



Aalborg Universitet

AALBORG UNIVERSITY
DENMARK

Innovating 'Innovation', Competing 'Competitiveness': A Critical Political Economy Approach to **Social Innovation System**

Juego, Bonn

Publication date:
2009

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Juego, B. (2009). Innovating 'Innovation', Competing 'Competitiveness': A Critical Political Economy Approach to *Social Innovation System*. Institut for Historie, Internationale Studier og Samfundsforhold, Aalborg Universitet.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

GDS
Global Development Studies

Aalborg University
Fibigerstraede 2-12a
DK-9220 Aalborg East

Phone: +45 9940 8404
Fax: +45 9635 0044

Mail: gds@lists.ihis.aau.dk

**Innovating ‘Innovation’,
Competing ‘Competitiveness’:
A Critical Political Economy
Approach to *Social* Innovation
System**

Bonn Juego

GDS RESEARCH SERIES

WORKING PAPER NO. 3

ISSN: 1902-8733 [print]

© 2009 Bonn Juego
**Innovating ‘Innovation’, Competing ‘Competitiveness’: A Critical Political
Economy Approach to *Social* Innovation System**
Global Development Studies (GDS)
Aalborg University
Denmark
GDS Research Series
Working Paper No. 3

ISSN 1902-8723 [print]

Published by
GDS & Department of History, International and Social Studies
Aalborg University

Distribution
Download as PDF on
<http://www.gds.ihis.dk/>

Lay-out and word processing
Cirkeline Kappel

The Secretariat
Global Development Studies
Fibigerstraede 2, room 99
Aalborg University
DK-9220 Aalborg East
Denmark
Tel. + 45 9940 8310
Fax. + 45 9635 0044

E-mail: gds@lists.ihis.aau.dk
Homepage: <http://www.gds.ihis.dk/>

Innovating ‘Innovation’, Competing ‘Competitiveness’: A Critical Political Economy Approach to *Social Innovation System*^{*}

Bonn Juego^β

Nature builds no machines, no locomotives, railways,
electric telegraphs, self-acting mules, etc.
These are products of human industry;
natural material transformed into
organs of the human will over nature,
or of human participation in nature.
They are *organs of the human brain,*
created by the human hand;
the power of knowledge, objectified.
— Karl Marx (1858)

Introduction

The neo-liberal offensive that has systematically unleashed its forces since the global economic crisis of the 1970s is further deepening not only the digital divide but the social divisions as well. It is done not anymore in the old imperialist fashion of the rich robbing the poor. All is done is to subject and subordinate the poor countries and labour to the imperatives of the market. This is therefore the moment when a more dynamic, socially embedded alternative to development that focuses on production and innovation as drivers of economic growth is most urgently needed.

This essay proposes a critical political economy approach to *social* innovation system that critiques the disembedding of the market from the society, on the one hand, and that attempts to offer an alternative through a progressive project of re-embedding the market forces in the society, on the other. It does so in four (4) inter-related sections. First, it lays down initial propositions for ‘a critical political economy approach to social innovation system’. This proposed approach improvises from the established national innovation system (NIS) approach of the Freeman-Lundvall-Nelson persuasion, with emphasis on the

^{*} Earlier versions of this paper were presented at the Asia-Europe Institute, University of Malaya, Kuala Lumpur in June 2005 and at the *Globelics Academy Ph.D. School on Innovation and Economic Development*, Lisbon, Portugal, 1-12 May 2007. The author is grateful to his classmates and the lecturers in these events and institutions for their invaluable discussion and comments. The usual disclaimer applies.

^β **Bonn Juego** is PhD Fellow in Global Development Studies at Aalborg University, Denmark.

developmental needs of the developing countries and the indispensable role of the workers. Second, it tries to unpack the logic of innovation against the background of the contradictions of market-dependence under conditions of globalisation. It provides a case for the combined and uneven character of development under the global capitalist system with the intensification of the ICT revolution, specifically the progressive potential of technological innovation that is regressively constrained by its dependence on the market. It reveals the wounds of modernity—the widening social divisions and increasing poverty—that are just sealed, and not healed, by the tremendous productive capability of innovation. Third, it attempts to unpack the project of competitiveness being pressed on national economies around the world by the multilateral, international, and regional institutions, and is being implemented by states. It argues that the recent competitiveness project being globally promoted is *for* capitalist market competition. Finally, it concludes with the significance of a critical political economy perspective towards a social innovation system. It then recommends further enquiry worthwhile as an intellectual endeavour and for policy-making, and hints at some prospects for advancing change towards the realisation of real, sustainable development.

A Critical Political Economy Approach to National Innovation System

I propose here a ‘critical political economy approach to social innovation system’ that would serve both as an *intellectual filter* in understanding the dynamics of a social innovation system against the background of the historical evolution of global capitalism and as a *transformative framework* in orienting opposition to the hegemony of neo-liberalism and in promoting development strategies in the developing world. This critical political economy perspective would reveal the limitations and contradictions of innovation as promoted within the faith on global competitiveness, and thereby makes it possible to identify points of weakness which the proponents of alternative futures can exploit.

This proposed critical political economy perspective puts forward six fundamental theses for discussing the dynamics of innovation. First, it sees the history of technological development as closely bounded with the evolution of global capitalism. This suggests that technology is not only path-dependent, but is strongly shaped—but not uniquely determined—by the existing structure as well, in particular the capitalist structure. It therefore adopts Carlota Perez’s (2002) reinvention of the Schumpeterian analysis of the changing relationship between technological advances and financial capital that shapes the pattern of economic cycles. Apart from this highly interactive and direct relationship between technological revolution and finance capital, the model suggests the existence of remarkable dynamic regularities and recurrent sequences of change in the capitalist system. It starts from the proposition that at the irruption of a technological revolution, configured in a particular techno-economic paradigm, all existing industries and activities are modernised. The process of diffusion of this historical moment across the economy constitutes a great surge of development. Each surge that approximately lasts for a half century has two distinct periods (namely, the installation period and the deployment period), which are mediated by a turning point. Each of these periods in recurring sequence then undergoes four phases (with each phase lasting around a decade): irruption – frenzy – turning point – synergy and maturity. As a result, this massive economic transformation involves complex processes of social assimilation which may also require the adaptation of socio-institutional framework to each paradigm, and the eventual need for a process of ‘institutional creative destruction’ for the introduction and diffusion of the next technological revolution (see Perez 2002). Within this broad model, it must be noted that the critical political economy approach proposed here does not embrace technological determinism, but sees the historical specificity of technological revolutions represented in distinct ‘techno-economic paradigms’ as a product of the interaction among technology, politics, society and culture leading to certain economic pattern.

Second, today's historical moment is best characterised as the 'universalisation of capitalism' in which the logics of accumulation, competition, commodification, and profit-maximisation have penetrated to the depths of human life, nature, and all social relations (Wood 1997). This also means the universalisation of the contradictions inherent in the capitalist system, in particular the cumulative yet uneven character of development under global capitalism. As a result of this phenomenon of combined and uneven development, societies in the world develop at an uneven pace resulting in the coexistence of both primitive and advance features of the society across and within nations. These varying domestic configurations suggest that it may give rise to distinct arrays of interests and distinct strategies for technological development from society to society in the world.

Third, all capitalist social relations—including the processes of innovation, production, appropriation and distribution—are 'mediated at all points by exchange' (that is, by the market). This dependence on the market is one of capitalism's fundamental contradictions.¹ Capital, labour, and technology—individually or in relation to one another—are dependent on the market. Their market-dependent nature is a *fundamental condition of survival and social reproduction*, on which it imposes its imperatives of competition and profit-maximisation (Wood 2001: 275-93). There is a dependent relationship between capital and labour; but this relationship is reinforced by the market, guaranteeing a structure of the real subsumption of labour to capital. Workers find themselves in a labour situation thoroughly permeated by market imperatives. Capital, on the other hand, needs to compete with one another for profitability and, arguably, often leads to the preservation of lower labour cost. Further, under conditions of contemporary global capitalism, as depicted in the process of globalisation, innovation is now systematically seen as a process of perpetual technological development that is constitutive of the market.

Fourth, this process of the disembedding of the market from the society is a central logic of the capitalist system that makes it a unique system of appropriation, which is very much private but one that does not carry any public responsibility. This suggests a two-fold contradiction in capitalism of the systematic separation between 'the economic' and 'the political'. On the one hand, its conduct of business is a social relation that implicates the whole of

¹ Ellen Meiksins Wood (2001) however argues that this 'market dependence' is 'the fundamental contradiction' in capitalism that is not present in any other social systems like feudalism and socialism. Hence, this argument implies that it is not 'class struggle' which is the fundamental contradiction of capitalism, as is conventionally understood by many of the system's critics. For her, class struggle is only constitutive of the contradictions of market dependence. 'Contradictions' here refer to the system's internal logic (i.e., the capitalist market), to the system's dependence on its own structural relationships that produce conflict and incoherence, problems and vulnerabilities.

society. But at the same time, public institutions exist apart from private appropriation and are mobilised to sustain this system of private property that carries no public responsibilities (Wood 2001).

Fifth, there is therefore a need to re-embed in and subordinate the market forces to the society that now controls the world towards putting an end to uneven development and the realisation of *real* development, a qualitative improvement to the lives of all. The governance of innovation, and technology as its material manifestation, is key to this task of re-embedding the market forces in the society as the development of the material forces of production brings about social change. However, the ongoing ‘great transformation’ of pre-capitalist social forms into a capitalist market economy that is increasingly leading to the disembedding of the market from the society (Polanyi 1978) has likewise transformed innovation from a social endeavour to a task to be satisfied by the market forces.

Sixth, this task of governance of the market and of innovation by the society would be best accomplished through a *social* innovation system, the existence of institutional synergies necessary for a socially embedded innovative activities and economic development. This improvises on the National Innovation Systems pioneered by Christopher Freeman and later Bengt-Åke Lundvall (1992) and Richard Nelson (1993) in a way that stresses the ‘social’ in innovation systems—that innovation is a social endeavour that implicates the society. It incorporates all actors in the society—the state/government, firms, supporting institutions domestically and abroad, and the people themselves—in the process of innovation. And significantly, it requires the extension of the long-established ‘triple helix’ model of states, firms, and universities in understanding the dynamics of innovation to introduce an indispensable set of actors: workers. As Marx (1858) puts it in his understanding of technology, as opposed to nature, as central to social production and development:

Nature builds no machines, no locomotives, railways, electric telegraphs, self-acting mules etc. These are products of human industry; natural material transformed into organs of the human will over nature, or of human participation in nature. They are *organs of the human brain, created by the human hand*; the power of knowledge, objectified. (p. 706)

Unfortunately, this ‘tacit’ understanding has been marginalised in most literatures on technology, innovation, and development today and thereby systematically excluding the workers without whom innovation cannot be realised.

Hence, as an analytical tool, the *critical* political economy approach to social innovation system does not only deal with relations of exchange that merely sees

the surface appearance of phenomena as in the ‘classical’ political economy school; *critical* political economy focuses on class relations among human beings and of their underlying causes. The critical political economy perspective deals with issues of class and power inherent in the history and dynamics of innovation. It thus brings the ‘social’ back in the analysis of innovation, that is the idea that interdependent actors cumulatively influence, affect, and implicate each other in their shared space called the society (for an interesting historical account on the works of Antonio Serra alluding to these concepts of increasing returns and cumulative causations on economic development, see Reinert and Reinert [2003]). As a transformative tool, it raises the consciousness of all the actors in the society of the nature of the social embeddedness of innovation. It promotes the nurturing of *wisdom*, of care and concern and a high sense of responsibility for the society, alongside knowledge generation and creation in a learning economy. For the developing world, this would mean the resistance against the hegemony of neo-liberalism that promotes deepening capital accumulation, rather than of the ‘assimilation’ of development strategies, alongside the building of local technological capabilities.

Rising from the abstract to the concrete, the next sections deal with the hegemonic discourses on innovation and competitiveness under conditions of capitalism in contemporary political economy.

The Market-Dependent and Socially Disembedded Nature of Innovation under Capitalism

The progressive potentials of technological innovation in creating growth and wealth for humanity are well known. Today’s techno-economic paradigm is characterised by the intensification of ICT, which offers ‘tremendous potential’ and ‘great promise to raise new growth opportunities as well as bring greater equity’ (see Rasiah and Oyeyinka 2004: 2). This ICT-led development potential has however become an empty force and an empty promise amidst the growing national inequalities and poverty around the world (see Singh and Dhumale 2000). With the advent of the 21st century which is characteristic of the maturation of the ICT as the contemporary techno-economic paradigm since 1971, it is believed that the ‘new economy’ has the capability for generating sustained growth. This popular belief was formed by the globalisation of the two dominant discourses at that historical juncture: (i) the foreseen perpetual increases of productivity due to the promises of the information revolution and, (ii) the faith in the financial markets in unleashing the capitalist ethos for wealth generation. The collapse of the Internet bubble has however frustrated many of the then optimistic spectators of the rise of information revolution and finance capital. As Perez (2002) argues this kind of euphoria brought about by the excitement in new technology and in financial mania in the global economy,

eventually leading to a recession, is nothing unprecedented. The history of technological revolutions, which is inescapably linked with the power of finance capital, is one of continuity of the nature and logic of the capitalist system, of recurrence of its historical structure. Thus, what remains unchanged since the industrial revolution in the 18th century is the long held capitalist principles of letting the market forces be the sole director of the fate of human lives.

The current techno-economic paradigm is reinforcing the *combined* and *uneven* character of development under global capitalism. In this epoch of globalisation, the emergence of the three macro-regions for capital accumulation has become apparent: the East Asian region centred on Japan and the rising economies of China, South Korea, and India; the North American region centred on the US; and the European region centred on the EU. Africa seems to be of no interest to the global system (see Oyeyinka 2003; Lall 2005). Latin America remains to be an economic laggard which ‘seems to be living in a distributional world of its own, acting as though it were on a different planet’—even though its wealth and labour remain targets for exploitation (see Palma 2003; also Lall et al. 2004). Moreover, the international private capital movements across the globe in the era of globalisation for the period 1980-1997 suggests increasing inequality in inter-country development—specifically, while there is improvement in the material conditions of the majority of developing economies, those located in Africa and South Asia have remained seriously disadvantaged (see Rasiah 2000). Interestingly, even mainstream economists like Krugman finds that the wonders of technology are ‘not so wondrous’ at all as shown by recent economic data (see Krugman 1996) and that while the internet revolution props up growth it does not necessarily lead to stability (see Krugman 2001).

The widening of social divisions is resonated in ownership of and access to technology and finance. The widening gap is both a consequence of global inequalities arising from the capitalist international order, and in turn becomes reinforcing sources of its perpetuation. This is so because this is how technology is organised in a regime of capitalist market-led development: ‘Access to technology in the capitalist market demands access to capital’ (Freeman 2001: 209). Market is said to be the key factor in innovation. Technology, which is the material manifestation of innovation, is the end product of science. While science, especially in its conceiving stage of idea, is free, technology is commodified. Capitalism treats technology not as ‘power of knowledge objectified’, but as power of knowledge *commodified*. Innovation is thus mediated at every point by exchange (that is, by the market), and its self-reproduction likewise depends on the market.

As has been suggested above, the science behind the technology is by nature neutral; but the economic structure, to a large extent, defines—but not uniquely

determines—its potentialities and propensities. Under conditions of capitalism, technical change creates diversity in unit costs within sectors. There is a tendency for capitalists to delay introducing new equipment to a particular industry to achieve the optimal trade-off between current operating costs and losses on capital value (Weeks 1999). For mature industrial capitalists, lack of knowledge of superior techniques is therefore not a fundamental problem, nor their lack of finance to acquire them. The problem is manifested in the enduring tension between the forces and relations of production. While technical change offers efficiency to produce commodities, techniques ultimately depend on capitalist rationality grounded on the iron law for profit and expansion, either they are the ‘profit-maximisers’ of the neo-classical school or the ‘profit-seekers’ of the evolutionary school. In a word, this logic of profitability somehow delays technological innovation. Of course, there are risks involved in delaying innovations especially when new capital comes to play. This also means that the logic of profitability of businesspeople, especially the MNCs that are seen today as the force of innovation, could make innovation sterile and uneven development prevalent. As Reinert (2005) rightly argues, *‘From [a] businessman’s point of view the very simple explanation for the lack of investments in poor countries is the lack of profit opportunities’*. This capitalist rationality suggests the contradictory potential of technological innovation for poorer countries, and in particular the highly concentrated FDI needed for their development. Pippa Norris (2000: 3) observes that ‘[t]he 29 OECD member states... contain 97 per cent of all internet hosts, 92 per cent of the market in production and consumption of computer hardware, software and services, and 86 per cent of all internet users’.

Further, the claim of Chris Freeman and Carlota Perez (1988) that the new techno-economic paradigm offers a wide-ranging scope of diversity, and hence opening ‘windows of opportunity’, while rational and valid, appears to be illusory at this historical moment globally dominated by market imperatives and global standardisation that are enforced and compelled at the local, regional, and global scales. This also means that the promise of increasing returns on the process and practice of innovation is likewise dependent on the market. For instance, the controversial issue on intellectual property rights globally enforced through the creation of the Trade-Related Intellectual Property Rights (TRIPS) Agreement has become an instrument of the developed countries in maintaining the status quo where they remain the dominant, and the poor countries in perpetual subordination. TRIPS has become the legal license (and a reflection of double-standard as well) of the developed countries in ‘pulling up the ladder’ by protecting their private intellectual property regimes, and hence depriving the poorer countries of the space to catch up with development and the development strategy they were once pursuing when they were still catching up (see Chang

2002, 2003). This resonates the relentless drive for capital accumulation, rather than for assimilation, under global capitalism.

The progressive potential of technology and innovation but is actually resulting in a regressive reality of uneven development is worsened by the systematic exclusion of most actors in the society in the system of innovation, in particular the workers who comprise majority of the population and without whom the system cannot work. Production is realised through a prior exercise of human imagination: human desires, purposes, and intentions are mobilised towards an end. Under industrial capitalism, however, not everyone has access to this process but a few; hence, the mass population is denied access to the full play of human creativity, subjecting them into an alienating situation (Harvey 1992). This traditional understanding on social exclusion vis-à-vis the process of innovation may not be absolutely valid today. But it may also be true that there still exists this kind of exclusion in some industries or firms where only a select few do the imagining and designing, and make all the decisions and set up technologies that regulate the actions of workers. Moreover, workers today may have been *included* in the process of innovation but they are *excluded* in enjoying the fruits of innovation. The 1995 *World Development Report* recognises this tragic reality of rising unemployment and poor labour conditions existing at a time of rapid growth in average levels of productivity per worker and a rapid growth in world trade amidst reductions in costs of movement, increasing trade liberalisation, and rising international flows of investments in the form of transnationally integrated production systems (see also Singh and Zammit 2000).

This reality of the market-dependent and socially disembodied nature of innovation under conditions of capitalism contradicts one of the main assumptions of neo-classical economics of the universal access to the means of innovation and the existence of perfect competition. Paul Samuelson's (1948, 1949, 1953) *factor-price equalisation theorem*, which remains to be a dominant discourse in economic integration influencing policy formulations worldwide, posits that free trade among countries would result in equality in prices paid to the factors of production, namely capital and labour, all over the world. Its essential assumptions include: (a) that all countries have access to the same technology of production, (b) that output results from capital and labour, which can be substituted for each other in the production process; (c) that demand structure in the domestic economy in each country is the same; (d) that changes in wage rates as well as profit rates are not affected by the measures of the 'factor-intensity' of a product, and (e) that domestic markets are perfectly competitive. However, the falsity of each of these assumptions has been empirically and apparently proven over the years, specifically the assumptions of equality and perfect competition (see Weeks 1999; Reinert 1994, 2003). First,

the economic policies being pressed on by global capitalist institutions and developed economies to developing countries ‘fail to address the fundamental blind spots of neo-classical economics’, blind spots that prevent poor countries to develop (Reinert 2005):

- a) its [neo-classical economics] inability to register qualitative differences, including the different potentials of economic activities as carriers of economic growth,
- b) its inability to register synergies and linkages, and
- c) its inability to cope with innovations and novelties, and how differently these are distributed among economic activities.

Second, the factor-price equalisation theorem has tremendous implications for labour who comprise majority of the world’s population. Its inner rationality is that it is rational for wages to fall in the technologically developed countries (where wages are higher because labour is relatively less abundant). It also follows that it is irrational for labour to resist wage cuts (Carchedi 2001: 36-59). It thus gives intellectual justification to the hegemony of technologically leading countries, both in technologically advanced sectors and in decreasing wages.

The universality of market imperatives, and their concomitant contradictions, intensified in the current ICT techno-economic paradigm does not lead to the reproduction of high-tech societies across the world, but rather to the reproduction of the ‘social antagonisms that spring from the natural laws of capitalist production’. This process of combined and uneven development means that the logic of class struggle is increasingly global in character. Accordingly, this is contrary to the assertion of Manuel Castells (1996-1998, 2000) that today’s dominant mode of production referred to as ‘informational capitalism’, which is characterised by the tremendous annihilation of space through time, is leading to the demise of class inequalities. Castells’ obsession with the rise of network society in which the ‘space of flows’ is annihilated through ‘timeless time’ glosses over the contradiction of the market-dependent nature of innovation. Since capital is dependent upon the market for its self-reproduction and survival, the market thus compels it to drive for innovation while at the same time obstructing its own development. As Marx (1971: 50) puts it:

The *real barrier* of capitalist production is *capital itself*. It is that capital and its self-expansion appear as the starting and the closing point, the motive and the purpose of production; that production is only production for *capital* and not vice versa, the means of production are not mere means for the constant expansion of the living process of the *society of producers*.... The means – unconditional development of the productive forces of society – comes continually into conflict with the limited purpose, the self-expansion of existing capital.

Competitiveness for Capitalist Market Competition

Any development project is always *for* someone and *for* some purpose. Hence, it is a worthwhile endeavour to unpack the logic behind, and within which, the hegemonic discourse on competitiveness project is being pressed on national economies around the world by the multilateral, international, and regional institutions, and is being implemented by states.

The idea of national competitiveness has become a key theme in assessing a country's economic performance. The concept of competitiveness has been evolving over time. It has become a highly contested concept; corrupted, abused, and misused (see Reinert 1994; Lall 2001a, 2001b). In fact, the hyperactivity on it has elicited debates among economists and policy-makers as to its meaning and usefulness. Paul Krugman (1994), a popular mainstream economist, has warned of the dangers of the 'obsession' to competitiveness, and has argued that competitiveness is a meaningless concept. What matters, Krugman argues, is optimal allocation of resources, and hence the analytical focus must be on 'productivity'. This has provoked a response from the camp of Stephen Cohen (1994) who argued for the analytical utility of said concept especially for comparative purposes among economies themselves. The late Sanjaya Lall (2001a, 2001b) also argued that there is a case for 'competitiveness analysis' in the real world that focuses on 'imperfect competition, external economies or both', as opposed to Krugman's 'growth analysis'. Erik Reinert (1994) likewise argues for the importance of the concept of competitiveness in understanding national and global distribution of wealth. Proposing a Schumpeterian understanding of competitiveness which is compatible with that of the Organisation for Economic Co-operation and Development (OECD) as an economic policy that raises living standards, Reinert argues that the key element behind competitiveness—divorced from productivity and efficiency—is the pursuit of 'dynamic imperfect competition', which is an anti-thesis to the neo-classical assumption of perfect competition that renders the concept of competitiveness meaningless.

Amidst this series of discourse among economists, the concern on competitiveness from policy-makers and influential multilateral organisations and international financial institutions is real, and is currently exercised and enforced. Perhaps, the most cited and widely-accepted definition of competitiveness is from the OECD: 'the degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term' (Garelli 2003). Stéphane Garelli, the Director of the World Competitiveness Project 2003, makes a case that nations compete to 'increase their standard of living'. However, this appears to be a *normative* stance on the issue of competitiveness, which is insensitive to

today's reality economics and bereft of a consciousness of the capitalist ethic of profitability and of the structural logic of contemporary global capitalism. First, the competitiveness agenda of international financial institutions for the developing regions of Latin America and Asia stresses labour market reform—hence, the creation of a 'flexible' labour force and the imperative of labour productivity—as a key strategy to the establishment of competition cultures and the promotion of competitiveness.² Second, competitiveness underlies the political-economic logic of capitalism in general and of free capital mobility in particular.

IDB and ADB: Labour Productivity as an Essential Element in Competitiveness
Contemporary economic reality—and to a large extent the business ethic itself—tells us that labour productivity is essential to competitiveness. This is explicit, and straightforward, from the influential multilateral institutions that are staunch proponents of competitiveness themselves such as the Inter-American Development Bank (IDB) for the Latin American region and the Asian Development Bank (ADB) for the Asian region. The IDB has switched its advocacy 'from the extraction of absolute surplus value to relative surplus value' (Cammack 2004: 262):

No productive sector can expect its competitiveness to be based on diminishing the well being of its workers. Even in the most labor-intensive sectors, the possibility of competing and expanding depends not on workers' salaries but on unit labor cost; that is to say, on the combination of the effective cost per worker and the productivity of labor. (IDB 2001: 4)

The ADB's competitiveness report in the *2003 Asian Development Outlook* is clear-cut on labour productivity as constitutive of competitiveness:

[N]ational competitiveness has become something of a buzzword: in common parlance, competitiveness is used to cover almost any aspect of market performance and its overuse may detract from its importance. In fact, the key variable for the economic analysis of competitiveness is the growth of labor productivity since this, ultimately, is the main determinant in raising living standards. This is what competitiveness is about. (ADB 2003: 206)

ADB's understanding of competitiveness is totally different from that of the OECD's raising living standard rhetoric and that of Reinert's conception that is 'devoid from issues of productivity and efficiency'. The ADB's strategy in the

² It must be asserted that what is being presented here is the project of competitiveness from the point of view of the powerful international financial institutions. A critical political economy perspective, before it provides a critique on the status quo and an alternative to it, tries to see the world from the point of view of business, from the point of view of the forces of capital.

institutionalisation of competition culture (through increasing firm-level productivity and the provision of necessary institutional support) on the catching-up states of Asia is bold and daring, statements that could have actually come directly from Marx's *Capital* that is a critique of the political economy of capitalism:

Why does raising firm-level labor productivity matter? Because this is how the profit motive is put into practice at that level. In order to increase profits, firms must increase labor productivity, and it is for this purpose that new machines and methods of production are introduced, leading to an increase in the capital/labor ratio. Increasing labor productivity is the key to ensuring survival and long-run growth both at the firm and national levels, and this is the essence of competitiveness. Figure 3.2 summarizes the two channels used by firms to increase labor productivity, i.e., technical and allocative efficiency, and technical progress. These two channels are, in practice, complementary and mutually reinforcing. (ADB, 2003: 215)

WEF and IMD: A Capitalist Free Market-Oriented Competitiveness

Reinforcing labour productivity as an essential strategy in building-up competitiveness is the free-market orientation underlying it. At present, there are two leading annual competitiveness indices in the world—namely, the Geneva-based World Economic Forum (WEF) that publishes *The Global Competitiveness Report*, and the Lausanne-based International Institute for Management Development (IMD) that publishes *The World Competitiveness Yearbook*. These indices are too influential to policy-makers, analysts, and researchers around the world despite its methodological, measurement, and definitional flaws (see the rigorous and insightful evaluation by Lall 2001b). Their bias towards a capitalist, free market-oriented structure is straightforward.

The 'market friendly' injunction for nations to be competitive that underlies these indices favours the assumption of the efficiency of the market. Take for example the IMD's 'The Golden Rules of Competitiveness'. There is little doubt as to the desirability of these rules especially on the emphasis on the preservation of the 'social fabric by reducing wage disparity and strengthening the middle class' (Garelli 2003: 709). These 'Golden Rules' are in fact the relatively impressive features of the high growth rates and the long-term socio-economic stability during the 'Golden Age' (for an insightful discussion on the socio-economic features of the Golden Age, see Glyn et al. 1990; Patel 1992; Singh 1995). However, a careful examination of 'The Principles of World Competitiveness' underlying these Golden Rules, the latter would come out to be nothing but an empty rhetoric. The Principles underscore an open, export-led market in which 'competition is governed by market forces'; a minimal government intervention to business activity; a skilled, productive labour force subordinated to the market imperatives to achieve business efficiency; and a

well-developed infrastructure and an efficient business system supportive of the market (see Garelli 2003: 710). These market-based Principles to which the Golden Rules are founded is far from realising the success of the Golden Age: a historical moment when a competitive economy with an industrial policy was characterised by a strong, co-ordinated, protected, and efficient manufacturing sector able to satisfy ‘the demands of consumers at home at least cost [and] also able to sell enough of its products abroad to pay for the nation’s import requirements...[and to do so] at socially acceptable levels of output, employment, inflation, real wages and the exchange rate’ (Singh 1977: 128).

What Pyke and Sengenberger (1992) refers to as the ‘high road’ to competitiveness that focuses on efficiency, innovation, and good working condition is a must and indeed desirable. However, they also allude to the fact that innovation does not necessarily lead to the high road, there also exist the ‘low road’ to competitiveness of ‘race to the bottom’, lowering wages and labour standards. Therefore, there is an urgent need and a crucial task to move beyond the normative and ethical ‘raising-living-standard’ assertions on competitiveness, and into the critical endeavour of analytical and logical rigour of contemporary reality economics. Rather than being contented and complacent on the normative take that ‘competitiveness *should* raise standards of living’, the critical question to ask is ‘what does a capitalist market-led competitiveness mean?’ The previous section has examined the contradictions of the market-led, as well as the market-dependent nature, of innovation constitutive in the emergent competitiveness project vis-à-vis the current processes of economic globalisation, which emphasises free trade, free movement of capital, and labour market flexibility within national economies.

Under market-dependent nature of global capitalism of intensified competition, states and firms compete with one another, as well as cooperate, in order to increase the rate of profit and lower the cost of labour. This is the logical structure of competition in the accumulation of capital that Schumpeter’s *normative* take on competition in particular and capitalism in general could not grasp. For Schumpeter (1950: 68), competition is the driving force of innovation, and hence the lifeblood of the capitalist system, that would, ‘by virtue of its mechanism’, progressively raise the living standard of the masses. On the contrary, the *logic* of competition is founded on higher levels of productivity (i.e., more output per unit labour). Competition has thus resulted in unemployment, and the flexibility of labour relations has led to lower cost of labour (for empirical studies, see Singh and Dhumale 2000; Singh and Zammit 2000).

Labour market reform—with the accompanying principles of labour productivity and ‘flexible’ labour force—is an essential strategy of

competitiveness constitutive of the process of capitalist technological innovation. It by no means revolutionises the existence of the conditions of the workers. In this sense of promoting competitiveness under conditions of capitalist market competition, competitiveness would be inimical to innovation. Since production is immediately consumption, and vice versa, it follows that increasing purchasing power of the people is a vital requirement for the perpetuation of innovation. There is thus an urgent and critical need for the political economy of development to focus not only on the seemingly predictable productive capacity of technology (supply-side), but also on consumption patterns (demand-side).

Conclusion, Recommendation, and Prospects for a ‘Wisdom Society’

This essay has tried to offer a preliminary take on the critical political economy approach to social innovation system, examining the dynamics of innovation and critiquing the logic of competitiveness under conditions of the enduring global capitalist structure. There are still many terrains to be explored in understanding the dynamics underlying innovation and on its proper use for social development. This would include the concrete mechanisms and policy recommendations for the realisation of innovation system truly embedded in the society. The emergent trends at the firm-level of technology partnering and of clustering in this globalising learning economy (for example, Lundvall 2003; Pietrobelli 1996; Pietrobelli and Sverrisson 2003) are terrains needed to be further explored, and be tried to be captured within the critical political economy approach to social innovation system as these are contemporary realities not only in business and innovation, but in the rest of the society. This kind of analysis that incorporates firm-level dynamics with the social dimension is important simply because it touches on reality that implicates social relations, the real lives of human beings. The issues of learning, skills, competence building, and capabilities—including the building of technological capabilities and of learning capabilities—are some of the important issues that need to be further analysed through the lenses of critical political economy perspective that is more historically and structurally conscious, socially embedded, truly holistic, and critical of the capitalist system.

In incorporating the logic of the capitalist system in understanding the dynamics of innovation and the contemporary project on competitiveness *for* capitalist market competition, an important learning that can be drawn from this essay, learning that needs to be elevated into the level of consciousness, is that: the perpetuation of uneven development today is done by the capitalist and pro-capitalist political forces by subjecting and subordinating the poor countries and the workers to the imperatives of the capitalist market in which the market is used as an end rather than a tool in attaining development. Therefore, the

greatest unconsummated development project of our time is to re-embed in the society the market forces that now control the world.

With all its ideological mystifications, it is harder to *reveal* than to conceal the exploitative character of capitalist relations, or to capture it in theory (Wood 2001). This essay has risen up to this challenge in its attempt to unpack the *realpolitik* of the contemporary dominant discourse on innovation and competitiveness as an economic and business strategy oriented towards free capital mobility, profit-maximisation, and labour market flexibility. It has tried to unpack the current dominant discourse on competitiveness against the background of the intensifying imperative for global competition that intends to impose capitalist market discipline to all economic agents and the universal geography. At the heart of this competitiveness project is labour market reform in which workers are directly subjected to the compulsions of the principles of labour productivity and ‘flexibility’. Indeed, the ongoing project with the rhetoric of competitiveness-as-economic-policy-raising-living-standard is perfectly captured by John Weeks (2001): ‘to globalise requires global lies’.

There is a need for developing countries to pursue industrialisation which could address the issue of both production and redistribution, and usher in civilisation and long-term development to the Third World; in particular, a very strong and efficient manufacturing sector that is able to perpetually enhance its technological capability, and able to create local synergistic exchange between different economic activities in the urban and rural spaces (i.e., a synergy between activities in the manufacturing, agriculture, and advanced services), as well as possessing diverse economic base, a dynamic division of labour, and specialising in increasing returns activities. These industries should be situated within the framework of their respective *social innovation systems* that uphold the idea of the ‘social’ in attaining collective social developmental goals. In doing so, industrialisation will be able to create formal employment—as well as full employment—in which a critical mass and a countervailing power of labour unions are socially formed.

An alternative national competitiveness strategy that is able to mount country-specific industrial policy, characterised by co-ordinated institutions and an economy that harmonises productivity and real wage, is most urgently needed. Governments are *not necessarily* inefficient (Kiely 1998). While it is true that the developing world is structurally constrained by the historical imperatives of neo-liberalism, globalisation and technical change do not eliminate the need for intervention and the policy space for selective industrialisation (Lall 2003b; Archibugi and Pietrobelli 2002). After all, the state remains the point of concentration of the power of capital that implements and enforces the global

economy. Thus, it remains the most effective means in intervening in the global economy.

Contrary to the mantra that ‘there is no alternative’ in the emergent hegemony of neo-liberal globalisation, states have some spaces to address their developmental concerns. The market is a blind force that needs the intervention of the state in a way that re-embeds the market forces in the society. It would thus be necessary to learn from the analysis of Schumpeter (1939) on business cycles, while not being complacent of the promises of innovation:

Times of innovation...are times of effort and sacrifice, of work for the future, while the harvest comes after.... The harvest is gathered under recessive symptoms and with more anxiety than rejoicing.... [During] recession...much dead wood disappears.

Indeed, innovation—with its concomitant logic of competition and its market-dependent nature under conditions of capitalism—reinforces the existing market realities not only of digital divides, but of social divisions and of increasing material inequalities as well. The emergent knowledge economy must then be guided with *wisdom* (that is, a higher level of knowledge with ethical consideration and a high sense of social responsibility and solidarity). In this way, knowledge would not only be a question of who, what, why, and how; but also of ‘for whom’ with consideration on ‘what do we do to what we know?’. In particular, it highlights the concern on ‘knowledge *for whom?*’ and ‘development *for whom?*’. The realisation of this ‘wisdom society’, as an alternative to the project of creating capitalist market-dependent ‘knowledge society’, would thus require a particular economic structure that is not just left to the pursuit of individual private interests; but an economy that is embedded in the society.

The task of nurturing wisdom in particular and socio-economic change in general cannot be expected to come from the forces of the market. The oppressed, the marginalised, and the exploited are expected to resist and struggle against the market-led development of the capitalist system, a terrain not simply of freedom and choice, but of coercion and domination. There are ‘real existing resistances’ that offer hope for structural change. Worthy of note is the Linux operating system introduced in the early 1990s by Linus Torvalds, a student from Finland. Since he placed the source code of the Linux kernel in the internet thousands of devoted programmers have contributed to its development (see Moody 2001). What motivated these programmers is not greed, the dream of becoming multimillionaires overnight but the desire to subvert the concept of proprietary programs. They believe that the power of computing should be accessible to all, and that one’s invention and innovation should be shared, and

others may contribute to its improvement. Associating innovation with the market precludes Linux, for instance, from the title of being innovative, which the latter technically deserves. Linux has thus created a space in the computing world which Bill Gates and Steve Jobs cannot corner and control.

Social institutions such as progressive social movements and the universities have a key role to play in the resistance against the system of private appropriation that carries no public responsibilities. They can be the ‘forces of wisdom’ that empower the masses and the students through critical thinking and learning. They could be a force for structural change, institutions not just for knowledge generation but also for the nurturing of wisdom, creating mass consciousness that the art and science of invention and innovation are social endeavours that implicate the society, and hence must carry public responsibilities (see Dutton 1999). Wisdom is the antidote to the commodification of knowledge.

But the crucial task of resubordinating the market forces requires a much bolder and more daring political-economic development project. In this regard, an understanding of a multifaceted and multidimensional nature of the processes of historical change that is both dynamic and social would be indispensable, and of utmost significance for the true forces of development to take heart. This task may be large in scope, and indeed ambitious. But it meaningfully challenges the developmental forces to also struggle against the hegemony of the outmoded values and theories of capitalist market fundamentalism and neo-classical economics, alongside the building-up of local technological capabilities and the gradual institutionalisation of a strong manufacturing base specialising in increasing returns activities. Only an authentic *social innovation system* offers a viable alternative to the disembedding of the market forces from the society; and one that could tame the ‘animal spirit’, discipline the ‘greedy, selfish baker’, and regulate the ‘gales of creative destruction’.

References

- ADB (2003) *Asian Development Outlook 2003*, Manila: Asian Development Bank.
- Archibugi, D. and C. Pietrobelli (2002) 'The globalisation of technology and its implications for developing countries: Windows of opportunity or further burden?', in *Technological Forecasting and Social Change*, 70 (2003), pp. 861-83.
- Cammack, P. (2004) "'Signs of the Times': Capitalism, Competitiveness, and the New Face of Empire in Latin America', in L. Panich and C. Leys (eds) *The Empire Reloaded: Socialist Register 2005*, London: Merlin Press, pp. 256-70.
- Carchedi, G. (2001) *For Another Europe: A Class Analysis of European Economic Integration*, London: Verso.
- Castells, M. (1996-1998) *The Information Age: Economy, Society, and Culture*, 3 volumes. Oxford: Blackwell.
- Castells, M. (2000) 'Materials for an exploratory theory of the network society', in *British Journal of Sociology*, Vol. No. 51, Issue No. 1, January/March, pp. 5-24.
- Chang, H-J. (2002) *Kicking Away the Ladder*, London: Anthem Press.
- Chang, H-J. (2003) *Globalisation, Economic Development and the Role of the State*, London: Zed Books.
- Cohen, S.S. (1994) 'Competitiveness: A Reply to Krugman', *BRIE Research Notes*, at <http://brie.berkeley.edu/~briewww/pubs/pubs/rn/sckrugman.html>.
- Cox, W.M. (2001) 'Schumpeter: In His Own Words', in *Economic Insights*, Vol. 6, No. 3, at <http://www.dallasfed.org>.
- Dutton, W.H. (1999) *Society on the Line: Information Politics in the Digital Age*, Oxford: Oxford University Press.
- Ernst, D. and B.Å. Lundvall (2004) 'Information Technology in the Learning Economy: Challenges for Developing Countries', in E. Reinert (ed) *Evolutionary Economics and Income Inequality*, London: Edward Elgar.
- Freeman, A. (2001) 'Has the Empire Struck Back?', in R. Albritton, et al. (eds) *Phases of Capitalist Development: Booms, Crises and Globalizations*, New York: Palgrave, pp. 195-214.
- Freeman, C. and C. Perez (1988) 'Structural Crises of Adjustment, Business Cycles and Investment Behaviour', in G. Dosi, et al. (eds) *Technical Change and Economic Theory*, London and New York: Pinter.
- Freeman, C. and L. Soete (1997) *The Economics of Industrial Innovation*, London: Pinter.
- Garelli, S. (2003) 'Competitiveness of Nations: The Fundamentals', *IMD World Competitiveness Yearbook 2003*, Lausanne, Downloaded at <http://www01.imd.ch/wcc/fundamentals>
- Glyn, A., Hughes, A., Lipietz, A., and A. Singh (1990) 'The rise and fall of the Golden Age', in S. Marglin and J. Schor (eds) *The Golden Age of Capitalism*, Oxford: Clarendon Press, pp. 39-125.
- Harvey, D. (1992) 'Capitalism: the factory of fragmentation', in D. Harvey, 'Spaces of Capital: Towards a Critical Geography', New York: Routledge, pp. 121-7.
- IDB, *Competitiveness: the Business of Growth*, Washington DC: Inter-American Development Bank.
- International Institute for Management Development, at <http://www01.imd.ch>.
- International Labour Organisation (1996) *World Employment 1996/97: National Policies in a Global Context*, Geneva: International Labour Organisation.
- Kiely, R. (1998) *Industrialization and Development: A Comparative Analysis*, London: UCL Press.
- Krugman, P. (1994) 'Competitiveness: A Dangerous Obsession', in *Foreign Affairs*, March/April, at

- <http://www.foreignaffairs.org/19940301faessay5094/paul-krugman/competitiveness-a-dangerous-obsession.htm>
- Krugman, P. (1996) 'Wonders of technology not so wondrous', in *The Unofficial Paul Krugman Web Page*, at <http://www.pkarchive.org/theory/WondersofTechnologyNotSoWonderous.html>
- Krugman, P. (2001) 'Chip of Fools', in *The New York Times*, at <http://www.pkarchive.org/column/41801.html>.
- Lall, S. (2001a) *Competitiveness, Skills and Technology*, Cheltenham: Edward Elgar.
- Lall, S. (2001b) 'Competitiveness Indices and Developing Countries: An Economic Evaluation of the Global Competitiveness Report', in *World Development*, September, pp. 1501-25.
- Lall, S. (2003a) 'Industrial Success and Failure in a Globalizing World', Queen Elizabeth House, Working Paper 102, February.
- Lall, S. (2003b) 'Reinventing Industrial Strategy: The Role of Government Policy in Building Industrial Competitiveness', Queen Elizabeth House, Working Paper 111, October.
- Lall, S. (2005) 'Is African Industry Competing?', Queen Elizabeth House, Working Paper 121, January.
- Lall, S., Albaladejo, M., and M.M. Moreira (2004) *Latin American Industrial Competitiveness and the Challenge of Globalization*, Washington, DC: Inter-American Development Bank, Integration and Regional Programs Department, INTAL-ITD, Occasional Paper-SITI-05.
- Lundvall, B.Å. (ed) (1992) *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London: Pinter.
- Lundvall, B.Å. (2003) 'Industrial Clusters and Competence Building in the Era of the Globalizing Learning Economy', Lecture at the Opening of the Thailand Science Park, 19 June, at <http://www.globelics.org>.
- Marx, K. (1858) *The Grundrisse*, at <http://www.marxists.org/archive/marx/works/1857/grundrisse/ch14.htm#p704>
- Marx, K. (1971) *Capital*, Vol. 3, Moscow, as cited in E.M. Wood (1991) *The Pristine Culture of Capitalism: A Historical Essay on Old Regimes and Modern States*, London: Verso, p. 250.
- Moody, G. (2001) *Rebel Code: Inside Linux and the Open Source Revolution*, Cambridge, Mass.: Perseus Publishing.
- Nelson, R.R. (1993) *National Innovation Systems: A Comparative Analysis*, New York: Oxford University Press.
- Norris, P. (2000) 'The Worldwide Digital Divide: information poverty, the internet and development', Paper given at Political Studies Association of the UK, London, 12 April, at <http://www.Pippanorris.com>
- Oyeyinka, B. (2003) 'Knowledge Networks and Technological Capabilities in African Clusters', in *Science, Technology & Society*, Vol. 8, No. 1, pp. 1-24.
- Palma, G. (2003) 'National Inequality in the Era of Globalisation: what do recent data tell us?', in J. Michie (ed), *Handbook of Globalisation*, UK: Edward Elgar.
- Patel, S. (1992) 'In Tribute to the Golden Age of the South's Development', in *World Development*, Vol. 20, Issue 5, May, pp. 767-77.
- Perez, C. (2002) *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*, UK: Edward Elgar.
- Pietrobelli, C. (1996) 'Emerging Forms of Technological Cooperation: The Case for Technology Partnership Inner Logic, Examples and Enabling Environment', in *Science and Technology Issues*, Geneva, UNCTAD, United Nations.
- Pietrobelli, C. and A. Sverrisson (eds) (2003) *Linking Local and Global Economies: The ties that bind*, London, Routledge.

- Polanyi, K. (1978) *The Great Transformation*, Frankfurt am Main: Suhrkamp.
- Pyke, F. and W. Sengenberger (1992) *Industrial Districts and Local Economic Regeneration*, Geneva, International Institute for Labour Studies.
- Rasiah, R. (2000) 'Globalization and private capital movements', in *Third World Quarterly*, Vol. 21, No. 6, pp. 943-61.
- Rasiah, R. and B. Oyeleran-Oyeyinka (2004) 'Reducing the Digital Divide: A Critical Focus', in *Journal of Cyber Culture and Information Society*, July, pp. 1-26.
- Reinert, E.S. (1994) 'Competitiveness and its predecessors: a 500-year cross-national perspective', *STEP Report*, R-03, Oslo.
- Reinert, E.S. (2003) 'Increasing Poverty in a Globalised World: Marshall Plans and Morgenthau Plans as Mechanisms of Polarisation of World Incomes', *The Other Canon Papers*, at <http://www.othercanon.org/papers>.
- Reinert, E.S. (2005) 'Development and Social Goals: Balancing Aid and Development to Prevent "Welfare Colonialism"', Draft Paper prepared for the High-Level United Nations Development Conference on Millenium Development Goals, New York, March 14-15.
- Reinert, S.A. and E.S. Reinert (2003) 'An Early Innovation System: The Case of Antonio Serra's 1613 *Breve Trattato*' in *Istituzioni e Sviluppo Economico (Institutions and Economic Development)*, No. 3, pp. 87-120.
- Samuelson, P. (1949) 'International Factor-Price Equalisation Once Again', in *Economic Journal*.
- Samuelson, P. (1953) 'Prices of Factors and Goods in General Equilibrium', in *Royal Economic Society*.
- Schumpeter, J. (1939) *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, New York: McGraw-Hill.
- Schumpeter, J. (1950 [1942]) *Capitalism, Socialism, and Democracy*, 3rd ed., New York: Harper and Brothers.
- Singh, A. (1977) 'UK industry and the world economy: a case of deindustrialisation', *Cambridge Journal of Economics*, Vol. 1, p. 113-36.
- Singh, A. (1995) 'Institutional Requirements for Full Employment in Advanced Economies', in *International Labour Review*, Vol. 134, No. 4-5.
- Singh, A. and A. Zammit (2000) 'The Global Labour Standards Controversy: Critical Issues for Developing Countries', South Centre, Geneva.
- Singh, A. and R. Dhumale (2000) 'Globalization, Technology, and Income Inequality', UNU/WIDER, Working Papers No. 210, December.
- Weeks, J. (1999) 'The Expansion of Capital and Uneven Development on a World Scale', *Center for Development Policy and Research Discussion Paper*, SOAS, University of London.
- Weeks, J. (2001) *Globalize, Globa-lize, Global Lies: Myths of the World Economy in the 1990s*, London: Palgrave.
- Wood, E.M. (1997) 'Modernity, postmodernity or capitalism?', in *Review of International Political Economy*, Vol. 4, No. 3, pp. 539-60.
- Wood, E.M. (2001) 'Contradiction: Only in Capitalism?', in L. Panitch and C. Leys (eds) *A World of Contradictions: Socialist Register 2002*, London: Merlin Press, pp. 275-93.
- World Bank (1995), *World Development Report: Workers in an Integrating World*, New York.
- World Economic Forum, at <http://www.weforum.org>

**GDS RESEARCH SERIES
WORKING PAPERS:**

- No. 1. *Bonn Juego*: Constitutionalizing “Authoritarian Liberalism” in the Philippines: A Critique of the Political Economy of Charter Change, 23 pp, 2008.
- No. 2. *Vibeke Andersson & Håvard Haarstad*: Citizenship and State-building in Contemporary Bolivia; Politization of Cultural Identity, 27 pp, 2009.
- No. 3. *Bonn Juego*: Innovating ‘Innovation’, Competing ‘Competitiveness’: A Critical Political Economy Approach to *Social* Innovation System, 21 pp. 2009.