

Transformations of the Global Forest Products Sector: Drivers, Effects and Response

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Outline

- Drivers of global change
- Global forest sector in transformation
- Response to change in advanced forest nations
- Summary

Drivers of global change

- Population growth and urbanization
- Economic globalization
- Advances in information and communication technologies
- Climate change and energy
- Other environmental and social trends

Table 1. The World's Population in Benchmark Years and Annual Growth Rate

	Population (million)						Annual growth rate during the period (%)				
	1980	1990	2000	2005	2025*	2050*	1980 -1990	1990 -2000	2000 -2005	2005 -2025	2025 -2050
Africa	470	622	796	906	1349	1969	2.86	2.49	2.63	2.01	1.52
Asia	2632	3168	3680	3921	4759	5325	1.87	1.51	1.28	0.97	0.45
Europe	692	722	728	730	716	660	0.41	0.09	0.06	-0.10	-0.33
Oceania	23	27	31	33	41	46	1.57	1.52	1.23	1.09	0.46
Northern America ¹	256	284	316	329	386	457	1.02	1.09	0.81	0.80	0.68
Latin America ²	361	442	520	559	702	805	2.02	1.65	1.45	1.15	0.55
Developed countries	1126	1198	1249	1268	1314	1306	0.62	0.41	0.31	0.18	-0.02
Developing countries	3308	4065	4822	5210	6639	7956	2.08	1.72	1.56	1.22	0.73
World	4435	5264	6071	6477	7952	9262	1.73	1.44	1.30	1.03	0.61

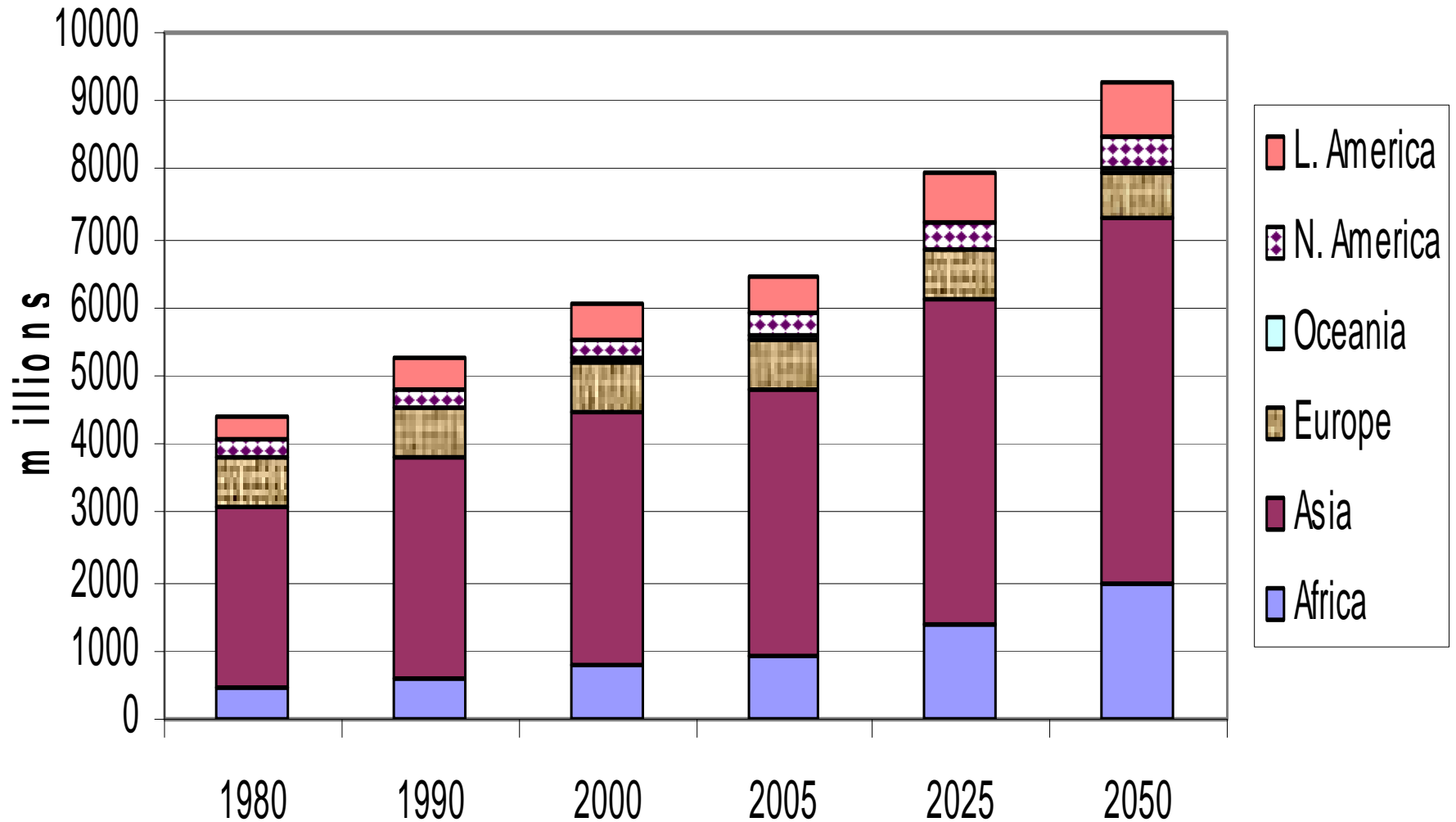
¹Northern America includes Canada and USA.

²Latin America includes Mexico, Central America and South America.

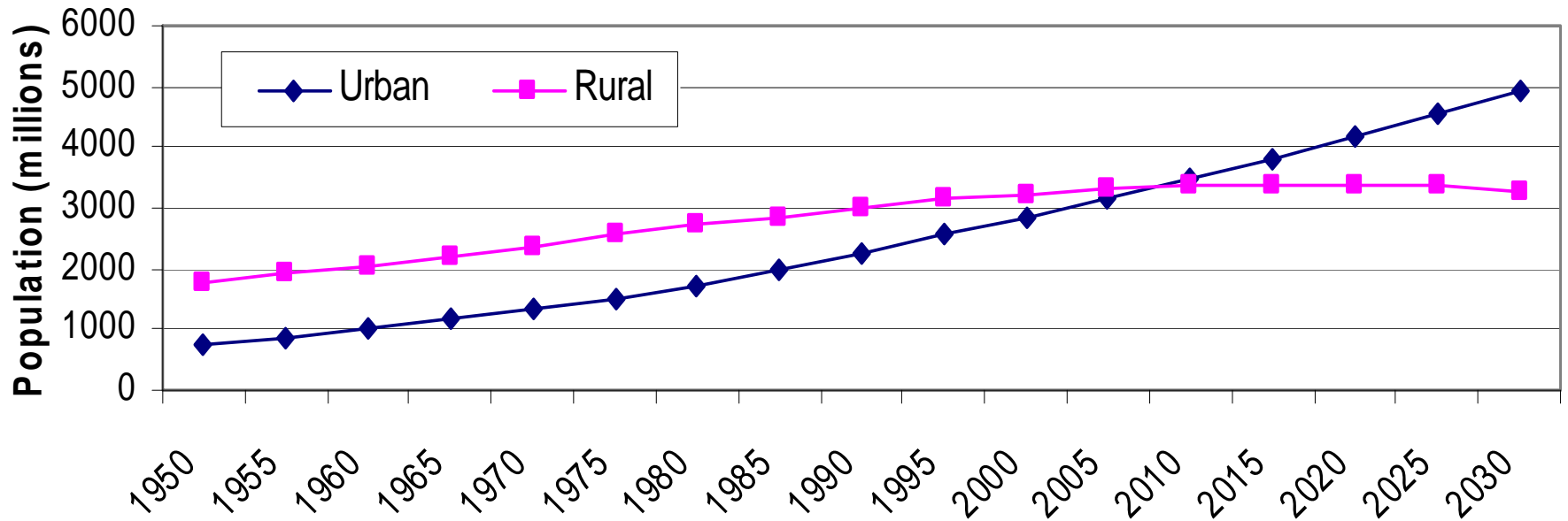
*Projected.

Data: World's Population Data Sheet 2005. Annual growth rates were calculated by the author. The numbers may not add up, due to rounding.

The World's Population, by Region

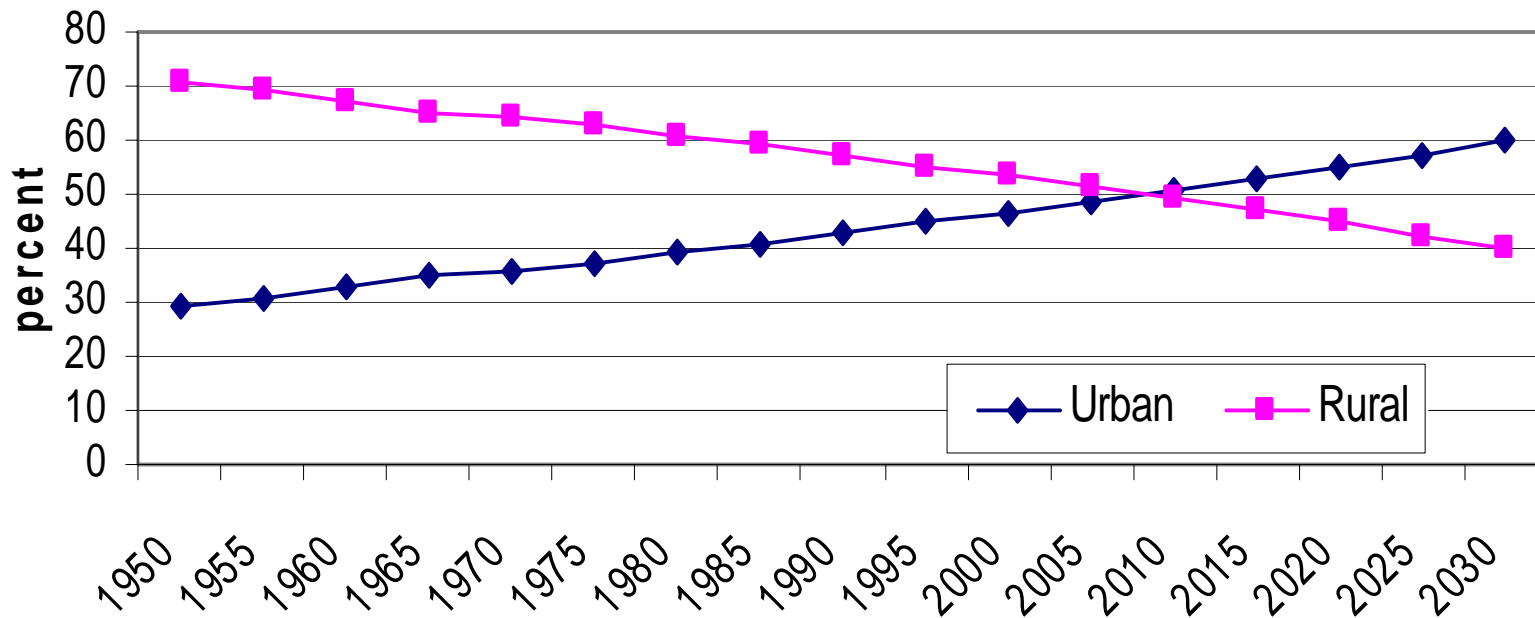


Urban and Rural Population of the World: 1950 - 2030



- Globally, urban population increased from 220 million in 1900 to 732 million in 1950;
- Urban population reached 3.2 billion in 2005, more than quadrupling since 1950;
- In 2030, nearly 5 billion people are expected to live in cities.

Rate of Change in the World's Urbanization: 1950 - 2030

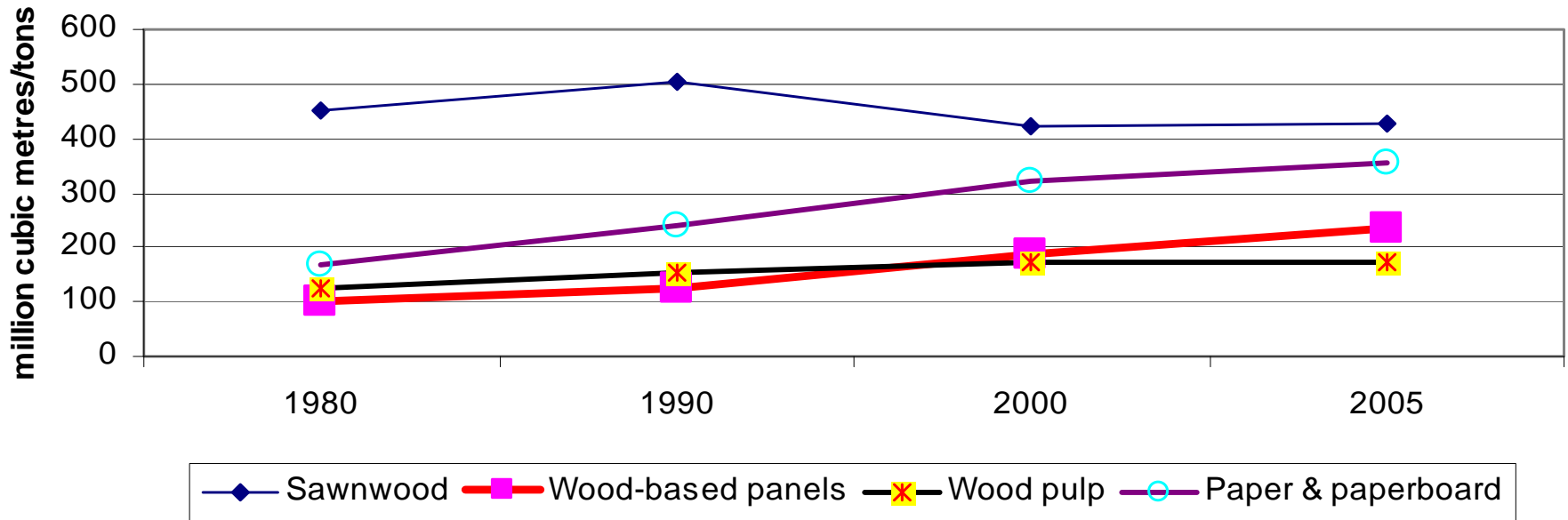


- Globally, the proportion of urban population increased from 13% in 1900 to 29% in 1950, and reached 49% in 2005.
- The year 2008 represents a milestone because, for the first time in human history, more than half of the world's population are living in urban areas.
- By 2030, 60% of the global population is expected to live in cities.

Global forest products sector in transformation

- Rapid increase in wood-based panels and paper products output
- Stagnant sawnwood production and moderate increase in wood pulp and roundwood output
- Shifts in production regions
 - Pulping the South
- Shifts in consumption patterns
- Shifting patterns of international trade in forest products
- Increasingly globalized trade in forest products

Output of the World's Major Forest Products

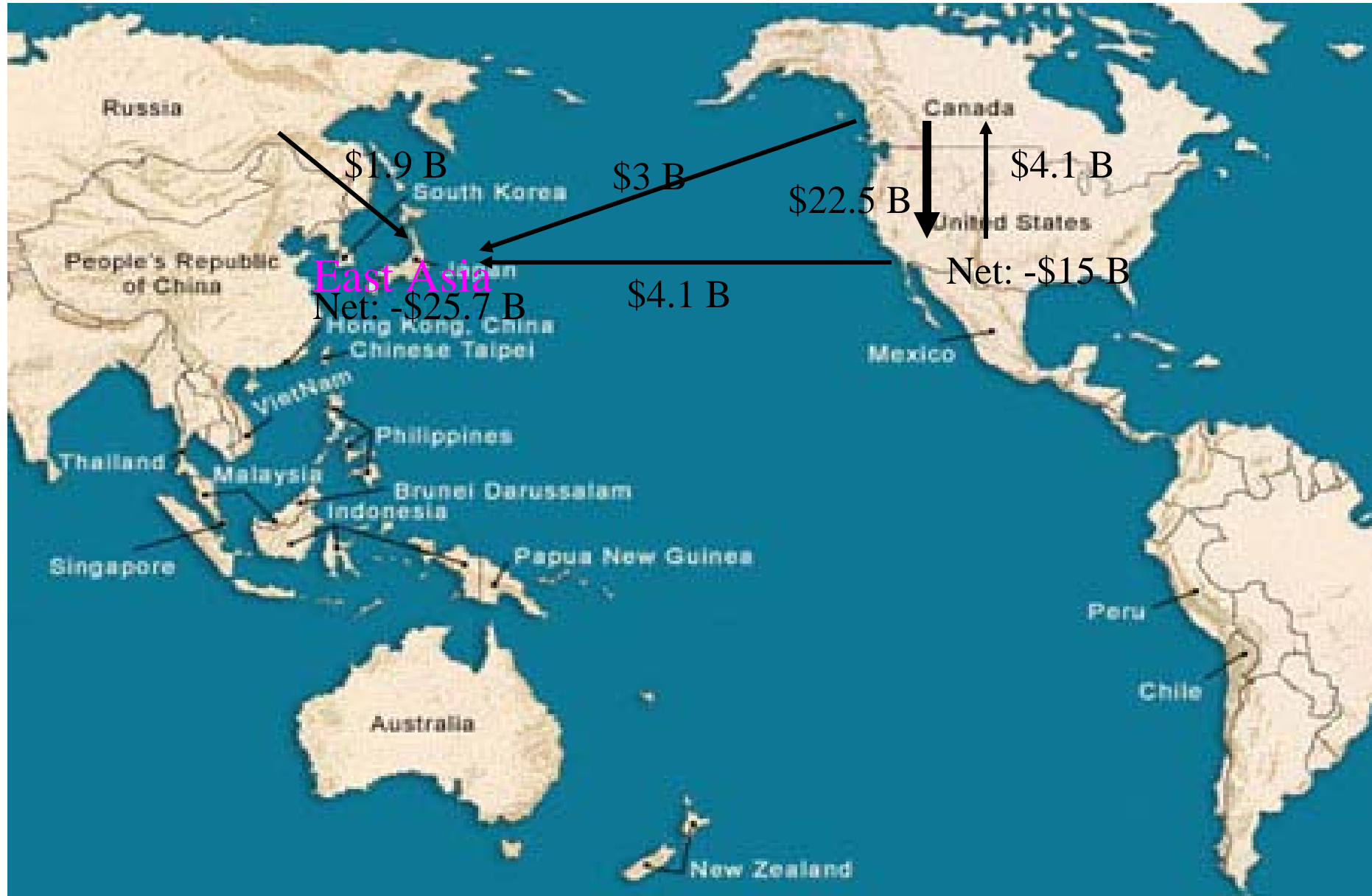


- Since 1980, the trends are:
- Roundwood, including industrial roundwood production has increased only marginally
- Sawnwood production has stagnated and declined slightly
- Wood pulp production has increased moderately
- Wood-based panels and paper products have doubled in outputs.

The World's Forest Products Production and Exports

	1980		1990		2000		2005	
	Output (million m3/t)	Export- output ratio (%)	Output (million m3/t)	Export- output ratio (%)	Output (million m3/t)	Export- output ratio (%)	Output (million m3/t)	Export- output ratio (%)
Roundwood	2929	4.0	3507	3.4	3353	3.5	3503	3.8
- Ind rw	1452	7.9	1673	6.9	1587	7.2	1711	7.5
Lumber	451	17.7	506	17.6	421	30.4	429	31.7
WB panels	101	16.2	123	24.7	189	29.5	235	34.3
Wood pulp	126	16.8	156	16.2	171	22.1	174	24.5
P & P	170	20.6	239	23.3	323	30.2	354	31.9

Forest products trade in the Pacific Rim, 2005



Response from traditional forest nations

- Nordic Europe:
 - Wood Wisdom Program (1998-2001)
 - Finnish-Swedish Wood Material Science and Engineering Research Program (2003-2007)
- Canada:
 - FPInnovations
 - Merging of Feric, Forintek and Paprican into a single national forest products research institute
 - Focus on transformative technologies
 - Canadian Wood Fibre Centre