

Trade openness and its impact on economic growth



The main objective of this chapter is to have an overview of what has been said in the literature regarding trade openness and its impacts, mainly on growth and exposure to external shocks. Infact, the benefits and costs of increased integration remain the subject of a hotly contested debate. Section 2. 1 provides an overview of the theoretical perspective of different authors. Section 2. 1. 1 and 2. 1. 2 elaborate on the impact of trade on growth and exposure to external shocks respectively. Finally, section 2. 2 reviews the empirical literature.

2. 1 Theoretical review

2. 1. 1 Trade and Growth

The net effect of trade openness on economic growth has been and remains a subject of much controversy. It is well known that periods of openness have generally been associated with prosperity while protectionism has been the companion of recessions. World international trade has experienced exponential growth over the past two decades. L. Fontagné and M. Mimouni (2000) have stated that “ since the end of the European recovery after World War II, tariff rates have been divided by 10 at the world level, international trade has been multiplied by 17, world income has quadrupled, and income per capita has doubled” (p. 2).

An economy’s openness is said to be one of the key determinants of its growth, along with human capital, the investment ratio and the rate of population growth (The Deutsch Bank Research, 2005). Countries that have successfully indulged in international trade, opened themselves to foreign direct investment and attracted foreign workers experienced much higher

economic growth than countries that have failed to become integrated into the global economy.

Explanations brought forward by The Deutsch Bank Research (2005) on how increased trade boosts growth are drawn from the neoclassical trade model, the technological transfer argument and the institutional improvements argument.

In order to explain the neoclassical model of international trade, one should go back to Adam Smith (1776) and David Ricardo (1817). They showed that two countries with absolute and comparative cost advantages can benefit from trade given that each country specialises in producing the good that it can manufacture at a relatively lower cost. The total number of manufactured goods that both countries can consume thus increases and higher welfare follows. However, it is to be noted that economic growth is not an immediate consequence.

Technology transfer occurs via the importing of high-tech capital goods, production facilities, patents and licences, as well as knowledge-intensive services. Furthermore, the importing of new technologies also stimulates the development of domestic technology via the imitation and enhancement of imported products. So trade accelerates technological progress, which in turn is the key source of long-term economic expansion according to growth theory.

The institutional framework also plays a major role. It encompasses improving infrastructure, boosting capital market efficiency and safeguarding property rights. This process is facilitated by increasing international
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competition, which prompts domestic companies to continually optimise their production processes and develop new products; this also speeds up technological progress and thus boosts economic growth.

In the same breath, Grossman and Helpman (1991) established that openness enhances economic growth through the following channels. Firstly, trade enlarges the available variety of intermediate goods and capital equipment, which can expand the productivity of the country's other resources. Secondly, trade permits developing countries the access to improved technology in developed countries, in the form of embodied capital goods and thirdly, trade allows intensification of capacity utilization that increases products produced and consumed.

To Fontagné and Guérin (1998), openness is certainly a prerequisite, not the engine of growth. It simply fuels the engines of investment, reform and credibility.

The trade performance of individual countries tends to be a good indicator of economic performance as well. Performing countries tend to record higher rates of GDP growth. The majority of developing countries have joined the World Trade Organization (WTO) and have taken initiatives aimed at opening their economies. Nevertheless, the outcome has not been systematically positive since export performance sometimes remains disappointing and these countries steadily follow contrasted development paths. Guérin (1999) pointed out that there is no systematic gain in growth associated with the binding to the multilateral rules of international trade. Accordingly, Rodrik

(2000) argues that integration into the world economy hardly substitutes for a development strategy.

Nonetheless, some developing countries record high growth rates by specialising in niche markets and concentrating their export markets, while other developing countries record more moderate rates of growth with a well diversified array of products and partner countries. In other cases, successful performance is the result of a favorable product or market penetration since the beginning. Successful performance can also be gauged in terms of a country's ability to adapt its export profile to changing patterns of world demand.

The phenomenal differences among the growth rates of the East Asian, the Latin American, and Sub-Saharan African countries over the last several decades have stimulated a renewed interest in the effects of trade policies on growth. During most of the 20th century, import substitution industrialization (ISI) strategies dominated most developing countries' development strategies. While developing countries in Latin America that followed ISI strategies experienced relatively lower growth rates, East Asian countries, that employed export-promotion policies, consistently outperformed other countries. This probably explains why a growing body of empirical and theoretical research has shifted towards examining the relationship between trade liberalization and the economic performance of countries since the late 1970s.

2. 1. 2 Trade and Exposure to External Shocks

Trade provides countries with new growth opportunities but also exposes them to external shocks. Many economists believe that, though openness to trade increases average GDP growth rates, it also raises output volatility by exposing countries to terms-of-trade shocks. The term “vulnerability” is often brought up when referring to exposure to external shocks. Vulnerability refers to inherent characteristics which render countries prone to exogenous shocks

Open economies are subject to external shocks and Rodrik (1998) has argued that more open economies have bigger governments, because government spending is used to smoothen those external shocks.

The vulnerability of countries to some types of external shocks should be reduced when these countries' exports are better diversified. More specifically, the effect of trade openness on growth volatility, might it be either negative or positive on average, is likely to be exacerbated when the country in question exports either a relatively small set of products, or sells its goods to a small number of destination markets. The argument is that a higher degree of concentration in exports would imply that any idiosyncratic price shock experienced is more likely to have a substantial impact on the country's terms of trade, and this would then induce greater fluctuations in a country's growth process. Furthermore, a higher degree of diversification would likely imply that a country is involved in a larger number of both implicit and explicit international insurance schemes, which would similarly serve as a cushion against such fluctuations.

It has been argued that the structure of developing countries' exports makes those countries particularly vulnerable to external shocks. Michaely (1958) showed five decades ago that countries with lower GDP per capita tend to be characterized by a higher commodity concentration of exports and argued that as a result, shocks affecting individual export products can have significant effects on overall export performance and potentially on economic performance in developing countries.

However, it is to be noted that many small states manage to generate a relatively high GDP per capita when compared to other developing countries in spite of their high exposure to exogenous economic shocks. This would seem to suggest that there are factors which may offset the disadvantages associated with such vulnerability. This phenomenon was termed by Briguglio (2003) as the "Singapore Paradox", referring to the reality that although Singapore is highly exposed to exogenous shocks, this small island state has managed to register high rates of economic growth and to attain high GDP per capita. This reality can be explained in terms of the ability of Singapore to build its resilience in the face of external shocks.

Practitioners keep wondering whether being open, or in the process of opening up, can determine long-run negative effects linked to an increased exposure to external shocks or greater stress on certain actors. The open question is the following: does trade openness - or the process of opening up - magnify the "risk exposure" of the open economy and/or increase uncertainty towards the future, with negative consequences on its welfare?

This question does not have a once-for-all answer. It concerns, in general

terms, the issue of the balance between the advantages of trade openness and the drawbacks of a greater exposure to shocks and uncertainty.

The simplest analysis of risk suggests that at low levels of trade (as typical in developing economies), further trade liberalisation would tend to reduce risk exposure, because (larger) world markets with many players are likely to be more stable than (smaller) domestic ones (Winters, 2002).

The hypothesis of a likely long term negative welfare effect of exposure to external shocks and uncertainty - a sort of "vulnerability hazard" - induced by trade openness in

developing countries (Montalbano et al., 2006 and 2008; Guillaumont, 2007a, 2007b; UNUWider 2008b) has been supported by a number of considerations: Dercon (2001) underlines the role of openness as a vehicle for an entirely "new set" of shocks and incentives able to put traditional mechanisms under pressure and hamper people standard management strategies; Calvo and Dercon (2003 and 2007) and Ligon and Schechter (2003 and 2004) highlight how risk averse households will have lower levels of welfare or a lower expected utility if they face greater variation in future consumption, as it is more likely in the case of trade openness; Winters (2002) and Winters et al. (2004) suggest that trade openness could alter households' optimal portfolio leading to sub-optimal choices, especially for the poor, because of a "poor" ability to bear "new risks" and weak capabilities to insure themselves against adverse impacts or simply because their behaviour can be negatively affected by rising uncertainty.

2.2 Empirical Review

Do open economies grow faster than closed economies? Almost all empirical growth studies have provided an affirmative answer to this question. The reason for this strong bias in favor of trade liberalization is partly based on the conclusions of a wide range of empirical studies, which claimed that outward-oriented economies consistently have higher growth rates than inward-oriented countries. It is also partly due to the tragic failures of import-substitution strategies, especially in the 1980s and overstated expectations from trade liberalization.

Levine and Renelt (1992) show that trade openness may affect growth through investment. Continuous openness may lead to faster long-run growth since openness allows larger access to investment goods. Trade liberalization provides incentives for foreign direct investment; nevertheless, foreign investment may crowd-out domestic investment.

Rodriguez and Rodrik [1999] also emphasize the indefinite sign of the effects of trade on growth. Net effects are positive if the resource allocation driven by trade policy promotes sectors that generate more long-run growth, but are negative otherwise.

Economic volatility has been shown to reduce economic growth (Ramey and Ramey, 1995; Martin and Rogers, 2000; Imbs, 2007) and the positive growth impact of trade may therefore be attenuated if it leads to significant exposure to external shocks.

Terms of trade volatility is probably the most widely used measure for external shocks. A number of studies have used quantitative, multi-sector <https://assignbuster.com/trade-openness-and-its-impact-on-economic-growth/>

equilibrium models to analyse the effect of terms of trade shocks on output volatility. Kose (2002) finds that world price shocks play an important role in driving business cycles in small open developing economies. His results confirm the results of earlier work by Mendoza (1995) or Kose and Riezman (2001).

A number of recent studies have analysed the relationship between terms of trade shocks and changes in GDP growth in vector auto-regression (VAR) models. Ahmed (2003) uses a VAR model to study the sources of short-term fluctuations in the output of six Latin-American countries and finds that changes in the terms of trade and foreign output play a moderate role in driving output fluctuations.

Using industry-level data, di Giovanni & Levchenko (2009) investigate the channels through which trade openness might affect volatility. They find a strong positive correlation between the risk content of exports and the variance of terms of trade and also found that export specialization affect macroeconomic volatility. They find that trade openness appears to lead to countries becoming more specialised in their exports. This is problematic given that openness is likely to also expose a country to a greater number of shocks.

Trade openness may expose economies to external shocks, but may also act as a buffer against domestic shocks. The overall impact of openness on volatility is therefore an empirical question. Easterly, Islam and Stiglitz (2001) and Calderon et al. (2005) find that higher trade openness leads to

larger growth volatility. In contrast, Kose et al. (2002) do not find that trade openness have a robust effect on GDP volatility.

Most studies on economic vulnerability provide empirical evidence that small states, particularly island ones, tend to be characterised by high degrees of economic openness and export concentration. These lead to exposure to exogenous shocks, that is, economic vulnerability, which could constitute a disadvantage to economic development by magnifying the element of risk in growth processes, without necessarily compromising the overall viability.

Cordina (2004) shows that increased risk can adversely affect economic growth as the negative effects of downside shocks would be commensurately larger than those of positive shocks. The high degree of fluctuations in GDP and in export earnings registered by many small states is considered as one of the manifestations of exposure to exogenous shocks.

In the analysis of the linkages between trade openness and volatility, for instance, an extensive use of “ panel data” appears. Among the most recent exercises, Kose et al. (2003); Hnatkovska and Loayza (2004); Wolf (2004); Calderon et al. (2005) use panel data to measure the “ external exposure” of a worldwide sample of countries by the sensitivity of first and second moments of economic growth (average rate and standard deviation) to openness and financial shocks. They also allow the possibilities of non-linearities by allowing growth and volatility effects to vary with the level of economic development. On the same wake, Loayza and Raddatz (2006) apply semi-structural VAR to a panel of 90 countries with annual observations for the period 1974-2000 in order to isolate and standardise the shocks; estimate their impact on GDP and examine whether and to what

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extent this impact depends on the domestic conditions. 4 Using this technique, as mentioned, they show that trade openness magnifies the output impact of external shocks. Santos-Paolino (2007) too, who applies the same Panel VAR approach for a selection of SIDS from the Caribbean, emphasises the negative impact of terms of trade shocks on current account and real output volatility. Malik and Temple (2006), in their effort to explain differences in output volatility across developing countries, use instead a Bayesian method to highlight explanatory variables that are robust across a wide range of specifications. They show the pervasive role of geography in determining aggregate volatility: since remoteness is associated with a lack of export diversification, a significant phenomenon of high volatility of terms-of-trade and output of the more remote countries is apparent. This result is not sensitive to the precise regression specification, nor it is driven by the contrasting geographies of low income and high income countries.

Concerning the analysis of the linkages between trade openness and economic crises, Cavallo and Frankel (2007), following closely the definition of Calvo et al. (2003), Frankel and Rose (1996) and Frankel and Wei (2004), use a Probit model to measure the probability of a sudden reduction in the magnitude of net capital inflows; exchange market pressure and output loss for a set of 141 countries for the period 1970-2002. They find evidence that trade openness makes countries less vulnerable to sudden stops and currency crises. A special feature of this work is that they address the problem of endogeneity of trade, using gravity estimates to construct an instrumental variable for trade openness based on geographical determinants of bilateral trade which are supposed to be exogenous.

In a slight different exercise, Glick and Rose (1999) explain regional contagion of crises, using a binary probit equation across countries via maximum likelihood. They use cross sectional data for 161 countries in five different episodes of widespread currency instability. Their conclusion complement that of Cavallo and Frankel (2007), arguing that – no matter who is the “ first victim” of the speculative attack and what factors are behind it – there is a strong evidence that currency crises tend to spread regionally because of trade linkages. It emerges from the above how current analyses remain basically ex post assessments, mainly targeted to issues not directly linked to vulnerability. An additional effort is needed to build a sound methodology to assess vulnerability to trade openness.

A. Federici and P. Montalbano in a paper entitled “ Assessing vulnerability to trade openness: a cross-country analysis” offer a substantive contribution to current debate on the effects of trade openness on developing countries’ vulnerability. The main result of this cross countries empirical test is to highlight a robust and significative statistical relationship between consumption volatility linked to trade openness and a positive consumption gap, i. e. the presence of negative shocks on consumption growth. This phenomenon remains covered up by simple data analyses and largely overlooked by current empirical literature on openness and growth. This paper demonstrates that situations of vulnerability to trade can co-exist with a positive trade and growth relationship. Some countries keep higher probability to be worse off in case of negative external shocks, because of endogenous characteristics (resilience) and/or the use of inadequate coping strategies (responsiveness).

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Empirical work on the construction of an economic vulnerability index (Briguglio, 1995; Briguglio and Galea, 2003; Farrugia, 2004) is often based on the premise that a country's proneness to exogenous shocks stems from a number of inherent economic features, including high degrees of economic openness (measured as the ratio of international trade to GDP), export concentration (measured by the UNCTAD index of merchandise trade) and dependence on strategic imports (measured as the ratio of the imports of energy, food or industrial supplies to GDP). All vulnerability indices using these or similar variables come to the conclusion that there is a tendency for small states to be more economically vulnerable than other groups of countries.

L. Briguglio, G. Cordina, N. Farrugia and S. Vella (2008) provide an explanation as to why inherently vulnerable countries may register high levels of GDP per capita. It is argued that countries may be economically successful because they are inherently not vulnerable, or because they are resilient in the face of the vulnerability they face. The obverse is also true, in that countries may be unsuccessful because they are not sufficiently resilient. The paper has also shown that GDP per capita is positively related to economic resilience and negatively related to inherent economic vulnerability. Furthermore, per capita GDP is found to be more sensitive to resilience variables than to vulnerability variables.

H. Yanikkaya (2002) showed that trade liberalization does not have a simple and straightforward relationship with growth using a large number of openness measures for a cross section of over 100 developed and developing countries observed from 1970 to 1997. The regression results for <https://assignbuster.com/trade-openness-and-its-impact-on-economic-growth/>

numerous trade intensity ratios are mostly consistent with the existing literature. However, contrary to the conventional view on the growth effects of trade barriers, our estimation results show that trade barriers are positively and, in most specifications, significantly associated with growth, especially for developing countries and they are consistent with the findings of theoretical growth and development

literature.

2.3 Conclusion

Much has been said in the literature regarding trade and growth. However, the more exposed to trade a country is, the more vulnerable it is to shocks coming from abroad. But nonetheless, economists believe that trade openness promotes economic growth. These have led some observers to identify an interrelationship between openness to trade, output volatility and growth.