



## Influence of Trade Policies on Local Manufacturing Industries

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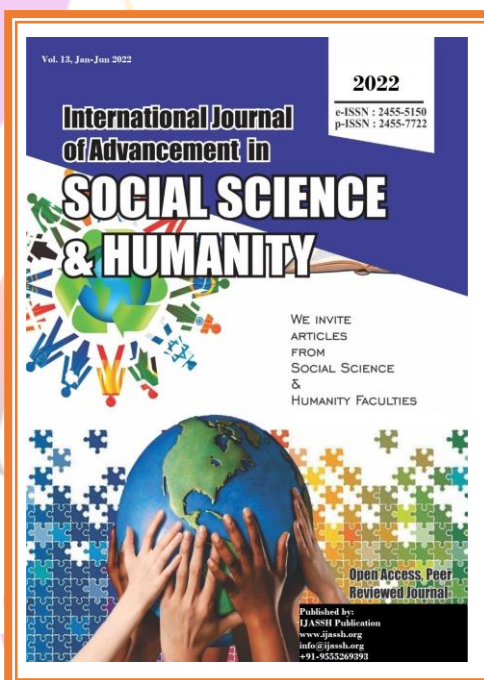
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## ABSTRACT

During the 2000s, India's industrial industry saw phenomenal expansion. Not only did yearly growth reach 8% on average, but actual exports and imports of manufactured goods also saw phenomenal increases in growth throughout this decade. Additionally, the greatest yearly increase rate of real per capita income (5.6% on average) occurred during this decade. Over the last 20 years, scholars studying international trade have begun to pay more attention to non-policy trade frictions, such as transportation, information, and communication costs, rather than trade policy itself. As a result of this change, many people think trade policy is irrelevant. To refute this, we take a close look at the abundant data showing how trade policy influences crucial economic outcomes. Instead of speculating about potential policy shifts, we zero in on real ones. First, we'll go over some of the methodological issues with measuring trade policy and determining its causes and consequences. Next, we'll go over the evidence regarding how trade policy impacts various outcomes. These include: (1) aggregate outcomes like trade volumes (and their price and quantity subcomponents), the extensive margin of trade, and static, aggregate gains from trade; (2) firm and industry performance like productivity, costs, and markups; (3) labour markets like wages, employment, and wage inequality; (4) long-run trends like aggregate growth and poverty, secondary distortions, and misallocation, and uncertainty.

**Keywords:** *Trade policy; Economic reforms; Manufacturing industries.*

## INTRODUCTION

Tariffs and non-tariff barriers (NTBs) have severely affected India's trade regimes for over 40 years, and the country's system of trade restrictions is extensive and intricate. Due to its far-reaching effects on the economy, trade policy reform in the 1990s was seen as an essential part of India's reform initiative. The original intention of these changes was to boost industry and national economic performance.<sup>2</sup> Examining the role of commerce in India's industrialisation might provide light on the dynamics and performance of the manufacturing sector in the country. It is now well acknowledged and supported by evidence that India's 1947 industrialisation effort revolved on a trade strategy centred on import substitution. Trade policy changes were an important aspect of India's economic liberalisation after the

country had followed an inward-looking trade strategy for over 40 years. Quantitative limitations on imports and tariff rates, adjustments to licensing for size and technology, and other reforms in the industrial and external sectors occurred in the 1980s. Devaluation of the rupee, lowering of peak tariff rates and dispersion, and elimination of non-tariff barriers were all components of the trade liberalisation that occurred in the 1990s. The effect of changes to the trade policy system on manufacturing in India, however, has been the subject of conflicting opinions.<sup>3</sup> After being heavily controlled under the Nehru-Mahalanobis framework of planned industrialisation, India's manufacturing industry transitioned to a largely de-licensed system in the late 1980s. After a slowdown in the early years of the reforms in the 1990s, manufacturing performance began to improve again in the

latter half of that decade. In comparison to other emerging nations, notably China, India's manufacturing share is currently low. Here are two details about manufacturing's efficiency: first, despite efforts to boost productivity, the industry's competitiveness has remained dismal (Das et al., 2014). Two, the manufacturing sector's capacity to generate jobs has long been an open subject. These days, the "puzzle of jobless growth" is only one part of the problem. It is a significant problem to create excellent employment in India's industrial sector (Kapoor 2014). "Manufacturing Plan—Strategies for Accelerating Growth of Manufacturing in India in the 12th Five Year Plan and Beyond," prepared by the Planning Commission for the Government of India, lists a number of problems plaguing India's manufacturing sector, including but not limited to: low technological depth as a result of extremely low research and development activities; problems with skill development; and labour regulations.

### Objective of the study

- 1- To examine the influence of trade policies on local manufacturing industries.

### METHODOLOGY

This is qualitative and descriptive study to explore the trade policies and their respective impact on local manufacturing industries.

### Conceptual framework

Baier and Bergstrand (2001) cite a similarly noteworthy comment from Krugman (1995) in their landmark research of the variables driving the rise of international trade:

Most coverage of the expansion of international commerce in the media has painted a picture of rising integration as being propelled by technical advancements, namely, the idea that better means of transport and communication are an unstoppable force blurring the lines between countries. But most international economists attribute the rise of trade after WWII to the lifting of protectionist policies that had limited global markets since 1913 (p. 328), rather than any inherent economic factors.

Even after all these years, many still think that trade policy isn't all that important when it comes to the expanding role of international commerce. The only change is that this opinion is now more common in academic circles than in journalistic ones. Academic trade literature reflects this, albeit it is most often stated informally in seminar and conference presentations.

"Trade costs," often known as iceberg costs, have recently dominated theoretical and empirical/quantitative scholarly study. Without making any effort to link them to real trade policy initiatives, such costs are usually backed out of empirical specifications that are guided by particular theoretical models. As jaiswal (2104) points out, trade costs include a lot more than just trade policy. It is sometimes said that the costs associated with "backed out" trade seem to be much higher than the expenses that could be justified by visible trade policy constraints alone. Nevertheless, it is difficult to ascertain the precise nature of trade costs without gauging the degree to which trade policy measures are restrictive. We shall return to the difficulty of measuring trade policy many times throughout this chapter as a

contributing factor. The idea that "other trade costs," like transportation, search, and communication costs that aren't specific to international trade, and productivity growth in developing nations (particularly China) have been more significant than trade policy in recent decades adds to the difficulty of measuring these factors. It would be pointless to analyse and analyse trade policy obstacles meticulously if this assumption is correct. Analysis of economic activity's geographical distribution, more closely related to economic geography than international commerce, is gradually becoming the focus of the study. Trade policy is never the major subject of study, even in studies that take advantage of particular shifts in policy. For example, in recent studies on developing-world trade liberalisation events, researchers have used trade policy as a means of identification, focussing less on the policy itself and more on the outcomes of expanded trade. Theoretical and quantitative researchers also tend to ignore trade policy changes in favour of using hypothetical scenarios to illustrate how a model functions. The fact that the Recovery Act's recent "Buy American" section has not been the subject of any serious scholarly investigation is perhaps the clearest indication of this mentality. Whereas many scholarly articles in the domains of public finance, health, education, and industrial organisation have examined particular policy reforms (such as the "No-Child-Left-Behind" Act, the Affordable Care Act, mergers, etc.), there is surprisingly little policy-oriented research in the realm of international trade. Research on trade agreements is the only field that deviates from this trend; these studies are intrinsically related to trade policy and the institutions that support it.

### **Trade policy strategies and operations**

In a sector where policy-induced frictions to cross-border commerce (such as tariffs, nontariff barriers, various currencies, etc.) are inherent, the idea that commercial policy is no longer significant for global trade seems like a contradiction in terms. Why this viewpoint has become more popular among scholars in the last 20 years is an open subject. Is it true that academics are avoiding studying trade policy because of the challenges and complexity of measuring it, or has trade policy really become irrelevant?

The assumption that trade policy is no longer relevant is based on the fact that global commerce has already been heavily liberalised, particularly in industrialised nations. A recent interview with Reason magazine (2008) provided a concise summary of this position by Lant Pritchett: Everything is much more liberalised now than it was when I first began my career as a trade economist in the early 1980s. Therefore, any outcome of the WTO discussions would have little additional benefits.

If we accept Pritchett at his word, commercial policy has had substantial impacts in the past, but now it's moot because of its own success. To evaluate this early data, read Deardorff and Stern (1986), although early studies of the impacts of trade agreements and policies from the 1970s and 1980s tended to show minimal effects of these programs. Subsequent research using gravity-equation methods has shown contradictory findings when attempting to rank the relative importance of trade policy, transportation cost reduction, and income convergence or growth of trading partners

as drivers of trade growth. Among these studies, Rose's (2004) assertion that GATT or WTO membership had no detectable influence on trade volumes is both the most famous and contentious. Although the study's findings were later cast into doubt in a number of follow-up articles, the discussion they sparked highlighted a problem that is separate from the usual measurement issues encountered when assessing trade policy: the study's inherent endogeneity. This worry goes to the extreme of suggesting that trade policy responds to rather than initiates shifts in the trade environment, thus it should come as no surprise that some research has shown that trade policy does little to alter things; in fact, by the time it takes effect, changes in the trade environment may have already begun.

## REVIEW OF LITERATURE

Claims that trade policy is losing significance, based on the fact that substantial liberalisation has already taken place and on studies of the aggregate effects of trade agreements using gravity-equation-type approaches, should be contrasted with research on the effects of trade restrictions on particular industries, like the Voluntary Export Restraints on autos, antidumping lawsuits, and the Multi-Fibre Agreement in clothing and textiles. Notwithstanding their narrow scope, studies such as these accurately measure trade policy and focus on the institutional components of the economic climate, which may be disregarded in broader aggregate studies of trade policies. According to jaiswal et.al. (2017), there is a lack of evidence that trade policies have a substantial impact. This could be because it is difficult to measure and identify the effects of trade policies, but many industry

case studies have shown substantial responses along multiple margins. Therefore, globalisation could be less severe than previously believed.

Given the preceding material, this chapter seeks to address the following question: "What is the evidence on the actual effects of trade policy, as opposed to other causes of changes in trade?" In what ways is trade policy involved?

Before continuing, it is important to outline the chapter's objective and clarify some conceptual problems.

We discuss the main methodological challenges in assessing trade policy and conduct a literature review on the subject at the beginning of this study. Not limited to the policies at hand, we address general methodological concerns that arise when evaluating trade policies in general.

The outcomes have been the subject of several studies, most of which have concentrated on the static, short-term effects of trade policy. Even more difficult is the task of empirically assessing trade policy's long-term consequences. This means that claims about dynamic long-term effects are often dependent on theoretical models and ideas rather than formal empirical data. This study takes a look at the few information available about the ever-changing effects of trade policy on GDP growth and poverty rates over the long term. We also look at the ways in which trade policy influences results that, despite their importance, have received little attention in the literature thus far. Trade policy's effects on secondary distortions, misallocation of resources, and uncertainty reduction are only a few of these (Shan and Sun, 1998a). One of the biggest challenges of this

chapter is organising and selecting data from studies that examine the worldwide and time-based effects of trade policy. While a separate chapter of the Handbook (Ossa, 2016) discusses the use of quantitative trade models for counterfactual analysis of hypothetical policy scenarios, this one primarily focusses on actual policy changes rather than hypothetical ones. Second, we focus on the time immediately after the GATT and WTO's inception. The relevance of trade policy is being questioned, which is a recent development. It would be fascinating to see a research that looks at the consequences of trade policy from the past, however. Looking at more current data and historical eras can help us assess whether trade policy is important to international business now. Regarding the third issue, we provide statistics from both developed and developing countries. The role of international trade in the economic development of developing countries—nations that have not yet achieved the same level of liberalisation as developed nations—is an interesting and policy-relevant question. Last but not least, we primarily review information derived from studies on extensive trade liberalisations. By highlighting these revisions, we want to differentiate this area of the Handbook from others that cover more specific trade policy instruments, such as antidumping charges, preferential trade agreements, World Trade Organisation rules and regulations, and nontariff trade barriers. Because these studies offer more precise measurements and a deeper understanding of the institutional setting, we sometimes draw on what we discover from trade policy case studies in particular sectors. Everyone knows by now that India's goal in trying to liberalise its trade was to

increase exports of manufactured goods while simultaneously doing away with import licensing and high tariff rates. The topic of changes in trade policy and their impact on the Indian economy has been discussed in a number of academic works, including Panagariya (2004). Here, we make a two-part effort to survey the literature on liberalisation of trade and Indian industry. To start, we compile a list of all the articles that have dealt with the topic of trade barrier quantification, and then we look at the research that has looked at how trade policy changes have affected manufacturing in India.

The trade policy in India has been very restricted since the late 1950s. High tariffs and a comprehensive import licensing system have been the primary tools used to control import demand. Research by Bhagwati and Srinivasan (1978), Rao (1985), and Pursell (1988) has consistently focused on the economic consequences of India's trading policy. Indian views on trade liberalisation have also been shaped by official committee recommendations and policy declarations [Alexander (1977), Hussain (1984), and Narsimham (1984)]. An increase of the OGL list, a transfer of items from more restricted to less restrictive lists, a decrease in the scope of canalisation, and quicker and fewer administrative judgements are all examples of significant improvements to import policy that began in the early 1980s. Capital and intermediate goods import limits have been eased, mostly for commodities that do not compete with local manufacturing. According to the most comprehensive analysis of Indian trade policies, the country's protectionist regime oversaw the establishment of a diverse and expansive industrial base at the expense of cost and comparative

advantage considerations, leading to inefficient resource utilisation across the board.

There seems to have been an attempt to undermine the import licensing system by reducing the number of items classified under the banned/restricted category, according to research covering tariff and NTBs. There were a lot of exclusions that applied to the basic duty rate throughout the 1980s and 1990s, which made the effective tariff structure quite complicated. Not only have tariff rates been high, but they have also applied to almost every category of intermediate, capital, and consumer products. Still, the tariff system was an attempt at simplification in the 1990s. We found that most of the studies that were included here calculated both the nominal and effective rates of protection. Two main sources form the basis of most ERP estimates: tariff data and the collection rate  $\tau$ . In an effort to get ERP estimates, one research has tried to utilise both actual and published tariff data. Mehta (1997), Hashim (2001), Das (2003), Goldar and Hasheem (1992b), Gang and Pandey (1998), and the Corden measure of ERP is used extensively. In contrast to the Balassa measure, which just considers the direct value contributed, Corden's measure is popular since it considers both the direct and indirect value added.<sup>9</sup> The goal of the extraordinarily high tariffs was to generate cash, in addition to giving protection. Prior to 1990, India's import policy framework was too complicated and arduous. Alternate methods of importation, various kinds of permits, and distinct sorts of importers were all present. As a result, quantifying QRs became a formidable challenge.<sup>10</sup> Both the frequency ratio and the import coverage ratio were calculated in most of the investigations. All sectors of

the economy and all manufacturing subsectors have these figured out. While Mehta (1997) and Pandey (1999) calculate the NTB indices for use-based sectors, Aksoy (1991) and Hashim (2001) estimated the percentage of imports for broad manufacturing sub-sectors according to licensing categories. A key drawback of these activities is that all of the research only cover certain time periods. Looking at the data, it seems that the NTB levels in the industrial sector were much lower in the 1990s compared to the 1980s. Krishna and Mitra (1998), Balakrishnan et al. (2000), Goldar and Kumari (2003), Topolova (2004), Das (2006), Mitra and Ural (2008), Sivadasan (2006, 2009), and Topolova and Khandelwal (2011) are among the research that have sought to demonstrate the effect of trade openness on India's manufacturing sector. A key limitation of the studies conducted by Krishna and Mitra (1998) and Bala et al. (2000) is that they utilised dummy variables to represent changes in trade policy, which means that they may have captured changes in other policies as well. Despite this, the early studies indicated that trade reforms had a positive impact on manufacturing. Mitra and Ural (2008) and Das (2006) both find that trade policy reforms have a positive effect on manufacturing. Mitra and Ural found that both tariff cuts and the lowering of non-tariff barriers (NTBs) had a positive effect on industrial productivity. Reducing tariffs has a substantial effect on productivity development, according to Topolova (2004), Topolova and Khandelwal (2011), and Trivedi et al. (2011). Everyone knows that trade and industrial policies work hand in hand.<sup>12</sup> Other policies' effects on manufacturing performances have also been the subject of research; for example,

Mitra and Ural discover that deregulation of the industrial sector increases productivity, especially in situations with flexible labour market institutions. Falling capacity utilisation might offset the beneficial effects of trade policy reforms, according to research by Goldar and Kumari (2003). Foreign direct investment liberalisation has a substantial effect on firm-level productivity, according to Sivadasan (2006, 2009).

## DISCUSSION

Trade Policy's Impact on Trade and manufacturing local Indian Industry

- Trade policy's significance is questioned due to claims of diminishing significance due to substantial liberalization and studies of aggregate effects of trade agreements.
- Studies on trade restrictions on specific industries, such as Voluntary Export Restraints on autos, antidumping lawsuits, and the Multi-Fibre Agreement in clothing and textiles, accurately measure trade policy and focus on institutional components of the economic climate.
- Despite narrow scope, these studies accurately measure trade policy and focus on institutional components of the economic climate, which may be overlooked in broader aggregate studies of trade policies.
- The chapter aims to address the evidence on the actual effects of trade policy, as opposed to other causes of changes in trade and in what ways trade policy is involved.
- The chapter addresses methodological challenges in assessing trade policy and conducts a literature review on the subject.

- The Study focuses on the ever-changing effects of trade policy on GDP growth and poverty rates over the long term.
- The Study also examines the ways in which trade policy influences results that have received little attention in the literature thus far.
- The Study primarily reviews information derived from studies on extensive trade liberalisations to differentiate it from others that cover more specific trade policy instruments.
- The Study also provides statistics from both developed and developing countries, highlighting the role of international trade in the economic development of developing countries.

## Indian Trade Policy and Import Control

Trade Policy Restrictions and Economic Consequences

- Trade policy in India has been restricted since the late 1950s, primarily using high tariffs and a comprehensive import licensing system.
- Economic consequences of India's trading policy have been analyzed by various researchers.

## Improvements to Import Policy

- Significant improvements began in the early 1980s, including an increase of the OGL list, a transfer of items from more restricted to less restrictive lists, a decrease in the scope of canalisation, and quicker and fewer administrative judgements.
- Capital and intermediate goods import limits have been eased, mostly for commodities that do not compete with local manufacturing.



### Impact of Trade Liberalisation

- The protectionist regime led to the establishment of a diverse and expansive industrial base at the expense of cost and comparative advantage considerations.
- The tariff system was an attempt at simplification in the 1990s.

### Impact of Trade Openness on India's Manufacturing Sector

- Research has shown that trade reforms have a positive impact on manufacturing, with both tariff cuts and the lowering of non-tariff barriers (NTBs) having a positive effect on industrial productivity.
- Other policies' effects on manufacturing performances have also been the subject of research, such as deregulation of the industrial sector increasing productivity, falling capacity utilization potentially offsetting the beneficial effects of trade policy reforms, and foreign direct investment liberalisation having a substantial effect on firm-level productivity.

### CONCLUSION

This chapter will look at the evidence on the real impacts of trade policy, rather than other sources of trade shifts. It covers methodological issues in evaluating trade policy and provides a literature review on the topic. The chapter focusses on the ever-changing impacts of trade policy on long-term GDP growth and poverty rates, as well as the ways in which trade policy affects outcomes that have gotten little attention in the research to far.

One of the most difficult tasks is organising and choosing data from research that investigate the global and

time-based consequences of trade policy. The chapter also analyses the importance of trade policy in the economic growth of emerging countries and includes figures from both rich and developing nations. The chapter differs from others in that it focusses on evidence collected from research on wide trade liberalisations rather than more particular trade policy tools. India's trade policy has been tightly limited since the late 1950s, with high tariffs and a complex import licensing system serving as the principal mechanisms for controlling import demand. The country's protectionist system has resulted in wasteful resource use across the board. Significant changes to import policy were undertaken in the early 1980s, including an expansion of the OGL list, a shift of products from more stringent to less restrictive lists, a reduction in the extent of canalisation, and faster and fewer administrative judgements. Capital and intermediate products import restrictions have been relaxed, mostly for commodities that do not compete with domestic production.

Tariff and non-tariff barriers (NTB) research has shown that the country's protectionist system facilitated the development of a varied and expanded industrial base at the expense of cost and comparative advantage concerns. The tariff system was an effort at simplification in the 1990s, with the majority of studies calculating both nominal and effective protection rates.

Trade policy improvements have been demonstrated to have a favourable influence on industry, with tariff cuts and NTB reductions improving industrial productivity. Other policies that have an impact on manufacturing performance

include industrial sector deregulation, reduced capacity utilisation, and foreign direct investment liberalisation.

## REFERENCES

1. Ahmad, J. and Kwan, A.C.C. (1991) Causality empirical evidence from Africa, *Economic Letters* 37, 243-48
2. Anwer, M. S., and R. K. Sampath (2001), 'Exports and Economic Growth', *Indian Economic Journal*, 47 (3): 79-88
3. Asafu-Adjaye, J., and D. Chakraborty (1999), 'Export-led Growth and Import Compression: Further Time Series Evidence from LDCs', *Australian Economic Papers*, 38:164-75.
4. Balassa, B. (1978a) Exports and economic growth: further evidence. *Journal of Development Economics* 5,181-9.
5. Balassa, B. (1985) Exports, policy choices, and economic growth in developing countries after the 1973 oil shock=. *Journal of Development Economics* 18, 23-35.
6. Berg, H. Van den, and J. R. Schmidt (1994), 'Foreign trade and economic growth: Time series evidence from Latin America', *Journal of International Trade and Economic Development*, 3(3): 121-30
7. Robert A. Blecker, 2006. "Macroeconomic and Structural Constraints on Export-Led Growth in Mexico," Working Papers 2006-05, American University, Department of Economics.
8. Chandra, R. (2002), 'Export Growth and Economic Growth: An Investigation of Causality in India', *Indian Economic Journal*, 49(3), 64-73
9. Chow, P.C.Y. (1987) Causality between export growth and industrial development: empirical evidence from the NICs=. *Journal of Development Economics* 26, 55-63.
10. Darrat, A.F. (1987) Are exports an engine of growth? Another look at the evidence, *Applied Economics* 19, 277-83.
11. Das, Deb Kusum (2003), "Manufacturing Productivity under Varying Trade Regimes: India in the 1980s and 1990s", Working Paper No. 107, ICRIER, New Delhi.
12. Dhawan, U., and B. Biswal (1999), 'Re-examining Export Led Growth Hypothesis: Multivariate Cointegration analysis for India', *Applied Economics*, 31: 525-30.
13. Feder, G. (1983) On exports and economic growth=. *Journal of Development Economics* 12, 59-73.
14. Ghatak, S., Milner, C. and Utkulu, U. (1997) Exports, export composition and growth: cointegration and causality evidence for Malaysia. *Applied Economics* 29, 213-23.
15. Ghatak, S., and S. W. Price (1997), 'Export Composition and Economic Growth: Cointegration and Causality Evidence for India', *Weltwirtschaftliches Archiv*, 133(3): 538-53.
16. Goldar, Bishwanath (2002), "TFP Growth in the Indian Manufacturing in the 1980s", *Economic and Political Weekly*, 37(49): 4966-68.
17. Goldar, Bishwanath and Anita Kumari (2003), "Import Liberalization and Productivity Growth in Indian Manufacturing Industries in the 1990s", *Developing Economies*, December, 41(4): 436-60

18. Granger, C. W. J. (1969), 'Investigating Causal Relations by Econometric Models and Cross-Spectral Methods', *Econometrica*, 37: 424-38.
19. Greenaway, D. and Sapsford, D. (1994a) What does liberalization do for exports and Growth, *Weltwirtschaftliches Archiv* 130, 152-74.
20. Greenaway, D. and Sapsford, D. (1994b) Exports, growth, and liberalization: and evaluation, *Journal of Policy Modelling* 16, 165-86.
21. Grossman, G.M. and Helpman, E. (1991) *Innovation and Growth in the Global Economy*. Cambridge, MA :MIT Press.
22. Hashim, Danish A., Ajay Kumar and Arvind Virmani (2009), "Impact of Major Liberalization on Productivity: The J-Curve Hypothesis", Working Paper No. 5/2009-DEA, Ministry of Finance, Government of India.
23. Shan, J. and Sun, F. (1998a) Export-led growth hypothesis for Australia: an empirical re Investigation *Applied Economics Letters* 5, 423-8.
24. Heller, P.S. and Porter, R.C. (1978) >Exports and growth: an empirical re-investigation *Journal of Development Economics* 5, 191-3.
25. Helpman, E. and Krugman, P.R. (1985) *Market Structure and Foreign Trade*. Cambridge (Mass.): MIT Press.
26. Islam, M.N. (1998) Export expansion and economic growth: testing for cointegration and Causality. *Applied Economics* 30, 415-25
27. Jung, S.W. and Marshall, P.J. (1985) >Exports, growth and causality in developin countries. *Journal of Development Economics* 18, 1-12Jung and Marshall 1985
28. Jaiswal, J. (2014). "Environmental Impact on SMEs Growth and Sustainability Challenges and Opportunities," *Journal of Studies in Dynamics and Change (JSDC)*, ISSN: 2348-7038.
29. Jaiswal, J., Jaiswal, B., & Bisht, M. (2017). Rural Economic Development and the role of Infrastructure in the State of Uttarakhand: An Overview. *International Journal of Research in Social Sciences*, 7(9), 624-638.
30. Kasahara H. and J. Rodrigue, 2008, Does the Use of Imported Intermediates Increase Productivity? Plant-level Evidence, *Journal of Development Economics*, 87, pp106 118.
31. Kumari (2010), liberalisation and sources of industrial growth in India: an analysis based on input-output approach, Working Paper, IEG
32. Mallick, S.K. (1996) Causality between exports and economic growth in India: evidence from cointegration based error correction models=. *Indian Journal of Economics* 76, 307
33. Marin, D. (1992) >Is the export-led growth hypothesis valid for industrialized countries=. *Review of Economics and Statistics* 74, 678-88
34. Marjit, S., and A. Raychaudhuri (1997), *India's Exports - An Analytical Study*, Oxford University Press, New Delhi.
35. Michalopoulos, C. and Jay, K. (1973) Growth of exports and income in the developing world: a neoclassical view, DP. 28, US Agency of International Development, Washington
36. Nidugala, G K. (2001), 'Exports and Economic Growth in India: An Empirical Investigation', *Indian*

- Economic Journal, 47(3): 67-78. Oschos (1989)
37. Perron, P. and T. J. Vogelsang, "Testing for a Unit Root in a Time Series with a Changing Mean: Corrections and Extensions," *Journal of Business & Economic Statistics* 10 (oct 1992), 467-470.
38. Ram, R. (1985) Exports and economic growth: some additional evidence, *Economic Development and Cultural Change* 33, 415-25.
39. Ram, R. (1987) Exports and economic growth in developing countries: evidence from time series and crosssection data. *Economic Development and Cultural Change* 36, 51-72.
40. Trivedi et al (2011) "Productivity, Efficiency and Competitiveness of the Indian Manufacturing Sector" Reserve Bank of India
41. Virmani, Arvind (2006a), "India's Economic Growth History: Fluctuations, Trends, Break Points and Phases," *Indian Economic Review*, Vol. XXXXI, No. 1, January-June, pp 81-103.
42. Virmani, Arvind (2006c), "The Dynamics of Competition: Phasing of Domestic and External Liberalisation in India", Working Paper No. 4/2006-PC, Planning Commission, April.
43. Virmani, Arvind (2009), *The Sudoku of India's Growth*, BS Books, Business Standard Publication, New Delhi.
44. Virmani, Arvind and Danish A. Hashim (2009); "Factor Employment, Sources and Sustainability of Output Growth: Analysis of Indian Manufacturing", Working Paper No. 3/2009-DEA, Ministry of Finance, Government of India.
45. Wallack, J. S., "Structural Breaks in Indian Macroeconomic Data," *Economic & Political Weekly* 38 (oct 2003), 4312-4315.