Research Note

Indian Punjab: A Practical Way Forward from Theoretical Constructs

Jaswinder Brar
Punjabi University, Patiala

Development flows from systemic, well researched and practical ideas. The economic literature, both in its theoretical and empirical spectrums, has produced extremely worthwhile developmental ideas on a regular basis. International trade, since its inception as higher level of economic activity, has continuously been subject to tight and terse research scrutiny. The emergent input has played a critical role in the formation of countries' expectations from trade. External trade occupies a central place in the determination of overall economic policies. Growth theorists assert that best way of economically classifying countries lies in their fundamental approach to foreign trade. So trade policy literature classifies countries on the basis of their foreign trade regimes: autarkic, mercantilists, protectionists, second best regionalists, or free trade globalists.

Explanation for patterns of trade continues to absorb great deal of research. The trade theory remained in its pure competition and specific mould (Smith, Ricardo, and Heckscher-Ohlin) for a long period.[1]It provides a robust explanation for trade patterns and gains from trade. The pure theory of trade provides theoretically the strongest justification for role of foreign trade in economies. It had exploded mercantilist view of foreign trade almost on a permanent basis. It strengthened the belief of policy makers in growth-stimulating power of foreign trade. The rationale for free trade, in all its variants, comes from pure theory's basic formulations.

The formidable challenge to pure theory of trade built up with increasing intensity of trade in manufactured goods among similar countries. The quest for suitable explanations for trade patterns containing intra-industry trade led to further theoretical explorations. The theory has responded by basically following two routes: first, by relaxing, modifying, or qualifying some or all of assumptions of pure theory; secondly, by incorporating additional assumptions and features from research in other sub-disciplines of economics. Consequently, contributions to understanding of trade patterns poured in from divergent type of frameworks within neo-classical settings.[2] Noticeably, almost all theoretical constructs accord critical role to human capital in growth, trade patterns, and comparative advantages. The famous Leontief paradox (1953) found its ultimate settlement in a human capital version. And, it was proved that United States' exportables were more capital-intensive than other trading countries.[3]

The relaxation of what are called unrealistic assumptions of pure theory paved the way for its extension into many directions. The dimension added to theory was the explanation of trade patterns by incorporating the assumption of strong relationship between level of development and demand patterns. It is held that higher level of development stimulates demand for sophisticated products and, thereby, increases demand for advanced production technologies. High intensity of trade in manufactured commodities among similar countries was attributed, among other things, to the availability and utilization of human skills which are necessary to use advance technologies (Dhesi, 1977). The difference in use of advanced technologies among various regions becomes the basis for differential development of comparative advantages (Salvatore, 2001).

Trade models dealt with trade patterns by explicitly incorporating solid features pertaining to imperfect market behavior. The features which were examined rigorously include: product differentiation, scale economies, technological progress, demand and factor reversal, R&D activities, innovations, market structure, logic of mass production, preference for consumption diversity, strategic behavior, role of subsidies, taxes and tariffs, etc. The consolidated body of literature highlights critical relationships among economic variables and hence various markets. The stage of general development exercises strong influence on relative intensity of factor-use by firms competing for global market shares. Firms with more market power happen to be high on human capital embedded in products. Importance of human capital in formulations of trade patterns increases during mature stage of the economy's development. Trade promotes market by advancing specialization which changes factor efficiencies and factor rewards. Factor substitution following market signals impacts their demand and supply in factor markets with strong implication for technological progress. The countries and industries with higher R&D activity become market leaders. Therefore, utilization of human capital is as important as that of its formation. It was established that export performance based on R&D intensive industries indicate the efficient utilization of higher level manpower (Dhesi, 1979).

Krugman (Nobel Laureate, 2008) contributed to the understanding by combining vital elements of theories of economic geography and trade (Krugman, 1979). New 'geo-trade theory' establishes that regions with higher production will be more profitable and attract more production. There would be a tendency for general concentration of production in some locations over others. Locations with more production will manifest higher population density along with higher income. Location bound increasing returns to scale will act as an effective check on the diffusion of production. Thus, patterns of trade will maintain affinity with geographical particularities of the regions *inter alia* factor endowments (Krugman, 2000).

Punjab had experienced higher rate of growth (between 6 and 7 per cent) for about two and a half decades (till 1990) with advent of green revolution during mid 1960s. It resulted from vigorous state intervention involving high public investment in irrigation, credit provisioning, public purchase systems, support prices, newer seeds, and changes in agrarian institutions, etc. All this was the

result of a national level growth strategy which meticulously sensed comparatively better placing of the state in agriculture. The region has shown quick results in crop sector with smaller investment. Livestock has emerged as the second largest sector after agriculture within primary sector. The manufacturing sector is confined to a narrow product range consisting of large number of small scale units set up in an ancillary and informal mode. The sector operates under family ownership or sub-professional management with limited stock of capital, lower technology, utilizing unskilled and semi-skilled family and hired labour. It essentially caters towards the lower or medium segment of the market by producing intermediate and final goods on basis of sub-contracting. The sector made good fortune by enjoying, for about four decades, two fold advantages: first, small scale sector favoring subsidy and reservation-cum-protectionist policies of home country; and, secondly, exporting to formerly Soviet-Union and associated markets under the then prevalent bilateralism of rupee trade.

The economy of the Punjab state experienced structural transformation with change in relative production contribution of different sectors. Gradually, proportionate share of primary sector declined and fell to 38 per cent and that of service sector went up and touched 40 per cent. The share of the manufacturing sector shows inter-temporal constancy and hovers around 22 per cent. It means 60 per cent of state income originated from the goods producing sector and 40 per cent from service sector during 2005-06. It implies that the state owes 62 per cent of its income to non-primary sector. The employment structure, however, demonstrated less resilience as the dominant form of work force is stationed in agriculture. The state could not make any noticeable improvement in the rural non-farm sector. The labour force composition of the state changed due to out-migration (mainly to Europe and North America) and in-migration (mainly from Central India). A good sized middle class came up in rural and urban areas. The state recorded higher level of urbanization relative to the rest of the country. At present, almost every third resident falls in category of urban dwellers.

The state experienced high growth and associated changes under national level protectionist macroeconomic regime. But, national economic policy has undergone drastic change under economic reforms of the last one and half decades. National economic reforms in essence are based upon three processes, viz. privatization, liberalization and globalization. Importantly, national economy experienced unprecedented high growth during reform period. But, economic growth in the state has decelerated both in inter-temporal and national context. The overall standing of the Punjab state economy in national economy registered a decline. The share of overall income of the state in national income declined from 3.81 per cent in 1999-00 to 3.22 per cent in 2005-06(ES, 2007-08). The state got just 0.68 per cent (i.e. Rs. 1968 crore) of cumulative foreign direct investment received by the country during 1991 to 2003(EPW, 2003:4499). Similarly, the share of the state in total national exports was 1.70 per cent (i.e. US $ 2148 million) in 2006-07(ES, 2007-08). The agricultural sector of the state has been losing vibrancy because of growing ecological problems, falling size of operational holdings, increasing costs, unattractive

returns, squeezing of public investment, mono cropping pattern, collapse of agricultural extension services and slowing down of public funded research activity. The Punjab state slipped from its long held position as leader with the highest per capita income in the country to that of fifth during 2005-06.

The lackluster performance of the state resulted from complex inter play of multitude of factors. The long spell of militancy during the eighties has turned development oriented administration into routine administration. The institutional network in education, health, rural development, water supply, co-operation, and social welfare weakened because of fragile resource backing and non-functionality of the monitoring apparatus. The political process in the state, though functionally stable, has actually been embroiled in populism, mutual animosity and factionalism. The political community has developed a vested interest in privately promoting lucrative activities. It has made the regulatory mechanism redundant and crippled the will and capacity of the state to mobilize additional resources. Poor governance has subverted the meritorious decision making process. The state organs throw a clear signal that economic field is 'free for manipulators'. The state apparatus has lost its face as repository of public trust because of lack of transparency and accountability in matters dear to the public. The private participation in an unregulated and corruption ridden environment has not improved the quality of basic services. The non-functional state sector and unregulated private sector ended up in excluding masses from quality education (Ghuman et al, 2009) and health care (Gill et al, 2007). During 1999-00, the educational base of the workforce of the state was low as follows: illiterate (33.50 per cent); primary level education (22.10 per cent); middle level education (13 per cent); secondary and above (31.50 per cent) (Chadha, 2004). Similarly, health indicators too present a dismal picture (Brar, 2002).The state has lost its competitive edge because of the qualitatively hollow physical and social infrastructure.

The influential sections of society rely upon the private sector for all sorts of requirements. The state machinery virtually has no interest and compulsion to improve the quality of public goods and services. The urban infrastructure is under stress. Lack of natural developmental advantages further aggravates the situation. The state being land locked in character, lies about a thousand miles away from sea ports. It, practically, does not have any commercially useable natural base of resources. The border hostility between India with Pakistan has inflicted tremendous costs. The state is not able to fully exploit its trade potential with that country in the form of border trade. It has deprived the state from all those direct and peripheral advantages which naturally accrues to a territory being located on an international trade route. The growth in the state slowed down with the change in the economic environment and is highly damaging. The slow down period accompanied the educational neglect. From 1992-93 to 2007-08, share of the education budget in overall state budget declined from 16.52 per cent to 11.40 per cent; and in state income from 2.88 per cent to 2.31 per cent (Bajwa, 2009).

The state has in all means shown greater operational incompetence in specifying its new role in a market driven environment. Political decision-

making appears to be happening in a casual and haphazard manner. The incapacitated politico-administrative system of the state fails to acknowledge, appreciate, absorb and put to use the new ideas generated in economic research. New trade and growth theory contains significant policy import for regions such as Punjab which strive for industrialization. Economic doctrine based on market structures and trade patterns show that economic activities grow in any region on the basis of comparative advantages; inherent, natural or acquired. The advantages are dynamic in character and shift across countries, sectors, industries and firms. The advantages, by interacting with economic environment, take the form of competitive advantages and ultimately that of growth drivers. The identification, adaptation, improvement, and building up of comparative advantage are factors of paramount importance in industrialization.

The co-movement of new trade theory and endogenous growth theory has singled out human capital as the most important and crucial factor of production. It has been filtered out as the great transforming force with enormous benefits to individual, household, economy, society, and polity. The experience of East-Asian countries is the latest living testimony to the transforming power of human capital. Trade patterns of these countries changed beyond recognition. Traditional exports were replaced with upgraded high-tech exports. New trade theory puts forward an explanation for these high tech trade patterns to strong investment in human capital, R&D activities, product development, and innovations, etc. Economic success stories prove that a deficiency pertaining to any sort of factor-endowments in any region could be more than adequately compensated by generating human capital. The availability of quality human capital in any region attracts economic activities and hence concentration of production. The message comes clear from collective reading of theory of 'geo-trade', new trade models, high tech trade patterns and new growth formulations. The overall context of the state demands better governance with a central thrust towards formation and utilization of human capital. It is the only natural option available for the state towards the revitalization of the economy and by providing necessary dynamism, diversity and sophistication.

Notes

1. The period in specific was 1776 to 1933; see Soderston and Reed (1994).
2. The new trade models incorporate: market imperfections, new industrial economics, new growth theory, and political economy arguments, see Deraniyagala and Fine (2001).
3. For criticality of human capital in trade patterns, see Salvatore (2001).

References

Bajwa, A. K. (2009) *Education Budget of Punjab: Its Composition, Spatial Distribution, and Equity Considerations*, M.Phil Thesis, Department of Economics, Punjabi University, Patiala.

Brar, J. S. (2002) 'Basic Education, Health Care and Economic Growth in Punjab: Achievements, Gaps and Imbalances', *Man and Development*, Vol. 24 (1), pp 51-63.

Chadha, G. K. (2004) 'Human Capital Base of Labour Force: Identifying Worry Spots', *The Indian Journal of Labour Economics*, Vol. 47 (1), pp. 3-38.

Deraniyagala, S. and B. Fine (2001) 'New Trade Theory versus Old Trade Theory: A Continuing Enigma', *Cambridge Journal of Economics*, Vol. 25, pp.809-825.

Dhesi, A.S. (1977); 'Theory of Comparative Costs and the Level of Development: Some Extensions', *The Indian Journal of Economics*, Vol. 58(229), pp. 171-182.

Dhesi, A.S. (1979) *Human Capital Formation and Its Utilization*, Sterling Publishers, Pvt. Ltd., New Delhi

EPW (2003) 'Current Statistics, Foreign Investment Approvals and Actuals: A Profile', *Economic and Political Weekly*, Vol. 38(43), p. 4499.

ES (2007-08) *Economic Survey*, Govt. of India, Oxford University Press, New Delhi

Ghuman, R.S., Sukhwinder Singh and J.S. Brar (2009); *Professional Education in Punjab: Exclusion of Rural Students*, Publication Bureau, Punjabi University, Patiala

Gill, S.S., Sukhwinder Singh and J.S. Brar (2007) *Globalization and Indian State: A Study of Delivery of Education, Health, and Agricultural Extension Services*, Project Report submitted to National Foundation for India, New Delhi

Krugman, P (1979) 'Increasing Returns, Monopolistic Competition, and International Trade', *Journal of International Economics*, Vol. 9, pp.469-479

Krugman, P. (2000) *Geography and Trade*, MIT Press, Cambridge, MA

Salvatore, D. (2001) *International Economics*, John Wiley & Sons, Singapore

Soderston BO and G.Reed (1994) *International Economics*, Macmillan, London