



Loading and unloading container vessels reduced to a few hours

Globalisation – Implications for Supply-Chains

by Andrew Grainger

On roads, canals and navigable rivers Adam Smith (1776) writes in his economics classic: *The Wealth of Nations* that they are: “... the greatest of all improvements.”

By reducing the expense of the carriage of goods they encourage the development of the remote and give access to towns. They introduce new commodities into old markets and they open up new markets for producers and traders alike. With extended market boundaries Smith argues that local monopolies are broken down, thus intensifying competition and enhancing economic welfare. Moreover, as markets grow manufacturers can specialise and develop economies of scale, further reducing cost of produce. Following Smith's argument, the facilitation of the movement of goods is one significant facet in the growth of markets and economic welfare. As national frontiers become less significant it is worth while re-exploring the significance that our lines of services in transport, logistics and supply-chain management have in the more contemporary context of globalisation. The questions that this article asks in aiming to stimulate debate are:

- What is globalisation?
- How does it affect logistics and supply-chain management?
- What challenges are set through globalisation?
- What agendas does globalisation dictate?
- What are the implications?

What is Globalisation?

The term *Globalisation* is a contested concept used in many contexts ranging from culture to politics and economics. In order to focus analysis of globalisation, two sources of origin may be contemplated. These are:

- The 'political source' of globalisation
- The 'technological source' of globalisation

The political source of globalisation

The political source of globalisation may be attributed to economic liberal forces aimed at enhancing trade and integrating economies. Through international political efforts – such as the General Agreement on Tariffs and Trade (GATT) and later the World Trade Organisation (WTO) – tariff barriers have been reduced from around 15-20% in the 1950s to less than 7% by the beginning of the 1990s. Moreover, the sophistication of free-trade areas and trading agreements such as the European Union, North America Free Trade Area (NAFTA), MERCOSUR (Common Market of the South) or the Association of South East Asian Nations (ASEAN) Free-Trade Area, by 2002, indicate that this process of trade liberalisation is ongoing. Between 1990 and 1995 the average annual export growth rate has been around 6% and despite the 1998 Asian crisis



the export volume growth rate has remained positive. Focusing on the world's economic core – members of the Organisation for Economic Co-operation (OECD) – and average annual export growth figure of around 6% can be dated back to the early 1960s. In 1998 the WTO has counted a total of \$10,937 billion in goods which have been traded and moved across national frontiers.

Beyond the analysis of trade liberalisation similar significance to the globalisation process can be attributed to the development of increasing capital mobility. Liberalisation of international finance began with the innovation of eurocurrency dealing and lending in the 1960s. It was continued with measures of financial deregulation initiated by the United States in the mid-1970s and early 1980s, from which a more or less single global financial market has evolved where capital is near perfectly mobile.

As a direct result of this evolution towards financial liberalisation the difficulties of raising money for investment in offshore operations and moving across the exchanges have vanished. The resulting capital mobility has led to unprecedented flows of foreign direct investment (FDI) that have profoundly affected the world's production structure as more and more firms invest beyond their domestic sphere. Thus, as a consequence of political efforts in driving a political agenda in trade liberalisation and financial deregulation, today's international business environment has been created.

The technological source of globalisation

On the source of globalisation three revolutionary technological innovations can be noted. These are: advancements in transport technology; innovations in information technology; developments in modern communication technology.

In shipping, for example, liner vessels in the late 1960s spent about 60% of their time laid up in port for loading and unloading. Today loading and unloading operations for container and roll-on roll-off vessels have been reduced to a few hours. Similarly, in aviation with the emergence of wide-bodied aircraft hourly productivity a tkm has more than ten-folded between the 1950s and 1980s. In information technology prices have come down from \$10 million a mainframe computer in the early 1970s to under \$2,000 for a substantially more powerful lap-top of today. Also, telecommunication costs have come down from £173 for a three-minute call from the UK to the USA in 1927 to £1.63 in 1983 and to just a few pence today.

As a result, these technological developments have allowed globally dispersed production structures – stimulated by trade liberalisation and foreign direct investment – to integrate more effectively and reduce the significance of national frontiers as cost in bridging them has been reduced. In fact, these technologies are at the very heart in facilitating modern international supply-chains which aim to facilitate the cross-border integration of producers and markets.

Globalisation and its Implications

Globalisation, that is the increase in goods traded and the emergence of international production structures through foreign direct investment, increases the status of logistics and supply-chain management significantly. It is through effective logistics that international production networks are linked and integrated.

Challenges are manifold. These may include the difficulties and cost of bridging greater market distance or catering for different market segments with unique requirements. Other challenges may be conflicting infrastructure, different industrial standards and other non-tariff trade barriers that can range from failure to obtain planning permission for a warehouse to customs red-tape or immigration restrictions in the employment of professionals. Moreover, challenges also include different languages and cultures in different market segments and the need to develop and maintain trusting relationships with supply-chain partners.

Visible responses to many of these challenges have been international alliances and mergers. Critics may argue that such business networks – even if they do reduce transaction cost – have negative implications on competition patterns. Observers of competition and anti-trust policy – for example in the context of airline alliances or shipping cartels – will note that political tolerance of such relationships is declining. Similar concerns in favour of more interventionist industrial policy may be expressed in the context of increased environmental pressures directly attributable to growing economic activity and the increased movement of goods. Much of the globalisation debate is still open.

In Conclusion

Trading regions, with the exception of the European Union, are still relatively young (NAFTA, MERCOSUR, ASEAN) and are still in a shaping process. Meanwhile international economic relations are challenged by regional economic stress such as in Mexico, South-East Asia and, more recently, in Brazil. Thus, international supply-chain management, in addition to effectively bridging national frontiers, also includes, in the mid to long-term, the need to understand and gauge the political forces that shape the international business environment and determine the scope for opportunity.



Useful Web sites:

Organisation for Economic Co-operation (OECD)
www.oecd.org

World Trade Organisation (WTO) www.wto.org

United Nations Conference on Trade and Development (UNCTAD) www.unctad.org

International Monetary fund (IMF) www.imf.org

ABOUT THE AUTHOR

Andrew Grainger, following a degree in International Transport from Cardiff University, spent three years working for a German freight forwarder in East Germany, Malaysia and Singapore. He has recently completed his MA in International Political Economy at Warwick University. andrew@graingerstarfsnet.co.uk