

EXPLAINING UNEVEN DEVELOPMENT

Technological change, creative destruction and the
challenge of inclusive development

E.A. Brett

Department of International Development
London School of Economics

- Under monopoly stability conditions become indeterminate; and the basis of which economic laws can be constructed is therefore shorn away....It is... only possible to save anything from this wreck, and ... the threatened wreckage is that of the greater part of general equilibrium theory — if we can ... suppose ... **that *marginal costs* do generally increase with output at the point of equilibrium.** [T]hen the laws of an economic system working under perfect competition will not be appreciably varied in a system which contains widespread elements of monopoly.

Hicks, (1946) *Value and capital* (*Emphasis added*)

- The normal case of modern industry [involves] an increasing productivity of labour and the operation of a larger quantity of means of production by fewer labourers.

Marx, (1894) *Capital*, vol. III.

ISSUES AND OUTLINE (1/2)

- Global economic relationships are now primarily mediated by open market systems whose success depends on liberal theoretical claims about their ability to maximise equity and inclusion as well as economic growth.
- The current crisis, like its predecessor in the 1930s, is not only falsifying their empirical predictions, but also forcing us to revisit the structuralism traditions based on the work of List, Marx, Keynes and Schumpeter, that showed why free markets must generate inequality, exclusion and instability given the existence of economies of scale, unless they are subordinated to effective social and political controls.
- I used a radical version of these arguments to explain the major crisis in the early 1980s; I will now return to this argument, correcting some of the misjudgements I made then, but also demonstrating its relevance to the intensifying problems of exclusion and instability that dominate the global system. I will do this in five stages –

ISSUES AND OUTLINE (1/2)

First identify the key assumptions that underpin the liberal free market case;
Second, show that their validity depends on technological and organisations assumptions about diminishing returns to scale, that do not hold in the real world and therefore, as Hicks claimed that they must, have had 'must have very destructive consequences for economic theory' and practice;
Third, identify the market driven processes that do offset some of these tendencies to centralisation and concentration that explain the positive achievements of late capitalism, and perverse consequences of many of the state-led programmes that produced the structuralism crisis in the late 1970s;
Fourth, outline the disruptive consequences of scale economies operating at the plant, firm and regional levels;
Fifth, identify their policy implications for the stability of the global system, unemployment and marginalisation, and state fragility and political conflict

FREE MARKETS, ECONOMIC EFFICIENCY AND INCLUSIVE DEVELOPMENT (1/3)

- Liberals use Hume's theory of the balance of payments, Ricardo's theory of comparative advantage and Arthur Lewis' model of a labour surplus economy to explain why free trade between rich and poor regions should maximise growth and inclusion in both, and produce Pareto optimal even development.
- **Hume** showed that a chronic balance of payments surplus in a region with full employment will generate surpluses that will increase costs and prices if they are invested at home, leading to increased imports from, or exports of capital to lower cost regions.
- **Ricardo** showed that free trade would benefit high and low cost regions since each could expand production of their lower cost product, export the surplus to their neighbour, reduce production of their higher cost product and import the shortfall.

FREE MARKETS, ECONOMIC EFFICIENCY AND INCLUSIVE DEVELOPMENT (2/3)

Before Trade

Costs are higher for both wine and cloth in England, but only 10% higher in cloth and 30% higher in wine. Hence both benefit from expanding the lower cost product:

	Cloth	Wine
High Cost Country England	Lower Costs 100 per unit	Higher costs 110 per unit
Low Cost Country Portugal	Higher Costs 90 per unit	Lower Costs 80 per unit

After Trade

Thus everyone gains after the short-term costs of restructuring have been absorbed, provided we have full employment and no technical change in Portugal.

	Cloth	Wine
England	Expands output, exports surplus to Portugal, absorbs labour from wine	Reduces output, imports wine from Portugal, transfers labour to cloth
Portugal	Reduces output, imports cloth from England, transfers labour to wine.	Expands output, exports surplus wine to England, absorbs labour from cloth

FREE MARKETS, ECONOMIC EFFICIENCY AND INCLUSIVE DEVELOPMENT (3/3)

- **Lewis** can then claim that free trade will force capitalists to shift resources from regions where labour is fully employed to those where it is underemployed. They will introduce new technologies, pay workers less than those in their home economy, but more than they were earning locally, thus increasing output and profits. This will continue until all underemployed labour has been absorbed, equalising wages and productivity between rich and poor regions.
- These arguments tell us why capitalist competition has revolutionised production by transferring new technologies from first-comers to late-comers over the past 400 years, and explain the counter-productive effects of perverse state interventions that blocks these effects, including agricultural protectionism in DCs, and over or under-valued exchange rates in in China and the Eurozone.
- *Liberals accept the need for a strong state, but limit its role to the maintenance of the conditions needed to facilitate stable market relationships by guaranteeing property rights, regulating open access resources and externalities, creating safety nets and providing public*

TECHNOLOGICAL CHANGE, MARKET FAILURE AND INEQUALITY (1/3)

Liberal theory assumes full employment and constant or diminishing returns to scale, but if free trade leads to labour-saving technological change that generate increasing returns, it will block the equilibrating processes outlined above, as we can see by introducing labour saving-technology into the Portuguese wine industry:

After Trade with Technical Change

	Wine	Cloth
Portugal	Expands output, reduces employment, and exports surplus labour to Cloth.	Increases output using surplus labour from wine. Richer Portuguese wine growers absorb increased output.
England	Reduces output. Unemployment grows.	Demand and output falls, Unemployment increases further.

Portugal gains and England loses until all surplus labour in Portugal has been absorbed, and this will continue for as long as new technology in either sector allows it to keep its cost below its English competitors by expanding its output and exports.

Portuguese surpluses will not move to England since its capitalists will invest at home for as long as exploiting scale economies at home is more profitable than exporting capital to England.

TECHNOLOGICAL CHANGE, MARKET FAILURE AND INEQUALITY (2/3)

- This relationship will collapse when unemployment in England reduces demand for Portuguese exports and produces a systemic crisis. England should increase exports to Portugal, but will not do so unless its producers can out-compete those in Portugal.
- Here rapid technological change will increase output and potential welfare, but also tendencies to monopoly, inequality and breakdown, so incorporating it into does explain some of the most challenging issues confronting modern society – the constant destruction of old firms, barriers to entry, structural unemployment, balance of payments disequilibria, and unsustainable environmental degradation.

TECHNOLOGICAL CHANGE, MARKET FAILURE AND INEQUALITY (3/3)

- *Liberals attribute these problems to perverse interventionist policies. We will argue that they actually stem from what Marx and Schumpeter saw as the 'natural' tendency to economic concentration and inequality generated by competitive capitalism, and can only be resolved through collective interventions designed to restructure and not just regulate market systems.*
- However, we also cannot dispense with free markets, as the Command Economies discovered in the 1980s, so we first need to identify their strengths before exploring the contradictory consequences of different kinds of increasing returns, and some of their complex policy implications.

THE BENEFITS OF MARKET SYSTEMS (1/2)

- Diminishing returns will destabilise social systems unless they are accompanied by what Marx called 'countervailing tendencies' that encourage new entrants and generate the resources needed to support social cohesion.
- These do exist, and can be blocked by perverse anti-market policy interventions. They enable us to explain three crucial developments that have redistributed resources across the post-war world –
 1. the transfer of new technologies to new regions;
 2. the replacement of old firms by new ones;
 3. and the ability of successful societies to maintain social order, create safety nets and sustain increasingly complex ethical and cultural activities.
- These processes are blocked by perverse policy interventions, but facilitated by competitive processes that increase demand, encourage the emergence of new firms, and strengthen state and civic institutions.

THE BENEFITS OF MARKET SYSTEMS (2/2)

- **First**, earlier failures to transfer of productive capacity to poor countries can be attributed to protectionism in DCs and domestically imposed distortions and not just infant industry problems, as the recent shift of industry from DCs to NICs shows.
- **Second**, the growth in wages and investment in the high-technology sector generate additional demand for inputs and consumer goods that sustain many old and new jobs in their suppliers that can include small enterprises in the informal sector.
- **Third**, free trade allows scale- and skill-reducing technological change enables new companies to enter old or create new sectors. Command planning suppressed innovation in the east while competition destroyed old computer and telephone monopolies and facilitated the IT revolution that has created millions of jobs and increased the competitiveness of small enterprises.
- **Fourth**, the productivity gains created by modern technology are indispensable for the provision of the public goods and ethical and cultural services provided by the state and civil society. These not only sustain economic systems but also absorb a growing proportion of the labour force, and make a fundamental contribution to social inclusion.

SCALE ECONOMIES, CREATIVE DESTRUCTION AND INEQUALITY (1/4)

- Yet market-based systems cannot manage all the disruptive consequences of increasing returns that operate at the plant, firm, and regional levels of the economic system and produce different practical and policy consequences at each.
- **First**, least-cost production depends on **plant-level** scale-economies determined by best-practice technology. Diminishing returns set in once any plant reaches its maximum capacity, creating a need for more plants if demand increases. Free markets enable these plants to move to new areas, facilitating the emergence of new industrial centres and rapid growth in new NICs, as liberal theory predicts.

SCALE ECONOMIES, CREATIVE DESTRUCTION AND INEQUALITY (2/4)

- However, these plants can marginalise less efficient local competitors, devalue local skills and cultural and organisational practices and threaten the distribution of wealth and power. They increase demand, but this will only be met by local firms that are:
 1. internationally competitive,
 2. depend on immobile resources or involve high transport costs;
 3. scale-reducing technologies like better seeds or mobile phones;
 4. or can reduce wages or lengthen the working day.
- Unless these very exacting conditions exist, more demand will increase imports not jobs. Devaluation is the preferred liberal option, but is not possible within closed national economies or 'currency unions', and reduces wages rather than productivity.

SCALE ECONOMIES, CREATIVE DESTRUCTION AND INEQUALITY (3/4)

- **Second, multi-plant firms** derive scale economies from privileged access to research, credit, marketing and supply-chains that give their subsidiaries a competitive edge over single-plant firms. Transferring their plants to LDCs accounts for the dominant role of TNCs in the rapid growth in new economic zones that has taken millions out of poverty.
- However it has also facilitated job destruction in DCs, marginalised weaker local producers in the centres where TNCs do invest, *and in the much larger areas that they ignore.*

SCALE ECONOMIES, CREATIVE DESTRUCTION AND INEQUALITY (4/4)

- **Third**, economic competitiveness depends on '**economies of aggregation**' at the regional or national levels that give local firms privileged access to supply chains, human capital, infrastructure and public order.
- These market-driven processes shift investment and skills from poor to rich societies, producing:
 1. the widening gap between the richest and poorest societies,
 2. the continuous shift of population from rural to urban areas,
 3. the brain-drain from poor to rich countries,
 4. and the existence of repressive controls over labour migration.
- *They also explain the key role of civic and political institutions in determining the economic competitiveness of plants and firms in strong and weak regions, and the tendency for open markets to encourage the flow of resources from poor to rich regions unless they are offset by compulsory collective transfers.*

POLICY IMPLICATIONS (1/4)

- Competitive markets maximise innovation and growth, but must be consciously controlled if they are not to produce uneven development, exclusion and periodic crises as Marx, Schumpeter and Polanyi predicted.
- The crisis of structuralism in the 1970s showed how difficult it is to do this, but the new crisis has now discredited many liberal claims and forced us to look for a middle way between too much and too little control that encourages innovation, but also ensures an equitable and sustainable distribution of its benefits.
- This view is widely accepted; this analysis does have important policy implications in four key areas :
 1. chronic balance of payments disequilibria;
 2. structural unemployment;
 3. state failure and intensifying political conflict;
 4. and unsustainable environmental degradation.

POLICY IMPLICATIONS (2/4)

First, uneven development has produced unsustainable balance of payments disequilibria with rapid growth and reserve accumulation in the strong countries, import compression and fiscal deficits in weak ones, and global deflation.

- These problems could be alleviated by eliminating the controls that sustain chronic surpluses in China and Germany, but revaluation without aid to, or protectionism in, the weakest states would not be enough.
- The failure to support war-damaged countries in the 1920s helped to precipitate the depression, while post-war reconstruction of Europe and Japan depended on Marshall aid and American military expenditure. Successful industrialisation in the NICs was depended on managed structuralism policies, and not pure market forces.
- The IFIs need formal rules that put as much pressure on surplus countries to reflate, as they now do on deficit countries to deflate as Keynes recommended.

POLICY IMPLICATIONS (3/4)

Second, these macro-interventions must therefore be backed by effective poverty-reducing programmes at the micro level or creative destruction will continue to increase the reserve army of labour in the 'informal sector' in poor societies; and the benefit-dependent underclass in rich one.

- Current aid programmes do emphasise poverty focused services and small business development, but still fail to acknowledge the negative impact of free trade on infant industries, and need to give them better access to world markets while protecting them from destructive competition.
- Indeed, full employment in strong societies has not depended on free markets, but on compulsory transfers that have created public sector jobs, and not only maintained social cohesion, but also maintained demand for the private sector.

POLICY IMPLICATIONS (4/4)

Third, the restructuring markets has radical political implications. Liberalisation eliminated the interventionist policies that sustained the socialist and social democratic movements that created full employment and even development after the war.

- The crisis of neo-liberalism has provided us with an opportunity as well as a threat, because it is forcing us to revisit, but significantly improve, the redistributive policies that not only increased social inclusion, but also rescued the world from the deflationary spiral that now threatens to undermine many of our recent achievements.

Fourth, most threatening of all, but too complex and intractable to address here, unsustainable environmental degradation and loss of biodiversity stemming from market-driven need to adopt least-cost production processes.

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THANKS FOR THE ATTENTION