Chapter 1

Introductory Background, Review of literature and Framework of the Study

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1. Introduction

Economies, the world over designed their economic policies under the guiding torch of two ideologies i.e. capitalism and socialism. The configuration of world economy on these two philosophies per se paved way to polarization of outlook and orientation in respect of economic growth and development. The emergence of bi-polar world got nourishment on account of these very variances prevalent in these two driving philosophies. As ground of these ideologies got more cemented, the world recognized how forthrightly Marshall in Principle of Economics (1890) substituted the term economics by political economy.

With passage of time, some very remarkable events got place in economic history. The financial revolution of 1970s was major development that led to removal of capital control in many economies, thereby paving way for global financial system. The emergence of Multinationals Corporations (MNCs) and Foreign Direct Investment (FDI) in world economy brought the term “Economic Globalism” to its pinnacle. The international debt problems of 80’s that spread its tentacles in Latin America, African and East European countries induced them to comply to policies of Bretton-wood Institutions which was better labeled as Washington Consensus. Imbibing the prescriptions of Washington Consensus spawned to deregulation, privatization and decreased role of state. These events injected sinews to capitalist led developed economies. The tumbling of Soviet Union in 1990, brought socialism to its nadir. Thereby the developed economies became the flag-bearer of the world
economy. Ultimately socialist led developing economies shifted from the policies of import substitution to export – led growth strategies. Thus the developing economies ultimately acknowledged the potential of international trading as panacea for prevailing ills at domestic echelon. The most detrimental issue that surfaced for the developing countries was carving their niche under the ambit of global trading system. With no grounding of nitty - gritty and intricacies of global trade led developing economies entail for a global mentor that can escort on landscape of International trade. The emergence of the WTO as a well globally acknowledged god-sent institution is earmarked to act as mentor for trading mechanism in developing economies.

With the establishment of this juggernaut at the global echelon of trade and investment, the hitherto sketchy patterns of Liberalization, Privatization and Globalization (LPG) have been escorted to concrete pathway. Trading and investment arenas have enhanced under the umbrella of WTO regime. The WTO prides itself in being a democratic institution fostering one member - one vote and assists the opening of developing economic as per their development level.

In case of India, opening of economy is appended with a sad story owing to plethora of faulty policies in the form of red-tapism, license raj, subsidies and rampant corruption. These policies ultimately left Indian economy with modicum of foreign exchange reserves and at this juncture India had no alternative but to comply with austere economic measures and policies of
Breton wood Institution's (IMF /World Bank). Thus India changed its track from socialist led economy and signaled green to the winds of market driven economy of globalization on July 24, 1991 as a compulsion not as an alternative. By becoming a signatory to the agreements of WTO on 1st January 1995, it has been manifested that India has made some noticeable strides in many fronts of the economy.1 Under WTO regime, tariff and quota will become mute and countries have to change their strategies from being comparative to competitive. In respect of India, there is a clarion call to come up with a set of strategies to hone her forte in consonance with global benchmarks to fully exploit her economic sinews to the possible optimum level.

Among the entire forte, that can sanguinely help India to become global leader in trade, the potential of services sector to substantiate India's effort on global economic landscape is second to none. Numbers of International studies have corroborated the potential of Indian service sector in term of rising revenues, escalation in exports and huge employment generations. Thus access to a growing external market for services and partial liberalization of domestic economy has significantly enhanced the role of Indian service sector. The World Bank study (2004) also attests that liberalized service sectors like Information technology and telecommunication service have attracted significant FDI, fostered growth and brought more employment opportunities.

India's signing of General Agreement on Trade in service (GATS) under WTO ambit has enhanced the internationalization
of Indian service. Taking into account a span of a decade (1990's), the World Bank Study (2004) reveals that India's services export grew at a Compounded Annual Growth Rate (CAGR) of 17.3 per cent with rank one. The GATS agreement guarantees against discrimination and address regulatory barriers in foreign markets. India gets opportunity to grab these facilities. The signing of GATS agreement by India is instrumental in making India achieve the target of 1 per cent share in global trade by 2007.

With attributes like Disputes Settlement Body and Facilitating Training Course (FTC), the WTO holds opportunities for India to carve its niche in service sector by leveraging its potential under WTO umbrella.

2. Statement of the Problems

With emergence of World Trade Organization as masthead of LPG bandwagon, this trade juggernaut entails countries to hone their attributes in consonance with its global norms in order to remain on global trade. As India is signatory to WTO agreements, she too has to preen her services sector landscape in fashion mirroring the WTO norms. But while imbibing GATS prescription, the Indian service sector faces galore complication in preening domestic economic plane. Some of the noteworthy and challenging problems are enumerated below.

- The foremost lurking fear is that the opening of Indian services under GATS shall envelop public services in the form of health, transport and education.
• Another problem is that with the opening of services sector, people employed in public sector will lose job securities.
• Another problem relates to curtailment of subsidies in Indian public services on account of signing GATS commitment.
• GATS commitments will lead to spates of Ms and As of domestic companies with foreign companies, thereby making the Indian company subordinate to foreign services providers.
• Services where equity is foremost cardinal is feared to be sacrificed in the name of efficiency.

3. Review of Literature

  a. Books


UNDP 9 (2003) in its publication on "Making Global Trade Work for People", emphasizes that multilateral trade should make all efforts for the betterment of human development, especially in developing countries. The multilateral regime should accommodate the developing countries with policy space and autonomy at domestic echelon. The book also advocates key reforms in the global governance of trade under WTO gamut.

Mattoo, A. and A. Carzaniga10 (Eds.) (2003) in their edited book “Moving People to Deliver Services”, presents a compendium of conceptual and empirical research papers to further the pace of research in services. Srivastava, D. 11 (2003) in his book titled “Globalization, Privatization and WTO with Reference to India”, prescribes a number of suggestions for India under the WTO ambit covering areas like services, intellectual
property. Martin, W. and P. Mari\textsuperscript{12}, (Eds.) (2003) in their edited book titled “Options for Global Trade Reform A view from the Asia – Pacific”, is collections of papers from seasoned personalities. A number of papers highlights those services sectors that can be liberalized in more appropriate way under the WTO ambit.

Motuhita, M., T. J. Schoenbaum, and P. C. Mavroidis\textsuperscript{13}, in book captioned “The World Trade Organization Law, Practice and Policy”, brings forward substantial topics relating to World Trade Organization. The book makes an attempt to threadbare the various interfaces of WTO in an attempt to a better apprehending of the institution. Mattoo, A and R. M. Stern\textsuperscript{14} (Eds.) (2003) in their edited book titled “India and the WTO”, has brought out a compendium of papers. The papers discusses various issues like services, Foreign Direct Investment, Trade Barrier under the ambit of WTO. Data, M\textsuperscript{15}. (2001) in his book titled “The Significance and Growth of the Territory Sector”, brings out the causes of growth of services in India. A major focus is made on three sub-sector distributive trade, banking and public administration.

Chanda, R. \textsuperscript{16} (2002) in her book titled “Globalization of services India’s Opportunities and constraints”, has lessen knowledge gap of Indian services under WTO landscape. The book furnishes an analytical framework for understanding India’s services. It also brings out the problems at various service sectors in India. The author recommends well-crafted
strategies for the domestic echelon, as well as, at the multilateral level to leverage India’s service sectors.

Gandhi, J. P. and P. Ganesan (Eds.) (2002) in their edited book “Services Sector in the Indian Economy”, has brought out a collection of papers on India’s services sector. Paper ranges from those revealing dynamics of India service sector to those demonstrating India’s competence in service like IT enabled services, telecommunication services, tourism Industry. Rao, V.L. and J.Wengel (Eds.) (2001) in their edited book titled “Financial and consultancy services Issue in International trade”, has brought out a collection of papers on service sector. Papers investigate the prospect of liberalizing trade in financial and consultancy service from the developing countries perspective. WTO secretariat (2001) in booklet titled “GATS – Fact and Fiction”, makes an attempt to dispel the misunderstanding and scare stories regarding liberalization of services under the architecture of GATS.

Sampson, Gary, P. (Ed.) (2001) in edited book titled “The Role of the World Trade Organization in Global Governance”, is compendium of papers. The papers gauge the role of World Trade Organization in a fast paced global economy. The papers delves through different lens to know, as how WTO can bring a greater equity between developing and developed customer.

delves on the contributions of services in developing economic and potential for service liberalization in India Egypt, Segnal. Part 3 studies the issues and options in services 2000 negotiation, including the telecommunications policy reform, insurance service, media services. Claessens, S. and M.Jansen (2000) in their edited book titled “The Internationalization of Financial Services Issues and Lessons for Developing Countries”, has brought out a collection of fourteen papers that encapsulates different facets of globalization of financial services. Sauve, P and R.M. Stern (Eds.)(2000) in their edited book titled “GATS 2000: New Direction in Services Trade Liberalization”, is collection of seventeen papers. The papers highlights the impediment to services, as well as the means to improve the architecture of GATS. WTO secretarial (Ed.) (2000) in booklet titled “Guide to the GATS An overview of issues for further liberalization of Trade in services”, serves as guiding torch to the member countries in their pursuit of liberalizing the service sectors.

Findley, C. and T.Warren (Eds.) (2000) in their book titled “Impediment to Trade in Service Measurement and Policy Implication”, has brought revolution in the studies of services sector. The book reveals the designing of reform programmes as well as the shaping of international service negotiations in more appropriate and befitting way.

Mukherjee, M(2000) in her book titled “World Trade Organization and India’s Trade Policy in Services”, is the foremost book depicting India’s tradable services in the context

Mathur, B.L. (Eds.) (1999) in his edited book named “Globalization of Financial Services”, is collection of 12 papers that make a clarion call for appropriate upgradation of Indian financial system. The papers also make a number of strategies in enhancing the pace of globalising India’s financial service.

Chaudry, A (1998) in his book titled “GATT A Developing country perspective”, has drawn up issues that are regarded as bone of contention between the developed and developing countries. The author makes holistic recommendations for leveling the playing field between the developed and developing economies. Masserlin, P. A and K.P. Sauvant (Eds.) (1998) in their edited book titled "The Uruguay Round Services in the World Economy", testify the relevance of service sectors in International Trade. Part one of book makes a look at economic tools and their relevance for examining trade in services under trade negotiations. Part two of book goes, inter alia, through the principal modes of delivery, impact on contemporary international millieu and the extent of regulation and protection. Part third of book looks into the countries that enjoy comparative advantage in service sector. Zarrilli, S and
C. Kinnon (Eds.) (1998) in their edited book titled "International trade in health services: a development perspective", have brought out a collection of papers addressing the major emerging issues relating to trade in health services.

Srinivasan, T.N. (1998) in his book named "Developing Countries and the Multilateral Trading System from the GATT to the Uruguay Round and the Future", has come out with a book for developing countries. The book sheds light on the events leading to formation of WTO. Issues that have created tug of war between developing and developed countries are given. The book closes with suggestions for the developing countries to foster reforms at domestic level of trade.

McDonald, B. (1998) in his book titled "The World Trading System: The Uruguay Round and Beyond", provides an account of outcome of Uruguay Round trade negotiations. The book makes an assessment of global trading system as well as flesh out with the major issues that WTO will have to deal with, in years to come.

Mukherjee, N. (1995) in her book titled "GATT Uruguay Round, Developing Countries and Trade in services", evaluates the GATT Uruguay Round and General Agreement on Trade in Services (GATS) from the developing countries perspectives. A major focus is made on GATS. A detail deliberations on the factors that constrains the comparative advantage of developing countries is made. Chowdhry, N.K. and J.C. Aggrawal (1994) in their book titled "Dunkel Proposal The Final Act-1994 Significance for India and The World Trade", has brought into
light the areas that entails to sift through, after the signing of the new GATT agreements. The book makes a holistic attempt to capture all the GATT agreements.

b. Special Studies

World Bank (2004) in special study titled "Sustaining India's Services Revolution", states that access to external markets and domestic reforms were cardinal in enhancing the growth rate of Indian service sector. The study suggests that the pace of Indian service sector can be accelerated if the country values the ongoing negotiations on service under WTO ambit. Consumer Unit Trust (CUTS) (2003) in special study titled "Competitiveness of service sectors in South Asia: Role and Implications of GATS", unfolds the importance of services to world GDPs. The study reveals that the South Asia can be transformed into palatable hub in health sector, provided that South Asian economies exploit the ongoing GATS negotiations in proper and appropriate way.

IMF (2001) in staff paper titled “Global Trade liberalization and the Developing countries”, brings out a vivid account of rapid growth of world economy. The paper states that the current zoom in trade is on account of both technological developments and concerted efforts to reduce trade barriers. (OECD) (2001) in special study titled "The Development Dimensions of Trade", demonstrates an in-depth analysis of development dimension of trade, with focus on integration of non-OECD countries into global economy. The study also reveals the boons of multilateral trading system. Fink, C., A.
Mattoo and R. Rathindran (2000), in special study on titled “Liberalizing Basic Telecommunications: The Asian Experience”, investigates the liberalization of basic telecommunication sector in Asian countries and resolves as how multilateral negotiation can foster it.

Sauve, P. and J. Gillespie (2000) in special study titled “Financial Services and the GATs (2000) Round”, arrests attention toward the macroeconomic context. The study also states that the global financial market promises for increase in efficiency and better international allocation of capital.

Blouin, C. (2000) in special study titled “The WTO Agreement on Basic Telecommunications: A Reevaluation”, argues the pros and cons of the World Trade Organization (WTO) Agreement on Basic Telecommunications. The study also raises the main shortcoming of the Agreement. Mattoo, A and M. Olarreaga (2000) in their special study titled “Reciprocity Across Modes of supply in the World Trade Organization: A Negotiating Formula”, imparts that further liberalization of trade in service under the ambit of world trade organization is conditional on reciprocity. With the application of Heckscher-Ohlin-Vanek framework, the authors propose a negotiating formula that generalizes the fundamental WTO principle of reciprocity to include alternative mode of delivery.

on “Financial Services and the World Trade Organization: Liberalization Commitments of the Developing and Transition Economies”, states that financial services negotiations through WTO have assisted developing and transition economies in building more stable and transparent policy regime. Stephenson, S. 46 (1999) in his focused study on “Approaches to Liberalizing Services”, states that it was through the completion of Uruguay Round that an awakening in developing countries in regard to liberalizing services have been witnessed. The paper deliberates that it would be easier to liberalize services among those countries that are at similar stages of development.

Kono, M. and L. Schuknecht47 (1998) in special study titled “Financial Services Trade, Capital Flows and Financial Stability”, fosters financial service liberalization, which shall per se facilitates the presence of foreign financial institution. The study gets weight owning to the empirical analysis of GATS commitments in 27 emerging markets being made. Kono, M., P. Low, M. Luanga, A. Matto, A. Oshikawa, and L. Schuknecht48, (1997) in “Opening Markets in Financial Services and the Role of the GATS”, is one of most leading study in recent time, providing light on, the role of WTO in promotion of financial services. The paper focuses on rights, obligations of member countries under GATS. The study also shows the mechanism of GATS as a vehicle for enlarging progressive liberalization on a non-discriminatory basis.

Assessment of the WTO Agreement on Telecommunication Service”, examines the outcome of WTO agreement on basic telecommunications service. Ripoll, J (1996) in his special study titled “Domestic Insurance Markets in Developing Countries: Is There Any Life After GATS?”, brings out the caveat that the opening of insurance markets to foreign market will further lead to the dominance of well established global insurance corporations on domestic companies.

c. Working/Discussion/Occasional Papers

Chanda R. (2005), has very forcefully convinced the readers regarding the positive role of financial services in globalising economy. The author makes readers abreast of commitment made by India under financial services of WTO umbrella. Finally, a numbers of strategies are chalked out for reaping the opportunities that emerges from financial services under the WTO gamut. Kuthuria, R. (2004), brings into light the phenomenal growth of Indian telecom sector since 1991. The paper favors the active participation of India under the ongoing negotiation of GATS 2000. Banga, R. and B. Goldar (2004) has brought out an outstanding study of role of services in production in India by assistance of KLEMS (capital, labor, energy, material and services) production function.

Mukherjee, A. and R. Sachdeva (2004) has spotlighted crucial role of railways in fostering trade. Under the context of ongoing GATS 2000 negotiations, the paper examines the development both at global level and in India.
Sawhney, A. and R. Chanda (2003), in their working paper titled “Trade in Environment Services: Opportunities and Constraints”, studies the structure of environmental service sector. The paper by carrying out SWOT analysis, explores the consequences of liberalizing environment services in India. Mukherjee, A., makes analysis of Pros and cons of opening up the retail sector to foreign direct investment. The paper also gauges India’s prospect for expanding trade in distribution services under the GATS framework.

McGuire, G. (2002) brings to light the importance of service sector in developing economies. The paper pinpoints the barriers built up by developed economies on their temporary movement of labour. Mattoo, A. (2001), explores out the structure of GATS. The author prescribes a numbers of recommendations to refashion GATS with aim of making it more effective tool of liberalization.

Mukherjee, A. (2001), demonstrates the potent of construction and consultancy services. The paper further examines India’s capacity for furthering the pace of trade under the stated service with the GATS matrix. Mukherjee, A. (2001) reveals the relevance of maritime transport service in world trade and advocates that India should vigorously engage in GATS 2000 negotiations. A number of recommendations are made to stimulate India’s share in maritime transport under GATS. Chanda, R. (2001) furnishes a synoptic view of trend of international trade in health services. Further, the paper examines the degree of liberalization that has occurred in health
services under the WTO ambit. Lastly, emerging arenas of health services along with strategies to enhance the pace of gains from such trade is made.


Hoekman, B. (1995) has manifested that GATS is guide torch in fostering multilateral disciplines. Suggestions are made to strengthen the agreement on service.
d. Periodicals and Journals

Sahani, R. and S. Kale (2004) talks about the broad order of GATS and makes endeavor to know implication for India under GATS. Bhushan, S. (2004) brings out pros and cons of higher education in India under WTO landscape. Technical aspects of limitation for the market access and national treatment are very vividly explored. Chanda, R. (2003) makes an attempt to ward off the unjustified fears that shall crop up from the signing on the GATS under the WTO ambit. The paper also reveals as how the developing countries can keep control over the social -policy making, while making commitment under GATS in tandem. Joseph, M. and R. R. Nitsure, (2002) states that the escalation of integration of economies under flagship of WTO has created galore opportunities for India. The authors lay down recommendations for Indian banking sector, so as to garner lion share for herself in current round of GATS negotiations. Panitchpakdi, S., (2001) provides a details insight of the cardinal issues under the WTO ambit and world trade in general, as well as calls for coordination and coherence in the pathway of international economic relations.

Abbot, K.W. (2001) reveals that WTO should act as watchdog to control bribery and corruption in international business. Bronckers, M.C.E.J. (2001) advocates that WTO has the potent to become custodian of global governance. A numbers of sea-changes are entailed under the WTO mechanisms which will then fetch respect from all the nations.
Fernandez Martos Montero, A. (2000) catches the gist of GATS 2000 Round. The paper states that the GATS enfolds a wide range of tools entailed for promoting effective liberalization of service trading. Springer, U. (2000) states that the General Agreement on Trade in Service (GATS) has promoted the WTO members to liberalize service sector. Thus it is sanguinely hoped that the WTO negotiation rounds will enhance the pace of environmental services too, in time to come. Fernandez Martos Montero, A. (2000) states that the GATS enfolds a wide range of tools indispensable for promoting effective liberalization of services. Zdouc, W. (1999) argues as how the GATS adopts the different steps of the WTO dispute settlement procedures. The paper also draws attention toward those legal issues and problems that are likely to emerge in future course under the GATS ambit. Raipuria, Kalyan M. (1999) discusses the relevance of services sector and urges to frame out proper set of strategies to make India's service sector more competent and efficient. Key, S.J. (1999) furnishes issues involved in international efforts to liberalize services along with ensuring adequate regulation and supervision of financial firms.

El Toukhy, M.M. (1999) delves to the consequences of globalization of trade and finance on developing countries, with a focus on sub-saharah Africa. The paper also explores the impact of Uruguay Round Agreement on the developing countries. Tuthill, L. (1997) states that the liberalization committed on basic telecommunication under the WTO ambit shall enhance the pace of sector's transformation.
Bachi, J. (2005), Gandhi, J. P. and P. Ganesan (2002) Chanda, R. (2002), Mukherjee, M. (2000) have performed a commendable job in abridging a vital knowledge deficit in the landscape of literature on trade in services; a sector bearing paramount significance for Indian economy. The scholars seem to have contributed significantly on an analytical matrix for contemplating India’s trade in services. The works bring out the multi-faceted *modus operandi* through which India can maximize its strength in trade in services and simultaneously outdistances its shortcomings in order to garner benefits from on-going GATS negotiations. The readers of the purported treatise will certainly be illuminated by the well-craft out strategies that need to be endorsed by India at all echelons of service sector.

Inspite of the fact, that these works are treasure to the current literature on the sphere of GATS and India, these studies have nevertheless over looked to delve and examine into the state of play in service sector at the domestic rung of Indian economy. These studies neglect to incorporate as how the government machineries shall be able to design their micro-policies pertaining to service sector in light of GATS commitments. The studies also miss out to encompass cogent pep-talk to ward-off the faulty apprehensions that subscribing to GATS commitments shall lead to waning of jobs in public service sector in India.

Das, M.R. and T.K. Chakrabarty (2004) and Mathur, B. L. (1999) have provided significant input to the contemporary existing of literatures in the sphere of India and trade in services.
The authors have very meticulously incorporated the agreement on trade in services in tandem with specific attention on the Financial Service Agreement (FSA). The works have thread bare examined the internationalization of financial service in India and its multifaceted aspects. The works make one aware of the reality that India can only delay the internationalizing of the service but cannot escape. Financial service providers and the regulators need to have close cooperation, which *per se* shall translate the best results. The works fail to communicate the impact of foreign financial service providers on the Indian turf. The studies however appears to have skipped to make readers aware of the impact of foreign service providers on Indian counterparts.

**Martin, W. and M. Pangestu, (eds.) (2003),** **Stren, R. M. (ed.) (2001), Sauve P. and R. M. Stren (2000) and WTO Secretarial (2000)** have put forward thought provoking piece of work on international trade in services. These works are some of the widely – referred in the areas of international trade in services. In fact, these works have broken new grounds in the literature of trade in services. These works have very finely meshed in, the multi-facets of trade in services with the WTO matrix covering all the areas of trade in services along with focus on the developing countries. Through these works, it can be firmly deduced that services are the best bet for the developing countries to make their presence felt at the global echelon of trade and investment. These works have documented all the areas of GATS. The authors have recommended plethora of steps for developing countries in their quest to foster trade in services.
These studies could have enriched more, provided that these works could incorporate the discourse on mode of GATS in more befitting way from the developing countries point of view.

Rao, V. L. and J. Wengel (eds.) (2001) Claessen’s and M. Jansen (2000) concentrate on the theoretical facets, cross-country pattern along with specific country participation in the context of globalization of service sector. The authors have very cogently brought out the fact, that globalization of services augur tremendous amount of benefits to the countries. The authors speak that internalization of services shall add sinews to the financial system. Amelioration of quality, efficiency and broadening of financial services along with stable source of funds are some main positive aspects of internalization of services. The works have further discussed the trade-off of internationalization of services. While the caption of these work relates to developing countries, but while reviewing these studies, it is revealed that the authors have paid no attention to deliberate on subsidies in services; an area which have given birth to stalemate between the developed and the developing countries.

Zarrilli, S. and C. Kinnon (eds.) (1998) are the first one to bring out a collection of papers addressing the major emerging issues relating to trade in health services. The work brings forth the difficulties and prospects of developing countries in the international trade in health services. The work also discusses the prospect of infusing information technology (IT) in health. Of late, it is christened as Tele-Health. The work formulates a number of strategies for enhancing the domestic capacity at the turf of developing countries.
Sampson, G.P. (2001), M. Matsushita and et al (1999) and Das, B.L., (1999) substantiate the potent attributes of the multilateral trading system. The studies recommend that in order to sustain the credibility of WTO; social, developmental and environmental concerns are entailed to be properly addressed. The studies further reveal that each member’s country of WTO has equal voting power, so that no state or group of states can dominate. The studies suggest that WTO member governments must find ways to guarantee that the world trade and investment do not invite violation of health and environmental standards. These studies paid no attention to discuss any concrete way out to remove the dead lock between the developed and developing countries.

Garg, H. (2004) presents the likely benefits that can be availed of by domestic producers and importers under the WTO ambit. The author threat bare examines the impact of the constitution of WTO and the various regional trading blocks on the pattern and development of international trade. The book states that WTO is anticipated to oversee its trade agreements, facilitate an ambience for trade negotiations, handle the trade disputes, provide technical assistance and trading to developing countries and cooperate with other international organizations. The study would have got better, had it covered the portion of trade in service more substantially.

Bansal, N. S. (2004) brings out into light the attributes of World Trade Organization (WTO). The book focuses on the cross-cutting and new issues which are namely, regional economic grouping, environment, competition policy, government
procurement, and labor right, which are rapidly emerging at the international trade under the WTO's gamut. The author educates the readers that through the WTO, the developing countries can lower the trade barriers. The work also discusses as how the new negotiations can address the vital challenges facing the multilateral trading system. The main lacune of the work is that the work is copied in toto from WTO web site. The author has not taken any pain to even change the head and tails of the materials. Going through this book, it can be cogently perceived that publishing a book is child's play in India.

Matoo, A. and Carzaniga (eds.) (2003) and Masserlin, P. A. and K.P. Sauvant (eds.) (1998) exhibit the issue of movement of natural movements (mode 4) which is considered to be of paramount significance for the developing countries. The studies make aware that developing countries were disappointed by the dearth of commitments in their area of comparative advantage. The studies proclaim that reduced barriers to the temporary movement of service providers will produce substantial global benefits. These studies aimed at enhancing the understanding of the implication of mode 4 liberalization on the developing countries. Though the studies cover the conceptual and empirical research papers, but have neglected to cover the matter relating curtailment of subsidies in service sector.

Chaudary, A. (1998) and Mukherjee, N. (1995) have bought forth issues that are regarded as bone of contentions between the developed and developing countries. The works also evaluate the General Agreement on Trade in services (GATS)
from the developing countries’ perspective. While making detailed deliberations on the factors limiting the comparative advantage of developing countries, the authors recommend a numbers of holistic steps for creating parity in the playing field between the developed and developing economies.

John, K. (2004) and WTO secretarial (2001) are clever and cogent enough in replying to the umpteen number of misleading demonstrations brought up against the WTO. The work has put forward very convincing justification for the WTO’s survival. The authors have subsumed the complaints and disapproval against the WTO and thereby have tried to clear up the mess created against WTO. The works endorse that the key for development of developing countries rest in actively participating in WTO system. The studies proclaim that through a matrix of rules and regulations, the developing countries shall be able to leverage their position in global trade. The studies could have got more enriched provided that some documentations on data would have been done to corroborate the potent of WTO more forcefully.

Chaudhary, N. K and J.C. Aggarwal (1994), are acknowledged among the pioneer authors who had brought this work instantly after India ratified the WTO agreements, which is better labeled as Dunkel proposals among Indian populace. The book provides the multifaceted attributes of WTO and its agreements. The authors explicitly discuss the taxonomy of GATS. Keeping in view, that the work is counted among the earlier publications, the work could include some statistics on
trade in service to manifest the potent of India in trade in services.

**Findley, C. and T. Warven (eds.) (2001)** have brought revolution in the studies of services sector. The book brings out the blue print of reform programmes as well as forming the international service negotiations in much appropriate modes. The work makes acquainted with the barriers to trade in services. This study makes an endeavor to assess and measure the economic impact of policies affecting trade in services. In fact the book could have more significance, provided that the study would have covered on the developing countries’ problems relating to trade in services.

**Debroy, B and M. Saquib (eds.) (2004), Mattoo, A and R. M. Stern (eds.) (2003)** have put forward collections of papers from seasonal pundits on the area of WTO and India. The works centre on the vital issues of the Doha Development Agenda. The works have very compactly deliberated on the economic impact of the Uruguay Round negotiations on India and the other developing countries. The work thread-bare examines, *inter alia*, the service trade liberalization. The works further make analysis of India’s participation in the Doha Development Agenda (DDA) negotiations and bring forth the areas needing changes in the domestic and external policies.Inspite of the fact that these authors have produced splendid work; they omitted to throw light on the subsidies in services; which entailed to be debated.

**Datta, M. (2001)** primely focuses on the analysis of the growth of major activities of the tertiary sector. This reveals that
services activities represent a dynamic, technologically vibrant and important sector of a modern economy. The study indicates that the rapid growth of services in on account of faster growth of the manufacturing sector relatively to GDP. Secondly with increasing sophistication of service activities, some task which normally used to be taken up within the manufacturing firms themselves is increasing being contracted off to specialized service firms. Thirdly, income elasticity of demand for certain services is very high. The total focus of the book rests on the domestic performance of services, thereby ignoring entirely the export aspects of India’s trade in services.

Srinivasan, T. B. (1998) and McDonald, B. (1998) bring out the result of the Uruguay Round trade negotiations, which led to the establishment of the World Trade Organization (WTO). The studies bring forth the arenas that have created stalemate between the developing and developed countries. The studies disseminate that trade and the environment, foreign direct investment, trade and labor standards and international rules are some of the vital area that WTO will have to deal in coming years. These studies could get better, provided that these studies could provide better illustrations to substantiate their arguments for WTO.

World Bank (2004) is one of the sensational studies relating to trade in service in India under the GATS regime. The study reveals that India’s exports of services have experienced one of the fastest growth rates in the global trade in services. The study recommends that unilateral reform in service sector can assist India in creating a suitable position in the multilateral regime of
General Agreement of Trade in Service (GATS). Further, the study advocates that India should adopt bold and innovative approach to garner access to foreign markets. It is deduced through this publication, that India’s developmental aspirations hinge substantially on its efforts to enhance the rapid growth of trade in services in India. Though the study throws light on the universal services goals, but has not made endeavor to chalk out ways as how liberalization through GATS shall not affect development objectives under the banner of efficiency.

**Consumer Unit Trust (CUTS) (2003)** unfolds the significance of service sector to world GDP. The publication, through the reliance of statistics, document that the contribution of services to world GDP is second to none. The study makes an endeavor to gauge the Revealed Comparative Advantage (RCA) of a nation in export of commercial services. RCA of a nation in the export of commercial services manifests her comparative edge in services. The study shows that India enjoys highest RCA of commercial services in world. The escalation of India’s trade in service has been due to privatization and opening up to FDI in India’s economic arena. The study also reveals that the South Asia can be transformed into palatable hub in health sector, provided that South Asian economies exploit the ongoing GATS negotiations in proper and appropriate way. One of the short-coming is an account that the work gave no room for deliberations on modes of GATS.

**IMF (2001) and OECD (2001)** explain the role of international trade in assisting the developing countries to get rid of extreme poverty. These publications show that the multilateral trading
system has delivered successive rounds of trade liberalization and has established mechanisms to protect the interest of trading nations. These studies certify that growth has been experienced by those developing countries which have acknowledged the value of openness and constituted a domestic policy system. These studies are able to clear a lot of doubt relating to international trade.

Sauve, P. and J. Gillespie (2000), Matoo, A. (1999), Kono, M. and L. Schuknecht (1998) and Kono. M. and et al (1997) are the staple studies illuminating on the significance of World Trade Organization (WTO) in the promoting trade in financial services. These studies get weight on account of the pragmatic analysis of the GATS agreements. These studies corroborate that the ambience of GATS promotes liberalization of financial services sans discrimination. The international trade in financial services augurs well for enhancing the service ability and more appropriate distribution of capital. These studies conclude that the bargaining in the international service through the General Agreement of Trade in Service (GATS) have facilitated the developing and least developing countries in creating a better long-lasting and open trading regime. Inspite of the fact that these studies are highly commendable, they left out to talk about as how the developing countries shall able to retain their autonomy in policy making in service sector under the GATS regime.

Matoo, A and M. Olareaga (2000) and Berkey, J. and E. Tinawi (1999) communicate that if the negotiations in trade in service at the World Trade Organization are to be advanced
beyond the level undertaken unilaterally, reciprocity must play a central role in negotiations. The central theme of the book states that participants have failed to exploit the scope of the services agreement (GATS) for the exchange of market access 'concessions' across different modes of supply-cross-border delivery. The studies inform that the GATS rules of classifying services are inadequate to deal with, on account of rapid expansion of the delivery of services electronically. These studies are a must-read for those interested to know about the GATS classifications and how e-services got accommodated under the GATS's gamut. These studies failed to throw light on the further expansion and development of e-services and as how GATS shall include in future.

Finik, C. A. Mattoo and R. Rathindran (2000), Blouin, C (2000) and Fredebeul, K, and A Fregtag (1997) educate about the outcome of the WTO agreement on basic telecommunications services. These studies discuss the benefits and the weakness of the World Trade Organizations (WTO) Agreement on Basic Telecommunications. The Agreement is intended at opening up the national telecommunications services markets to foreign competitors as well as setting rules to ensure fair competition. The cardinal shortcoming of these studies is that they have not put forth substantial evidence as how the competitive market access shall become a reality in days to come.

Stephenson, S. (1999) has very forthrightly stated that the countries in integration must enquire the approach to liberalizing services, which can per se fetch maximum transparency and the greatest degree of non-discrimination for
service suppliers. Further, the study reveals it was through the completion of Uruguay Round that awakening in developing countries in regard to liberalizing services have been witnessed. It further deliberates that it would be easier to liberalize service sector among those countries that are at similar stages of development. The publication ignores to satisfy the readers as how the domestic government shall able to manage their policy in service sector independently under the multilateral regime.

Ripoll, J. (1996) communicates about the dominance of the well-established insurance corporations. The study put forward that the insurance corporation’s competitiveness get raised on account of locational situation, along with special factors. The publication projects that local company of the developing countries shall be vulnerable owning to arrival of foreign insurance corporations. The study could be improved more, provided it could corroborate these facts more substantially with the help of statistics.

Chanda R. (2005) has very forcefully convinced the readers regarding the positive role of financial services in globalizing Indian economy. The author makes readers abreast of the commitments made by India under the financial services of WTO umbrella. The paper also focuses exhaustively the nature of India’s financial sector, its strength and weakness in tandem with its trade and investment avenues. The author brings forth India’s negotiating strategy and endorses for maximizing India’s offer in financial services. The study would have got better and more enriched, if the author could bring out the impact of
opening up of mode 3 in financial services on the employment and revenue earning in the post WTO regime.

**Mukherjee A and C. Sachdeva (2004)** gather evidence to show the significant role of railway in promoting trade and commerce and simultaneously uniting populace across the India. The study documents the current trends and development in the railway sector, both at the international and domestic plane. While sifting through the study, it is manifested that the ambit of multilateral liberalization in the sphere of rail transport services is of remote nature. Notwithstanding, the study states that many countries have made unilateral reforms in the railway sector, but these very countries are still disinclined to opt for multilateral liberalization in railway sector due to non–clarity of the agreements. The study skips to bring out as how the honing of mode 4 can be made; an area promising to earn substantial foreign reserves for Indian economy.

**Kuthuria, R. (2004)** appraises the state of India’s telecom industry in the context of reference to the global telecom industry. The paper holds forths that the current zoom in the market revenues is on account of escalation in use of telecommunications as cardinal ingredient in the modern business milieu. The scholar has very meticulously made an effort to incorporate all the telecom reforms in India since 1991. The paper also includes the multilateral liberalization of telecom industry with a focus on India. The paper has also brought out the areas where India can broaden its commitments. Keeping into mind, that inviting global telecom players at Indian turf can
be threat to country’s security, the study neglect to cover this vital area, this *per se* entails to be given earnest attention

**Banga R and B. Goldar (2004),** has made a novel study on the role of services in production in India. The study has made an empirical assessment of the growing importance of services input in the manufacturing sector. The study reveals that the services inputs contributed little to production of the registered manufacturing sector during the eighties; the contribution of services has increased radically during the nineties. Through analysis, it is known that trade reforms have fostered in increasing the use of services in the manufacturing sector. The study endeavor to fill a vital gap in literature. As the study rests heavily on the statistical tools, it tends to side track the interest of novice scholars.

**Sawhney, A and R. Chanda (2003)** inspect the nature and the structure of the environmental service sector, both from the global and India’s point of view. The study examines the impact of liberalizing environmental services in India. The study prescribes negotiating strategy for India in environmental services in the GATS negotiations. Highlighting the deficiencies in Indian environmental infrastructure service, the study advocates considerable changes in these services. The study proposes a selective commitment approach in terms of the sub-sectors along with limitations and exclusions. Since there is limited experience with private participation in the environmental service sector in India, the study misses out to elucidate as how equity in form of development objectives, shall not be sacrificed under the banner of efficiency.
Muguire, G. (2002) and M. Mashayekhi (2000) bring to light the importance of service sector in developing economies. The studies state that service sector is the largest contributor to the gross domestic product, production and employment. The developing economies need to adopt holistic approach in identifying their comparative advantage in service and thereby broaden up their export markets. Through the studies, it is deduced that developing economies have abundance of low and semi-skilled labor which can be accommodated into tourism, construction and transport services. New and better vistas of export opportunities have emerged in communications and computer services. The studies highlight the impediments on the service suppliers that are blocking developing economies from materializing these benefits. While focusing on strategies for developing economies in trade in services, these studies omit to study the effect relating to waning of subsidies in public services on account of subscribing the GATS commitments.

Mukherjee, A. (2001) makes known the under-pinning of distribution sector toward India’s GDP and employment. The study furnishes a thorough and detailed evaluation of the trade-off in inviting FDI in retail sector. The work endorses that the foreign investment shall escalate the expansion of modern stores and brings in more opportunities for enhancement of trade in distribution services. Thus, the author advocates that India should actively participate in GATS negotiations relating to distribution services. While contemplating on the study, it is deduced that the author has hastily advocated for FDI in retail
sector without suggesting any mechanism which can keep in check the activities of foreign companies arriving at Indian turf.

Mukherjee, A. (2001) articulates the prowess of construction and consultancy services in enhancing the growth, the employment creation and the transfer of technology in Indian economy. The study highlights the comparative edge that India holds in supply of low-cost manpower. The paper deliberates India’s capability for enhancing trade in construction, architectural and engineering services. The study also urges that India should vigorously partake in the GATS negotiations, like other papers, this paper too, ignores to make readers acquaint as how the indigenous companies shall be able to maintain their staying-power in presence of foreign companies at Indian turf.

Chanda, R. (1999) unveils the plethora of non-tariff barriers to the temporary movement of the service providers (mode 4) to the overseas land. The study states that GATS framework has been modest in fostering the liberalization of trade in services through the movement of natural persons. The paper advocates some modifications in the GATS matrix, so as to facilitate their implementation. The study suggests a numbers of steps for India so as to enhance its capacity in export of services through movement of natural persons (mode 4) in the areas of software, health and financial services. The major lacune of study is that it fails to clear up the perplexity as how with the opening of services sector, the people employed in public sector shall not experience wonting in jobs securities.
Matoo, A. (2001) Franchios, J and I.Woolon (2000) and Hoekman, B. (1995) disclose that the General Agreement on Trade in Services (GATS) is acknowledged as a milestone in the designing of multilateral regime. The authors thread bare examine whether the different modes of GATS is able to foster liberalization in services. The studies are not very optimistic about the scope of the GATS mechanisms. The authors recommend that pro-competitive principles and reciprocity are the central pre-requisite to strengthen the GATS and assist in more liberalization in the near future.

Mukherjee, A (2001) reveals that Maritime transport services are the only service arena in which the multilateral negotiations failed during the establishment of WTO. The paper states that since a significant part of World Trade Volume is moved by sea, it is pertinent that India and other maritime nations should engage in GATS bargaining. The paper inspects the possibilities of liberating trade in maritime transport service within the GATS matrix. It is manifested through the paper that India has a minuscule share in global market for maritime services but it has potent to increase its share in global maritime transport services. Further the study highlights the domestic and external barriers to India’s trade in maritime. Though the strategies provided in the paper are very convincing but it omits to talk about the ability of member countries to overcome domestic resistance.

Chand, R. (2000) and Gupta, I., B. Golder and A. Mitra (1998) articulates the nature of international trade in health services and educate about the national, regional and
multilateral participation in this context. The analysis of studies reveals that no satisfactory progress till date has been made in health service. Studies recognize the crucial role of harmonization of standards in liberalizing health services multilaterally. As for India’s position, opening up of various arenas of health services is going to be beneficial for the country as a whole. These papers fail to cover the debate as how the developing countries including India shall able to manage autonomy in designing the policy making in health service under GATS regime.

Chandha, R., Brown, D. K. Deardorff, A. and Stren, R.M. (2000) provides insight as to how the Indian economy has experienced a major transformation during the decade of the 1990s. The Indian economy has refashioned under the GATT-WTO matrix. The study has very cogently demarcated the difference between the unilateral regime and multilateral regime. The study examines the economic effects of the Uruguay Round (UR) on India and other major trading countries.

Anklesaria Aiyar, S. S. (1999) brings forth that the liberalization of trade in services is a one of the important areas of the World Trade Organization. The paper demonstrates that India is becoming a service economy and prescribes a set of strategies for leveraging the potential of India’s trade in services. The paper makes clarion call to India to improve its education, infrastructure, agriculture and governance areas. This paper has only provided cursory peep into India’s trade in service, without providing any concrete light on the four modes of GATS.
Sora, P. (1997), explores the relation between multilateral and unilateral financial liberalization. The study provides an overview of the main attributes of the General Agreement of Trade in Services (GATS) and there by compare it with status quo liberalization of the countries. The study reports that it is quite shocking to note that in many countries multilaterally liberalized financial sector are less opened than the actual state of openness or development of financial sectors. The study could get better, if the author could provide discourse as how the local companies shall able to compete with the global companies under the GATS’s gamut

Sahani, R. and S. Kale (2004) and Raipuria, K. M. (1999) deliberate on the broad ambit of General Agreement on Trade in Services (GATS). These studies discuss the importance of trade in services in India; thereby advocate a combination of strategies for fostering India’s trade in services. These studies have neglected to sift through the lurking fear that GATS shall envelop the public services in the member countries.

Bhusan, S. (2004) examines the pros and cons of higher education in India under the WTO landscape. The paper discusses the various modes of GATS through which higher education could be provided. The paper also talks about the technical aspect of limitation for the market access and national treatment. The paper has not illustrated as to how the various modes shall not impede the smooth running of higher education at domestic echelon of Indian economy.
Chanda, R. (2003) makes an attempt to ward-off the unjustified fears that shall crop-up from the signing on the GATS under the WTO ambit. The paper also reveals as how the developing countries can keep control over the social policy making, while making commitments under the GATS. The paper could improve significantly, had the author corroborated her arguments with statistics.

Joseph, M. and R. R. Nitsure, (2002) claim that the escalation in globalization of trade under the WTO has facilitated India in its endeavor to reform its financial services sector. The paper states that India urgently needs to adopt the appropriate bargain in GATS negotiations. The authors have recognized a number of topical issues that are to be tabled at GATS negotiations. These issues inter alia cover issues of national treatment and restrictions on the number of branch licenses per year. The paper recommends the honing of India’s strategies in the wake of GATS commitments. The study could have been further enriched if the current participation of foreign banks on Indian economy was substantially detailed.

Panitchpakdhi, S. (2001) and E. Toukhy M. M. (1999) talk about the globalization of trade and investment. The studies discuss the principal issues facing the WTO and the world trade in general, thereby focuses on the need for both co-ordination and coherence in the development of international economic relations. The need is for an inclusive approach to the international trade liberalization. Further the studies cover the implication of trade on developing countries including sub-Saharan Africa.
Bronckers, M.C.E.J. (2001) and Abbott, K. W. (2001) articulate about the structural attributes of the WTO, its modus operandi to legalization and its negotiating process. The studies reveal that WTO has the potential to underpin the global governance. The studies tell about the trade and other social values incorporated in the WTO framework need to be acknowledged. These studies suffers disinterest among the readers on account of more reliance on rhetoric, had the authors documented data in tandem with their arguments, they could fetch substantial acknowledgment.

Key. S. J. (1999) provides an overview of the issues involved in international efforts to open and restructure markets for financial services and to ensure adequate regulations and supervision of financial firms. The article put forth the measures needed to open trade in financial services in tandem with indispensable steps to fortify prudential regulations and supervisions.

Fernandez Martos Montero, A. (2000) and Zdouc, W. (1999) deliberate about the GATS mechanism. Through the studies, it is revealed that studies discourse as to how GATS has incorporated the various attributes of WTO’s dispute settlement matrix. The studies communicate about the legal aspects and problems that are likely to crop up in future course. The author could cogently pacify the quest of opponents of globalization, had they brought out strategies for leveraging the position of developing countries at the higher echelon of trade and investment.
Tuthill, L (1997) states that the liberalization on the basic telecommunication under the WTO’s gamut promotes the pace of sector’s transformation. The telecom regulators need now to fully appreciate their scheduled market access, national treatment and regulatory commitments as well as the rights and obligations in the service agreements. Further, the paper reveals that fundamental of the multilateral system are progressive liberalization, non-discrimination, transparent and reasonable. One of main shortcoming of this paper is overlooking the perspective of developing countries. The paper needed to articulate as how the domestic player’s right shall not be ruin in the presence of global telecom players.

In view of the above comprehensive incisive literature review on variegated facets and dimensions of WTO and particularly the sphere of Trade in Services (GATS), the Researcher has endeavored to carve out Research Gap, Scope, objectives and the hypotheses of the study, as patently and unequivocally stated in the succeeding paragraphs.
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4. **Research Gap and Scope of the Study**

With the formation of WTO, tremendous opportunities have been thrown open for the developing countries. Umpteen studies corroborate that the emergence of India’s escalation in global trade is on account of cardinal role displayed by rapid growth of its service sector. Thus it becomes obviously pertinent to explore whether the signing of service agreements by India under WTO umbrella will substantiate India’s cause of becoming global flag bearer in service arena or not.

Keeping this view into account, the current study delves through the root cause of nourishment of Indian services. A synoptic view of GATS framework is made. The present study gauges India’s service sector under WTO regime. The study makes appropriate use of statistical tools to make out the role of WTO in enhancing Indian services in terms of enhanced FDI, sustained export markets and galore job opportunities. Grey areas of Indian services are also explored through the study. The study shall act as guiding torch on account of its synergetic and holistic approach to explore those services and related modes that have potential for growth, provided that the GATS commitments are embraced.

5. **Objective of the Study:**

The following objectives have been set for the study:

- To critically examine the role of trade in services in developing countries including India.
• To delve into the status quo of Indian service sector under WTO regime.

• To examine in detail the provisions in the GATS structure and threadbare GATS commitment in some selected services.

• To make an in-depth analysis of role of WTO in promotion of trade in services in India.

• To identify the cross cuttings issues and gray areas relating to trade in services concerning India.

• To envisage the future prospects of GATS commitment on Indian service sector with special focus on Mode 1 i.e., cross border supply and Mode 4 i.e., movement of natural person.

• And ultimately to come out with findings of study and to put forward some functional proposals and suggestions for leveraging the potential for Indian services under the WTO ambit.

6. Hypotheses of the Study:

The study seeks to test the following hypotheses.

H₀₁ - The study assumes that the employment and exports in business services have not increased on account of FDI inflows in India’s software services (business services) in the post WTO regime. On the other hand, the alternative hypothesis suggests that the employment and exports in software services
(business services) have enhanced due to the FDI inflows in software (business services)

\[ H_{02} \] - The study assumes that the employment and exports in communication services have not increased on account of FDI inflows in India's communication services in the post WTO regime. Whereas, the alternative hypothesis suggests that the employment and export in communication services have enhanced due to the FDI inflow in communication services.

\[ H_{03} \] - The study assumes that the employment and exports in construction and related engineering services have not increased on account of FDI inflows in India's construction and related engineering services in the post WTO regime. However the alternative hypothesis suggests that the employment and exports in construction and related engineering services have enhanced due to the FDI inflows in construction and related engineering services.

\[ H_{04} \] - The study assumes that the employment and exports in financial services have not increased on account of FDI inflows in India's financial services in the post WTO regime. Nevertheless, the alternative hypothesis suggests that the employment and exports in financial services have enhanced due to the FDI inflow in financial services.

\[ H_{05} \] - The study assumes that the employment in health related and social services have not increased on account of FDI inflows in India's health related and social services in the post WTO regime. On the contrary, the alternative hypothesis suggests that the employment in health related and social
services have enhanced due to the FDI inflows in health related and social services.

H06 - It is assumed that the employment in tourism services has not increased on account of FDI inflows in India's tourism services in the post WTO regime. Nevertheless, the alternative hypothesis suggests that the employment in tourism services has been enhanced due to the FDI inflow in tourism services.

7. Research Methodology

In the present study, an effort has been made to cull the relevant statistics from secondary data of primary source and secondary data from secondary source of information. With objectives set to study the role of WTO in promotion of trade in service. The following set of parameters that includes foreign exchange earning through the four modes of services, exports of Indian service, employment generations are to be gauged with reliance of appropriate statistical tools.

7.1. Source of Information

The data have been mainly collected from working papers and special studies reports of WTO, IMF, UN, World Bank, UNCTAD, ILO, OECD, BIS, Manual on Statistic of International Trade in Services by IMF, National Bureau of Economic Research, Center for Economic Policy Research.

The following Annual reports are also made good use of. World Investment Report, World Development Indicator, World Trade Report, International trade Statistics, Global Development

Data relating to Indian Services have been incorporated from working papers and sector analysis reports of Indian council for Research on International Economics Relation (ICRIER), ICRA Ltd., CUTS Center for International Trade, Economics and Environment, Rajiv Gandhi Institute for Contemporary Studies (RGICS), Indian Institute of Foreign Trade (IIFT), Institute of Economic Growth (IEG), Centre for Policy Research (CPR), Research and Information System for the Non-Aligned and other Developing Countries (RIS) Ministry of Commerce, RBI, Ministry of Finance.

Consolidated figures through periodicals and journals such as Business World, Business Today, Business India, Yojana, Economic and Political Weekly, Fact for You, Focus WTO, Foreign Trade Review, Vikalp have also been documented.

Newspapers like Business Line, The Economic Times, The Financial Express, The Business Standard, Hindustan Times, The Hindu and The Times of India have been adopted to make the study more enriched.

7.2. **Data Computation and Tabulation**

Data related to Indian service revenues, exports, employment generations, remittances, have been collected from secondary sources. After collection and checking the data, it has been tabulated and processed through computer software as well
as manually. Afterward, information is extracted and interpreted to make the purported study more enriched.

7.3. Statistical Tools used

The statistical tools that have been used for the analysis and interpretation are Mean, Standard Deviation and Coefficient of variance and Regression Analysis. For test of significance, F-test and t-test have been done depending upon the nature of cases. Considering the technical nature of certain statistical tools and the frequent use of those tools in the study. A brief discussion of some relevant topics are represents here.

a. Arithmetic Mean

Most of the time we refer to the “average” of the something, are talking about into arithmetic mean. It has been calculated by summing all the observations in a batch and then dividing the total by the number of item involved.\(^85\)

\[
x = \frac{\Sigma X}{N}
\]

Where, \(\Sigma X\) = Total value of the observation

\(N\) = No. Of observations

b. Standard Deviation: (S.D.)

The S.D. is a measure of the variation in the data that have been used to determine the percentage of data values that reside within any specified distance from their mean.\(^86\)
Statistical Tools

Analysis of Variance (ANOVA) A statistical technique to examine the differences among means of two or more variables. It examines the differences in the mean values of the dependent variable associated with the effect of the controlled independent variables, after taking into account the influence of the uncontrolled independent variables.

Average Annual Growth Rate (AAGR)

AAGR is used to examine and verify the rate of growth, which has been registered during the study period. It helps in comparing the annual growth rate with average annual growth rate for the period under study. It also help to identify the years which have attained a higher growth rate then the average annual growth rate. Which provide the ground for further investigation to assess the causes, which are responsible for the higher growth rate. A very simple method for calculating the AAGR has been adopted, i.e., in the first step the growth rate of individual year is calculated, thereafter the average of annual growth rates has been calculated to find out AAGR.
Introductory Background, Review of Literature and Framework of the Study

\[ \sigma = \sqrt{\frac{\sum (X-X)^2}{N}} \]

Where, \( X-X \) = Deviation taken from the actual mean
\( M = \) No. Of observation

\[ \text{c. Coefficient of Variation (C.V.):-} \]

The C.V. is a measure of relative variation. It expresses the standard deviation as percentage of arithmetic mean.\(^{87}\)

\[ \text{C.V.} = \frac{\sigma \times 100}{X} \]

Where, \( \sigma \) standard Deviation
\( X = \) Mean of the observation

\[ \text{d. Regression Technique} \]

The most common technique used in the statistical analysis is the regression technique.\(^{88}\) It assumes a functional relation between the dependent variable and independent variable. If there is only one independent variable then the technique relevant is known as simple regression. The title of the present research suggest that the macroeconomic variables like employment and export are the dependent variables, whereas there is FDI as a independent variable. The single variable regression takes the linear form of functional relations like:

\[ Y = a + b \times X \]

Where, \( Y \) is the dependent variable,
\( X \) is the independent variable,
B is the slope of the straight line
A is the Y-intercept

e. **R squared**

The estimates of R-squared, alternatively known as the goodness of fit or the coefficient of determination in regression analysis measures the strength of linear relationship between the employment and export (dependent variable) and FDI (independent variable).

f. **F-Test**

The value of R-squared really indicates the independent variables explain Y, or it might have happened just by chance. This question is often phrased, “Is the regression as a whole significant?” F-test is used to answer this question.

With the help of Statistical Package for Social Sciences [SPSS] the t-test has been applied finally. To find out whether the coefficients are statistically significant or not at 5% level the Standard t-test is done. The goodness of fit has been hypothetical by above 5% as the rule in general $R^2$ with higher values indicates stronger dependent variables.

8. **Significance and Utility of the Study**

The Members' countries of WTO are vying with each other at the on-going GATS negotiations in order to carve niche in service arena. India too has a big stake in service negotiations.

Keeping this into perspective, the purported study occupies paramount significance. The utility of this study gets inflated as
it sifts through fleshing out those services and related modes that promise to leverage Indian economy, provided that GATS commitment is made. The findings and the conclusions of the study shall be food for thought for the Indian planners, researcher and the Government alike.

9. Conclusion:

The current chapter has brought, *inter alia*, the scope, the objectives and the utility of the study. Infact, the chapter has made an effort to encapsulate the gist of the study in totality.

The ensuing chapter undertakes an endeavor to sift through the circumstances that led to establishment of WTO. The chapter makes endeavor to threadbare examine the various agreements of WTO. The chapter also envelops the arenas that India has encompassed under the WTO agreements. Cross-cutting issues that have brought pause between the developed and the developing countries at various conferences are also incorporated in the chapter.

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