



Centre for International Trade & Development
Jawaharlal Nehru University, New Delhi, India

Lecture on

India's Development Experience: Policies, Priorities and Performance

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Outline

1. Post-independence Development Policy Regime
2. India's economic reforms – Genesis, elements, and outcomes
3. India's opportunities in the New World Order
4. Institutions to facilitate India's development
5. Threats and challenges
6. Political economy lessons



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1. Post-independence Development Policy Regime

Post-independence development strategy (till mid-1980s)

- For the first four decades after independence (in 1947) India followed a development strategy of import substituting industrialisation, largely inspired by the soviet model
 - Central economic planning – a mixed economy was envisaged – clearly assigned role for the private sector but with pervasive regulatory control by the government – the public sector was expected to reach the “commanding heights” of the economy.



1. Post-independence Development Policy Regime

Post-independence development strategy

(till mid-1980s) (cont. 2)

- Restrictions on foreign investments; trade received very little attention; import substitution for “self reliance” was the buzz word. Indian planners were effectively operating under the assumption of a nearly closed economy.
- The second 5-year plan model was in a sense the backbone of India’s post independence development strategy – it closely resembled Feldman’s model of the Soviet Union in the 1920s – stress on heavy industries (capital goods sector) primarily under the aegis of the state.



1. Post-independence Development Policy Regime

Post-independence development strategy

(till mid-1980s) (cont. 3)

- Genesis of India's strategy of import substituting industrialisation for ***self reliance***
 - Long legacy of colonial rule – do away with all elements of dependence on the western world
 - Important to signal to the rest of the world – India is “capable” of “doing” what the rest of the world can do
 - “Nehruvian” Socialism – lack of faith in the market, role of state emphasised



1. Post-independence Development Policy Regime

Post-independence development strategy

(till mid-1980s) (cont. 4)

- Influence of the Latin American Structuralist school of thought – elasticity pessimism and inequalising trade
 - Standard argument of infant industry protection
 - Almost all developing nations embraced import substitution at that time
-
- This strategy was almost universally endorsed by the international development policy circles



1. Post-independence Development Policy Regime

Post-independence trade policy

- Pre 1966: Pervasive import and exchange control policy relying primarily on quantitative restrictions (QRs)
 - Based on detailed estimates of foreign exchange availability made by the Ministry of Finance
 - After pre-empting for essential requirements (Embassy expenses, food fertiliser and petroleum imports), the rest was allocated to competing users through the mechanism of import licensing
 - Two principal criteria (1) essentiality and (2) indigenous non availability, but absence of well defined set of objective principles
 - preference given to small scale (over large scale) and public sector (over private sector)



1. Post-independence Development Policy Regime

Post-independence trade policy (cont. 2)

- 1962 onwards: QRs were supplemented by increasing use of import duties
- Export policy – initially an attitude of indifference and “pessimistic neglect” – there were export controls and export duties on several items at varying rates (this led to complete stagnation of exports during the first two plans)
- From the third plan (1961/62) deliberate policies of export promotion through export incentives (subsidies, fiscal incentives, and import entitlements)



1. Post-independence Development Policy Regime

Post-independence trade policy (cont. 3)

- Devaluation of 1966 – a full policy package of devaluation with liberalisation
 - 57.5% devaluation of the rupee
 - Substantial elimination of export incentives on non-traditional exports
 - Official declaration of a policy of liberalised import licensing and reduced import duties
- Post 1966:
 - Strikingly early revival of export subsidies
 - Continuation of QRs-driven import control regime
 - Import tariffs remained unusually high by international standards
 - 140%+ for 70% of lines, 100%+ for 88% of lines and 80%+ for 99% of all tariff lines



1. Post-independence Development Policy Regime

Post-independence trade policy (cont. 4)

- To summarise
 - The objective of India's inward-looking trade strategy of import substitution was to set up domestic industrial capacity for whichever goods (consumer and producer) could be produced domestically and protect them from international competition
 - Very high *Effective Rate of Protection* (ERP) – calculations by Bhagwati and Srinivasan (1975)
 - Distorted resource allocation towards capital intensive industries that would otherwise be unprofitable domestically under an “efficient” market determined allocation of resources



1. Post-independence Development Policy Regime

Post-independence trade policy (cont. 5)

- To summarise (cont. 2)
 - Strong anti-export bias in the regime sought to be countered with export incentives – Bhagwati and Desai (1970) aptly summarises “India should produce whatever it can and should export whatever it produces.”
 - The impact of the trade regime has manifested at different levels – (1) overall anti-export bias, (2) encouraged diversified basket of manufactures (import substitutes) being produced and exported, completely ignoring the dictates of natural comparative advantage.



1. Post-independence Development Policy Regime

Post-independence industrial policy

- Aimed at
 - Creating a large public sector reserving certain industries for this sector exclusively – mostly strategic and heavy industries – consumer goods industries left to the private sector
 - Reducing monopoly and concentration
 - Promoting small scale industries through extensive reservations
 - Promoting balanced regional development
- System of industrial licensing formed the backbone of industrial policy
 - License must be obtained to set up industrial units and for major expansions – small scale sector exempted
 - Government can lay down criteria regarding size, location, foreign collaborations etc.



1. Post-independence Development Policy Regime

Post-independence industrial policy (cont. 2)

- Consequences
 - Throttled competition by restricting entry and exit
 - Pre-emptive licensing behaviour by large houses
 - Serious adverse implications for scale of production and plant size – preventing full exploitation of scale economies
 - Complex administrative procedures caused hurdles, delays, and corruption resulting in inefficiencies.



1. Post-independence Development Policy Regime

Post-independence technology policy

- The basic objective was “the development of indigenous technology and efficient absorption and adaptation of imported technology appropriate to national priorities and resources” to attain self reliance
- The main focus of India’s technology policy was not only to build up search-, selection-, implementation-, absorptive-capability, but also to acquire technological capabilities of adaptation and minor innovation through reverse engineering
- Government spent money on R&D and also offered fiscal and non-fiscal incentives for technological capability building



1. Post-independence Development Policy Regime

Post-independence technology policy (cont. 2)

- Prior to the 1990s, the main thrust of the R&D incentives was to generate indigenous technologies primarily in the institutional sector (public funded R&D institutions) and facilitate effective commercialisation, transfer and absorption of such technologies in the industrial sector
- Technology imports were restricted and highly regulated
- Thus, India's technology policy in the pre reforms era was essentially grounded on building up of national level capabilities through the public institutions, while at the same time the industry (private and public sector) was encouraged to actively engage in R&D activities to develop absorptive and adaptive capabilities of minor innovations



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2. India's economic reforms – Genesis, elements, and outcomes

Genesis of the reforms process

- Flipside of the protectionist regime became all too apparent
 - No incentive to keep abreast with the fast changing global frontiers of technology, industry became technologically backward and inefficient
 - India settled at a “Hindu” rate of growth (2-3% p.a.), identified as a growth laggard in the world
 - High “effective rate of protection” and “domestic resource costs”, no attention to India's natural comparative advantage



2. India's economic reforms – Genesis, elements, and outcomes

Genesis of the reforms process (cont. 2)

- The first wave of changes in the mid-1980s
 - Changing norms of developments among Indian policy makers: technology driven world view
 - Serious re-thinking on economic policy
 - However policy response beginning in the mid-1980s was feeble and sporadic



2. India's economic reforms – Genesis, elements, and outcomes

Genesis of the reforms process (cont. 3)

- 1990 crisis and major reforms from 1991
 - A severe BoP crisis in 1990 prompted India to launch a massive reform package in 1991
 - Short term stabilization measures
 - Longer term programme of comprehensive structural reform
 - Comprehensive reforms package rather than piecemeal attempts of the 1980s
 - Less controls and more reliance on the free and competitive markets
 - Larger role of the private sector
 - Greater integration with the world economy



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2. India's economic reforms – Genesis, elements, and outcomes

Genesis of the reforms process (cont. 4)

- Coincided with the WTO – we must view Indian reforms against the backdrop of WTO driven world order rather than as an isolated phenomenon



2. India's economic reforms – Genesis, elements, and outcomes

India's reform experience: First phase 1991-1996

- External Sector:
 - Abolition of QRs, reduction of tariffs, exchange rate reforms, foreign investment policy
- Industrial Sector:
 - Removal of state intervention in the form of licenses,
 - Relaxation of monopolies and restrictive trade practices provisions,
 - Reduction of reservations for public sector and for small scale sector
 - Abolition of freight equalization policy
 - Divestment of public sector units



2. India's economic reforms – Genesis, elements, and outcomes

India's reform experience: First phase 1991-1996 (cont. 2)

- Financial Sector:
 - Deregulation of interest rates,
 - Deregulation of lending and borrowing operations in the banking sector
 - Capital market also partially liberalized – fetters removed for foreign institutional investments – Indian companies allowed to raise equity capital from international markets



2. India's economic reforms – Genesis, elements, and outcomes

India's reform experience: First phase 1991-1996 (cont. 3)

- Fiscal Consolidation:
 - Limited effort, primarily to contain the fiscal (especially) revenue deficit
 - Some limited tax reforms
 - Expansion of tax base
 - Service sector in tax net
 - Reduction of personal and corporate income tax
- Introduction of MODVAT (Modified Value Added Tax regime)



2. India's economic reforms – Genesis, elements, and outcomes

India's reform experience: Second phase 1999 - today

- Reforms slow down during 1996-1999 due to political changes and instability
- Second phase begins in 1999 with
 - Deepening of external and industrial sector reforms
 - More progressive and radical (but somewhat difficult) reforms in areas like
 - fiscal consolidation
 - streamlining legal framework
 - revamping public sector
 - strengthening physical and social infrastructure
 - invigorating capital markets and financial institutions



2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: External sector

- WTO compatible trade regime in place
 - All QRs lifted
 - Peak rate of customs duty (for non-agricultural products) reduced to 15%
 - Foreign exchange rates for Rupee now market aligned,
 - Restrictions on capital account convertibility somewhat reduced, even though full capital account convertibility not reached
 - Liberal, transparent, investor friendly FDI policy put in place – rules relaxed – permitted in real estate, ports, telecommunication, defense, and insurance



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2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: External sector (cont. 2)

- Ceiling on Foreign Institutional Investment raised
- External Commercial Borrowings liberalized, allowing Indian companies raise resources from the overseas market.



2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: Fiscal reforms

- FRMB (Fiscal Responsibility and Budget Management) Act 2004 mandating central and state governments to eliminate fiscal and revenue deficits in a phased manner in the medium-term
- VAT introduced – now uniform Goods and Services Tax across all states being contemplated
- Subsidies reduced (petroleum)
- Expenditure Compression – not much achieved



2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: Industrial sector

- De-licensing and de-reservation
- List of sectors reserved for small-scale enterprises reduced (800+ items reduced to 200 + including 30 textile items)
- Privatization, Disinvestment and Closure of PSU – slow progress on this front
- Establishment of Investment Commission and National Manufacturing Competitiveness Council – shifting the role of the government from 'control' to 'regulation'.



2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: Others

- Financial Sector:
 - Greater operational autonomy of banks
 - Capital markets: securities laws amendment bill
 - Efforts to reduce administered interest rates on small savings, lending rates also progressively decontrolled
 - Insurance sector opened up to private participation
 - However, financial sector still remains largely regulated
- Agriculture/ rural economy:
 - Little progress due to lack of political consensus: subsidies (power, water, fertilizers), prices and procurement, Public Distribution System, rural credit etc.



2. India's economic reforms – Genesis, elements, and outcomes

Reform outcomes: Others (cont. 2)

- Infrastructure
 - Private initiative and FDI encouraged
 - Efficient pricing of infrastructural services attempted
 - Sectors reformed: Telecom, Ports, Civil Aviation, Power
- IPR:
 - The New Patent Act 2005 introduced, TRIPS compliant but broad patent scope
 - Novartis controversy



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3. India's opportunities in the New World Order

- The Asian Miracle of the 1960s, 1970s, and 1980s
 - Changing pattern of international trade since 1960s: A new international division of labour – Labour surplus East Asia got integrated with the world through rapid expansion of labour intensive manufactured exports.
 - Flying geese model – successive transition of Asian nations
 - India not on board in the Asian Miracle, despite labour abundance due to post colonial policy baggage of inward looking regime



3. India's opportunities in the New World Order (cont. 2)

- Low labour cost advantage pervasive – extends well beyond the realm of traditional labour intensive mass manufactures into new industries and services such as IT, biotech, pharmaceuticals, outsourcing (business and knowledge process) services
 - India's advantage in these arise out of strong university educated middle class (translating labour abundance into skill abundance)
 - English, as inherited from our colonial past



3. India's opportunities in the New World Order (cont. 3)

- While China dominates the world market for traditional labour intensive mass manufactures, India moves towards knowledge intensive sectors.
- Policy thrust on higher education and colonial past helped in creating a competitive advantage based on knowledge rather than simple labour abundance.
- Must strengthen further its efforts towards human capital investments and technological capacity building



3. India's opportunities in the New World Order (cont. 4)

- The Role of Human Capital
 - Opportunities for the English speaking educated and upwardly mobile
 - Limited to creamy layer of society – not an inclusive strategy and hence unviable in a democratic set up
 - Greater stress needed on improving labour productivity through health, primary education and appropriate technology policy for simple labour intensive mass products



3. India's opportunities in the New World Order (cont. 5)

- The Role of Technology
 - Technological capability in LDCs
 - Know how versus know why
 - India's technological trajectory
 - Self reliance and know-why
 - Shift from institutional to industrial R&D
 - Poised for a paradigm shift into frontier R&D?



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4. Institutions to facilitate India's development

- India has stable institutional structures, much of it inherited from the British-Indian administration
 - Largest and thriving democracy and parliamentary political structure – withstood several crises and now firmly rooted
 - Strong and impartial legal and judicial framework
 - Strong administrative mechanism – large bureaucracy perhaps requires some pruning and streamlining
 - Powerful regulatory bodies



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5. Threats and challenges

- **3 key areas: Health Education and Poverty**

It is somewhat ironical that it is the underprivileged masses of India's enormous population that faces the primary threats of globalization, it is this same pool of human resources, if properly nurtured, will prove to be India's greatest strength and source of opportunity to embrace globalization positively and productively to become a global economic power

- **Health**

- Significant achievement but a long way to go
- Market versus State
- TRIPS: New Drug Discovery, Drug prices, Quality



5. Threats and challenges (cont. 2)

- Education
 - Exclusive (not inclusive)
 - Market versus state
- Poverty
 - Growth without poverty reduction
 - Jobless growth, skill divide and inequalities,
 - Market determined credit allocation
 - Targeted approach to poverty reduction



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6. Political economy lessons

- Gradual (not a big bang approach) but by and large well sequenced
- To understand the political economy of gradualism
 - Indian reforms home grown, deliberated and debated, - not a top down from the Washington consensus – as expected in a democratic structure
 - Gradual but perhaps more permanent and irreversible.
 - Three variants of the unfinished agenda of reforms
 - Lack of academic and political consensus
 - Strong power lobbies
 - Lack of motivation
 - Reforms with a human face?



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Thank you



Question to Prof. Ray

As far as I know, India's capital account and also its domestic financial markets and institutions are still much more regulated than elsewhere (despite gradual liberalization steps). Based on your presentation, the reader could get the impression as if India has almost fully liberalized all this.



Answer from Prof. Ray

You are absolutely correct. In fact, India has a long way to reach full CAC. Indeed, there is still a lack of academic and political consensus on full CAC. Especially after the global financial crisis of 2008.

It was quite evident that India's financial sector remained relatively unhurt and insulated, thanks to

India's prudent and slow approach towards reforms in the areas of financial sector and capital accounts which remain much more regulated than many other countries.



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Question to Prof. Ray

Perhaps too far fetched, but why is growth so jobless in India? Is it because of high productivity increases or just too low growth, or increases in labour supply?



Answer from Prof. Ray

India's growth is driven by knowledge and skill intensive sectors, instead of labour intensive ones.
Hence, growth is not accompanied with an employment expansion.



Question to Prof. Ray

Why is the absolute poverty still so high in India?

Answer from Prof. Ray

The reason is apparent from the nature of India's growth drivers. In India's case, the upwardly mobile skilled segment of the population reaps the major benefits from this growth process, while the large pool of illiterate poor population remains outside the ambit.



Question to Prof. Ray

*Why did growth pick up from the 1990s onwards?
Was it due to the gradualist liberalization strategy
or mainly due to technology advances? What
would be your opinion on that?*

Answer from Prof. Ray

I think it was a combination of both factors. Of course, the fortuitous circumstances highlighted in the presentation also contributed to the growth process.



Question to Prof. Ray

In how far did the post-independence import control regime influence the development of indigenous technology and adaptation of external technology?

Answer from Prof. Ray

Very significantly, indeed. India's capacity building in pharmaceutical process technologies were fostered within such a policy environment during the 1970s and the 1980s.



Question to Prof. Ray

Which industries were built up during the import substitution phase? Was there any policy to direct incentives to a specific sector?

Answer from Prof. Ray

Support went primarily to heavy industries, like machinery, machine tools, and chemical products. In general, a whole range of products across the board for self reliance.



References

- Alhluwalia, I.J. (1991), *Productivity and Growth in Indian Manufacturing, Delhi: Oxford University Press.*
- Balakrishnan, P. and Puspangadan, K. (1994) 'Total Factor Productivity Growth in Manufacturing Industry: A Fresh Look', *Economic and Political Weekly, July.*
- Bhaduri, S. and Ray, A.S. (2004), 'Exporting through Technological Capability: Econometric Evidence from India's Pharmaceutical and Electrical/Electronics Firms', *Oxford Development Studies, 32 (1), pp 87-100.*
- Dore, R. (1984) 'Technological Self Reliance: Sturdy Ideal or Self Serving Rhetoric', in M. Fransman and K. King (eds.) *Technological Capability in the Third World, London: Macmillan.*
- Evenson, R. E. and Johnson, D. K. N. (1998) 'Invention in Developing Countries', *Unpublished mimeo.*



References (cont. 2)

- Guha A. and Ray A.S. (2004), 'India and Asia in the World Economy: The Role of Human Capital and Technology', *International Studies*, vol.41 (3), pp 300-311.
- Lall, S. (1978), 'Developing Countries as Exporters of Technology: A Preliminary Analysis', in Giersch (ed.) *International Economic Development and Resource Transfer Workshop*, Tubingen: J.C.B. Mohr.
- Lall, S. (1984) 'India's Technological Capacity: Effects of Trade, Industrial, Science & Technology Policies' In M. Fransman and K. King (ed.) *Technological Capability in the Third World*, London: Macmillan.
- Lall, S. (1985). *Multinationals, Technology and Exports*, London: Macmillan.



References (cont. 3)

- Ray, A.S. (2004), 'The Changing Structure of R&D Incentives in India: The Pharmaceutical Sector', *Science Technology and Society*, 9 (2), pp 297-317.
- Ray, A.S. (2005) 'The Indian Pharmaceutical Industry at Crossroads: Implications for India's Health Care', in Amiya Bagchi and Krishna Soman (eds) *Maladies, Preventives and Curatives: Debates in Public Health in India*, New Delhi: Tulika Books.
- Ray, A.S. (2006), 'Going Global: India's Economic Aspirations and Apprehensions in the New Millennium' in F.Villares (ed.) *India, Brazil and South Africa: Perspectives and Alliances*, Sao Paulo: Editora UNESP.
- Ray, A.S. and Bhaduri S. (2001), 'R&D and Technological Learning in Indian Industry', *Oxford Development Studies*, 29 (2), pp. 155-171.



References (cont. 4)

- Ray, A.S. and Bhaduri, S. (2002) 'Technological Development in Indian Industry: Challenges and Options after the East Asian Crisis', Richard Hooley and J.H.Yoo (ed.), *The Post Financial Crisis Challenges for Asian Industrialization, Oxford: Elsevier Science*.
- Ray, A.S. and Bhaduri, S. (2008), 'Co-evolution of IPR Policy and Technological Learning in Developing Countries: A Game-theoretic Model', Paper for *Globelics 6th International Conference, Mexico City, September 2008*.
- Ray, A.S., et al (1999), *The Role of In-House R&D in Indian Industry, Report prepared for the Department of Science & Technology, Govt. of India, July*.
- Rosenberg, N. (1976), *Perspective on Technology, New York: Cambridge University Press*.



References (cont. 5)

- Ray, A. S., & Saha, S. (2009, June). India's Tryst with Technology: The Way Forward. *Discussion Paper 09-11*. India: JNU.
- Schumpeter, J. A. (1980 (1934)), *The Theory of Economic Development*, London: Oxford University Press.
- Schumpeter, J.A. (1939), *Business Cycles*, New York: McGraw-Hill.
- Solow, R.M. (1957) 'Technical change and the aggregate production function', *Review of Economics and Statistics*, August, pp. 312-320.
- Young, A (1995), 'The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience', *Quarterly Journal of Economics*, August.