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**The Pattern of Trade in Seventeenth-Century
Mughal India: Towards an Economic
Explanation**

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The Pattern Of Trade In Seventeenth-Century Mughal India: Towards An Economic Explanation¹

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Abstract

This paper identifies the absence of both sub-continently oriented histories which knit together the land and sea trades, and convincing explanations of the persistence of the Indo-Central Asian trade (for example) despite the growing Indo-European trade from the seventeenth-century. The customs-union model usefully approximates this trading-situation (*i.e.* the Europeans were given a privileged trading position by the Mughals vis-à-vis the Central Asians). It is used to structure the investigation and provide suitable explanatory hypotheses, as it suggests the separation of the likely creative and divertive effects of such privileged relations. Two tradeables (and related industries) are examined. The textile-industry demonstrates the possibility for trade-creation (*i.e.* due to substitution between otherwise regionally-specialised production-centres as in Gujarat, and the utilisation of spare capacity as in Bengal); it is not, however, possible to comment on the extent to which trade-creation took place. The horse-trade persisted because of limited trade-diversion. This was in turn the consequence of the absence of a European supply of horses, on the one hand, and the continued/unchanging geographical comparative advantage and demand conditions in the Mughal Empire, on the other. The necessary extensions to the model and analysis – for a complete understanding of sub-continental trading patterns – are noted (*e.g.* extending geographical and chronological scope, investigating private trading, and introducing balance of payments issues).

1. Introduction

1.1 The Historical Context

It is in the period after Vasco da Gama's landing in India in 1498² that the foundations were laid for the birth of the modern world³ and in

¹ This paper is drawn from the dissertation submitted for the requirements of the MSc. in Economic History (Research) and hence any errors or omissions which remain are entirely my own. I would like to thank the LSE Economic History Department for selecting this work for publication, Dr. Tirthankar Roy for supervision and Mr. Christopher Bredholt for his most meticulous proof-reading and syntactical suggestions. J.Lally@st-annes.oxon.org.

² Darwin rejects the da Gama myth but identifies Tamerlane's death (fifteenth-century) as the turning-point in global history, for it facilitated the sorts of contacts established by da Gama (J. Darwin, *After Tamerlane: The Rise and Fall of Global Empires, 1400-2000* (London: Penguin, 2008), pp.5-6).

which the way was paved for British dominance on the Indian sub-continent in the nineteenth-century. In the early seventeenth-century, the Dutch (1606) and the English (1607) established their first trading posts in India in an attempt to wrest control of the profitable spice trade from the Portuguese. Following the defeat of the Portuguese in 1615, the Dutch and the English Companies would spend much of the seventeenth century in the struggle to secure monopoly rights over the trade of certain spices, and trading privileges for other valuable goods such as textiles and opium. The decline of the Dutch grip on Asian maritime trade after 1670, the dwindling competition from France in the later half of the eighteenth century, and the conquest of Bengal in 1757, placed Britain squarely on a trajectory towards territorial and commercial hegemony on the land and in the ocean.

The Indian sub-continent, however, had been connected to the fringes of Europe, the Near East and Central Asia (as well as East and Southeast Asia) not for centuries, but for several millennia before 1498. The first Indians are thought to have travelled to Central Asia approximately two-thousand years ago, where they contributed to the growing overland trade of the trans-Eurasian Silk Route, which (ironically) they 'outlived'.⁴ The first maritime contacts are thought to have been made across the Indian Ocean from India between 3,000⁵ and 5,000⁶ years ago. These trade networks probably did not disappear after 1498, or even after the 1750s, but have long been forgotten in the popular histories of the period.⁷ Moreover, their existence challenges teleological

³ C.A. Bayly, *The Birth of the Modern World, 1780-1914: Global Connections and Comparisons* (Oxford: Blackwell, 2004); c.f. J. Inikori, *Africans and the Industrial Revolution in England: A Study in International Trade and Economic Development* (Cambridge: Cambridge University Press, 2002).

⁴ S. Levi, 'Introduction' in *India and Central Asia: Commerce and Culture, 1500-1800*, (ed.) S. Levi, (Delhi: Oxford University Press, 2007), p.1.

⁵ S. Kohli, *Sea Power and the Indian Ocean* (New Delhi: Tata McGraw-Hill, 1978), p.3.

⁶ M. Pearson, *The Indian Ocean* (London: Routledge, 2003), p.3.

⁷ c.f. J. Keay, *India: A History* (London: Harper Collins, 2000).

portrayals of European expansion in Asia (at least as far as commercial control is concerned⁸), as well as the extent to which this period can be seen as the turning-point or 'revolution'⁹ in the trading-history of the sub-continent. This chapter introduces the main historiographical perspectives related to a study of such themes, as well as the debate on the changing pattern of Indian trade, before outlining areas which require further scholarly attention; it also develops and contextualises the central research question: *Why did the Indo-Central Asian overland trade persist after the establishment of Dutch and English trading activities on the Indian sub-continent?*

1.2 The Historiographical Context

Three historiographical schools have emerged in the past three decades which have examined – from different vantage points – the issue of European commercial contact after 1498: global history, world history, and maritime history. The following review aims to evaluate the usefulness of these perspectives, and their associated conceptual tools, for an analysis of effects of European commercial contact on established sub-continental patterns of trade (*i.e.* the physical volume of goods traded and/or the destinations of these goods).

The new global histories – so-called because they examine the totality of economic and social processes as if one were viewing the globe as a whole from the vantage-point of outer space¹⁰ – can be divided into histories of globalisation and studies of processes at the global- rather

⁸ *c.f.* K. Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton: Princeton University Press, 2000).

⁹ N. Steensgaard, *The Asian Trade Revolution of the Seventeenth Century: The East India Companies and the Decline of the Caravan Trade* (Chicago: University of Chicago Press, 1974).

¹⁰ B. Mazlish, 'Comparing Global History to World History' *Journal of Interdisciplinary History*, 28, 3 (1998), p.389.

than national- or local-level.¹¹ The former histories deal explicitly with the issue of European commercial contact. On the one hand, it has been argued that a major turning-point in history can be located in the era of sustained commercial contact by the Europeans in Asia and the Americas, as these contacts initiated the process of globalisation (*i.e.* increasing global interconnectedness).¹² Some scholars deem the two centuries after 1498 as a significant period in which unprecedented European trade integrated markets across the globe,¹³ while others have proposed specific dates, such as 1571 when the Old World was connected directly to the New World via Manila.¹⁴ This also suggests that despite the Portuguese lead in Asia, it was later (in the era of British, Dutch, and French competition with the Portuguese) that any significant changes occurred. On the other hand, evidence of limited factor price convergence in the period before c.1800 – which is at least an indication of *economic* globalisation – casts doubt on the significance of these contacts.¹⁵

Yet, the futility of attempting to date globalisation notwithstanding, the perspective taken by global historians seems to preclude the

¹¹ *Ibid*, p.389.

¹² The period c.1620-c.1740 is what Fernandez-Armesto calls 'global re-convergence', insofar as human history before the Ice Age was characterised by the divergence of human populations, and that only in this period does the process of re-convergence become 'global' under the aegis of the Atlantic European states; F. Fernandez-Armesto, *Pathfinders: A Global History of Exploration* (Oxford: Oxford University Press, 2007).

¹³ K. Pomeranz and S. Topik, *The World That Trade Created. Society, Culture, and the World Economy, 1400 to the Present* (London: M. E. Sharpe, 2006); *c.f.* review of Bernstein (2008) in Kennedy P, 'The Distant Horizon: What Can 'Big History' Tell Us About America's Future' *Foreign Affairs*, 87, 3 (2008), pp.126-132.

¹⁴ D. Flynn and A. Giráldez, 'Path dependence, time lags and the birth of globalization: A critique of O'Rourke and Williamson' *European Review of Economic History*, 8 (2004), p.82.

¹⁵ K. O'Rourke and J. Williamson, 'When did globalisation begin?' *European Review of Economic History*, 6 (2002), pp.23-50.

construction of explanations,¹⁶ in favour of mapping the history of the process of globalisation. The series of 'vignettes' offered by Pomeranz and Topik, for example, colourfully demonstrate that the globalising force of trade has shaped modern markets and commodity production, but do not explain how or why such changes occurred.¹⁷ Indeed, as with world histories, such histories are, by admission of global historians themselves, "less keen about making predictions...[than] about tracing the course of civilisations."¹⁸ Thus, from the vantage-point taken by these global histories, it is likely that the post-1498 period was of some significance as far as the history of globalisation is concerned, but little is offered to an explanation of the ways in which European commercial contact altered Indian trade *patterns*.

World historians, however, have been less concerned with globalisation *per se* than with understanding how interconnections have shaped 'world' and 'local' level systems and processes (e.g. migration, trade, urbanisation).¹⁹ Two sub-sets of such histories are discernable. The first emanates from the early work of Braudel on the maritime economy of the Mediterranean, in which the sea, the littoral, and the *umland* are seen in the unified sense of a 'world'.²⁰ On the one hand, it is undoubtedly the case that the Mediterranean world differed greatly from the Indian Ocean world,²¹ and that the analysis of these worlds in isolation reflects analytic simplification rather than reality (e.g. sea-borne

¹⁶ On the nature of 'explanation' as used here, see: D. Little, *Varieties of Social Explanation. An Introduction to the Philosophy of Social Science* (Colorado: Westview, 1991), Chapter 1.

¹⁷ Pomeranz and Topik, *The World That Trade Created*, pp.3-8, 97-104.

¹⁸ Mazlish, 'Comparing', p.387.

¹⁹ T. Hall, *A World-Systems Reader: New Perspectives on Gender, Urbanism, Cultures, Indigenous Peoples, and Ecology* (Oxford: Rowman and Littlefield, 2000), p.6.

²⁰ F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (London: Collins, 2 vols. 1972).

²¹ M. Pearson, 'Introduction I: The Subject' in A. Das Gupta and M. Pearson (eds.), *India and the Indian Ocean, 1500-1800* (Delhi: Oxford University Press, 1999), pp.8-9, 16-19.

contacts existed between the Atlantic and Indian Ocean coasts since at least the mid-fifteenth century,²² and between the Indian Ocean world and the Levant from an even earlier period²³). Furthermore, India and the Indian Ocean have been relatively absent from such world histories, in comparison to the Atlantic.²⁴ On the other, this approach can undoubtedly enrich studies of trade and commerce (of India and elsewhere) by introducing the 'world' as constructed, imagined, and/or designative concept²⁵ (in contrast to the spatially determined and fixed 'globe'), which takes as its vantage-point the epicentre(s) (e.g. the European core or the Indian sub-continent) of whatever space is being analysed. This conceptual treatment has been extended through the focus on "webs of interaction"²⁶ where webs are sets of connections (e.g. common worship, economic exchange, military competition) which in turn result in transfers (e.g. of information to guide behaviour, technologies, goods) that shape history. The idea of a 'world', rather than a web, however, is probably more conducive to the study of the changing trade patterns.

The second sub-set of world histories, which introduces the conceptual 'world-system', emerges from the work of Wallerstein in the 1970s. A review of this well-known approach is not possible here, and is available elsewhere,²⁷ except to make a few comments relating specifically to the usefulness of this perspective to the issues under investigation. First, the problem and challenge for scholars, especially of the world-systems approach, is to interpret modern South Asian history within the framework of the universalising and globalising forces of the

²² J. Hobson, *The Eastern Origins of Western Civilisation* (Cambridge: Cambridge University Press, 2004), p.138.

²³ Levi, 'Introduction', pp.3-7.

²⁴ Pearson, *Indian Ocean*, p.3.

²⁵ Mazlish, 'Comparing', p.389.

²⁶ J. McNeill and W. McNeill, *The Human Web: A Bird's Eye View of World History* (London: W. W. Norton, 2003), p.3.

²⁷ e.g. P. Grimes and T. Hall in *A World-Systems Reader*, (ed.) T. Hall.

capitalist world-system.²⁸ In the world-systems analysis, 'pre-European' India is seen as an 'external arena' before (*i.e.* an 'other' world-system with which the capitalist world-system had a trade relationship)²⁹ but as a 'semi-periphery' after (*i.e.* a region within the capitalist world-system which is less industrialised than the core but more capitalistic than the periphery)³⁰ European commercial contact. The immediate difficulty is avoiding: (i) constructing a history of the Indian economy (and the world-system/external arena of which it is a part) which asserts its defenceless subordination to the European-centred capitalist world-system, and (ii) failing to note the ways in which "the West did not autonomously pioneer its own development in the absence of Eastern help...[as] its rise would have been inconceivable without the contributions of the East."³¹ Indeed, world-systems analyses after Wallerstein have not only posited that the capitalist world-system is more deeply rooted than previously believed, but also that it was Asia-centred³²; hence, the rise of the capitalist world-system cannot be seen in terms of the 'rise of the West' and its subordination of Asia, but in terms of the 'fall of the East.'³³ Second, even if this problem is resolved or avoided, the world-systems approach remains unsuitable because it focuses on world-system trends such as commodification, proletarianisation and state formation rather than how the spreading of the world-system changes and interacts with existing patterns of trade and commerce.³⁴ Thus, while world history has

²⁸ D. Washbrook, 'South Asia, the World System, and World Capitalism' *The Journal of Asian Studies*, 49, 3 (1990), p.482; *c.f.* *South Asia and World Capitalism*, (ed.) S. Bose (Delhi: Oxford University Press, 1990).

²⁹ Wallerstein, *The Modern World-System* (London: Academic Press, 1974), p.302; *c.f.* H-J Nitz, *The Early Modern World-System in Geographical Perspective* (Stuttgart: Franz Steiner 1993), pp.16-25.

³⁰ Wallerstein, *The Modern World-System*, p.349.

³¹ Hobson, *The Eastern Origins*, pp.2-3.

³² *c.f.* S. Gordon, *When Asia was the World* (London: Yale University Press, 2007).

³³ J. Abu-Lughod, *Before European Hegemony: The World System, A.D. 1250-1350* (Oxford: OUP, 1989).

³⁴ Hall, *A World-Systems Reader*, p.7.

provided many offerings to the study of Indian economic history – principally conceptual rather than empirical – it is the much earlier conception of world(s) rather than webs or world-systems that are most useful to the present study.

Maritime history, including Indian Ocean history, has been greatly influenced by the world history approach associated with Braudel. The idea of an Indian Ocean world has been used in several studies but perhaps most monumentally by K. N. Chadhuri.³⁵ The logic underlying the concept of the 'world' (*i.e.* as a space that can be constructed for analysis in a way that reflects the spaces imagined or perceived by contemporaries), has also led to the fragmentation of the Indian Ocean world into smaller and more analytically manageable regional spaces, or 'worlds writ small'. Broeze thus sees the Indian Ocean world as "a string of closely related regional systems stretching from East Asia around the continent and across the Indian Ocean to East Africa."³⁶ On the one hand, this inheritance from the world history school has meant that Indian Ocean historians have been more content to document the progress made by the European Companies – and the commercial connections in which they found themselves – than to explicitly evaluate or explain the effects of such progress.³⁷ On the other hand, the suggestions about what the effects on commercial patterns might have been are at best ambivalent: some argue that the seventeenth-century was marked by general prosperity on the sub-continent, thereby undermining the idea of deleterious competitive effects associated with the coming of the

³⁵ K. Chaudhuri, *The trading world of Asia and the English East India Company, 1660-1760* (Cambridge: Cambridge University Press, 1978).

³⁶ F. Broeze, *Brides of the Sea: Port Cities of Asia from the 16th to the 20th Centuries* (Honolulu: University of Hawaii Press, 1989), p.21.

³⁷ O. Prakash, 'The Dutch East India Company in the Trade of the Indian Ocean' in *India and the Indian Ocean*, (ed.) Das Gupta and Pearson, pp.192-193.

Europeans,³⁸ not least because certain merchant groups proved to be adaptable in the face of the new competition³⁹, and because trades such as the slave trade were hardly affected at all⁴⁰; others suggest that the eighteenth-century marked a major turning-point for Indian commerce as the English Company by-passed middlemen and directly controlled the productive activities inland.⁴¹

Yet, despite the claim that maritime historians "see maritime history as interacting with activities on the land all the time,"⁴² the problem with the maritime historian is her vantage point: from the coast, the maritime historian looks across the littoral to the sea, occasionally glancing back to view the mainland. Consequently, just as Africa has been a lacuna to Indian Ocean historians (when perhaps it ought to be conceptualised in the Indian Ocean world given its direct commercial contacts to the Indian Ocean and the Red Sea tributary⁴³) so too has much of the Indian sub-continent, and (adjacent) Central Asia and the inland Near East, which were closely commercially and monetarily⁴⁴ linked by land and sea to the ocean. Thus, as with the other historiographies it is evident that, useful conceptual innovation notwithstanding, the vantage-point taken by maritime historians precludes an examination of the pattern of overland and maritime trade between the sub-continent and her neighbours. A perspective or vantage-point rooted on the sub-continent itself is needed;

³⁸ A. Das Gupta, 'Introduction II: The Story' in *India and the Indian Ocean*, (ed.) Das Gupta and Pearson, p.35.

³⁹ L. Subramanian, 'Merchants in Transit: Risk-sharing strategies in the Indian Ocean' in *Cross Currents and Community Networks: The History of the Indian Ocean World*, (ed.) H. Ray and E. Alpers, (Delhi: Oxford University Press, 2007), pp.263-283.

⁴⁰ G. Campbell, 'Slavery and the Trans-Indian Ocean World Slave Trade: A Historical Outline' in *Cross Currents and Community Networks: The History of the Indian Ocean World*, (ed.) Ray and Alpers, pp.286-300.

⁴¹ S. Arasaratnam, *Merchants, Companies and Commerce on the Coromandel Coast, 1650-1740* (New Delhi: Oxford University Press, 1986).

⁴² Pearson, 'Introduction', p.2.

⁴³ Campbell, 'Slavery and the Trans-Indian Ocean World Slave Trade', p.287.

⁴⁴ N. Haider, 'The Network of Monetary Exchange' in *Cross Currents and Community Networks*, (ed.) Ray and Alpers; the links were also cultural, religious and ideological (§1.3).

the next sub-section examines the debate about one element of sub-continental trade relations after 1498 which provides the stepping-stone to such an investigation.

1.3 The Debate

The issue of whether European commercial activities wrested the Indian Ocean trade away from Asian merchants remains ambiguous in the maritime history tradition, but an established tradition exists which argues that as far as European maritime trading and Indo-Central Asian overland trade were concerned, the effects were unequivocally deleterious.⁴⁵ The central contribution to this tradition was made by Steensgaard in 1974. The thesis can be summarised as follows. First, it was not until the arrival of the Dutch and English Companies in the Indian Ocean (a century after Portuguese) that the trade of the Indian sub-continent experienced a 'revolution' (*i.e.* a change in its established trade patterns), because the Companies were successfully able to internalise protection costs and enjoy improved technology and communication networks. This view has recently been supported by the work of the institutionalist Douglas North.⁴⁶ Second, these Companies – unlike the Portuguese or the Indo-Central Asian caravan merchants – consequently benefited from economic buffers (rather than from lower transportation costs, which did not affect international trade until the nineteenth-century⁴⁷), thereby causing the decline of the latter.

⁴⁵ S. Adshead, *Central Asia in World History* (Basingstoke: Macmillan, 1993), pp.177-201; M. Athar Ali, 'The Passing of Empire: The Mughal Case' *Modern Asian Studies*, 9, 3 (1975), pp.387-388; M. Rossabi, 'The 'decline' of the central Asian caravan trade' in *The Rise of Merchant Empires*, (ed.) J. Tracey (Cambridge: Cambridge University Press, 1990), pp.351-370.

⁴⁶ D. North, 'Institutions, Transactions Costs, and the Rise of Merchant Empires' in *The Political Economy of Merchant Empires*, (ed.) J. Tracey (Cambridge: Cambridge University Press, 1991), p.25.

⁴⁷ R. Menard, 'Transport Costs and Long-Range Trade, 1300-1800: Was There a European 'Transport Revolution' in the Early Modern Era?' in *Political Economy*, (ed.) Tracey, pp.274-275.

Yet, while the former contention is probably valid and useful to an understanding of the effects of European maritime activities in the Indian Ocean, the latter is problematic in at least three respects. First, Steensgaard's dismissal of the significance of the overland merchants is largely driven by his characterisation of such merchants as itinerant peddlers' (when, for example, it is now known that the caravanserais – contemporary equivalents of the motorway service station – could accommodate almost 1000 people at a time⁴⁸), and more fundamentally by the absence of suitable evidence of their activities, from which he infers back that they must have been insignificant. Second, in addition to the informational advantages possessed by the indigenous merchants and middlemen – which would continue to disadvantage foreign commercial interests on the sub-continent even into the Raj⁴⁹ – there is decisive evidence that kinship networks were extended in this period to mitigate the costs associated with long-distance trade.⁵⁰ Merchants also developed networks across religious (e.g. Hindu-Muslim) and ethnic (e.g. Indian-Armenians) lines.⁵¹ The difficulty in seeing how these mechanisms might have reduced transaction costs to the same (or, at least, to a sufficient) extent as those of the Dutch and English Companies has perhaps been entrenched by the new institutionalist perspective, which emphasises the evolution beyond kin-/cultural-institutions to successfully deal with transactions costs as the scale and scope of exchange is widened.⁵² The most striking problem is that, to anticipate

⁴⁸ A. Burton, *The Bukharans: A Dynastic, Diplomatic and Commercial History 1550-1702* (Richmond: Curzon, 1997), p.444.

⁴⁹ A-M Misra, 'Business Culture' and Entrepreneurship in British India, 1860-1950' *Modern Asian Studies*, 34, 2 (2000), p.334.

⁵⁰ S. Gopal, 'A Brief Note on Business Organisation of Indian Merchants in Russia in the Seventeenth Century' *Journal of the Economic and Social History of the Orient*, 29, 2 (1986), pp.206-207.

⁵¹ *Ibid*, p.208.

⁵² c.f. A. Greif, 'Cultural Beliefs and the Organisation of Society: A Historical and Theoretical Reflection on Collectivist and non-Individualist Societies' *The Journal of Political Economy*, 102, 5 (1994), p.904.

terminology introduced in the following chapter, Steensgaard's thesis is posed entirely in terms of trade-diversion. That is, the enlargement of English and Dutch trading activities was based on the diversion of goods destined for Asian markets to Europe: a more sophisticated (and convincing) explanation might balance between the diversionary and creative forces of the European trade activities.

The revisionist work, however, has largely attacked the accepted portrayal of Indo-Central Asian trade by highlighting that the extent of trade diversion was smaller than believed by Steensgaard (although they do not use such terminology),⁵³ and that serious decline did not result until political change north of the sub-continent in the later eighteenth century.⁵⁴ For example, Alam has argued that in response to the loss of Indian control over the maritime trade in the face of expanding European activities in the ocean, the rulers of the Mughal, Safavid, and Uzbek empires responded by initiating a policy of protection for the overland trade.⁵⁵ It has indeed been demonstrated that the Mughal emperors – despite their 'failure' to develop the maritime trades⁵⁶ – felt some connection with their Central Asian homeland, and sympathised enough with merchants to be "compelled"⁵⁷ to reduce taxation, relay the roads, and order the building of caravanserais.⁵⁸ (Implicit in such arguments is the notion of path-dependence broadly conceived, *i.e.*, 'history matters for

⁵³ *c.f.* review in: S. Levi, 'India, Russia and the Eighteenth-Century Transformation of the Central Asian Caravan Trade' *Journal of the Economic and Social History of the Orient*, 42, 4 (1999), pp. 526-542; Levi, 'Introduction', pp.7-15.

⁵⁴ J. Gommans, 'Mughal India and Central Asia in the Eighteenth Century: An Introduction to a Wider Perspective' in *India and Central Asia*, (ed.) Levi, p.45.

⁵⁵ M. Alam, 'Trade, State Policy and Regional Change: Aspects of Mughal-Uzbek Commercial Relations, c.1550-1750' *Journal of the Economic and Social History of the Orient*, 37, 3 (1994), pp.214-215.

⁵⁶ D. Washbrook, 'India in the early modern world economy: modes of production, reproduction and exchange' *Journal of Global History*, 2 (2007), pp.109-111.

⁵⁷ R. Foltz, *Mughal India and Central Asia*, (Oxford: Oxford University Press, 1998), p.153; *c.f.* Subramanian, 'Merchants in Transit: Risk-sharing strategies in the Indian Ocean', p.266.

⁵⁸ Burton, *The Bukharans*, pp.444-447.

future outcomes⁵⁹: the ancestral origins of the Mughals in Central Asia entailed a kind of connection which facilitated the movement of goods *and* people, ideologies, technologies, *etc.*, sponsored by the courts.⁶⁰ The overland trade was thus enmeshed in a many-sided cultural, commercial, and political 'web' - quite unlike the maritime trade.) The problem with such an explanation is two-fold. First, policy seldom unequivocally facilitated the overland trade (*e.g.* the emperor Shah Jahan undid many of the liberalising measures of his father), such that individual policy measures alone cannot be seen as evidence (save as explanations) of the persistence of the overland trade with Central Asia. Second, it is unclear whether the benefit of protection was sufficient to outweigh the costs of raiding and banditry that prevailed on the overland routes (and from which the European Companies were *relatively* free) and make such trading profitable, so that it is difficult to see how such protectionism might have encouraged the persistence of trades other than those which might naturally have continued in the face of European competition. More generally, the revisionists have developed the argument that 'where there is smoke, there will be fire,' by highlighting the active presence of merchants of the Indian diaspora in Central Asia as evidence of the persistence of overland trade, and thereby taking a Eurasian vantage-point. Influenced by world history,⁶¹ these studies have made use of previously unavailable or 'misused'⁶² sources from the archives of the newly independent Central Asian republics, to reconstruct the 'webs' or 'worlds' of the Indian merchants and the interconnections created by the

⁵⁹ D. North, *Understanding the Process of Economic Change* (Princeton: Princeton University Press, 2005), p.52.

⁶⁰ Levi, 'Introduction', pp.20-30.

⁶¹ P. Manning, *Navigating World History: A Guide for Researchers and Teachers* (Basingstoke: Macmillan, 2003), p.88.

⁶² Levi, 'Introduction', pp.3-5.

goods they traded.⁶³ The principle problem with many of these analyses is that – despite broad engagement with the foreign-language scholarship – convincing *explanations* of *why* the Indo-Central Asian trade persisted are absent.

1.4 The Puzzle

Much valuable conceptual innovation and marshalling of (often new) evidence have taken place in the study of Asian commercial history in the past few decades. Yet, this introductory review has highlighted two fundamental weaknesses that must be addressed, and which are established as the aims of this investigation. The first is the absence of a sub-continentally rooted vantage-point or perspective, which engages with global- and world-level processes, and which knits together the interacting histories of the land and the ocean.⁶⁴ From such a perspective it is difficult to deny the conclusion that although the Indo-Central Asian overland trade *did* decline, this process was probably later, slower, and more regionally-varied⁶⁵ ⁶⁶ a process than previously asserted (at least as far as some trading links or goods-trades were concerned). The second is the absence of a convincing explanation as to why this trade continued until the later-eighteenth and nineteenth-century,

⁶³ S. Dale, *Indian merchants and Eurasian trade, 1600-1750* (Cambridge: Cambridge University Press, 1994); S. Levi, *The Indian Diaspora in Central Asia and its Trade, 1550-1900* (Leiden: BRILL, 2002); C. Markovits, *The Global World of Indian Merchants, 1750-1947. Traders of Sind from Bukhara to Panama* (Cambridge: Cambridge University Press, 2000); C. Markovits, 'Indian Merchants in Central Asia: The Debate' in *India and Central Asia*, (ed.) Levi, pp.123-155.

⁶⁴ Chaudhury has attempted to compare the overseas and overland trades and thereby demonstrate the significance of the overland routes to the Bengal silk trade; yet, his analysis has largely been limited to the intra-sub-continental trade in Bengal silk versus the European overseas trade. S. Chaudhury, 'International Trade in Bengal Silk and the Comparative Role of Asians and Europeans, circa. 1700-1757', *Modern Asian Studies*, 29, 2, (1995), pp.373-386.

⁶⁵ For discussion of the pattern of decline: Levi, 'Introduction', p.32.

⁶⁶ The scope of this investigation precludes an investigation of rising European advantage and 'crowding-out' effects, save to reiterate that the Europeans are unlikely to have possessed any significant advantages in the seventeenth-century overland trade vis-à-vis established traders.

without recourse solely to trade diversion (or the lack thereof), and despite newly available evidence (although this is perhaps a consequence of the kinds of history being written with such evidence). Thus, the following question is taken as the *point de depart*: *Why did the Indo-Central Asian overland trade persist after the establishment of Dutch and English trading activities on the Indian sub-continent?*

The following chapters propose an answer to this question. Chapter 2 further specifies the problem, and outlines the research design, by: (i) using situational analysis to characterise and model the effects of the arrival of the European Companies in the competitive environment of the Indian Ocean, and in turn (ii) developing the hypotheses that the persistence of the trades can be explained by the limited nature of trade-diversion in certain key goods (in turn explained by continued strong demand and trade based on comparative advantage) *and* the potential for trade-creation in others, and (iii) examining the available source material to identify how best to test these hypotheses and what methodological problems might be encountered. Chapters 3 and 4 examine the textile and horse trades respectively, arguing that: (i) trade in these goods took place because of the comparative advantages possessed by each region, (ii) the potential to increase cloth production entailed that the arrival of the Europeans initiated trade-creation, and (iii) that alongside the strong demand for horses on the sub-continent until the twentieth century, which limited the possibility for trade diversion, these factors explain the persistence of the Indo-Central Asian trade. Chapter 5 evaluates/complicates the overarching explanatory model by examining demand and balance of payments issues that are absent in the model to provide directions for further research. Chapter 6 concludes with implications for our understanding of the Indian sub-continent and for historiographical approaches to its commercial history.

2. Model, Hypotheses and Sources

The first step in constructing an explanation of the persistence of the overland trade is to further specify the problem in a way amenable to investigation in a work of this scope. This chapter examines the following two questions: (i) *How will existing patterns of trade be affected when trade between the sub-continent and one region benefits from lower trading costs relative to the trade between the sub-continent and other regions?* (ii) *What kind of evidence is needed to examine the core hypotheses?* The model of the customs-union proposed by Viner - the simplest of a set of models which examine such questions - suggests an answer to the former question.^{67 68} This chapter first aims to match this model to the historical evidence to demonstrate its plausibility and develop specific hypotheses to answer the central research question, before considering the nature and limitations of the existing sources.

2.1 Model

2.1.1 Overview

It is from the seventeenth-century – until perhaps the late nineteenth-century – that India is engaged in trade with Central Asia. There are, however, at least two reasons for limiting focus to the seventeenth-century. First, whilst the contingency of history limits the use of *ceteris paribus* assumptions, the seventeenth-century – unlike the following centuries – provides a more constant environment in which it is possible to begin to understand the effects of European trading activities

⁶⁷ *c.f.* R. Pomfret, *Unequal trade: The economics of discriminatory international trade policies* (Oxford: Basil Blackwell, 1988); P. Robson, *The economics of international integration* (London: Unwin Hyman, 1987).

⁶⁸ Introducing gravity-equations into customs-union models shows that trade-creation effects dominate because country-specific effects limit trade-diversion (*c.f.* S. Ghosh and S. Yamarik, 'Does trade creation measure up? A re-examination of the effects of regional trading arrangements' *Economics Letters*, 82 (2004), p.214). This is inconsequential here because: (i) the model is merely an heuristic tool hypotheses-generation, and (ii) the matching exercise identifies any specific-effects.

in a work of this scope. Indeed, as already noted, the eighteenth century was a period of increasing territorial advance by the English on the sub-continent, and by the Russians and Chinese in Central Asia. Furthermore, it has been argued that the diversion of the credit and trade facilities of the Indian banking firms, from the Mughals and towards regional powers such as the English Company, facilitated the disintegration of the Empire in the eighteenth-century.⁶⁹ Consequently, it is difficult to disentangle European commercial and territorial actions and consequences after the seventeenth-century. Second, as noted in the debate between global historians, a major issue concerns the extent to which the pre-Industrial Revolution period can be located as a major turning-point in world and global history, thus meriting a study of the seventeenth-century.

The second point of clarification regards the territorial units being studied. The model (detailed below) posits the existence of three countries: a home country, a partner country with whom the union is formed, and a non-member representing the rest of the world. This raises three issues. First, taking an Indian vantage-point, the trading 'world' being examined consists of the totality of its commercial contacts – including China, Japan, Southeast Asia, Central Asia and Russia, the Near East, Africa (particularly, but not exclusively, East Africa), and parts of Europe.⁷⁰ For analytic simplicity, however, this world is conceived of as being constituted of (interconnected) regional systems, following Broeze.⁷¹ The Indo-Central Asian system is one such system: on the one hand, this system was undoubtedly connected to other systems, such as the Eastern European and Russian systems (in the trade of furs and fruits),⁷² or the African and Arab systems (in the trade of slaves);⁷³ on the

⁶⁹ K. Leonard, 'The 'Great Firm' Theory of the Decline of the Mughal Empire' *Comparative Studies in Society and History*, 21, 2 (1979), p.152.

⁷⁰ Pearson, *Indian Ocean*.

⁷¹ Broeze, *Brides of the Sea*, p.21.

⁷² Gopal, 'A Brief Note', p.29; Gommans, 'Mughal India', pp.42-43.

other hand, while the Indo-Central Asian trades can reasonably be analysed as a single system, it is analytically useful to separate the maritime and overland trades of which it is composed into two sub-systems, for these existed in both competition (e.g. in the horse trade)⁷⁴ and cooperation (e.g. at nodal points, such as Hormuz or Aleppo, where goods were traded and/or goods transported in ships were forwarded by caravan, and vice versa).⁷⁵ The Indo-European system – in which goods are transported directly, or indirectly⁷⁶ via other parts of Asia, to Europe – is another such system which emerges with significance in the seventeenth-century. Second, it should be noted that the Indian sub-continent, England and Holland (as the destination for much of the European Companies' exports, including those, for example, sold by the English Company to the Levant Company for re-export within the Mediterranean⁷⁷), and Central Asia (as defined by the Indo-Central overland sub-system) can realistically and plausibly be conceptualised as the three 'countries' posed in the model (respectively). Third, and as a corollary, it is necessary to define the geographic limits of India and Central Asia. The former, following convention, is the sub-continental mass south of the Hindu Kush and Himalayas; specifically in this discussion, however, it is the Mughal Empire that is of interest because it is here that the flourishing overland trade was centred in the seventeenth

⁷³ Campbell, 'Slavery and the Trans-Indian Ocean World Slave Trade', p.293.

⁷⁴ J. Gommans, 'The Horse Trade in Eighteenth-Century South Asia' *Journal of the Economic and Social History of the Orient*, 37, 3 (1994), pp.229-235.

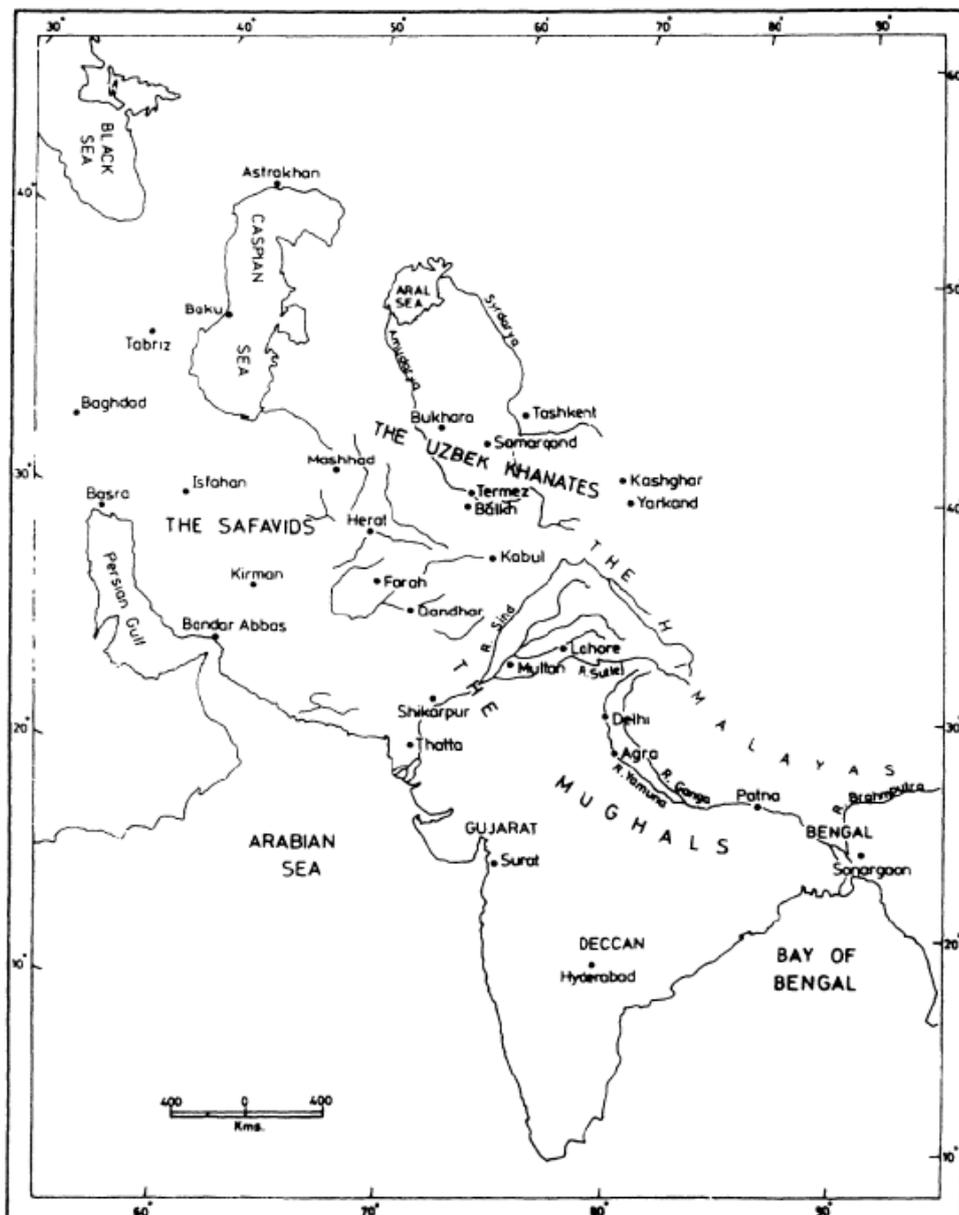
⁷⁵ c.f. R. Findlay and K. O'Rourke, *Power and plenty: trade, war, and the world economy in the second millennium* (Princeton: Princeton University Press, 2007), pp.3-4.

⁷⁶ The Companies and private traders were both engaged in this trade, but who dominated is unclear; c.f. T. Metcalf, *Imperial Connections: India in the Indian Ocean Arena, 1860-1920* (London: University of California Press, 2007), p.278; Prakash, 'The Dutch East India Company', p.190.

⁷⁷ J. Irwin and P. Schwartz, *Studies in Indo-European Textile History* (Ahmedabad: Calico Museum of Textile, 1966), p.8.

century and where most analyses have focussed⁷⁸ (Fig.2.1).⁷⁹ The latter, is defined as the region controlled by the Safavids and the Uzbek Khanates, thus encompassing the important trading cities of Bukhara, Samarkand, Qandahar, Isfahan and Astrakhan (Fig.2.1).

Figure 2.1: The Indo-Central Asian Overland Sub-System



⁷⁸ e.g. Alam, 'Trade, State Policy, and Regional Change'; Burton, *The Bukharans*, pp.444-450.

⁷⁹ Source: Alam, 'Trade, State Policy and Regional Change', p.204.

Finally, if a customs-union is the coordinated effort of two countries/regions to eliminate tariff walls, then an immediate issue concerns whether the situation being analysed is one of customs-union formation. (The issue of tariffs – and how they may be operationalised – is discussed below). On the one hand, issues of the existence and direction of state (*i.e.* Mughal) policy notwithstanding, it is doubtful whether either the Europeans or the Mughals – for all the efforts of ambassadors such as Sir Thomas Roe – intended to create anything like the customs-unions of the twentieth century. Yet, customs-unions are often primarily concerned with the establishment of market power,⁸⁰ and it has already been noted that the Europeans strived to obtain monopoly privileges on the trade of textiles, spices, and other goods. Ultimately, the model provides valuable insight into how the low costs experienced by the European Companies in its trade with Mughal India impacted the established trade pattern between Central Asia and Mughal India.

2.1.2 Assumptions

First, there are certain assumptions shared with pure theory of international trade, including: (i) pure competition, (ii) factor mobility within the country/region, (iii) zero transportation costs.⁸¹ The absence of transportation costs is an abstraction that is never fulfilled in reality, but it is of note that the costs were at least roughly symmetric (*i.e.* in the absence of a transportation revolution, the cost of Indo-European shipping, according to Steensgaard, is unlikely to have been considerably different from the cost of overland Indo-Central Asian transportation⁸²), such that trade did of course take place. There is also evidence of factor mobility. The weavers of the Coromandel coast just outside the Empire,

⁸⁰ L. Rivera-Batiz and M-A Oliva, *International Trade: Theory, Strategies and Evidence* (Oxford: Oxford University Press, 2003), p.535.

⁸¹ Robson, *The economics of international integration*, pp.13-30.

⁸² Steensgaard, *The Asian Trade Revolution*, p.7.

for example, operated a simple transportable loom which made their operations highly mobile. Indeed, the English sources show that under their policy of encouraging weavers to move to the settlements they had established, the population soon "doubled itself in magnitude, so fast doe the poore people flocke hither from Moorish tierry." ⁸³ There are similar accounts of mobility within the Mughal-controlled areas of the country, ⁸⁴ but regional and production differences meant that the degree of mobility probably varied across the Empire. The most important of these assumptions, however, is that of perfect competition because the benefit from obtaining protection would have been negated in the presence of significant control over the trade by competitors. There is much evidence that the Indian trading world was highly competitive. For example, the overland trade was undertaken by individual merchants and pastoral nomads (of the Ghilzai and Lodi tribes) ⁸⁵, and as such probably limited the exercise of market power. The trade may then have been carried on by Indian or indigenous merchants who, despite the volume of trade they are likely to have carried, are noted for their individualism and the need for competitiveness (especially for fear of being undercut by Armenian merchants). ⁸⁶ Pearson, among others, has similarly described the well-known picture of maritime trade as highly competitive. ⁸⁷

Second, it is assumed that the non-member country (*i.e.* Central Asia) is the most efficient producer of good *x*, which is imported by the home-country (*i.e.* Mughal India), after levying a tariff. Three points are of note. (i) Good *x* need not be a single good, but could be extended to reflect the reality of *all* the goods exported from Central Asia. (ii) These goods, which are widely documented in contemporary Central Asian and

⁸³ *The English Factories in India*, Vol. 1634-36, (ed.) W. Foster (Oxford: Oxford University Press, 1911), p.48.

⁸⁴ Irwin and Schwartz, *Studies*, pp.8-27, 44-50.

⁸⁵ Gommans, 'Mughal India', p.45.

⁸⁶ Gopal, 'A Note', p.209.

⁸⁷ Pearson, *Indian Ocean*, p.99.

Mughal sources, included: luxury items such as horses, camels, furs, raw silk, military slaves, and other items such as dried fruit.⁸⁸ Other goods which have since received less attention, but which are recorded in the accounts left by the Arab geographers, medieval travellers and Persian chroniclers included: luxury items such as silk and silk-stuffs, precious stones, as well as various types of clothes, fruits, plants and herbs, olive-oil, rose-water, and glass.⁸⁹ (It is also assumed that the partner countries (*i.e.* England and Holland) also produced good x, although their principle export from Europe – after an unsuccessful attempt to export textiles⁹⁰ – was the bullion used to finance the purchase of cloth in India for European markets and for bartering in the 'Spice Islands' of Southeast Asia.⁹¹) (iii) Since the intention of tariff-levying is to increase costs on imports (albeit while generating revenue for the state), tariffs are conceptualised as tariffs proper and additional costs on Central Asian exports. On the one hand, it seems that the Mughals liberalised rather than protected trade in this period. Jahangir, the first of the seventeenth-century Mughal emperors, seems to have taken an unequivocal step towards liberalising rather than protecting trade: the port duty (*mir bahri*) and personal travel tax (*tamgha*) were abolished,⁹² while trade costs were reduced through the building of caravanserais to ensure security in transit. Furthermore, income tax (*zakat*) was abolished, because it seems the emperor feared that it hurt merchants from the Safavid Empire and

⁸⁸ F. Bernier, I. Brock (transl.), *Travels in the Mogul Empire, A.D. 1656-1668* (London: Archibald Constable, 1891), p.249; *c.f.* Gommans, 'Mughal India', pp.42-43.

⁸⁹ J. Chawla, *India's Overland Trade with Central Asia and Persia during the Thirteenth and Fourteenth Centuries* (Delhi: Munshiram Manoharlal, 2006), p.206.

⁹⁰ *e.g.* letter from Roe to Kerridge at Surat (25 April 1617): *Letters received by the East India Company, Vol.VI - 1617*, (ed.) W. Foster (Sampson Low & Co.: London, 1902), p.200.

⁹¹ Irwin and Schwartz, *Studies*, p.10.

⁹² B. Krishna, *Commercial Relations between India and England (1601 to 1757)* (London: Routledge and Sons, 1924), p.42.

the Uzbekh Khanate.⁹³ Similarly, Aurangzeb (the last of the seventeenth-century Mughal emperors), repealed many of the damaging measures implemented by his father Shah Jahan; for example, he abolished a form of tax on profits (*hasil*) in 1663 and various transit and income taxes (*zakat, rahdari, pandari*).⁹⁴ On the other hand, not only had Shah Jahan introduced (the later repealed) transit taxes on food, drink and livestock, but less hagiographic sources from the reign of Aurangzeb's demonstrate that the trend towards higher tariffs increased through the seventeenth century. For example, despite the abolition of the 2.5 percent sales tax for Muslims in 1667, the tax still had to be paid by Hindus and at a rate of 5 percent. Furthermore, the contemporary French traveller Tavernier notes that all foreign visitors (except those belonging to the English or Dutch Companies) were searched on arrival in the sub-continent and ordered to pay 4-5 percent of the value of their goods in tax, and that gold and silver coins were confiscated at the northern frontier and re-minted into local coins.⁹⁵ Finally, "Having paid the import tax and the separate tax on silver, gold, and precious stones, merchants were free to sell their goods, but whenever a sale took place they had to pay a commission of 1 to 2 percent to a broker."⁹⁶ The Europeans, in contrast, enjoyed happier economic relations with the Mughals, which resulted in relative freedom from the payment of tariffs.⁹⁷ Thus, Indo-Central Asian merchants faced (relatively speaking) significant tariffs in this period (and which were

⁹³ *The Tuzuk-i-Jahangiri or Memoirs of Jahangir. From the First to the Twelfth Year of his Reign*, (transl.) A. Rogers, (ed.) H. Beveridge (London: Royal Asiatic Society, 1909), pp.21-22.

⁹⁴ Burton, *The Bukharans*, p.446.

⁹⁵ *Tavernier's Travels in India*, 2 Vols., (ed.) V. Ball (London: Macmillan and Co., 1889), pp.5-8 (Vol.II).

⁹⁶ Burton, *The Bukharans*, p.447.

⁹⁷ F. Hasan, 'Conflict and Cooperation in Anglo-Mughal Trade Relations during the Reign of Aurangzeb' *Journal of the Economic and Social History of the Orient*, 34, 4 (1991), p.360; C. Hamilton, *The Trade Relations between England and India (1600-1896)* (Calcutta: Thacker, Spink and Co., 1919), p.19.

probably rising, rather than falling, albeit having started from a low level in the reign of Jahangir).

Third, it is assumed that the home country (*i.e.* Mughal India) is the most efficient producer of good(s) y , which is imported by the partner(s) (*i.e.* England and Holland) after levying a tariff. Three points are of note. (i) The goods exported by India included: luxury items, such as several varieties of cloth, carpets, embroidery, pearls, elephants,⁹⁸ rhinoceros's horns, peacocks; and non-luxury items, such as ghee,⁹⁹ spices, aromatic-roots, cotton, indigo-cakes, iron-swords, musk, different types of wood, sugar-candy, and food grains.¹⁰⁰ (ii) The issue of tariffs is somewhat problematic. On the one hand, tariffs were levied by the English, for example, but only from the eighteenth century when the Calico Acts were passed in response to fears that the domestic cloth industry could not compete with the Indian industry.¹⁰¹ On the other hand, the absence of tariffs is probably unimportant to present purposes. The assumption of *ex ante* tariffs is important in the model insofar as it shows how the dropping of tariffs between the home and partner countries affects the pattern of trade of the home country with all other countries. In reality, England and Holland can be seen to 'join' the Indian trading world at the same time that such a drop in tariffs would have been experienced, so that their absence *ex ante* reflects the same situation as trade having been prevented by tariff protection. Ultimately, the matching between the model and the historical case is weakest only where the assumptions are

⁹⁸ *c.f.* Thomas Coryat's testimony in: *Early Travels in India, 1583-1619*, (ed.) W. Foster, (Oxford: Oxford University Press, 1921), p.243.

⁹⁹ An important tradeable until the nineteenth-century but overlooked by revisionists; *c.f.* Bernier, *Travels in the Mogul Empire*, p.440.

¹⁰⁰ *e.g.* testimony of Edward Terry in: *Early Travels in India, 1583-1619*, (ed.) W. Foster, (Oxford: Oxford University Press, 1921), p.301; *c.f.* Chawla, *India's Overland Trade*, p.150; Gommans, 'Mughal India', p.43; Irwin and Schwartz, *Studies*, pp.8-50.

¹⁰¹ These fears emerged after the Restoration, although the subsequent increases in duties were neither effective, nor as significant as the (circumvented) Calico Acts; *c.f.* Krishna, *Commercial Relations*, pp.255-256.

relatively trivial such as this, and hence does not affect the proceeding analysis.

2.1.3 Outcomes and Hypotheses

The formation of the customs union (*i.e.* the simultaneous elimination of tariffs between the home and partner countries) has two consequences. The first is *trade-diversion*, that is, the exports from the non-member (*i.e.* Central Asia) are supplanted by the exports from the partner (*i.e.* England and Holland). The reduction of tariffs on the imports of good *x* from the partner allows her to overcome the disadvantages from being less efficient, and so trade in good *x* is diverted away from the Central Asia and towards Europe. England and Holland, of course, were not actually producing good *x* as defined above. This suggests the first explanatory hypothesis as to why the Indo-Central Asian trade was able to persist in this period (expressed here in such a way amenable to falsification)¹⁰²:

Trade-diversion from Central Asia to Europe would have occurred as envisaged by the model without a significant change in the demand for Central Asian goods (which were not supplied by the Europeans).

The second consequence is *trade-creation*: the home-country expands its imports of good *x* because the good is now cheaper. There is evidence of bullion inflows increasing in this period suggesting, in turn, that Indian

¹⁰² *i.e.* a hypothesis against which evidence is mounted to demonstrate its likely falsehood - in this case demonstrating that continued demand for certain goods was essential in limiting the extent of trade diversion; *c.f.* G. King, R. Keohane and S. Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton: Princeton University Press, 1994).

export-production must be increasing to match the rise in imports. This suggests the second (falsifiable) explanatory hypothesis:

Trade-creation, based on the possibility of increasing the supply of those exportables which were destined for both trading regions, did not facilitate the continuation of trade with Europe and Central Asia.

2.2 Sources

The preceding review highlighted two traded goods which merit investigation in conjunction with the trade-creation and trade-diversion hypotheses, respectively. First, textiles formed perhaps the most significant exports from India to both Europe (by the Companies) and to Central Asia (by the merchants of the Indo-Central Asian system) in this period.¹⁰³ Second, horses formed a valuable and significant part of the overland trade in the thirteenth and fourteenth centuries,¹⁰⁴ and continued to do so in the seventeenth, eighteenth and nineteenth centuries, such that Gommans notes how "even if only 5000 horses were annually imported into India, this would result in a trade volume which compares still very favourable with the total export trade of...the eighteenth-century Dutch [Company]...in Bengal."¹⁰⁵ In spite of the absence of any reliable and complete quantitative records of the trade in these goods, the principle advantage of a sub-continentally oriented vantage-point is that many valuable qualitative sources related to these two goods are available in English or in English translation, and which may be used to draw inferences for an examination of the two hypotheses.

¹⁰³ For an indication of the extent of English Company trade: Chaudhuri, *The trading world of Asia*, pp.507-547; for the Indo-Central Asian trade: Levi, 'India', p.531.

¹⁰⁴ Chawla, *India's Overland Trade*, p.150.

¹⁰⁵ Gommans, 'The Horse Trade', p.240.

2.2.1 Availability of the Evidence

There are two types of sources for an examination of the trade-creation hypothesis. The first are published records and calendars from the English Company, including: *The First Letter Book, 1600-1619*, (ed.) Birdwood and Forster; *Letters received by the East India Company from its Servants in the East* (Vols.I-VI), (ed.) Forster et al; *The English Factories in India*, (ed.) Forster. The second are unpublished sources in the India Office Archives (British Library), including: letter books, court books, official correspondence, and various factory records. That these relate primarily to the English should not be problematic insofar as sources from the Dutch Companies are widely available in translation and in the secondary literature, and since the few accounts of merchants have now been documented in the secondary literature (even if not yet in English translation). The evidence for an examination of the trade-diversion hypothesis is more scattered. The sources include translations of the diaries and journals of European travellers (including Jean-Baptiste Tavernier and Francois Bernier), and the court histories from the reigns of Jahangir, Shah Jahan and Aurangzeb. These primary sources will be complemented by the secondary literature, especially where this literature has made extensive use of the foreign language sources, although it does not examine the entire seventeenth-century.^{106 107}

2.2.2 Limitations of the Evidence

There are two key limitations of the evidence utilised by this investigation. First, the often condescending attitudes of European

¹⁰⁶ e.g. S. Digby, *War-horse and elephant in the Delhi Sultanate: a study of military supplies* (Oxford: Orient Monographs, 1971); Gommans, 'The Horse Trade'.

¹⁰⁷ Note: these sources have been widely used but have not been consulted for present purposes or used in conjunction with the customs-union model which is, to the author's knowledge, entirely original.

visitors to India (e.g. Ralph Finch¹⁰⁸), and the hagiographic portrayals of the Mughal emperors by court historians are such that concerns about reliability have been well-imbibed into examinations of these contemporary sources. Second, there is a distinct absence of evidence produced by textile weavers or horse-traders, reflecting its non-existence in the former and its loss in the latter case. (The evidence produced by horse-traders/merchants that has recently become available is incorporated where possible, but it is of note that these men were seldom concerned with the issues under investigation here, and so is of little use to present purposes). Consequently, in light of the available data (e.g. European accounts, Mughal court documents), the analytical units for the investigation of the trade-diversion and trade-creation hypotheses are the production centres (e.g. Gujarat or Sind) and the Mughal Court, rather than individual weavers and individual consumers, respectively. The specific questions asked of the source material are: (i) *What were the main (regional) sources of supply of textiles in Mughal India?* (ii) *How responsive was regional textile production to increases in demand?* (iii) *Did the exchange of horses for Indian exports take place because of differing comparative advantages?* (iv) *What factors explain the continuing demand for horses and hence the continuation of trade on the basis of comparative advantage?*

2.2.3 Methods of Analysing the Evidence and Methodology

The former limitation - in addition to the general problem of authorial selectivity biases associated with edited (published) collections of archival sources¹⁰⁹ - can be overcome by adhering to the practice of cross-referencing and appreciating the provenance of the source

¹⁰⁸ *Early Travels in India, 1583-1619*, (ed.) Foster, p.14-30

¹⁰⁹ G. Elton (ed.), *The Practice of History* (Oxford: Blackwell, 1967), p.63.

material.¹¹⁰ The hypotheses are examined through the presentation of two case-studies, which are best-suited to the type of evidence available. The first seeks to answer the question of supply responsiveness outlined above by examining the supply response of textile production centres to the Gujarat famine of 1630 to determine the extent to which production could be increased to meet increased export-demands. It should be noted that the criterion for interpreting a genuine increase in supply of one type of textiles would be evidence of increased production without substantial substitution from the production of alternative types of textiles. The second examines supply and demand in the horse market to determine why horses were traded inter-regionally and why this trade continued in the seventeenth-century.

3. The Textile Trade and Trade-Creation

The Indian weaver of the seventeenth-century is characteristically portrayed as possessing a highly specialised craft learned from knowledge and learning-by-doing passed down many generations and utilising relatively simple tools.¹¹¹ Such weavers are appreciated for the skill and quality of their products: English contemporaries like the politician Pollexfen, for example, commented on the quality (rather than speed) of such weavers: "As ill weeds grow apace, so these manufactured goods from India met with such a kind reception that from the greatest gallant to the meanest Cook Maids, nothing was thought so fit to adorn their persons as the Fabrick from India!"¹¹² Yet, the oft-mentioned disadvantage of such textile production and technology is that the quantity and speed of production seldom matched the quality, as

¹¹⁰ *Ibid*, pp.64-67, 70-76

¹¹¹ e.g. Coromandel weavers used simple mobile handlooms.

¹¹² From a speech to the Board of Trade, *India Office Library Tracts*, Vol.83, p.50; quoted in Irwin and Schwartz, *Studies*, p.13.

highlighted by K. N. Chaudhuri who asks whether the industry in this period was marked by 'stagnation or stability.'¹¹³ If the idea of trade-creation in textiles is to have any significance in explaining the Indian pattern of trade then it must necessarily grapple with issues of technical-learning and capacity. This chapter thus asks two questions: (i) *What type(s) of textile were exported from India to Europe and where were they produced?* (iii) *How did production respond to downward movements in supply and upward changes in demand?*

3.1 Textile Types and Production-Centres

An exhaustive treatment of individual textile types and production-centres is not possible here, but four main types of textiles (excluding carpets and embroideries¹¹⁴) produced in the Indian sub-continent can be determined.¹¹⁵ (In addition to these, linen was produced in South India but was not a popular export item for the Europeans, and wool was produced in North India and remarkably exported to Europe – despite wool being a British staple – because fine Kashmiri wools were seen as substitutes for fur). These are discussed in order of their importance to the Indo-European export trade (beginning with the most important), for to examine production of goods (also destined for Central Asia) being stimulated by increased European demand, the most important types of textiles must first be identified.

3.1.1 Plain, Dyed and Loom-Patterned Calicoes

There are references to calicoes patterned in the loom being produced in West and South India (e.g. ginghams), but these were

¹¹³ Chaudhuri, *Trading world of Asia*, pp.272-276.

¹¹⁴ The demand for the latter (produced only in Western India) declined by the 1620s, and demand for both of these goods was switched to Persian substitutes (*c.f.* Irwin and Schatz, *Studies*, p.19).

¹¹⁵ The distinctions employed here follow: Irwin and Schwartz, *Studies*, pp.8-50.

destined for African markets, or for use in bartering for spices in the intra-Asian trade.¹¹⁶ Similarly, the dyed calicoes of South India were principally for use in the intra-Asian trade, while those of West India were 'troublesome' because – in addition to being necessary to advance order – they were dyed in regions (e.g. Ahmedabad) away from the actual production-centres (e.g. Lucknow). In contrast, all three regions were noted for the production (and, in most cases, the purchase in significant quantities by the English Company) of plain calicoes, albeit that England was not universally the final-market. The muslins of West India, for example, were bought in large quantities for re-export from London to the Levant, while the trade in Bengali muslins was limited by the monopolisation of supply by indigenous merchants and by virtue of their unsuitability for the European climate. The plain calicoes of Golconda, however, included the high-quality 'Longcloths' and 'Salempores' that were exported in significant numbers to England.

3.1.2 Printed and Painted Calicoes

These goods were insignificant in the trade of Northeast India (including the Bengal) for most of such fabrics came from Patna and were of a cheap or inferior grade.¹¹⁷ These were hence poor substitutes for the expensive painted calicoes (there is no evidence of cheaper printed calicoes being produced) of the Coromandel. These varied greatly in quality (the best, and rarest, came from Golconda¹¹⁸ - from where supply was further limited by demands imposed upon the Mughal and Deccani courts¹¹⁹) and it was only in the 1680s that the English Company began to show an interest in exporting cotton paintings to Europe (with the first

¹¹⁶ *Ibid*, pp.26, 40.

¹¹⁷ *Ibid*, p.45.

¹¹⁸ *Tavernier's Travels in India*, (ed) Ball, Ch.XIII (Vol. II).

¹¹⁹ *The English Factories in India*, Vol. 1634-36, p.161.

shipment sent in 1682¹²⁰). Such was the political disturbance of the Mughal-Deccani conflicts that the English agents moved the best Golconda weavers to Madras¹²¹ - although this arrangement is likely to only have begun to generate returns after c.1700. It is only in Western India that printed (especially in Sironj¹²² and Burhanpur¹²³) and painted (especially in Ahmedabad¹²⁴) calicoes were produced – although the English market seems to have preferred painted calicoes (and even began sending out sample-patterns after 1662¹²⁵).

3.1.3 Silk Fabrics

The Coromandel region of South India is not noted for silk production and most Western Indian silks were mixed cotton-silk fabrics (the cheapest of which were called 'tapseils' and were generally bought for the West African trade) – the English generally bought such textiles for bartering in the intra-Asian spice trade. In contrast, silk exports were a significant part of the export trade of Bengal in this century, with the English Company as one of the largest buyers from c.1670.¹²⁶ Indeed, in 1682 the London Directors of the English Company instructed the agents in the Bengal to "push on the making of Taffaties to your utmost quantities procurable, for that is always a sure staple commodity,"¹²⁷ such was the demand for Bengal silks.

Thus, this review highlights conclusions which are pertinent to the investigation of trade-creation. First, the textile industry was highly regionally-specialised: (i) Western India specialised in the production of

¹²⁰ *Records of Fort St. George: Despatches from England*, Vol. 1681-86 (Madras: Government Press, 1916), p.21.

¹²¹ *Ibid*, p.16.

¹²² *Journal of John Jourdain*, (ed.) W. Foster (London: Hakluyt Society, 1905), p.251.

¹²³ *Letters received by the East India Company*, Vol.I - 1602-23 (ed.) F. Danvers (Sampson Low & Co.: London, 1896), p.29.

¹²⁴ Irwin and Schwartz, *Studies*, p.16.

¹²⁵ *Letter to Surat factors (1683)*, India Office Archives, Letter Book VII, p.210.

¹²⁶ Irwin and Schwartz, *Studies*, p.46.

¹²⁷ *Records of Fort St. George*, Vol. 1681-86, p.83.

painted, printed and plain calicoes, (ii) South India in painted-calico production, and (iii) Northeast India in silk-production. Second, the extent of demand- (and perhaps, as a corollary, supply-) substitutability was limited as, for example, preferences between printed and painted calicoes, or painted calicoes and silk-textiles of West and South India, were well-ingrained. Finally, despite these aforementioned features, there was a possibility for changes in supply – such as increasing the quantity of silk produced or working to patterns of European origin – which are suggestive of the possibility of learning or technical-uptake and expanding supply. This idea is examined in the following section.

3.2 Production Responses

3.2.1 Shifting Production Centres

The Famine and its Effects

In 1630, a famine swept across the sub-continent from Gujarat to Golconda (although the former was the main production-centre for the European trade at this time), the result of poor rains in the previous three years.¹²⁸ This famine brought:

"an universal dearth over all this continent, of whose like in these parts noe former age hath record; the country being wholly dismantled by drough...the poore mechaniques, weavers, washers, dyers, etc., abandoning their habitacions in multitudes, and instead of reliefe elsewhere have perished in the fields for want of good to sustaine them."¹²⁹

The famine worsened when, in 1631, the rains fell so heavily that they destroyed crops and facilitated the spread of water-borne diseases.¹³⁰ The humanitarian consequences aside,¹³¹ the effects on the

¹²⁸ *The English Factories in India*, Vol. 1630-33, pp.20, 79.

¹²⁹ *Letter from Surat to the Company* (31 December 1630): *Ibid*, p.122.

¹³⁰ *Ibid*, pp.166, 178, 180.

textile industry were two-fold. On the one hand, the famine resulted in the death or migration of many of labourers involved in textile production. The Viceroy of Goa reported, for example, that 3 million died in Gujarat and 1 million in Ahmadnagar between 1630 and 1631. On the other hand, those textiles-sector workers who survived were unlikely to be able to continue production at previous levels. First, the interdependent nature of textile production meant that a shortage of washers (for example) would retard the rate of weaving. Second, high food prices doubtless brought malnutrition to the few survivors, and low productivity as a corollary. Thus, all merchants and traders – Indians, Central Asians, and Europeans alike – suffered from the associated contraction in trade; an investigation of the response of the English Company (for which records are readily available), however, demonstrates how trading continued, and in turn, is suggestive of how trade-creation was possible.

Responses

The commercial response of the Company appears to have been two-fold. First, the Company provided its ships for the merchants operating the intra-Asian trade, thereby putting much of its own trading on hiatus.¹³² Second, and more significantly, the Company also decided to explore the possibility of trade in South India, having rejected a previous suggestion to that effect before the famine.¹³³ The first ship reached Masulipatam in July 1631. Since Gujarat cloth was well-established on the London market, the task was first to determine whether any Coromandel cloth could be a suitable imitation, and then to acquire the necessary trade privileges. In 1645, the agents reported some success in

¹³¹ The gruesome details – Victorian sensationalism notwithstanding – are noted in: H. Elliot, (ed.) J. Dowson, *The history of India, as told by its own historians: the Muhammedan period*, Vol. VI (London, 1877).

¹³² *The English Factories in India*, Vol. 1630-33, pp.94, 143, 145, 148, 178.

¹³³ *The English Factories in India*, Vol. 1618-21, p.343.

this regard and reported that they required just a few workmen from Surat to improve the quality of the imitation.¹³⁴ The timing, however, was unfortunate, for the Coromandel Coast was hit by its own famine soon afterwards. On the one hand, this analysis only permits the inference that trade-creation via shifting production-centres was possible – without being able to comment on extent – although this nevertheless suggests that production could be changed to meet changes in demand/supply. Yet, in the aftermath of the famine, Gujarat enjoyed a revival in its trade *but* was significantly changed. Cheap cotton and silk piece-goods, for example, were principally being produced in the northern regions that escaped the famine (e.g. Punjab and Sindh) such that Gujarat now specialised in chintz production.¹³⁵ Ultimately, this reinforces the idea that regional-specialisation could be overcome/alterd by rapid technical-learning, which in turn enforces the idea that trade-creation was possible.

3.2.2 Spare-Capacity Utilisation

The Indo-European trade increased the total demand for Bengal textiles - since there is no evidence to suggest that the demand from overland provinces simultaneously abated.¹³⁶ This analysis of responses to such demand changes draws from the data accumulated and analysed by Om Prakash,¹³⁷ who assessed the contribution of the Indo-Dutch trade to the economy of Bengal, but who does not discuss trade-creation *per se*.¹³⁸ The following sub-sections discuss the methods employed,

¹³⁴ *The English Factories in India*, Vol. 1646-50, p.163.

¹³⁵ Irwin and Schwartz, *Studies*, p.27.

¹³⁶ Chaudhury, 'International Trade', p.373.

¹³⁷ O. Prakash, *The Dutch East India Company and the Economy of Bengal, 1630-1720* (Princeton: Princeton University Press, 1985), pp.234-247; c.f. O. Prakash, 'On Estimating the Employment Implications of European Trade for the Eighteenth Century Bengal Textile Industry – A Reply', *Modern Asian Studies*, 27, 2, (1993), pp. 341-356.

¹³⁸ Note: amassing the necessary primary data for a similar analysis of other textile-producing regions is not feasible in an investigation of this scope, but is a fruitful area for further research.

potential problems, and the findings, before drawing inferences related to this investigation.

Method

There are four stages in the method employed by Prakash. First, data pertaining to the number of pieces of textiles exported by the Dutch Company from Bengal between 1678-79 and 1717-18 were obtained, and from which annual average numbers were calculated. Second, these were classified into five categories: fine cotton muslins, fine cotton calicoes, ordinary cotton calicoes, silk piece-goods and silk and cotton mixed piece-goods (*i.e.* largely following – but distinguishing for quality – the types of textiles noted above as being produced in Bengal); a weakness of the approach is that "details of individual varieties of textiles exported, which were critically important to make categorisation of the textiles possible, were available only in respect of eighteen years."¹³⁹ Third, the number of looms required to produce these pieces per annum is calculated by estimating the number of pieces of each textile-type that could be produced on a loom in one year, and subsequently dividing this figure by the relevant annual average. Fourth, these figures (*i.e.* total number of looms needed for average number of textile piece-good exports, per annum) were then associated with the additional full-time jobs in the textile-production industry that would have been created, by expressing this as a share of total employment.

Critique and Rebuttal

An issue of contention concerns the basis on which realistic estimates (*i.e.* those within a small margin of error) of output per loom per annum figures were calculated. Prakash used two sources of evidence – from later periods – to do so: (i) *Account of the Districts of Bihar and*

¹³⁹ Prakash, 'On Estimating', p.342.

*Patna in 1811-12*¹⁴⁰ (which records the average monthly output per loom of varieties of cheaper fine muslins as 2 pieces, giving an annual average of 24 pieces, with dimensions of 36 covids by 2 covids and hence equivalent to the average size of such pieces exported by the Dutch Company); (ii) 'Dacca Cloth Manufactures for Exportation' in the Ninth Report from the Select Committee of 1783¹⁴¹ (which records the average annual output as approximately 10 pieces of more expensive fine muslins per annum). Indeed, "while all this information is clearly inadequate to establish a definitive figure or even a range of annual output per loom, it nevertheless would appear to support an assumption of an output of 15 pieces of muslins of the general quality the Company exported from Bengal per loom per annum."¹⁴² The annual output per loom for other textiles was based on "the relation that the average size of a piece of a staple variety in the relevant category bore to that of a staple variety of fine muslins, both of which were recorded in the documentation in terms of covids."¹⁴³ The figures calculated were: 36 for fine calicoes, 80 for ordinary calicoes, and 45 for silk and silk-mixes (Table 3.2.1). It has been argued that the cavid measurement was smaller than appreciated in the analysis by Prakash (*i.e.* 18 rather than 27 inches long) such that the employment estimates should be reduced by a third.¹⁴⁴ Prakash has countered that this issue does not affect the estimates derived from the aforementioned method, and only the supplementary estimates from the

¹⁴⁰ F. Hamilton, *Account of the Districts of Bihar and Patna in 1811-12*, Vol.II (Patna: Bihar and Orissa Research Society), p.775.

¹⁴¹ *c.f.* K. Chaudhuri, 'The Structure of the Indian Textile Industry in the Seventeenth and Eighteenth Centuries' *The Indian Economic and Social History Review*, XI, 2 (1974), pp.162-163.

¹⁴² Prakash, *Dutch East India Company*, p.243.

¹⁴³ Prakash, 'On Estimating', p.343.

¹⁴⁴ S. Chaudhury, 'European Companies and the Bengal Textile Industry in the Eighteenth Century: The Pitfalls of Applying Quantitative Techniques', *Modern Asian Studies*, 27, 2, (1993), p.328.

'square-yardage' method.¹⁴⁵ Thus, these estimates are reasonable data for consideration in this analysis.

Findings

The estimates (Table 3.1) suggest that 6,169 looms were required to produce the volume of textiles annually exported by the Dutch Company. The associated full-time jobs per loom were around five or six (*i.e.* two for weaving, three for spinning, and one for bleaching, finishing, printing and embroidering, depending on the type of textile produced) – the total number of full-time jobs were thus 37,014. In addition, raw silk production involved 7,350 jobs (Table 3.2), taking the total number of jobs associated or created by the Dutch trade to 44,364. This allows Prakash to infer that, since the Bengal textile-sector employed roughly one-million workers, and the crudity of the estimates notwithstanding, the Dutch trade accounted for approximately 4.43 percent of the total workforce. Furthermore, if the trade carried by the English Company were also considered, the figure would be 11.11 percent – and still further if the other European Company and private trades were considered (but for which data is unavailable). In terms of this analysis, it may further be inferred that this trade-creation was possible because of the utilisation of spare capacity, and indeed wages are not recorded as having increased significantly (*i.e.* as would be expected if labour was scarce).¹⁴⁶ Yet, this inference may risk falling into the trap of 'affirming the consequent', since the idea of spare capacity probably (and implicitly) informed the method and calculations. Nevertheless, while accurate population statistics are not available before the census years, estimates suggest that the population of Bengal grew from 19.99 to 28.055 million between 1711 and

¹⁴⁵ Prakash, 'On Estimating', pp.345-347.

¹⁴⁶ *c.f.* discussion in: S. Broadberry and B. Gupta, 'Cotton Textiles and the Great Divergence: Lancashire, India and Shifting Competitive Advantage, 1600-1850' *CEPR Discussion Paper Series*, 5183 (2005).

1801,¹⁴⁷ such that it is reasonable to assume population growth in the sixteenth-century which created greater capacity or labour. This information, together with the above findings relating to technical-uptake, suggests that trade-creation due to the realisation of increased (or even spare) capacity was possible.

Table 3.2: Number Of Looms Required To Produce Textiles Exported By The Dutch Company From Bengal, 1678-1718

Textile Type	Number of Pieces	Output of Pieces Per Loom Per Year	Number of Looms
Fine muslins	40,802	15	2,720
Fine calicoes	27,565	36	766
Ordinary calicoes	131,562	80	1,645
Silk piece-goods	27,986	45	622
Silk-cotton mixed goods	18,707	45	416
Total	247,622	-	6,169

Source: Prakash, Dutch East India Company, p.243

Table 3.2: Full-Time Jobs Created By Dutch Company Exports Of Raw Silk From Bengal, 1669-1718

Amount of Raw Silk in Bales	Full-Time Reeling Jobs	Other Full-Time Jobs	Total Full-Time Jobs
1,423	2,940	4,410	7,350

Source: Prakash, Dutch East India Company, p.245

¹⁴⁷ D. Bhattacharya, *Population in India, 1801-1961* (Unpublished), Appendix I – reproduced in Prakash, *Dutch East India Company*, p.246.

3.3 Summary

The Indian cotton textile industry was highly regionally-specialised and with limited demand-side substitutability. The two case-studies examined here, however, demonstrate that technical-uptake and the utilisation of new/spare capacity was possible - albeit that it is difficult to comment on the extent to which this occurred. Together, these conclusions demonstrate that trade-creation was possible, which in part explains the persistence of the Indo-Central Asian trade after the expansion of European commercial activities on the sub-continent. Yet, the spinning-wheel which so revolutionised Indian textile production was, ultimately, a Persian invention.¹⁴⁸ Thus, an outstanding question concerns why India produced and exported cotton textiles at all. The next chapter moves away from a supply-side, and towards a demand-side, perspective in order to explain the existence of the Indo-Central Asian trade and why, consequently, complete trade-diversion was not possible.

4. The Horse Trade and Trade-Diversion

Kipling opens his novel *Kim* with a lively and informative description of the Kashmir caravanserai in the late nineteenth century.¹⁴⁹ The eponymous character works his way around the caravanserai to find the well-respected horse-trader Mahbub Ali, for whom he carries a message concerning a 'white stallion', which – given that such traders were often recruited as what today would be called 'intelligence agents' – actually conceals a secret coded message. This 'forgotten' description¹⁵⁰ demonstrates that the trade was flourishing well into the Raj. The work of

¹⁴⁸ Chawla, *India's Overland Trade*, p.150.

¹⁴⁹ R. Kipling, *Kim* (London: Penguin, 1987), p.65.

¹⁵⁰ There is no mention in: J. Gommans, *Mughal Warfare: Indian Frontiers and High Roads to Empire, 1500-1700* (London: Routledge, 2002); Gommans, 'The Horse Trade', pp.228-250; J. Gommans, 'Warhorse and post-nomadic empire in Asia, c.1000–1800' *Journal of Global History*, 2 (2007), pp. 1-21.

Jos Gommans on the horse trade in the eighteenth-century provides two (as yet unexplored, to the author's knowledge) suggestions with which it is possible to construct an explanation of the persistence of the Indo-Central Asian trade and of the limited nature of trade diversion. The first is the suggestion that Central Asia exported horses to, and imported cloth from, India because of certain climatic advantages.¹⁵¹ The second suggestion is that the demand for horses was related to the prevalence of war and conflict on the sub-continent.¹⁵² This chapter thus asks two questions: (i) *Is it possible to explain the Indo-Central Asian trade by reference to comparative advantages in a Heckscher-Ohlin framework?* (ii) *In this framework, can limited trade diversion be explained by continuing demand for horses in a context of persisting conflict?*

4.1 The Issue of European Supply of Horses

The trade-diversion hypothesis is premised on the absence of an Indo-European horse trade; hence, it is first necessary to establish the validity of this premise. On the one hand, there is evidence of animals (including horses) travelling by sea, destined for the sub-continent. Elephants, according to Tavernier, were transported not only from Ceylon (the principle source of elephants on the sub-continent) but also from East Africa and Southeast Asia¹⁵³ – journeys which would have been undertaken by ship. This undoubtedly difficult journey is corroborated by the Mughal sources which document the transportation of elephants from East Africa during the reigns of Akbar¹⁵⁴ and Jahangir.¹⁵⁵ Horses were also transported by sea. The *Jahangirnama* records the arrival of

¹⁵¹ Gommans, 'The Horse Trade', pp.240-241.

¹⁵² *Ibid*, p.238.

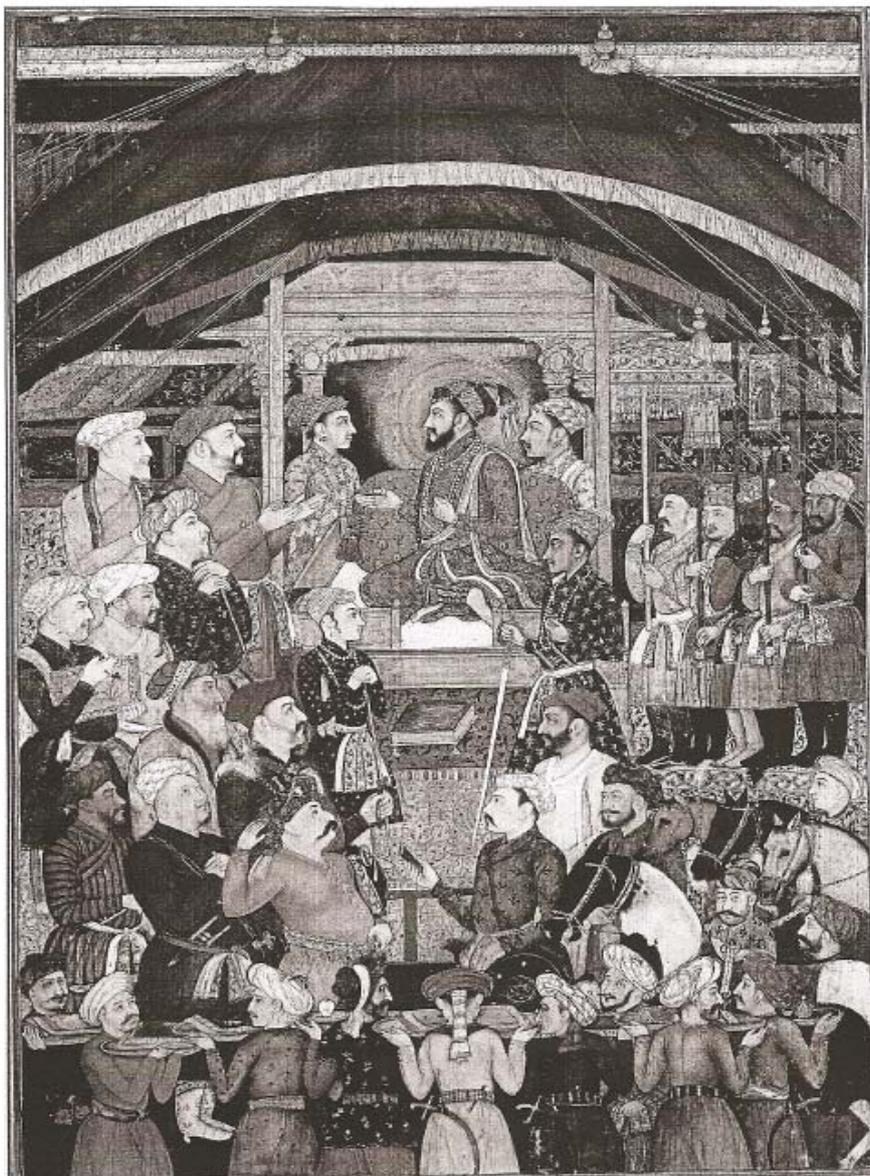
¹⁵³ *Tavernier's Travels in India*, (ed.) Ball, p.277 (Vol.I) and p.317 (Vol.II).

¹⁵⁴ *The Akbarnama of Abu-l-Fazl*, Vol.II, (transl.) H. Beveridge (Calcutta: Asiatic Society of Bengal, 1910), p.466.

¹⁵⁵ *The Jahangirnama. Memoirs of Jahangir, Emperor of India*, (transl., ed.) W. Thackston (Oxford: Oxford University Press, 1999), p.193.

Muqarrab Khan in court to pay homage in 1610, and that among other preciosities, he "brought so many Abyssinian slaves, Arabian horses, and every other sort of thing...that his presents were offered for...inspection for a period of two and a half months."¹⁵⁶ Furthermore, Tavernier also notes that the King of Persia sent the King of Golconda a gift of fifty-five horses by sea.¹⁵⁷

Figure 4.1: 'Shah-Jahan Recieves The Persian Ambassador, M. Ali-Beg'



¹⁵⁶ *Ibid*, p.108.

¹⁵⁷ *Tavernier's Travels in India*, (ed.) Ball, p.256 (Vol.I).

Figure 4.2: 'Europeans Bring Gifts To Shah-Jahan'



On the other hand, it is doubtful that such animals were either as strongly demanded or likely to survive (relative to those transported by land), save be traded by the English. First, Roe notes the persistence with which Jahangir requested that an English horse be sent to him, for both

its novelty and quality,¹⁵⁸ and which Roe maintained would be impossible by sea; the persistent emperor maintained: "if six were putt into a shipp, one might live; and though it came leane, he would fatt yt" to which Roe "replied I was confident it could not bee in soe long a voyadge, but that for His Majesties satisfaction I would write to advise of his request."¹⁵⁹

This is corroborated by a comparison of two leaves from the *Padshahnama* (the illustrated chronicle of the life of Shah Jahan): Figures 4.1-4.2 show embassies from Persian and European courts (respectively)¹⁶⁰ - it is the former which makes a gift of horses (and are more involved in the scene). Second, as noted by Bernier (discussing an ambassadorial gift from the King of Abyssinia), humans and animals undertaking such voyages by sea were more likely to die than those transported overland: "Several slaves, however, and many horses died; probably from want of proper nourishment."¹⁶¹ Third, horses transported overland were preferred to those shipped by sea. Bernier notes, for example, that the master of the cavalry inspects recently received royal horses and "If they are found to be *Turki* horses, that is, from *Turkistan* or *Tartary*, and of a proper size and adequate strength, they are branded on the thigh."¹⁶² Indeed, Gommans suggests that the overseas horse-trade was complementary to the overland trade, making-up supply when political unrest in the north stopped caravan traffic or when (as in nineteenth-century British India) demand rose to the extent that Iraqi horses needed to supplement the Central Asian supply.¹⁶³ (This also suggests that even if European private traders imported horses into India,

¹⁵⁸ *The Embassy of Sir Thomas Roe to India, As Narrated in his Journal and Correspondence*, (ed.) W. Foster (New Delhi: Munshiram Manoharlal, 1990), pp.151, 251, 351.

¹⁵⁹ *Ibid*, p.129.

¹⁶⁰ *King of the World: The Padshahnama: An imperial Mughal manuscript from the Royal Library, Windsor Castle*, (ed.) M. Beach and E. Koch, (transl.) W. Thackston (London: Azimuth Editions, 1997), pp.52, 56.

¹⁶¹ Bernier, *Travels in the Mogul Empire*, p.136.

¹⁶² *Ibid*, p.243.

¹⁶³ Gommans, 'The Horse Trade', p.234.

such activities were likely to be inconsequential given the preference for Central Asian horses and the limited numbers of horses that could be transported by sea). Thus, it may be concluded that the Europeans did not supply horses to India (in competition with those from Central Asia), and hence that the investigation of the trade-diversion hypothesis may be fruitful to an understanding of the persistence of the Indo-Central Asian trade.

4.2 Explaining the Existence of an Indo-Central Asian Trade

The previous chapter noted that technical-uptake and output-expansion could be rapid in the textiles industry. The implication is that, while there are clear opportunity costs between textile and grain production on the one hand, and horse-breeding on the other, the Indo-Central Asian trade must be explained by reference to factors other than comparative advantages based on differing opportunity costs. In the Heckscher-Ohlin framework (based on the assumptions outlined in §2.1.2) trade occurs because of comparative advantages arising from relative factor (input) abundances.¹⁶⁴ The comparative advantages possessed on the sub-continent and Central Asia can be gauged by comparing cotton-textile production and horse-rearing in these regions with that in Persia.

First, as far as textile production is concerned, the available evidence (albeit more suggestive than conclusive) suggests that Indian comparative advantage lay in the growing and weaving of cotton. The English textile industry was based largely on wool so that contemporary Englishmen took great care to describe the cotton plant in Persia¹⁶⁵ and

¹⁶⁴ *c.f.* Rivera-Batiz and Oliva, *International Trade*, pp.3-38; *i.e.* in contrast to Ricardian comparative-cost theory.

¹⁶⁵ *e.g.* R. Hakluyt, *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation, Made by Sea or Overland to the Remote and Farthest Distant*

India¹⁶⁶ in the early seventeenth century (*i.e.* when England was seeking outlets for its textiles in Asia and before it turned to buying Indian textiles¹⁶⁷). Hakluyt recounts the journey of Anthony Jenkinson from London to Persia in 1561, and notes that Persia had an abundance of land suitable for cotton growing,¹⁶⁸ such that its textile trade with India was perhaps based (in part) on Ricardian advantage from higher relative opportunity costs. Yet, neither Persia, nor Central Asia, had the geographical advantages possessed by India. The idea that India traded cotton because of its relative cheapness, which in turn stemmed from low labour costs because of intense exploitation by the predatory state, has recently been challenged; product cheapness can in part be explained, for example, by the relative cheapness of subsistence (*i.e.* tropical agriculture could produce high yields and hence drove down food costs).¹⁶⁹ The Ricardian explanation for trade is further undermined when the linkage between geographical endowments (factors) and cotton production is appreciated: problems of water supply, irrigation, climate, ecology and food storage determined cotton production and the availability of (healthy) weavers to produce textiles.¹⁷⁰ On the one hand, the sub-continent was troubled by a lack of investment in irrigation and food storage technologies. On the other hand, it is not implausible that Central Asia suffered equally (if not worse) in this regard given the extent of political strife, nor is it to be ignored that contemporaries took great pain to detail the fertility of the sub-continent.¹⁷¹ Furthermore,

Quarters of the Earth at any time within the compass of these 1600 Yeares, Vol.II (London: J. M. Dent & Sons, 1913), pp.118-119.

¹⁶⁶ *e.g.* Edward Terry, in: *Early Travels in India*, (ed.) Foster, p.301.

¹⁶⁷ Irwin and Schwartz, *Studies*, p.9.

¹⁶⁸ Hakluyt, *Principal Navigations*, p.26.

¹⁶⁹ P. Parthasarathi, *The transition to a colonial economy: weaver, merchants and kings in South India 1720-1800* (Cambridge: Cambridge University Press, 2001).

¹⁷⁰ Washbrook, 'India', pp.92-93.

¹⁷¹ *e.g.* Bernier, *Travels in the Mogul Empire*, pp.431-440.

contemporaries often noted the talents of Indian weavers,¹⁷² thus noting the abundance of skilled labour for textile production – a skill much cultivated by the Mughal artisanal system.¹⁷³ The logic of factor abundances, rather than mere opportunity costs, fits best with this account.

Second, the evidence reviewed suggests that Central Asian advantage lay in horse-breeding. It has already been noted that Turki (*i.e.* Central Asian) horses were preferred to Arabian (including, but not exclusively, Persian) horses, for their superior size and strength. Indian horses – which likely originated in Kashmir – were apparently "by nature so small that when a man is upon them his feet nearly touch the ground"¹⁷⁴ and hence were unsuitable for war or ceremonial purposes. This size-deficiency was a product of their poor diet - due to the unavailability of suitable fodder on the sub-continent (*e.g.* oats or hay, instead of chick-peas and lentils)¹⁷⁵ - so that they were too weak for use as cavalry compared to Central Asian and Arabian ponies.¹⁷⁶ Furthermore, as far as breeding non-indigenous (*i.e.* Turki) species was concerned, India was considerably disadvantaged. The opportunity cost of horse-breeding was a decisive factor: horse-breeding came at the expense of arable farming in areas where soils and climate were not suited to crop-cultivation and/or where extensive grazing areas were needed for horse-breeding (*e.g.* Kathiawar), although the relationship was more symbiotic in areas of secure and rich harvests (*e.g.* Rohilkhand).¹⁷⁷ Yet, these opportunity costs are ultimately based on relative factor endowments within the sub-continent (*i.e.* land suitable for horse-

¹⁷² *Ibid*, p.254.

¹⁷³ Washbrook, 'India', p.105.

¹⁷⁴ *Tavernier's Travels in India*, (ed.) Ball, p.263 (Vol.II).

¹⁷⁵ Gommans, *Mughal Warfare*, pp.112-113.

¹⁷⁶ *c.f.* J. Masson Smith Jr, 'Mongol society and military in the Middle East: Antecedents and adaptations' in *War and Society in the Eastern Mediterranean, 7th-15th Centuries*, (ed.) Y. Lev (BRILL: Leiden, 1997).

¹⁷⁷ Gommans, 'The Horse Trade', p.241.

breeding) which, despite its varied geography and because of its unsuitable indigenous breeds, was generally not as well-suited to horse-breeding as the lands of Central Asia. In sum, this suggests that while Ricardian forces were at play, a strong explanation for the existence of a horse (and a broader Indo-Central Asian) trade can be found in the Heckscher-Ohlin logic of relative factor abundances.

4.3 Demand Considerations and the Persistence of the Trade

The suggestion that the demand for horses was maintained in this period due to conflict is difficult to assess because of the absence of records for purchases of warhorses by the Mughal state.^{178 179} On the one hand, contemporaries such as William Finch observed that on the return home of the Deccan army (from a conflict with the Mughals) "there were to be found thirty thousand horse, with infinite number of elephants, camels, and other cattell dead,"¹⁸⁰ but do not note whether these horses were 'replaced' with Central Asian horses. On the other hand, such sources – as well as the Mughal court sources – do provide several explanations for the persistence of demand for horses (and hence of the Indo-Central Asian horse trade) in this period despite being limited to the activities of the emperor and the court.

4.3.1 Horses as Assets and Markers of Rank

The most important use of horses found in the source-material is socio-economic. First, it is significant that horses were assets that were readily (albeit reluctantly) liquefied into cash in times of need. Bernier, for

¹⁷⁸ Gommans most recently focuses on the attributes of horses that made them suitable for war, without asserting a link between suitability and demand, and neglecting their suitability for other purposes - as investigated here; Gommans, *Mughal Warfare*, pp.117-121.

¹⁷⁹ Note: warhorses and war-elephants were non-substitutable because of the timidity of the latter; c.f. Bernier, *Travels in the Mogul Empire*, p.277; *Tavernier's Travels in India*, (ed.) Ball, p.180 (Vol.I).

¹⁸⁰ *Early Travels in India*, (ed.) Foster, p.147.

example, notes that the delayed payment of troops resulted in the sale of small items else they "disband and die of hunger."¹⁸¹ Only in exceptional circumstances, such as the civil war during Aurangzeb's reign, did Bernier discover "a growing disposition in the troopers to sell their horses, which they would, no doubt, soon have done if the war had been prolonged."¹⁸² These horses were among other 'goods' that were stored as assets: Ralph Finch tellingly observes, for example, that "The king hath in Agra and Fatepore...1,000 elephants, thirtie thousand horses, 1,400 tame deere, 800 concubines, [and so fourth]."¹⁸³

Second, it was in the *mansabdar* system (*i.e.* a quasi-feudal military and civilian hierarchy) that the role of horses as assets and markers of rank was crystallised. The Mughal court chronicles – which are littered with references to assumptions of, and elevations in, rank – demonstrate that while many valuable gifts (ultimately, assets) were bestowed during the ceremonies where individuals received (new) ranks, it was horses that signified the rank to which one belonged. In one such ceremony during the reign of Shah Jahan, for example, "According to their status, each of the nobles received favours in the form of robes of honour, jewelled blades, daggers and swords; flags, drums and standards of high military rank; and horses, elephants and cash."¹⁸⁴ That is, gifts such as robes of honour were bestowed upon all, but the number of horses varied by rank. The Europeans who witnessed such ceremonies were amazed by the *mansabdar* system and took pains to document it¹⁸⁵ – but it is Bernier

¹⁸¹ Bernier, *Travels in the Mogul Empire*, p.220.

¹⁸² *Ibid*, p.221.

¹⁸³ *Early Travels in India*, (ed.) Foster, p.17.

¹⁸⁴ *The Shah Jahan Nama of `Inayat Khan: an abridged history of the Mughal Emperor Shah Jahan, compiled by his royal librarian. The Nineteenth-Century Manuscript Translation of A. R. Fuller* (British Library, Add. 30,777), (ed.) W. Begley and Z. Desai (Delhi: Oxford University Press, 1990), p.19.

¹⁸⁵ *c.f.* William Hawkins: *Early Travels in India*, (ed.) Foster, pp.98-99, 103-104; Nicholas Withington: *Early Travels in India*, p.198; Thomas Roe: *Embassy of Sir Thomas Roe*, (ed.) Foster, p.89.

who most painstakingly records the classification system,¹⁸⁶ who notes that the *omrahs* (i.e. lords) may be assigned a rank of one, two, five, seven, ten or even twelve-thousand horses.¹⁸⁷ Furthermore, the Europeans who frequented court (such as Aurangzeb's physician Francois Bernier, or the English Ambassador Sir Thomas Roe) were also given horses as markers of their rank in a system analogous to the *mansabdar*.^{188 189}

Finally, in addition to being markers of rank and assets, horses were also accepted currency as ambassadorial gifts. In the reign of Shah Jahan, for example, the governor of Bengal paid tribute to the emperor with a gift including "27 horses which are peculiar to that part of the country."¹⁹⁰ Similarly, foreign ambassadors such as Fidai Khan from Rum arrived with 52 Arab horses.¹⁹¹ This exchange is a manifestation of the aforementioned path-dependent character of trade in the Mughal empire¹⁹² for the Mughals were descended from the nomadic horsemen of Central Asia. Indeed, in the reign of Shah Jahan, the envoy from the Central Asian region of Turan is rewarded for his gift of 87 horses (including twenty-seven of his own Turki horses) with an Iraqi steed with a gilt saddle and cash.¹⁹³ Indeed, while such ambassadors or envoys brought (and were expected to bring) native treasures, they are usually thanked in return with horses – that being the standard measure of rank and/or method of payment. The English ambassador William Hawkins, for example, was:

¹⁸⁶ Bernier, *Travels in the Mogul Empire*, pp.212-217.

¹⁸⁷ Bernier doubted whether omrahs actually possessed ten or twelve-thousand horses given the financial cost to the King; Bernier, *Travels in the Mogul Empire*, pp.212.

¹⁸⁸ c.f. William Hawkins' testimony in: *Early Travels in India*, (ed.) Foster, p.114.

¹⁸⁹ D. Cannadine, *Ornamentalism: How the British Saw Their Empire* (London: Penguin, 2001).

¹⁹⁰ *Shah Jahan Nama*, (ed.) Begley and Desai, p.77.

¹⁹¹ *Ibid*, p.274.

¹⁹² §1.3.

¹⁹³ *Shah Jahan Nama*, (ed.) Begley and Desai, pp.268-269.

"daily [enticed to]...doe service both to my naturall king and to him [Emperor Jahangir], and likewise he would allow me by the yeare three thousand and two hundred pounds sterling for my first, and so yeerely hee promised mee to augment my living till I came to a thousand horse. So, my first should be foure hundred horse; for the nobilitie of India have their titles by the number of their horses..."¹⁹⁴

Thus, the continuing role of the horse as both store of value, marker of rank, and system of currency – itself a product of the status and awe attributed to horses by the Central Asian ancestors of the emperors and their aristocracy of *mansabdars* – in part explains why the Indo-Central Asian trade was able to persist in the seventeenth-century.

4.3.2 Horses as Objects of Beauty

The Mughal affection and appreciation for horses does not explain the extent or pervasiveness of the horse trade, but such aesthetic considerations do permit the making of inferences regarding tastes, which in turn may explain the origins (and likelihood of the persistence) of the demand for horses. On the one hand, Bernier noted that the horses that constituted the ambassadorial gifts from the Uzbekh Khanates during the reign of Aurangzeb, were "of great beauty, although *Tartar* horses are generally something better than merely beautiful."¹⁹⁵ On the other hand, he notes that, "Aureng-zebe expressed himself well pleased with the liberality of the Kans; extolling in exaggerated strains the beauty and rareness of the fruits, horses, and camels."¹⁹⁶ It is the latter observation that best captures the importance of beauty (and rarity) and which the Mughals saw in horses. Indeed, such was the affection for horses that the emperors Jahangir, Shah Jahan, and Aurangzeb all possessed particular favourites. The *Jahangirnama* – Emperor Jahangir's official biography –

¹⁹⁴ *Early Travels*, (ed.) Foster, pp.82-83.

¹⁹⁵ Bernier, *Travels in the Mogul Empire*, p.118.

¹⁹⁶ *Ibid*, p.119.

takes care to name six such especial horses: Khadang¹⁹⁷, La'l-i-Bebahá (or 'Priceless Ruby', a rare Persian horse sent as a gift with the servant Sharif for Parvez in 1616)¹⁹⁸, Musáhib¹⁹⁹, Rúm Ratan²⁰⁰, Subh-i-Sádiq²⁰¹, and Sumer²⁰². The *Shah Jahan Nama* mentions two such horses. The first is the *Padshah Pasand* ('Choice of the Emperor'), which was sent as a present from the jagirdar (appointed regional ruler) of Ellichpur, and which became the chief of the royal stud of Iraqi horses.²⁰³ The second is the *Lal Bibaha* ('Priceless Ruby') which "had been obtained with great difficulty from 'Ali Pasha, the ruler of Basra, and only after sending him the most costly and precious gifts"²⁰⁴ and was valued at fifteen-thousand rupees. It was "esteemed the best in the royal stud of Arab steeds" and "[f]requently expressions escaped the inspired tongue of His Majesty to the effect that since his auspicious accession, no horse so perfect in all points had ever entered his stables."²⁰⁵ The hagiographic and hyperbolic tone of the chronicle aside, it does indicate the extent to which horses – particularly beautiful and rare horses – were desired by the Mughals. This affection spread even to the imperial grooms: in one of his letters (c.1700) Aurangzeb thanks his son for the horse he has sent and sends him two Turki horses in return, conveying that "the miser head groom sheds tears (and says) 'Why does Your Majesty give away [such] fine horses?'"²⁰⁶ Furthermore, Roe notes in a letter to Lord Carew from the court at Ajmer in January 1617, that: "This is all their pride. They keepe their horses most delicately, fed with butter [ghee] and sugar; and though they be not

¹⁹⁷ *Jahangirnama*, (transl., ed.) Thackston, p.355.

¹⁹⁸ *Ibid*, p.197.

¹⁹⁹ *Ibid*, p.358.

²⁰⁰ *Ibid*, p.365.

²⁰¹ *Ibid*, p.356.

²⁰² *Ibid*, p.288.

²⁰³ *Shah Jahan Nama*, (ed.) Begley and Desai, p.370.

²⁰⁴ *Ibid*, p.365.

²⁰⁵ *Ibid*, p.365.

²⁰⁶ *Ruka'at-i-Alamgiri or Letters of Aurungzebe*, (transl.) J. Bilimoria (London: Luzac and Co., 1908), letter xlii, p.45.

very great, yet they are of delicate shape, both of Persia, Arabs, and of this land."²⁰⁷ Thus, this deep-seated and long-standing affection and appreciation for horses may also explain the persistence of the horse trade, insofar as it demonstrates that the demand for horses was unlikely to have subsided because of a change in tastes.

4.3.3 Horses, Ceremony and Entertainment

Horses had a central and pervasive place in the ceremonies and entertainment of the emperor and the imperial court. First, and perhaps most frequent, were the daily presentation ceremonies – the "hour and a half, or two hours...[during which] a certain number of the royal horses will pass before the throne, that the King may see whether they are well used and in a proper condition."²⁰⁸ The horses were accompanied by elephants, as well as sporting dogs from the Uzbek Khanates.²⁰⁹ It is likely that this daily procession served the entertainment needs of the Mughal Court whilst also reaffirming the power structure of the Empire. Second, Bernier also notes that horses were used during hunts (although this was only one of many hunting-methods²¹⁰): "Sometimes the King rides on horseback, especially when the weather is favourable for hunting."²¹¹ Finally, there is also a mention in Jahangir's biography of horse-racing in Kabul, suggesting further employment for horses: "I ordered them to bring my racehorses...to the Khyaban [avenue]. The princes and the Amirs raced them. A bay Arab horse, which Adil Khan, ruler of the Deccan, had sent to me, ran better than all the other

²⁰⁷ *Embassy of Sir Thomas Roe*, (ed.) Foster, p.91.

²⁰⁸ Bernier, *Travels in the Mogul Empire*, p.261; c.f. documents relating to William Hawkins in: *Early Travels*, (ed.) Foster, p105.

²⁰⁹ *Ibid*, p.262.

²¹⁰ c.f. descriptions in: *The Tuzuk-i-Jahangiri or Memoirs of Jahangir. From the First to the Twelfth Year of his Reign*, (transl.) A. Rogers, (ed.) H. Beveridge (London: Royal Asiatic Society, 1909); *The Tuzuk-i-Jahangiri or Memoirs of Jahangir. From the Thirteenth to the Beginning of the Nineteenth Year of his Reign*, (transl.) A. Rogers, (ed.) H. Beveridge (London: Royal Asiatic Society, 1914).

²¹¹ Bernier, *Travels in the Mogul Empire*, p.370.

horses."²¹² Thus, while the use of horses for ceremonial or entertainment purposes largely derived from their existence as objects of socio-economic and aesthetic value, the continuation of such frivolous practices nevertheless implies that demand (preference) and supply (availability) of horses was likely to have remained stable in the seventeenth-century.

4.4 Summary

The portrayal of long-distance trade as being limited to, and primarily driven by, trade in luxuries²¹³ is challenged by this evidence which suggests that trade was driven by comparative advantage for goods that were demanded for several practical (*i.e.* military and socio-economic, cultural and entertainment) purposes. Consequently, demand-persistence for goods such as horses - due to their continued socio-economic and cultural roles - entailed the sustenance of the trade, until (as noted at the beginning of this chapter) the late-nineteenth and early-twentieth century. This evidence falsifies the first hypothesis²¹⁴ and hence demonstrates that: (i) trade-diversion occurred to a lesser extent than posited by historians working in the tradition epitomised by Steensgaard's *Asian Trade Revolution* of 1974 (*i.e.* some trades were not diverted at all), and (ii) this may explain the persistence of the Indo-Central Asian trade. The balance between trade-creation and trade-diversion as alternative explanators is examined in concluding chapter.

²¹² *Memoirs of Jahangir. From the First to the Twelfth Year*, (transl.) Rogers, (ed.) Beveridge, p.110.

²¹³ *c.f.* Flynn and Giráldez, 'Path dependence', p.91.

²¹⁴ §2.1.3.

5. Evaluation

This paper is subtitled 'Towards an Economic Explanation' because it provides the foundation for a fuller understanding of the sub-continental pattern of trade in the seventeenth-century. The previous four chapters have: (i) highlighted one aspect of the trade-pattern that has been unconvincingly explained (*i.e.* the Indo-Central Asian trade), (ii) proposed an explanatory model and related hypotheses (*i.e.* based on trade-creation and -diversion), and (iii) undertaken an examination of these hypotheses to explain the (persistence of this) pattern of trade in the seventeenth-century. This chapter asks: *How can this analysis (and framework) be improved/extended to provide a fuller explanation of the sub-continental pattern of trade?*

5.1 Further Extensions

There are four limitations which beset the present work and which may serve as the basis for its extension.

5.1.1 Geographical-Coverage

Extension beyond Mughal India (and better-appreciating the changing frontiers of that empire) is necessary because: (i) the Mughals were but one of many authorities which exercised economic and political power on the sub-continent (*e.g.* the rulers of the Deccan or the Marathas) – to the detriment or advantage of trade in those and other regions, and (ii) regions of the sub-continent outside the Mughal Empire were important trading- or production-centres (*e.g.* the Coromandel Coast²¹⁵). Furthermore, such a widening of scope would permit a discussion of the intra-sub-continental trade that was extensive in this period. Textiles were often 'exported' by overland merchants to distribution centres (*e.g.* silk textiles were sent to Mirzapore or Lahore in

²¹⁵ *c.f.* Arasaratnam, *Coromandel Coast*.

northern India) and then to markets across the subcontinent and beyond.²¹⁶ Horses were imported overland from Central Asia, fattened near Kabul, and then sold at a series of markets along the southward route through the sub-continent;²¹⁷ such was the demand for horses in the seventeenth-century (when the Portuguese reduced their overseas horse trade to south India)²¹⁸ that an intra-sub-continental trade was likely to have emerged in response to the southern kings' needs for warhorses for use in battles against the Deccanis.²¹⁹ In addition, international trade with other regions must be considered for a full account of trading-patterns to be made, as India was dependent on (for example) Southeast Asia for spices and East Africa for slaves. This is perhaps the most important extension.

5.1.2 Chronological-Coverage

Broadening the period would perhaps help shift explanatory strategies away from the static and partial-equilibrium customs-union model used to structure the investigation and argument here, toward dynamic and general-equilibrium models. Indeed, the pattern of trade undoubtedly evolved further after the coming of the Europeans in the seventeenth-century as, for example: (i) the horse trade persisted and grew due to British military demand, while (ii) British political and economic hegemony ruined the Indian textile industry.²²⁰ The Battle of Plassey was a significant turning-point for, as Chaudhury notes, British agents were able to ruthlessly restrict their indigenous Asian trading competitors (to the detriment, for example, of the Bengal silk industry).²²¹

²¹⁶ Chaudhury, 'International Trade', pp.381-382.

²¹⁷ Gommans, 'The Horse Trade', p.233.

²¹⁸ Gommans, *Mughal Warfare*, p.115.

²¹⁹ *c.f.* R. Sewell, *Forgotten Empire (Vijayanagara): A Contribution to the History of India*, Project Gutenberg E-Text: <http://www.gutenberg.org/etext/3310>, p.200.

²²⁰ *c.f.* Broadberry and Gupta, 'Cotton Textiles and the Great Divergence', p.2.

²²¹ Chaudhury, 'International Trade', p.381.

5.1.3 Range of Tradeables

A complete explanation must attempt an examination of the full range of tradeables, that is, beyond horses and textiles to goods such as slaves, spices and oils.²²²

5.1.4 Sources

As a corollary, the nature, range and variety of the sources and explanatory models would necessarily change to fit the subject(s) of study.

Furthermore, the issue of European private trade is not addressed – due to limitations of scope – in this investigation. On the one hand, this maritime trade was relatively limited as far as the exchange in horses was concerned,²²³ and scholars seem divided as to *when* the trade acquired the kind of scale and significance that would (consequently) merit its analysis in a study such as this. Watson suggests that it was only in the early eighteenth-century – when the Company had attained a firm enough position in key ports (e.g. Madras, Bombay, Calcutta) to provide traders with the necessary security to pursue their intra-Asian trade interests – that the private trade grew large enough and began to transact "at about half the amount of trade driven by the Company."²²⁴ On the other hand, receipts in Britain from English private trading activities amounted to the significant sum of £500,000 per annum between 1757 and 1784,²²⁵ with the trade having likely grown in importance from the later seventeenth-century when the English Company withdrew from the intra-Asian trade and when this trade in turn fragmented into separate 'disjointed

²²² §2.1.2.

²²³ §4.1.

²²⁴ I. Watson, *Foundation for Empire: English Private Trade in India 1659-1760* (New Delhi: Vikas Publishing, 1980), p.37.

²²⁵ P. Marshall, *East India Fortunes: The British in Bengal in the Eighteenth Century* (Oxford: Clarendon Press, 1976), p.262.

markets.²²⁶ In this context, incorporating this private trade into the analysis is important at least because it was through such trading that many British fortunes were amassed, and hence available for the financing of a foreign trade in excess of what would have been exchanged in its absence. These funds, for example, provided Asian merchants with more vessels in which to transport goods, thereby raising the total volume of their trade.²²⁷ Indeed, while earlier studies appear ambivalent about the profitability of the private intra-Asian trade because of the need for the Englishmen involved to borrow from indigenous financiers in the *bazar*,²²⁸ more recent studies have demonstrated that the profitability of this trade (which made investments such as the aforementioned possible) came from forwards from London for the transport of diamonds.²²⁹ Consequently, it is not inconceivable that such funds could have been utilised by overland merchants, nor is it implausible that the increased demand caused by the 'stimulative' effects of private trading (especially since Britain raised duties on Indian imports in the eighteenth-century) raised prices and hence incentivised more indigenous labour to produce goods such as textiles.²³⁰ (This kind of investigation, furthermore, necessitates the analysis of different sets of evidence (*i.e.* the diaries, accounts and correspondence of private traders such as Nathaniel Chomley), while also disturbing the geographical, chronological, and tradeables-coverage employed in this paper in the ways suggested above). Thus, private trading may have played a significant role in trade-creation that facilitated the continuation of the

²²⁶ E. Erikson and P. Bearman, 'Routes into Networks: The Structure of English Trade in the East Indies, 1601-1833,' *ISERP Working Paper* 04-07 (2004), pp.7-8.

²²⁷ Marshall, *East India Fortunes*, p.264.

²²⁸ S. Subrahmanyam and C. Bayly, 'Portfolio capitalists and the political economy of early modern India' *The Indian Economic and Social History Review*, 25, 4 (1988), p.421.

²²⁹ S. Mentz, 'English private trade on the Coromandel Coast, 1660-1690s: diamonds and country trade' *The Indian Economic and Social Review*, 33, 2 (1996), p.155.

²³⁰ Marshall, *East India Fortunes*, p.269.

Indo-Central Asian trade, such that the (relatively) weaker falsification potential of the trade-creation hypothesis may be related to the need to consult such alternative types of evidence.

5.2 Complicating the Model

The customs-union model usefully distinguishes between the creative and divertive effects of privileged trading relations, such as those between India and England, and consequently facilitates the writing of a new sub-continentally oriented history of its changing pattern of international trade. Yet, there are at least two problems with the model which, when addressed, would increase the sophistication of this history. First, the model does not provide any indication of how the trades might have been financially connected. It has been suggested that Indian exports to Central Asia were of little value compared to those in the reverse direction.²³¹ It is also known that India was a major importer of precious metals via its maritime trade: between 1681 and 1685, the English Company alone exported 240 tonnes of silver and 7 tonnes of gold into India.²³² It is perhaps the case, then, that the coexistence of the maritime and overland trades was possible because a trade-surplus on the maritime trade financed the goods trade-deficit on the overland trade – a narrative absent in the existing scholarship and hence a particularly fruitful issue for further enquiry. Second, the model does not help determine the final-consumers of those goods imported into India, and consequently, suggest how trade patterns might have changed as the composition of the market changed in the eighteenth- and nineteenth-centuries. That is, since goods such as horses were primarily (if not exclusively) bought by the imperial and military elite, then it is explicable that the trade would persist when the elite of the English Company

²³¹ Chawla, *India's Overland Trade*, p.150.

²³² J. Keay, *The Honourable Company* (London: HarperCollins, 1993), p.150.

emerged and dominated the sub-continent. The (dis)continuation of the trade in other goods (e.g. slaves) may also be explained by such changes in market/consumer composition – subject to further research. To return to seventeenth-century India and its trade with Central Asia and Europe, however, this analysis has outlined and explained some aspects of the coexistence and complementarity of these trades.

6. Conclusion

6.1 Summary of Argument

This paper has aimed to evaluate the significance of the 'coming of the Europeans' – and, to that end, establish the foundations for an analysis of the international trade-relations or patterns of the Indian sub-continent – by focussing on the trade between India and Central Asia. This trade declined more slowly and gradually, and was a more regionally varied experience, than has traditionally been believed; the central focus has thus been to explain why this trade persisted – an aim that is not evident in the scholarship. The main conclusion is that the trade persisted because of the limited substitutability of, and complementarity between, the Indo-European and Indo-Central Asian trades; the specific arguments are detailed below.

First, the trading-situation approximates to the customs-union model, because (in addition to the fulfilment of the assumptions of international trade theory) the European Companies faced significantly lower (*i.e.* zero) tariffs than the merchants who traded with Central Asia. The situational analysis highlights two (non-mutually exclusive) explanatory possibilities: that the trade persisted because (i) the Europeans did not supply those goods arriving from Central Asia (*i.e.* insufficient trade-diversion), and (ii) the European demand stimulated increased supply (*i.e.* trade-creation).

Second, although creative-effects have been neglected in previous histories of the Indo-Central Asian trade, the (supply-side) analysis demonstrates that: (i) cloth production was highly regionally specialised on the sub-continent, but (ii) there existed the possibility for production by alternative centres as demand increased – as demonstrated by the response to the 1630 famine, and (iii) there also existed the potential to increase supply within a region by utilizing spare/extra capacity – as demonstrated in Prakash's study of the Bengal. It is not possible to say with certainty, however, whether such potential was generally or universally realised, and to what extent it was realised.

Third, the limited nature of divertive-effects can be better understood than in the existing literature by appealing to the logic of the Heckscher-Ohlin model, and adopting a demand-oriented perspective. In a context where the Europeans failed to provide those goods for which there was an established demand on the sub-continent (e.g. horses, slaves, furs, fruit), trade in horses (in exchange for Indian exports such as cloth) based on strong demand for military, socio-economic and cultural purposes and generally geographically-based comparative advantage was likely to continue, rather than be redirected. In particular, the continuation of the *mansabdari* system – with extension of the number of new, and the rising rank of existing, *mansabdars* – allows the inference that horses were still in demand (and hence traded) for military and socio-economic purposes.

Finally, notwithstanding the aforementioned data-constraints, the limited nature of trade-diversion is likely to have been more important than creative effects. This would be better understood when further analysis allows a more complicated understanding²³³ – and this conclusion hence does not support the absence of trade-creation narratives in the existing scholarship. Nevertheless, this analysis has

²³³ §5.1.

provided the basis for an economic explanation of a significant part of the Indian pattern of trade, and avenues for further research (e.g. extending the analysis and complicating the model).

6.2 Implications and Contributions

The last three decades have witnessed the marshalling of much new evidence (especially from the Central Asian archives) and the innovation of concepts (e.g. 'worlds', 'webs') pertinent to the study of commercial patterns, and yet there remain two lacunae which this discussion has aimed to address. The first is the absence of a sub-continental vantage-point which knits both the global and the local, and the land and the ocean. The second is the absence of a history which engages with the source material to construct an explanation of the trade patterns which persisted on the sub-continent after the coming of the Europeans. The implications of this analysis for existing historiographies and research agendas are thus two-fold: to adopt vantage-points which simultaneously privilege global- or world-level processes and local-level realities, and to explain rather than describe the existence and effects of those interconnections wrought by commerce.

This analysis makes four specific contributions. First, and of most analytical importance, it introduces models from international trade theory as heuristic tools, which have two principle benefits: (i) introducing a new 'conceptual vocabulary' (i.e. trade-diversion and trade-creation) to the analysis of trading history in this period to allow a more sophisticated analysis than in the previous scholarship (i.e. which failed to balance between divertive and creative effects), and (ii) providing an explanatory framework which moves the analysis beyond a description, and towards an explanation, of why trade patterns were able to (in this case) persist between the sub-continent and Central Asia. Second, it demonstrates the potential for rapid technical-uptake and output-expansion in the textile

industry. Third, it also challenges the view that long-distance trade (before the advent of European shipping) was primarily concerned with the preciousness trade, as it is demonstrated that trade took place because of comparative advantages in goods for which there was strong demand for (non-frivolous) purposes. Finally, and perhaps most important for histories of this period, is the conclusion concerning teleological portrayals of European expansion in Asia and its implications for the development of the world economy. The seventeenth century may have initiated the making of Northwest Europe (and especially Britain), but it would not witness the unmaking of South Asia: this was a more gradual process that would culminate only in the nineteenth century when economic and military forces crystallized into sub-continental domination.

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