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## Why has export diversification been so hard to achieve in Africa?

Paul Mosley<sup>1</sup>

### 1. Introduction

Although the poorest countries, notably in Africa, have experienced some success during the twenty-first century in returning to growth, and in some cases reducing poverty also<sup>2</sup>, they have with one solitary exception ( Vietnam) had no success at all in the present century in confronting the fundamental development problem which has afflicted them since colonial times: their inability to diversify their export base and become exporters of manufactures, a handicap which since has exposed them to adverse trends in the terms of trade, volatility of trade flows and inability to realise externalities from learning by doing from the production of high-technology goods (Lewis 1954, IMF 2014a). Indeed, some low-income countries, especially in Africa, which achieved some penetration of global export markets during the 1990s, from Ghana to Zimbabwe (Table 1), have now lost their competitive edge and have been forced back into production for the domestic market only, thus trapping them in a vicious circle of increased costs and increased inability to compete or diversify.

As shown by Table 1, inability to diversify is not a problem applying to all developing countries, indeed it is the developing countries of East Asia, and also Brazil, who have shown the way in escaping from it (World Bank 1993, etc). The problem applies rather to the poorest developing countries and specifically to Africa. As shown in table 1, the IMF's estimate of the change in the export diversification index over the last fifty years<sup>3</sup>, although around 20% for the developing world as a whole and more than this for Asia and Latin America, is for Africa insignificantly different from zero (although there are a few countries which have managed very substantial diversification during this time, including South Africa and Mauritius). Over the most recent period of the last twenty-five years, the recent book

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<sup>2</sup> In Africa, we estimate that just under half of all countries for which we have data have achieved significant reduction in headcount poverty over the quarter-century since 1990. For discussion of why this is, see Khan et al. (2016)

<sup>3</sup> We use the IMF's recently constructed *Export Diversification Database* (IMF 2014b). This measure of diversification, in the words of one of its authors, 'controls for endogeneity using IVBMA (Instrumental Variable Bayesian Model Averaging), a method specifically designed to allow for a potentially large set of growth determinants when causality is drawn into question' (IMF 2014b:4). The value of this index drops from a maximum of 10 to a minimum of zero as the level of export diversification rises.

by Whitfield et al (2016: 64) finds that the share of Africa in total manufacturing production, always minute, has fallen back further between 1980 and 2005, from 0.4 to 0.3 per cent

**Table 1. Less developed countries: diversification performance by continent, 1962-2010**

*Values of IMF export diversification index:*

	Value, 1962	Value, 2010	Change 1962-2010(%)
<b><i>Africa: Overall diversification score, 1962-2010(%):</i></b>			
<b>weighted average</b>	<b>5.01</b>	<b>5.25</b>	<b>+4.6</b>
<b>unweighted average</b>	<b>4.93</b>	<b>4.78</b>	<b>-3.1</b>
<i>Individual countries:</i>			
Nigeria	3.73	5.78	+54.9
D.R.Congo	4.13	5.77	+39.7
South Africa	2.74	2.23	-18.7
Mauritius	6.09	2.99	-49.0
<b><i>Asia: Overall diversification score, 1962-2010 (%):</i></b>			
<b>weighted average</b>	<b>3.09</b>	<b>2.30</b>	<b>-25.6</b>
<b>unweighted average</b>	<b>3.80</b>	<b>2.77</b>	<b>-26.9</b>
<i>Individual countries:</i>			
China	2.14	1.96	-8.5
India	3.08	1.92	-37.7
South Korea	3.13	2.37	-24.3
Bangladesh	5.11	4.81	-5.9

<b>Latin America: Overall diversification score, 1962-2010(%):</b>			
<b>weighted average</b>	<b>4.09</b>	<b>2.84</b>	<b>-30.6</b>
<b>unweighted average</b>	<b>4.34</b>	<b>3.14</b>	<b>-27.7</b>
<i>Individual countries:</i>			
Brazil	4.11	2.45	-40.4
Bolivia	5.08	3.61	-29.0
Mexico	3.02	2.44	-19.3
Venezuela	5.02	3.67	-26.9
<b>All LDCs: Overall diversification score, 1962-2010 (%):</b>			
<b>weighted average</b>	<b>3.72</b>	<b>2.99</b>	<b>-19.7</b>
<b>unweighted average</b>	<b>4.35</b>	<b>3.56</b>	<b>-18.2</b>

**Source:** calculated from IMF(2014c). Note that lower levels of the export diversification index reflect higher levels of diversification.

This is the more worrying because their trade policies have, on most criteria, greatly improved over recent years. The main suggestion towards export diversification made by international financial agencies over the last three decades, namely liberalisation of trade protection and a move to more competitive exchange rates in the spirit of the ‘Washington Consensus’, has been substantially implemented, especially in the poorest countries of Africa, and yet appears to have borne little fruit. This opens up the question: if Washington Consensus policies will not work, what will? - which then leads to a further question: under what circumstances will alternative, presumably more interventionist, policies be politically feasible? This paper is focussed around these two questions.

Ten years ago, Rodrik’s famous paper ‘Goodbye Washington Consensus, Hello Washington Confusion...’ ( Rodrik 2006: 973) argued that ‘the policies spawned by the Washington Consensus have not produced the desired results’, in particular an agreed definition either of what trade openness was or what policy instruments were required to achieve it. Notably, it argued that complementary reforms in institutions (notably legal systems, labour market institutions, ‘governance’ (often a euphemism for corruption) and social safety nets)<sup>4</sup> were needed, over and above policies of trade liberalisation, in order to provide the competitive cutting edge required to make openness work, in the sense of both competitiveness and political sustainability. However, Rodrik also emphasised, echoing the World Bank’s (2005) report on *Learning from a Decade of Reform*, that the experience of

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<sup>4</sup> These are four of the ten institutional reforms highlighted by Rodrik as needing to be added to the original Washington Consensus; others, including ‘WTO agreements’ and ‘targeted poverty reduction’ are much vaguer than this.

liberalisation demonstrated the need for country-specific approaches rather than the implementation of a standard package, or what Rodrik calls a 'laundry list', of institutional reforms. 'What works', on this view, was likely to vary both over time and between countries<sup>5</sup>. However, even accepting the validity of all of this, the fact remains that progress with diversification into export-based manufacturing across the whole of Africa over the last thirty years has been, with the important exceptions mentioned above, close to zero. In particular this has been the case in the two countries – Ghana and Botswana – whose success in combining rapid growth with pro-poor, democratic institutional development has been most outstanding.

Since Rodrik wrote, the debate has moved forward in three ways. First, a range of writings on the developmental states of the 'East Asian Miracle', one of the most impressive exercises in diversification that has ever occurred, have reminded us that the policies employed by nearly all the 'miracle' countries have gone a good way beyond anything contained in Rodrik's 'augmented Washington Consensus', and in particular involve, over and above the measures described there, an expanded role for the state and in particular capital controls and protectionist measures. However, such protection is typically time-bound, temporary, and targeted on industries with demonstrable export potential.

Second, the Bank has moved beyond the Rodrik analysis in the sense of acknowledging that a 'new structural economics', championed by Justin Yifu Lin, the World Bank's chief economist, has emerged, seeking to define more precisely how economic policy recommendations need to adapt to the world of imperfect markets. Lin's 'new structural economics' (2011) is presented as a modernised version of the structuralist economics of the 1950s constructed by writers such as Rosenstein-Rodan (1943), Lewis(1954), and Hirschman(1958), which argued that underdevelopment, and specifically the failure of many LDCs to diversify from the production of commodities to manufacture for export, could be ascribed to failures in the markets for capital, labour and knowledge. Lin begins by suggesting that the difference between the new and the old structural economics is that the new economics lays less emphasis on state intervention:

The new structural economics concludes that the role of the state in industrial diversification and upgrading should be limited to:

the provision of information about the new industries, the coordination of related investments across different firms in the same industries, the compensation of information externalities for pioneer firms, and the nurturing of new industries through incubation and encouragement of foreign direct investment (Lin 2011: 206).

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<sup>5</sup> 'There is no unique universal set of rules...We need to get away from formulae and the search for elusive "best practices" (World Bank 2005: 13)

In this spirit, and by contrast with the original structuralists and the developmental states literature, he rejects protection, even in the form of export subsidy, as a development strategy (Lin 2011: 198, 206). However, on the next page he significantly adds:

Physical infrastructure in general is a binding constraint for growth in less developed countries and governments need to play a critical role in providing essential infrastructure to facilitate economic development (Lin 2011: 207)<sup>4</sup>.

This brings us close to the argument of the recent WIDER study (Newman et al (2016)) of ‘why there is so little industry in Africa’. This, like Lin, praises policies for the expansion of human capital, as ‘one way of introducing higher capability firms into a lower capability environment’ (Newman et al 2016: 121). Like the Lin article, it draws attention to the importance of infrastructure, especially electric power and transport, in determining competitiveness<sup>5</sup>. In more detail than the Lin article, it also draws attention to the role of the skills gap and especially managerial education in determining that competitiveness. Several general reviews of export diversification, such as Bartz(2010) Huria and Brenton(2015), and Elhiraika and Mbate(2014), following a mainly econometric methodology, have arrived at the same conclusions as Lin and the UNU-WIDER authors, namely that the things which make export diversification possible are high levels of infrastructure, human capital and institutional capacity.

At this point, however, we need to switch our attention to the question of what makes export-based industrialisation politically feasible. For various reasons LDC governments have shown indifference or even hostility to policies which will promote competitiveness and diversification, in particular where the state is weak and, as a consequence, vulnerable to pressures from rent-seeking special interest groups - often trading companies and multinational corporations with an interest in cheap imports and consequently in frustrating competitive exchange-rate policies. And since the state is weaker in Africa than elsewhere, that is a good reason for expecting the politics of diversification to be more difficult in Africa, and for using the manner in which rents are allocated as a lens through which to try and understand it.

This has yielded some fascinating insights, starting with David Kang’s book (2002) on *Crony Capitalism*, which makes a comparison between two Far Eastern countries both characterised by high levels of corruption and pressure from special interest groups, but very divergent outcomes: the Philippines, where the rent-seekers as a group have had the upper hand and competitiveness has suffered, and South Korea, where the state has been able to play off different groups of rent-seekers against one another, so as to produce what

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<sup>4</sup> Lin illustrates this with the statistic that freight and insurance costs in Africa are 200% of the global average (Lin 2011: 208)

<sup>5</sup> In the view of Newman et al, ‘reliable electrical power may be Africa’s greatest single infrastructure constraint.’ It is relevant to recall the role played by electrical shortages in aggravating the current economic crises of both Ghana and Zambia ( Mosley 2017: chapters 3 and 4 ).

Kang calls a 'strategic alliance' in which both state and business elites settle for a compromise allocation of rents rather than each group trying to checkmate the other. Thus high levels of corruption – which the donors are still furiously trying to stamp out as part of the 'augmented Washington consensus', as discussed above – , may be perfectly consistent, as in South Korea, with high levels of diversification and pro-competitiveness policies. In short, we need better indicators of governance than simply the level of corruption. The recent book by Whitfield et al (2016) explores these issues in detail in relation to Africa; they find (2016, Chapters 3 and 4) that the less the power of excluded factions , the more cohesive is the ruling elite and the stronger the technical capacity of the exporting business group, the greater is the likelihood of a 'strategic alliance' emerging, whatever the level of corruption, and being able to carry diversification initiatives through.

We thus have one classical story (inadequate liberalisation) and four new stories (Rodrik's focus on institutional development as a complement to liberalisation; evidence on the effectiveness of heterodox instruments such as input subsidy; Lin's insistence on the importance of (lack of) human capital and infrastructure as barriers to diversification; and new political economy approaches) which may help us to understand the barriers to export diversification in Africa. In what follows, we embed these stories into an estimating model (section 2); this is then tested by means of a qual-quant methodology through two different routes. Route one (Section 3) uses both a single-equation approach and an instrumental-variables, panel-data regression model, using World Bank Global Development Indicators data from 1980 to 2010; and route two (section 4) uses a case-study approach, focussing on Mauritius - the one low-income African country which, so far, has progressed to become an exporter of manufactures, and also a country on which Chris Milner, appropriately for this symposium, possesses experience and expertise far exceeding mine. Section 5 presents the policy ideas and conclusions which emerge from our discussion.

## ***2. The model to be estimated***

Compressing the ideas so far presented into a single narrative, we reach the picture presented by Figure 1, which is an export-possibility frontier whose axes represent exports of manufactures ( $X_m$ ) and exports of primary commodities ( $X_{pc}$ ). The characteristic African country is trapped low down the frontier, at a point such as A on Figure 1, with a low proportion of manufactured exports in total exports and, because of this, is vulnerable to fluctuations in primary commodity prices ( as emphasised by Greenaway and Milner (1991))

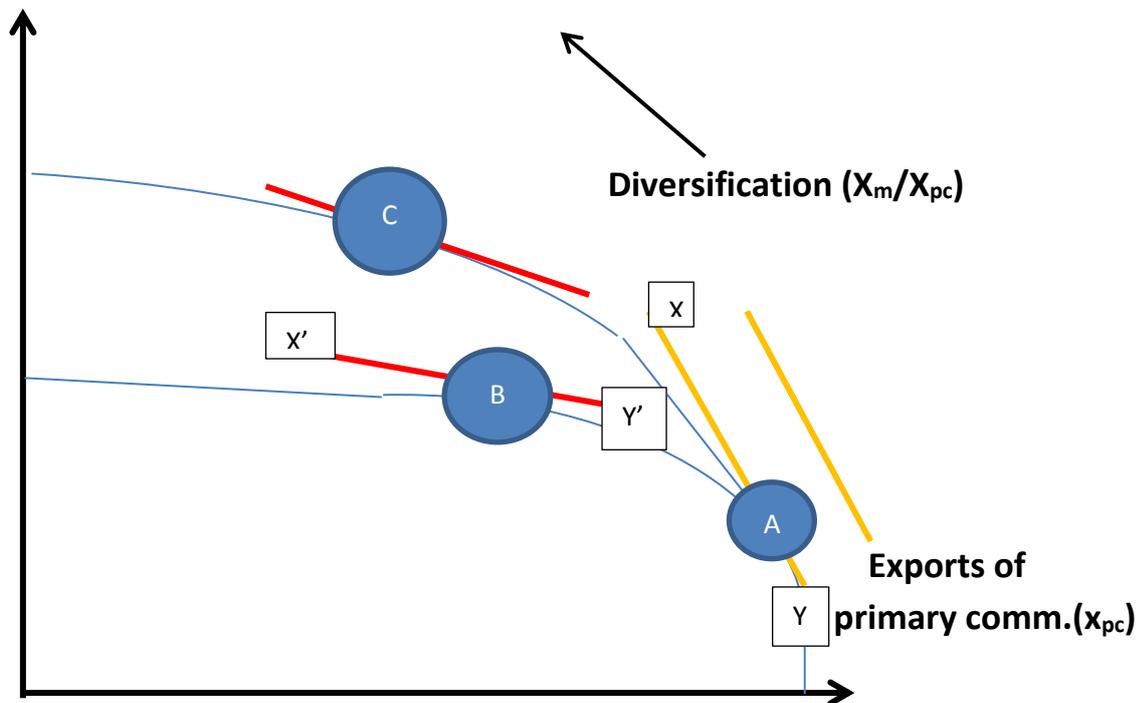
and continuing decline in the terms of trade. The reforms of the 'Washington Consensus', of course, attempted to extract Africa from this bind through liberalisation of tariff protection and, especially, the real exchange rate; but, as discussed above, the liberalisations of the 1980s were very partially implemented (because they threatened the access of powerful rent-seekers to cheap food and cheap inputs) and also because, to the extent they were implemented, they favoured exporters of primary products, such as Ghanaian cocoa, at least as much as exporters of manufactures, such as Ghanaian textiles, and sometimes more. In order to achieve diversification, therefore (i.e. a north-westward movement on Figure 1), stimulative real-exchange policies need to be complemented by:

- (i) input subsidies targeted on manufacturing activities with export potential – ideally, as in the Far East, temporary and performance-based, so as to give the maximum possible incentive to competitiveness; and also
- (ii) political 'agencies of restraint' which counterbalance the pressure of powerful rent-seekers in every LDC for policies of 'urban bias' (Lipton 1973, Bates 1981), i.e. cheap inputs and hence a high, uncompetitive exchange rate; and thus enable a 'strategic alliance' between the state and manufacturing exporters to emerge, as for example in South Korea, Indonesia and Mauritius (Mosley, 2017: Chapters 2 and 7).

These measures, if implemented, make possible a shift in the 'price line' (the ratio of incentives to manufacturing exporters to incentives to primary producers) from  $XY$  to  $X'Y'$ , in other words a movement from point A to point B on the transformation curve of Figure 1. This takes us part of the way there: but at this point the arguments of Lin's (2011) new structural economics come into play. These arguments emphasise that in a world of poor infrastructure and imperfect and sometimes non-existent markets for labour and for both financial and human capital (as especially in Africa) the development of all high-tech activities, and notably manufacturing, is constrained. If these arguments are accepted, investment in infrastructure and human capital have the ability to push outward the transformation curve for high-tech in relation to low-tech activities (an upward movement (or 'unflattening') of the left-hand part of Figure 1), which leads to a further diversification of the export base, illustrated by the movement from B to C on Figure 1.

Figure 1. A model of diversification

Exports of manufactures ( $X_m$ )



Thus our 'core model' of diversification can be represented as:

$$\text{Export diversification} = f(\text{RER}^* \text{subs}, \text{TGE}, (\text{Inf} + \text{HC}/\text{TGE}), \text{AR}) \quad (1)$$

where:

ED = export diversification

RER = real exchange rate

TGE = total government expenditure

subs = level of targeted input subsidies

Inf = infrastructural investment

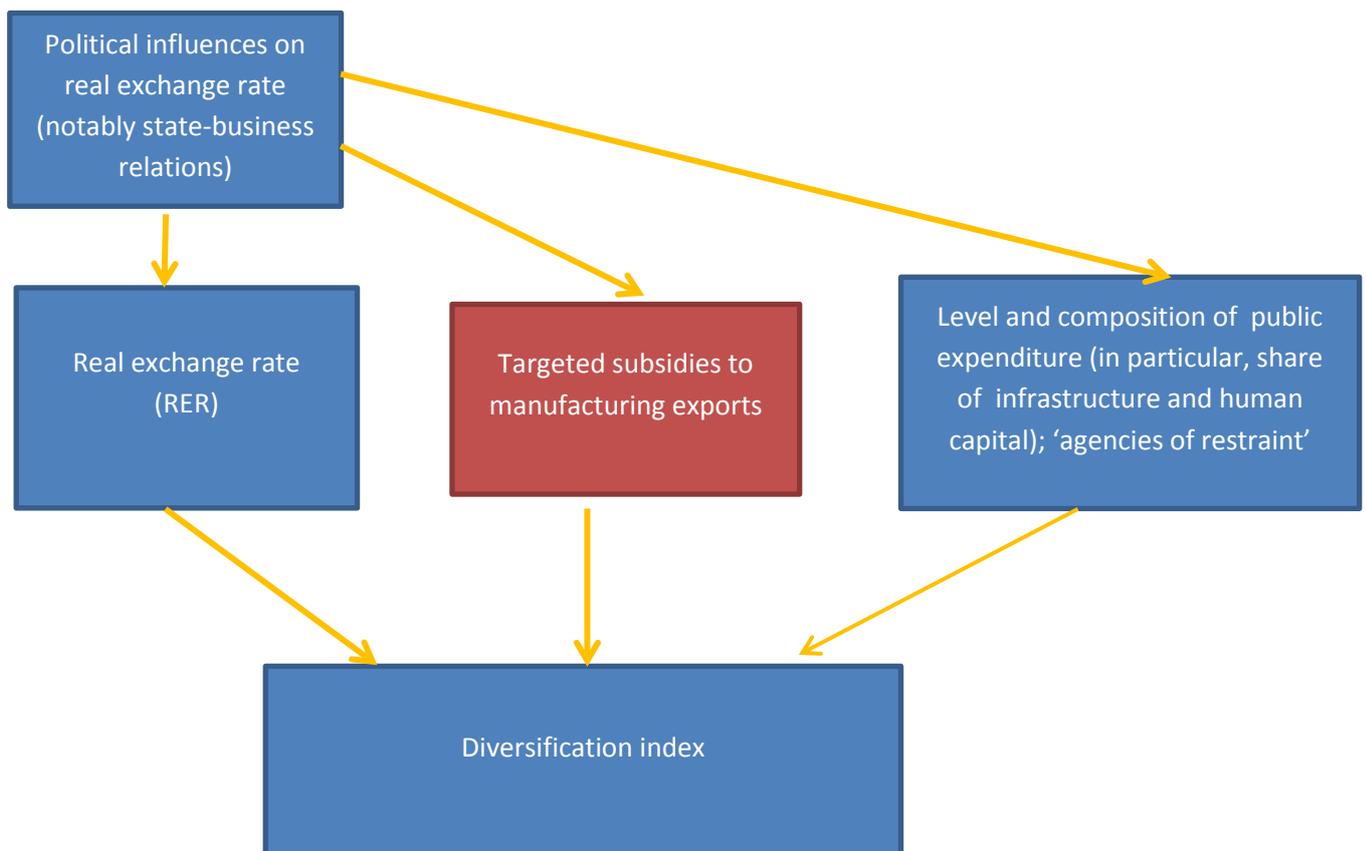
HC= human capital investment (health and education)

AR = 'agencies of restraint', or counterpoise to rent-seekers

This core model is portrayed diagrammatically in Figure 2a.

**Figure 2a. Causal relationships in the 'core model'**

*Core model:*



We estimate the core model (1) in two forms: firstly as a single equation by ordinary least squares and secondly embedded in a larger model which instruments for those right-hand side variables which are endogenous – in particular public expenditure

which helps to cause, but is also caused by, diversification and growth. This larger model, which is estimated by instrumental variables (3SLS) contains four other relationships:

First, Public expenditure is determined by the ability of states to raise revenue, and hence by tax effort (the tax/GDP ratio);

$$\text{TGE} = f(\text{tax/GDP}) \quad (2)$$

where TGE is total government expenditure.

Second, the tax ratio is determined by income level (reflecting the observation of Moore (1999) that low-income countries, tending to have weaker states, therefore have greater difficulty in raising revenue, and by democratic accountability, reflecting our own finding (Lenton, Masiye and Mosley, 2017) that people are more willing to pay tax if they do so in exchange for specific public services as part of a 'fiscal contract', which is more likely to materialise under democratic governance; the ratio of aid flows to GNP is included as a control variable:

$$\text{Tax/GDP} = f(\text{demacc}, \text{GNP/cap}, \text{aid/GNP}) \quad (3)$$

where GNP/cap is per capita GNP and aid/GNP is the ratio of aid flows to GNP.

Third, the rate of GDP growth (GNPG) is estimated by a 'new growth theory' equation which fairly standardly contains terms for capital investment (physical and human) and initial income, but also for diversification and aid flows:

$$\text{GNPG} = f(I, \text{HC}, \text{ED}, \text{GDPC}_{1988}, \text{aid/GNP}) \quad (4)$$

where I is physical capital investment and  $\text{GDPC}_{1988}$  is initial income (GDP per capita in 1988).

Diversification, as in the core model, is endogenous to the real exchange rate, the value of targeted subsidies, the composition of public expenditure (in particular the share of human capital in total government spending and the effectiveness of 'agencies of restraint', which we estimate by means of the Polity index of governance:

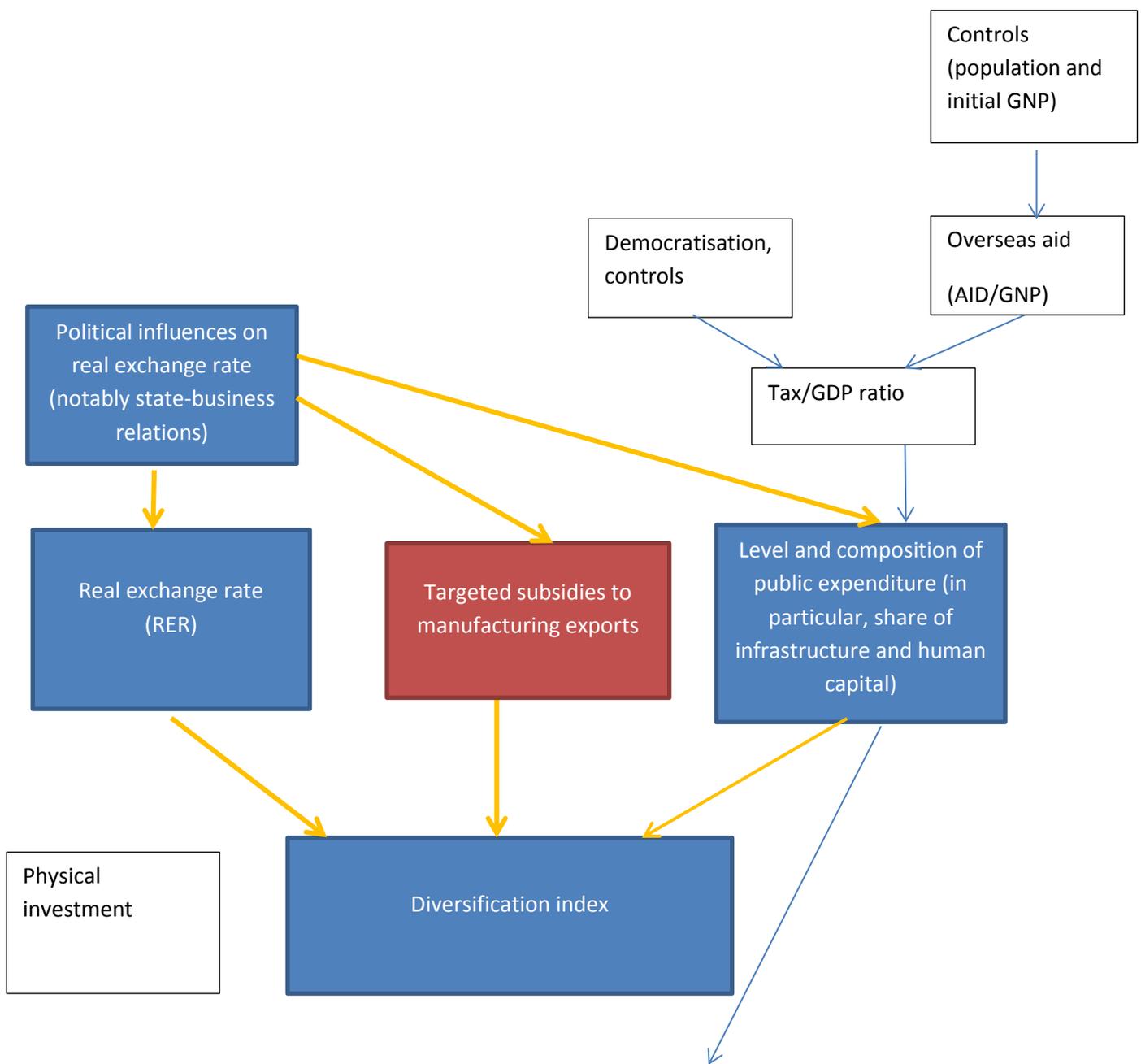
$$\text{ED} = f(\text{RER*subs}, \text{HC/TGE}, \text{aid/GNP}, \text{Polity}) \quad (5)$$

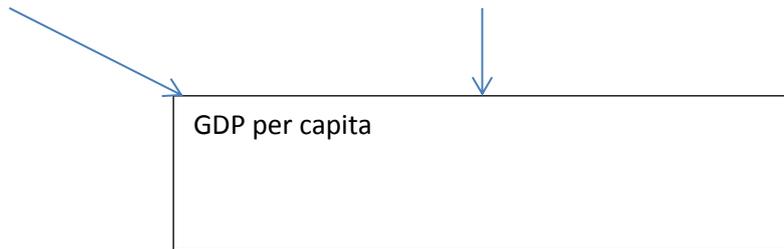
Finally and again fairly standardly we use population and initial income as instruments for aid:

$$\text{Aid/GNP} = f(\text{population}, \text{GDPC}_{1988}) \quad (6)$$

The system consisting of relationships (2) through (6), embodying our diversification story as its core, is portrayed in Figure 2b.

Figure 2b. Causal relationships in the 'extended model'





### **3. Quantitative results**

In Table 2, we estimate the simple model of figure 2a by ordinary least squares in the first column, and the extended model of figure 2b by instrumental-variables methods in the last five columns, against data over a thirty-year span, from the early 1980s to the early 2010s, for all developing countries for which data are available. The findings of the table could be summed up in the words ‘liberalisation is not enough’. In the basic model of Figure 2a, using ordinary least-squares estimation, the impact of the real exchange rate on the IMF diversification index, controlling for the growth of GDP and the ratio of total expenditure to GDP, is statistically insignificant (column 1). However, within this same model the real exchange rate becomes a significant influence on diversification if the real exchange rate is interacted with the ratio of input subsidies to GDP, mentioned above as a key element in heterodox explanations of diversification, and this significant association continues to be the case, as shown in columns 2 to 6 of the table, if the estimating model is embedded within the simultaneous-equations framework of Figure 2b, which treats public expenditure as endogenous. There are no obvious problems of overidentification within this simultaneous-equations framework, as indicated by the values of the Sargan-Hansen test statistics reported in the bottom row of the table. It appears on this evidence that Lin’s story to the effect that ‘market imperfections are crucial’ needs to be supplemented: specifically, what needs to be added, on this evidence, is that protectionism, in the form of input subsidies, is needed to overcome those market imperfections, and that infrastructure on its own will not deliver diversification.

Table 2. Drivers of diversification: regression analysis

Dependent variable	(1)Diversification index		(2)Tax/GDP ratio	(3)Public expenditure/GDP ratio	(4)GDP growth	(5)Diversification index (note 2)	(6)Aid as % GNP
<b>Model</b>	Core model (from Figure 2a)		Extended model (from Figure 2b)				
<b>Estimation method</b>	OLS		3SLS				
<b>Regression coefficients on independent variables:</b>							
Constant	3.55*** (11.84)	3.37*** (20.79)	10.29*** (8.16)	6.10*** (3.61)	0.78 0.17	3.98 19.28	12.41 13.62
GDP growth	-0.045** (2.13)	-0.022** (2.37)					
Democratic accountability (Polity IV index)			0.66* (1.71)				
'Tax effort' (tax-to-GDP ratio)				1.14*** (9.00)			
Total investment/GDP ratio					0.54*** (3.32)		
Total government expenditure/GNP ratio	0.049*** (4.16)	0.018*** (2.63)			-0.44*** (4.36)		
Real effective exchange rate (1990=100) (note 3)		-0.00004 (1.48)			-0.0005*** (2.81)		
'Incentives to competitiveness' (input subsidies/GDP x real effective exchange rate)	-0.00008*** (3.18)					-0.00004* (1.78)	

Human capital/total public expenditure ratio	-0.013*** (5.37)					-0.1007 (0.14)	
Diversification index					1.13 (1.49)		
Aid/GNP ratio					0.69** (2.22)		
Polity index of governance quality	-0.051*** (6.61)						
Population							-0.008*** (5.35)
Current GNP per capita				-0.001 4.69			
GNP per capita in 1988					-0.0001 0.12		-0.005 5.38
$r^2$	0.22	0.11	0.02	0.39	0.83	0.06	0.34
Number of observations	153	515	146	146	146	146	146
P	0.0000	0.0224	0.2181	0.0000	0.0000	0.0002	0.0000
Sargan-Hansen overidentification statistic (p-value)	NA	NA	0.0433	0.8711	0.7619	0.6032	0.1955

**Source:** World Bank, World Development Indicators CD-ROM..

**Sample:** All LDCs for which the required data are available.

**Estimation method:** OLS (column 1) and 3SLS(other columns).

**Notes:** (1) Figures in brackets beneath coefficients are Student's t-statistics; \*\*\*/\*\*/\* denote significance of a coefficient at the 1%/5%/10% ratio.

(2) The diversification index is that prepared by the IMF (see IMF 2014b ), which falls from 10 to zero as the measured export diversification rate rises.

(3) The real effective exchange rate (REER) is defined in terms of value of the domestic monetary unit per unit of other currencies: thus an increase in the REER connotes a fall in its value relative to the dollar and other currencies, and hence an increase in competitiveness.

It is desirable to confirm that these results are robust with respect to variations in specification, and in particular that the apparent positive effect of our 'incentives to competitiveness' variable connotes genuine causality and not a chance correlation. To this end, we lag the incentives to competitiveness (real exchange rate x share of input subsidies in GNP) variable on the diversification index, and introduce into the explanatory story a new right-hand side variable, the Polity index of governance quality. Also, it is important to see whether (as suggested by Adrian Wood during the conference) our story that 'input subsidies are crucial' holds up in the absence of the other key drivers of diversification, namely human capital and governance quality.



Table 3. Drivers of diversification: robustness tests

Dependent variable	(1)Diversification index		(2)Tax/ GDP ratio	(3)Public expenditure /GDP ratio	(4)GDP growth	(5)Diversifica tion index(note 2)	(6)Aid as % GNP
<b>Model</b>	Core model (from Figure 2a)		Extended model (from Figure 2b)				
<b>Estimation method</b>	OLS		3SLS				
<b>Regression coefficients on independent variables:</b>							
Constant	3.18*** (15.85)	3.51*** (11.67)	6.42*** (3.09)	14.59*** (4.05)	17.1* (1.58)	5.02*** (18.27)	27.96*** (6.30)
GDP growth	-0.04*** (2.69)	-0.045*** (2.08)					
Democratic accountability (Polity IV index)			1.88*** (2.97)				
'Tax effort ' (tax-to-GDP ratio)				0.74*** (2.82)			
Total investment/GDP ratio					0.25* (1.66)		
Total government expenditure/GNP ratio	0.029*** (3.59)	0.044*** (3.65)					
World Bank openness index					-0.028** (2.12)		

'Incentives to competitiveness' (input subsidies/GDP x real effective exchange rate), <i>lagged one period</i>	-0.00004* (1.76)	-0.00007*** (2.82)				-0.0001*** (4.97)	
Human capital/total public expenditure ratio		-0.122*** (4.69)				-0.16*** (4.01)	
Diversification index <i>(lagged one period)</i>		-0.0005** (2.04)			1.53 (0.94)		
Aid/GNP ratio					0.25** (2.35)		
Polity index of governance quality		-0.022* (1.52)					
Population							-0.085*** (6.14)
Current GNP per capita			-0.0007 (0.36)	-0.007** (1.96)			
GNP per capita in 1988					-0.016* (1.75)		-0.029*** (2.93)
'r <sup>2</sup> '		0.20	0.21	0.21	0.32	0.36	0.44
Number of observations		153	53	53	53	53	53
P		0.0000	0.0047	0.009	0.0000	0.0002	0.0000

Sources and sample: as for Table 2.

As shown in Table 3, the explanatory power of the estimating equations, both in single-equation and simultaneous-equation formulations, is substantially unaffected by these changes in specification, although the crucial response-coefficient of incentives to competitiveness on diversification is now significant only at the 5%, and not the 1%, level. Importantly, lagged input subsidies continue, across the sample as a whole, to be an influence on diversification (within the OLS estimations) even in the absence of the governance, human capital and GDP per capita measures, even though now at a lower level of significance<sup>6</sup>.

#### **4. Focus on Africa: case-study analysis**

In order to focus more sharply on the key problem, which is the failure of Africa to diversify its exports, we now concentrate the analysis on that part of the sample, and in particular on variations in policy across the African continent. The relationships explored in Tables 2 and 3 above have given us an indication as to what policy pathways may need to be followed in order to improve on that performance; however, they do not give us any clue about the politics which has enabled those pathways to be followed. Specifically, Tables 2 and 3 showed that a major barrier to diversification in Africa has been an overvalued exchange rate, aggravated by market imperfection which governments have not been proactive in offsetting. This typically arises from the politically powerful (namely multinational companies and their clients in government) pressing for and achieving policies which cheapen inputs on domestic markets, often known as policies of 'urban bias' (Lipton 1977, Bates 1981), in which overvalued exchange rates are an important element, but are compounded by subsidies being put on commodities such as food and fuels (especially petroleum) rather than on exportable manufactures. However, we have not yet explored the process by which these policy biases, in a small number of countries, have been overthrown. We now investigate this issue.

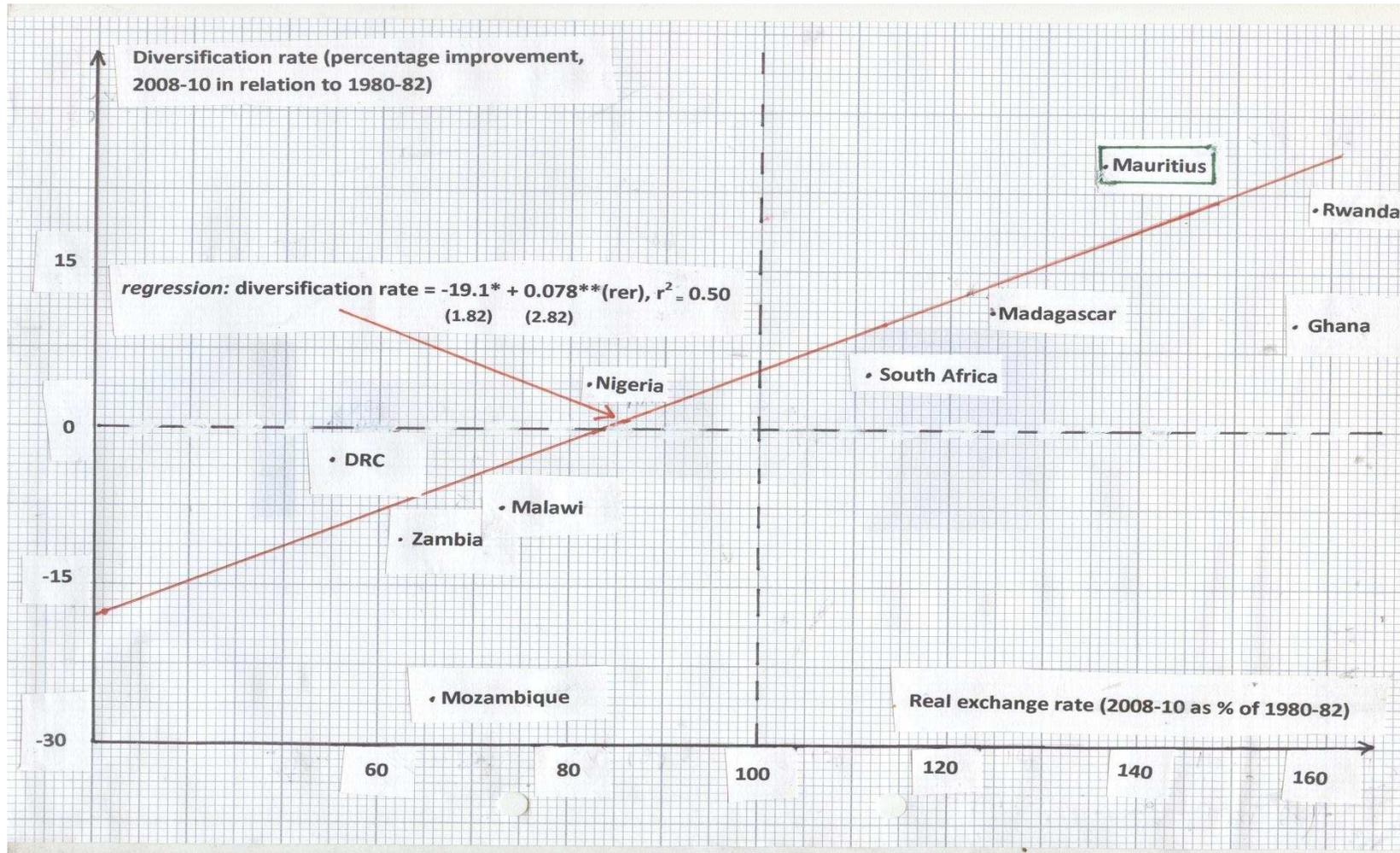
Let us begin from a scatterplot (Figure 3) relating two of the fundamental variables in the story - export diversification and the rate of real exchange rate devaluation since the 1980s. The correlation between the two variables is significant, but there are a number of outliers, both positive and negative: on the one hand countries such as Mozambique and Ghana where the 'stimulus' of real devaluation has not produced the 'response' of diversification, and on the other hand countries such as Mauritius where the level of diversification, as shown in the diagram, exceeds what would have been expected from the

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<sup>6</sup> The qualification 'across the sample as a whole' is important. As Adrian Wood pointed out at the conference, merely to show that input subsidies are a significant influence on diversification across the set of developing countries as a whole is not to be able to show that the application of input subsidies would achieve diversification in the Democratic Republic of the Congo (or any other country with impossible governance problems).

movement in its exchange rate. Study of both kinds of outliers can help us understand the processes, political and otherwise, which favour diversification.

Figure 3 Scatter of export diversification in relation to real exchange rate, African countries, 2008-10 compared with 1980-82



In what follows we shall focus on the only country in Africa to have been successful at export-based industrialisation, namely Mauritius, which has gone over the last forty years from almost exclusive dependence on sugar exports to being a large-scale exporter of textiles, semiconductors and other IT components, and services, notably tourism (Subramaniam, 2009). Mauritius' achievement is the more extraordinary because, in the 1960s, it was politically insecure under the threat of social conflict provoked by severe social inequalities caused by the dominance of the sugar estates in Mauritian economy and society ( Meade, 1961, 1967)

What delivered this extraordinary performance? In Table 4, we make a comparison between Mauritius and two other African countries, Ghana and Zambia, whose diversification performance was weak even though their liberalisation policies were only slightly less competitive than in Mauritius (indeed the rate of exchange-rate devaluation, considered on its own, was more dramatic in Ghana than in Mauritius, as shown in Figure 3). Therefore, as argued in the previous section, exchange-rate policy on its own does not give a complete explanation of diversification. So what made the difference? Not, in this case, infrastructure and education, often cited (e.g. Newman et al.'s study (2016) for UNU-WIDER) as a key determinant of the success of diversification: the *level* of these variables, as the table shows, is certainly higher in Mauritius than in Ghana and Zambia, but their *rates of change* (columns 5 and 6 of Table 4) are actually higher in the comparator (non-diversifying) countries. Rather, we believe, the answer is to be found in fiscal policies, but highly heterodox fiscal policies, which gave temporary shelter to non-traditional activities with export potential. First, as we can see from column 2 of the table, Mauritius had higher average rates of protection in 1990 than Ghana and Zambia but a lower rate in 2010, suggesting that in that country protection, during the years of structural adjustment, was focussed on specific strategic industries with export potential rather than succumbing to the pressures of importers and of urban bias; after 2000, once exporters had thereby gained a comparative advantage, protection was liberalised. Secondly, subsidies in Mauritius were applied in a quite different way, being often applied to potential exportables, whereas in Ghana and especially in Zambia (column 3 of the table) they were mainly used to reduce the cost of imports. These differences in subsidy policy derive from differences in the power-structures of the two country groups, with exporters being much better represented in the governing coalition of Mauritius than of Ghana. To understand the origins of these differing political structures, we now need to delve into their countries' histories, and specifically examine the predicament which they faced in the 1960s.

Table 4. Possible drivers of successful diversification in Africa

	(1)Export diversification rate(2010 as % of 1982)	Possible drivers of export diversification:						
		Policies:			Resources:		Governance and power-relationships:	
		(2)Nominal protection rate 1990(2010)	(3)Subsidy regime	(4) Real exchange rate, 2014 or nearest year(1990=100)	(5) Infrastructure provision (electric power consumption per capita, kilowatt-hours 1990(2010)	(6) Human capital provision (growth of secondary-school enrolment rate,%) 1990(2010)	(7)Political structure	(8) State-business relations(Kang-Ayo classification)
<b>Successful diversifiers:</b>								
<b>Mauritius</b>	69.9	26.5 (1.1)	Subsidy (duty exemption) on manufacturing within export processing zones (financed by tax on sugar exports)	124	Na	118	Multi-party democracy since 1968	Strategic alliance between (mostly Franco-Mauritian) sugar planters and (mostly Indian) skilled workers
<b>Unsuccessful diversifiers:</b>								
<b>Ghana</b>	87.1	22.0 (8.6)	Consumer subsidies on food and petrol; input subsidies only on cocoa	186	301(298)	153	Democratic since 1992	Since early 1990s: strategic alliance between state and cocoa sector
<b>Zambia</b>	81.7	8.0(3.8)	Consumer subsidies on food and petrol; input subsidies on fertilizers	79	503(623)	120	Dominant party to 2006, then multiparty democratic	Mainly rentier-dominated

Average, less successful diversifiers:	84.4	15.0(6.2)		132	402(460)	30(42)		
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**Sources and notes:** *Col. 1* – Calculated from IMF(2014b). Note that diversification is measured on the IMF scale, in which higher numbers denote lower levels of diversification: thus in this column, the lower the number, the more diversification has occurred since 1982.

*Col. 2* - from World Bank, *World Development Indicators*. Note that there is a wide discrepancy between the measures of nominal protection recorded here and effective protection rates: for example, the effective protection rate for Mauritius in 1990 was 129%, whilst the rate of nominal protection was 26% (Gulhati and Nallari 1990: 27 ).

*Col. 3* - from Mosley(2017) Chapters 2-5 and 7 .

*Col. 4* – from Mosley(2017), Table 2.1. The real exchange rate (RER) is defined as the number of units of domestic currency that can be exchanged for a US dollar, corrected for differences in inflation between the two countries: therefore, values in excess of 100 indicate a depreciation of the real exchange rate over the period indicated.

*Cols. 5 and 6* – from World Bank, *World Development Indicators*.

*Cols. 7 and 8* – from Mosley(2017) Chapter 2 (especially Figure 2.3) , with interpolations for Mauritius from *ibid.*, Chapter 7.

Mauritius, in the mid 1960s, was represented by the Nobel Prizewinner James Meade (1961, 1967), following on his visits to the island, as ground between the upper millstone of dependence on the monocropping of sugar<sup>7</sup> and the nether millstone of rising inequality (between the white, Franco-Mauritian, urban elite and the low-income, mostly Indian, workers who cut the sugarcane), rising unemployment<sup>8</sup> and consequent social protest, aggravated by a high rate of population growth.

How to get out of this situation, which Meade styled as a ‘Malthusian trap’? As a small country with a population of well under a million, Mauritius was trapped in a small-market, high-cost trap, compelled therefore to expand exports rapidly, or make things at home in face of foreign competition, or die. In fact, as Meade showed, there were just five options, which we present as bullet-points:

- ‘Either domestic wage-rates must be kept low,
  - or domestic labour productivity must be raised,
  - or imports must be restricted by tariffs and import licensing,
  - or exports must be subsidized,
  - or the foreign exchange value of the Mauritian rupee must be depreciated’
- (Meade 1967:256)

It is clear from the context that Meade did not expect any of these recommendations to be implemented<sup>9</sup>; in fact all five of them were, during the decade of the 1970s, and subsequent economic and political developments have not disturbed the developmental momentum that was thereby created. We will first document each of the five propositions, in a slightly different order from Meade’s presentation, and then discuss the politics which enabled them to be brought into being.

*‘Domestic labour productivity must be raised’*: this was achieved by creating export processing zones (EPZs), financed in large part by taxes on sugar exports<sup>10</sup> but also through rents from the EU-ACP Protocol<sup>11</sup>, in which first a thriving textile industry and then an electronic components industry were created; from the 1980s onward, these were followed

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<sup>7</sup> 98% of Mauritius’ exports came from sugar in 1967, representing a higher proportion of exports derived from one product than in any other country in the world (Meade 1967: 242)

<sup>8</sup> In 1967 unemployment in Mauritius was 37,000 out of a labour force of about half a million – i.e. about 8%, or four times the average level prevailing in European countries at the time.

<sup>9</sup> Apart from his comments about Mauritius being ‘a case study in Malthusian economics’, Meade observed in 1961 that because of population pressures and inter-ethnic rivalries ‘the outlook for peaceful development [in Mauritius] is poor’ (Meade 1961, quoted in Subramaniam (2009:1)

<sup>10</sup> These export duties were at all times progressive so as to favour small sugar plantations at the expense of large ones – for example between 1979-81 the rate of sugar export duty varied from zero for those producers exporting less than 20 tons to 23.6 per cent for those producers more than 3,000 tons. The sugar duty was constantly tinkered with, and a fuller account can be found in Gulhati and Nallari (1990: Table 2.2, page 22). Politically they thus fulfilled the same function as the IDH (*Impuesto Directo en los Hidrocarburos*) tax imposed on the Bolivian hydrocarbons industry in 2004 (Mosley 2017: chapter 5), which was also a progressive tax on a natural resource, although in this case a non-renewable one.

<sup>11</sup> Under this agreement, the European Union paid a guaranteed price well above the export price for specific commodities, which in the case of Mauritian sugar in the 1980s was worth \$200 million a year or about 4% of GDP to the national treasury. See Milner and Zgovu(2004)

by rapid expansion of tourism and financial services exports. Between them, these enabled Mauritius to develop its non-traditional (i.e. non-sugar) exports rapidly, from zero in 1970 to over 20% of total exports ten years later to well over half at present. A key investor in the export processing zones was the small Chinese population of Mauritius which nonetheless 'played an important role in attracting the first wave of foreign direct flows from Hong Kong. Entrepreneurs from Hong Kong chose Mauritius as an investment location to circumvent the quotas on exports of textile and clothing from Hong Kong'. (Subramaniam 2009:20)

*'The foreign exchange value of the Mauritian rupee must be depreciated'*: from the start, Mauritius protected its competitiveness, after the manner of Far Eastern economies, by engineering a steady downward float of the real exchange rate. As shown by Figure 3, the rate of real depreciation of the Mauritian rupee (from 100 in 1970 to 155 in 2014)<sup>12</sup> is by no means the most rapid in our sample, but what is notable is the steadiness of the signal sent by the exchange-rate trend: as Subramaniam puts it, 'one of the striking features about Mauritius is that it has managed to maintain a very competitive exchange rate for long periods of time' (Subramaniam 2009:15), which at all times helped the economy to diversify.

*'Imports must be restricted by tariffs and import licensing' and/or 'exports must be subsidised'*; in fact Mauritius did both of these things, on a scale which puts into question Sachs and Warner's (1995:9-10) characterisation of the country as 'a very open economy'. Tariff rates, according to Gulhati and Nallari, 'continued to rise over time [throughout the 1970s and early 1980s] except on food items' and they were supplemented by import quotas, extended in 1981 from about 25% to 65% of total exports (Gulhati and Nallari 1990:27), and the upshot was an effective protection rate far above the nominal protection rate, estimated by Gulhati and Nallari (ibid) at 89 per cent in 1980 for the manufacturing sector as a whole and by Greenaway and Milner(1989) at 128 per cent. Subsidies on exports of manufactures (by contrast with food subsidies, which had been in place for a long time) were instituted in the form of exemption from corporation tax and from import duties on raw materials under the Export Processing Zone Act of 1980<sup>13</sup>: thus the structure of input subsidy in Mauritius was much more oriented towards the production of manufactures

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<sup>12</sup> Note that this index represents the number of Mauritian rupees that can be bought for a dollar, corrected for inflation: therefore an increase in this number represents a real devaluation.

<sup>13</sup> The main features are complete exemption from payment of import duty on capital goods; complete exemption from payment of import and excise duties on raw materials, components and semi-finished goods (except spirits, tobacco, and petroleum products); and corporate tax holiday for ten to twenty years...Other features of the Act include loans at preferential rates for importing raw materials; electric power at subsidized rates; export finance at lower interest rates; loans up to 50 per cent of total building costs for a ten-year period;(and) priority in allocation of investment capital by Development Bank of Mauritius' (Gulhati and Nallari 1990: 28). The last of these is particularly significant, as it goes beyond mere subsidy into administrative measures which push exporters to the front of the queue in the allocation of scarce inputs. As Subramaniam comments, this suggests a particular Far Eastern way of doing business, which 'appeared to follow the dirigiste approach of Korea, Taiwan and Japan rather than that of Singapore and Hong Kong' (Subramaniam 2009:11)

rather than in Ghana or Zambia, neither of which has become effectively involved in subsidising industry, except in a very small and ineffective way in Ghana's own export processing zones. In the course of the structural adjustment operations of the 1980s, in which the World Bank insisted on some liberalisation in return for financial support, the Mauritius government reduced and rationalised the rates of nominal protection against imports, but persuaded the Bank to allow it to keep nearly all the input subsidies in position<sup>14</sup>. These were crucial in enabling diversification in the export processing zones to take off.

*'Domestic wage rates must be kept low'*: this was done in a very partial but significant way, by exempting the Export Processing Zones from legislation which protected formal-sector employees against being made redundant, offered them the right to statutory overtime and protected them against being penalised for absenteeism. The upshot was that jobs in the EPZs were taken up mainly by non-unionised new entrants into the labour force, eighty per cent of them female, rather than by people with established jobs (Gulhati and Nallari 1990: 29) and that earnings in the EPZs were well below those earned in other parts of the economy<sup>15</sup>. However, alongside the competitive exchange rates and export subsidies mentioned earlier, these low wage rates were part of the process by which protectionism was prevented from imposing a competitive disadvantage on exporters<sup>16</sup> and, indeed, enabled Mauritius to make rapid inroads into global textile, semiconductor and services markets. In addition, such was the rate of growth of overall earnings, and of the economy as a whole, that by contrast with many countries in Africa, (the Gini coefficient of) inequality across the island steadily declined, from 0.5 in 1962 to 0.34 in 2004 (Subramaniam 2009: 3).

From all of this it will be clear that Mauritius, especially in the 1970s and 80s, behaved as an idealised and all-too-rare-in-practice version of the Lewis (1954) model, in which the 'surplus' derived from the gap between the earnings of the raw materials export sector and the subsistence wage is recycled, with active help from the fiscal system and overseas aid donors, into increasing and diversifying exports of manufactures.

The next question which we have to answer is: if this package of measures, in Mauritius, achieved happiness (in the shape of rapid growth, falling poverty, rapid diversification, and falling inequality) what made it politically feasible to implement? And, even more to the point, why did this package deliver happiness in Mauritius but fail to do so

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<sup>14</sup> See Subramaniam(2009: 14-15 ). Thanks to Chris Milner for drawing my attention to the 'lop-sided' character of liberalisation in Mauritius.

<sup>15</sup> Gulhati and Nallari (1990), figure 2.7, show average monthly earnings in the EPZ garment sector in the first half of the 1980s as being around 600 (million rupees per month at constant 1970 prices), by contrast with government sector wages of just over 1,400 and an all-sector average of around 1,200.

<sup>16</sup> Rodrik (1999) characterises Mauritius' trade policies as being not open but rather 'heterodox, with imports being closed and exports relatively open' : this is reminiscent of the practice of several east Asian developmental states, South Korea in particular (see Edwards (1998))

in our other sample countries, even though the measures which they implemented – in particular competitive exchange rates, input subsidy and tariff protection, were in many ways similar?

Part of the answer, we would argue, resides in the way democracy worked out in Mauritius by comparison with the other countries. At the time just after independence, when Meade wrote his initial gloomy review of the island's development prospects, its politics could be crudely characterised as a contest between two coalitions, one of them (led by the *Parti Mauricien Social et Democrate*, or PMSD) dominated by Franco-Mauritian, and the other (led by the Mauritius Labour Party, or MLP) by Indian, interest groups. The former held a preponderance of economic power through their ownership of the big sugar estates and the latter a preponderance of political power; indeed, it is not unreasonable to think of this contest as a multi-ethnic variant of the nonzero-sum game, or 'strategic alliance' approach to inter-group competition, leading to the emergence of pro-competitiveness policies which hold rent-seekers in check, as per the approach of Kang(2002). Each group needed the other too much to fight over big issues such as the expropriation of the sugar estates. Power alternated between these groups during the crucial decade of the 1970s, and then in the 1980s passed to more radical groupings, initially (1982-83) led by the *Mouvement Militant Mauricien* (MMM) and then (1983-87) the *Mouvement Socialiste Militant* (MSM)<sup>17</sup> into which many members of both the Franco-Mauritian and Indian communities migrated during the decade. Crucially, however, none of these realignments altered the consensus which formed in the 1970s around the idea of an inclusive, interventionist developmental state, committed to pro-exporter policies as a survival strategy. As Gulhati and Nallari explained nearly thirty years ago, this entailed many compromises, born of the idea that for all factions, the taking of extreme positions would entail risks (of expropriation, violent conflict, and consequent economic collapse) which could not be afforded:

Mauritius, therefore, was a deeply stratified society at independence. Franco-Mauritians now had the economic power, but Hindus, who had come to the island as indentured labourers, now had political power. Such a schism could have produced a radical regime that might have tried to redress the exploitation suffered by Hindu labourers during the colonial period through confiscation of the assets of the affluent Franco-Mauritians. This did not happen. *The commitment to parliamentary democracy pressured all parties to seek the middle ground.* (Gulhati and Nallari 1990:36; emphasis in original).

In achieving this highly untypical political settlement, the role of Seewoosagur Ramgoolam, leader of the MLP coalition, prime minister from 1968 to 1982, and a Fabian socialist who nonetheless strongly supported private sector development on the grounds that in Mauritius 'it was doing such a good job'<sup>18</sup> was clearly crucial.

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<sup>17</sup> The changing membership of these alliances, and the changing number of seats won by each party in them, is chronicled by Gulhati and Nallari in their tables 3.1 and 3.2 (pages 33 and 34)

<sup>18</sup> Colin Legum, as reported in Gulhati and Nallari(1990):36, note 14.

To summarise, what distinguishes Mauritius, which achieved rapid diversification of exports and the whole economy as well as equitable growth, from our other case studies which did not achieve that diversification, is the range of incentives, in particular subsidies on the inputs used by exporters, which were offered to exporters to complement free-market exchange rates. In Mauritius, these input subsidies were financed by a levy on plantation crops, offered from the start to export-based industries, and were initiated and sustained by a multi-party democratic system. The Mauritian case is particularly worthy of note because, as we have seen in the case of both Ghana and Zambia, African multi-party systems have been accused of favouring intra-party rent-seeking on a scale which makes diversified development difficult<sup>19</sup>. In Mauritius, the process of rent-seeking was subjected to sufficient competitive restraint that it did not obstruct either 'longer-term economic accumulation' or, even more important for the present argument, the diversification of the economy. These subsidies have of course been factored into the composite variable, (real exchange rate\* ratio of subsidies to GNP), used in Tables 3 and 4 above; but what we have now added to this story is the importance of the specific nature of the industries subsidised, and of the political process which made the targeting of subsidies on those industries feasible.

What is particularly remarkable about Mauritius is that it achieved these exploits without exceptional assistance from two of the 'agencies of restraint' which have historically been important in restraining rent-seekers and encouraging growth around the underdeveloped world: these are aid agencies and the civil service. Aid agencies, in particular the World Bank, did enter the picture in the 1960s and 1970s, but only in a small way (aid flows to the country never exceeded 2% of GNP); and by the 1980s Mauritius was a lower middle-income country and therefore not entitled to concessional aid flows; therefore the Bank's main contribution, and an important one, was, even in the middle of a liberalising reform programme, as discussed above, to accept the logic of Mauritius' economic reform strategy on its own terms and to not interfere with its highly unorthodox system of export subsidy combined with import tariffs and quotas – which in turn was based on pre-existing trust between the Bank and the Mauritius government<sup>20</sup>. As for the civil

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<sup>19</sup> Tim Kelsall (2013: 680) has argued that 'transformative growth is highly unlikely in African countries with an unrestrained form of multi-party democracy. The reason is that in current African conditions, where party supporters tend to be swayed more by patronage handouts than programmatic public goods, this form of multi-partyism introduces extremely strong incentives to focus on short-term distributive politics rather than longer-term economic accumulation'.

<sup>20</sup> The Bank, during the 1980s, did however provide two structural adjustment loans which were important in helping Mauritius adjust to higher budgetary and balance of payment deficits caused by shortfalls in export demand. It did impose some conditionality, mainly related to retrenchment in the public sector; but crucially, it did not significantly interfere with Mauritius' trade policies, even though they were very much contrary to the kind of open-economy policies which the Bank was trying to press on all developing countries at the time.

service, there are few signs that in Mauritius (by strong contrast, for example, with Indonesia) it developed the kind of 'relative autonomy' that Leftwich and others see as key attributes of a developmental state. Gulhati and Nallari, rather elusively, summarise the situation as follows:

It is very difficult to define the precise role played by the bureaucracy in economic policy decisions. The core economic ministries built up some analytical capacity for policy work over time, but even at the end of the 1970s there were many weak areas... Some permanent secretaries have stayed a long time in key posts and their long experience has given them an inside track in policy making. In the open, pluralistic environment of Mauritius, however, many economic policies are decided by polling and party alignments, rather than by technocratic professional work. (Gulhati and Nallari 1990:36)

What this seems to mean is that, at a minimum, there was no equivalent in Mauritius to the power wielded over economic policy, for example, by the Ministry of Finance and Economic Planning under Festus Mogae in Botswana, or the Ministry of Finance under Emanuel Tumusime-Mutabile in Uganda – both of which were just as successful as Mauritius in terms of growth and poverty reduction, but definitely not as successful in terms of diversification. On this evidence, much of the technical expertise, and much of the restraint required to maintain pro-export policies, had to come from politicians, even from trade-offs between politicians; it is the more remarkable that the pattern of policy we have described lasted so long and so stably.

To summarise, we believe that fiscal policy can increase the rate of export diversification if, as in Mauritius, it is driven by the needs of exporters rather than importers, and if subsidies focussed on exporters are combined with consistently competitive exchange rates. However, we have also seen that the specific nature of the industries subsidised is crucial, and that the political give-and-take which characterised the relationships between 'old' and 'new' export-based industries was important, and in many ways (certainly amongst African countries) unique. As acknowledged by David Greenaway and Chris Milner nearly thirty years ago, 'those arguments which are increasingly advanced for South-South trade, on the grounds that developing countries cannot export their way to prosperity via the industrialised countries, may be inappropriate in the case of Mauritius' (Greenaway and Milner 1991: 334).

## **5. Conclusions**

Without structural transformation, prospects for long-term economic development are generally poor. Acknowledging this, an approach has emerged within the World Bank which acknowledges, like this paper, that liberalisation (especially of exchange rates) is not enough. This approach, centred on the work of Justin Yifu Lin, has argued that measures

aimed at repairing and complementing 'missing markets', especially for human capital and for infrastructure, may also be necessary; but has explicitly warned also that protectionism, of any sort, is not the way forward.

Our analysis suggests that this generalisation is not correct, and closes off possibilities for diversification which have borne fruit even in the unpromising environment of very poor countries. Our econometric analysis (Tables 2 and 3 above) has shown that controlling for human capital, overall public expenditure and GDP growth, competitiveness as embodied in the trend of the real exchange rate will only translate into diversification if accompanied by protection in the form of input subsidy. However, as our African country case-studies suggest, the targeting and the timing of such input subsidy is crucial. In Mauritius, such subsidies were *temporary*, lasting essentially for the decades of the eighties and early nineties whilst a highly unorthodox form of structural adjustment policy was implemented, and *targeted* on specific areas of manufacturing with good chances of rapidly penetrating global export markets, and these characteristics, together with the political settlement which made their implementation possible, are the key things which enabled that country, uniquely in Africa to date, to achieve a shift into exports of manufactures. This uniqueness, however, is very possibly simply an accident of history, and there is no obvious reason why the general approach of targeted, temporary protection, successful in Mauritius and the Far East, should not be replicable elsewhere. This will more readily happen if input subsidies of this kind are treated by the international community, as capital controls have recently come to be treated (IMF 2010, 2012; Ghosh and Qureshi 2016), not as just another disreputable form of protectionism but as a perfectly respectable form of behaviour for which a developmental case can be made, particularly in the case of targeted, temporary protection. The evidence of this paper suggests that it is time for performance-based protection to emerge from the shadows and take its proper place as a potentially powerful tool of development policy.

## References

- Ancharaz, Vinay Dey(2003) 'FDI and export performance of the Mauritian manufacturing sector', unpublished paper, University of Mauritius.
- Bartz, Christina (2010) *Export diversification and growth in sub-saharan Africa*, Master's thesis, University of Amsterdam, Department of Economics.
- Bates, Robert(1981) *Markets and States in Tropical Africa*, Berkeley: University of California Press.
- Elhiraika, Adam and Michael Mbate(2014) 'Assessing the determinants of export determinants in Africa', *Applied Econometrics and International Development*, **14**, 147-161.
- Ghosh, Atish, and Mahvash S. Qureshi(2016) *What's in a name? That which we call capital controls*, Washington DC: IMF Working Paper 16/25.
- Gulhati, Ravi and Raj Nallari (1990) *Successful stabilisation and recovery in Mauritius*, Washington DC: World Bank, Economic Development Institute, EDI Analytical Case Studies no. 5.
- Hirschman, Albert (1958) *The Strategy of Economic Development*, Cambridge, MA: Harvard University Press.
- Huria, Ankur and Paul Brenton(2015) *Export diversification in Africa: the importance of good trade logistics*, Addis Ababa, Ethiopia: World Bank/Investing in Africa Forum; <http://document.worldbank.org/curated/en/313321467998192410/pdf/97402-REPLACEMENT-FILE-PUBLIC-Export-Diversification-in-Africa-the-Importance-of-Good-Trade-Logistics-reviewed.pdf>.
- International Monetary Fund (IMF)(2010) *The Fund's role regarding cross-border capital controls*, Washington DC: IMF Staff Position Note 10/04.
- International Monetary Fund(IMF) (2012) *The liberalisation and management of capital controls :an institutional view*. Washington DC: IMF.
- International Monetary Fund (IMF) (2014a), *Sustaining long-run growth and macro stability in low-income countries: the role of structural transformation*, Washington DC: IMF Policy Paper.
- International Monetary Fund (IMF) (2014b), *The diversification toolkit: export diversification and quality databases (spring 2014)*, Washington DC: <https://www.imf.org/external/np/res/dfidimf/diversification.htm>.
- Kang, David(2002) *Crony capitalism: corruption and development in South Korea and the Philippines*, Cambridge: Cambridge University Press.
- Kelsall, Tim (2012) 'Neo-patrimonialism, rent-seeking and development: going with the grain?', *New Political Economy*, **17** (November), 677-682.
- Khan, Rumman, Oliver Morrissey and Paul Mosley(2016) *Two Africas: Why Africa has Barely Reduced Poverty since the 1980s*. CREDIT discussion paper no. 16/01.

Lewis, W.A. (1954) 'Economic development with unlimited supplies of labour', *Manchester School*, **22**, 139-191.

Lin, Justin Yifu (2011) 'New structural economics: a framework for rethinking development', *World Bank Research Observer*, **26**, 193-221.

Mbabazi, Jennifer, Chris Milner and Oliver Morrissey(2006?) *Trade costs and growth: why sub-saharan Africa performs poorly*, Nottingham: CREDIT Research Paper 06/08.

Meade, James et al.(1961) *The Economic and Social Structure of Mauritius*, London: Methuen.

Meade, James(1967) 'Population explosion, the standard of living and social conflict', *Economic Journal*, **77**, 233-255.

Milner, Chris and David Greenaway (1991) 'Did Mauritius really provide a 'case study in Malthusian economics?' *Journal of International Development*, **3**, 325-338.

Milner, Chris and Peter Wright(1998) 'Modelling labour market adjustment to trade liberalisation in an industrialising economy', *Economic Journal*, **108**, 509-528.

Milner, Chris and Evious Ngovu (2004) 'Would all ACP Sugar Protocol exporters lose from sugar liberalisation?' *European Journal of Development Research* **16**, 790-808.

Newman, Carol, John Page, John Rand, Mans Soderbom and Finn Tarp (2016) *Made in Africa: Learning to Compete in Industry*, Washington: Brookings Institution.

Mosley, Paul (2017) *Fiscal policy and the natural resources curse: how to escape from the poverty trap*, London: Routledge.

Rodrik, Dani(2006) 'Goodbye Washington consensus, hello Washington confusion? A review of the World Bank's economic growth (policies?) in the 1990s: learning from a decade of reform', *Journal of Economic Literature*, **44**, 973-987.

Rosenstein-Rodan, Paul(1943) 'Problems of industrialisation of Eastern and south-eastern Europe', *Economic Journal*,**53**, 202-211.

Subramaniam, Arvind (2009) *The Mauritian success story and its lessons*, Helsinki: UNU/WIDER Research Paper 2009/36.

Whitfield, Lindsay, Ole Therkildsen, Lars Buur and Anne Mette Kjaer(2015) *The Politics of African Industrial Policy: a comparative perspective*, Cambridge: Cambridge University Press.

World Bank(1993) *The East Asian Miracle*, Washington D.C.

World Bank (2005) *Economic Growth in the 1990s: Learning from a Decade of Reform*, Washington DC: World Bank.