

Potential Drivers of Economic Development in the 21st Century

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Drivers of Growth and Development

- Modern Economic Growth: History
- Distinguishing growth and development
 - Economic sociology and new institutional economics
- Theories of growth and development
- Post WW-II development strategies
- Development strategies for the 21st century

Economic “Epochs”

- Long period characterized by the working out of an “epochal innovation”
 - Simon Kuznets, *Modern Economic Growth*
- Commercial age: 1500-1800
 - Epochal innovation: transport and communications
 - Driver: development of efficient (economic) long-distance sailing ship

Kuznets: Modern Economic Growth

- 1800 to the present, and still running
- Epochal innovation: the application of science to the problems of production.
 - Note emphasis on “application.” Engineering is as important as science.
- Interaction between economic rewards and induced technological change

Modern Economic Growth

- Development of basic science
- Invention and commercial development of new methods of production: innovation
- Development of inexpensive sources of energy and their application to production
 - Coal, petroleum, electricity
- Creation of capital goods that embody new technology and energy

Modern Economic Growth

- Economies of scale through specialization and division of labour
 - “Smithian” productivity gains
 - Forward and backward linkages
- Market integration, national and international
 - Division of labour is limited by the extent of the market

Modern Economic Growth

- Structural changes in production
 - Industrialisation: rise of industry and relative decline of agriculture
- Rapid technical change in both agriculture and industry
 - Technical change in agriculture is essential
- Institutional changes in organization of production: factories, corporations, etc.

Modern Economic Growth

- Demographic changes
 - Rapid population growth
 - Urbanisation
- Labour force
 - Rural-urban migration
 - Education and training
 - Role of women

Modern Economic Growth

- Mass production of commodities
 - Making goods cheaper essentially defines the process
 - Over emphasis on terms of trade is misplaced
- Agriculture, energy, metals, chemicals, machinery, electronics
 - From luxuries to mass produced commodities

Theories of Economic Growth

- Necessary and sufficient conditions
 - Elegant theory, but history is noisy
 - Substitution among necessary conditions
- Minimum set of sufficient conditions
 - Conditions such that if something is missing, modern economic growth is not achieved
 - Analytic history: seek to understand causal chains

Schumpeter: Role of Innovation

- Introduction of a new good
- Introduction of a new method of production
- Opening of a new market
- Conquest of a new source of supply of raw materials
- Carrying out of new organization of any industry

Necessary Conditions

- Profitable opportunities must exist
- Individuals or groups who wish to exploit the profitable opportunities must exist
 - Information: ignorance and risk
 - Motivation: desire to exploit opportunities
- Investment capability
 - Must be able to divert adequate resources to exploit the potential profitable opportunity

Drivers of Growth

- Classification of societal structures, forces, and trends in terms of links to growth:
 - Facilitators
 - Inhibitors
 - Concomitants
- Identify necessary facilitators
- Identify sufficient or “killer” inhibitors
- Mixes of sufficient facilitators/inhibitors

Necessary Facilitators

- Kuznets: epochal innovation
- Increased investment
 - Infrastructure to facilitate market integration
 - Physical and human capital
- Institutional innovations
 - Private property and commercial legal system
 - Financial system
 - Role of government: developmental state

Inhibitors to Growth

- Incomplete markets: stifle profitable opportunities
- Poverty: vicious circles prevent investment
- Inappropriate Culture: lack of motivation
 - Weber thesis on role of reformation
- Inappropriate Institutions: stifle innovation
 - Failed states, Communist states, kleptocracy

Concomitants to Growth

- Demographic changes
 - Facilitators, concomitant, and/or inhibitor
- Gender roles
 - Important role of women in the labour force
 - Initially a facilitator
 - Gender equality was a concomitant,
 - Eventually inequality is an inhibitor

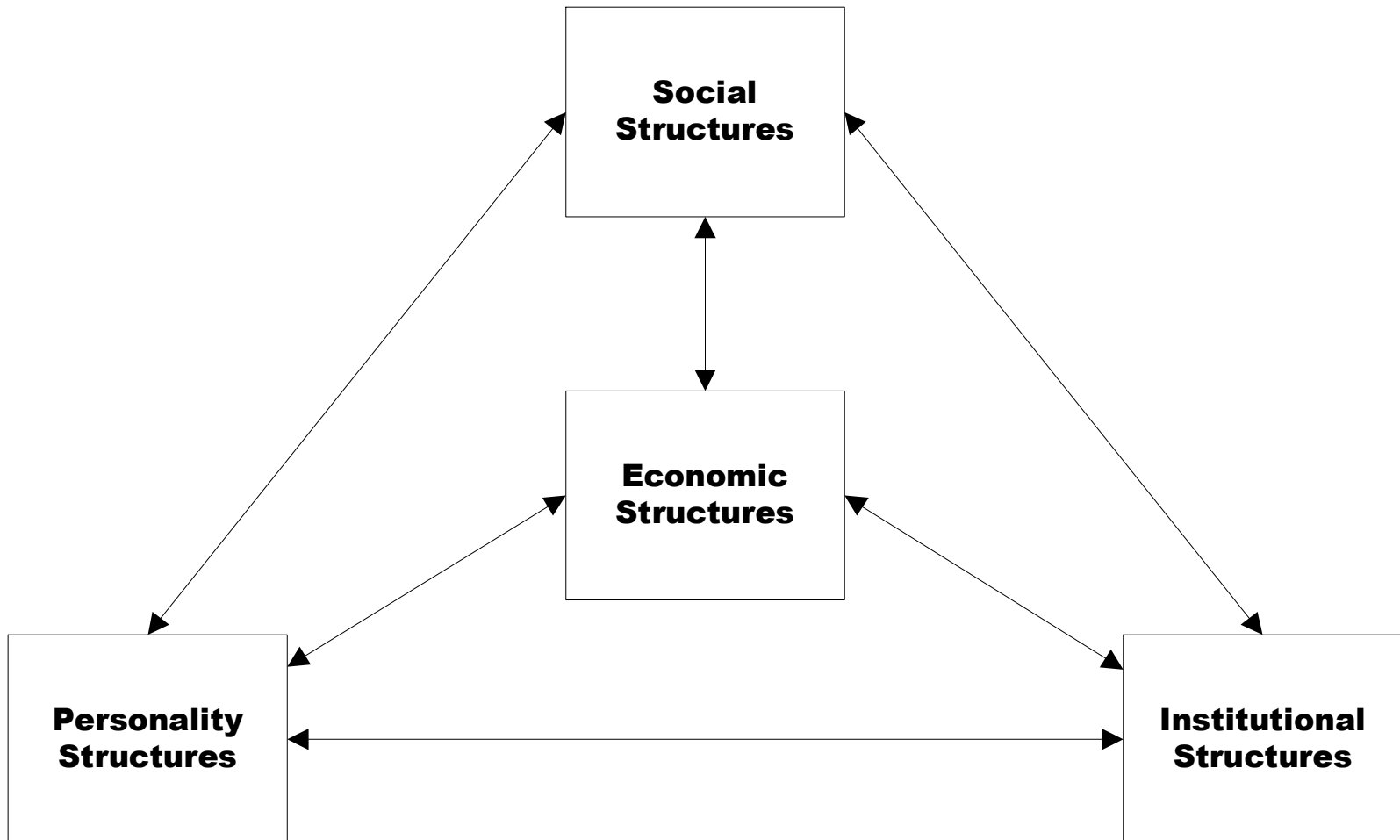
Growth versus Development

- Modern Economic is linked to profound changes in institutional structures.
 - Economic, political, legal, social, and cultural systems
- Define economic development as modern economic growth plus other societal changes.

Parsons-Smelser: Economic Sociology

- Theory of “social systems” and economic institutions.
 - Economic “drivers” of societal change.
- Douglass North: Role of institutions
 - New book: *Understanding the process of economic change.*
 - Mancur Olson

Structure of Society



Personality Structures

- Education and “tastes”
 - Human capital
- Culture
- Attitudes
 - World view: what is possible
 - Societal performance criteria
- Market demand: “preference structures”

Social Structures

- Societal norms and standards
 - Political rights
 - Economic rights: income distribution
 - Property rights
- Roles of individuals versus authority
- Gender roles
- Cultural values

Institutional Structures

- Government: democratic versus authoritarian
 - Roles of civil society and political institutions
 - “Reach” of government: policy space
 - Ability to meet societal performance criteria
- Legal system:
 - Security and public safety
 - Political rights
 - Commercial law: property rights and markets
- Religious institutions
- Educational system: human capital formation

Economic Structures

- Economic systems (“isms”): capitalism, socialism, national socialism (fascism)
 - Policy environment: “developmental state”
- Markets: mixed systems
 - Regulation and property rights
 - Industrial organization: corporations, etc.
- Capital stock: human, industrial, infrastructure
- Resource base
- Technology: stock and growth

Douglass North: New Institutional Economics

- Can view evolution of economic institutions as resulting from “tension” between what was possible, given new technology, and what was feasible, given existing institutions.
 - New institutions evolved to take advantage of new opportunities.
 - History matters: institutional inertia.

Growth: Tension and Resolution

- Tension: Present perceived potential profit arising either within the present economic structure or that structure changed in ways that are perceived to be feasible.
 - Perception is important: ignorance and risk
 - Potential profits arising from changes in institutions is a source of tension.
 - Extends Schumpeter

Growth: Tension and Resolution

- Growth is the result of the successful resolution of tension.
 - Actors respond to the tension by investing, changing institutions, or engaging in Schumpeterian innovation.
- The process is messy
 - Schumpeter: creative destruction
 - Errors and failures are common

Institutional Changes: Examples

- Creation of insurance industry in response to needs of traders in age of sail.
- Creation of limited liability companies to insulate owners from risk.
- Creation of joint stock companies to raise needed capital for large scale investment.
- Creation of financial institutions to organize exchange and investment.

Process of Development

- Dynamic changes in economic and societal structures:
 - Winners and losers
 - High adjustment costs with complex incidence
- Development is a mysterious process
 - Much that we do not understand
 - Both robust and delicate
 - Analogy to medicine

Early Modern Economic Growth

- By World War I, capitalist system was in deep trouble
 - Periodic financial crises
 - Boom-depression cycles
 - Class warfare: income distribution
- Economic, political, and social crisis.
 - Two world wars
 - Great depression
 - Collapse of international trading system

20th Century: Clash of “isms”

- Resolution of the Marxian crisis
 - Changes in Parsonian societal systems
- Competing economic systems
 - Reformed capitalism (social democracy)
 - Fascism
 - Communism/state socialism (Lenin)

Resolution of the Marxian Crisis

- Post WW-II, societies developed a set of performance criteria for economic and political systems
- These criteria reflect:
 - Emerging societal values and norms
 - Knowledge of what modern economies can deliver to their populations

Societal Performance Criteria

- Continued modern economic growth based on technological change and economic innovation
 - Economic management: macro stability
- Significant degree of economic and political freedom
- Significant degree of economic and social mobility

Societal Performance Criteria

- Acceptable distributional outcomes
 - Level of poverty
 - Adequate social safety net for the poor
 - Relative wealth and income distribution
- Management of risk
 - Incidence and insurance
- Formalized in the UN
 - Millennium Development Goals
 - Human Development Indicators

Sustainable Development

- Meeting performance criteria
 - Government involvement
- “Shock absorbers”:
 - Ameliorate impact of societal changes
 - Safety nets
 - Risk management
 - Facilitators that smooth the process
 - Subsidize factor mobility
 - Manage incidence of transition costs

Country Typologies

- Post-industrial mature economies
- Industrializing countries in the process of modern economic growth (MEG)
- Pre-MEG countries in the process of achieving important facilitators and eliminating inhibitors
- Countries that are failing to achieve MEG because of killer inhibitors or lack of ability to encourage facilitators
- Rentier economies that will not evolve to MEG

Development Strategies

- Development strategy is an integrated package of policies aimed at achieving development in an evolving global economy
- Modern economic growth is central
 - Productivity growth:
 - Technology and investment
 - Specialisation and economies of scale
 - Long term poverty reduction
 - Structural change: industrialisation and urbanisation

Post War Development Strategies

- Debates in the 1950s and 1960s
 - Socialist versus market strategies
 - Import substitution versus open strategies
- Role of the Cold War
 - Clash of ideologies
 - Aid policy linked to global politics

Socialist Strategy

- Provided a viable alternative for much of the century
 - Successful in mobilizing resources
 - Avoided crises and boom-bust cycles.
 - Shock absorbers and equal income distribution
- Failed to achieve continued productivity growth and modern economic growth
 - Bureaucracy and perverse incentives
 - Stifled all economic innovation: North analysis

Import Substitution Industrialisation

- ISI strategy. Pursued in most countries in 1950s-1960s and Latin America through 1970s.
 - Linked to ideology: socialism and planning
- Achieved significant industrialisation and aggregate growth
- Pursued too long, led to increasing inefficiency and stifled innovation

Failure of Socialist and ISI Strategies

- End of History: Fukuyama
 - Washington consensus
- Impact of failure of these strategies
 - Narrowing of policy space
 - Continuing debate on role of government
 - Depoliticisation of strategy debate
 - Focus on micro: households, poverty
 - Focus on safety nets rather than drivers of growth

Open Development Strategy

- Successful “export led growth” in E&SE Asia starting in mid-1960s
 - Japan, Korea, Taiwan, Hong Kong, Singapore
- Attention to role of international trade and the evolution of global markets
 - Stages of comparative advantage (Balassa)
 - Diffusion of technology

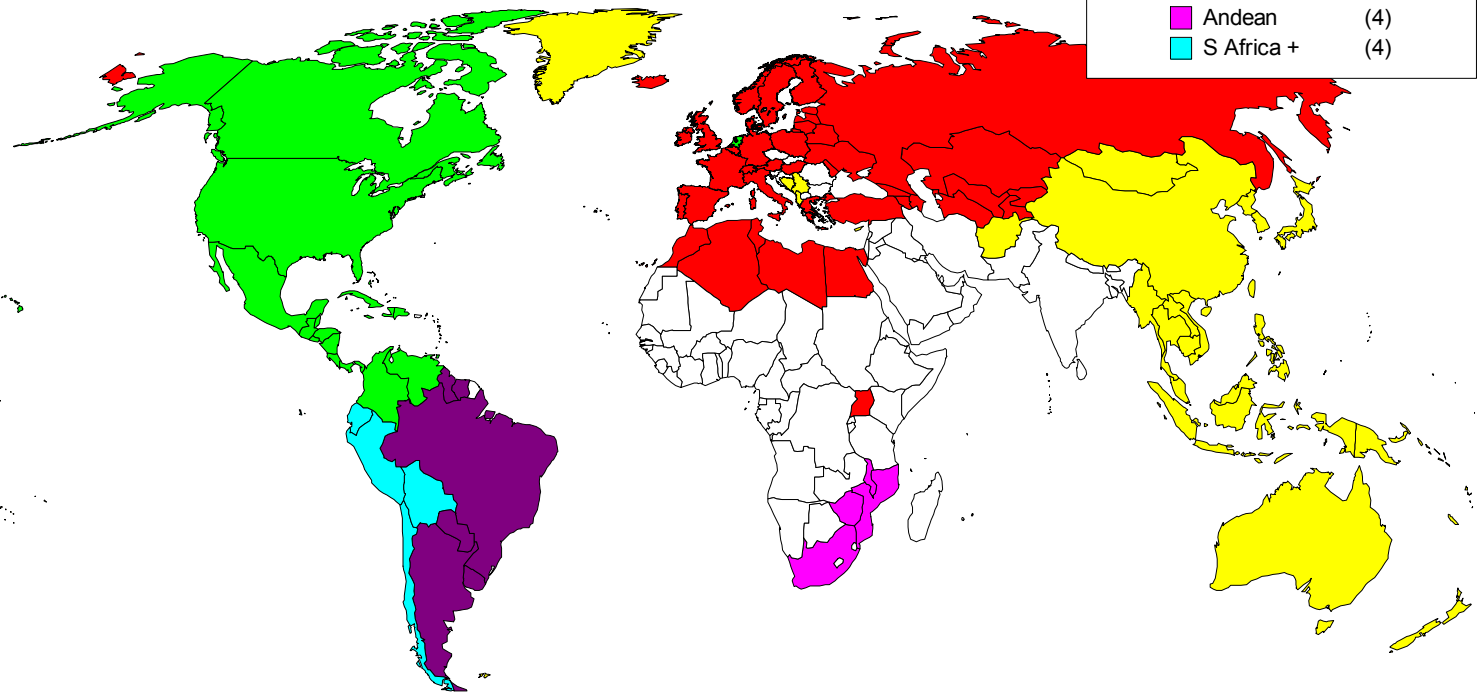
Trade and Growth: Drivers

- Increased trade is associated with:
 - Growth and structural change
 - Poverty reduction
- Links:
 - Trade → productivity → growth
 - Trade → investment → growth
- Economic integration
 - Shallow and deep

Trade Blocs: 1990s

1990s

■ Europe +	(42)
■ N America +	(31)
■ E&SE Asia	(43)
■ MERCOSUR	(6)
□ Rest	(61)
■ Andean	(4)
■ S Africa +	(4)



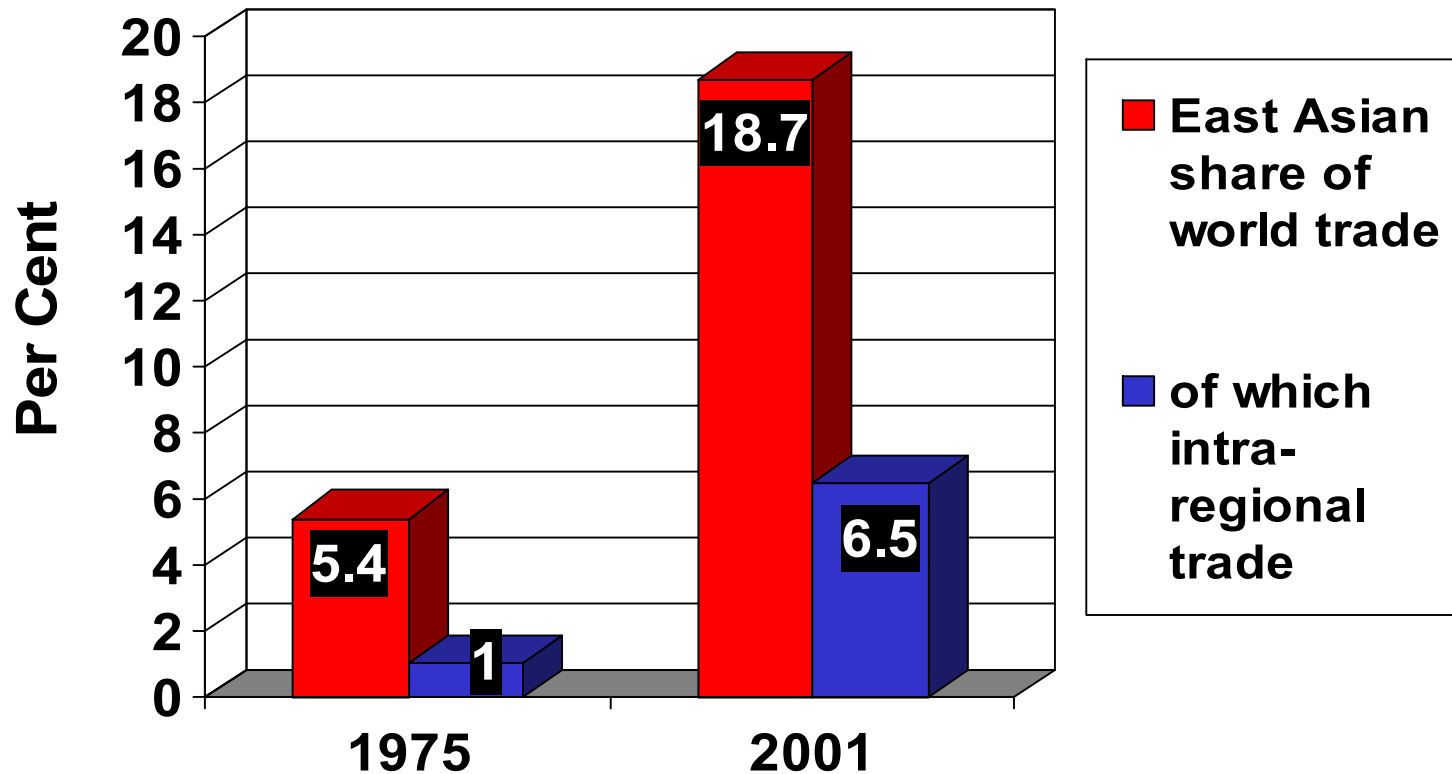
Implications of Trends

- The formation of blocs pre-dated any explicit regional trade agreement (RTA)
 - Institutions follow economic trends
- Three kinds of RTAs:
 - Bloc creation: EU, NAFTA, Mercosur
 - Bloc expansion: EU expansion, CAFTA
 - Market access: EPAs, AGOA, FTAA, bilateral agreements

Role of Trade

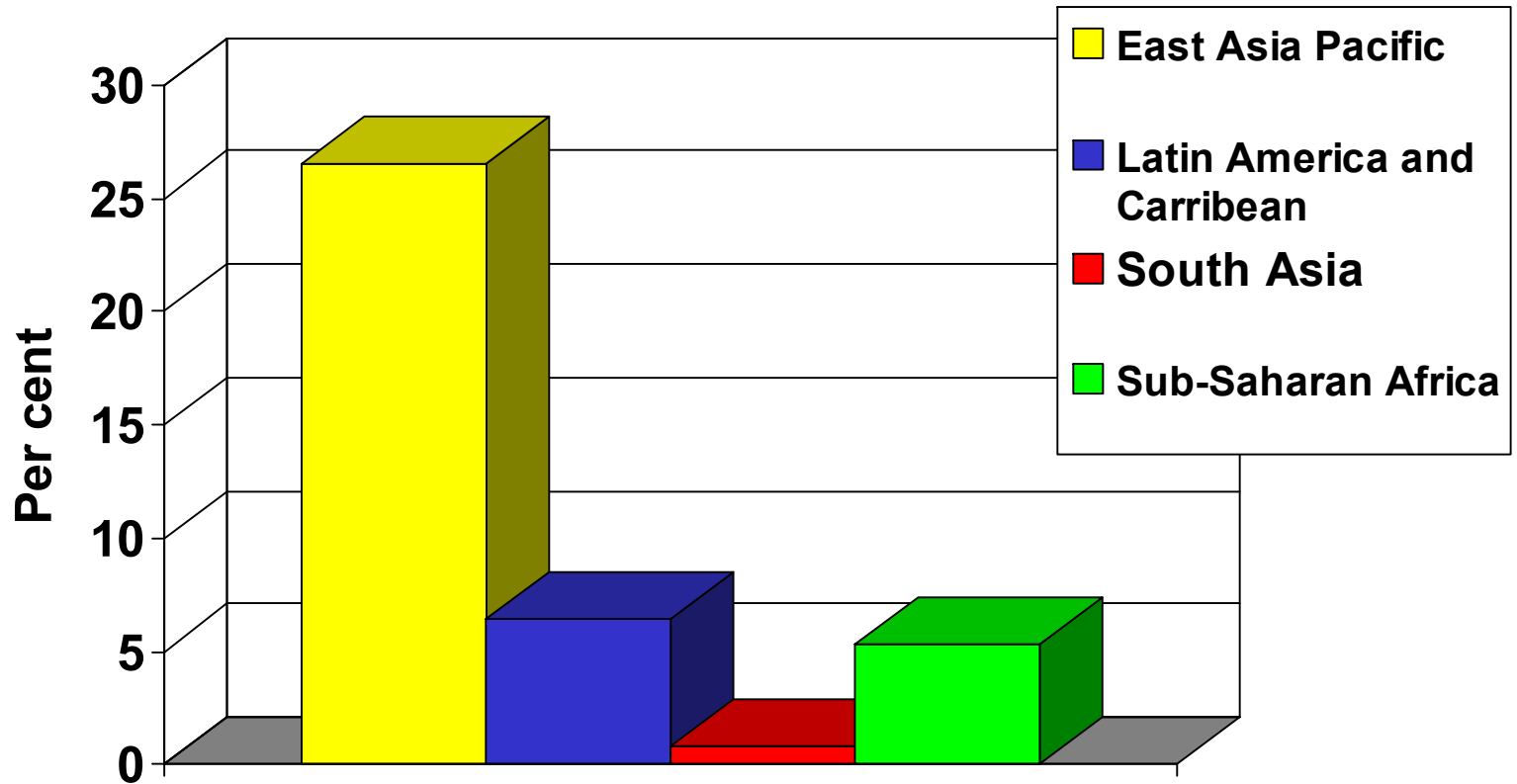
- Increased trade as share of GDP
 - Largest increase in trade among OECD countries
 - Emergence of new trade blocs
- Increased trade in intermediate inputs
 - Import content of exports increased
 - International segmentation of production: value chains
- Increased trade in new products
- Trends challenge standard trade theory and analysis of gains from trade

Deep integration? rising intra-regional trade



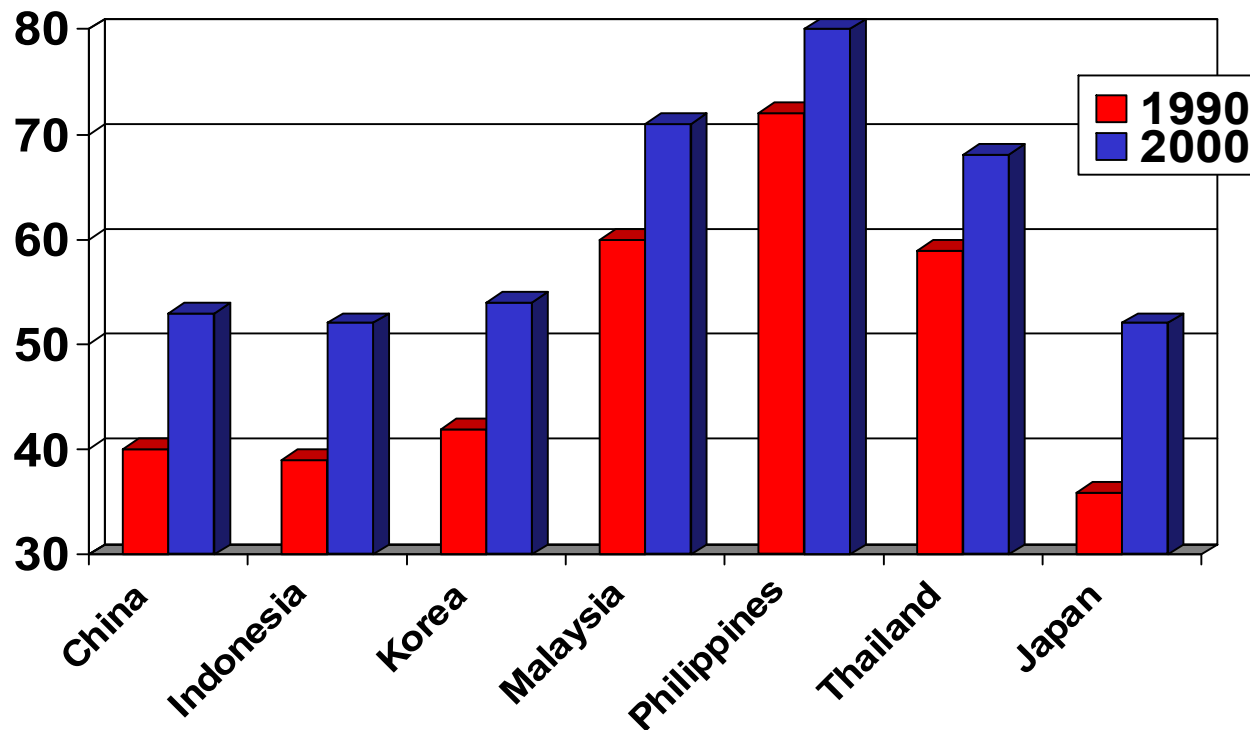
Source: Ng, F. and Yeats, A., 2003, 'Major Trade Trends in East Asia: What Are their Implications for Regional Cooperation and Growth?' World Bank Policy Research Working Paper 3084, Washington DC, World, p.3 46

Intra-regional trade/GDP, 2002



Source: World Bank, Global Economic Prospects 2005, p. 43

Share of parts and components in machinery trade (%)



Ando, M., 2005, 'Fragmentation and Vertical Intra-industry Trade in East Asia', paper presented to "Claremont Regional Integration Workshop with Particular Reference to Asia, " Claremont McKenna College, U.S.A, February, available <http://lowe.claremontmckenna.edu/events/pdf/AndoPaper022505.pdf> (accessed December 2005), p 34

Drivers of Integration: Why now?

- Lower transactions costs
 - Transport and communications
- Technology of standards
 - Computer: processing and storage
 - Measurement and precision instruments
- Past trade liberalisation: GATT rounds
 - Better integrated global commodity markets through elimination of trade barriers.

New Trade Theory

- New trade theory
 - Mechanisms linking trade and growth
 - Deep integration versus shallow integration
- Institutional adaptation to potential gains from integration
 - Private, national, global
- Implications for development strategies

New Regionalism

- Increased geographical dispersion of production (value chains) through trade that supports
 - (1) exploitation of different factor proportions for parts of the production process (comparative advantage efficiency gains) and/or
 - (2) local economies of scale through finer specialization and division of labour in production (“Smithian” efficiency gains);
- Externalities arising from institutional changes and linkages that lead to a wide increase in productivity
 - Major source of productivity growth: “driver” of growth.

Trade-Productivity Links

- Value chains: mechanisms differ from earlier trade-industrialisation links
 - Scale economies: Smithian gains
- Applies to many sectors and more economic activity
 - Agriculture
 - Services
 - Industry

Shallow and Deep Integration

- Early trade agreements and GATT rounds facilitated shallow integration:
 - Reduction of border trade barriers
 - Negative integration: reduce barriers
- New regionalism involves elements of “deep integration”
 - Positive integration: institutional adaptation to facilitate trade

Deep Integration

- Factor mobility: capital and labour
- National Institutions: trade facilitation
 - Legal: property rights, commercial law
 - Regulatory: standards and rules, industrial policy
 - Harmonize macro policies/financial regulation
- International institutions
 - Regional/preferential trade agreements
 - Global: GATT/WTO

Institutional Adaptation

- Enterprise/plant management adapts to support geographic dispersion of production
 - Command and control system
- Integration/disintegration of enterprises
 - Intellectual property
 - Coordination of production processes
- Role of government in trade facilitation

Lessons from the 20th Century

- Socialist and ISI strategies failed.
- Export-led growth worked, but has evolved into new forms of integration of global production and trade patterns.
- ISI and ELG strategy based on “old” industrialisation is no longer feasible or desirable.

Latin America: 1950-1980

- ISI development strategy
 - Developed industrial sectors and mastered technologies
 - Achieved industrialisation and growth
- Inhibitors
 - Periodic macro crises
 - Increasing inefficiencies in production
 - Strains on institutional and political systems

Latin America: 1980s and 1990s

- 1980s: Debt, macro, and political crises.
- Period of adjustment
 - Shift in development strategy from ISI to open development strategies
 - Adoption of “Washington Consensus”
 - Some success in achieving macro stability
 - Major changes in political systems.
- Economic performance was disappointing
 - Failed to achieve earlier ISI growth rates

Latin America: 21st Century

- Latin America failed to take part in new trade patterns arising in E&SE Asia
 - Focus on “old” industrial growth rather than “new” engagement in global value chains.
 - Missed opportunities because of focus on painful macro and structural adjustments
- Global economy changed
 - Potential “first mover” advantages

Latin America: 21st Century

- Policy responses: New strategies
- Tentative hypotheses:
 - 1990s strategy of “freeing” economies and then standing aside to let market work its magic was not sufficient.
 - Need for government involvement in defining new strategies to participate in new global economy and manage threats.

Old Versus New Strategies

- Asian success stories: lessons?
 - Roles of institutions and deep integration
- The world has changed. The old strategies are no longer relevant.
 - Cannot replicate history, and should not try
 - Policy space should reflect new realities
- Evolving global system needs managing
 - Must understand forces to manage them

Typologies and Strategies

- **Classify countries**
 - Who can play in the new game?
 - How soon and at what cost? Policy strategy
 - within regional trade, who gains and who loses (the two-speed Asian model)?
- **Classify trade agreements**
 - How well do non-Asian trade blocs function?
 - What are the elements in trade agreements that most promote deep integration?

Getting into the Game

- Implications for countries who cannot play the game, but have to compete with those that do (e.g., Africa).
 - Nature of impediments
 - Long-term versus short term strategies
 - Standing on the sidelines is not an option
- Given the new players, do the global rules need changing? How?

New Institutional Economics

- Performance criteria and system evaluation by polity
 - Efficiency and growth versus distribution
 - Social and economic mobility
 - Who bears adjustment cost?
 - Who bears risk?
- Role of policy: who is responsible?
 - Local, national, international

Tradeoffs

- Facilitators versus shock absorbers
 - Competition for scarce resources
 - Some are complementary
 - Transfer programs conditional on school attendance
 - India: Public works anti-famine programs
 - Need to consider micro-based shock absorbers within an economywide strategy
 - Narrowly micro focused, pro-poor development strategies may do neither

New Trends: Growing Inequality

- Global trend of increasing inequality
 - Worsening relative distribution of income within and across countries
 - Rise of hyper-rich in many countries
- Response of poverty reduction to growth is lower than in past.
 - Growth is still important, but redistribution is also needed

New Trends: Global Public Goods

- New development strategies have to operate in a more interdependent world
- Global public goods and market failures
 - Global warming
 - Public health: aids, Avian flu, etc.
 - Pollution
- Requires international response

Conclusions

- Continuing modern economic growth
 - Investment: national and global
 - Rapid technological change and productivity growth
 - Globalization and international trade
 - International division of labor
- Evolution of Parsonian “structures”
 - Personal, social, institutional, and economic

Conclusions

- History has not ended yet
 - Continued evolution of economic systems. Mixed “isms”.
 - Continued problems:
 - Financial crises
 - Many failures: process is mysterious and delicate
 - Global externalities (e.g., climate change)
- Much research still to do