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TOWARDS A HISTORICAL-ANALYTICAL PERSPECTIVE ON THE GLOBALIZATION EFFECTS OF THE GREAT TRADE ROUTES

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ABSTRACT

The paper was motivated by a concern for the de-globalization possibilities of the coming decades. The enigmatic position of contemporary globalization hangs between two extremes. Globalization is a novel phenomenon or else, one rooted in antiquity. The paper takes an historical-analytical approach to studying connectivity via the great trade routes. It believes that a panoptic view of globalization is critical to understanding its evolutionary nature. This is imperative if globalization is to build a constructive foundation for humanity. Using the methodology of 'non-ergodic' path dependence, it examines a variety of products on the silk road and the spice route as well as the issue of productivity. The applications are illustrative. The methodology is exploratory. Two different globalization indices are created. It is believed that the approach has the potential of generating a more normative and prescriptive insight into contemporary globalization, especially if a more rigorous methodology was to be developed.

INTRODUCTION

As we slide into the 21st Century, the tentacles of historical literature on globalization continue to accumulate and expand in search of explanations of the commercial archaeology of the past (Abu-Lughod, 1989; Broadberry & de Jong, 2000; Chandler, 1992; Creone, 2003; David, 1990; Flynn & Giraldez, 2004; Gordon, 2000; Lal, 2004; LaBianca & Scham, 2006; Mielants, 2007; Nelson & Winter, 1982). Meanwhile, the negative associations and consequences of globalization have begun to challenge its constructive premises (Stiglitz, 2006). On the one hand globalization theory has become a debatable issue (Rosenberg, 2005). On the other hand, global capitalism has been seen as the new Leviathan (Ross & Trachte, 1990). Now its very instrumentation, the multinational enterprise (MNE) has begun to be seen as an uncontrollable Leviathan (Chandler & Mazlish, 2005). According to Levinson (2008), the rising cost of transportation and diminishing reliability are the key factors driving de-globalization. The significance of distance is well established as per the gravity model of international trade (Vemuri & Siddiqi, 2009). But this is a simplistic perspective – so many, so deep and so wide are the consequences. The *crème la crème* is the recent sprouting and globalization of economic debacle. The prediction of a traumatic 21st Century (2000-2050) had been noted with daring clarity by Wallerstein of the World Systems School (2002). The question of what type of modernity should a society pursue, may well become the quandary of the next few decades.

If these enigmatic hurdles are to be crossed, the need to ground globalization in the landscape of history becomes the first imperative. This would permit a panoptic view of globalization. More importantly, this would lead to a more constructive, normative and prescriptive globalization process, rather than the present band wagon effect. It appears that a part of the problem is the very issue brought up by Abu-Lughod (1989) in the context of the development of Europe and Wallerstein's World System (2002). Abu-Lughod (1989) felt a

> "gnawing sense of Kuhnian anomaly, since they (Eurocentric researchers) tended to treat the European – dominated world system that formed in the long 16th Century as if it had appeared *de novo***.** This heightened the 'dis-ease' I had long felt about the works of …Max Weber, and even about Marx's treatment of the origins of capitalism" (p. x).

This remark has a stinging echo effect in the globalization scene of today. The point here is that a narrow time frame or a cross sectional view creates perceptual distortions. These may lead to twisted prescriptions, and often euphoric imitations. The unifying and transforming effect of international trade can only be appreciated when seen from 'the widest possible angle' (Beaujard, 2005). This is the issue with globalization and therein resides the role of the great trade routes of antiquity and the middle ages, later to become precursors of contemporary globalization.

The paper considers an historical-analytical perspective to be a necessary pre- condition in resolving the crisis of economic globalization and its corporate dimension. This is particularly so because the modern firm is spearheading globalization. And the gain from market - power related to control of rapidly diminishing resources, is primarily accrued to those associated with giant firms. The basic concern is the acquisition of private gains, rather than the sustainability of public good. It is in this context that the reaction to 'giantism', as in the case of WalMart, appears. It is seen as (mis)shaping the world economy (Wilson, 2007). Even here the need is not to view the MNE as a Leviathan, but with the open, transparent and analytical eye of history (Chandler & Mazlish, 2005). However, the value of economic growth *per se,* may be seen not only in material improvement, but also in so far as it affects the society's moral character (Friedman, 2005). The real benefit arises from the potential improvement in social virtues, including dedication to democracy, tolerance of diversity, social mobility, and commitment to fairness, subject to an upper ceiling of utilization of depleting resources.

In examining the methodological trajectory of analyzing globalization, this exploratory research limits itself to a comparative study of management of international commerce, *albeit* in a narrow sense, on two of the vital linkages to antiquity –the *silk road* and the *spice route*. The paper examines the two from different perspectives. In the case of the *silk road*, given the narrow range of products, the analysis attempts to sub-classify their content and categorize the products as to whether they stimulated supply based or demand based globalization. In the case of the *spice route,* the paper takes a value added approach. The purpose of the research is to illustrate a comparative methodology. It takes these two different approaches to discuss how two of the greatest historical trade routes could have contributed to globalization (Lawton, 2004). However trade routes cannot be viewed in isolation. Indeed the *silk road* and the *spice route* have multiple inter-linkages – not the least of it is international management's concern for logistic efficiency, security, predictability, competitive advantage and net discounted future payoff. Technology and productivity are critical glues which have stimulated each stage of globalization through the

process of innovation at spatial centers and its diffusion across the periphery. Certainly the outposts in the periphery had their own significance (Algaze 1993). The paper also offers the technology/productivity perspective to the evolution of globalization. Interestingly, in defending the constructive role of empires, Lal (2004) explains that empires, through established trade systems, have provided the order necessary for social and economic life to flourish. Linking autarkic states into a common economic space, empires have promoted the mutual gains from trade.

"GLOBALIZATION IS DESTRUCTIVE, IF NOT CATASTROPHIC"

While globalization is supposed to mean integration and unity, it has been found to be a polarizing phenomenon (Rosenberg, 2002). The above quote from a recent article in Foreign Policy (Theil, 2008 p. 58) refers to the teaching of globalization and open market philosophy in Europe. The national context is the school curriculum in Germany and France. The atmosphere has some parallel in the United States as well. The distressing economic condition, particularly as it relates to employment, under-employment and the sluggish wage increase, is creating an anti-open economy atmosphere (Scheve & Slaughter, 2007). The Seattle WTO riots, and other similar events worldwide, have become a watershed in the global articulation of anti globalization agenda arising from the 'unintended consequences'. Reactions from an array of stakeholders and from diverse disciplines have further consolidated the issue. The impediments to corporate led economic globalization are increasing with concerns related to global warming, terrorism, epidemics, poverty, national debts, MNE power, and extinction of species, languages and culture. Playing into this milieu is the debate on corporate corruption and the role of big business. An historical comparison has been suggested by Bing (2006) who uses Rome Inc. as an analogy for the MNE and its corruptive powers. It may be noted that corporate corruption and uncontrollable, opaque credit-based socio-economic systems are the present precursor to the meltdown which spread worldwide so dramatically because of the globalization of market-space. In the case of Rome, this effect remained limited because of the insulation (or, rather control) of markets and empires. There were of course exceptions. Furthermore, the above discussion should not be taken to deny the existence of optimistic voices exploring constructive globalization through the examination of alternative routes. Such is found to be the case, for instance, in the report of the International Forum on Globalization (Cavanagh & Manders, 2004).

The paper does not deal with the management strategies of global enterprises or their consequences, whether intended or otherwise. Instead it focuses on the historical linkage, so as to ground globalization – in a shallow sense of expanding spatial frontiers of human activities and in a deeper sense of the increasing number of conscious and purposeful interweaving of extending geographic horizons. The rationale is that if globalization is viewed as a significant force in the evolution of human civilization, the contemporary phenomenon will lose its threatening image. Instead it will lead to a humbling position and direct the reaction towards a set of constructive and optimizing strategies in so far as corporate decisions have negative externalities. Questions related to possible reversing or limiting the process of globalization, have begun to emerge. The fear of protectionism created de-globalization is a distinct possibility.

GLOBALIZATION: SELECTED DIMENSIONS

As the number of dimensions of human ecology affected by corporate driven globalization, have expanded, the definitions of globalization have acquired new elements. The collections of papers brought out by Lechner and Boli (2006), and O'Meara, Mehlinger, and Krain (2000) illustrate this point. Indeed a novel issue of hybridization has emerged (Pieterse, 2004). Yet the economic dimension maintains its instrumental primacy. This comes through in the discussion of the origin of global trade suggested by Flynn and Giraldez (2004). "Global trade emerged when all heavily populated continents began to exchange products continuously – both with each other directly and indirectly via other continents and on a scale that generated deep and lasting impacts on all trading partners" (p. 83). These words were underscored by de Vries (2007) in citing the above definition and in disagreeing with it on the ground of lack of specificity. From his perspective, the definition fails to emphasize that trade advances globalization and that it is not merely the movement of goods. In other words the latter could conceivably result in indirect contact and could therefore be not intense enough. For instance, in the 1500-1850 periods an indirect effect was the process of institutional change whose objective was to protect private rights. True globalization would mean the reduction of transaction cost and the interflow of information. However, a direct contact between cultures could only be established with 'the mastery of trade routes'.

The origin of globalization is not the concern of this paper, as has been discussed by many economic historians (Flynn & Giraldez, 2004; Ronnback, 2009). But the above definition of Flynn and Giraldez (2004), does invite criticism on at least four other grounds. Firstly, evidence exists to suggest that historically trade often has had associated investment connections as well (Chaudhuri, 2003; Moore & Lewis, 1999). Secondly, raising the issue of 'continuity' is an unnecessary complication in the above definition. This is not to deny that globalization has not been disrupted by wars and disease or disturbance of trade routes. Thirdly, the issue of physical globalization, in the sense of the circumnavigation of the globe, sweeps away the meandering paths to human connectivity. This has been the historical essence of international trade and commerce. To ignore this is to ignore the colorful world as well as the challenge and contribution of globalization as an evolving phenomenon. Fourthly, intermediation has been a critical aspect of globalization in antiquity, in the middle ages, as well as in contemporary times.

De Vries (2007) distinguishes between 'soft' and 'hard' globalization. Soft globalization focuses on increase in contact, interaction, and exchange that reduce previously existing barriers. For historians and sociologists, it would mean greater integration and interdependence. Hard globalization is basically the intercontinental convergence of commodity and factor prices referring to measurable outcome rather than to a process. It needs to be noted however, that the soft globalization process may not necessarily lead to the hard globalization outcome because of the existence of a variety of constraining and mediating factors. For instance, what began as an age of globalization ended as an age of colonialism as the monopoly economic power of the trading companies transformed into a political hegemony (in the case of East India Company). De Vries (2007) points to the limits of early modern globalization in the 1770s based on various quantitative measures of trade dependency of Europe on Asia. The center of gravity (as well as inter-dependence) of international trade had shifted to the new world, somewhat similar to the change now taking place in favor of Asia. This would be a return to history. In this sense India and China should be seen as re-emerging markets rather than emerging markets.

ECONOMIC HISTORY: SOME REFLECTIONS ON GLOBALIZATION

Solow (1985) has an interesting take on economic history when he notes: **"**economic theory learns nothing from economic history, and economic history is as much corrupted as enriched by economic theory" (p. 328). David (1993) on the other hand, remarks that a good deal of modern economics is a-historical, and that historical economics cannot merely be modern economics servicing history. He suggests that it is necessary to bring in the issue of *path dependence* to ground economics in history, especially given the fact that we are dealing with stochastic systems. The historical process requires the linking of the present to the past. David's study of the story of QWERTY (typewriter keyboard) is a compelling example of a non 'ergodic' path dependent system with unshakable future effects.

Broadberry & de Jong (2000) conclude that the Workshop organized in NIAS, Wassenaar, Netherlands to discuss technology and productivity in historical perspective, brought out a fair degree of agreement between the evolutionary (Nelson & Winter,1982) and neoclassical growth (Solow, 1956) schools. The path dependence approach (David, 1993) added to the strength of the evolutionary model. The conclusions of the conference include the following: the minimal cost savings of new technology (macro inventions), the need for further improvements (micro-inventions) in it to increase its applicability, the possibility of 'reverse causation' – in terms of technology/economic growth linkage, the difficulty in making distinction between capital accumulation and technical change because of complementarities.

Abu-Lughod (1989), in discussing the issue of reformulation of knowledge through transformation of socio-historical work, suggests that changing the observing distance creates a new scale of analysis. In this way history and geography can infuse a new meaning. This is the historical-analytical approach that this paper is oriented towards.

It is in this sense that Mielants (2007) argues that the rise of the West should not be viewed through the static perspective of the industrial revolution but rather through the lens of long term developments rooted in the Middle Ages. Much like Abu-Lughod (1989), Mielants (2007) rejects many explanations and recommends avoiding Eurocentric assumptions of western superiority. He bases his argument on several factors including the fact that the spirit of capital accumulation existed elsewhere as well and that in the 13th -14th Century, Europe lagged behind in technology, military and socioeconomic pre-requisites. The above references point to the need to study a collection of longitudinal factors – after assuming a level of development as a differentiating starting point for a civilization. For instance in the rise of Europe, the City State played a critical role. The in- fighting and City-State rivalry resulted in the development of citizenship as well as entrepreneurship which in turn led to resource seeking, colonization and the chartering of East India Co., and then, developing the knowledge base via the transferring (along with the translation, interpretation and extensions) conduits which were well established in the Middle East. Thus the confluence of factors including industrial revolutions, colonization, discovery of America, the development of financial instruments, and the evolution of technology and management/organizational skills need to be considered in a dynamic spatio-temporal perspective for a meaningful analysis of contemporary globalization as it relates to the past.

The above factors point to the distinguishing *path dependence* of European (commercial and trade) history *vis a vis* China, India and the Sudanese States (Mielants, 2007). Herein rests the seeds of modernity - sown in the European City States. From the perspective of free-enterprise capitalism, defined essentially on the ability to mobilize profit-oriented investment from extra-state sources, Venice and Genoa were almost capitalistic by the 13th Century (Abu-Lughod, 1989). The 1250-1350 periods may then be seen as the critical turning point in world history with the Middle East acting as a geographic fulcrum between the Orient and the Occident and creating a transcontinental trade network. At this point according to Abu Lughod (1989) there was no historical necessity for the balance to tip in favor of the West. However a combination of geo-political factors (including the disruption of trade routes after Genghiz Khan, the plague and the crusades), technological advances (shipbuilding, compass, nautical charts and so on) besides the role of merchant mariners and competitive alliance capitalism particularly in the context of City States, did tip the balance.

Another view of historical analysis can be illustrated with Hont's (2005) work on the conjunction between politics and economy. The latter emerged when success in international trade became a matter of the military and political survival of nations. According to Hont (2005), Hume advanced a comparative advantage model of international trade when economic development moved from the center to the periphery. Furthermore both Hume and Smith argued that it was commerce not renaissance and reformation that created modern liberty. This is somewhat similar to the point explained earlier, namely, that there are indeed moral consequences of economic growth (Friedman, 2005). However, this is not to suggest a denial of the conundrum associated with the 'limits to growth' (analyzed so insightfully by the Club of Rome about four decades back) or the presently emerging, socio-ecological economic malaise.

Historical comparison of globalization thus leads in one respect, to the comparison of *path dependent* economic development/growth. This brings in the notion of comparative technological achievement/advancement, leading to the question of comparing productivity. This section may be concluded with the appropriate words of Chandler (1992): "besides providing tools for historical analysis and explanation, evolutionary theory (of the firm) raises significant questions for study" (p. 99). The evolutionary theory and its strengthening mechanism – the path dependent aspect, are both of great relevance to the study of evolutionary dimensions of globalization.

GLOBAL CONNECTIVITY IN ANTIQUITY AND BEYOND

The fundamental essence of globalization is conscious and purposeful connectivity and its consequences, intended or unintended. The question is how far back this interdependence goes. The farther back in time it travels and the broader space it covers, the more grounded and rooted globalization becomes. This enhances its normative as well as its prescriptive power. The acceptance of this 'groundedness', opens up new horizons of knowledge and removes 'boundedness' or the 'bounded rationality' factor in decision making, especially as it bears upon the historical East-West dichotomy or the North-South Dialogue of the 1970s or the contemporary emerging market/mature market bi-polarity. The term 'globalization' or rather 'economic globalization' has gained currency with the success of the MNE in the post World War II era – a period of about 60 years. In fact the word evolved out of a need to underscore the phenomenon of interconnectedness. Chanda (2007) for instance, captures the essence of

grounding globalization when he takes the global expansion of Starbucks to the roots of the discovery of coffee beans as wild shrubs in Ethiopia and its domestication in 15th Century Yemen. Chaudhuri (2003) does so in an elaborate fashion when he analyzes trade and civilization in the Indian Ocean. An example is his discussion of cotton, thread, textile and the multi-ethnic indigenously designed exports from India to the Middle East and beyond (Europe). The same connection can be seen in the present information age and the Arab mathematician al-Khwarizimi or India's pioneering role in mathematics, and the great contribution of Europe in science and philosophy, and of course Chinese paper-making and the diffusion of knowledge. Abu-Lughod (1989) sees the 1250-1350 century as the link that connects antiquity to pre-modernization. In other words, the history of globalization began with the history of man as he endeavored to secure himself or as he was galvanized spatially by need, curiosity and passion. In many ways the Orient-Occident dichotomy, erodes the ability to conduct an insightful understanding of globalization. In this sense it is critical to see Aristotle and Confucius as nodal points in the development of human thought process or the experiment of man. Without a global mindset in decision makers, born out of a global spirit, globalization processes will remain warped. The absence of a thought out eclectic approach in pursuing globalization has a distinct confounding impact.

The collection of articles in the edited work by LaBianca and Scham (2006) brings out the expansive phenomenon of connectivity in antiquity. Based upon Castell's (1996, 1997, 1998) trilogy - concerning the network society, search for identity and the end of the millennium,- these articles deal with diverse issues including the fact that a variety of revolution (industrial, information, urban, fiber) has punctuated human history. The idea of production and trade networks is clearly borne out. Indeed, networks are critical to the protection of recurring ties (Fombrun, 1982). Recurring buyer-seller relationships would fall in this category (Chung, Yam & Chan, 2004). South West Asian trade in commodities existed prior to the emergence of urbanization and states. Later the network created by the Sumerians gave way to South and East Asia trade. The above edited work describes the linkage between production innovation and trade diffusion. These seem to create ripple effects across regional and accessible transcontinental space. Findlay and O'Rourke (2003), based on their study, point to the integration of commodity markets in the period 1500-2000. This refers to hard globalization as suggested by de Vries (2007). Yet it is the soft globalization of 'unintended consequences' that has thrown the global socio-economic system into a *problematique.*

Findlay and O'Rourke (2003), note that large scale trade distinguished the centuries following the voyages of de Gama and Columbus. They measure (market) integration as prices of identical commodities in different markets. But then there is a problem with such understanding of convergence, since the voyage of discovery increased the number and variety of goods. There was sufficient integration driven by technology in the 19th Century and by politics in the 20th Century. Prior to 1500, shipping and nautical technology had emerged, as explained earlier. Complex pattern of linkages had developed opening up the issue of country-of-origin of innovations and exports (Abu-Lughod, 1989; Findlay, 1996). For instance there was wool from England and Spain, woolen cloth from Flanders and Italy, furs from Eastern Europe, gold from West Africa cotton textiles and pepper from India, fine spices (cloves, nutmeg) from South East Asia, and silk and porcelain from China. The Middle East was most advanced – large cities, considerable manufacturing, and sophisticated monetary and credit system. The plague (or Black Death) changed attitudes and was followed by greater demand for Asian luxury goods. The focus

on trade route increased after the demise of Pax Mongolica. This resulted in greater reliance on Egyptian traders and Venetian intermediaries. Soon the search for competitiveness energized Western Mediterranean and Genoa to circumnavigate Africa. Ultimately, the quest was successful. An alternative now offered security, availability, and price and strategic market control.

While globalization of the world economy or the inter-linking of old and new markets through convergence in world products and prices, did occur soon after, it was the year 1571 with Manila becoming the originating point of world trade that the interlinking of all continents was established. It was in this sense that physical globalization finally overshadowed the inter-continental trade since antiquity. However, transportation cost was still high. Trade was therefore limited by a high ratio of value to weight and bulk. But now the channels and the supply chains were laid down, later to be lubricated by other ingredients – technological change, capital accumulation, and population growth. Abu-Lughod (1989), however, believes that the ingredients were a modern capitalistic system was established in the 1250-1350 periods and that the 16th Century offered nothing new.

Williamson (1996) points to the linkage between convergence and globalization in the two epochs – the late 19th Century and the late 20th Century– the latter being causal, the middle years (1914-1950) being the de-globalization period related to wars and protectionism. The flow of capital, labor, and commodity trade boomed as transportation cost declined. Williamson differentiates between Sigma convergence and Beta convergence. Sigma convergence refers to the fall in living standard between rich and poor countries, while Beta convergence refers to: poor countries growing faster than the rich. A relevant issue is that of de-globalization and whether convergence leads to it and whether de-globalization can be prevented.

THE ORIGIN OF THE MULTINATIONAL

A similar point needs to be made regarding the origin of the MNE. The Honorable East India Company, which was granted Charter by Elizabeth I in 1600, was the first joint stock company. It was permitted to monopolize trade privileges with India. It finally transformed from a commercial trading venture to one that virtually ruled India, till the English as Empire curtailed it after the 1858 mutiny. The Dutch East India Co was established in 1602 when Netherlands granted a 21 year Charter. It was the first to issue public stock and is seen as the first MNE in the world. It was formally dissolved in 1800 after its bankruptcy. However, the path breaking historical research of Moore and Lewis (1999), clearly establishes the existence of multinational activity in antiquity.

The idea of the present global knowledge economy dominated by MNEs, is often presented as if it is a contemporary phenomenon only. Moore and Lewis (1999) have counter-argued that the prototypes of the present economic structures and processes existed thousands of years back. Using Dunning's (1997) *eclectic paradigm* to evaluate economic activities of the Assyrians, Phoenicians, and others around 2000 BC, they find the existence of MNEs in Assyria, sea-trading in Phoenicia and intercontinental enterprises created by the Canaanites. They find evidence of hierarchical organization, foreign employees, value-added activities, resource and market seeking behavior as well as foreign investment, branding strategies and industry structures. The above view of the historicity of the modern MNE has been questioned by

Chandler and Mazlish (2005), but Wilkins (2005) sees a substantive historical continuity with evolving elements. The MNE is exemplified in the changing character of industrialization and the modern economy – trading, extracting, manufacturing, servicing, financing.

Greif (1989), on the strength of the evidence on the Maghrabi traders, examines the economic institutions utilized during the eleventh Century to facilitate complex trade characterized by asymmetric information and limited legal contract enforceability through merchants and their overseas agents. He concludes that Mediterranean trade contributed much to the development of Western Europe. The common religious – ethnic origin of the traders provided the natural boundaries for coalitions, strategic alliances and commercial networks, to be defined and organized. The protective, reciprocal as well as legitimate characteristics of network are the very reason for its organization (Kumon, 1992). Relevant to this section is the work of Alfred Chandler (1992) in his study of the history of the modern multi-unit enterprise. Though he was concerned primarily with the American industrial firm from the 1880s, it is clear that he finds great value in the evolutionary theory of the firm propounded by Nelson and Winter (1982). A critical issue in this evolutionary explanation is the significance of organizational learning and capabilities, particularly in an environment exhibiting discontinuity. This is precisely the environment associated with international trade and investment – the arena of globalization and MNE decision-making.

PATH DEPENDENCY, PRODUCTIVITY AND GLOBALIZATION

The issue of path dependency has been discussed earlier. It has been found to be a valuable methodology in connecting temporal linkages of technology (Little, 2008). In this context the paper now examines the issue of productivity which has actually been implicit in much of the discussion of globalization and economic growth. Gordon (2000) examines the computer chip in the comparative perspective of past inventions in terms of growth rates of output, inputs and multi-factor productivity (1870-1900). He discusses what he classifies as three stages of the Great Inventions. The First (1760-1830) which includes the steam engine, and the power loom, exhibited a 'snail pace' change in multifactor productivity. The Second (1860-1900) which includes electricity and the internal combustion engine led to the golden age of productivity. The computer and the Internet age may be called the Third Industrial Revolution**.** He concludes after this tough test that in fact the latter does not stand up to the productivity consequences of the Second. The question that this paper asks is whether these would have been possible without the temporal linkages of technology and productivity (which happened to spawn spatial linkages as well). Furthermore whether there is a critical path dependency which links it in a *sine qua non* sense to the First. The logic is no different when applied to the evolution of globalization over time. The space-time connectivity of trade routes is critically relevant to globalization. The definition of common purpose (profit or otherwise) explores and consolidates such connectivity.

David and Wright (1999) present two visions (on the ignorance) of the dynamics of productivity: Firstly, technological forces affect broad sections of the economy through spillovers of knowledge and the diffusion of general purpose technologies (GPTs), Secondly, multiple and idiosyncratic sources of productivity arise. The latter is basically an aggregate of many sources of total factor productivity (TFP) growth. TFP growth is indeed considered a proxy for technology, since it is viewed as the growth in real output, once labor and capital inputs have been taken into account (Noland & Pack, 2003). The former appears to be supported by evidence

regarding the US growth after WWI – from declining or stable capital productivity to rising output-capital ratio. For example, with electrification profound changes in American industrial labor market occurs, following the stoppage of immigration from Europe. Subsequently rising real wages are affected by evolving recruitment and management practices. Indeed, the role of TFP has now brought new insights into the international comparison of technology diffusion and convergence as against the understanding derived from factor endowments (Islam, 1999, p. 493).

It is evident that the productivity-enhancing potentialities of the dynamo revolution involved many other complementary technological and organizational advances. These were implemented with the buoyant condition of the 1920s. Also, there were structural changes in the labor market following stoppage of immigration (David & Wright, 1999). Several other synergistic developments (technological and organizational interconnections) emerged, including the increasing role of information in planning and control of large enterprises. This acquires particular significance for MNEs, given their global involvements. David (1990) uses the historical analogy of the dynamo to explain the initial inertial response to the rise in productivity. Therefore technical advancement of knowledge must consider the pace of effective diffusion. He sees the 'productivity paradox', as presented by Solow (1987), from the perspective of the value of the sunk cost and the gradual containment of the variable cost. Related issues in the computer – dynamo analogy include "network externally effects" (David, 1990, p. 356) and the compatibility of business strategies surrounding the breakthrough technology and its gradual incremental improvements.

Devine (1983) points to the fact that major changes in production and distribution followed the switching from coal to oil, to natural gas and from the direct use of raw energy forms (coal and water power) to the use of processed energy (internal combustion fuel and electricity). The effect in the years 1880-1930 on the US GNP was clear. The result was a change in factory designs and production methods thanks to the precision in time, space, scale arising from electricity. Arnold and Dennis (1999) discuss the dramatic decrease in the cost of lumen – open fires, oil lamps, candle, gas lamps, and electric bulbs. The productivity consequences of path dependent evolution are obvious.

THE SILK ROAD AND THE SPICE ROUTE: STRATEGIC CONNECTIONS

The *prima facie* connection between the two is the time-line. In spite of being separated by thousands of miles and the variation in medium of transportation, it is the causal link which remains paramount. The term 'maritime silk road' points to this causality. The *spice route* acquired greater significance because of its competitive advantage in terms of efficiency, safety and cost effectiveness, although it suggested a longer journey than the *silk road.* It should be noted that the study of the monsoon was a critical factor in the effectiveness of control over the *spice route*. The comparison is no different than the analogous comparison between the steam engine, electric motor and the jet engine, or for that matter the earlier non-mechanical modes of travel and transportation. Such comparisons, however, are not attempted in this paper (David, 1990; Gordon, 2000).

Unlike the Moore and Lewis (1999) study on the historical origin and 'birth of the multinational', this exploratory research is concerned with the strategic implications of the *silk road* and the *spice route* as precursors to globalization in a generic sense - not in the hard/soft

sense suggested by de Vries (2007). Both terms evoke a sense of a specific material and a defined route. The terms fail to capture the sense of diversity of commodities, materials and differentiated products that have moved across the diverse arteries and sea lanes through the multiple ports, entrepots and emporia. These have served as a major conduit for the transportation of knowledge, philosophy and religion besides material goods between Asia and Europe with the Middle East serving as critical monopolistic intermediaries. More importantly, the intense rivalry for the source of competitive advantage on the *silk road* (namely the quest to monopolize and internalize the sources of unique commodities and exotic goods), stimulated the European search for an alternate route. This resulted in the circumnavigation of the globe or more appropriately - globalization in a physical sense. Ultimately contemporary globalization was made possible by improving transportation and communication. These were themselves affected by new technology, advanced infrastructure, the availability of cheap raw materials and the pent up demand of colonies. It is only in such a historical context and its cumulative linkages that the final impetus to globalization could have been effectively provided by the global institutions of the 20th Century. This was then the stimulating backdrop in which the MNE unleashed its entrepreneurial spirit to spearhead the 21st Century global economy.

Yet it is important to recognize that while the Mediterranean exhibited intense economic, political and cultural rivalry in a closed space, the vast Indian Ocean, in spite of social cultural diversity rooted in four great civilizations displayed a co-operative, complementary and expansive trading spirit. It defined a strong sense of commercial and historical unity. Trade implied a culture of a long-term relationship in the exchange of knowledge, beliefs and values (Beaujard, 2005). Such long distance trade could not have been possible without an ocean wide acceptance of the role of money. Nor could this human gain worthy behavior survive for more than a thousand years without universal agreement on the issues associated with safe-conduct, international relations, and the ability to distribute economic gains fairly. The price mechanism functioned effectively throughout this long extended period (Chaudhuri, 2003). Beaujard (2005) sees in this trade a stimulant which unites space. Ultimately the Indian Ocean and the Mediterranean were linked through maritime and terrestrial networks created by transcontinental commercial relationships

INTERNATIONAL BUSINESS MANAGEMENT & CROSS CULTURAL EXCHANGES

Given the above perspective of business history, the context of increasing diversity of products with varying degrees of value addition and complexity, and the centuries of trade and commerce with multiple empires/peoples, it is difficult to ignore the globalization value of *the spice route(ex-post the silk road),* as a witness to varying business strategies, tactics and operations. Every international business management principle had been involved. The business approach had been both resource seeking and market seeking on a transcontinental multi-empire scale as well as supply chain driven requiring complex strategic planning and control. Efficiency seeking behavior was clearly visible in the long term alliances between terrestrial caravans and ship masters as well as the balancing act associated with high value goods and bulk goods (and ballast) to secure profitable and predictable maritime transportation. Given the labyrinthine long distance nature of the voyage, every effort was made to improve efficiency and minimize risk. Barter and other forms of counter-trade had become necessary to accommodate multi-ethnic middlemen and customers. Not only had creativity and innovation abounded when targeting the elite market segments, but standardization of products and maintenance of country-of-origin

image had been necessary to maintain brand equity and loyalty. Logistics had perhaps been more important than advertising and promotion. Of course financial management and international human resource management developed along side. Industrial clusters, trade centers, emporia and entrepots became important facilitating agencies. Thus organizations developed with interdependent alliances across the continents. Involved were long term capital, distant suppliers, bankers, merchants, traders, craftsmen and the rural markets.

Chaudhuri (2003) discusses in intricate detail the nature of commodities and markets associated with the *spice route*. Abu-Lughod (1989) describes at length the strategic alliances, the nature of trading, the types of facilitating organizations, and the nature of primary products as well as manufactured goods. These include the Karimi merchants (large wholesalers) of Cairo and its industries (including metallurgy, fabrication, textiles, food processing). In a similar vein, considering the historical links that India had with Mesopotamia in antiquity (4000 years ago), Abu-Lughod (1989) discusses the importation of a variety of products imported by the Romans from India including Chinese silk, precious stones, exotic animals, sugar, spices and so on. This created an overwhelming balance of trade surplus for India. The sophisticated textile industry in Kanchipuram is a case in point. So is the existence of merchant class and trading towns (*nagaram*) in the 11th Century, giving India a remarkable competitive advantage. The same was true for the Middle East and China and other Asian countries.

Many researchers from varied disciplines have contributed to the understanding of the mosaic of commercial and trade relationships across the oceans and the bordering land masses (Abu-Lughod, 1989; Beaujard, 2005; Chaudhuri, 2003; Hourani, 1995). The limited scope of this paper does not allow the luxury of exploring the colorful vistas of multi-cultural and economic-political relationships spawned from antiquity to middle ages and the 21st Century. Nor is the history of capitalism and free market system, its purpose. However sufficient insights have been presented in a kaleidoscopic fashion to get the point across. The lower level of technology and the rudimentary industrialization of the pre-modern economic space could permit only a limited range of trade-oriented globalization options for strategic management decision-making. Yet it is undeniable that the global socio-economic space was discontinuous (notwithstanding the porous nature of borders in the absence of statehood), especially considering the limits of early transportation. This is so today as well in the context of multiple factors related to cross-country differences faced in international strategy (Ghemawat, 2007). Besides, the political atmosphere is potentially turbulent, contrary to Lal's (2004) meaningful perspective on the value of empires. In this sense the trade-oriented shallow regionalization or globalization was no less deep than the deep investment-driven regionalization and globalization of the present.

PRODUCTIVITY: METHODOLOGICAL VALUE

To recapitulate, the paper has taken the context of the great trade routes to examine globalization. The issue has been to explore the historical linkages in an evolutionary perspective. The prime challenge has been the development of a comparative methodology. In this search, it explains some aspects of globalization and the unintended negative consequences. These are threatening, and may lead to de-globalization, or at least arrest its deep, spatial expansion and set the global economy in an autarkic mode. The rationale for the paper is that if globalization can be grounded in history it would not be seen as a *de-novo* issue and would therefore appear less threatening.

The paper applies the evolutionary and *path dependent* analysis to globalization and the multinational enterprise, the latter being a fundamental force stimulating globalization. This historical analytical approach is seen to be applied to various stages of technology, as well productivity. Significant work has been done in this area (David, 1990; David, 1993; David & Wright, 1999; Devine, 1983; Gordon, 2000) particularly in the context of the productivity paradox of Solow (1987). If one examines some of the products involved in the transcontinental trade in the pre-industrial middle ages (*ex post* antiquity), one could qualitatively estimate and compare the productivity effects. Below (Table 1) is a simple illustration using a rating system – low/medium/high (positive) productivity effects. Silk and spice would be expected to have little effect on human productivity. In fact they could have possibly lowered productivity, arising out of a relaxed and leisurely life style. Dates may be a short term energy booster. It is classified here as 'low' relative to the other products. Glass is being put in the 'medium' category since it does have a utilitarian value in a work environment. For instance, in the processing of oil and the use of lamps, glass could secure and extend the lumens/light and improve work conditions. Paper, compass and steel are being put in the 'high' category. While the compassed energized shipping, navigation and trade, paper effectuated contracts and communication, and formalized business contracts and culture. Finally, steel has not only continued to play a critical role in war and peace, it is critical to the entire industrialization process.

TABLE 1

Product Type	Silk	Paper	Compass	Glass	Spice	Dates	Steel
Productivity Effects	Low	High	High	Medium	Low	Low	High

The concern of this paper, however, is the value of globalization across time. The productivity effects described above do little to explain globalization or ground it, except to identify a set of products which have had some degree of productivity value in the middle ages in the areas of consumption, agriculture, pre-industrial/industrial production, transportation, trade and service. The paper now uses the context of the *silk road* and *the spice route* to offer, from a different perspective, other illustrations of globalization. A set of products are analyzed using two alternative approaches in an exploratory spirit.

SILK ROAD – DYNAMICS OF INTERNATIONALIZATION: AN ILLUSTRATION

This section attempts to illustrate the internationalization process unfolding through the operation of *the silk road*. The products were traded on the *silk road*. The globalization index looks at the demand and supply dimensions. Products are seen from the perspective of scientific knowledge, engineering/technology knowledge, organization/ management knowledge. The term science (scientific knowledge) and technology (technological knowledge) are being used in the sense of pure science and applied science. Organization knowledge is referring to the ability to organize and manage operations including all aspects normally considered being a fundamental

part of the discipline of management (planning, controlling, organizing, directing and so on). Supply and demand refer to the effect of either of the two factors on trade. For example like spice, silk has had a significant impact as a demand pull effect on trade. This is no different from the Japanese demand for Harley Davidson or the insatiable American appetite for Asian electronic products. Supply chain effect would take place through efficiency and related transportation cost effects that ultimately offer benefits to the consumer. Containerization is a good example, as is the latest Boeing long distance aircraft.

Table 2 suggests silk to have a high demand pull globalization index. The Romans had been mesmerized by it since the war with Parthians. Given the complexity of producing silk and the involvement of many workers (Abu-Lughod, 1989), its profile puts it 'high' on organization knowledge. Paper making technology has high globalization index but from a supply driven perspective. Its production does not seem to require the same degree of worker sensitivity and involvement. Unlike the consumption value of silk, paper making has had a tremendous impact on the spread of knowledge, theoretical or applied, including business dealings. One of the greatest impacts on navigation has been the role of the compass. This is therefore 'high' on the globalization index from a historical perspective. This product seems to require greater purity of theoretical science. The last item in Table 2 is glass, which creates more demand pull rather than supply push. It can be argued however, that it has noteworthy supply effects, as in the case of bottling high value consumables. The profile of each product and its impact on globalization should be clear from Table 2. Once again these are illustrative examples only. At this time this classification should be considered arbitrary and subjective.

TABLE 2

Products	Exporter	Importer	Scientific Knowledge	Technology Knowledge	Organization Knowledge	Demand/ Supply	Globalization Index
Silk	China	Rome	Low	Medium	High	Demand	High
Paper	China	Mideast	Low	High	Medium	Supply	High
Compass	China	Mideast	High	High	Medium	Supply	High
Glass	Europe	China	Low	Medium	Low	Demand	Medium

SPICE ROUTE – DYNAMICS OF INTERNATIONALIZATION: AN ILLUSTRATION

One element of pre-modern distinctiveness of commerce was the difficulty in classifying inputs/intermediates for manufacturing which changed with the industrial revolution (Chaudhuri, 1985). At the same time colonies became exporters of commodities but importers of finished goods. Within the less developed countries trade remained a function of specialization and the ability to produce consistent surplus. Relevant factors included: population, rainfall, technology, fertility of land and the risk of invasion and famine. Thus the reliability of information and commercial network were critical. This brought in another factor - issue of sufficiency of bulk goods to counterbalance the high value added items.

TABLE 3

Products	Exporter	Importer	Value Added	Resource/Market/Efficiency/Asset Seeking	Globalization Index
Spices	India, Indonesia Etc.	Europe Middle East etc.	Low/Luxury	Market Seeking	High
Dates, wheat	Middle East	India etc	Low	Efficiency Seeking	Low
Steel, sword	India	Europe Middle East	High	Resource Seeking	Medium
Brocade, Silk	China	India, Middle East Europe	High/Luxury	Market Seeking	High

Table 3 describes the globalization index (high/medium/low) for a set of products with varying degrees of value addition and international goal orientation (resource/market/efficiency/asset seeking) as discussed by Dunning (1997). However, asset seeking behavior cannot be ruled out, as was found to be the case in the Moore and Lewis (1999) study centuries before.

Any number of items could be used as ballasts to counter value the risk associated with high value items: stones, heavy metals and tanks. These would reduce insurance risk as well as risk of shipwreck – thus the need to establish an upper ceiling for the value of cargo. These are the 'subject to' factors to be evaluated while maximizing revenue and customer orientation. One aspect of strategic planning was the control of ballast. An item of common usage was dates from the Middle East which was used as standard measure of shipping space and vessel size. Because of its perishability, time schedule coordination was crucial. Furthermore, the issue of deadline became vital on account of the weather. Thus the need for bulk goods instead of ballast like dates was often there, or else the loss of profit and reputation of the ship-master and the agent was possible (Chaudhuri, 2003).

A careful consideration of international goal orientation of merchant/ traders or channel captain (given the long distance nature of trade), suggests a classification of spices and silk to be associated with market seeking. This could involve either import marketing or export marketing depending upon the point of control on the value added chain. Steel is classified as resource seeking because of its ability to create highly differentiated products as in the case of military armor (including swords). Finally dates and wheat may be seen as efficiency seeking products because of their value to shipping. These items allowed great flexibility in tradable product mix

by adding bulk and weight to ships. They created safety and efficiency in terms of transportability on the high seas as well as an appropriate value mix.

Chaudhuri (2003) classifies three categories of trade and commerce on the spice route: a) those involving local exchange, b) those dealing with inter-regional market where wholesale merchants and markets were involved and c) the long distance pre-modern/transcontinental trade where high value items like silk, brocade, superfine cotton, porcelain, jewellery, spices and horses were the main features. It is the latter which allowed *the spice route* to become the wellspring of globalization, even surpassing the *silk road.* These were the precursors – links in the globally evolving commercial chain from antiquity to pre-modernity - whose contributions can be analyzed along the two possible methodologies suggested by the paper.

CONCLUSION

The paper was inspired by a concern for the emerging downward spiral of the global socio-economic and ecological systems. This concern was also associated with the spearhead of economic globalization – the multinational enterprise. Its management was critical in the efficient allocation of scarce and depleting global resources. Yet it was overly focused on the short-term profit motive and personal wealth accumulation. In this sense public space and private accountability were receding faster than the melting glaciers or the vanishing species or the disappearing languages and culture. The paper sought to unfold a problem solving metric which would permit the grounding of globalization itself in the landscape of history. An evolutionary route to globalization was identified and strengthened by a 'non-ergodic' *path dependent* approach which was shown to possess a rigorous research foundation. Though the research was generally based on product, technology and productivity, it had potentiality in being applied to any evolving system. The paper applied it to globalization in the specific context of the two critical trade routes – *silk road* and *spice route*. The applications were exploratory and illustrative only. The paper was also limited in its ability to conduct a more comprehensive coverage of the history of globalization. The objective was narrow and the subject was encyclopedic. One approach broke down the product itself into management challenges/tasks/skills as being scientific/technological/organizational knowledge prerequisites in globalization. A globalization index was developed for *the silk road*. This was a dichotomous index. Globalization could either be demand pull or supply push. Furthermore a high/medium/low classification scheme was presented. The second illustration used the market/resource/efficiency/asset seeking orientation with the globalization index being multi-chotomously driven by these four international business orientations. This approach used the value added chain in the case of the *spice route*, wherein there was increasing diversity in differentiated products, in terms of being high/medium/low. A final qualification needs to be made. As has been noted earlier, the methodology of this paper is in its infancy. There is a pressing imperative to study globalization from an evolutionary perspective. This panoptic view would permit a significant normative and prescriptive orientation for society, economy and ecology. However there is a need for developing a robust methodology for understanding products, productivity, technology, industrialization, economic development/growth in order to study their potential contributions to constructive globalization at the deepest level.

REFERENCE

Abu-Lughod, J.L. (1989). *Before European hegemony: The world system A.D. 1250-1350*. Oxford, UK: Oxford University Press.

Algaze, G. (1993). Expansionary dynamics of some early pristine states, *American Anthropologist,* June, 95 (2), 304-333.

Arnold, R., & Dennis, R. (1999). Perspectives on productivity growth. *Business Economics*, April, 7-12.

Beaujard, P. (2005). The Indian ocean in Eurasian and African world – systems before the sixteenth century. *Journal of World History*, 16 (4), 1-43, retrieved from http://www.historycooperative.org/journals/jwh/16.4/beaujard.htm retrieved 7/17/2007

Bing, S, (2006). *Rome, inc.: the rise and fall of the first multinational corporation*, New York: Norton.

Broadberry, S. & de Jong, H. (2000). Technology and productivity in historical perspective: Introduction. *European Review of Economic History*, 4, 115-119.

Castells, M. (1996). *The rise of the network society, the information age: economy, society and culture.* Vol I. Oxford, UK: Blackwell Publishers.

Castells, M. (1997). The power of identity, the information society, Vol II. Oxford, UK: Blackwell Publishers.

Castells, M. (1998). End of millennium, the information age: economy, society and culture. Vol III. Oxford, UK: Blackwell Publishers.

Cavanagh, J., & Mander, J. (Eds.) (2004). *Alternatives to economic globalization: A better world is possible.* Francisco: Berrett-Koehler Publishers.

Chanda, N. (2007). *Bound together: How traders, preachers, adventurers, and warriors shaped globalization.* New Haven: Yale University Press.

Chandler, A.D. (1992). Organizational capabilities and the economic history of the industrial enterprise. *Journal of Economic Perspectives*, 6 (3), Summer, 79-100.

Chandler, A.D, & Mazlish, B. (Eds.) (2005). *Leviathans, corporations and the new global history.* Cambridge, UK: Cambridge University Press.

Chaudhuri, K.N. (2003). *Trade and civilization in the Indian Ocean: An economic history from the rise of Islam to 1750.* Cambridge, UK: Cambridge University Press.

Chung, W.C., Yam, A., & Chan, M. (2004). Networked enterprise: A new business model for global sourcing. *International Journal of Production Economics*, 87, 267-280.

Creone, P. (2003). *Pre-industrial societies: Anatomy of the pre-modern world*. London, UK: One World.

David, P. A. (1990). The dynamo and the computer: An historical perspective on the modern productivity paradox. *The American Economic Review*, 80 (2), Papers and Proceedings of the Hundred and Second Annual Meeting of the American Economic Association, May, 355-361.

David, P.A. (1993). Historical economics in the long run: Some implications of path-dependence. In G.D. Snooks, (Ed.). *Historical Analysis in Economics*. London, UK: Routledge, pp. 29- 40.

David, P.A., & Wright, G. (1999). Early twentieth century productivity growth dynamics: An enquiry into the economic history of 'our ignorance'. *Discussion Papers in Economic and Social History,* Oxford, UK: University of Oxford.

Devine, Jr., W.D. (1983). From shafts to wires: Historical perspective on electrification. *The Journal of Economic History,* 43 (2), June, 347-372.

de Vries, J. (2007). The limits of globalization in the early modern world, *Department of History and Economics, Working Paper,* University of California at Berkley, 17 October.

Dunning, J. (1997). The advent of alliance capitalism. In Dunning, J.H., & Hamdani K.A.(Eds.). *The new globalism and developing countries*. New York: United Nations University Press.

Findlay, R. (1996). The Emergence of the world economy, *Discussion Papers 1996_05, Department of Economics.* Columbia University.

Findlay, R., & O'Rourke, K. (2003). Commodity market integration, 1500-2000. In Bordo, *et al* (Eds.). *Globalization in historical perspective.* Chicago, Il: The University of Chicago Press. 2003.

Flynn, D., & Giraldez, A. (2004). Path dependence, time lags, and the birth of globalization: A critique of O'Rourke & Williamson. *European Journal of Economic History*, 8, 81-108.

Fombrun, C.J. (1982). Strategies for network research in organization. *Academic of Management Review*, 7, 280-291.

Friedman, B.M. (2005). *The Moral Consequences of Economic Growth*. New York: Knopf Publishing.

Ghemawat, P. (2007). Managing the global differences: The central challenge of global strategy. *Harvard Business Review*, March, 59-68.

Gordon, R.J. (2000). Does the 'new economy' measure up to the great inventions of the past? *Journal of Economic Perspectives*, 14 (4), Fall, 49-74.

Greif, H. (1989). Reputation and coalitions in medieval trade: Evidence on the Maghrabi traders *The Journal of Economic History*, 49 (4), December, 857-882.

Hourani, G. F. (1995). *Arab seafaring*. Princeton, NJ: Princeton University Press.

Hont, I. (2005). *Jealousy of Trade: international competition and the nation-state in historical perspective.* Cambridge, MA: The Belkap Press of Harvard University Press.

Islam, N. (1999). International of total factor productivity: A review of income and wealth. Series 45 (4), 493-518.

Kumon, S. (1992). Japan as a network society. In: Kumon, S., & Rosovsky, H. (Eds.). *The Political Economy of Japan,* iii, Stanford, CA: Stanford University Press.

LaBianca, O.S., & Scham, S.A., (2006) (Eds.). *Connectivity in antiquity: Globalization as long-term historical process.* London, UK: Equinox Publishing.

Lal, D. (2004). *In praise of empires: Globalization and order*. New York: Palgrave Macmillan.

Lawton, J. (2004). *Silk, scents & spice: Retracing the world's great trade routes*. Paris, France: UNESCO.

Lechner, F., & Boli, J. (Eds.) (2000). *The globalization reader*. Oxford, UK: Blackwell Publishers.

Levinson, M. (2008). Freight pain: The rise and fall of globalization. *Foreign Affairs*, 87(6), November/December, 133-140

Little, D. (2008). Eurasian historical comparisons: Conceptual issues in comparative historical inquiry. *Social Science History*, 32 (2), summer, 235-261.

Mielants, E.H. (2007). *The origins of capitalism and the rise of the West*. Philadelphia, PA: Temple University Press.

Moore, K., & Lewis. D. (1999). *Birth of the multinational*. Copenhagen, Denmark: Copenhagen Business School Press.

Nelson, R.R., & Winter, S.G. (1982). *An evolutionary theory of economic change.* Cambridge, MA: Harvard University Press.

Noland, M., & Pack, H. (2003). *Industrial policy in an era of globalization: Lessons from Asia*. Washington, DC: Institute for International Economics.

O'Meara, Mehlinger, H., & Krain, M. (Eds.) (2000). Globalization and the challenges of a new century. Bloomington, IN: Indiana University Press.

Pieterse, J.N. (2004). *Globalization & culture: Global melange*. Oxford, UK: Rowman & Littlefield.

Ronnback, K. (2009). Integration of global commodity markets in the early modern era. *European Review of Economic History*, 13, 95-120.

Rosenberg, J. (2005). *The follies of globalization theory.* London, UK: Verso.

Rosenberg, T. (2002). Globalization. *New York Times*, August 18.

Ross, J., & Trachte, K. (1990). *Global capitalism: The new leviathan*. Albany: State University of New York.

Scheve, K.F., & Slaughter, M. J. (2007). A new deal for globalization. *Foreign Affairs.* 86 (4), July/August, 34-47.

Solow, R. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics,* 70, 65-94.

Solow, R. (1985). Economic history and economics. *The American Economic Review*. 75 (2), pp. 328-331.

Solow, R. (1987). We'd better watch out. *New York Times, Book Review*, July 12, 36.

Stiglitz., J.E. (2006). *Making globalization work*. New York: Norton. 2006.

Theil, S. (2008). Europe's philosophy of failure. *Foreign Policy*, Issue 164, Jan/Feb, 54-60.

Vemuri, V., & Siddiqi, S. (2009). Impact of commercialization of the Internet on international trade: A panel study using the extended gravity model. *International Trade Journal*, 23 (3), Fall. forthcoming.

Williamson, G. (1996). Globalization, convergence, and history. *The Journal of Economic History,* 56 (2), June, 277 -306.

Wilkins, M. (2005). Multinational enterprise to 1930: Discontinuities and continuities. In Chandler, A.D, & Mazlish, B. (Eds.). *Leviathans, corporations and the new global history.* Cambridge University Press.

Wallerstein, I, (2002). The world we are entering, 2000-2050. In Wallerstein, I., & Clesse, A. (Eds.). *The World we are entering, 2000-2050*. Amsterdam: University Press.

Wilson, R. (2007). How Wal-Mart is (mis) shaping the global economy. *American Educator*, Spring, 34-42

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