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

- Social Structures
- Economic Structures
- Personality Structures
- Institutional Structures
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

  - 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
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

Intra-regional trade/GDP, 2002

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 20\textsuperscript{th} 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