GLOBALIZATION AND THE POLITICAL ECONOMY OF GENETIC ENGINEERING

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Abstract

This article argues that the development of genetic technologies has to be critically evaluated from a socio-political economy perspective to establish if, on balance, the benefits of such technologies outweigh their costs and risks. The article illustrates how the current governance of these technologies can be seen as "undemocratic" because corporate interests dominate the directions in which the technologies are going. When aligned with the underlying socioeconomic power structures globally, these technologies create a situation where the development of science and technology fail to be about the common good. The article begins with a brief overview of neo-liberal globalization. It examines key global institutional arrangements including the World Bank, the International Monetary Fund, international patenting laws and free trade agreements. It is argued that in their convergence with the biosciences, these are antithetical to democracy, instead entrenching the interests of corporations, rich elites and rich countries. Finally, some suggestions for reforming the global political economy are presented.

Keywords: globalization; genetic; technology; corporations

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Genetic technologies have been promoted on the basis of rather grand goals – feeding the world, curing diseases and providing solutions to problems of environmental pollution; tackling problems of infertility and promoting longevity. From a political economy perspective, this paper seeks to illustrate some of the problems of these technologies. Thus the development of such technologies needs to be critically evaluated alongside claims of benefits.

This paper argues that to too great an extent, corporate interests are driving the development of these technologies. The development of genetic technologies represents one case example of how science and technology have aligned with private companies in such a way that "the common good" is threatened. I begin with a brief overview of the process of neo-liberal globalization and some of its core structures, including the World Bank, the International Monetary Fund, international patenting laws and free trade agreements. In their convergence with the biosciences, these institutions can be seen as being antithetical to democracy (and to social justice and sustainability). This article examines how such institutions and their rules, such as Trade Related Intellectual Property rights, entrench the interests of both corporations and rich countries, as illustrated by the case of genetic technologies. How to do better on the political economy front is indicated.

Neo-liberal globalization

Defining neo-liberalism and globalization is difficult as there are so many different views of these terms. The definition from Kim et al captures the relevant meaning of neo-liberalism used in this article: "Neo-liberalism" is a broad term for the pattern of economic theory that has most strongly influenced American economic policies over the past two decades... The

¹ Francis COLLINS – Michael MORGAN – Aristides PATRINOS, "The Human Genome Project: Lessons from Large Scale Biology." *Science*, April 11, 2003, p. 290.

United States and Great Britain have used their authority to ensure that neo-liberal ideas inform the programs and policies of major international financial institutions like the International Monetary Fund and the World Bank. Thus neo-liberalism [...] has contributed decisively to shaping the current global economy." ²

Neo-liberalism embraces a set of policies which are often incorporated in globalization which, since the 1970, has involved at a global level the growth economics and the centrality of the free market in determining socio-economic structures both globally and in an increasing number of countries. Neo-liberalism is promoted by such institutions as the World Bank, the International Monetary Fund and the World Trade Organization, all of which are dominated by Western economic interests.

There are however two major failings of neo-liberalism. The first is that it promotes inequality creating social division within countries and between countries. The second is its inability to provide a system of sociopolitical-economic organization that would be sustainable.

The ideology and institutions of neo-liberalism have developed in tandem with the process of globalization. Globalization is a form of political economy whereby a particular system of socio-economic organization spreads from a local to a global reach in its control of the market and resources so as to, as Amoroso put it "increment world wide profits. It is rooted in a strong cohesion among social classes and privileged groups of power which exploit to their own advantage principles of planning, coordination, centralization and authority. The ideology of competition and a free market is employed as a tool to exercise ever greater power over citizens and workers [...] or to penetrate the weaker parts of the global system." ³

² Jim Yong KIM – Joyce V. MILLEN (eds.), *Dying for Growth: Global Inequality and the Health of the Poor.* Massachusetts: Common Courage Press 2000, p. 52.

³ Bruno AMOROSO, On Globalisation: Capitalism in the 21st Century. Hampshire: Palgrave 1998, p. 52.

A definition of neo-liberal globalization ideally has to reflect a number of features: the dominant role of private markets and private corporations, the concepts of cultural, ideological and economic hegemony, and the imbalances in power between the players. It clearly has to make reference to the values, technologies and systems that are being globalized.

Neo-liberal globalization is important in the development of genetic engineering technologies. This is in part because of the potential of the technologies to change the broad ecology,⁴ but also because of the convergence of the physical aspects of genetic engineering technologies with their social, political and economic features. Genetic technologies create new markets and new forms of profit which can be enhanced by the determination of private corporations to implement gene patenting regimes (more about this later).

The IMF, the WTO and TRIPs

Two key institutions of the neo-liberal globalization project are the International Monetary Fund (IMF) and the World Trade Organization (WTO). The former was established in 1945 as part of post World War II economic measures aimed at ensuring the stability of the international monetary and financial system. The latter is an international organization of 149 countries whose objective is to facilitate the expansion and growth of international trade. The WTO came into being in 1995 and has in recent years shifted its emphasis from trading in goods to dealing with services and intellectual property, both significant areas of trade growth and wealth creation. The WTO's member states together contribute to around 90% of

⁴ For example, the mixing of genes from completely different species (including human and animal genes), the impact of genetically modified crops cross fertilizing with other plant species which give rise to the development of "super weeds", affecting birds, butterflies and other species populations.

world trade.⁵ The IMF and WTO work closely together, ensuring coherence in global economic policymaking.⁶ Opponents of the IMF argue its policies have resulted in an increase in poverty, debt burden and unsustainable models of development and do little to foster democracy, human rights or labor rights.⁷ They also contend that the development models it supports are out of line with the social objectives in Third World countries while at the same time protecting the interests of Western companies.

The WTO came into existence very much at the insistence of the United States which sought to have a global body that would be responsible for regulating world trade – mostly in alignment with the interests of the North.⁸ The US called for the management of intellectual property rights (IPRs) to be included in the WTO rather than being administered by the World Intellectual Property organization (WIPO), which is the international organization created specifically to administer intellectual property. This created greater power to enforce intellectual property rules within the globalized market economy. In principle the aim of the WTO was to harmonize legal trade agreements, including those relating to patents. However, as Hawthorne argues, in practice "The implicit and explicit aim is the worldwide spread of Western systems of law to satisfy the needs of industrialized countries." ⁹

⁵ Wayne ELLWOOD, The No-nonsense Guide to Globalisation. London: Verso 2001.

⁶ Reinert argues that different economic medicines are applied to poor countries and to rich countries – with the vast majority of World Bank and IMF economists educated in economics departments of American and English universities – but such economics is no longer in demand in OECD countries (Erik S. REINERT, *Globalisation, Economic Development and Inequality: An Alternative Perspective.* Cheltenham, UK: Edward Elgar 2004, p. 63–64).

⁷ Maurice MULLARD, *The Politics of Globalisation and Polarisation*. Cheltenham, UK: Edward Elgar 2004.

⁸ Kunibert RAFFER – Hans Wolfgang SINGER, *The Economic North-South Divide: Six Decades of Unequal Development*. Cheltenham, UK: Edward Elgar 2001, p. 56.

⁹ Susan HAWTHORNE, Wild Politics. Melbourne: Spinifex 2002, p. 331.

In the 1990's, developed countries had become concerned that the products protected by IPRs in their countries could not be protected in developing countries where there was often no equivalent IPR system. In the area of biotechnology, agricultural companies believed they would lose their competitive advantage as the knowledge behind the invention was utilized without profit to them.¹⁰ The developed countries introduced Trade Related Intellectual Property Rights (TRIPS) as a means of ensuring that developing countries provided an IPR system to complement their own. The TRIPS agreement mandates the development of strong intellectual property laws in member countries. Such laws protect corporate investments. It is to be noted that there is no parallel system of laws that protects the labor or the non-corporate knowledge that goes into production processes. There are concerns that the TRIPS agreement is inequitable for developing countries as it may result in both an increased flow of income from the developing to the developed and a decreased flow of technological knowledge in the opposite direction. Stronger critics say that TRIPS amounts to "economic colonization" of the developing world. 11 For example there is much literature which shows how, through patent regimes and the WTO TRIPS agreement, the WTO has protected pharmaceutical companies at the expense of critical public health issues such as HIV/AIDS and malaria.

Neo-liberal economic theory claims that the "free" market is the most efficient and most democratic way of distributing goods and services. Ironically, perversely even, the global institutions of the major institutional

¹⁰ Sharmishta BARWA – Shirin M. RAI, "The Political Economy of Intellectual Property Rights: A Gender Perspective." In: NEWELL, P. – RAI, S. – SCOTT, A. (eds), *Development and the Challenge of Globalisation*. London: ITDG Publishing. 2002, p. 41–56.

[&]quot;William LESSER – Gesa HORSTKOTTE-WESSELER – Uma J. LELE – Derek BYERLEE, "Intellectual Property Rights, Agriculture, and the World Bank." In: LELE, U. – LESSER, W. – HORSTKOTTE-WESSELER, G. (eds), Intellectual Property Rights in Agriculture: The World Bank's Role in Assisting Borrower and Member Countries. Washington DC: The World Bank 1999, p. 1–21.

players, such as the WTO, the World Bank and the IMF are undemocratic and based on not just non-market values but anti-market principles. These international organizations are largely driven by the interests of Western corporations which are outside the boundaries of democratic processes.

Gene patents and intellectual property

Within this dominant global economic system, genetic engineering technologies have a special significance. This is in part because of the power of the technologies to change the broad ecology, but also because of the convergence of the physical aspects of genetic engineering technologies with the political economy of neo-liberal globalization. Much of the energy and excitement around the development of these technologies lies in the fact that they provide a new form of profit for capitalist economies, hence the developed world's determination to implement gene patenting regimes.¹² The increasing pervasiveness of Western market economics in conjunction with, for example, the patenting of seeds and livestock, means that there is the growing potential for a poor, powerless peasant farmer in a Third World country to be tied to the economic and legal requirements of a multi-national seed owning company (based for example in New York) with which the farmer has no other connection, no control, no input, and certainly no benefit.¹³ Yet, as it has been argued, to prevent famines and

¹² See for example Sheldon KRIMSKY, Science in the Private Interest: Has the Lure of Profits Corrupted Biomedical Research? London: Rownman and Littlefield Publishers Inc 2004. See also Kathryn PACKER – Andrew WEBSTER, "Patenting Culture in Science: Reinventing the Wheel of Scientific Credibility." Science, Technology and Human Values, 21, 1996, p. 427–453; and Anthony J. STENSON – Tim GRAY, The Politics of Genetic Resource Control. Hampshire, London: Macmillan Press 1999.

¹³ Vandana SHIVA, Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology. London: Zed Books 1993.

food scarcity, it is essential that the "localization and regionalization of food production" is maintained.¹⁴

A patent is a government license giving a person or organization the sole right to make, use and sell an invention for a period of time, usually 20 years. For patent protection, the "invention" must be novel, non-obvious, of practical use and able to be described in sufficient detail to allow one skilled in the field to use it for the stated purpose. Traditionally and conventionally the reason economists argued for patents has been to protect the profits of firms which had invested heavily in research and development.

In 1987, however the United States Commissioner of Patents decided that the Patent and Trademark Office consider naturally occurring multicellular living organisms to be patentable subject matter. Since then, human genetic material has been routinely patented. This raises major ethical issues. For example, a cell line "produced from a spleen removed from a Leukemia patient" had a commercial value for pharmaceutical companies of several billion dollars.¹⁵ The person whose spleen was "harvested" for the cell line and patented (US Patent No. 4,438,032) was John Moore. He was found in the California Supreme Court to have no ownership rights to the cells and hence to their value in the market place. Moore's cell line earned its owners around \$US3 billion.¹⁶

Most genetic diversity occurs in the Third World; most patents are held in the First World. Patenting regimes are embedded in Western property concepts of ownership with the result that patenting laws are neither

¹⁴ HAWTHORNE, Wild Politics, p. 342. See also David BOLLIER, Silent Theft. The Private Plunder of Our Common Wealth. London: Routledge 2003.

¹⁵ Ned HETTINGER, "Patenting Life: Biotechnology, Intellectual Property, and Environmental Ethics." *Environmental Affairs* 22, 1995, p. 267–283.

¹⁶ See HAWTHORNE, Wild Politics, p. 353.

economically or culturally neutral. In turn they risk becoming a form of not only economic but also cultural hegemony.¹⁷

The developed world (mainly the US, but also Europe and Japan) owns 95% of the world's patents, 95% of Africa's, 85% of Latin America's and 70% of Asia's.18 This results in a very large transfer of wealth from developing to developed and this is in addition to the \$100 million that the poorest countries pay to Western creditors in interest repayments every day. International enforcement of patenting regimes serves to reinforce the divergence of economic interests between the developing and the developed. For example is the case of the Endod, the African soapberry plant which was for centuries cultivated by innovative Ethiopian women. "Attempts to get help from Northern institutes to develop Endod further to obtain a preventive medicine were unsuccessful [...] but [...] scientists from Ohio University found out about Endod on 14 June 1990, on 15 June they "knew it worked" and on 15 October, the university filed a patent application ... The market in the USA is estimated to be some \$5 billion [...] while Endod's true discoverers, the women of Ethiopia got nothing".¹⁹ Similar examples abound.

Gene technology has led to genes being increasingly seen as a valuable resource which can be privately owned through patent regimes. The application of patent laws to genetic technology has given rise to a new body of asset ownership that raises many ethical issues but also legal, economic and political questions. Certainly genetic technology could lead to cures for some of the most debilitating of diseases. One obvious ethical difficulty however with using patenting to promote this is that ethically the notion of 'ownership' and the construct of a commodity sit badly with genes. Numerous ethically problematical scenarios can arise; for example,

¹⁷ Noam CHOMSKY, *Chomsky on Intellectual Property Excerpts from year 501: The Conquest Continues* [online]. 2003. Available at: http://www.zmag.org/chomsky/other/intellectual-property.htm [quoted 18. 5. 2007].

¹⁸ BARWA - RAI, The political economy of intellectual property rights, p. 41.

¹⁹ RAFFER – SINGER, The Economic North-South Divide, p. 211–212.

if one pharmaceutical company holds the patents, that then reduces competition and creates the risk that gene patented therapies could become expensive.

Gene patenting is thus a contentious issue. The potential it carries for some radical transformation of the biological/economic arrangements of social life is currently not well understood. Yet such understanding is pivotal to neo-liberal global private sector interest in genetic technologies. The tying of such relationships into the pursuit of private sector profits globally rather than into some global common good is concerning.

It can be argued that it is the fear that humanitarian principles might come to the fore which has given new urgency to the US demands for increased protection for intellectual property at current WTO negotiations. In this context the goal of US private corporations is to increase their control over the health and agricultural sectors worldwide. Blakeney argues that there is no proof that Intellectual Property Rights increase the level of investment in research and development yet this is the key argument in principle which is used to support the practice of gene patenting.²⁰

It is to be noted that there is a contradiction here in the idea that social benefit might be advanced by restraining global society's ability to use an innovation. Two thirds of patented products are never placed on the market. Instead the patent is used to prevent competitors' gaining an advantage. Stiglitz, a protagonist for globalization, a Nobel Prize-winning economist and the Chief Economist at the World Bank until January 2000, argues that the Intellectual Property regimes supported by the WTO not only reduce access to medicines but may slow the pace of innovation and lead to a less efficient economy.²¹

²⁰ Michael BLAKENEY, "Ethnobiological Knowledge and the Intellectual Property Rights of Indigenous Peoples in Australia." In: BLAKENEY, M. (ed.), *Intellectual Property Aspects of Ethnobiology*. London: Sweet and Maxwell Ltd 1997.

²¹ Joseph STIGLITZ, Making Globalisation Work: The Next Steps to Global Justice. London: Penguin 2006, p. 106.

The US International Trade Commission estimates that the US companies stand to gain \$61 billion a year from the Third World if intellectual property rights are protected in accordance with US demands, a cost to the Third World of somewhere between \$100 and 300 billion when extrapolated to the other industrial countries. This dwarfs the debt service flow of capital from the developing to the developed world.

The practice of copying patented drugs can make medicines more affordable for patients around the world. For example, the Indian generic pharmaceutical industry provided drugs to about half the people infected with HIV who were receiving treatment in developing countries. In less than 10 years this supply of 'copycat' drugs forced the cost of AIDS treatment down from \$15,000 per patient to little more than \$200. Such cheap medicines were possible because India did not have any constraints from product patents. If countries were to conform to the requirements of the WTO, as India is now doing, this supply of inexpensive new medicines would be cut off.²²

The political economy of genetic technologies

An understanding of globalization and the forces lying behind it are critical to the political economy of genetic technology. As Stiglitz writes: "as they signed TRIPS, the trade ministers were so pleased they had finally reached an agreement that they didn't notice they were signing a death warrant for thousands of people in the poorest countries of the world. TRIPS reflected the triumph of corporate interests in the United States and Europe over the broader interests of billions of people in the developing world. It was another instance in which more weight was given to profits than to other basic values – like the environment, or life itself. It has

²² Yalnee SHANTHARAM, "The Cost of Life: Patent Laws, the WTO and the HIV/ AIDS Pandemic." *Undercurrent* 2, 2005, no. 2.

also become symbolic of the double standard, the difference in attitudes toward these values domestically and abroad." ²³

In looking behind neo-liberal globalization, there is a need to recognize the extent of the power of multinational corporations in the world today. For example 50 of the world's 100 largest economies are multi national corporations.²⁴ These thus represent a very potent lobby group that has access to the highest levels of governments and they have played a pivotal role in the structuring of a global economic infrastructure. Yet corporations are not accountable in any democratic sense to any body of people or to any global governance structure.

Transnationals move to and in turn between Third World countries. They operate within Third World countries, often in special economic exclusion zones, to abolish conditions that protect labour. No single nation state on its own can hope to regulate the global activities of transnational corporations (TNCs). It is increasingly difficult for states to do so, even when acting together. "Free trade" is the catch-cry of the neo-liberal political economy and this is underpinned by the WTO which in turn entrenches the domination of the rich West. Rubens Ricupero, current Secretary General of the UN conference on Trade and Development, assesses the multilateral (free) trading system as a matter of concrete evidence that global trade rules are "highly imbalanced and biased against developing countries". ²⁵

Furthermore, the WTO is about trade and only trade. Environmental laws, labor standards, human rights legislation, public health policies, cultural protection, food self reliance or any other policies held to be in the "national interest" are criticized as being unfair impediments to

²³ STIGLITZ, Making Globalisation Work, p. 105.

²⁴ Sarah ANDERSON – John CAVANAGH, *Top 200: The Rise of Global Corporate Power* [online]. Available at: http://www.globalpolicy.org/socecon/tncs/top200. htm [quoted 3. 2. 2007].

²⁵ ELWOOD, The No-nonsense Guide to Globalisation, p. 32.

free trade.²⁶ It seems not to matter to the WTO if goods are produced by children in sweat shop conditions, if poverty wages are paid to workers, the environment polluted, or if goods might be poisonous and dangerous. Even if a country wants to ban an import on the grounds it may harm public health or damage the environment, it has to prove the case scientifically – something that is burdensome, especially to countries with poor infrastructures and resources.

The World Bank extended and reinforced the IMF prescription for financial "liberalization" and open markets through Structural Adjustment Programs (SAPs). These include privatizing state owned enterprises, reducing the size and cost of government through public sector layoffs, cutting social services and subsidies on basic foodstuffs, and reducing barriers to trade. This restructuring was highly successful from the point of view of the private banks who "siphoned off more than \$178 billion from the South between 1984 and 1990 alone".²⁷ Two decades of such structural adjustment have not only failed to solve the debt crisis; they have caused suffering for millions and led to widening gaps between rich and poor.²⁸

Millen states that although the degree of corporate influence over specific policy decisions may be uncertain, the pervasive effects of the transnational economic and political power are becoming increasingly apparent: "As national and transnational corporations expand their share of the global economy, they consolidate their powerful position vis-à-vis governments and international institutions, in turn further enhancing opportunities for growth." This cycle of private corporate expansion and increased political leverage does not occur by accident. "The history of corporate-government relations has been one of continuing pressure by corporate interests to expand corporate rights and to limit corporate

²⁶ Ibid., p. 33.

²⁷ Ibid., p. 48.

²⁸ *Ibid.*, p. 50.

²⁹ KIM – MILLEN, Dying for Growth, p. 225–226.

obligations." Millen further argues that in recent years, "as regulatory mechanisms limiting [corporate leaders'] activities have been scaled back, and as social forces (such as organized labor) that once counterbalanced corporate demands have lost ground, Trans National Corporations (TNCs) and other large companies have attained a degree of power over our political decision making and legislative processes that a short time ago would have been unimaginable". Increasingly, TNCs are integrally involved in the deliberations of international political and economic institutions such as the WTO.

The power of corporations to influence national and international policies over technologies such as genetic engineering is of concern. Kay (1993), an assistant professor of the history of science at the Massachusetts Institute of Technology, writes that the new biology of genetic engineering was founded on a strong belief in "industrial capitalism" and its perceived mandate for "science-based social intervention". The developers of this technology were "confident that it would offer them a previously unimagined power and control over both nature and society".32 Science was being molded to the agenda of how it could better serve the private sector. Cummings writes that Monsanto Corporation, a leading corporation in the development of genetic technologies, visited the Reagan White House and sought and obtained assurances that they would not be disturbed by regulations of the genetics business. The early developers of genetic technologies were the agrochemical companies like Dow Chemical, DuPont, Novartis and Monsanto – all sources of pervasive chemical pollution that resulted in the environmental laws passed in the 1960's.

³⁰ David C. KORTEN, When Corporations Rule the World. West Hartford, CT: Kumarian Press, Inc 1995, p. 55.

³¹ KIM – MILLEN, *Dying for Growth*, p. 226.

³² Claire Hope CUMMINGS, *Vision for a Sustainable World* [online]. 2005. Available at: World Watch Institute Jan/Feb 2005 at http://www.mindfully.org/GE/2005/Trespass-Genetic-Engineering1jan05.htm [quoted 6. 5. 2007].

The internationalization of finance, production and consumption in the globalized borderless world takes the control of regulation and policy formation out of the hands of national, democratically elected governments. The model that has dominated international assistance programs in developing economies and is supported by institutions that direct globalization is one that prioritizes the globalized market economy. The fact that institutions such as the World Bank are controlled by the West intensifies its economic dominance.³³

New technologies and global financial structures removed from local economies have major consequences for ordinary people. For example in 1987, as a result of the Green Revolution and a dependence on imported pesticides, more than 60 Indian farmers from Andhra Pradesh killed themselves by consuming pesticide, overwhelmed by debts they had incurred for pesticide purchase. An even greater and more insidious dependence on the global economy is being instituted through genetic engineering and patenting regimes applied to seed and livestock production.

Conclusion

The political economy of gene technology in the current globalizing world, particularly with respect to policy on gene patenting and intellectual property rights, is becoming more and more dominated by the forces of the global neo-liberal market place. This process is led by major international organizations which are undemocratic and in which the major Western and largely neo-liberal economies are over represented. The World Trade Agreement on TRIPS has brought intellectual property into the forum of debates about and regulation of global trade. By ensuring the adoption of

³³ See Vincente NAVARRO (ed.), *The Political Economy of Social Inequalities: Consequences for Health and Quality of Life.* New York: Baywood Publishing Company 2002.

³⁴ SHIVA, Monocultures of the Mind, p. 112.

intellectual property rights regimes in developing countries, TRIPS decreases the sovereignty of developing countries and allows greater domination by the developed world, both economically and culturally. In particular, greater IPRs in agricultural and livestock biotechnology increase the monopoly of transnational agricultural companies and undermine the economic position of small-scale farmers in developing countries.

The convergence of genetic technologies with a neo-liberal political economy built around corporate interests is of great concern. It is imperative that a new model of political economy is developed as a framework for the development of sophisticated technologies such as genetics – for the benefit of all of human-kind. Without a different structural context, genetic technologies, like many other sophisticated technologies, are at risk of becoming another factor in entrenching disadvantage and inequality.

The details of how to build a new model of global political economy are for another paper. Here however, from what has been set out in this article, it is possible to identify what the key features of such a development would comprise. These are first the reform of certain global institutions; second a reappraisal of patenting; third the creation of a system of international poverty to fight global poverty; and fourthly the creation of a fund to build better governance in developing countries.

Currently the global institutions of the IMF, the World Bank, the G7 and G8 and the WTO represent only a small minority of the world's population and leave the developing countries disempowered. This is in part because the voting rights in the IMF and the World Bank are based on the economic power of nations rather than one country one vote which is the case for the UN. To move these to a one country one vote basis would give the developing world more equal power with the rich West. The G7 and G8 should either be disbanded or their powers severely constrained.³⁵

³⁵ Five years later, the WTO deal on access to medicines is a failure: G8 leaders must step up [online]. 2006. Available from: Act Up Paris at http://www.actupparis.org/article2780.html [quoted 7. 8. 2007].

The WTO needs do more to encourage global trade on terms that are not dictated by the rich West and at the same time limit the so called Free Trade Agreements that are springing up between pairs of nations to get round the problems of negotiating successfully with a wider set of nations.

On patenting what is needed is to return to the practice of granting patents only on the basis of their original economic principle i.e. that they reward research and development. Raffer and Singer propose a system of international taxation to fight global poverty, marginalisation and inequality.³⁶ This might be based for example on the so called "Tobin tax" – a tax on currency transactions.³⁷ Finally as there are legitimate concerns about the problems of corruption and poor governance in many developing countries, there is a need for a separate fund to build such governance where it is lacking or deficient. This will allow the people of developing countries to be empowered in negotiations with the developed world and be better placed to protect their own economic interests and their local cultures.

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³⁶ RAFFER - SINGER, *The Economic North-South Divide*, p. 255.

³⁷ James TOBIN, *The New Economics: One Decade Older.* Princeton: Princeton University Press 1974, p. 89.