WHAT DANGER LIES IN THE WTO - NAMA NEGOTIATIONS FOR AFRICA?

Ha-Joon Chang

AFRICAN TECHNOLOGY POLICY STUDIES NETWORK
ABOUT THE AFRICAN TECHNOLOGY POLICY STUDIES NETWORK

The African Technology Policy Studies Network (ATPS) is a multi-disciplinary network of researchers, policy makers, actors in the private sector and other end-users interested in generating, promoting and strengthening innovative science and technology policies in Africa. With a regional secretariat in Nairobi, the network operates through national chapters in 23 African countries, with an expansion plan to cover the entire sub-Saharan Africa.

One of the objectives of the network is to disseminate research results to policy makers, legislators, the organized private sector, civil society, mass media and farmers' groups through publications, dialogue and advocacy. Among its range of publications are the Working Paper Series (WPS), Research Paper Series (RPS), Special Paper Series (SPS) and the Technopolicy Briefs.

Technopolicy Briefs Series are commissioned short papers written by experts from all over the world specifically to address current science and technology policy concerns and questions in Africa. The briefs are also summaries of technical papers published under our WPS, SPS and RPS written to highlight significant policy recommendations. These briefs are written with the busy policymakers and non-specialists in mind. The materials are designed for general readership and help advance the advocacy and knowledge brokerage roles of the ATPS.

ATPS is supported by a growing number of donors including the International Development Research Centre (IDRC), the Carnegie Corporation of New York, the Rockefeller Foundation, the World Bank, the OPEC Fund, Ford Foundation, Coca-Cola Eastern Africa, the African Development Bank, and the Royal Dutch Government.
Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GATT</td>
<td>The General Agreement on Tariff and Trade</td>
</tr>
<tr>
<td>LTFR</td>
<td>Less-than-full Reciprocity</td>
</tr>
<tr>
<td>NAMA</td>
<td>Non-Agricultural Market Access</td>
</tr>
<tr>
<td>SDT</td>
<td>Special and Differential Treatments</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
# Table of Contents

1.0 Introduction  

2.0 NAMA - An Underestimated Danger?  

3.0 Why Tariff?  

4.0 Is a 'level playing field' Attainable?  

5.0 Are ‘Special' (and Differential) Treatment and Less-than-full Reciprocity for Real?  

6.0 Conclusion  

References
1.0

Introduction

For Africa and other developing countries, the most important issue in the forthcoming WTO ministerial meeting in Hong Kong, December, 2005, is going to be NAMA (Non-Agricultural Market Access). It is however worrying that many developing countries do not seem to realise how devastating the industrial tariff cuts resulting from the NAMA negotiation can be, especially if the radical US version is adopted.
NAMA - An Underestimated Danger?

For many people, the most important issue for the developing countries in the current Doha 'development round' of trade negotiations is agriculture. When most poor people are farmers living in developing countries, it is argued, making it easier for them to export agricultural products to the developed countries is the most obvious way to help the poor and promote development. For this reason, many developing country negotiators and development campaigners, both from the North and the South, have focused their attention on reducing agricultural protection and subsidies in the North.

However, there is another issue in the current round of negotiation at the WTO that could have an even bigger impact on development in the longer run – it is the NAMA (Non-Agricultural Market Access) negotiation, whose key element is the lowering of industrial tariffs.\(^1\)

Needless to say, lowering tariffs, especially industrial tariffs, has always been the key goal of the GATT-WTO, but the tariff cuts proposed in NAMA are on a historically unprecedented scale. Especially if the most radical US proposal is implemented, the tariff cuts could be truly drastic. For example, according to the calculation done by the Indian government, the (simple) average tariff for most developing countries will become 5-7%, down from the current 10-70% (Khor & Goh, 2004).\(^2\)

This means that average industrial tariffs in developing countries will become the lowest since the days of imperialism, when colonies were forced into free trade and when the still-independent weaker countries were forced to impose a flat tariff.

---

1. While there are issues like non-tariff barriers (NTBs) and the abuse of anti-dumping measures that are also important in the NAMA negotiation, its key issue is tariff.
2. The EC proposal will bring it down to 5-15%, while the Korean and the Indian proposals will bring it down to 10-25% and to 10-50%
What Danger Lies in the WTO-NAMA Negotiations for Africa?

rate of no more than 3-5% through the so-called ‘unequal treaties’. They will be also lower than the rates that prevailed in any of today’s developed countries until the Second World War, except for Britain and the Netherlands between the late-19th and the early 20th centuries and Germany briefly in the late 19th century (see Table 1). ³

The effects of such drastic reduction in tariffs on the developing countries could be truly monumental. In the short run, the main casualties will be the middle-income developing countries, many of whose industries will be destroyed and jobs lost. However, in the longer run, the poorer developing countries, even though they have few industries to lose at the moment, will also lose out because they will not be able to nurture new industries behind tariff barriers when the need arises.

In contrast, the impacts of tariff cuts on the developed countries are likely to be minimal, given that they already have low industrial tariffs. For example, according to the same calculation cited above, the average industrial tariff of Japan will go down from 2.3% to 1.3% (EC formula) or 0.7% (US formula) and that of the USA will go down from 3.2% to 1.7% (EC formula) or 1.0% (US formula). These may be large cuts in proportional terms, but not larger even in proportional terms than in the case of some developing countries – for example, the Japanese cut according to the US formula will be about 70% (from 2.3% to 0.7%), whereas the cut for Indonesia will be 82% (from 35.6% to 6.3%) and that for Brazil will be 80% (from 30.8% to 6.2%). And the impacts of the cuts are incomparable – a tariff cut from 2.3% to 0.7% or from 3.2% to 1.7% is not going to affect the local industries every much, whereas a cut from 30-35% to 6% can have devastating effects.

³ Japan had 5% average tariff rate in the late 19th century, but this was the result of a series of unequal treaties that it was forced to sign upon opening up to the outside world in 1853.
Why Tariff?

The worrying thing is that most developing countries have been slow to wake up to the potentially devastating effects of the industrial tariff cuts resulting from the NAMA negotiation. Moreover, to the extent that they are now resisting it, they do not seem to be able to challenge the basis premise of the negotiation that freer trade (lower tariffs, lower NTBs) is always better, and are bogged down in the debate on the exact formulas to be used for tariff cuts.

However, the premise that freer trade is better is not true as a general proposition. Lowering tariff for a particular commodity may make its import cheaper, benefiting the consumers of the particular commodity, but the overall result depends on what happens to the rest of the economy.

It is theoretically possible that increased import competition makes the domestic producers more efficient. In this case, everyone is better off, and the only possible loser from the process will be the workers that may have been sacked in the process of raising efficiency. However, in the standard trade theory models that underlie the proposals for tariff cut, not even this is considered a problem because perfect resource mobility is assumed and therefore the displaced worker is bound to find an alternative employment, which is at least as well-paying as his/her current job.

However, in reality, what happens following the tariff cut very much depends on where and how it is done. If the magnitude of the tariff cut is large, as it is likely to be if the developed countries get their way in the current NAMA negotiation, and therefore if the domestic producers need to increase their efficiency very quickly in order to survive, the result may be the closure of the relevant producers, destroying income and jobs, rather than the rise in their efficiencies. And given that resource mobility is not perfect in the real world, the resources that come out from the bankrupt enterprises may not find alternative employment opportunities that will allow them make as large contributions to the national economy as before. For
example, if a reduction in steel tariff results in the closure of steel mills, the blast furnaces are likely to be sold as scrap metal and the laid-off steel workers are likely to end up unemployed or working in unskilled jobs like security guard or janitor.

Of course, even if tariff cuts lead to the destruction of domestic producers and the resulting ‘waste’ of resources, the whole society may gain, if the costs from the destruction of income and jobs are lower than the benefits to the consumers. However, even in this case, the distributional question still remains, as there is no automatic ‘trickle-down’ from the gainers to the losers from trade liberalisation – how do we compensate the automobile workers and the textile workers who lost their jobs thanks to trade liberalisation? In the developed countries, there are well-established mechanisms to re-distribute wealth – the welfare state with its progressive taxation and income transfer – but in the developing countries such mechanisms are at best weak and often non-existent. Moreover, given that tariff is a very important source of government revenue in many developing countries (even after two decades of liberalisation tariffs make up around 1/3 of government revenue in many of them), the already meagre abilities of their governments to make fiscal transfers to the losers in the process of structural change will be even more impaired by the tariff cuts and the consequent fall in government revenue.

More importantly, tariff cuts may damage long-term economic development. In the short run, it may indeed be more efficient for developing countries to get rid of those industries that cannot survive without tariffs and other protective measures and rely on agriculture and some labour-intensive industries (although the question of protection of these sectors by the developed countries still remains). However, in the long run, it is extremely unlikely that the countries can develop on that basis – as history shows.

Most of today’s developed countries relied on tariff protection, subsidies, and other measures, in order to promote their ‘infant industries’ in the earlier stages of their development (for details, see Chang, 2002). In particular, the UK between the early 18th century and the mid-19th century and the USA between the mid-19th century and the mid-20th century relied heavily on tariff protection, much more than did other countries that are usually associated with protectionism, such as Japan, France, and Germany (on the US case in particular, see the Box). As we can see
from table, the industrial tariff rates that prevailed in these countries during the periods in question were around 40-50% - rates that are higher than those prevailing in many developing countries today and rates that are several times higher than what will prevail in most developing countries if the ambitious US proposal is adopted in the WTO.

More contemporary experiences also confirm the importance of infant industry protection. Successful developing countries such as Korea, Taiwan, China, and India, all developed their industrial capabilities behind walls of tariff protection and other government supports. The growth records of the developing countries during the last two decade of trade liberalisation also suggest that the removal of protection and subsidies have led to a slowdown rather than an acceleration of economic growth. For example, during the 1960s and the 1970s, the ‘bad old days’ of import substitution, per capita income in developing countries grew at 3.0% per year. In the 1990s, after more than a decade of extensive trade liberalisation, growth rate fell to about half that rate – 1.7%.
Is a ‘Level Playing Field’ Attainable?

In the push for the reduction in industrial tariffs, the rhetoric of ‘level playing field’ is deployed as the most important principle that justifies drastic cuts in industrial tariffs by the developing countries. The developing countries should ‘level the playing field, it is argued, by making the access to their industrial markets by developed country exporters easier.

‘Level playing field’ is like, as the Americans say, motherhood and apple pie. It is definitionally good and therefore difficult to oppose. But it is something that has to be opposed if we are going to build a world trading system that is truly pro-developmental.

Needless to say, level playing field is the right principle to adopt when the players are equal. However, when the players are unequal, it is the wrong principle to apply. For example, if a team of 13-year-old children are playing football against the Brazilian national team, it is only fair that the playing field is not level and that children are allowed to attack from up the hill.

Indeed, in most sports, unequal players are not even allowed to compete against each other. In boxing, wrestling, weightlifting and many other sports, they have weight classes. A heavyweight boxer like Muhammad Ali would not have not been allowed to box Roberto Durán, the legendary Panamanian boxer, and take away his titles, however likely his victory was.  

Weight classes are not the only thing to prevent competition on an equal footing among unequal players. In many sports, including football itself and baseball (the

---

4 Durán is one of only 4 fighters to hold 4 different world titles— lightweight (1972-79), welterweight (1980), junior middleweight (1983) and middleweight (1989-90).
‘Little League’), there are age classes – adult teams are not allowed to play against children and juvenile teams. In sports like golf, we even have an explicit system of ‘handicaps’ that allows weaker players to compete with advantages in (inverse) proportion to his playing skills. And so on.

To take the boxing analogy further, the developed countries seeking a radical tariff reduction through NAMA are like a heavyweight boxer who sweet-talks a host of lighter boxers into boxing him by promising that they will be allowed to use protective gears and then suddenly turns around and accuses the others of playing foul by arguing that they have ‘unfair’ protection. And when the heavyweight boxer insists on wearing protective gear for his abdomen (agriculture and textile?) on the ground that it is his weak part, we begin to wonder whether there is any sense of fair play in his mind. Add to this the fact that the heavyweight boxer almost single-handedly writes the rules of the game, owns the only bank in town (and may refuse to lend money to those boxers who complain about his tactics), and also controls the town newspaper (which will assassinate the characters of those boxers who speak against him), we begin to see how absurd the rhetoric of ‘level playing field’ is in the present world trading system.

---

**Box 1**

**The Secret History of US Currency**

- **Historical Double Standards in International Rules**

On 26 November 2002, the US government submitted a proposal to the World Trade Organization that industrial tariffs be cut to zero by 2015. Impressive as the proposal to eventually eliminate US tariffs on textiles and other consumer goods may be, this proposal, if accepted, will impose disproportionately large burden for tariff cuts on developing countries, which have much higher industrial tariffs than the USA and other developed countries.

Interestingly, few people are aware of the historical double standards that the USA is adopting in advancing this proposal. In the 19th century, when most of its industries were behind the European ones, the country took the view that free trade was not in its national interest. Indeed, for about a century until the Second World War, the US economy was the most heavily protected in the world.

The historical double standards adopted by the USA do not end with free trade. This is clear from looking at American currency, which carries the pictures of
What Danger Lies in the WTO-NAMA Negotiations for Africa?

politicians whose policies would have come under severe criticism from the World Bank and the WTO.

On the one-dollar bill is the first President, George Washington. He insisted on wearing American clothes over higher-quality British clothes in his inauguration ceremony – a potential violation of the proposed WTO rule on transparency in government procurement.

On the rarely-seen two-dollar bill, we have Thomas Jefferson, who strongly argued against patents. He believed that ideas are “like air” and therefore should not be owned by anyone.

The other statesmen who appear on US currency are even bigger offenders on the issue of free trade.

On the five-dollar bill, we have Abraham Lincoln. He was a well-known protectionist and after the Civil War raised tariffs to the highest level ever.

On the ten-dollar bill, we have the first US Treasury Secretary, Alexander Hamilton. Hamilton is the person who invented the so-called “infant industry” doctrine, which says that less developed countries need to protect their industries against competition from more developed countries.

Benjamin Franklin, on the hundred-dollar bill, did not share Hamilton's infant industry doctrine, but he insisted on high protection as a measure against “social dumping” from the then lower-wage countries of Europe.

On the 50-dollar bill, we have Ulysses Grant, the Civil War hero-turned President. In defiance of the British pressure on the USA to adopt free trade, he famously remarked that “within 200 years, when America has gotten out of protection all that it can offer, it too will adopt free trade”.

That leaves Andrew Jackson on the 20-dollar bill. At first glance, Jackson, a well-known advocate of small government, may seem to fit the current policy orthodoxy. However, he was not very good at protecting land rights – he evicted many native Americans from their homelands. And he was hostile to foreign investors – he famously killed off the country’s first de facto central bank, the (second) Bank of the USA, partly on the ground that it was largely owned by foreign (mainly British) investors.

Thus, judging from US currency, the most revered politicians in US history seem to be precisely the ones who pursued policies the current development orthodoxy vehemently rejects.

However, historical double standards are not the monopoly of Americans. Virtually all of today's rich countries – from Britain down to Korea and Taiwan – used tariff protection and subsidies for industrial development. In the earlier stages of their development,
they did not protect intellectual property rights, especially those of foreigners. Switzerland and the Netherlands did not have a patent law until the early 20th century.

Once they became rich, these countries started demanding that the poorer countries practice free trade and introduce “advanced” institutions such as strong patent law. Friedrich List, the great 19th-century German economist, argued that such practice amounted to rich countries “kicking away the ladder” with which they climbed to the top and thus denying the poorer countries the chance to develop.

After the Second World War, thanks to post-colonial guilt and Cold War politics, such “ladder-kicking” was at a low ebb. However, during last two decades, developing countries have been under enormous pressure to adopt free trade, open their capital markets, and adopt “best practice” institutions such as strong patent laws. When applying such pressure, the rich countries rarely acknowledge that they are preaching what they did not practice.

The result has been a marked slowdown in the growth of the developing countries. The growth of per capita income in the developing countries has been halved from 3 per cent annually during the 1960-80 period to 1.5 percent during the 1980-2000 period.

In light of this, a radical re-thinking on today’s development orthodoxy is warranted. In practical terms, this means re-writing the international rules so that countries can adopt policies and institutions that are more suitable to their conditions. The past twenty years’ records suggest that this may give the developing countries a better chance for growth and development.
Are ‘Special’ (and Differential) Treatment and Less-than-full Reciprocity for Real?

There is, naturally, some unease with this rhetoric of level playing field among the developing countries, which the developed countries cannot totally ignore. This is why we have ‘special and differential treatments’ (SDT) in the WTO and why the developed countries in the NAMA negotiation say that they are happy with ‘less than full reciprocity’ (LTFR) from the developing countries. However, there are serious problems with these ‘concessions’ in the forms of SDT and LTFR.

The problem with SDT is the word ‘special’. To call something ‘special treatment’ is to say that the person getting the treatment is getting an ‘unfair’ advantage. However, in the same way we wouldn’t call stair-lifts for wheelchair users or Braille writings for the blind ‘special treatments’, we should not call the higher tariffs and other means of protection ‘special treatments’ – they are just ‘differential’ treatments for countries with ‘differential’ capabilities and goals.

The notion of LTFR should also be questioned. The notion implies that the developing countries will give ‘less’ than do the developed countries in the NAMA deal. However, the notion of reciprocity cannot be discussed without some reference to the relative positions of the parties involved. We would not say that a poor friend is being ‘less than reciprocal’ simply because he cannot buy champagne and caviar for his rich friend, as far as he is treating his rich friend often enough and generously enough, given his means. Likewise, even a small cut in tariff may be a lot to ask for a developing country desperate to preserve jobs, develop industrial capabilities, and collect government revenues, while even a relatively large cut may not be such a big burden on countries with greater wealth and higher industrial capabilities.

So, when the tariff cuts asked from the developing countries are much larger in their impacts – due to their greater absolute magnitudes and, more importantly, to their weaker adjustment capabilities and their greater needs to use the tariffs – it is
wrong to say that these countries are being less than fully reciprocal, even then they are making less cuts in proportional terms than are the developed countries (although even this is not necessarily the case – see the earlier example comparing Japan, on the one hand, and Brazil and Indonesia, on the other hand.

Against the One-Way-Street View of Flexibility

The developed countries have tried to sell certain agreements in the WTO to the developing countries on the ground that they give enough ‘flexibility’ to the latter countries – mainly in the form of keeping some sectors off the agreements. So GATS is said to be flexible because it allows countries to keep some sectors off their market-opening commitments. The same notion of flexibility was bandied about in the (now-dormant) negotiation for the MIA in the run up to the Cancun ministerial meeting in 2003 (for a post mortem on Cancun, see Chang, 2003). In the NAMA, it is said that there is some flexibility because countries can reserve some sectors from their tariff-binding and -cutting commitments, although the scopes for these are supposed to be quite limited.

However, this is a very peculiar notion of flexibility. Once a sector is liberalised, there is no going back. Indeed, the whole idea of tariff binding in the WTO is based on this notion of ‘one-way flexibility’. The exercise is based on the belief that there is a tariff rate in a sector above which the tariff should never rise. If there is going to be genuine flexibility, countries should be allowed to unbind and raise their tariffs, if there is a reasonable ground for it. For example, if a country had genuinely under-estimated the adjustment costs when it made a decision to cut the tariffs in particular industries – as it was in fact case with many developing countries in the Uruguay Round – it may be reasonable to allow that country to raise tariff ceilings in those industries. For another example, a country may have set low tariff ceilings in certain industries because it under-estimated the capabilities of domestic producers and did not think any infant industry protection would ever become necessary in those industries. However, it should be allowed to raise tariff ceilings if it later finds that after all there is some hope of viable domestic producers emerging with stronger tariff protections in those industries. Unfortunately, if tariff reduction is done on the line-by-line basis, as it is the case with the current round of NAMA negotiation, this will not be possible, even if the country may be willing to “compensate” for this tariff rise by lowering tariffs in other industries (Akyüz, 2005).
6.0

Conclusion

In short, the developing countries should wake up to the realities of the NAMA negotiation. Instead of being bogged down in the technical details of tariff-cut formulas, they should come out questioning the very justification of the NAMA negotiation. They should also question the fundamentally biased notions of what is ‘fair’ in the international trading system, which are manifested in concepts like ‘level playing field’, ‘special and differential treatment’, ‘less than full reciprocity’, and ‘flexibility’ used by the developed countries in the negotiation process.

If NAMA proceeds in the way it is doing at the moment, there may be no more industrial development in the developing world, especially given that the WTO rules governing the use of other policy tools for industrial development, such as subsidies, regulation on foreign investment, and technological imitation, have been dramatically tightened. This may sound like a very drastic assessment, but both theories and (historical and contemporary) evidence suggest that it is the only realistic assessment.
### Table: Average Tariff Rates on Manufactured Products for Selected Developed Countries in Their Early Stages of Development
(weighted average; in percentages of value)

<table>
<thead>
<tr>
<th>Country</th>
<th>1820</th>
<th>1875</th>
<th>1913</th>
<th>1925</th>
<th>1931</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>R</td>
<td>15-20</td>
<td>18</td>
<td>16</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Belgium</td>
<td>6-8</td>
<td>9-10</td>
<td>9</td>
<td>15</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Denmark</td>
<td>25-35</td>
<td>15-20</td>
<td>14</td>
<td>10</td>
<td>n.a.</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>R</td>
<td>12-15</td>
<td>20</td>
<td>21</td>
<td>30</td>
<td>18</td>
</tr>
<tr>
<td>Germany</td>
<td>8-12</td>
<td>4-6</td>
<td>13</td>
<td>20</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Italy</td>
<td>n.a.</td>
<td>8-10</td>
<td>18</td>
<td>22</td>
<td>46</td>
<td>25</td>
</tr>
<tr>
<td>Japan</td>
<td>R</td>
<td>5</td>
<td>30</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6-8</td>
<td>3-5</td>
<td>4</td>
<td>6</td>
<td>n.a.</td>
<td>11</td>
</tr>
<tr>
<td>Russia</td>
<td>R</td>
<td>15-20</td>
<td>84</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Spain</td>
<td>R</td>
<td>15-20</td>
<td>41</td>
<td>41</td>
<td>63</td>
<td>n.a.</td>
</tr>
<tr>
<td>Sweden</td>
<td>R</td>
<td>3-5</td>
<td>20</td>
<td>16</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8-12</td>
<td>4-6</td>
<td>9</td>
<td>14</td>
<td>19</td>
<td>n.a.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>45-55</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>n.a.</td>
<td>23</td>
</tr>
<tr>
<td>United States</td>
<td>35-45</td>
<td>40-50</td>
<td>44</td>
<td>37</td>
<td>48</td>
<td>14</td>
</tr>
</tbody>
</table>


**Notes:**
- **R** = Numerous and important restrictions on manufactured imports existed and therefore average tariff rates are not meaningful.
- 1. World Bank (1991, p. 97, Box table 5.2) provides a similar table, partly drawing on Bairoch’s own studies that form the basis of the above table. However, the World Bank figures, although in most cases very similar to Bairoch’s figures, are unweighted averages, which are obviously less preferable to weighted average figures that Bairoch provides.
- 2. These are very approximate rates, and give range of average rates, not extremes.
- 3. Austria-Hungary before 1925.
- 4. In 1820, Belgium was united with the Netherlands.
- 5. The 1820 figure is for Prussia only. Before 1911, Japan was obliged to keep low tariff rates (up to 5%) through a series of “unequal treaties” with the European countries and the USA. The World Bank table cited in note 1 above gives Japan’s unweighted average tariff rate for all goods (and not just manufactured goods) for the years 1925, 1930, 1950 as 13%, 19%, 4%.
- 6. Before 1911, Japan was obliged to keep low tariff rates (up to 5%) through a series of “unequal treaties” with the European countries and the USA. The World Bank table cited in note 1 above gives Japan’s unweighted average tariff rate for all goods (and not just manufactured goods) for the years 1925, 1930, 1950 as 13%, 19%, 4%.
References


ATPS Technopolicy Briefs Series

(ATPS Technopolicy Brief 1)

How Can We Constitutionalize Innovation, Technology and Intellectual Property in Kenya? by Bernard Sihanya
(ATPS Technopolicy Brief 2)

What Can Biotechnology Do For Africa? How Can The Associated Risks And Uncertainties Be Managed? by Norman Clark
(ATPS Technopolicy Brief 3)

Who Needs Technology Policy? by Ha-Joon Chang
(ATPS Technopolicy Brief 4)

Keeping Hunger at Bay: Genetic Engineering and Food Security in sub-Saharan Africa by John Mugabe
(ATPS Technopolicy Brief 5)

Science in a Globalizing World: Implications for Africa by Awele Maduemezia
(ATPS Technopolicy Brief 6)

How can Science and Technology in Africa be Formulated and Implemented? by Osita Ogbu
(ATPS Technopolicy Brief 7)

How can Science and Technology Policy Aid Nigeria’s Reconstruction? by Osita Ogbu
(ATPS Technopolicy Brief 8)

Can Africa Develop without Science and Technology by Osita Ogbu
(ATPS Technopolicy Brief 9)

How can Innovation Systems and Innovative Clusters be used to Develop Africa? by Osita Ogbu
(ATPS Technopolicy Brief 10)
The author is at the Faculty of Economics, University of Cambridge.
For more information this series and ATPS Contact:

The Executive Director
The African Technology Policy Studies Network
3rd Floor, The Chancery, Valley Road
P.O. Box 10081 00100 General Post Office
Nairobi, Kenya

Tel: +254-2-2714092/168/498
Fax: +254-2-2714028
Email: info@atpsnet.org
Website: http://www.atpsnet.org