Global Value Chains and Emerging Markets



Aaron Sydor A/Director – Current and Structural Analysis Office of the Chief Economist International Trade Canada





- What is a global value chain?
- Is this new?
- Global Value Chains and Emerging Markets
- What does this mean for Canadians?

What is a Global Value Chain?



- A value chain describes the full range of activities that are required to bring a product from its conception to its end use and beyond. This includes activities such as design, production, marketing, distribution and support to the final consumer.
- The activities that comprise a value chain can be contained within a single firm or divided among different firms.
- Value chain activities can be contained within a single geographical location or spread over wider areas. Global value chains are ones in which activities are divided among multiple firms and spread across wide swaths of geographic space.

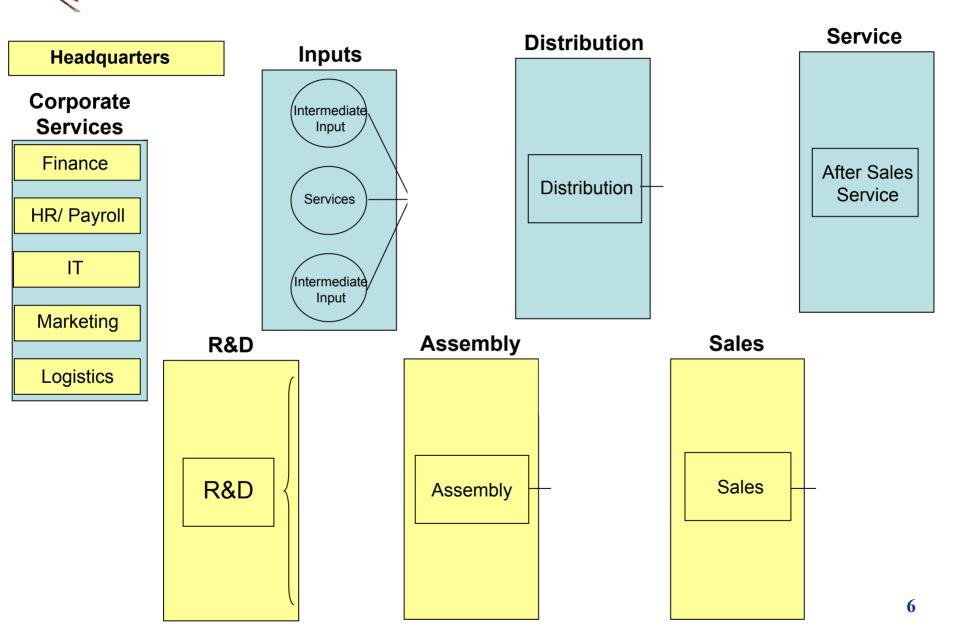


Headquarters

Corporate

Services	R&D	Inputs	Assembly	Distribution	Sales	Service
Finance	(Intermediate				
HR/ Payroll		Input			[]	
IT	R&D	Services	Assembly	Distribution	– Sales –	After Sales Service
Marketing		Intermediate				
Logistics		Input				

Value chain ... individual functions become separable



Which can then be located anywhere in the world





Global value chains are not just about multinationals

- "Locating operations" is not just about multinational enterprises locating parts of the firm through equity investments.
- Non-equity relationships, including contracts and joint ventures also fall under global value chains.
 - For example, multinationals contracting to other MNEs or to SMEs to perform certain activities.
- Many SMEs sell into a global value chains
 - Exporting to or importing from a global value chain, or
 - serving a Canadian or foreign MNE which operates abroad without ever exporting or importing.
- The same factors that will make a country a competitive location for multinationals will also help SMEs undertaking that function.
 - For example, if a particular location is the most efficient for a multinational to set-up its R&D facilities

A global value chain is a generalized form of other trends

- <u>Outsourcing:</u> In 1970s and 1980s, firms began to separate out individual functions once done inside the firm could now be done outside...particularly non-core services.
 - Contributed to the rise of the services economy.
- <u>Off-shoring:</u> Moving some, usually low-skilled, manufacturing to low cost-destinations abroad.
 - In important contributor to the rise of Southeast Asian Tigers and, more recently, China.
- <u>Off-shore Outsourcing:</u> Extending outsourcing internationally, but could be done within or outside the firm.
- <u>Concentration on Core Functions:</u> Firms are re-examining their contribution to the production process and focusing on core activities.
- <u>Global Value Chains:</u> A generalized version of these trends that has the ability to look forward; what determines which functions can be fragmented and the determinants of their location. 9

Global value chains describe an evolution from horizontally to vertically integrated production

International Expansion

 Branch plants replicate domestic structure.



Outsourcing of Production

• Major manufacturing functions outsourced.

Global Value-Chains

 Both production and services located according to where they are most efficient.

International Specialization

• Plants specialize in production.

Outsourcing of Services

• Service inputs now outsourced.

1950s	> 1960s >	>1970s >	> 1980s	<u>>1990s00s</u>
Canada is a net importer of both vehicles and parts.	1965 – Canada-U.S. Autopact 1968 – Canada	In 1960, MAGNA receives first contract…for GM to produce "metal-	Over the decade, direct employment at GM's assembly plants in the U.S. declines by	1996 – GM spins-off EDS. Holds open tenders for IT services in order to
Very little cross-border trade.	becomes a net exporter of finished vehicles while staying	stamped sun visor brackets".	60,000 – almost 40% of total employment as a result of	increase competition and lower costs.
	net importer of automotive parts.	By 2003, MAGNA employment in Canada matches GM	automation and outsourcing of services.	GM now contracts its IT to a variety of companies such as
	1969 – General Motors of Canada Ltd. Is	at roughly 22,000		EDS and IBM, both of which now have
	created.	GM formally spins-off its parts manufacturing business as Delphi in 1999.		operations overseas in order to reduce costs.

Is this New?



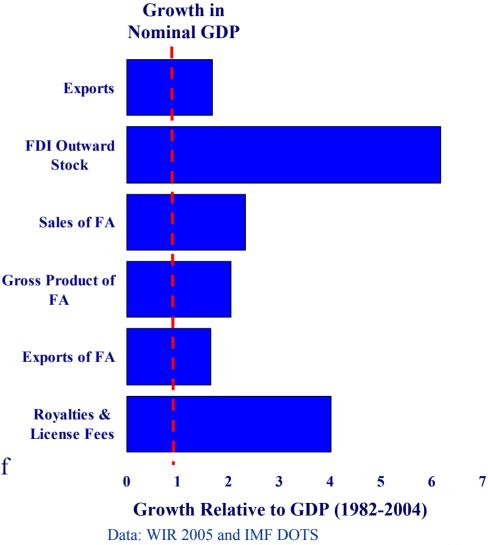
Global value chains are not new...

- There has always been trade in intermediate inputs.
 - Has been well studied in economics: Standard trade theory applies, fragmentation of production (Jones).
- True GVCs emerged with the multi-national corporation: Dutch East India Trading Company (1602), Hudson's Bay Company (1670).
 - Again well studied: boundaries of the firm (McManus, Coase), FDI (Dunning, Caves, Safarian).
- As of 1990, there were 37,000 MNEs with at least 170,000 foreign affiliates. But as Rugman and others have pointed out, they were mostly regional and most affiliates and nearly all parent companies were located in developed countries.
 - By 2004, the number of MNEs had nearly doubled to 70,000 and foreign affiliates expanded four-fold to 690,000. More than onequarter of parents and almost half of affiliates are now located in developing countries (includes NICs).

...but they are growing in importance

- Global value chains are not new, they have, to some extent, existed as long as trade in intermediate products has taken place, but they are now reaching a critical mass.
- There is not one simple measure of global value chains. Between 1982 and 2004, global GDP in nominal terms, grew 246%, by comparison...
 - exports grew much faster at 413% or 1.7 times as fast. FDI outward stock grew more than 6 times as fast.
 - Similarly, gross product of foreign affiliates was equal to 5.5% of global GDP in 1982, by 2004 this had increased to 9.8%.
- Even these statistics understate the scope of global value chains as they do not capture non-equity relationships between firms.

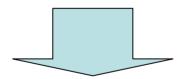
Growth in Global Value Chains





It is evolution rather than revolution... Business is simply responding to its external environment

- Declining costs of transportation:
 - Mostly air transport
 - Containerization (?)
- Improvements in ICT technologies
- Reduced barriers to trade and investment
 - Multilateral, regional, bilateral and unilateral
- Movement toward outward oriented market economies



- Individual stages in the value chain can be controlled/monitored from greater distances
- Network costs have declined
- Markets can be served from greater distances
- Competition is increasing

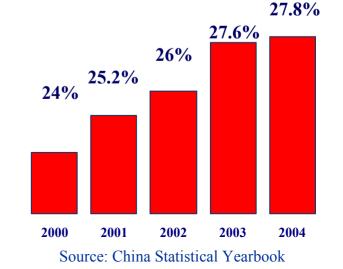
Global Value Chains And Emerging Markets

The rise of global value chains is driving growth in the China and many emerging markets

- Because firms are able to locate operations anywhere in the world, based on where it is most efficient to do so, vast amounts of production capacity is moving to places like China, India and South-East Asia, driving growth in those countries.
 - In China, for example, foreign affiliates account for more than one-quarter of all industrial production and 58% of China's total exports while employing more than ten million people.
- But, it is not just about global multinationals. Domestic small and medium enterprises (SMEs) are also growing as they feed into global value chains – such as through outsourcing to IT firms in India or contract manufacturing of low-end manufactures in South-East Asia.



Foreign Affiliate share of Industrial Value Added

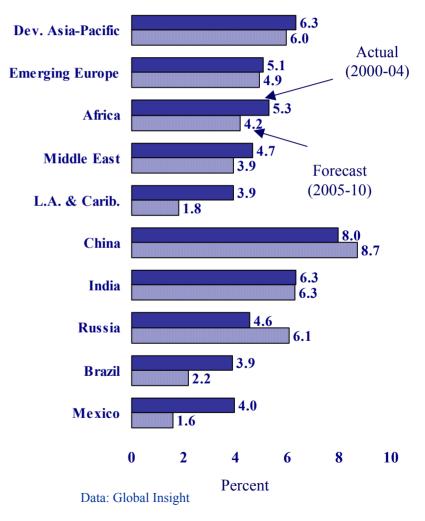


16

Emerging economies will become increasingly important as engines of growth

- Nearly all developing regions (with the notable exception of Latin America and the Caribbean) are expected to grow faster than the global average over the next five years.
 - This implies a growing economic importance and influence globally.
 - The adoption of market-oriented economic policy in these regions is largely responsible for their renewed economic performance.
- Some economies are expected to perform much better than others, however.
- China, both for its size as well as sustained high rates of growth, attracts a lot of attention. But all of East Asia is experiencing rapid growth.
- India and Eastern Europe are also expected to perform well.

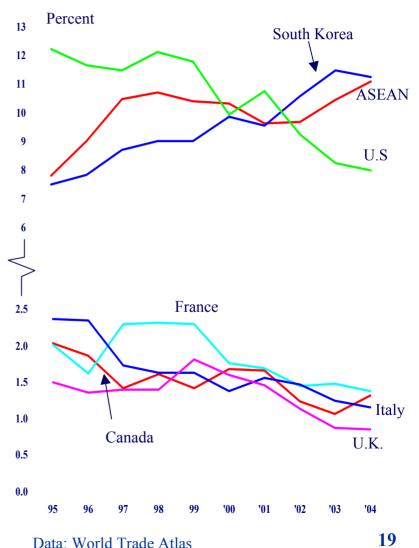
Annual Average GDP Growth



What Does this Mean For Canadians?

There will be opportunities in the form of new markets for Canadian goods and services...

- China offers a potentially enormous market for Canadian exporters and investors. With an estimated population of 1.3 billion, China is the 6th largest economy in the world. And, with an average annual growth rate of 9.7% since 1990, is one of the fastest growing as well.
- Canada has not performed well in the Chinese market, however, with Canada's share of Chinese imports falling from 2.0% in 1995 to1.3% in 2004.
 - This is largely due to the fact that growth in intra-regional trade has outpaced that of inter-regional trade - most countries outside the region have lost share while those closer have increased.
 - Distance will place some limit on the extent to which China will become a leading market for Canadian exports.



Share of China's Merchandise Imports

...but these same emerging economies will also pose new challenges

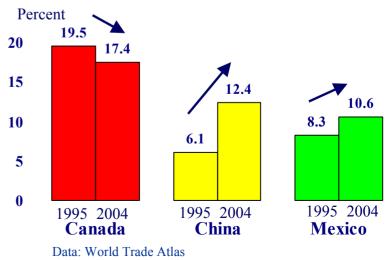
- The emergence of China and other low-wage countries will not only provide an opportunity for Canada, but also a challenge in the form of increased competition at home and in our most important foreign markets.
 - The share of Canadian production in Canadian consumption has declined 2.0 percentage points while the share of Chinese imports has increased 2.2 percentage points.
 - A similar trend is observed in the U.S., where the share of Canadian exports has fallen off somewhat while the share of China has increased significantly.
- This is not to say that China is necessarily displacing Canadian exports as the two currently do not, for the most part, compete on the same products; but as China moves up the value chain an increasing proportion of the Canadian economy will come in direct competition with China.

Share of Canadian Market

	1995	2003	Chang e
Canad a	38.9%		↓ 2.0
China	China 1.3%		† 2.2

Data: Statistics Canada

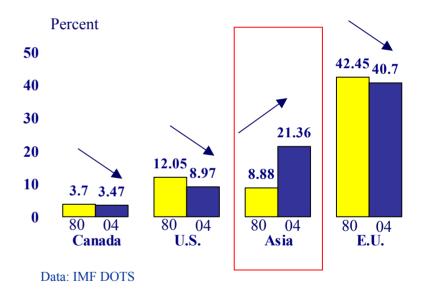
^e Share of U.S. Merchandise Imports



Canadian companies will be required to form new relationships and enter unfamiliar markets

- The most immediate impact of the emergence of global value chains will be that Canadian companies which may have previously had well developed relationships with suppliers and buyers – many American – will now be forced to re-prove themselves and form new relationships.
- This is likely to be in markets where Canadian companies have not traditionally been as active in the past and with new players.
 - Canada, the U.S. and E.U. have all seen their share of global manufacturing exports decline while new players, particularly in South-East Asia, including China, have seen their shares increase.

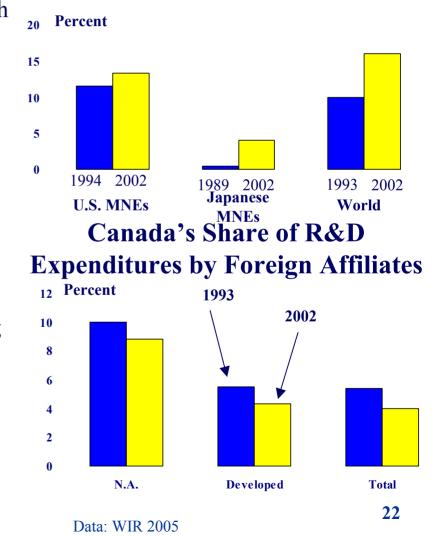
Share of World Manufacturing Exports



But, possibly more importantly, will raise the cost of maintaining inefficient policies...

- The biggest impact of the emergence of global value chains is that firms are increasingly able to shop for the best location in the world from which to conduct their operations.
 - Multinational enterprises, for example, once conducted most of their R&D in their home country, but are increasingly looking abroad to undertake these and other knowledgeintensive activities.
- Small policy differences between alternative locations may become increasingly important....particularly for the knowledge-intensive activities that are critical to maintaining and growing the standard of living of Canadians.
 - Canada's share of global R&D being conducted by multinational enterprises, for example, has been steadily falling with emerging economies accounting for the difference.

Foreign Spending on R&D as a Share of Total by MNEs





- All advanced countries are increasingly recognizing the same factors create wealth...R&D, HQs, and skill intensive manufacturing and services.
- International competition for these stages of the value chain will increase.
 - An aging population in most developed countries combined with less supply from traditional supplying countries.
- The same factors that attract international mobile functions will also help non-mobile functions to prosper.
- A combination of international and domestic policies will make-up the policy mix necessary to make Canada an attractive location for these functions.
- International convergence of policy...small differences may start to become more important.

Global Value Chains and Emerging Markets



Aaron Sydor A/Director – Current and Structural Analysis Office of the Chief Economist International Trade Canada

