

# China–Africa Trade Patterns: causes and consequences

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*China's trade patterns with African countries have made Beijing the focal point of new anti-Chinese resistance narratives in Africa. Unlike the Maoist era, when China's trade policies served its leaders' political goals, now they aim to access markets as part of China's larger domestic development strategy. China's state-run firms can channel China–Africa trade through extra-market decisions that influence flows, yet, ultimately, Beijing's ability to direct trade with Africa is constrained by market forces. Despite suggestions that shared illiberalism drives China–Africa trade the author concludes that five interrelated causal factors overwhelmingly determine China–Africa trade: China's comparative advantage in labor-intensive and capital-intensive production; Africa's abundant natural resource endowments; China's rapid economic growth; China's emphasis on infrastructure building at home and in Africa; and the emergence of economies of scale in China's shipping and light manufacturing sectors.*

## Introduction

China's trade patterns with African countries have made Beijing the focal point of new anti-Chinese resistance narratives in Africa.<sup>1</sup> Unlike the Maoist era, when China's trade policies served its leaders' political goals, now they aim to access markets as part of China's larger domestic development strategy. China's state-run firms can channel China–Africa trade through extra-market decisions that influence flows, yet, ultimately, Beijing's ability to direct trade with Africa is constrained by market forces. Five causal factors overwhelmingly determine China–Africa trade: China's comparative advantage in labor-intensive and capital-intensive production; Africa's abundant natural resource endowments; China's rapid economic growth; China's emphasis on infrastructure building at home and in Africa; and the emergence of economies of scale in China's shipping and light manufacturing sectors.

China trades extensively with African democracies and autocracies alike, making it doubtful that an African country's regime type explains much about its trade with

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1. The term 'trade patterns' refers to both the quantity of trade flows as well as the composition of goods traded.

China. Rather, China's trade with African countries is deeply rooted in powerful market dynamics that have begun to undermine China's image among average Africans. The spread of anti-Chinese narratives in Africa need not have coherent or predictable consequences. For instance, in December 2010 soccer fans chanting 'Chinese go home' rioted and attacked Chinese businesses in Lubumbashi, Democratic Republic of Congo (DRC) after their side lost to Inter Milan. Congolese fans mistook the Japanese referee for a Chinese, and were angered by some of his decisions in the match.<sup>2</sup> Nine months later in Zambia anti-China rhetoric helped populist Michael Sata win the presidency after three previously unsuccessful campaigns.<sup>3</sup> Incidents like these suggest that simmering anti-Chinese sentiment at the grassroots level is an increasingly powerful force that can be activated by either spontaneous, unforeseen events or ambitious politicians for their own purposes.

For a decade a dynamic expansion in the size and diversity of China's trade with Africa has been underway and along with it a growing number of anecdotal reports and interviews by scholars and government officials. Many, if not most of them, argue that China's trade is particularly friendly to repressive regimes. Beijing, the argument goes, prefers similarly autocratic African trading partners and its businesses assist in their efforts to resist calls for liberal democratic political reforms. Meanwhile, there are long standing economic theories of trade (i.e. factor abundance theory, the gravity model of trade, new trade theory, and structural economics) that also promise to explain China's trade with Africa. These explanations get more attention among economists than they do in the popular press. This paper seeks to reconcile these sometimes-conflicting explanations in an effort to better answer two related questions about China's trade with African countries: (1) what causal arguments help explain the patterns of China–Africa trade; and (2) what are the economic and political consequences of the patterns of trade between China and Africa?

## Part I: Causes of China–Africa trade patterns

### *Overview: unanswered questions*

Economic considerations determine trade patterns, but so do political ones, particularly between developing countries like China and African states. But why and how do political variables influence China's trade with Africa? Economies of scale and technological development, for instance, are often the product of a centrally administered national industrial policy born of a political process rather than an efficient market mechanism. This is particularly true in authoritarian developing countries like China, suggesting that nowhere is the role of politics in trade more prominent than between developing economies with autocratic political regimes. Many analysts have included political variables in their trade models yet none has developed a model that can predict the role they play, not only in determining the quantities of trade, but also in explaining which types of goods are traded and which

2. 'Unrest in DR Congo after TP Mazembe lose to Inter Milan', *BBC*, (18 December 2010), available at: <http://www.bbc.co.uk/news/world-africa-12030051>.

3. Howard W. French, 'In Africa, an election reveals skepticism of Chinese involvement', *The Atlantic*, (29 September 2011), available at: <http://www.theatlantic.com/international/archive/2011/09/in-africa-an-election-reveals-skepticism-of-chinese-involvement/245832/>.

are not. Yet, it is often the *types* of goods traded (raw materials vs. manufactured consumer products and capital equipment) that many observers believe determine the economic and political consequences we see between China and African countries.<sup>4</sup>

So what factors determine the patterns of China's trade with African countries (see Figure 1)? Amid the last decade or more of unprecedented growth in China's trade with Africa this question has elicited a myriad of publications describing its unique causes and implications. These works have revealed an assortment of arguments, each promising to explain the patterns of Chinese trade with Africa; many compare Chinese trade with other countries, such as India or the US. These explanations generally include elements of one or more of three prominent theories of trade: relative factor abundance theory, gravity trade theory, and political trade. Political trade is an amalgam of generally accepted views that some American, European, and African observers regularly use to help explain close economic ties between two liberal countries and two autocracies. President Bill Clinton broadly summarized the concept in his 1994 State of the Union address when he said: 'Democracies don't attack each other, they make better trading partners and partners in diplomacy'.

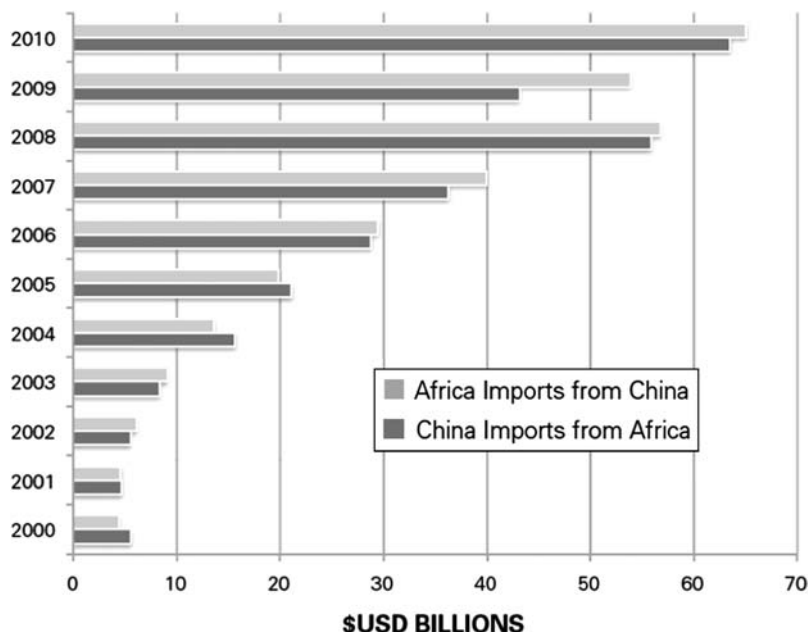
Differences between economic theories' predicted patterns of China–Africa trade and those observed in the real world have fueled political trade arguments. In 2005, for instance, a report for the United Kingdom's Department for International Development by Rhys Jenkins and Chris Edwards predicted a change in the structure of African exports and identified 'unexploited export opportunities which should be explored'. The report argued that rising per capita incomes in China would 'lead to a growing demand for food, particularly those with high income elasticity of demand such as meat products, fish, fruit and beverages'. The authors also identified 'new opportunities for other agricultural exports from Africa such as coffee and sugar'. They were optimistic that 'in the future for some [African] countries there may be opportunities for exporting labour intensive agricultural products such as fruit or coffee which could create more income or employment opportunities for poorer sections of society'.<sup>5</sup> By 2007, however, a World Bank report, authored by economist Harry Broadman, acknowledged that expected trade patterns had not emerged. Broadman was particularly puzzled by the slow growth in labor-intensive exports from African countries to China; he noted that only 'five oil- and mineral-exporting countries account for 85 percent of Africa's exports to China'<sup>6</sup> (see Figure 2). The report concluded that: 'Whether in terms of nationality, mode of entry, scale of investment, or geographic diversification, among other factors, one would expect to observe significant differences in the patterns of the exports and imports'.<sup>7</sup>

4. The early roots of this argument can be traced back to dependency theory. See Patrick J. McGowan, 'Economic dependence and economic performance in black Africa', *The Journal of Modern African Studies* 14(1), (March 1976); Michael B. Dolan and Brian W. Tomlin, 'First world–third world linkages: external relations and economic development', *International Organization* 34(1), (Winter 1980); And James A. Caporaso, 'Dependence, dependency, and power in the global system: a structural and behavioral analysis', *International Organization* 32(1), (1978).

5. Rhys Jenkins and Chris Edwards, *The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa*, DCP 70 (Department for International Development of the United Kingdom, May 2005), p. 18.

6. Harry G. Broadman, *Africa's Silk Road: China and India's New Economic Frontier* (Washington, DC: The World Bank, 2007), p. 10.

7. *Ibid.*, p. 296.

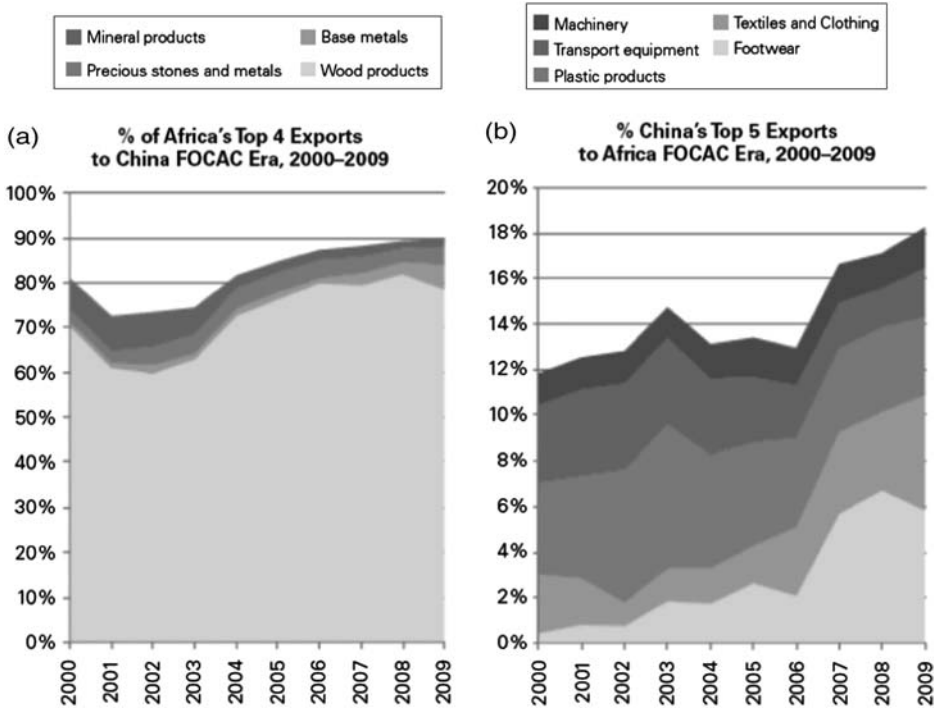


**Figure 1.** China–Africa trade, 2000–2010. *Source:* IMF Direction of Trade Statistics, China and Africa country pages, import data. David H. Shinn and Joshua Eisenman, *China and Africa: A Century of Engagement* (Philadelphia, PA: University of Pennsylvania Press, 2012), p. 115. Graphical displays reprinted with permission from the University of Pennsylvania Press.

Economists at the Common Market for Eastern and Southern Africa (COMESA) were similarly stumped by the slow growth in dozens of labor-intensive African exports to China. In July 2007, the East African regional trade bloc published a report on the effects of China’s tariff-free entry program for products from its member countries. COMESA concluded that despite China’s preferential tariff scheme on 454 African product lines, resource products including copper, cobalt, and marble consistently made up the bulk of member countries’ tariff-free import value. Based on a comparative advantage index the report identified dozens of products in which member countries might have expected a comparative advantage — e.g. textiles, cotton, salt and sulfur, rawhides and skins, coffee and tea, and fish and crustaceans—yet could not gain a foothold in Chinese markets.<sup>8</sup> China’s trade with Africa, at least, does not appear to function as relative factor abundance theory alone might predict. So what *else* determines China’s trade with African countries?

Researchers remain divided among those who believe existing economic theories of international trade can satisfactorily explain the patterns of China’s trade with Africa and those who believe political considerations are also highly salient. Even those who agree that China’s trade patterns do not conform to expectations do not necessarily agree on why; some researchers have privileged economic considerations, while others have

8. Themba Munalula, ‘China’s special preferential tariff Africa’, *Statistical Brief Issue No. 3*, Statistics Unit, Regional Integration Support Programme, Division of Trade, Customs and Monetary Affairs COMESA Secretariat, (July 2007).



**Figure 2.** (a) Percentage of Africa's top four exports to China FOCAC era, 2000–2009. (b) Percentage of China's top five exports to Africa FOCAC era, 2000–2009. *Source:* Based on a study of detailed PRC trade data conducted by the Trade Law Centre for Southern Africa, TRALAC, Stellenbosch, South Africa (see Shinn and Eisenman, *China and Africa*, p. 119).

advocated a mix of economic and political ones. Those who argue that politics also help determine Chinese trade patterns with Africa are, broadly speaking, unsatisfied with traditional economic explanations. These researchers generally agree that economic theories of trade have failed to adequately predict the actual patterns of trade we see in the real world. Before reviewing political explanations for China's trade with Africa, however, the following section identifies the key elements and assumptions of leading trade theories and their relevant amendments to determine where and how politics influences China–Africa trade.

#### *Relative factor abundance theory*

Relative factor abundance theory, privileged by most trade economists, holds that differing national endowments of resources, labor, and capital should explain the composition of China's trade with Africa. The Heckscher–Ohlin (H–O) model, rooted in David Ricardo's theory of comparative advantage, is the economists' traditional explanation for bilateral trade flows between countries. H–O (also known as neoclassical trade theory) predicts that the relative abundance or scarcity of a country's fixed factor endowments (resources, labor, and capital) compared with

those of its trade partner determines what it will sell and what it will buy. A country will export goods produced with its abundant endowments and import goods produced with inputs that are locally scarce. According to H–O, once trade barriers are removed fixed relative factor endowments will determine trade patterns.

Supporters of relative factor abundance theory, including economist Jian-Ye Wang, predict that China–Africa trade patterns ‘will be shaped by shifts in comparative advantage and changes in global supply chains’.<sup>9</sup> Jeffrey Herbst and Greg Mills agree that in Africa ‘the market, not grand strategy, is the Chinese motivation’.<sup>10</sup> They suggest that relative factor abundance theories have proven particularly valuable in explaining China–Africa trade because China’s relatively scarce natural resource endowments mean it must ‘lock up as many raw materials as possible’.<sup>11</sup> Indeed, many African countries’ relatively abundant factor endowments are natural resources and they do tend to dominate those countries’ exports to China. Wang’s International Monetary Fund (IMF) working paper described the resulting China–Africa trade pattern:

Strong growth of the Chinese and African economies, together with the complementary trade pattern—China imports fuel and other commodities, Africa purchases investment and manufactured products from China—largely explains their surging trade in recent years.<sup>12</sup>

Theories of relative factor abundance have come to dominate contemporary thinking on the patterns of international trade between countries, but researchers have also begun to recognize differences between traditional economic theories’ predicted patterns of China’s trade with Africa and those observed in the real world. To account for this researchers regularly relax one or another of the H–O theory’s six basic assumptions.<sup>13</sup> When studying China the most relevant amendments are increasing returns to scale and differences in technology and transportation costs. As discussed below these modifications to H–O assumptions help explain China–Africa trade patterns and identify the role that political factors play.

### *Gravity trade theory*

Some have turned to gravity trade theory (aka the gravity model) to fill in the gaps between the H–O theory’s predictions and those patterns observed in the real world.

9. Jian-Ye Wang, *What Drives China’s Growing Role in Africa?*, Working Paper No. 07/211 (International Monetary Fund, August 2007), p. 22.

10. Jeffrey Herbst and Greg Mills, ‘Commodities, Africa and China’, *S. Rajaratnam School of International Studies (RSIS) Commentaries* (Singapore: Nanyang Technological University, 9 January 2009), available at: <http://www.rsis.edu.sg/publications/Perspective/RSIS0032009.pdf>.

11. *Ibid.*

12. Wang, *What Drives China’s Growing Role in Africa?*, p. 20.

13. The H–O model is based on a half-dozen assumptions, and they are: *Dimensionality*: the number of goods is equal to the number of productive factors; *Factor Immobility*: (a) the factors of production move freely among industries within a country but are completely immobile among countries, and (b) goods move internationally with no transport costs and there are no other impediments to trade; *Competition*: both goods and factor markets clear competitively, all agents act as if they could buy or sell unlimited quantities at the prevailing market price; *Technology*: the same technological knowledge about the production of goods is costlessly available to all countries; *Factor Endowment Similarity*: the variability of factor endowment ratios among countries is less than the variability of factor input intensities across industries; and *Demand Similarity*: individuals consume as if each were maximizing an identical utility function. See Edward E. Leamer, *Sources of International Comparative Advantage: Theory and Evidence* (Cambridge, MA: Massachusetts Institute of Technology, 1984), p. 2.



The gravity theory of trade predicts that the *distance* between any two countries (measured in shipping distance) and the *size* of their respective economies (measured in GDP) will be the principal determinants of the quantity of trade between them.<sup>14</sup> Advocates note that the gravity model can be made increasingly robust with the inclusion of social and political explanatory variables such as population size, common borders, common language etc. This has made it attractive to many researchers investigating the link between politics and trade, while accounting for both economic and political drivers. In their examination of democracies, autocracies, and international trade, Mansfield *et al.*, for instance, found that ‘the gravity framework is quite successful in explaining the flow of interstate commerce’.<sup>15</sup>

### *Increasing returns to scale*

The concept of increasing returns to scale, first conceived by Bertil Olin and overlooked for decades, resurfaced in the early 1990s as a modification to relative factor abundance theory.<sup>16</sup> Paul Krugman describes this contribution, which came to be known as the new trade theory:

In the new trade theory, the basic point was that increasing returns are a motive for specialization and trade over and above conventional comparative advantage, and can indeed cause trade even where comparative advantage is of negligible importance among industrial countries with similar resources and technology.<sup>17</sup>

Increasing returns to scale, according to Helena Marques, proved an important amendment to H–O and helped explain why we see both inter-industry trade, still governed by the factor endowment differences, and intra-industry trade, where developed countries produce different varieties of the same good and trade them.<sup>18</sup> New trade theory has proven most helpful in explaining trade between two developed countries with similar technological and factor endowments, conditions not found between China and Africa. Yet, the concept of increasing returns to scale is also very important for China since it has spent massive sums on government devised and funded industrial policies.

Perhaps the most well known of Beijing’s initiatives designed to take advantage of increasing returns to scale was the selection of a handful of Special Economic Zones (SEZs) in southern China. Cheap labor, tax breaks, and other government-approved SEZ-specific incentives attracted foreign investment, promoted Chinese exports, and in a decade transformed the small fishing village of Shenzhen into a bustling

14. Although it is still unclear why and how it works, the gravity model, according to Jeffery Bergstrand, ‘has long been recognized for its consistent empirical success in explaining many types of flows, such as migration, commuting, tourism, and commodity shipping’. See Jeffrey H. Bergstrand, ‘The gravity equation in international trade: some microeconomic foundations and empirical evidence’, *The Review of Economics and Statistics* 67(3), (August 1985), pp. 474–481.

15. Edward D. Mansfield, Helen V. Milner and B. Peter Rosendorff, ‘Free to trade: democracies, autocracies, and international trade’, *The American Political Science Review* 94(2), (June 2000), p. 312.

16. Paul Krugman, *Was it All in Olin?*, Massachusetts Institute of Technology website, (October 1999), available at: <http://web.mit.edu/krugman/www/ohlin.html>.

17. *Ibid.*

18. Helena Marques, *The ‘New’ Economic Theories*, FEP Working Papers 104 (Universidade do Porto, Faculdade de Economia do Porto), p. 8.

metropolis of over eight million people. Yet, it is important to remember that the comparative advantage conveyed to Chinese producers via the SEZs' economies of scale was not the result of an efficient market mechanism, but rather of bargaining among political elites in Beijing. Shanghai, for instance, was not included among the SEZs for political reasons—the personal power of party elder Chen Yun—and thus its development initially lagged behind those cities that were selected. The SEZs' success (and that of China's economic reforms more generally) was only ensured after Deng Xiaoping's 1992 'Southern Journey' silenced powerful political critics who sought to roll back his efforts to open China to foreign trade and investment.

Over the last decade China's state-built economies of scale have helped confer upon its producers huge trade advantage over their African competitors, which face towering barriers to entry. China has boomtowns specializing in only one or two consumer products: Datong, Zhejiang produces over nine billion pairs of socks per year; Shenzhou, Zhejiang is the world's necktie capital; and the province also boasts a Sweater City, Kids Clothing City, and an Underwear City. The same expansion of economies of scale has occurred in various consumer products in other Chinese cities and provinces—like sneakers in Quanzhou, Fujian. Jinfei Wang, the chairman of the Jiangsu Diao Garment factory in Nantong, Jiangsu, explained how economies of scale helped his firm gain trade advantage over African producers. He concluded: 'I've been to factories all over the world and we can compete with any of them. Without restrictions, certainly China is going to be No. 1'. On Christmas Eve 2004, *The New York Times* underscored the power of China's 'enclave' approach to consumer goods production:

This remarkable specialization, one city for each drawer in your bureau, reflects the economies of scale and intense concentration that have helped turn China into a garment behemoth. Now, China is banking on its immense size and efficient operators to grab an even larger share of the world's clothing orders. China is not just becoming the leader of the pack. In many ways, it hopes to run away with as much of the market as possible.<sup>19</sup>

### *Technology and transportation costs*

The introduction of technology and transport costs into relative factor endowment theory (a component that H–O theory considers to be either zero or prohibitive) has been another innovation relevant for the study of China–Africa trade patterns. Structural economists suggest that differences in technology and industrial upgrading play a critical role in countries' economic development. Large differences in technology and infrastructure between China and most African countries are important deviations from neoclassical trade theory's basic assumptions of costless domestic factor mobility and equal technology. 'Comparative advantage in the modern world is created not endowed', notes Thomas I. Palley; '[It] is driven by

19. David Barboza, 'In roaring China, sweaters are west of socks city', *The New York Times*, (24 December 2004), available at: <http://www.nytimes.com/2004/12/24/business/worldbusiness/24china.html?pagewanted=print&position>.



technology, and technology can be importantly influenced by human action and policy'. Palley, a structural economist, believes that 'differences in technology can confer an absolute advantage on one country'.<sup>20</sup>

Although their focus has typically been on understanding the conditions favorable to economic growth in Africa rather than trade flows, structural economists' insights strongly suggest political causes for China–Africa trade. A 2009 report issued by the World Bank's Senior Vice President and Chief Economist, Justin Yifu Lin, outlined the central tenants of structural economics and its relationship to neoclassical theories of trade. Lin explained that: 'Structural economics applies the neoclassical approach to study the mechanism of economic development', except it:

... suggests a different, larger conception of endowments, including the factor endowment and hard and soft infrastructure endowment. Both factor endowment and infrastructure endowment are given at any given time and changeable over time. Based on the factor endowment, the individual firms make their choices of industries and technologies as well as production decisions. The infrastructure endowment will affect individual firms' transaction costs and rate of return to their investments.<sup>21</sup>

As noted above, World Bank and COMESA reports have both acknowledged that relative factor abundance theory alone is insufficient to explain China's trade patterns with African countries. This is because China's government exerts significant control over corporations and national interest is factored into business strategy.<sup>22</sup> China's domestic industrial policies push its production down the cost curve allowing it to poach demand from other developing countries and become the low cost producer at their expense. Beijing's trade and industrial policies can weaken the explanatory power of relative factor abundance theory if it 're-roots corporations by realigning profit with the national interest' thus redistributing the gains of trade and, in turn, substantially determining its patterns.<sup>23</sup>

A country's infrastructure and large-scale technology investments kick-start a self-reinforcing and self-sustaining process of economic development, Lin notes. This idea is powerful in China where the government has channeled massive investment into highways, train systems, and shipping ports, etc. In 2009, for instance, China invested US\$102.7 billion in its railways, with high-speed rail lines accounting for almost 60% of that total.<sup>24</sup> In 2011 and 2012, China invested an additional US\$75 billion and US\$65 billion, respectively, to maintain and expand its 91,000 km of railroads.<sup>25</sup> In 2011 the country had the world's largest high-speed rail network with 8,358 km of track, which is expected to exceed 13,000 km by the end of 2012 and

20. Thomas I. Palley, 'Institutionalism and new trade theory: rethinking comparative advantage and trade policy', *Journal of Economic Issues* 17(1), (March 2008), p. 199.

21. Justin Yifu Lin, *New Structural Economics: A Framework for Rethinking Development*, Policy Research Working Paper (The World Bank, February 2010), p. 28.

22. Palley, 'Institutionalism and new trade theory', p. 204.

23. *Ibid.*, p. 202.

24. 'High-speed railway accounts for over half of China's railway investment', *The People's Daily*, (27 April 2010), available at: <http://english.peopledaily.com.cn/90001/90778/90860/6965110.html>.

25. 'China blames 54 officials for bullet train crash', *The New York Times*, (28 December 2011), available at: [http://www.nytimes.com/aponline/2011/12/28/world/asia/AP-AS-China-Bullet-Train-Crash.html?\\_r=2&partner=rss&emc=rss](http://www.nytimes.com/aponline/2011/12/28/world/asia/AP-AS-China-Bullet-Train-Crash.html?_r=2&partner=rss&emc=rss).

16,000 km by the end of 2020.<sup>26</sup> Chinese firms are also building extensive rail networks throughout Africa linking resource-processing zones in DRC and Zambia to shipping hubs like Dar es Salaam, Luanda, Angola and Lagos, Nigeria. These rail projects serve to connect African raw material suppliers with Chinese buyers as well as Chinese goods manufacturers with African customers.

The growth of China's roads and highways has also outpaced African countries, yet China's proficiency in road building has also spread to Africa where its state-run firms have won bids to construct highways in Algeria, Angola, Ethiopia, and Zambia, among other countries. China has also invested heavily in its shipping sector and overtook South Korea to become the world's top shipbuilder in the first half of 2010. This success, however, came with ample political assistance. For instance, with the approval of the powerful National Development and Reform Commission in 2009 the Tianjin Shipbuilding Industry Fund was established. Cui Jindu, deputy mayor of Tianjin, announced that China's two major shipbuilders, China CSSC Holdings and the China Shipbuilding Industry Corp., donated to the fund, which by August 2010 had already financed 45 new ship orders for domestic shipbuilders and invested 15 billion yuan in shipbuilding projects. Revealing the close relationship between shipbuilders and the state, the website Tax-News.com reported that: 'Tianjin has the ear of central government with regard to providing the right tax incentives for ship financing packages and is spearheading developments in this direction'.<sup>27</sup> China has also expanded domestic port capacity and worked to improve the African ports of Lamu, Kenya, Luanda, Angola, and Dar es Salaam, Tanzania, among others. In Somaliland, even a lack of official diplomatic relations with Beijing did not stop Chinese firms from agreeing in August 2011 to build Berbera port into a regional hub for Chinese traders and a disembarkation port for East African oil shipments to China.<sup>28</sup>

Economists acknowledge that economies of scale, infrastructure and technology investment are born of a politics-driven process, yet they generally do not investigate the political causes of this cycle, i.e. the process that generates the preferential trade and industrial policies that governments use to pick winners. Instead they argue that a country's efforts to efficiently exploit its relative factor endowments will determine its industrial policies in accordance with efficient market outcomes. In short, while 'new trade' and structuralist critiques of factor endowment theory have succeeded in identifying *where* political considerations might influence trade patterns (e.g. in the development of economies of scale, technology, and reducing transport costs), they continue to shy away from explaining *how* and *why* they do.

26. 'Hu signals new high-speed railways approach', *South China Morning Post*, (17 April 2011), available at: <http://www.onenewspage.com/news/Asia-Pacific/20110417/21489795/Hu-signals-new-high-speed-railways-approach.htm>.

27. Mary Swire, 'China's shipping sector develops in Tianjin', *Tax-News.com* (Hong Kong), (5 August 2010), available at: [http://www.tax-news.com/news/Chinas\\_Shipping\\_Sector\\_Develops\\_In\\_Tianjin\\_44636.html](http://www.tax-news.com/news/Chinas_Shipping_Sector_Develops_In_Tianjin_44636.html).

28. Mark T. Jones, 'Somaliland President stops over in Addis Ababa enroute to China', *Somaliland Press*, (9 August 2011), available at: <http://somalilandpress.com/somaliland-president-stops-over-in-addis-ababa-enroute-china-23229>.

*Political trade*

‘Trade substantially follows patterns of comparative advantage. Nonetheless, economics is not everything’, Harry Bliss and Bruce Russett argued in response to existing economic theories of trade.<sup>29</sup> They contend that although the influence of shared regime type on trade may be difficult to observe, it should not be discounted entirely. Naazeen Barma, Ely Ratner and Steven Weber believe that the expansion of trade between China and Africa is ‘in excess of what standard economic models of trade would predict. This means that these patterns cannot be explained away by blistering economic growth’.<sup>30</sup>

The existing academic literature supporting political trade arguments is based on past studies that identified a connection between shared levels of liberalism and increased bilateral trade. This linkage appears to have emerged during the Cold War, when political loyalties in a bipolar world were substantially determined by a country’s trade partners. In their landmark article ‘Democratic trading partners: the liberal connection, (1962–1989)’, Bliss and Russett found that democracy is significantly and positively related to trade volume: ‘Trade between pairs of states with democratic polities’, they conclude, ‘is greater than that between states not sharing such a polity type’.<sup>31</sup> Bliss and Russett suggested that for democratic states the causal mechanism is rooted in a state’s security concerns:

States attempt to control trading patterns on behalf of private interests, and on behalf of perceived state and national interests. They promote trade with states deemed stable and reliable sources, and discourage, by various barriers, with adversaries and potential enemies. A democratic trading state will feel its security less threatened by other democratic state than by many autocracies. Democratic statesmen need to be less concerned that a democratic trading partner will use gains from trade to endanger their security than when their country trades with a nondemocracy. Their countries can enter into relationships of economic interdependence for absolute gains, without worrying as much about the hazard of relative gains as they might with nondemocratic partners.<sup>32</sup>

Mansfield *et al.* affirmed Bliss and Russett’s results that two liberal countries will tend to trade more than a mixed pair. They conclude that: ‘Holding constant various economic and political factors, democratic dyads tend to trade more freely than dyads composed of a democracy and an autocracy’.<sup>33</sup> Mansfield *et al.*’s research suggests that: ‘On average, a democracy and an autocracy engage in roughly 15% to 20% less commerce than a dyad composed of two democracies’.<sup>34</sup> Unfortunately, however, their model does not yield determinate predictions about whether trade between

29. Harry Bliss and Bruce Russett, ‘Democratic trading partners: the liberal connection, 1962–1989’, *The Journal of Politics* 60(4), (November 1998), p. 1127.

30. Naazneen Barma, Ely Ratner and Steven Weber, ‘A world without the West’, *The National Interest* 90, (July/August 2007), p. 25.

31. Bliss and Russett, ‘Democratic trading partners’, p. 1127.

32. *Ibid.*, p. 1128.

33. Mansfield *et al.*, ‘Free to trade’, p. 306.

34. *Ibid.*, p. 314. In 2002, and again in 2005, Mansfield *et al.* reaffirmed their earlier work and concluded that two democracies are more than twice as likely to sign a trade agreement as are a mixed pair. See Edward D. Mansfield, Helen V. Milner and B. Peter Rosendorff, ‘Why democracies cooperate more: electoral control and international trade agreements’, *International Organization* 56(3), (Summer 2002), p. 505; B. Peter Rosendorff, ‘Do democracies trade more freely?’, unpublished manuscript, dated 29 September 2005.

autocratic pairs is more likely than between mixed pairs.<sup>35</sup> The question thus remains unanswered by the academic literature: do similarly autocratic states also prefer to trade with each other?

Barma and Ratner sought to answer this question using China as a qualitative case study. They conclude that China advocates ‘illiberal capitalism ... where markets are free but politics are not’.<sup>36</sup> They argue that, ‘through a wide array of bilateral and multilateral arrangements, the Chinese government has begun to build an alternative international structure anchored by illiberal norms’.<sup>37</sup> They contend that ‘Chinese illiberalism presents the real long-term geopolitical challenge: it is easily exportable, and it is dangerously appealing to a disaffected world’.<sup>38</sup> Furthermore, Barma and Ratner link China’s political illiberalism with its economic relations by arguing that Beijing leverages its ‘mercantilist strength in the international system’ to attain its national interests and argue that ‘nowhere is this trend more evident than in Africa’.<sup>39</sup>

Two prominent Africanists, Denis Tull and Ian Taylor, also suggest that illiberalism drives China’s economic relations in Africa, but are unsure whether to attribute this to China’s indifference or its design. ‘What is different in comparison to other countries’ foreign policies is that Beijing legitimizes human rights abuses and undemocratic practices under the guise of state sovereignty’, Taylor writes. ‘China has no civil society worth talking about.’<sup>40</sup> Tull concurs, citing Taylor in support of his assessment that:

There is virtually no way around the conclusion that China’s massive return to Africa presents a negative political development that ‘almost certainly does not contribute to the promotion of peace, prosperity and democracy on the continent’.<sup>41</sup>

In the ‘Illiberal regimes’ section of his 2007 book, Chris Alden explained why he believes China’s demand for resource commodities instinctively increases the tendency to do business with autocracies:

From the Chinese perspective, these economies are generally closely tied to African elites’ interests, and there are fewer obstacles to rapid investment in the resource sector than they might experience in a state with stronger institutions and commitment to constitutional law.<sup>42</sup>

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35. Mansfield *et al.*, ‘Free to trade’, p. 314. Not everyone agrees, however. According to Penubarti and Ward, Mansfield *et al.*’s ‘results are both biased and inconsistent [and] produce not only inefficient, but also biased estimates of the parameters’, thus causing ‘the linkages virtually all other studies have uncovered between “joint democracy” and trade to evaporate’. They are also critical of using only a ‘loose fitting gravity model’ to determine bilateral trade flows and include economic variables (i.e. factor endowments, scale economies, and trade barriers) as well. These variables and falling trade barriers, not liberal politics, they conclude, are an increasingly important determinant of bilateral trade flows. See Mohan Penubarti and Michael D. Ward, ‘Commerce and democracy’, conference paper presented at *The Development and Application of Spatial Analysis for Political Methodology*, at the University of Colorado, Boulder, 10–12 March 2000.

36. Naazneen Barma and Ely Ratner, ‘China’s illiberal challenge’, *Democracy: A Journal of Ideas* 2, (Fall 2006), p. 57.

37. *Ibid.*, p. 64.

38. *Ibid.*, p. 61.

39. *Ibid.*, pp. 61 and 64.

40. Ian Taylor, ‘The “all weather friend”? Sino–African interaction in the 21st century’, in Ian Taylor and Paul Williams, eds, *Africa in International Politics: External Involvement on the Continent* (New York: Routledge, 2004), p. 99.

41. Denis M. Tull, ‘China’s engagement in Africa: scope, significance and consequences’, *Journal of Modern African Studies* 44(3), (2006), p. 476; also see Taylor, ‘The “all weather friend”?’, p. 99.

42. Chris Alden, *China in Africa* (New York: Zed Books, 2007), p. 70.

More hawkish critics, such as Peter Brookes and Ji Hye Shin, depict China's commercial competition as part of a zero-sum game that presents an inevitable threat to both liberalism and Western predominance. They contend that Chinese support for political and economic repression counters the liberalizing influences of traditional Western trading partners.<sup>43</sup> Others argue that as China expands economic relations with Africa its influence can actually encourage them to become more illiberal. This concern was echoed in a Council on Foreign Relations report issued in June 2008:

The way China does business—particularly its willingness to pay bribes, as documented by Transparency International—undermines local efforts to increase good governance and international efforts at macroeconomic reform by institutions like the World Bank and the International Monetary Fund.<sup>44</sup>

## Part II: Consequences of China–Africa trade patterns

Part I identified a number of causal arguments that purport to explain China–Africa trade patterns and which of them support the contention that China prefers to trade with authoritarian regimes in Africa. This section will address the economic and political consequences of the patterns of trade between China and Africa.

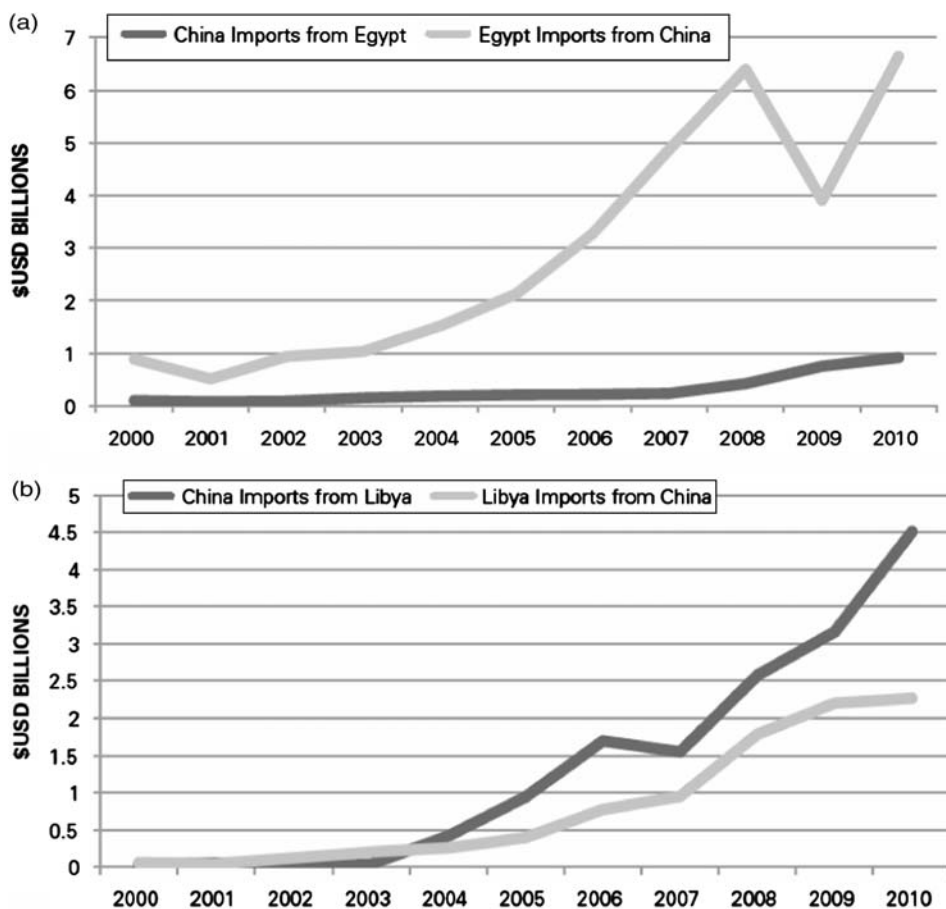
### *Resource trade growth*

Relative factor endowments of labor, capital, and resources substantially determine China–Africa trade patterns as well as the unique patterns of each African country's trade with China. The result is a generally balanced China–Africa trade relationship when China's trade with all 54 African states is taken together, but important differences emerge when the data are disaggregated. On a country-by-country basis the balance of trade between China and resource exporters tends to favor the African country, meanwhile China's exports dominate its commerce with non-resource exporting African trade partners. Comparing China's trade with Egypt to its trade with Libya—both tightly controlled autocracies until 2011—helps to illustrate the leading role factor endowments play in determining China–Africa trade patterns while holding regime type constant. In both cases China's comparative advantage in consumer goods and capital equipment drives steep growth in its exports. Yet, the presence of an export commodity (oil) in Libya results in a moderate Libyan trade surplus, while the lack of resources in Egypt has led to a severely imbalanced trade relationship in China's favor. The displays in Figure 3 are indicative of the stark split in China's balance of trade generally observed between non-resource and resource exporting African countries.<sup>45</sup>

43. Peter Brookes and Ji Hye Shin, *China's Influence in Africa: Implications for the United States*, Background #1916 (The Heritage Foundation, 22 February 2006), available at: <http://www.heritage.org/research/asiaandthepacific/bg1916.cfm>.

44. Stephanie Hanson, *China, Africa, and Oil*, Background (Council on Foreign Relations, 6 June 2008), available at: <http://www.cfr.org/publication/9557/>.

45. In 2005, Jenkins and Edwards (*The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa*) disaggregated China's trade among 21 sub-Saharan African countries and identified the widespread nature of this pattern.



**Figure 3.** (a) China–Egypt trade, 2000–2010. (b) China–Libya trade, 2000–2010. *Source:* IMF Direction of Trade Statistics, China, Egypt and Libya country pages, import data (see Shinn and Eisenman, *China and Africa*, pp. 117–118).

African countries with few resources usually endure large trade deficits with China (e.g. Benin, Egypt, Ethiopia, Ghana, Liberia, and Morocco) while resource exporters, by contrast, enjoy surpluses (e.g. Equatorial Guinea, Republic of Congo, Angola, Libya, and Gabon). This pattern reflects the dichotomous nature of China–Africa trade: China’s exports are diversified, i.e. each export category accounts for a small piece of total trade; by contrast, however, African exports to China remain concentrated in a narrow band of resource products. Since 2005 China’s top five import categories from sub-Saharan Africa—mineral products, base metals (including oil), precious stones and metals, wood products, and textiles and clothing—alone make up 90% of its total purchases. In fact, by 2009, nearly 80% of China’s exports from Africa were metals and petroleum products. Crude oil is Africa’s top seller and since 2000 has made up over two-thirds of the total export value to China. Iron ore and platinum are also important African exports to China,



although even they are swamped by the overwhelming value of China's oil imports (see Figure 2a).<sup>46</sup>

China's massive population and lack of labor rights protection have allowed for a largely cheap and generally compliant labor force that cannot be matched in Africa today. Meanwhile, China imports the large quantities of raw materials it needs to supply its domestic industries. Under such conditions, some African countries risk falling victim to the so-called Dutch disease whereby the economy becomes dominated by a single export commodity enriching a small group of elites who control natural resources at the expense of the larger workforce. By contrast, non-resource exporters risk accumulating large and sustained trade deficits with China that may have destabilizing political consequences over time.

### *The death of distance*

As gravity trade theory predicts, the fast growing Chinese economy is attracting more trade from around the world, including Africa. This is particularly true of China's trade throughout the developing world, which has rapidly grown as a part of China's total trade portfolio. More interestingly, perhaps, is the decline of distance as an important determinant in China–Africa trade. This is largely due to China, which throughout the 1990s and 2000s invested heavily in shipping and port construction to expand the use of super-sized cargo shipping fleets. Thanks to policymakers in Beijing, distance, the single variable that hindered China–Africa trade for so long, has been rendered increasingly irrelevant.

One news story helps to illustrate why distance no longer hinders China–Africa trade. On 16 February 2011, Dar es Salaam became the first port of call for the world's largest car and truck megaship, which docked on its way from Xingang Port near Dalian, China. The 232-meter long vessel has a top speed of 24 knots per hour and can carry 8,000 vehicles per voyage. It can make the trip from China to East Africa in two weeks, shaving one third off the previous shipping time. Like countless other megaships this one now makes regular monthly voyages from China to and from African ports. This type of heretofore-unseen shipping capacity and speed has underpinned the growth of China–Africa trade over the last decade.<sup>47</sup>

### *Africans locked-out of labor-intensive sectors*

China is building rail and road networks both at home and in Africa, allowing Beijing to exert influence over the destination of exports and the location of its suppliers. China's economies of scale, tariffs and subsidies to manufacturers for power, fuel, garbage collection, and other materials and social services have catalyzed its 'Go Global' strategy making it nearly impossible for African manufactured products to enter its markets and difficult for them to compete at home. By contrast labor-intensive African producers regularly pay hefty taxes and fees to political authorities for the

46. Data from 1995–2009 are available from the Trade and Law Centre for Southern Africa (TRALAC) in Stellenbosch, South Africa.

47. 'Largest cargo ship docks in Dar es Salaam', *Daily News* (Tanzania), (16 February 2011), available at: <http://dailynews.co.tz/home/?n=17346&cat=home>.

same services while smugglers readily help Chinese products avoid African countries' tariffs. China's manufacturing capacity and economies of scale supply a steady stream of affordable Chinese consumer goods for the domestic market and for export to African (and other international) markets.<sup>48</sup> Together, China's increasing demand for raw materials and ability to produce affordable consumer goods has become the dual engine for the growth of Sino–African commerce. This looks set to continue as African consumers snap up Chinese consumer products and African governments prey upon, rather than protect, their labor-intensive domestic manufactures. These trade patterns have also begun to have a destabilizing effect on China's relations with some African countries as Jenkins and Edwards foresaw in 2005:

Poverty reduction also depends on the type of growth generated by exports. There is a real danger that further expansion of mineral and petroleum exports to Asia will only reinforce an exclusionary model which will do little to reduce poverty and may exacerbate conflict and give rise to negative environmental impacts. Local producers may be displaced by competition from cheap imports from China and India and where these are in industries which employ significant numbers of unskilled workers, they may lose their jobs and be pushed into poverty.<sup>49</sup>

#### *Anti-Chinese African resistance narratives*

Although a boon for Chinese producers and African traders, the patterns of China–Africa trade also inhibit African countries from getting a foothold in labor-intensive manufacturing, the first rung of the development ladder. 'The potential danger, in terms of the relationship that could be constructed between China and the African continent, would indeed be a replication of that colonial relationship', South African President Thabo Mbeki said in December 2006. 'It is possible to build an unequal relationship, the kind of relationship that has developed between African countries as colonies. The African continent exports raw material and imports manufactured goods, condemning (it) to underdevelopment.'<sup>50</sup> Cautionary reports comparing China to colonial powers were news six years ago; today they have become a common refrain in conversations with average Africans and in press reports. One such article, published in August 2011 in Nigeria's *This Day* newspaper, was entitled 'A caution on China'. It said:

It has become fashionable to welcome the rise and incursion of China into the African market as an unmitigated blessing. Chinese goods are cheap relative to what we get from the West. My attitude is that we need to take a long-term strategic view of China's coming if we have any degree of national self-interest left. At this point in time, the best attitude is one of great strategic caution and informed engagement. If we are a serious nation with an eye on the future of our children instead of our present greed, we need to have put in place a team of people who have a capability for strategic thinking to fashion out a China policy. There are lessons to be learnt and dangers that are clear and present. If

48. Although it is outside the scope of this publication African countries' inability to compete with China in third country markets like the US and EU is another troubling trend.

49. Jenkins and Edwards, *The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa*, pp. 18 and 39.

50. Victor Mallet, 'The Chinese in Africa: Beijing offers a new deal', *The Financial Times*, (23 January 2007).

we take out oil and gas, we are a very unproductive people because the funds we generate through real sectors and activities are hardly enough to keep this flag flying for longer than 30 days.<sup>51</sup>

Economically, many Africans welcome the benefits of rising energy and commodity prices driven by China's export industries' growing demand. Yet, China's willingness to aid autocratic regimes in some well-covered African countries like Zimbabwe, Equatorial Guinea, Guinea, Sudan, and Ethiopia risks tapping into a reservoir of anti-colonial resistance still widespread among Africans. On the one hand, China's officials use the old anti-imperialist rhetoric to differentiate themselves from the Western nations; on the other, they try to convince Africans that there are mutual gains from trade. This is a tough balancing act for China's policymakers, as Eric Kiss and Kate Zhou observe: 'China inadvertently follows the same pattern of other preceding great powers, spreading the seeds of discontent in a continent with diversified ethnicities and cultures'.<sup>52</sup> If China–Africa trade continues in accordance with existing patterns Beijing's interests will be increasingly pitted against an emerging narrative of grassroots African resistance.

China's trade has also made it the target of disaffected, unemployed Africans. This appears to be the case in Egypt, where an influx of Chinese goods over the last decade has swamped local production. Zambia and Zimbabwe have seen riots against Chinese merchants and products. Beijing provides some autocratic African governments with the weapons and censorship and monitoring equipment to keep social order. Meanwhile, its firms' comparative advantage in labor-intensive and capital-intensive production undermines the development of homegrown African industries that could underpin long-run stability. These two incompatible trends have placed China in the crosshairs. For instance, in an August 2010 article entitled 'Autocracy: China's unsolicited export', Ephrem Madebo, an Ethiopian commentator, accused 'China of mixing tyranny with its material exports to Africa'. The article, which appeared in *The Addis Voice*, suggested that Ethiopia's economic relationship with China was actively supporting its repressive political system. Madebo observed:

The push of China into Ethiopia is driven by China's desperate need for raw materials and future market opportunities. China is wrecking the efforts of building democracy in Ethiopia by bankrolling the corrupt and repressive regime in Addis Ababa. We love your export of technology, investment, and pharmaceuticals, but please keep your unsolicited export of autocracy within China. The Ethiopian people do welcome mutually beneficial Chinese investment in Ethiopia, and the Chinese are encouraged to build dams in Ethiopia, but they should better build dams that contain water, not the flow of information.<sup>53</sup>

At the heart of this criticism is an argument that has become increasingly common among Africans: China's trade with African countries is supported by its close ties to

51. 'A caution on China', *This Day (Nigeria)*, (16 August 2011).

52. Eric Kiss and Kate Zhou, 'China's new burden in Africa', in Dennis Hickey and Baogang Guo, eds, *Dancing with the Dragon: China's Emergence in the Developing World* (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2010), p. 156.

53. Ephrem Madebo, 'Autocracy: China's unsolicited export', *The Addis Voice*, (12 August 2010), available at: <http://addisvoice.com/2010/08/autocracy-chinas-unsolicited-export/>.

autocratic political forces and driven by its demand for natural resources and, hence, is exploitative.<sup>54</sup>

## Conclusion

The largely market-driven disparities between China's trade with African resource producers and non-resource producers will continue to generate new political challenges. China's trade patterns with Africa are almost entirely determined by its comparative advantage in labor-intensive and capital-intensive production; Africa's natural resource endowments; the blistering growth of the Chinese economy; infrastructure expansion in both China and Africa; and the continuing emergence of government-supported economies of scale in China's shipping and manufacturing sectors. Shared autocracy appears unlikely to determine China's trade partners in Africa and is more likely a determinant of its political partners. China's state-run firms undoubtedly use extra-market decisions to influence trade flows; ultimately, however, Beijing's ability to direct trade is constrained by market demand and the location of Africa's resource supplies.

Given relative factor endowments of resources, labor, and capital there is little that can be done to reduce some African countries' overwhelming dependence on natural resource exports to China or African consumers' preference for low-cost, decent quality Chinese consumer goods. For African countries without resources and those that would like to diversify their exports, however, the continued inability of labor-intensive African exports, particularly agricultural goods, to freely access Chinese markets remain a source of frustration and concern. It is likely Africans will grow increasingly impatient with China's subsidies to its manufacturers, trade barriers against foreign goods, and political support for autocratic regimes. China will face increasing blowback from average Africans, many of whom will continue to watch their country's trade deficit with China grow over time. In sum, China's trade patterns with African countries are rooted in powerful market dynamics only partially created by government policies, but that has not stopped them from generating anti-Chinese resistance narratives among many Africans that threaten China's image as a long-term trading partner.

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54. For additional African commentaries that reflect this emerging anti-Chinese narrative, see: Catherine Sasman, 'Chinese in Gobabis', *The Namibian* (Windhoek), (12 January 2012), available at: <http://www.namibian.com.na/news/full-story/archive/2012/january/article/chinese-in-gobabis/>; also Bisong Etabohen, 'Cameroon looks to fix Chinese employment blues', *Africa Review* (Nairobi), (15 January 2012), available at: <http://www.africareview.com/Special+Reports/Cameroon+looks+to+fix+Chinese+employment+blues/-/979182/1305980/-/view/printVersion/-/69xk9i/-/index.html>.