The University of Manchester
Brooks World Poverty Institute

MANCHESTER 1824

Squeezing the state: tariff revenue, state capacity and the WTO's Doha Round

James Scott [1]

[1] University of Manchester, UK

james.scott@manchester.ac.uk

May 2012

BWPI Working Paper 169

Brooks World Poverty Institute
ISBN : 978-1-907247-68-2

Creating and sharing knowledge to help end poverty

www.manchester.ac.uk/bwpi

Abstract

Tax revenue forms a critical element of state capacity, in turn underpinning the state's ability to foster inclusive economic growth. This paper calculates the impact of the WTO's Doha Round on tariff revenues among low-income countries. It finds that some, though not all, are severely affected, losing up to 17 percent of total government tax revenue. In addition, the tariff cuts are found to be regressive, primarily affecting luxury items, such as motor vehicles. Finally, the paper analyses the effectiveness of the mechanism included in the Doha Round to overcome lost tariff revenue, namely aid for trade.

Keywords: WTO, DDA, developmental state, tax, tariffs, state capacity.

James Scott is Hallsworth Fellow in Political Economy, the Brooks World Poverty Institute, the University of Manchester, UK.

Acknowledgements

The author would like to thank Rorden Wilkinson, Sophie Harman and Dennis Rodgers for comments on this paper, and the participants in the 'Global Health, Political Economy and Beyond' Workshop at City University in December 2011, where an earlier version was presented. The usual caveat applies.

1. Introduction

The days of the Washington Consensus and its policies of state retrenchment have given way to greater recognition of the role the state plays in development (Gore 2000). The success in particular of waves of Asian countries – from Japan, through South Korea and the other newly industrialised countries, to China and Vietnam more recently – highlighted the role of the 'developmental' state in processes of development and poverty reduction (Johnson 1995; Woo-Cumings 1999; Wade 2003). Drawing from these examples, the World Bank laid out the importance of the state in its *World Development Report 1997*, arguing that 'development requires an effective state that plays a facilitator role in encouraging and complementing the activities of private businesses and individuals' (World Bank 1997: iii). More recently, Luiz Carlos Bresser Pereira (2010) has set out what he terms the 'new developmentalism', which gives the state a central role in forming a national development strategy. Such a strategy, he argues, is necessary to mobilise resources for sustained domestic investment and to shift economic activity into sectors of high productivity. The mobilisation of resources, including (though not restricted to) the effective collection of tax, forms a major element of securing an effective state that is able to facilitate both development and poverty reduction. As Jonathan Di John argues, 'Resource mobilisation lies at the heart of economic development. And among various means of resource mobilisation…tax is the most closely related to questions of state formation and capability' (Di John 2008a: 2).

It is well recognised that for many developing countries tariff revenues form a significant part of total tax revenue, and trade liberalisation can therefore lead to a decline in government revenue if it is not accompanied by wider tax reforms. Though this problem is often mentioned in literature surrounding prospective trade agreements, it is frequently referred to only in passing, with little attempt to estimate the magnitude of the impact or examine the likely means adopted to mitigate the problem. Yet this issue can have a significant impact on state capacity, shrinking the ability of governments in low-income countries to adopt the path of state-facilitated development used by successful countries, and is critical therefore to the prospect of trade contributing to development and poverty reduction. This paper examines the current round of negotiations within the World Trade Organization (WTO), known as the Doha Development Agenda (DDA) or Doha Round, and the extent to which it will reduce government revenue in a range of low- and lower-middle-income countries, namely Cameroon, Cape Verde, the Dominican Republic, Côte d'Ivoire, Kenya, the Kyrgyz Republic, Morocco, Namibia, Pakistan, Paraguay, the Philippines and Zimbabwe. It further examines the distributional impact of DDA tariff cuts within three of the most severely affected countries in the sample (Cape Verde, Côte d'Ivoire and Namibia), before examining the means of mitigating lost tariff revenue that has been built into the DDA. This enables an evaluation of the impact the DDA will have, should it be concluded, on these states and their ability to mobilise resources for development.

The paper finds that there is significant variation in how severely countries are affected, with many countries in the sample seeing relatively modest losses of around two percent of total government tax revenue, but for some the impact is severe. Namibia, for instance, stands to lose 17 percent of total government tax revenue, equating to nearly double its annual health budget, while Cape Verde and Côte d'Ivoire each lose close to eight percent. Even revenue loss of two percent can be problematic, given that it takes place concurrently with the significant economic reform that the

DDA will entail. Dislocation of workers out of less competitive industries and threats to agricultural livelihoods suggest the period of DDA implementation will require greater government assistance to affected citizens, which will be compromised by a widening fiscal deficit. This paper also finds that the products that will see the greatest reduction in tariff revenue fall primarily into two categories: luxury items (principally motor vehicles) and low-technology manufactures. This has troubling implications for the progressivity of tax systems and for the potential of the DDA to exacerbate the process of de-industrialisation in these low-income countries. The overall effect is that the DDA will reduce the capacity of the affected low-income states to mobilise the resources needed to foster an effective, or developmental, state.

The DDA includes measures to mitigate lost tax revenue and other costs associated with its implementation, through promises of 'aid for trade'. This will be used to fund reforms to tax regimes in affected developing countries to recover lost tariff revenue, channelled through the World Bank and International Monetary Fund (IMF). This paper accordingly analyses whether this can deliver the necessary broader tax reform to overcome the problems identified above. It finds that the international financial institutions (IFIs)' record in this regard has been distinctly problematic, with low-income countries unable to recover lost tariff revenues and suffering rising inequality due to the tax systems favoured by the IFIs. As such, the DDA combines liberalisation with insufficiently robust mechanisms for mitigating the problems caused by that liberalisation, weakening what are already relatively fragile states.

The paper unfolds as follows. The following section briefly examines the role of tax in state capacity, the issue of lost tariff revenue through trade liberalisation and the existing literature on this aspect of the DDA. Section 3 sets out the methodology employed in the tariff analysis before Section 4 gives the results. The paper then examines the issue of aid for trade and the World Bank and IMF sponsored tax reforms that can be expected to accompany the DDA, focusing on their success and equity. The final section offers some concluding comments.

2. Tax, tariff revenue and the DDA

Tax is central to the creation of a fully functional, secure and effective state that is able to facilitate development and poverty reduction. The concept of the 'developmental state' drew from the experiences of the countries of Asia that have achieved sustained, broad-based high growth rates (for an excellent literature review, see Routley 2012). These countries were able to form a virtuous circle of mobilising state resources to facilitate economic expansion, which in turn fed through to increased state resources. Africa, and particularly sub-Saharan Africa, by contrast, has been less successful in this regard. As Alice Sindzingre argues:

> The decrease in revenues [in sub-Saharan Africa following trade liberalisation] may have resulted in a developmental vicious circle. Indeed, the capacity for conducting public policies aimed at export diversification, which entail costs for the budget, is reduced. Spending on infrastructure, which is crucial for the building of the developmental state, has often been the first category of spending to be reduced when governments were facing fiscal constraints (Sindzingre 2007: 623, citing Khattry 2003).

The capacity (and willingness) to fund infrastructure and facilitate industrial expansion is critical, but fostering inclusive development 'is not limited to growth and economic transformation, it equally involves redistribution' (vom Hau 2012: 3). As Polanyi (1944) showed, states are compelled to establish welfare regimes to protect citizens from the socially destructive effects of market forces. This important redistributive role again brings to the fore questions of taxation and its distribution.

It should be noted that the concept of state capacity is analytically separate from that of a developmental or effective state. A state may possess a high level of capacity but choose not to direct it towards fostering development (Routley 2012: 8; vom Hau 2012: 4; Vu 2007: 28). This paper does not assume that increasing state revenue, nor increasing state capacity, inherently leads to poverty reduction or greater development. The machinery of the state may be, and frequently has been, put to wholly nefarious purposes, including genocide. Nonetheless, the paper adopts the position that history suggests that the state plays a key role in fostering high growth and inclusive development, and that if it is to perform this task the state requires secure and adequate revenue to enhance its capacity.

The pattern of taxation is critical to both state capacity and resilience, and to political stability. The distribution of the tax burden underpins the contract between segments of society and the state and is therefore important for state legitimacy. Different types of tax regime have different effects on building these relations. For example, direct (income and corporation) taxes tend to be most effective in enhancing the 'voice' among citizens (Di John 2010: 7; Lieberman 2002), helping to forge a social contract between the state and its constituents. Changes to the level of taxation, its structure and the distribution of its burden have a profound effect on the political settlement between domestic groups and the ability of the state to fund both social spending and economic infrastructure. Khattry (2003) finds that past trade liberalisation within low-income states has led to the squeezing of infrastructure budgets, and the financing of politically important social expenditures shifted towards taking on new debt. This in turn has set off a further tightening of budgets as rising interest payments squeeze fiscal expenditures. The sobering past experiences Khattry sets out highlight the importance of assessing the impact of the DDA in this regard while there is still time for altering the details of the agreement. If the DDA is to contribute to sustainable development, as the Doha Ministerial Declaration claims as its aim (WTO 2001), this issue must be taken seriously.

The WTO's DDA (if it is completed) presents a considerable liberalising force for many poor countries. Though the DDA is currently at an impasse, many commentators believe that it will nonetheless be concluded when the political conditions are right (see, for example Wilkinson, 2012). The Round continues to have support from a majority of developing countries, which wish to resist the shift to bilateral trade deals currently being pursued by the rich countries, since weaker states can lessen their political disadvantage within the multilateral setting. As such, it is appropriate to use this hiatus in the negotiations to seek greater clarity on the effects the DDA is likely to have on its participants. Furthermore, following the broad package that was put together in July 2008, the likely contours and coefficients of the DDA agreements are now reasonably securely known. Further changes to the package are likely to come at the margins, in such areas as sectorals and the details of the special safeguard mechanism.

Analyses of the impact of the DDA on developing countries abound, covering every aspect of the negotiations, including cotton (Lee 2012; Eagleton-Pierce 2012), food security (Clapp 2006), manufacturing (Chang 2005; Anderson et al. 2006), agriculture (Anderson and Martin 2005), services (Gootiiz and Mattoo 2009) and poverty (Hertel and Winters 2006; Polaski 2006). A large literature has arisen in recent times using computable general equilibrium (CGE) and partial equilibrium modelling to predict the global welfare gains that full liberalisation or a likely DDA outcome will bring about (for overviews, see Hess and von Cramon-Taubadel 2008 Ackerman and Gallagher 2008; Scott and Wilkinson 2011).

Within the literature on trade, the importance of tariff revenue to developing countries is often noted and a number of retrospective studies have been made examining the impact of past trade reform (including Khattry 2003; Baunsgaard and Keen 2005; Damme et al. 2008; Gemmell and Morrissey 2005; Khattry and Rao 2002) but the impact of the DDA on this area has been somewhat underexamined. One exception is the OECD study (Kowalski 2005). This is an important and useful contribution that provides a rich discussion of the issue and a CGE-based analysis of the effect of tariff reductions for a range of countries. However, when it was written the DDA negotiations had not yet progressed to the point where the likely deal had taken shape. Kowalski examines the effects of significantly greater liberalisation than has subsequently emerged as the likely DDA package, particularly in agriculture, where the formula he modelled for tariff reductions has turned out to have been greatly more ambitious than that subsequently agreed.

Valenzuela et al. (2008: 402-403) also present a CGE-based study, examining the effect of modifying the standard GTAP model such that tariff revenue losses are replaced by increasing indirect consumption taxes. They find that the welfare gains from full global liberalisation to developing countries as a group fall by 17 percent, while those for sub-Saharan Africa fall by 25 percent. Though this is an important correction to the usual CGE framework (which makes no allowance for lost tax revenue), the modelling of complete liberalisation is of relatively little direct relevance to understanding the impact of specific trade deals, such as the DDA, which will achieve much less than this and do nothing to reduce critical trade distortions such as agricultural subsidies.

These two studies make important contributions to the area, but both suffer from problems, particularly relating to assuming greater liberalisation taking place than has emerged as a likely DDA outcome. As such, the effect of the DDA itself on tariff revenue is an underexplored area. This paper addresses this critical issue, and the impact of the tariff losses on the prospect of facilitating developmental states within low income countries. The following section turns to the methodology employed.

3. Methodology

There are several ways of analysing tariff revenue losses, each having associated advantages and disadvantages. One option is the use of CGE analysis, which is coming to be the dominant method of trade analysis and is, as noted above, the method used by both Kowalski (2005) and Valenzuela et al. (2008). This paper, however, adopts a different approach. Here, tariffs and associated trade flows are examined on a line-by-line basis, calculating the tariff revenue currently earned and that

expected following imposition of the DDA formulae for Non-Agricultural Market Access (NAMA) and agriculture. This makes the assumption that trade flows will not change after the liberalisation is implemented. Often this assumption is inappropriate, since imports would normally be expected to increase following tariff reductions, increasing the volume of trade that revenues are collected on and thereby offsetting revenue losses. However, in the context of this paper this is not expected to be a problem. Increasingly, CGE analyses of the impact of the DDA suggest that imports into poor countries will *decrease* slightly as a result of the DDA, rather than increase. The most authoritative source is the set of papers in Hertel and Winters' (2008) edited volume, *Poverty and the WTO: Impacts of the Doha Development Agenda*. The countries included in that study that are of most significance for present purposes (namely Cameroon, Bangladesh, Mozambique, Vietnam and the Philippines) all show the DDA leading to declining imports (except for the Philippines, which shows no change) (Hertel and Winters 2008: 86). As such, assuming fixed import volumes should fractionally underestimate the impact on tariff revenues in this case, rather than overestimate it.

Adopting a line-by-line methodology brings its own benefits, such as allowing a more detailed examination of tariff levels, which is useful since it evades the potential problems of aggregating tariff lines, as is done in CGE analyses. The most commonly used CGE model, the Global Trade Analysis Project (GTAP) model, for instance aggregates tariff lines into 57 sectors, which can mask the wide tariff variation sometimes found within those sectors. Averaging different tariff levels and their associated trade flows introduces a significant degree of approximation into the analysis. Taking a line-by-line approach allows the full set of over 5,000 tariff lines (at the six-digit HS level) to be examined. There are advantages and disadvantages associated with any methodology used, but for present purposes a line-by-line approach is arguably most appropriate.

This paper calculates the DDA's tariff revenue implications for a number of low-income countries in order to examine the impact the DDA has on tariff revenue and thereby on overall government tax revenue. Through this it assesses the extent to which the DDA reduces state capacity within low-income countries and in turn reduces their ability to implement an effective developmental strategy. The paper does not aim for comprehensiveness across all developing countries, nor for a systematic random sample from which the results could averaged and extended to other countries. Such averages are unhelpful anyway, since they obscure the very different effects countries face. The purpose rather is to demonstrate that some of the countries included, and potentially others that were not included, will face a severe fiscal squeeze from implementing the DDA. Least developed countries are not included, as the DDA will not require them to cut their tariffs. The paper examines a selection of low-income countries, namely Cameroon, Cape Verde, Côte d'Ivoire, the Dominican Republic, Kenya, the Kyrgyz Republic, Morocco, Namibia, Pakistan, Paraguay, the Philippines and Zimbabwe. These were selected from the World Bank's categories of low-income and lower-middle-income economies, excluding least developed countries, non-WTO members and those for which sufficient data were not available.

Tariff data were taken from the WTO's Tariff Download Facility, and used the latest available bound and applied tariffs for which trade flows were available, at the six-digit HS level. For some countries the latest bound and applied rates were given in different HS codes (bound rates are usually listed in HS02 for countries that joined the WTO in 1995, while applied rates are usually in HS07). Where this has been the case, some codes could be converted from HS02 to HS07. Where this was not

possible, the tariff line was excluded from the analysis. However, the tariff rates examined covered a minimum of 94 percent of all lines, making a highly comprehensive analysis.

The current draft NAMA text (WTO 2011a: 25-26) indicates that agreement has been reached that the NAMA modalities would be through the application of a Swiss Formula, i.e. $T = (X \times Z) / (X + Z)$ where T is the new tariff rate, X is the old tariff rate, and Z is a coefficient to be chosen through negotiation. Z operates as the lowest tariff that there will be following the cuts. The current text envisages three options being given to developing countries concerning the value of Z and the flexibilities allowed in the cuts. In simplified terms, these are:

(i) Z=20, but with smaller cuts allowed on 14 percent of tariff lines or applying no cut to 6.5 percent of tariff lines.

(ii) Z=22, but with smaller tariff cuts for up to 10 percent of tariff lines, or applying no cut to five percent of tariff lines.

(iii) Z=25, but with no flexibilities.

In this paper, option three is used, since it is impossible to know which tariff lines will be chosen by each country for smaller cuts if they adopt option one or two. The implications of adopting either of these alternatives are briefly discussed after presenting the results of the analysis.

In agriculture the draft text (WTO 2011b: 26-27) proposes a tiered formula for cutting tariffs, with tariff cuts as set out in Table 1.

Table 1: DDA agriculture tariff cuts

Current tariff, x	0≤x≤30	30<x≤80	80<x≤130	x>130
Required cut	33.3%	38%	42.7%	46.7%

A number of tariff lines (around five to six percent of lines in the current draft, though this remains the subject of negotiation) will be designated by developing countries as Sensitive Products, on which lesser tariff cuts are required; yet, because of the difficulty of knowing which lines any country will designate as sensitive, these have been ignored. This will mean that the calculated loss of tariff revenues are overestimated to an extent. However, counterbalancing this is the effect of the Special Safeguard Mechanism, which will allow developing countries to raise tariffs to counter import surges. Given the high frequency of such surges (see FAO 2006) this could potentially have a significant impact on agricultural tariff revenues, since tariffs will be higher during such import surges than currently envisaged. Furthermore, for each country examined here, tariff revenues from non-agricultural goods are much greater than those on agricultural goods, limiting the distorting effect of ignoring Sensitive Products.

The following section gives the results of the analysis.

4. Results

Table 2 sets out the estimated existing tariff revenues disaggregated into NAMA and agriculture and those expected after applying the respective DDA formulae, with the implied loss of tariff revenue in US$ and as a percentage of the original. Table 2 shows that some countries in this sample will see dramatic declines in tariff revenue as a consequence of implementing the DDA, were it to be concluded as per the current draft texts. Cape Verde, the Kyrgyz Republic and Namibia stand out, each losing around 35-37 percent of their current revenues. For the former two, this appears to be due to their relatively recent accessions to the WTO (2008 and 1998, respectively). The accession process, in which existing members extract unreciprocated concessions from the acceding states, leaves the new member with little or no 'water' in their tariff schedule.[1] As such, the DDA tariff reductions immediately bite into applied tariffs. Developing countries that acceded in the early stages of the GATT, or made use of the provisions for former colonies to accede upon gaining independence without the need to negotiate concessions, tend to have large differences between applied and bound rates.

It is notable that for all countries in the sample revenues from trade in agriculture are markedly smaller than those in NAMA, reflecting the fact that trade in manufactures dominates the total value of global trade. In addition, the effects of the agricultural tariff cuts are generally more limited than those of manufactures, especially for Cameroon, Ghana and Kenya, where they remain unchanged since there is little or no bite into applied agricultural tariffs.

Lost tariff revenue is only of consequence if tariffs form a significant part of total government revenue. Table 3 gives data for the contribution of tariffs to total government tax revenue, and the impact of the lost revenue given in Table 2 for future government tax revenue. The results suggest that the impact is disparate, with some countries being largely unaffected (such as Kenya), and others losing a modest quantity of tax revenue. However, some countries are found to be losing a large amount of total tax revenue, particularly Namibia, but with significant cuts also in Cape Verde, Côte d'Ivoire, Zimbabwe and the Kyrgyz Republic. To put these figures into context, Namibia and Cape Verde each lose around one-and-a-half times their annual government health budgets, while Côte d'Ivoire loses nearly double its annual health budget.[2] The impact of such fiscal tightening can be debilitating (and will be returned to below).

The effect on those countries losing around two to three percent of total government tax revenue is harder to specify, as it will depend to a great degree on context. Some countries are likely to replace their lost taxes relatively easily. Others, however, may face difficulties from even these comparatively small losses. As examined in more detail in the following section, experience suggests that they will be unlikely to be able to recover these losses through wider tax reform. Furthermore, this revenue loss is taking place within the context of significant economic adjustment brought about by the DDA, including an expected reduction in both imports and exports (Hertel and Winters 2008) and a reduction in employment across almost all sectors (Polaski 2006: 48, 51-52), combined with higher and more volatile food import prices (Clapp 2012). As such, state revenue is

[1] Water refers to the gap between bound rates, on which the negotiated formulae operate, and applied rates.
[2] Author's calculations, using date from World Health Organization (2011: 128-134).

Table 2: Revenue pre- and post- DDA cuts

Country	Current revenue NAMA, millions US$	Current revenue, agriculture	Post-DDA revenue NAMA, millions US$	Post-DDA revenue agriculture, millions US$	Estimated current tariff revenue , millions US$	Estimated post-Doha tariff revenue, millions US$	Loss of tariff revenue, per cent of original
	(1)	(2)	(3)	(4)	(1)+(2)	(2)+(3)	
Cameroon	$314.4	$80.7	$260	$80.7	$395	$340	13.8%
Cape Verde	$50.3	$32.4	$28.8	$23.7	$82.7	$52.5	37%
Cote d'Ivoire	$348	$140	$270	$85	$488	$355	27%
Dominican Republic	$586	$201	$482	$156	$787	$638	18.9%
Ghana	$462	$246	$426	$246	$708	$672	5.1%
Kenya	$538	$134	$473	$133	$672	$606	9.8%
Kyrgyz Republic	$43.8	$23.1	$32.1	$11.4	$66.9	$43.5	35.0%
Morocco	$5,463	$1,490	$3,556	$1,248	$6,952	$4,805	31%
Namibia	$331	$68.2	$198	$54.7	$400	$253	36.8%
Paraguay	$466	$74.5	$416	$63.1	$541	$479	11.4%
Pakistan	$2,695	$190	$2,228	$185	$2,885	$2,413	16.4%
Zimbabwe	$340	$70	$250	$64	$410	$314	23.4%

Table 3: Tariff loss, contribution to overall government tax revenue, and lost government tax

Country	Loss of tariff revenue, per cent of original	Tariff revenue as % of total government taxes	Lost revenue, as % of total government taxes
Cameroon	13.8%	12%	1.6%
Cape Verde	37%	21%	7.7%
Cote d'Ivoire	27%	29%	7.9%
Dominican Republic	18.9%	8.5%	1.6%
Ghana	5.1%	23%	1.2%
Kenya	9.8%	8.1%	0.8%
Kyrgyz Republic	35.0%	14%	4.8%
Morocco	31%	6.7%	2.1%
Namibia	36.8%	48%	17.5%
Paraguay	11.4%	11%	1.2%
Pakistan	16.4%	10%	1.7%
Zimbabwe	23.4%	26%	6.1%

Sources: Contribution of tariff revenues to total taxes calculated from IMF Government Finance Statistics except for: Cameroon, for which tentative estimates were made using IMF (2007); and Zimbabwe, for which it data is taken from Zimbabwe Ministry of Finance (2009).

being squeezed at a time when there is a heightened need for the state's role in cushioning the social disruption caused by liberalisation. Past experience shows that even modest losses of tariff revenue can prove problematic. Such losses among members of the West African Economic and Monetary Union following its creation in 2005 led to the reversal of tariff cuts on some products (WTO 2011c: paragraph 276), despite the fact that trade between these countries is relatively small compared to their trade with the EU. Within the WTO, such backsliding is a great deal more problematic, as it opens up the threat of retaliatory measures through the dispute settlement mechanism.

The impact of liberalisation on government revenue is of critical importance for understanding the impact on state capacity, but other considerations are also important. These include how the effects are distributed among social groups and the associated consequences for political stability and the social contract between state and citizens. It is increasingly recognised that inequality is an important determinant of a country's long-run growth – that inequality 'clearly belongs on the list of well-established growth factors' (Berg and Ostry 2011: 15) – and slows down poverty reduction (Ravallion 2007). The intra-country distributional consequences of trade liberalisation is an area of contestation and considerable debate. There is no *a priori* reason for trade taxes to be considered necessarily either progressive or regressive – everything depends on the details of the tariff regime in place (see Chu et al. 2000). Likewise, even if the overall progressivity or otherwise of taxes associated with a particular tariff regime are known, for a trade deal that does less than abandon all tariffs completely the distributional effects of the liberalisation cannot be known in advance. Again, everything depends on the detail.

To get an idea of the distributional impact of the DDA tariff cuts, Tables 4, 5 and 6 list the 15 tariff lines (at the six-digit HS level) that show the biggest fall in revenue, for Cape Verde, Côte d'Ivoire and Namibia, respectively, along with the cumulative percentage of total losses from these lines. There is a significant degree of similarity across the three countries. Revenues from tariffs on motor vehicles form a large component of the overall losses (17.5 per cent, 33.5 per cent and 31.2 per cent for the three countries, respectively). Being luxury items, such tariffs are likely to be highly progressive, since it is only the relatively wealthy that can afford such items. Other luxury items, such as beauty treatments, also feature, but are less prominent.

Other items recurring across Tables 4-6 are non-luxury, but may be important components of industrial strategy. Clothing, textiles and furniture represent labour-intensive, low technology manufacturing sectors, which have traditionally formed the first rung in the ladder of industrialisation. Though reducing tariffs on such products would benefit consumers – poor and rich alike – it would likely come at the expense of domestic production, continuing the process of de-industrialisation that has been seen, particularly in Africa since the 1980s. Having an inefficient industrial sector is in some regards better than having no industrial sector at all. As UNCTAD (2011: 4) argues, industrialisation has been shown to be critical to all cases of countries successfully moving to sustained, high economic growth. Though trade liberalisation can induce gains in efficiency of import-competing industries, inappropriate liberalisation leads rather to industrial collapse, as has been the record of much of Africa (Sundaram 2012). As such, there are potential dangers to low-income countries opening themselves up to too much competition in low-

technology manufactures, given that they struggle to compete against least-cost producers, such as China and Vietnam.

The picture that emerges is that some low-income countries, though not all, will experience large losses in tariff revenues, primarily from liberalisation of manufactures. Furthermore, focusing in more detail on the three countries in the present sample for which the impact is greatest, two issues present themselves. First, the distributive effect of the DDA liberalisation appears to be regressive, with tariff revenues on luxury items seeing the greatest decline. Second, the protection of labour-intensive, low technology manufacturing, critical to the early stages of industrialisation, also appears to be heavily affected.

It is worth briefly considering whether the analysis above is likely to have overestimated or underestimated the tariff losses. Two reasons suggest that it will be an underestimate. First, as noted above, the results of CGE analysis suggest that the DDA will lead to falling import volumes for low-income countries (Hertel and Winters 2008: 86), rather than the unchanged volumes assumed here, reducing the volume of trade on which tariffs are being collected. Second, it is likely that countries will choose one of the other two options for NAMA cuts, which entail bigger tariff cuts but allow for some sensitive tariff lines to be excluded. The products chosen as sensitive will almost certainly be those which would face a large potential fall in domestic production (and therefore employment) if subjected to greater import competition. However, as this analysis has found, the greater part of tariff revenue loss comes from motor vehicles, which are not produced in low-income countries and are therefore unlikely to be chosen for lower cuts. As such, choosing one of the other NAMA options would exacerbate the tariff loss on those products that already show large contributions to overall losses, while reducing the tariff loss on products that contribute relatively little to overall losses.

The loss of government revenue examined here must be replaced by tax rises elsewhere if a large budget deficit and the associated rise in national debt is to be avoided.[3] Hence for some countries the DDA will require a significant change in tax structure, away from trade taxes towards other areas. This has been a common feature of past periods of trade liberalisation in developing countries, notably through structural adjustment programmes undertaken under the auspices of the World Bank and IMF, and there is a considerable body of research examining the contours of such reform and its likely impact. The following section examines this in more detail, assessing whether the DDA's mechanisms for addressing the issue of lost tax revenue are effective.

[3] Aid is a third possibility for replacing lost revenue, but is unsustainable in the long run.

Table 4: Cape Verde 15 products contributing greatest loss of tariff revenue

Loss, 1000s US$	Contribution to overall NAMA tariff loss	Cumulative loss as % of total NAMA tariff loss	Shortened tariff line description (and HS07 code in brackets)
1,197	5.58%	5.6%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 2.500 cm³ (870333)
1,191	5.55%	11.1%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.500 cm³ but <= 2.500 cm³ (870332)
721	3.36%	14.5%	Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. switching and routing apparatus (excl. telephone sets, telephones for cellular networks or for other wireless networks) (851762)
633	2.95%	17.4%	Photosensitive semiconductor devices, incl. photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes (excl. photovoltaic generators) (854140)
565	2.63%	20.1%	Surface-active preparations, washing preparations, auxiliary washing preparations and cleaning preparations put up for retail sale (340220)
545	2.54%	22.6%	Data-processing machines, automatic, comprising in the same housing at least a central processing unit, and one input unit and one output unit (847141)
545	2.54%	25.1%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.500 cm³ but <= 3.000 cm³ (870323)
539	2.51%	27.7%	Glazed ceramic flags and paving, hearth or wall tiles (690890)
493	2.30%	30.0%	Wooden furniture (excl. for offices, kitchens and bedrooms, and seats) (940360)
466	2.17%	32.1%	Wooden furniture for bedrooms (excl. seats) (9403500
452	2.11%	34.2%	Upholstered seats, with wooden frames (excl. convertible into beds) (940161)
448	2.09%	36.3%	Wooden furniture for kitchens (excl. seats) (940340)
437	2.04%	38.4%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.000 cm³ but <= 1.500 cm³
392	1.82%	40.2%	Metal furniture for offices (excl. seats)
377	1.75%	41.9%	Motor vehicles for the transport of goods, of a gross vehicle weight <= 5 t
289	1.35%	43.3%	Parts of telephone sets, telephones for cellular networks or for other wireless networks

Table 5: Côte d'Ivoire, 15 products contributing greatest loss of tariff revenue

Loss, 1000s US$	Contribution to overall NAMA tariff loss	Cumulative loss as % of total NAMA tariff loss	Shortened tariff line description
8,540	10.90%	10.9%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.500 cm³ but <= 3.000 cm³ (870323)
5,782	7.38%	18.3%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.500 cm³ but <= 2.500 cm³ (870332)
5,330	6.80%	25.1%	Tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicles, n.e.s. (871000)
4,311	5.50%	30.6%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 2.500 cm³ (870333)
3,852	4.92%	35.5%	Motor cars and other motor vehicles principally designed for the transport of persons of a cylinder capacity > 3.000 cm³ (870324)
2,126	2.71%	38.2%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.000 cm³ but <= 1.500 cm³ (870322)
1,876	2.39%	40.6%	Plain woven fabrics of cotton, containing >= 85% cotton by weight and weighing > 100 g to 200 g/m², printed (520852)
1,663	2.12%	42.7%	Coaxial cable and other coaxial electric conductors, insulated (854420)
1,650	2.11%	44.8%	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine 'diesel or semi-diesel engine' of a gross vehicle weight <= 5 t (870421)
1,570	2.00%	46.8%	Manganese dioxide cells and batteries (excl. spent) (850610)
1,223	1.56%	48.4%	Telephones for cellular networks 'mobile telephones' or for other wireless networks (851712)
1,163	1.48%	49.9%	Parts and accessories, for tractors, motor vehicles for the transport of ten or more persons, motor vehicles for the transport of goods and special purpose motor vehicles, n.e.s. (870899)
943	1.20%	51.1%	Lead-acid accumulators of a kind used for starting piston engine 'starter batteries' (excl. spent) (850710)
912	1.16%	52.2%	Worn clothing and clothing accessories, blankets and travelling rugs, household linen and articles for interior furnishing, of all types of textile materials (6309000)
869	1.11%	53.3%	Air pumps, air or other gas compressors and ventilating or recycling hoods incorporating a fan, whether or not fitted with filters, having a maximum horizontal side > 120 cm (841480)
765	0.98%	54.3%	Glazed ceramic flags and paving, hearth or wall tiles (690890)

Table 6: Namibia, 15 products contributing greatest loss of tariff revenue

Loss, 1000s US$	Contribution to overall NAMA tariff loss	Cumulative contribution to loss	Shortened tariff line description (and HS07 code in brackets)
32,904	24.6%	24.6%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 1.500 cm³ but <= 3.000 cm³ (870323)
3,136	2.35%	27.0%	Wooden furniture (excl. for offices, kitchens and bedrooms, and seats) (940360)
3,100	2.32%	29.3%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 3.000 cm³ (870324)
2,597	1.94%	31.2%	New pneumatic tyres, of rubber, of a kind used for motor cars, incl. station wagons and racing cars (401110)
2,583	1.93%	33.2%	Motor vehicles for the transport of >= 10 persons, incl. driver, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" (870210)
1,783	1.33%	34.5%	Motor cars and other motor vehicles principally designed for the transport of persons, of a cylinder capacity > 2.500 cm³ (870333)
1,690	1.26%	35.8%	Surface-active preparations, washing preparations, auxiliary washing preparations and cleaning preparations put up for retail sale (340220)
1,612	1.21%	37.0%	Soap in the form of flakes, granules, powder, paste or in aqueous solution (340120)
1,602	1.20%	38.2%	Sodium hydroxide "caustic soda" solid (281511)
1,584	1.19%	39.4%	New pneumatic tyres, of rubber, of a kind used for buses and lorries (excl. typres with lug, corner or similar treads) (401120)
1,583	1.18%	40.5%	Beauty or make-up preparations and preparations for the care of the skin (other than medicaments) (330499)
1,454	1.09%	41.6%	T-shirts, singlets and other vests of cotton, knitted or crocheted (610910)
1,432	1.07%	42.7%	Ceramic sinks, washbasins, washbasin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures (excl. of porcelain or china, soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper holders) (691090)
1,423	1.06%	43.8%	Motor cars and other motor vehicles principally designed for the transport of persons,of a cylinder capacity > 1.500 cm³ but <= 2.500 cm³ (870332)
1,321	0.99%	44.8%	Parts and accessories of bodies for tractors, motor vehicles for the transport of ten or more persons (870829)
1,222	0.91%	45.7%	T-shirts, singlets and other vests of textile materials, knitted or crocheted (excl. cotton) (610990)

5. Mitigating losses

The radical squeezing of government budgets through trade reform is recognised as being neither desirable nor politically tenable. If unsustainable debt is to be avoided, reduced revenue must lead to a reduction in government expenditure. This damages the ability of the government to play the vital role of fostering the conditions for long-term growth. Social spending may be reduced or, more likely since it is politically easier, investment in economic infrastructure is shrunk.

The DDA has thrown up a means of mitigating these problems through tying the DDA to increased 'aid for trade' from donor nations, which is to be used to help developing countries with the costs of implementation and with achieving greater competitiveness (see the selection of papers in Njinkeu and Cameron 2008). It is highly likely that aid for trade will be used to fund tax reform in states that face severe fiscal losses, utilising the expertise of the World Bank and IMF. The IMF's existing Trade Integration Mechanism was introduced in 2004 to assist countries with the fiscal shortfalls that can accompany trade liberalisation, and the IMF works in close coordination with the WTO in this regard (see WTO 2004). As such, to understand the full effect of the issues being examined in this paper it is necessary to appraise the past record of Bank and Fund tax reforms. This section briefly examines three issues: first, the theory underpinning Bank and Fund tax reforms and the empirical record of reform success; second, the distributional impact of such reform; and, third, the potential problems with relying on aid for trade.

The IFIs have had a great deal of experience over the last 30 years with implementing tax reform to recover lost trade tax revenues as part of structural adjustment programmes. In neo-classical theory, shifting taxes from trade to other areas can (if correctly designed and implemented) leave the country overall better-off (Keen and Lighart 2001). This theory-derived result has underpinned what has been termed a 'tax consensus' between the IFIs, the ignoring of which risks 'incurring disapproval from the international financial institutions' (Adam and Bevan 2004: 60). This consensus includes aiming for tax revenues to be around 15-20 percent of GDP, and for 'tax neutrality' – that is, for the tax system not to change economic incentives. In practical terms, the policies pushed by the Bank and Fund avoid direct taxes (of income and profits) and trade taxes, in favour of indirect taxes, particularly VAT, and widening the tax base.

However, modifying the idealised neo-classical framework underpinning this theory to bring it more into line with the particular circumstances prevalent in developing countries modifies the expected result. Emran and Stiglitz (2005), for instance, point out that developing countries generally have a significant informal sector which is largely untaxed. In such a situation, shifting from tariffs to indirect taxes can reduce overall welfare, since it increases the distortions in the economy between formal and informal sectors. Similarly, a range of structural conditions prevalent in low-income countries makes the collection of tax at a sufficient level difficult. These include the importance of agriculture in total output and employment, a large informal sector, the small share of wages in total national income, the small share of total consumer spending made in modern, formal sector establishments, and others (Di John 2006: 3; Stern 1987: 3).

The empirical record of IFI-inspired tax reform has found it to be problematic for low-income countries. Thomas Baunsgaard and Michael Keen, examining the record of 111 countries implementing tax reform over 25 years, find that while middle- and high-income countries have been able to offset lost tariff revenue with other tax reform, low-income countries have struggled in this regard (Baunsgaard and Keen 2005). In fact, they find that such countries have recovered only around 30 cents in each dollar lost. Barsha Khattry and J Mohan Rao (2002) undertook a similar exercise and also found that low-income countries have been unable to recover lost tax revenue, which they trace to the structural characteristics prevalent in such countries.

In addition to IFI-sponsored tax reform failing to recover lost tariff revenues, reforms are found to have negative distributional impacts. As noted above, the neo-liberal basis of the tax consensus favours movement away from direct taxes (of income and corporate profits) to the imposition or expansion of indirect, consumption-based taxes. In practice, this has generally meant a VAT, which has 'driven the majority of tax reforms' in most least developed countries (Di John 2008b: 9; see also Norregaard and Khan 2007: 37-38). However, as Damme et al. (2008: 5) argue, 'the relatively standardized advice provided by the IMF is sound from an efficiency perspective but may be inappropriate for least developed countries, which have characteristics different from the European countries where VAT was designed'. Limited state capacity has hampered the implementation of adequate refund mechanisms, thereby inhibiting the introduction of successful VAT regimes (Ebrill et al. 2001). Various structural factors prevalent in Africa, such as relatively low-levels of urbanisation and a large share of agriculture in the economy, have served to make the collection of VAT inefficient in such countries (Aizenman and Jinjarak 2008).

The distributional effect of VAT depends to a great degree on its design and which sectors are excluded. Empirical examinations of VAT regimes in developing countries have found the distributional impact to be mixed (Gemmell and Morrissey 2005; Bird 2007: 33). VAT applied to goods that are of importance to the poor, such as food and kerosene, are unsurprisingly found to be significantly regressive. Exempting such sectors, thereby concentrating the effect of the tax away from goods in the consumption basket of the poor, can make VAT neutral or progressive. However, in practice the need to create a simple system means that 'the multiple rates critical to distributional concerns ... are often ignored in favour of a simple revenue-maximising single-rate structure' (Marshall 2009: 5, citing Azaria and Robinson 2005).

Though the empirical record shows that VAT can be designed in a way that does not exacerbate inequality, the IFIs have a poor record in pursuing equitable reforms. Damme et al. (2008: 6) find that '[o]n the whole, the IMF does not often consider the negative distributional effects of its tax policy advice'. Recognising the weak institutional capacity of most low-income states, the IFIs oppose the use of more complicated regimes that involve multiple levels of VAT and exemptions for key sectors (such as food and agricultural inputs) in favour of a flat rate applied across the board.

As this evidence shows, the past experience of IFI-supported tax reform presents cautionary evidence with regard to the DDA. The experience of trade liberalisation undertaken over recent decades has shown that developing countries rarely manage to replace lost tariff revenue and the distributional effect of the usual reforms tends to be regressive. In a number of cases this has led to social unrest and political instability, as citizens react against the redistribution of the tax burden

and the extension of VAT to critical sectors such as food (Amenga-Etego and Grusky 2005: 277). This instability in turn jeopardises future growth prospects.

A final issue concerns the aid for trade agenda. Aid for trade came to the fore around the time of the Hong Kong WTO Ministerial Meeting in 2005, as a means of 'buying' the acquiescence of developing countries to the DDA, after it became clear that not all countries would gain from a completed DDA deal. The WTO lists four broad areas encompassed by aid for trade: technical assistance, building infrastructure, enhancing productive capacity, and adjustment assistance, including helping with the costs associated with tariff reductions (WTO 2012a). Estimates of the scale of aid for trade that will be needed to cover the 'narrow' definition of aid for trade (Page 2008) – that is, the expected costs of adjustment to the DDA – are imprecise, but are placed between $2bn and $4.3bn (Cali 2008: 155). This is relatively small compared to overall aid volumes, which reached $105bn from all OECD countries in 2009.

Despite this, caution is required. Developing countries must be wary of promises of aid for trade to buy their acquiescence to a damaging trade liberalisation agenda (see Langan and Scott 2011). Two issues are most important for present purposes. Firstly, though it has repeatedly been denied by the donors, it seems inevitable that money that goes into aid for trade will come at the expense of aid pledged to other sectors, particularly given the fiscal squeeze under way in almost all major donors. Critically, 47 percent of aid for trade currently comes in the form of loans rather than grants,[4] exacerbating debt problems in recipient states, and in the present context placing further importance on raising tax revenue to service debt repayments. Finally, developing countries must be wary of non-binding promises of aid to overcome the problems of implementing the DDA. The DDA texts currently place no enforceable commitments on the rich countries to provide sufficient aid to cover the costs of implementation. There is a significant risk that the non-binding clauses are broadly ignored once the ink is dry, as happened with the last trade round (the GATT's Uruguay round). The established pattern of aid pledges, including the longstanding 0.7 percent of GNI target, the Brussels Programme of Action for LDCs of 2001, through to the G7 Gleneagles targets of 2005, is that grand statements of intention are rarely subsequently honoured (see Gulasan 2010; OECD 2011; Langan and Scott 2011: 15).

In summary, the DDA has built in a mechanism for mitigating the lost tariff revenue associated with its implementation, involving increased aid for trade funding IFI-backed tax reforms. However, there are concerns raised by the past experience of tax reforms undertaken in conjunction with tariff liberalisation. The evidence from past IFI-sponsored tax reform is that: for low-income countries the lost revenue through trade liberalisation will be replaced primarily by shifting to VAT; the overall reforms are unlikely to fully replace the lost revenue, leaving a hole in the budget that must be replaced by borrowing or aid (both of which are unsustainable in the long run) or by reducing government spending (with implications for social spending); and the distributional consequences of reforms are likely to be regressive. Finally, developing countries should be wary about the promised assistance of aid for trade. Much of this is provided through loans, and without binding commitments written into the DDA texts may not be forthcoming anyway. The overall picture is one in which the DDA combines significant trade liberalisation with ineffective mechanisms for

[4] Calculated from data from www.oecd.org.

managing and mitigating the associated costs, leading to a reduction in state capacity and hampering future development prospects.

6. Conclusion

The DDA is at an impasse, but many commentators believe that it will eventually be concluded. The likely content of the final package is known to a reasonable degree, contained in the Chairs' reports to the General Council (WTO 2011a; 2011b), which provide a good indication of how implementation of the DDA will affect member states. This paper has examined the impact of the DDA on government revenue among low-income countries, finding that some, though not all, will be badly affected by implementation of the DDA, losing in Namibia's case a debilitating 17 percent of total government tax revenue. Past experience of tax reform implemented as part of trade liberalisation shows that low-income countries have been unable to recover lost revenues. As such, the DDA will place significant fiscal pressure on some member states, either increasing their need to borrow or squeezing social spending. The analysis here undermines the claim that the DDA can 'contribute significantly to the achievement of the MDGs' (WTO 2012b).

The results of this paper raise some issues around the nature of the WTO. It would appear that developing countries acceding to the WTO are having concessions extracted from them that are restricting their ability to contribute to further trade rounds (for an examination of this effect with respect to China, see Scott and Wilkinson forthcoming). While most of the developing countries that acceded to the GATT early on have large amounts of water in their tariffs, recently acceded states have very little. This means that further trade liberalisation has a much greater impact on their economies than it does on long-standing members, reducing their ability and willingness to contribute to WTO negotiations.

Least developed countries have been largely spared from commitments for liberalisation in the DDA in recognition of the problems they face in implementing further trade reform. However, it is clear that there are other low-income countries that will be highly adversely affected by the DDA; they are expected to undertake the same degree of liberalisation, and at the same pace, as developing countries that are more competitive enjoying robust growth. The difference between least developed countries and other low-income states is largely arbitrary. Not falling within the UN's definition of the least developed does not imply that further significant tariff liberalisation is feasible or appropriate. More attention to the circumstances of each individual country is needed.

This paper has shown that the effects on income distribution within the countries affected are likely to be regressive. The tariff lines that will see the greatest fall in generated revenue are primarily luxury items, while the tax reforms put in place to mitigate lost tariff revenue are likely to see the introduction or expansion of regressive VAT, financed by debt-creating aid for trade. Shifting the tax burden away from the wealthy threatens to reduce the income of the poor, while inequality is receiving increasing concern as a source of social disharmony and an impediment to long-run economic growth (Wilkinson and Pickett 2010; Lansley 2011; Thornbecke and Churumilind 2002).

However, the greatest negative impact of these reforms is perhaps the unquantifiable consequences on the development capacity of affected states. The lessons of countries that have successfully negotiated the path to sustained high growth and poverty reduction is that markets play an important role, but a robust state with a commitment to inclusive economic development coupled with sufficiently strong state capacity is crucial. Rather than state and market being in opposition, development requires both a strong market and a strong state working in tandem. Having a secure tax basis is a critical element in fostering the positive circle between enhancing state capacity, which enables the state to deliver for the poor and for domestic businesses, which in turn encourages acquiescence to taxation, thereby further improving state capacity.

As this paper has shown, the trade reform brought about within the DDA threatens to do the opposite, radically reducing tax receipts for some countries while offering no credible means of their recovery. Furthermore, this occurs simultaneously with subjecting the domestic economy to the shock of unbalanced liberalisation, through a deal which fails to tackle distortions such as agricultural subsidies, while simultaneously reducing the ability of low-income countries to protect small-holder farmers and infant industries. This threatens to create a vicious circle: falling taxes reducing state capacity, cutting the ability of the state to provide for its citizens while simultaneously requiring an increase in the amount of tax being extracted from them, in turn inducing greater non-compliance with tax authorities and further reducing state capacity.

The WTO's 'one size fits all' approach to trade liberalisation across all developing countries is failing. It does not generate a suitable developmental trade strategy for all member states and harms the capacity of states to follow the lessons of other successful countries. A more nuanced, context-specific approach to trade reform in low-income countries is demanded, that incorporates the lessons learned concerning the importance of developmental states and takes account of the complex interaction between trade, the structure of the domestic economy and the need to foster, rather than diminish, state capacity.

Bibliography

Ackerman, F. and Gallagher, K. P. (2008). 'The shrinking gains from global trade liberalization in computable general equilibrium models: a critical assessment'. *International Journal of Political Economy,* 37(1), 50-77.

Adam, C. and Bevan, D. (2004). 'Fiscal policy design in low income countries', in Addison, T. and Roe, A., *Fiscal Policy for Development.*(Basingstoke and New York: Palgrave Macmillan and UNU Wider.

Aizenman, J. and Jinjarak, Y. (2008). 'The collection efficiency of the Value Added Tax: theory and international evidence', *Journal of International Trade and Economic Development* 17(3), 391-410.

Amenga-Etego, R. N. and Grusky, S. (2005). 'The new face of conditionalities: the World Bank and water privatization in Ghana'. In D. A. McDonal and G. Ruiters (eds.) *The Age of Commodity: Water Privatization in Southern Africa* (London: Earthscan).

Anderson, K. and Martin, W. (2005). 'Agricultural trade reform and the Doha Development Agenda'. *The World Economy*, 28(9), 1301-1327.

Anderson, K., Martin, W. & van der Mensbrugghe, D. (2006). 'Doha Merchandise Trade Reform: What is at Stake for Developing Countries'. *World Bank Economic Review* 20(2), 169-195.

Azaria, N. and Robinson, Z. (2005). 'The revenue raising capabilities of a VAT system in developing countries'. *South African Journal of Economic and Management Studies* 8(1), 63-76.

Baunsgaard, T. and Keen, M. (2005). 'Tax revenue and (or?) trade liberalization', *IMF Working Paper WP/05/112* (Washington, DC: IMF).

Berg, A. G. and Ostry, J. D. (2011), 'Equality and efficiency: is there a trade-off between the two or do they go hand in hand?' *Finance and Development*, 48(3), 12-15.

Bird, R. M. (2007). 'Tax challenges facing developing countries: a perspective from outside the policy arena', Background Paper prepared for the UK Department for International Development.

Bresser Pereira, L. C. (2010). *Globalization and Competition: Why Some Emergent Countries Succeed While Others Fall Behind.* (New York: Cambridge University Press).

Cali, M. (2008). 'Scale and types of funds for aid for trade'. In D. Njinkeu and H. Cameron (eds.) *Aid for Trade and Development* (Cambridge: Cambridge University Press), pp. 151-170.

Chang, H-J. (2005). *Why Developing Countries Need Tariffs: How WTO NAMA Negotiations Could Deny Developing Countries' Right to a Future* (Oxford: Oxfam and South Centre).

Chu, K., Davoodi, H. and Gupta, S. (2000). 'Income distribution and tax and government social spending policies in developing countries', *IMF Working Paper WP/00/62* (Washington DC: IMF).

Clapp, J. (2006). 'WTO agriculture negotiations: implications for the global South', *Third World Quarterly* 27(4), 563-577.

Clapp, J. (2012). 'Food security and the WTO'. In R. Wilkinson and J. Scott (eds.), *Trade, Poverty, Development: Getting Beyond the WTO's Doha Deadlock* (London: Routledge) (forthcoming).

Damme, L., Misrahi, T. and Orel, S. (2008). 'Taxation policy in developing countries: what is the IMF's involvement?' (London: Bretton Woods Project), available at: http://visar.csustan.edu/aaba/LaurenDamme2008.pdf (accessed 18 February 2012).

Di John, J. (2006). 'The political economy of taxation and tax reform in developing countries', *UNU-WIDER Research Paper No. 2006/74* (Helsinki: UNU-WIDER).

Di John, J. (2008a). 'Taxation, resource mobilisation, and productive capacity-building in LDCs', Background Paper No. 5, for the *Least Developed Countries Report 2009* (Geneva: UNCTAD).

Di John, J. (2008b). 'Fiscal reforms, developmental state capacity and poverty reduction', Background Paper commissioned for the *UNRISD Flagship Report on Poverty* (Geneva: UNRISD).

Di John, J. (2010). 'Taxation, resource mobilisation and state performance', *Crisis States Working Papers Series No.2* (London: London School of Politics and Economics).

Eagleton-Pierce, M. (2012). 'The competing kings of cotton: (re)framing the WTO African Cotton Initiative', *New Political Economy,* 17(3).

Ebrill, L., Keen, M., Bodin, J. and Summers, V. (2001). *The Modern VAT* (Washington, DC: IMF).

Emran, M. S. and Stiglitz, J. E. (2005). 'On selective indirect tax reform in developing countries'. *Journal of Public Economics* 89, 599-623.

FAO (2006). 'FAO briefs on import surges – Issues No. 2: Import surges: what is their frequency and which are the countries and commodities most affected?' (Rome: FAO).

Gemmell, N. and Morrissey, O. (2005). 'Distribution and poverty impacts of tax structure reform in developing countries: how little we know', *Development Policy Review*, 23(2), 131-144.

Gootiz, B. and Mattoo, A. (2009). 'Services in Doha: what's on the table?' *World Bank Policy Research Working Paper* No. 4903 (Washington, DC: World Bank).

Gore, C. (2000). 'The rise and Fall of the Washington Consensus as a paradigm for developing countries', *World Development*, 28(5), 789-804.

Gulasan, N. (2010). 'Official development assistance: the status of commitments, projections for 2010, and preliminary 2009 figures'. *UNDP/ODS Discussion Paper* (New York: UNDP).

Hertel, T. W. and Winters, L. A., (eds.), (2006). *Poverty and the WTO: Impacts of the Doha Development Agenda* (Basingstoke and New York: Palgrave Macmillan).

Hess, S. and von Cramon-Taubadel, S. (2008). 'A meta-analysis of general and partial equilibrium simulations of trade liberalisation under the Doha Development Agenda'. *The World Economy* 31(6), 804-840.

IMF (2007). 'Cameroon: statistical appendix'. *IMF Country Report No. 07/286* (Washington, DC: IMF).

Johnson, C. (1995). *Japan, Who Governs? The Rise of the Developmental State* (New York: W W Norton).

Keen, M. and Ligthart, J. (2001). 'Coordinating tariff reductions and domestic tax reform', *Journal of International Economics* 56(2), 407-425.

Khattry, B. (2003). 'Trade liberalization and the fiscal squeeze: implications for public investment', *Development and Change* 34(3): 401-24.

Khattry, B. and Rao, J. M. (2002). 'Fiscal faux pas? An analysis of the revenues implications of trade liberalization', *World Development* 30(8), 1431-1444.

Kowalski, P. (2005). 'Impact of changes in tariffs on developing countries' government revenue', *OECD Trade Policy Working Papers, No. 18* (Paris: OECD Publishing).

Langan, M. and Scott, J. (2011). 'The false promise of Aid for Trade', *BWPI Working Paper No. 160* (Manchester: University of Manchester).

Lansley, S. (2011). *The Cost of Inequality: Why Enriching the Rich has Become Bad for the Economy* (London: Gibson Square).

Lee, D. (2012). 'Poverty and cotton in the DDA'. In R. Wilkinson and J. Scott (eds.), *Trade, Poverty and Development: Getting Beyond the WTO's Doha Deadlock* (Abingdon and New York: Routldege).

Lieberman, E. (2002). 'Taxation data as indicators of state-society relations: possibilities and pitfalls in cross-national research', *Studies in Comparative International Development* 36(4), 89-115.

Marshall, J. (2009). 'One size fits all? IMF tax policy in sub-Saharan Africa'. *Christian Aid, Occasional Paper No. 2* (London: Christian Aid).

Njinkeu, D. and Cameron, H. (2008). *Aid for Trade and Development* (New York: Cambridge University Press).

Norregaard, J. and Khan, T. (2007). 'Tax policy: recent trends and coming challenges', *IMF Working Paper WP/07/274* (Washington, DC: IMF).

OECD (2011). 'Development aid reaches an historic high in 2010'. Available from www.oecd.org/document/35/0,3746,en_2649_34447_47515235_1_1_1_1,00.html (accessed 1 November, 2011).

Page, S. (2008). 'Aid for trade: a new issue in the WTO'. In D. Njinkeu and H. Cameron (eds.) *Aid for Trade and Development* (Cambridge: Cambridge University Press), pp. 131-150.

Polanyi, K. (1944). *The Great Transformation* (Boston, MA: Beacon Press).

Polaski, S. (2006). *Winners and Losers: Impact of the Doha Round on Developing Countries* (Washington, DC: Carnegie Endowment for International Peace).

Ravallion, M. (2007). 'Inequality *is* bad for the poor'. In S. Jenkins and J. Micklewright (eds.), *Inequality and Poverty Re-examined* (Oxford: Oxford University Press).

Routley, L. (2012 forthcoming). 'Developmental states: a review of the literature'. *ESID Working Paper* (Manchester: University of Manchester).

Scott, J. and Wilkinson, R. (2011). 'The poverty of the Doha Round and the least developed countries'. *Third World Quarterly*, 32(4), 611-627.

Scott, J. and Wilkinson, R. (2011) 'China and the WTO'. *Research Center for Chinese Politics and Business Working Papers*, No. 5, (Indiana: RCCPB), available from www.indiana.edu/~rccpb/Working_Paper/Wilkinson_Scott_RCCPB_5.pdf.

Sindzingre, A. (2007). 'Financing the developmental state: tax and revenue issues', *Development Policy Review*, 25(5), 615-632.

Stern, N. (1987). 'Aspects of the general theory of taxation', in N. Sternand D. Newberry (eds.), *The Theory of Taxation for Developing Countries* (Washington, DC: Oxford University Press).

Sundaram, J. K. (2012). 'Some consequences of trade liberalization in sub-Saharan Africa', in R. Wilkinson and J. Scott (eds.), *Trade, Poverty, Development: Getting Beyond the WTO's Doha Deadlock* (Abingdon and New York: Routledge).

Thornbecke, E. and Churumilind, C. (2002). 'Economic inequality and its socioeconomic impact', *World Development*, 30(9), 1477-1495.

UNCTAD (2011). *Economic Development in Africa Report 2011: Fostering Industrial Development in Africa in the New Global Environment* (Geneva: UNCTAD).

Valenzuela, E., Anderson, K. and Hertel, T. (2008). 'Impacts of trade reform: sensitivity of model results to key assumptions'. *International Economic and Economic Policy* 4(4): 395-420.

vom Hau, M. (2012 forthcoming). 'State capacity and inclusive development: new challenges and directions', *ESID Working Paper* (Manchester: University of Manchester).

Vu, T. (2007). 'State formation and the origins of developmental states in South Korea and Indonesia'. *Studies in Comparative International Development,* 41(4), 27-56.

Wade, R. (2003). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (Princeton, NJ: Princeton University Press).

Wilkinson, R. G. and Pickett, K. (2010). *The Spirit Level: Why Equality is Better for Everyone* (London: Penguin).

Wilkinson, R. (2012). 'Of butchery and bicycles: the WTO and the "death" of the Doha Development Agenda'. *The Political Quarterly*, 83(2), 1-7.

Woo-Cumings, M. (ed.) (1999). *The Developmental State* (New York: Cornell University Press).

World Bank (1997). *World Development Report 1997: the State in a Changing World*. (Washington, DC: World Bank).

World Health Organization (2011). *World Health Statistics 2011* (Geneva: World Health Organization).

WTO (2001). 'Doha Ministerial Declaration'. 20th November, WT/MIN(01)/DEC/1.

WTO (2004). 'Fund support for trade-related balance of payments adjustments', 7 May, WT/L/565/Add.1.

WTO (2011a). 'Textual report by the Chairman, Ambassador Luzius Wasescha, on the state of play of the NAMA negotiations', 21 April, TN/MA/W/103/Rev.3/Add.1.

WTO (2011b). 'Negotiating Group on Agriculture: Report by the Chairman, H.E. Mr. David Walker, to the Trade Negotiations Committee', 21 April, TN/AG/26.

WTO (2011c). 'Committee on Trade and Development - Aid for Trade - Third Global Review of Aid for Trade - 18 and 19 July 2011 - Summary report', 17 October, WT/COMTD/AFT/W/28.

WTO (2012a). 'Aid for Trade fact sheet'. Available from: www.wto.org/english/tratop_e/devel_e/a4t_e/a4t_factsheet_e.htm (accessed 18 February 2012).

WTO (2012b). ‘The WTO and the Millennium Development Goals: summing up’. Available from: www.wto.org/english/thewto_e/coher_e/mdg_e/summing_up_e.htm (accessed 19 February 2012).

Zimbabwe Ministry of Finance (2009). ‘The 2010 National Budget Statement: Reconstruction with Equitable Growth and Stability’ (Harare: Zimbabwe Ministry of Finance).

The University of Manchester
Brooks World Poverty Institute

MANCHESTER 1824

Executive Director
Professor David Hulme

Research Directors
Professor Armando Barrientos
Professor Rorden Wilkinson

Contact:

Brooks World Poverty Institute
The University of Manchester
Humanities Bridgeford Street Building
Oxford Road
Manchester
M13 9PL
United Kingdom

Email: bwpi@manchester.ac.uk

www.manchester.ac.uk/bwpi

The Brooks World Poverty Institute (BWPI) creates and shares knowledge to help end global poverty.

BWPI is multidisciplinary, researching poverty in both the rich and poor worlds.

Our aim is to better understand why people are poor, what keeps them trapped in poverty and how they can be helped - drawing upon the very best international practice in research and policy making.

The Brooks World Poverty Institute is chaired by Nobel Laureate, Professor Joseph E. Stiglitz.

www.manchester.ac.uk/bwpi