

I: Bhagwati's THREE Nobel Prize-worthy Scientific Contributions to the Theory of Commercial Policy

A: The Postwar Theory of Free Trade

Bhagwati's central, path-breaking contribution has been to the postwar theory of commercial policy. In the excellent Profile of Bhagwati last year in Finance & Development (the influential IMF magazine that is read worldwide by hundreds of thousands of policymakers and other economists), Paul Krugman was cited as calling this contribution "Nobel Prize worthy".

It is also the principal reason why Bhagwati, who also has a unique policy presence through his policy writings in the media and in accessible books on free trade, protectionism and the world trading system, is widely expected to get the Nobel Prize. He has topped polls on the predicted Nobel prize for the coming year in polls by the Swedish economists, by the World Bank economists, the Thomson Scientific forecast in 2006 based on the number of citations, its poll later, another poll of over 2000 economists, and in several stories in the media worldwide this year, in India in particular where he has long been expected to get the Nobel. Also, the buzz about Bhagwati getting the Nobel prize was so considerable this year that he made it with his photo even to the celebrated TV show Comedy Central, which has millions of viewers, as the most likely candidate for the Nobel Prize in economics in 2006 (the comedy angle being that President Bush might get it instead because the Dow Jones average was doing so well).

Essentially, his 1963 JPE article with the late V.K.Ramaswami led to literally over a hundred articles in leading professional journals in the 1960s through 1980s. It also led to a most important breakthrough. Whereas, for nearly 200 years, the case for free trade had been compromised by repeated discoveries of one market imperfection or another, this article demonstrated that if the market failure was domestic, one could fix that failure through an appropriate policy and then restore the case for free trade. This insight, like all great insights, is obvious once realized; but 200 years of confusion had prevailed on this score. By thus narrowing the case for protection to external distortions, Bhagwati's scientific work immeasurably strengthened the case for free trade.

{Coincidentally, the case for free trade was later restored in the case of foreign distortions through the development of political-economy-theoretic arguments where also Bhagwati has made important pioneering breakthroughs later: see, in particular, his consideration of the external distortions and how political-economy arguments can be used to attack the use of protection even in this case, in Bhagwati's Bernard Harms Prize speech]

Perhaps the best single treatment of the postwar theory of commercial policy, and the role of the 1963 JPE paper in it, is to be found in Bhagwati's Chapter 1 of his Stockholm Lectures, Free Trade Today (Princeton, 2002) and in Harry Johnson's 1965 (Haberler Festschrift) extension of the 1963 JPE paper and his declaration of it as a major breakthrough, and in T.N.Srinivasan's comprehensive and magisterial treatment (in the Bhagwati Festschrift edited by Robert Feenstra, Gene Grossman and Dou Irwin) of modern writings on commercial policy as readily understandable centrally in terms of the analytical insights and framework provided by the 1963 and 1970 (Kindleberger Festschrift) articles by Bhagwati.

The 1963 JPE article is of as great importance scientifically as Akerlof's paper on Lemons and Mundell's work on Optimal Currency Areas. It has had even more profound effects on policy and human welfare because, except for a few dissident economists, it is widely accepted that free trade is a principal policy instrument for producing prosperity and therewith reduction of poverty and increment of economic welfare.

The 1963 JPE paper is also an original classic. To see this clearly, see the excellent article by Arvind Panagariya in The World Economy, December 2006, based on a University of Lancaster Conference on Bhagwati's 70th birthday, one of 3 Festschrift conferences held during his 70th year.

B: Multilateral Free Trade: Theory of Preferential Trade

But if the Nobel Prize-worthy work is about the theory of commercial policy, and hence the substantially augmented case for Free Trade, Bhagwati has also made comparably important scientific contributions to the case for **multilateral** free trade by writing about the problems that preferential trade agreements create for the world trading system. There are many dimensions to his scientific contributions in this important policy field.

1. **PTAs:** This phrasing has now totally replaced the more conventional use of the phrase FTAs. Bhagwati's argument was that FTAs, Free Trade Agreements, easily led the public, and even economists, to think that FTAs were the same as Free Trade, which they are not, of course. Preferential Trade Agreements makes it clear that we are talking about something strikingly different from Free Trade when we have Free

Trade Agreements. Besides, PTAs include all preferential trade arrangements, including Customs Unions and Common Markets.

2. The “Spaghetti Bowl” Problem: Where Jacob Viner introduced the concepts of “trade diversion” and “trade creation” in the analysis of PTAs, that analysis applies only to single PTAs. When Article 24 allowing them was introduced into the GATT, again the architects like James Meade were thinking of isolated exceptions to MFN.

Today, as anticipated in Bhagwati’s writings in 1990 (The World Trading System at Risk, Princeton) and many other places thereafter see some of the articles reprinted in his 2 MIT Press collections of public policy essays & also his Free Trade Today, Princeton, 2002), the problem has become systemic, with nearly 400 such PTAs, almost all bilateral FTAs, being the sum of those notified to the WTO, those formed but not notified and those where the intention to form one has been declared; and many others surely on the way. Bhagwati has called the resulting system a “spaghetti bowl” of criss-crossing differential tariffs and rules of origin, with applied tariffs depending on source and creating a virtual chaos in the multilateral trading system. Both the phrase, and the problem, have now come to center stage in academic and policy discussions of the world trading system.

3. “Stumbling Blocks” versus “Building Blocks”: Where Viner’s analysis was **static**, Bhagwati (especially in his World Trading System at Risk, Princeton, 1990) formally introduced the “**dynamic time-path**” question: would PTAs be a building block

or a stumbling block towards multilateral free trade? In several writings since 1990, this phrasing and conceptualization has been adopted and has become as influential as Viner's "trade diversion" and "trade creation" conceptualization and terminology.

Bhagwati's later work has conceptualized the question more sharply, distinguishing among two different questions: if a subset of nations forms a PTA, will this lead the PTA to introduce more members;

alternatively, if a subset of nations forms a PTA, will it lead the PTA away from reducing its MFN tariffs which apply to non-members, thereby slowing down its travel down to multilateral free trade? [On these two different ways of posing the stumbling versus building block analysis, see Bhagwati's two contributions in Bhagwati, Krishna and Panagariya (ed.), Trading Blocs, MIT Press, 1996.]

4. "Non-trade" Issues and PTAs: Bhagwati also introduced sharply, and for the first time, the notion that PTAs are typically preferred by hegemonic powers like the United States because they are used to browbeat/seduce small countries into accepting all kinds of "side" or extraneous demands, such as onerous IP Protection (as in NAFTA from Mexico), restrictions on ability to impose capital controls to address financial crises (as with Chile and Singapore) or to impose labour standards (as with Mexico, and then more centrally in Morocco and Jordan) and even to raise them (as with CAFTA), and so on. This non-trade game is also played by the EU. The strategy is to offer (ironically, eroding) preferential market access to small countries in exchange for such non-trade concessions, the strategy being to divide the poor countries and take them one by one. As Bhagwati has said, his strategy of "divide and conquer" turns the trade game into a shell game.

5. Bhagwati's "Selfish Hegemon" versus Kindleberger's "Altruistic

Hegemon": So, Bhagwati has pointedly drawn attention, in the context of PTA analysis, to the fact that major powers cannot be assumed always to be pursuing altruistic agendas, but can be "selfish" hegemons pursuing their own self-interest. This contrapuntal innovation of concept and phrasing also has become influential.

6. Contribution also to Static Theory of PTAs While the contributions cited above are the most important and influential, Bhagwati has also recognized and himself pioneered new approaches to the Viner-type "static" analysis of PTAs. While only two out of four different approaches to the static analysis of Preferential Trade Agreements can be distinguished, to two of which Bhagwati has made pioneering contributions, here only one is stated and a fuller analysis can be found in the Bhagwati-Panagariya-Srinivasan Lecture on International Trade (2nd Edition, MIT Press), Chapter 31.

First, as Editor of the Journal of International Economics, he published the classic Kemp-Wan article that produced an alternative way of looking at PTAs from Viner's. Where Viner had taken the external tariffs of the FTA members as given, so that an FTA could then be welfare-worsening or welfare-enhancing, Kemp and Wan said that a customs union could always be devised which would necessarily be welfare-improving for the member countries while leaving the outside countries at the original welfare level, so ensuring world-welfare improvement. Kemp and Wan therefore restored the pre-Vinerian intuition that a customs union could be formed that would necessarily improve

welfare, an intuition that Viner had destroyed. Bhagwati noted that the trick was that Kemp and Wan were making the external tariff a policy variable.

Second, Bhagwati, with Richard Brecher, in an important article in the JPE (1981) and in the JDE (1980) with his Chilean student Ernesto Tironi who was later Chile's Ambassador to the WTO, also introduced an alternative approach which is appropriate to asking questions once a Customs Union is formed: what would happen to, say, UK welfare if there was technical change in Germany; or what would be the distributional outcome, leaving out lump sum transfers, if the EU's external trade policy changed.

While therefore Bhagwati's most important and Nobel Prize-worthy scientific contributions are to the theory of free trade, and the theory of multilateral free trade, Bhagwati has addressed nearly all other areas of the theory of commercial policy., as evident from a glance at the Tables of Contents of the 3 volumes of his scientific essays on international trade theory that have been published by MIT Press & edited successively by Robert Feenstra and Douglas Irwin, and also from 2 additional volumes on Development which were edited by Gene Grossman.

C: Theory of Political Economy:

(1) Bhagwati has been among the earliest theorists to grasp the importance of political- economy-theoretic analysis. Principal among his many contributions is his generalization (JPE, 1982) of Anne Krueger's analysis of quantity-restrictions-generated rent-seeking to **the general theory of "directly-unproductive profit-seeking" (DUP) activities** that additionally **brought under one fold** the analysis of revenue-seeking generated by price interventions such as tariffs (with T.N.Srinivasan, JPE, 1980) , rent-

creating activities such as tariff-seeking, and evasion/smuggling which had pioneered with Bent Hansen (**QJE.**, 1973) .

His contributions have **totally transformed our comprehension** of the **welfare economics of tariff theory in political economy setting**. In contrast to the conventional welfare-theoretic analysis of exogenously given tariffs and distribution of tariff revenues in a lump sum fashion,, Bhagwati has analyzed in a series of papers the phenomena of (i) tariff-seeking (i.e. endogenous formation of tariffs to pursue profits through tariff imposition) , (ii) revenue-seeking (i.e. pursuit of revenues generated by tariffs) and (iii) tariff-evasion (i.e. pursuit of profits by evading tariffs) . The theory of commercial policy in the presence of these three types of political-economy-theoretic considerations, and the different implications of the three different political-theoretic complexities, constitute his most important contribution to the integration of conventional tariff analysis into the new interest in political economy.

(ii) The important question of **how to conceptualize and meaningfully measure the cost of protection in the presence of such unproductive seeking activities** is also among his deeply influential and policy-relevant contributions, in several papers in the Journal of Public Economics (1980) and elsewhere.

(iii) He also pioneered , initially 15 years ago and then later alongside the remarkable and important recent work of with Kyle Bagwell and Bob Staiger, the analysis of reciprocity versus unilateral trade liberalization: in his 1990 Introductory Chapter paper in the volume he co-edited with Hugh Patrick on Aggressive Unilateralism and at full length in the Introductory Chapter of the 2003 volume he researched and edited, titled Going Alone, published by MIT Press.

II: Other Significant Contributions to the Theory of Commercial Policy

Among these, only three are listed below.

1. The Concept of “Non-equivalence” (of Tariffs and Quotas): In his contribution to the Haberler **festschrift** in 1965, Bhagwati introduced the powerful notion of non-equivalence between tariffs and quotas in an analytically productive fashion, with a huge literature following. Analytically, he defined the problem sharply as follows: equivalence obtains when the imports generated by an (explicit) tariff are turned into a quota, and the tariff is removed, the equilibrium production, consumption, imports and the implicit tariff are unchanged.

Bhagwati introduced the **FIRST** theoretical analysis of market structure --- as recognized by Helpman and Krugman in Chapter 1 of their important 1989 MIT Press book on Trade Policy and Market Structure --- to show that this equivalence generally disappears in the presence of monopoly and imperfect competition in production, trade and quota allocation. [See also Panagariya’s analysis of this contribution in his contribution to the 70th birthday festschrift on website: www.columbia.edu/~ap2231.]

Bhagwati’s yet more major contribution came later, however, when he wrote a series of articles building on the 1965 insight that tariffs and quotas were non-equivalent. For, if they were non-equivalent, then Bhagwati asked a different question: pick a target like a given import volume or a given production level and ask: subject to this target, which instrument, tariff or quota, will produce a lower cost? This was a dramatic change in the way the equivalence question had been posed. So, there followed a number of

theoretical comparisons of different trade policy instruments, using Bhagwati's new formulation. What emerged also was that the rank-ordering of policy instruments was sensitive to which target (e.g. import level or import-competing production level) was being held constant. Bhagwati thus managed to change fundamentally the way in which we now compare different trade policy instruments when they have non-equivalent outcomes. A great deal of work on comparing VERs (export restraints) with import restrictions, for example, now builds on Bhagwati's reformulation.

2. Theory of Immiserizing Growth: Bhagwati's article on the theory of immiserizing growth (1958, Review of Economic Studies) established his international reputation at a very young age (the paper having been completed when he was an undergraduate in Cambridge, UK) because this short paper, much cited in both theoretical and policy writings at the time, highlighted the conditions under which one's own growth could hurt oneself if the primary gain from growth was offset by the secondary deterioration in the terms of trade. But he went on to provide (1968, Review of Economic Studies) a far more influential and theoretically profound generalization showing that the phenomenon of immiseration was to be explained by growth in the presence of distortions (i.e. market failures). This article has deeply influenced policy-relevant areas as diverse as the analysis of the welfare effects of direct foreign investment, the appropriate measurement of growth rates in the presence of trade distortions and cost-benefit analysis: see a complete sketch of many policy applications that this work has led to, in the Bhagwati-Panagariya-Srinivasan graduate text, Lectures on International Trade, MIT Press: 2nd Edition, Chapter 29, Section 29.5.

.Both articles together --- like the pair of Samuelson articles on Factor Price Equalization in 1948 and 1949 --- are among the most influential theoretical articles in the theory of commercial policy.

3. The Transfer Problem: Bhagwati has also made influential contributions through several papers [in **QJE**, **JPE**, **AER** etc.] jointly with Richard Brecher and Tatsuo Hattato, the welfare-theoretic analysis of the transfer problem. In a particularly creative synthesis, (along with Richard Brecher and Tasuo Hatta, writing several joint papers in **QJE**, **AER** etc.), he integrated the theory of the welfare effects of transfers successfully (1984) with the theory of market distortions, unifying two important literatures in trade theory. He and his co-authors also provided the definitive analysis of the transfer problem in the presence of three countries. This work has also integrated successfully the theory of Immiserizing growth with that of Immiserizing transfers: two paradoxes that had otherwise existed independently of each other. This work on the transfer problem has also been used extensively in the recent discussions of forrign aid by economists such as Murray Kemp and Sajal Lahiri.

Other Information

A: Bhagwati's website [www.columbia.edu/~jb38] contains other related information. See in particular:

1. Endorsements and several Book Review Excerpts for **In Defense of Globalization**, published in March 2004 by Oxford University Press.
2. **Profiles:** in New York Times, Chronicle for Higher Education & others;
3. **Citation in American Economic Review** on election to the **Distinguished Fellowship** of the **American Economic Association** (2004).
4. **Articles** about Bhagwati's work & influence: **Doug Irwin** on International Economics; **Deena Khatkhate** on India.
5. **Bios with 4 additional pages of Honors and Awards**

B: Bhagwati's **policy impact** has been profound in many other ways. He played a principal role in the 1960s and 1970s, mainly through research projects at the OECD and NBER, in getting the developing countries to abandon their disastrous import-substitution policies. He later turned to the issues of the world trading system, establishing a unique reputation that would lead him to be appointed as the Economic Policy Adviser to the Director General, GATT, External Adviser to two Directors General of WTO, and a Special Adviser to the UN on Globalization.

Bhagwati has also had considerable impact in other areas. On immigration questions, he pioneered the analysis of the appropriate income tax jurisdiction in the presence of international personal mobility almost three decades ago; the question of the "Bhagwati tax" on nationals working abroad has returned to center stage now. He proposed in 1991 the creation of a World Migration Organization; it is now a much-discussed proposal. In development, he proposed in the early 1960s the hypothesis, validated by over three decades of later experience, that growth had to be the principal instrument for removing poverty, calling it an activist "pull-up", not a passive "trickle-down", strategy for lifting the unemployed and the underemployed poor into gainful employment. His 1998 Foreign Affairs article on the asymmetry between freeing capital flows and freeing trade also proved influential, leading to worldwide impact in shape of multiple translations and awards.

C: Bhagwati's policy impact on the public at large is a result also of his numerous **popular writings**. His op.ed. articles in leading newspapers, and his essays and reviews in the best economic and literary magazines, numbering in the hundreds, are marked by wit, humor, irony and elegance, leading a reviewer in The Financial Times of his hugely successful book, Protectionism (1988) to call him "the slickest pen in the West". He was awarded the Eccles Prize for "excellence in economic writing".

D: His scientific achievements, his policy contributions, and his public writings

and presence, have made Bhagwati a uniquely influential economist. As noted in the citation on his election to the Distinguished Fellowship of the American Economic Association:

“Jagdish Bhagwati’s intellectual arc has taken him from profound theoretical analyses of international trade to deep insights into the political economy of globalization. No economist now living has displayed so potent a combination of academic analysis and practical wisdom.”