

Impacts of China on the Global Value (Supply) Chain: The wood sector

June 2005

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Summary

Global (Supply) Value Chain (GVC)

Wood exports from Chinese production

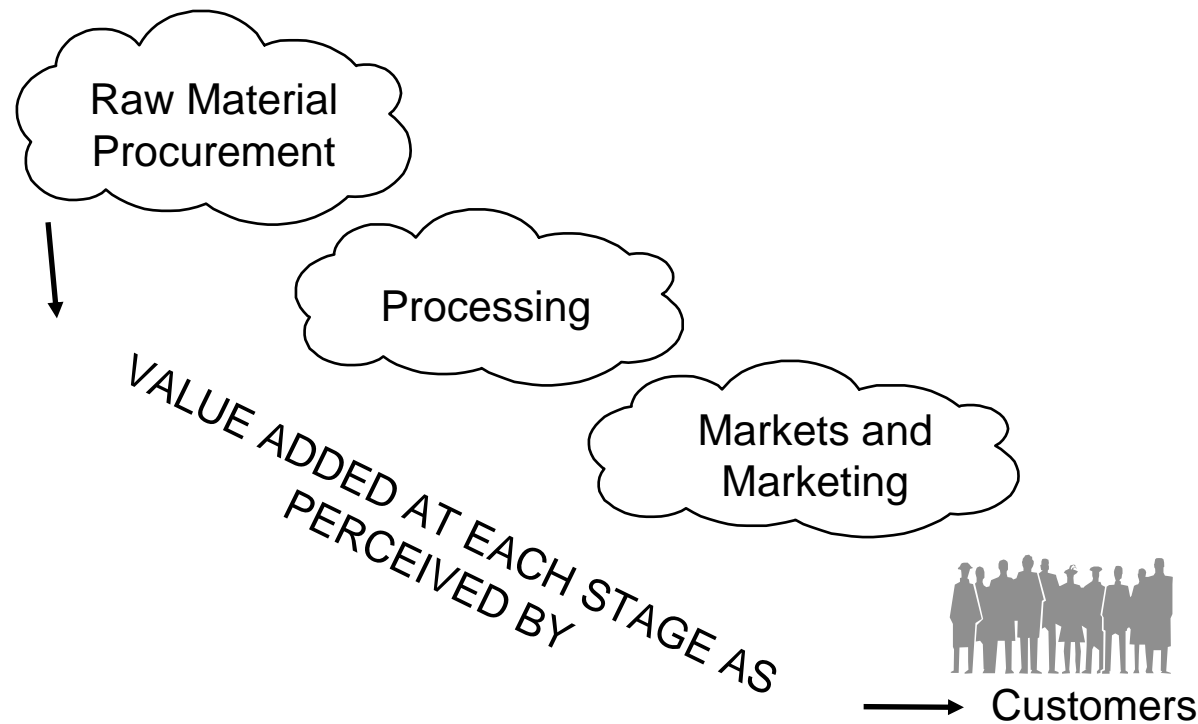
Raw Material Supply

Markets & Marketing

Current & Future Impacts on GVC

Global Value (Supply) Chain (GVC)

- ★ Increasingly connected world “value chains” are global



- ★ Start with focus on Processing - China's forte

GVC for Wood Products

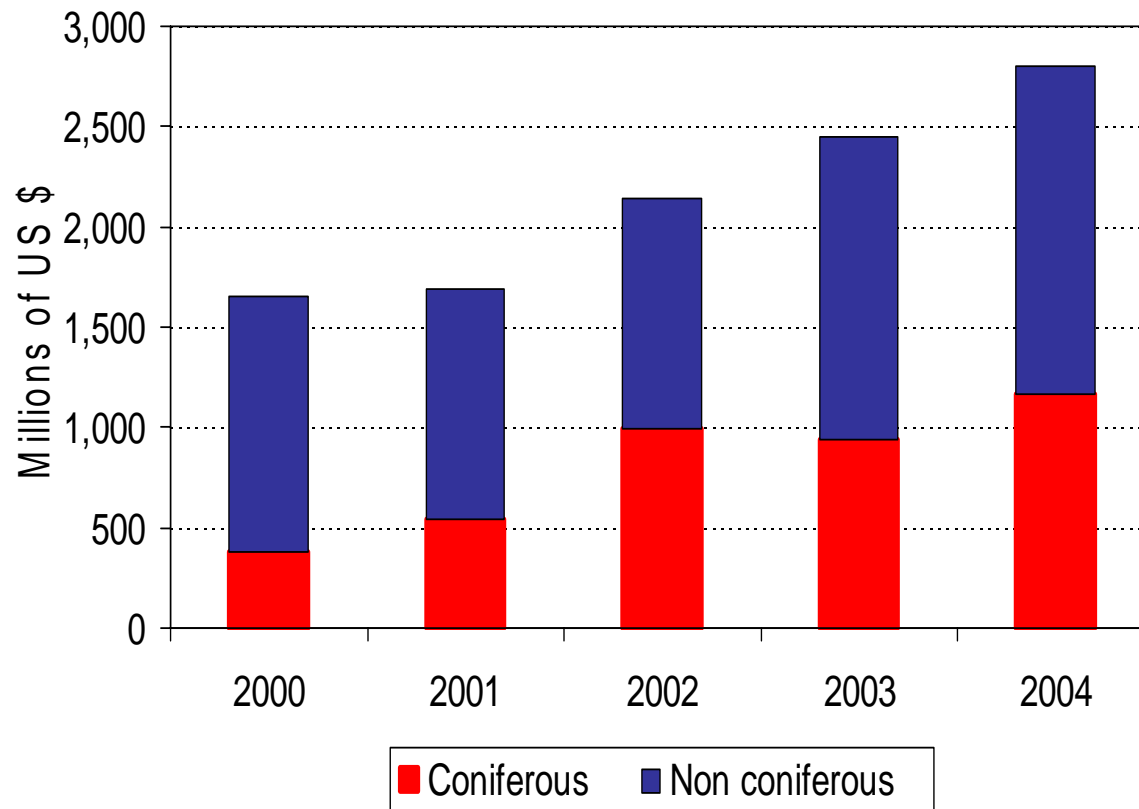
Processing - China

- ★ Large increases in investment in primary (MDF, plywood, pulp, sawmills, etc.)
- ★ Large investment in secondary (furniture, moulding, flooring, doors, etc.)

Investment continues today!

- ★ Investment based on “network capitalism” i.e. connections - more later
- ★ Some examples follow with all data from: Eurostat, US Dept. of Commerce, US Bureau of Census and World Trade Atlas

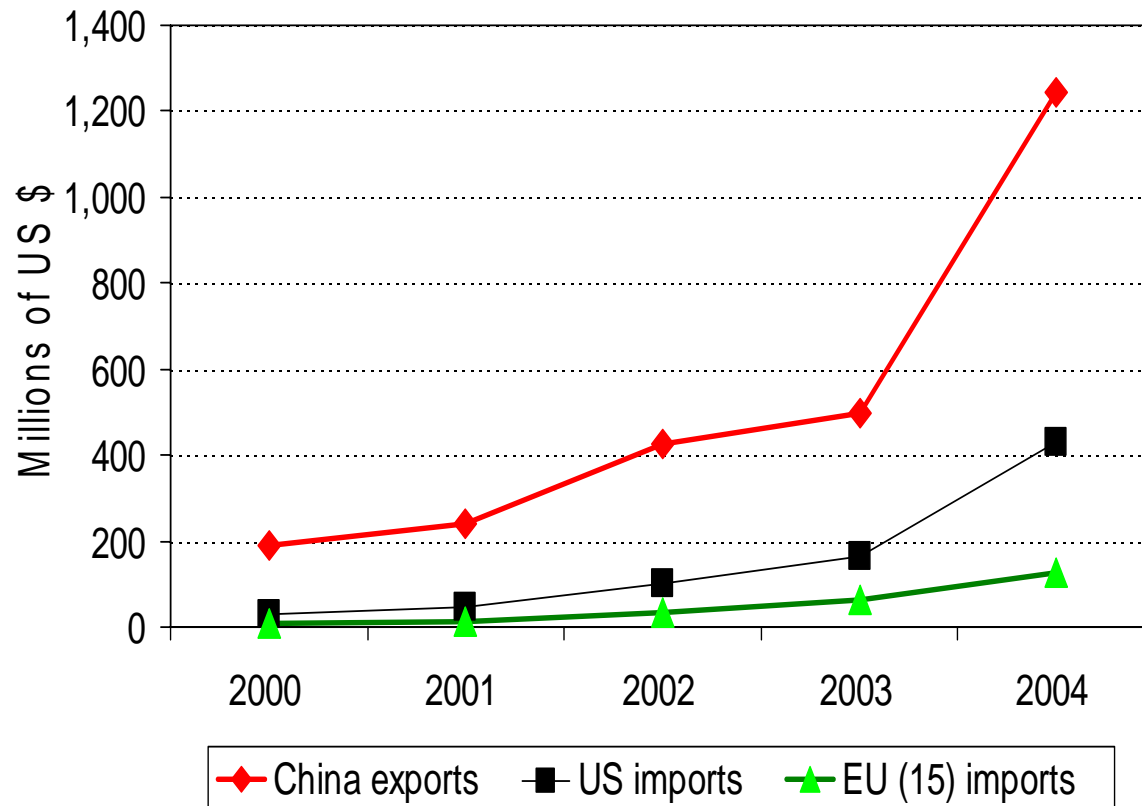
HS 4403, Chinese Imports of Logs (value)



Source: China Customs and WTA

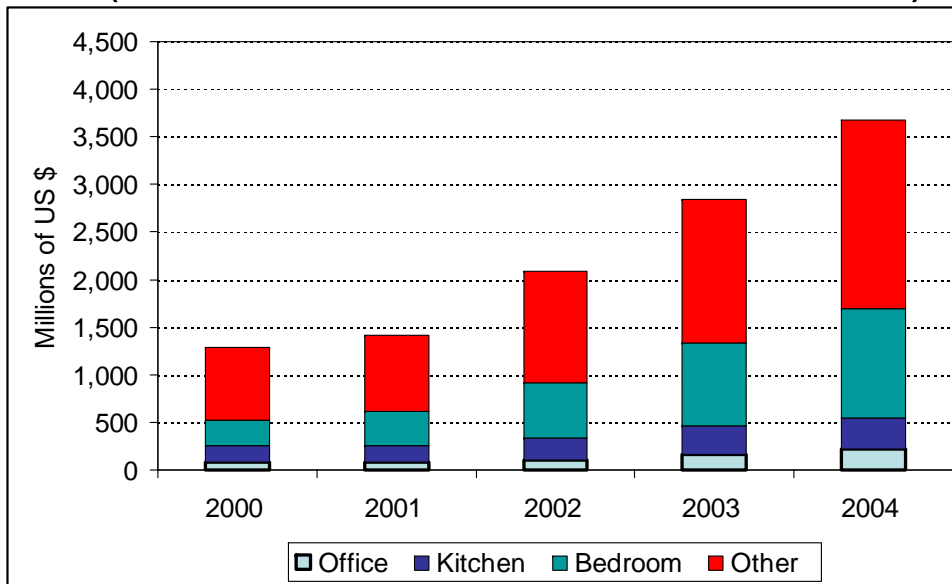
- ★ This includes logs legally imported from both illegal and legal sources but not logs smuggled into China
- ★ Share from Russia ↑ from 22% (00) to 47% (04)
- ★ Increased value from all regions but EC due to currency
- ★ Infrastructure development to ↑ vol. & value from Russia

HS 4412, Plywood and Veneer



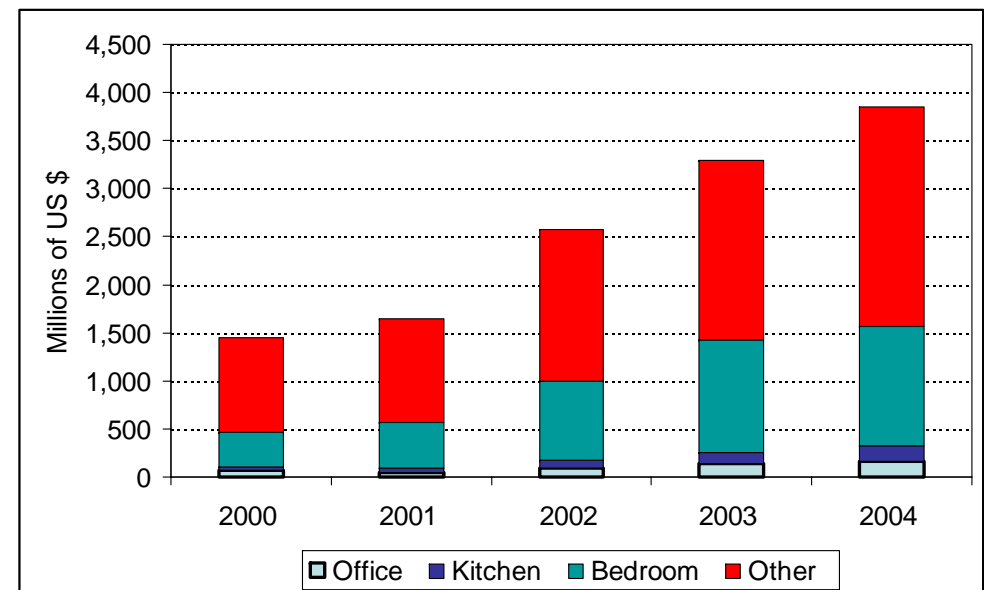
- ★ China increased exports 60% each year since 2000
- ★ Uses imported logs
- ★ >1/3 of US imports (double share 2000)
- ★ ~ equal amounts hardwood & softwood
- ★ SW -- Russian logs
- ★ HW – Russian, European, + SE Asian logs
- ★ Uses legal & illegal logs

Chinese exports of furniture (office, kitchen, bedroom, other)



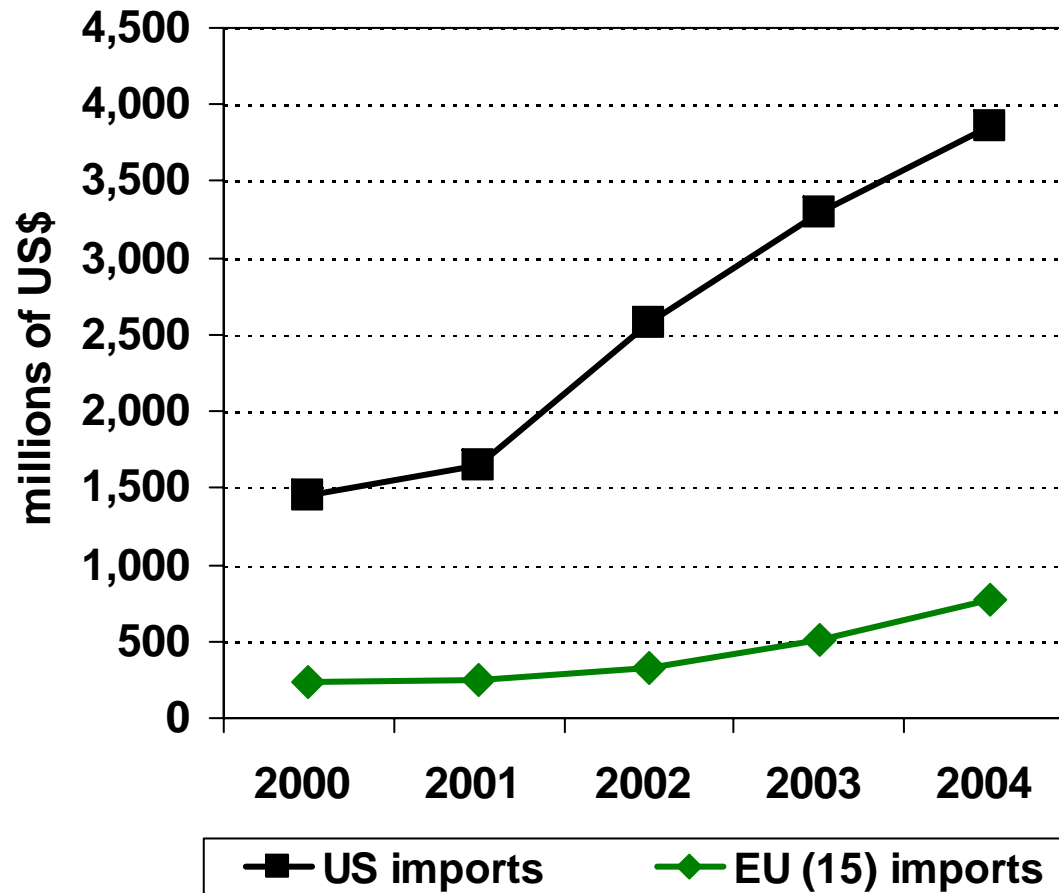
- ★ Exports ↑ >37% each year
- ★ US imports >> than Chinese total exports → DATA SUSPECT

US Imports of furniture (office, kitchen, bedroom, other)



- ★ Wooden seats (upholstered and not) add >\$1 billion more to US imports
- ★ Factories in China still expanding

US & EC imports of 4 furniture segments

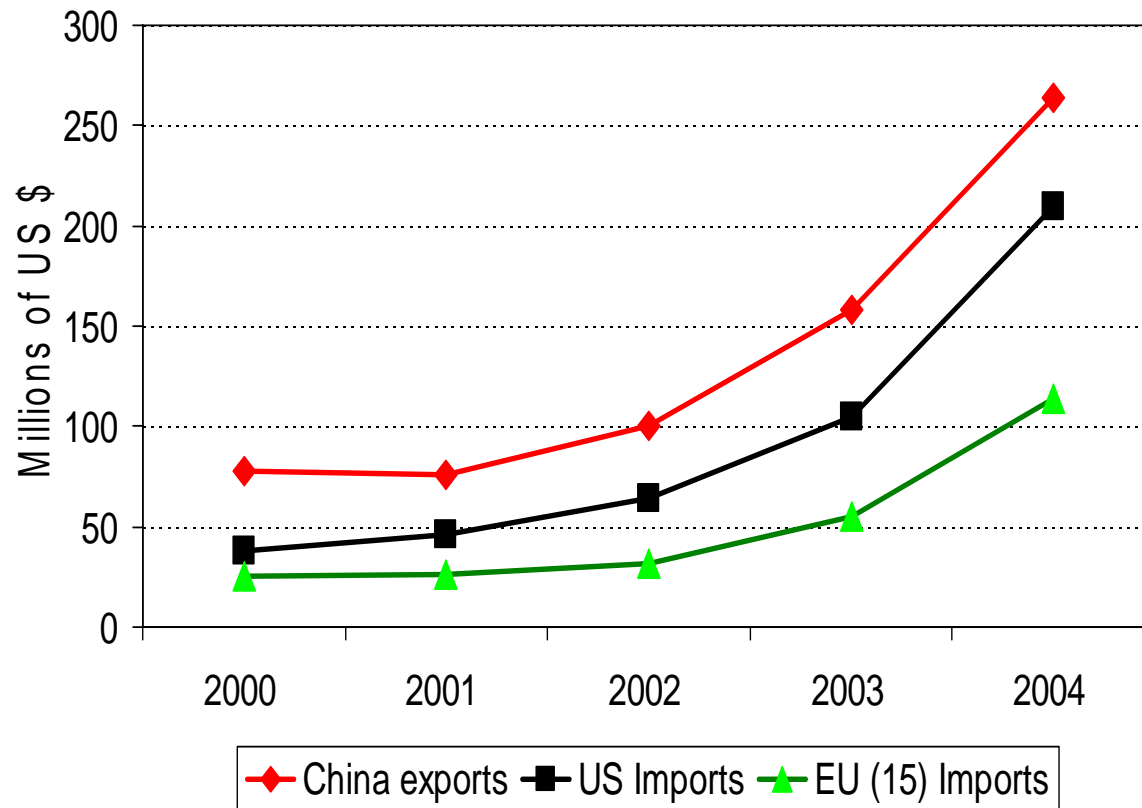


- ⬠ Increased competition from Viet Nam
- ⬠ Increased US resistance to China imports (battle royale between domestic producers and outsourcing mnfctr & distributors)
- ⬠ Mix of very poor and very high quality



Source: Kent Wheeler
Weyerhaeuser

HS 440920, HW tongue & grooved lumber (flooring)

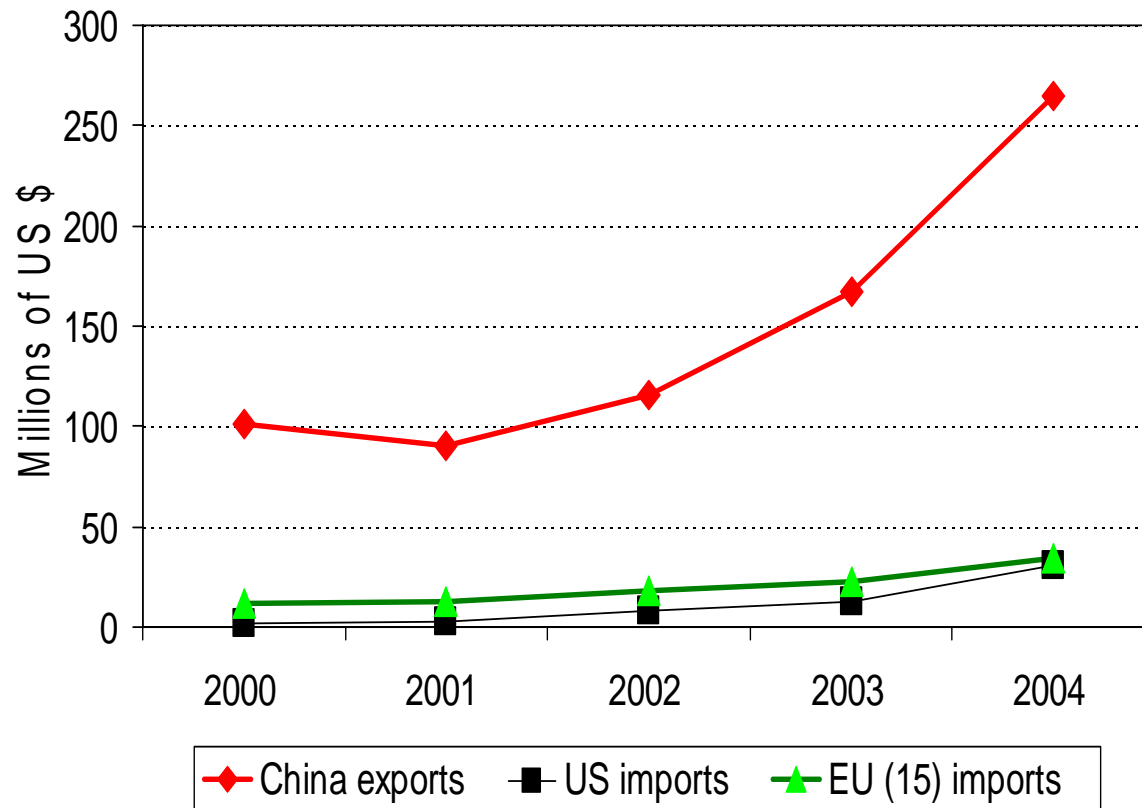


- ★ 80% of China exports to US
- ★ Exports ↑ >35% each year
- ★ US + EU imports > China exports (??)
- ★ US accounts for >1/3 of all imports
- ★ Often OEM eg Bruce HW Floors
- ★ Expansion in China continues unabated
- ★ Pressure on suppliers = ↑ costs for RM, power & transport BUT no ↑ in selling price



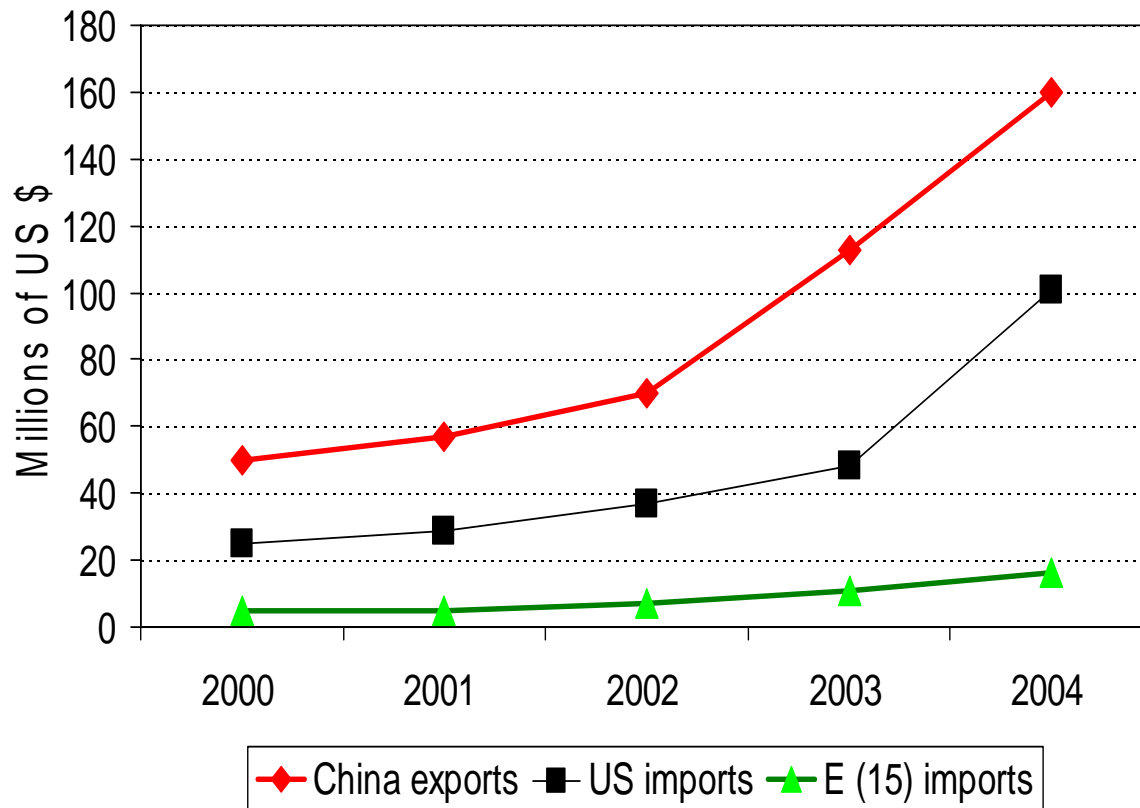
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HS 441820, Doors, frames & thresholds



- ★ Exports double each year
- ★ Expected to continue for 2005 (plant coming on stream for 2 million/year)
- ★ US & EC recent target, following SE Asia
- ★ Pressure on suppliers = ↑ costs for RM, power & transport BUT no ↑ in selling price

HS 441890, Other builders joinery and carpentry



- ★ Exports ↑ >33% each year
- ★ US export target (63% of Chinese exports)
- ★ Chinese production continues to ↑
- ★ Raw material supply from Russia, MDF plants, NZ, SE Asia
- ★ Pressure on suppliers = ↑ costs for RM, power & transport BUT no ↑ in selling price



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Chinese Investment

Wood Manufacturing Plants

- ★ Investment based on “network capitalism”
 - ✓ loans based on connections (cronyism, NOT corruption, based on Confucian hierarchical rules of relationships)
 - ✓ “Guanxi” is foundation of getting loans from banks, permission from government agencies, consistent power supply, environmental approvals, export permits, etc.
- ★ SOE's replaced by proliferation of Township and Village Enterprises (TVEs)
 - ✓ shift from central control of business to regional control
- ★ Gov't still controls business through loans, appointing Directors, permitting, power allotment, TVE's, etc.
 - ✓ indirect control of ALL businesses by communist party

Chinese Investment

Wood Manufacturing Plants

- ★ Economic growth drives all decisions
 - ✓ **creating 15-20 million jobs a year is priority**
 - ✓ little regard for profit, competitiveness, strategy, planning beyond the short term, environmental concerns, impact on raw material supply or markets (ie rest of value chain), etc.

employment, increasing production, exporting, are
all more important than PROFITS

- ★ Many hollow businesses will eventually fail

*Rationalization, Restructuring & Reform will transform
Chinese wood sector within five years*

Chinese Investment

Rationalization, Restructuring & Reform

- ★ Some sectors will thrive due to comparative advantages
 - ✓ eg furniture, solid & eng. wood flooring, doors
- ★ Some sectors will wither
 - ✓ eg laminate flooring, MDF, HDF,
- ★ in each sector there will be winners
 - ✓ based on cost controls, basic business knowledge, business ethics, planning skills, profit potential
- ★ and losers
 - ✓ due to poor business skills and ethics, little planning, no strategy,

Restructuring

Will be triggered by impacts to neglected parts of global value chain

Raw material supply
&
Markets

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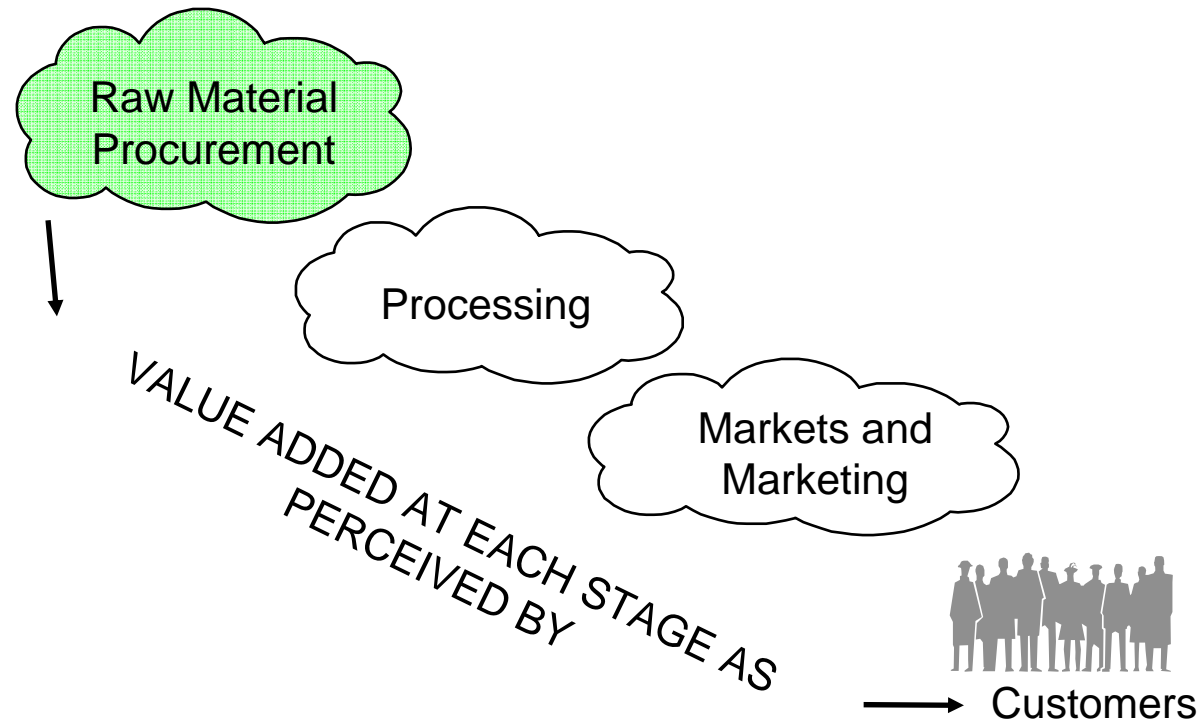
Raw Material Supply 

Markets & Marketing

Current & Future Impacts on GVC

Global Value (Supply) Chain (GVC)

- ★ Processing shifting to China → Raw Material Procurement for China is Going Global



China importing logs and lumber globally

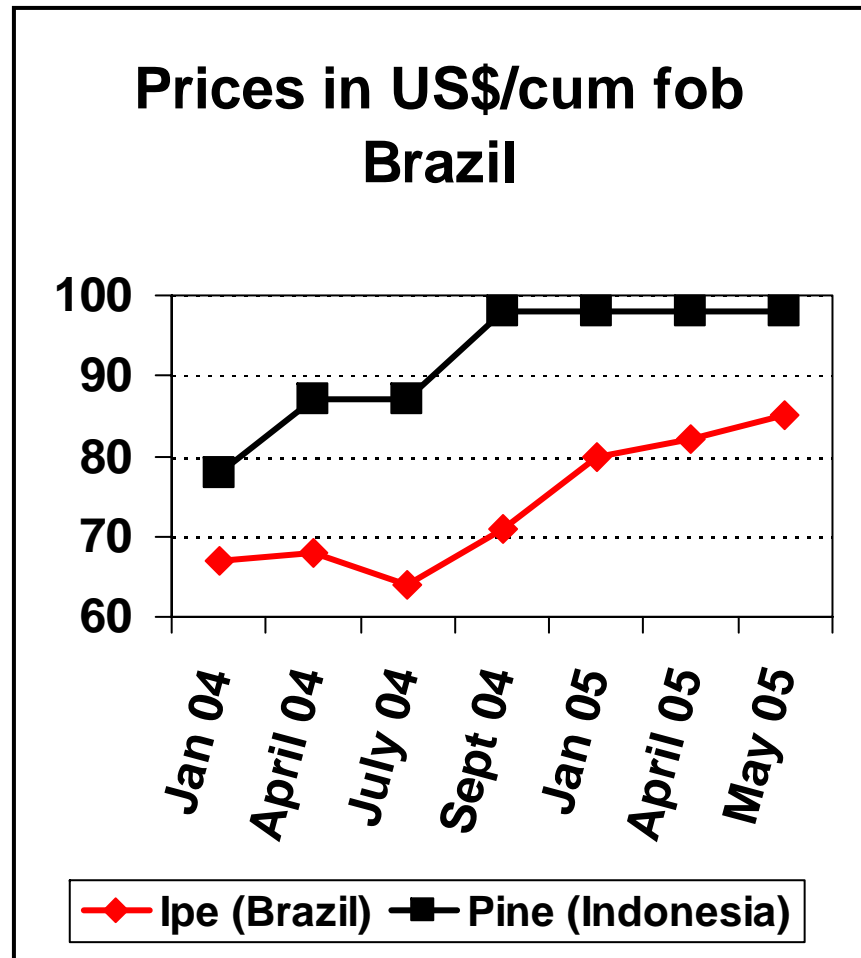
- ✓ Logs/lumber Africa (eg Gabon), Asia (eg Indonesia), Oceania (NZ), S. America (Brazil), N. America (USA), Europe (Germany), Russia (RFE),
- ✓ Illegal logs & lumber (Myanmar, PNG, Indonesia, RFE, Vietnam, etc.



GVC for Wood Products

Raw Material Procurement

- ★ separate (but overlapping) supply for HW & SW
- ★ global prices for both legal & illegal wood ↑
- ★ continuous expansion in China
 - ↑ shortages of HW & SW logs
 - ↑ prices - highly competitive sourcing
- ★ ↑ energy costs
 - ↑ operating & transport cost
 - ↑ price to China
- ★ pressure on RMB exchange rate
 - ↑ cost pressures



GVC for Wood Products

Raw Material Procurement

- ★ no more cheap illegal hardwood
 - ✓ illegal wood will provide supply BUT at global prices due to shortage of hardwood logs and lumber
- ★ limits to illegal wood
 - ✓ **unsustainable** ecologically and practically
 - ✓ increased **market pressure** (see new certification in markets section)
 - ✓ China **WILL** run out of illegal wood as plantations continue to be degraded
- ★ flood will continue but the growth in quantity has peaked (this may be wishful thinking) and will decline erratically over next 5 years



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Raw Material Procurement

Pressures on Supply

- ★ Successful strategies replicated quickly
 - ✓ flooring plant setting up sawmills & buyer in Brazil → 4 more firms planning the same in < 6 months → escalating prices between Chinese firms
- ★ In China basic assumption that supply exists for all increased production
 - ✓ short term perspective + lack of planning → growing but unprofitable production & huge pressure on resource
 - ✓ plans for production expansion does not include raw material sources
 - ✓ sourcing going global with Chinese buyers scouring the globe for wood supply (mostly HW)

Raw Material Procurement

Pressures on Supply

- ★ Pressure on hardwood is severe
 - ✓ NFPP led to ↓ harvests in China
 - + ↑ demand for wood for remanufacturing
 - ↑ illegal logging in China, Russia, Indonesia, etc.
- ★ Recent controls on illegal logging in Indonesia + eia/telepak report
 - ↑ desperate search for more supply (Africa, RFE and EC log imports)
 - ✓ media attracted to simplicity of legal logs
 - ✓ may actually resonate with consumers in developed countries
- ★ Dramatic increase in illegal log imports
 - ✓ China refuses to follow Malaysian lead requiring proof of legal source of imported logs
- ★ Increased harvesting of under-aged plantations
 - ✓ used for feed stock for growing # of pulp & MDF plants
 - ✓ have seen 3-4 yr old Poplar used in MDF plants

Raw Material Procurement

Pressures on Supply

- ★ Port development in Shanghai will facilitate ↑ imports from RFE by ship (both legal & illegal and both hardwood and softwood)
 - ✓ expect softwood lumber mills near Shanghai producing dimension SW lumber for US market
- ★ Continued expansion of HW using industries (flooring, doors, furniture, moulding)
 - ✓ little thought given to long term supply
 - ✓ sustainability considerations lacking
- ★ Lack of proof of sustainable raw material source MAY become tool to restrict imports to EC and NA
 - ✓ legality of logs becoming certification issue with greater resonance than current complex certification schemes

Supply constraints may be the trigger for restructuring & rationalization of sector in China



Suifenhe Rail Yard - RFE

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Source: Kent Wheeler Weyerhaeuser



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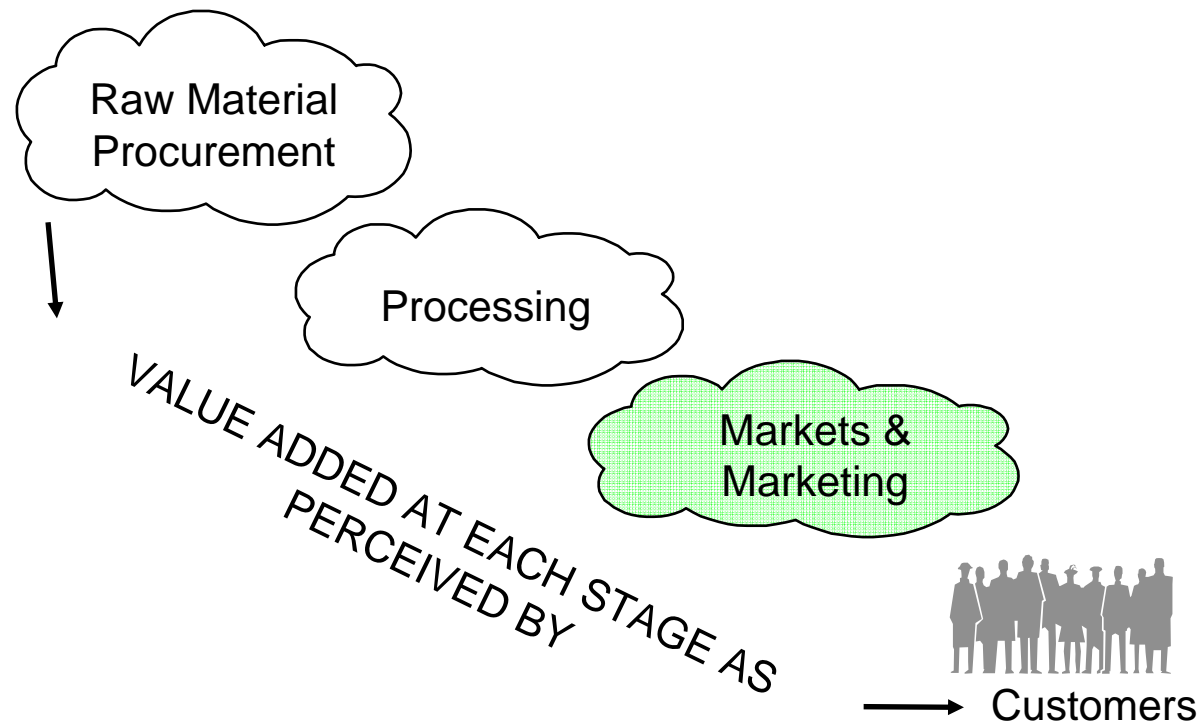
Raw Material Supply

Markets & Marketing 

Current & Future Impacts on GVC

Global Value (Supply) Chain (GVC)

- ★ Processing shifting to China → Expanding Global Markets Needed to Absorb Supply



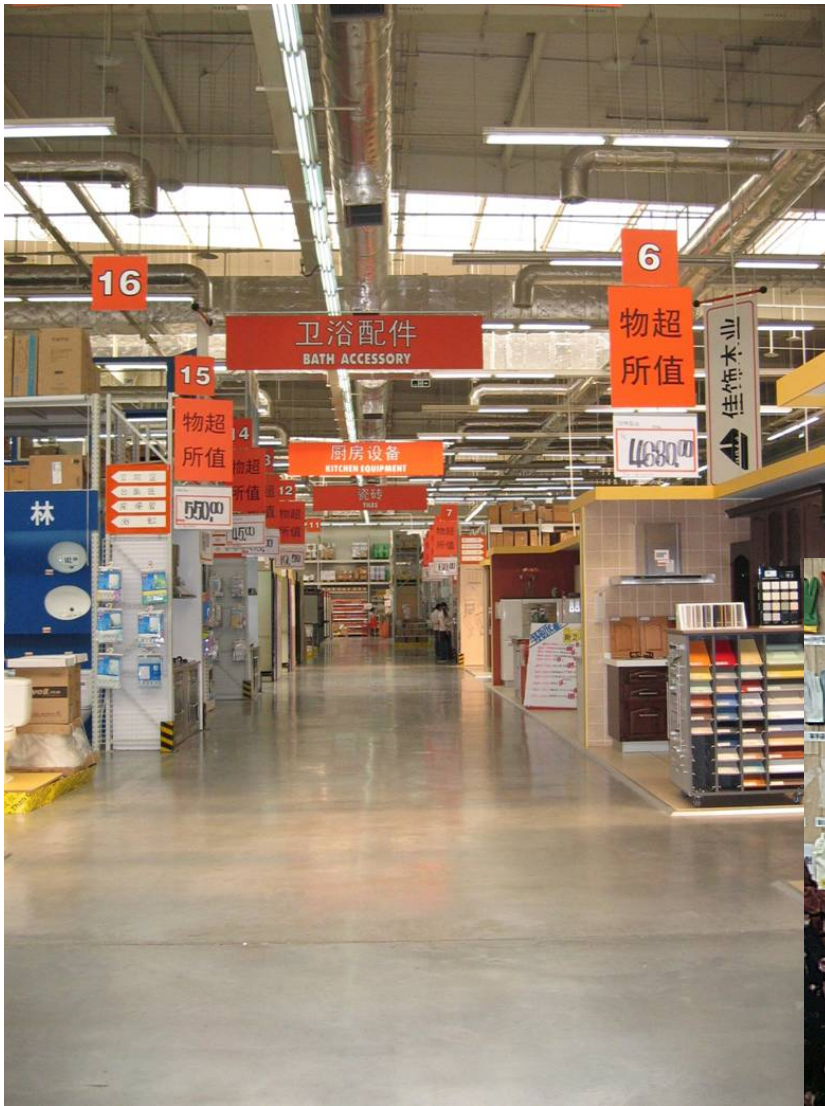
Internal Chinese Market

- ★ Internal market has low quality, low cost requirements with small but growing “quality class”
- ★ Infrastructure being built for wealthy class not yet in existence
 - ✓ In Shanghai average income is \$US 7,000 per year (triple China avg.) but apartments sell for \$110,000 + (in Canada this would mean an avg. price for apt. in city of US\$ 785,000)
 - ✓ Empty high end dept. stores selling goods few can afford
 - ✓ Empty home centres selling materials and products beyond the reach of most consumers
- ★ Is Chinese growth producing enough of the right type of consumers to create an internal market to drive growth?

Will economic growth provide future customers or is this a bubble about to burst?

What is future of massive retail expansion?

← China - 50:1 ratio clerks: customers



Japan - 50:1 ratio customers clerks →



GVC Markets & Marketing

Export Markets

- ★ No concern with **unintended market consequences** due to rapid distortion of market norms
- ★ Some examples of consequences to date
 - ✓ rapid expansion of furniture exports → ↑ share in US → protectionist reaction + new competitors (Vietnam +)
 - ✓ rapid decline of market price → rapid ↑ exports of low cost laminate flooring to Canada → dumping tariff of 6-27% (May 05)
 - ✓ even the expectation of massive imports (EC & textiles) → to negotiations for “voluntary restrictions” (model is past US/Canada Softwood Lumber agreements)

In China producers consider all dumping accusations to be political and not economic and respond by changing target markets and not operations

GVC Markets & Marketing

"employment, increasing production, exporting,
are all more important than PROFITS"

★ Consequences of these drivers are:

- ✓ Chinese production expands without identifying markets
- ✓ vaguely refer to US, Japan or Europe as target market
- ✓ in wood sector there is little understanding of basic marketing or branding concepts
- ✓ no time to develop business models, even short term (2 year) business plans
- ✓ proactive marketing (rather than reactive)
- ✓ pull strategies rather than push strategies
- ✓ little use of proper patents (intellectual property rights huge problem in China) or ILO safety standards

GVC Markets & Marketing

*Annual increase of imports from China 2000-05
compounded annually*

item	EC (15)	USA
doors	30%	105%
moulding	46%	41%
furniture	34%	28%
flooring	46%	61%

Source: World Trade Atlas for EU (15) and US imports from China

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Overall Impacts on GVC

In some product/market sectors changes due to Chinese manufacturing requires only partial adjustment

Product/market	Raw material supply	Markets & marketing
Solid wood flooring in USA	<ul style="list-style-type: none">✓ ↑ pressure on HW supply & prices✓ lack of concern of legality of supply	✓ USA already outsourced flooring so just shift in locale
Wood furniture in Japan	<ul style="list-style-type: none">✓ ↑ pressure on HW supply & prices✓ lack of concern of legality of supply	✓ Japan had outsourced flooring in 90's so just shift in locale

Overall Impacts on GVC

In other product/market sectors changes due to Chinese manufacturing are monumental

Product/market	Raw material supply	Markets & marketing
Solid wood flooring in EC	<ul style="list-style-type: none">✓ ↑ pressure on HW supply & prices✓ logs from EC → China & products return	✓ cost battle shaping up between new EC members and China for manufacturing jobs
Wood furniture in Canada & US	<ul style="list-style-type: none">✓ ↑ pressure on HW supply & prices✓ lack of concern of legality of supply	✓ furniture sector under serious threat from both China & new competitors (Vietnam etc.)

Future Impacts on GVC

Scenario A

Rationalization & restructuring of wood sector

Scenario A - upheaval but adjustment

- ★ China responds to US & EC pressure → profitability, intellectual property rights & business ethics become standard operating procedures
- ★ transition is difficult & requires independent (& enforceable) court, repayable loans, improved business planning & longer term strategic planning
- ★ will reduce (not alleviate) some pressures on raw material supply (price stabilization or decline) & provide opening to reduce illegal logging
- ★ market impacts will be mixed depending on product/market sector & how xenophobic US & EC become prior to change

Future Impacts on GVC

Scenario B

China continues headlong (profitless) expansion based on need to create jobs

Scenario B - unpleasant reactions

- ★ protectionist sentiment in US (and EC) → punitive trade restrictions (tariffs, quotas, etc.) on all Chinese goods
- ★ leads to breaches in the movement towards freer trade (replaced by fair trade)
- ★ international organizations (including trade) are less effective
- ★ most powerful markets (US & EC) make all trade rules
- ★ raw material supply markets thrown into chaos with erratic prices & ineffective environmental controls (even worse than today)
- ★ adaptation but lesser developed countries suffer most while EC and US use wealth to buffer domestic impacts

Future Impacts on GVC

Scenario C

Global recession, internal unrest in China, US moats

Scenario C - doom & gloom

- ★ China retains focus on internal growth and domestic policies & does not rationalize manufacturing sector (wood included)
- ★ US (& EC) pander to national sentiment and develop trade moats supporting "fair trade" and slap tariffs on all goods and services with strong lobby groups (business & ENGOs)
- ★ weakening of international organizations, global recession, & trade wars become common place with "blame" on China
- ★ rampant increase in illegal logging due to less international oversight and pressure and in recession environment takes a back seat to economic growth (env. still seen as luxury good)

Future Impacts on GVC

- ★ There are many more possible scenarios and I have noted just some
- ★ Regardless of which scenario, China, its evolving integration into the world economy, its selective adoption of market economics and its impact on the GVC will shape the next decade in global markets and wood supply
- ★ Efforts today can impact the scenario of the future and must take place IN China as well as globally
- ★ Efforts must go beyond the individual battles (eg illegal logging) and strategically address the need for China to be better integrated into the world, including global environmental & forestry issues



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