paper*, No 03-17.
- Srinivasan, T.N. and Jagdish Bhagwati (2001),
- Temple, Jonathan (1999), “ The New Growth Evidence ”, *Journal of Economic Literature*, vol. 37, n°1, March, pp. 112-156.
- Wacziarg Romain and Karen Horn Welch (2003), “Trade Liberalization and Growth: New Evidence”, *NBER working paper*, No 10152, December.
- Wang, Chengang, Xiaming Liu and Yingqi Wei (2004), “Impact of Openness on Growth in Different Country Groups”, *The World Economy*, vol. 27, No 4, April, pp. 567-85.