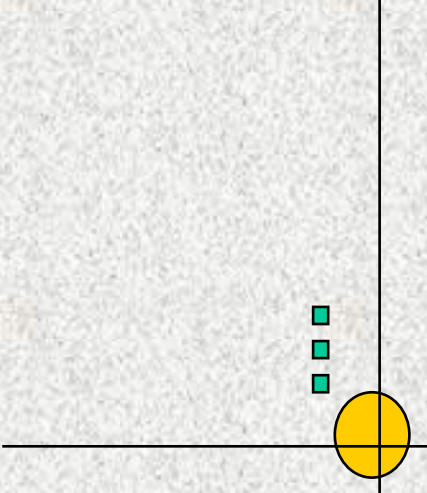




China's impact on global forest products trade: Viewpoint from abroad

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University of Washington

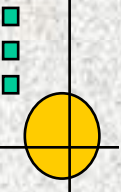
Presented at:
Society of Wood Science and Technology
55th International Convention
International Centre for Bamboo and Rattan
Beijing, China
August 27-31, 2012



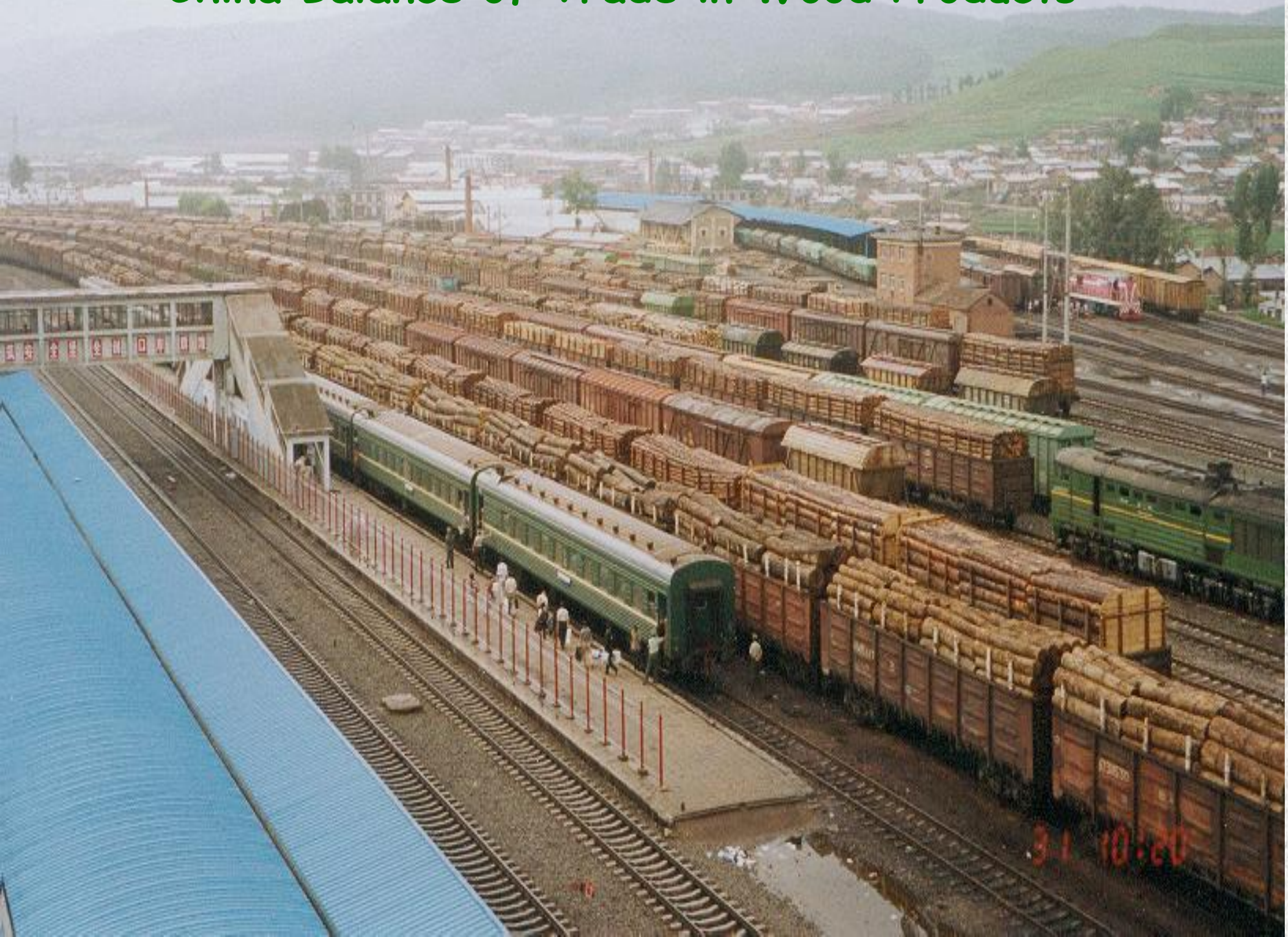


Agenda

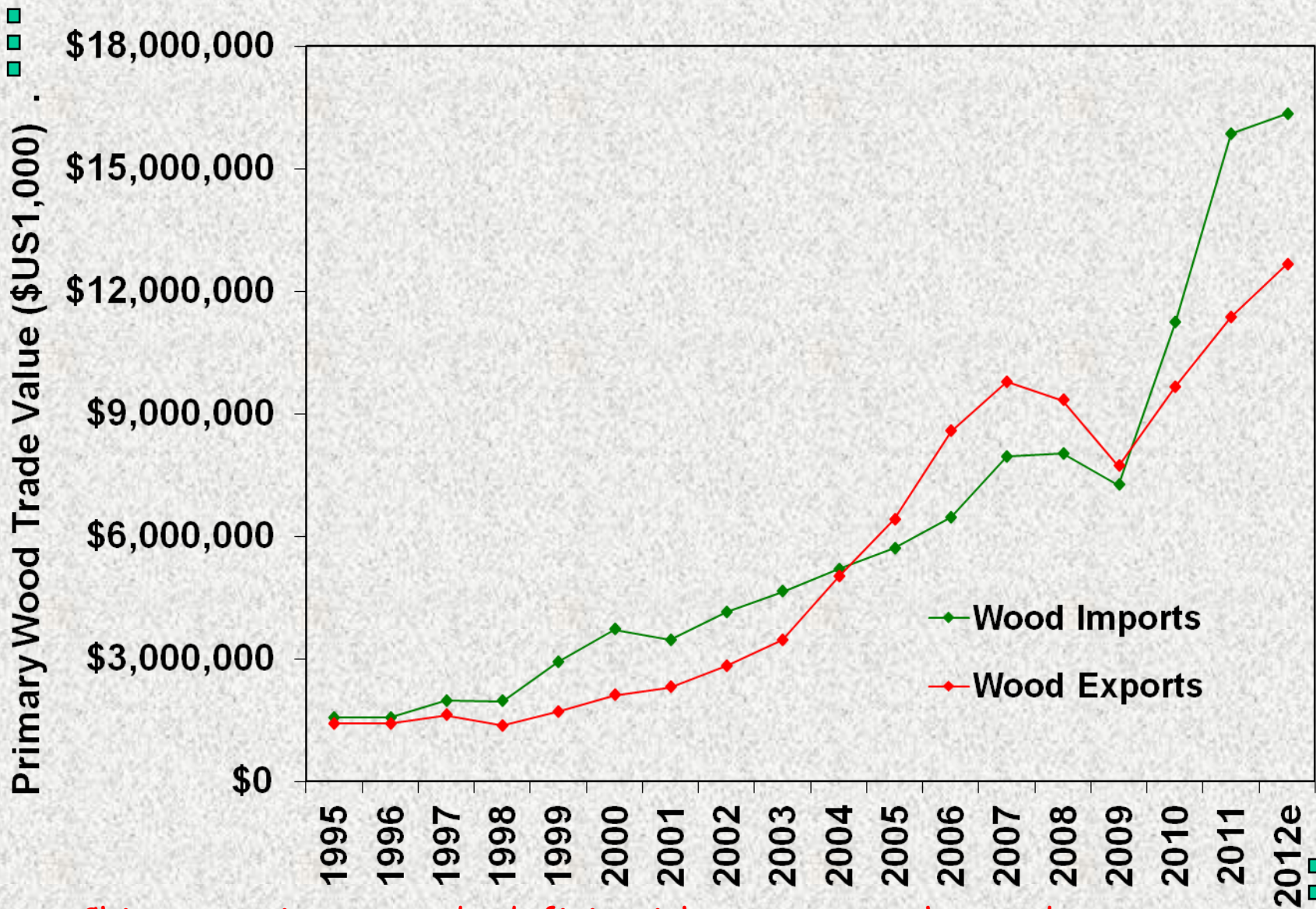
- Balance of Trade in Wood Products
- China Wood Trade Trends
- China Social Factors
 - Demographic Trends
 - Construction Trends
- The (Considerable) Benefits of Using Wood in Construction
- Concluding Observations



China Balance of Trade in Wood Products

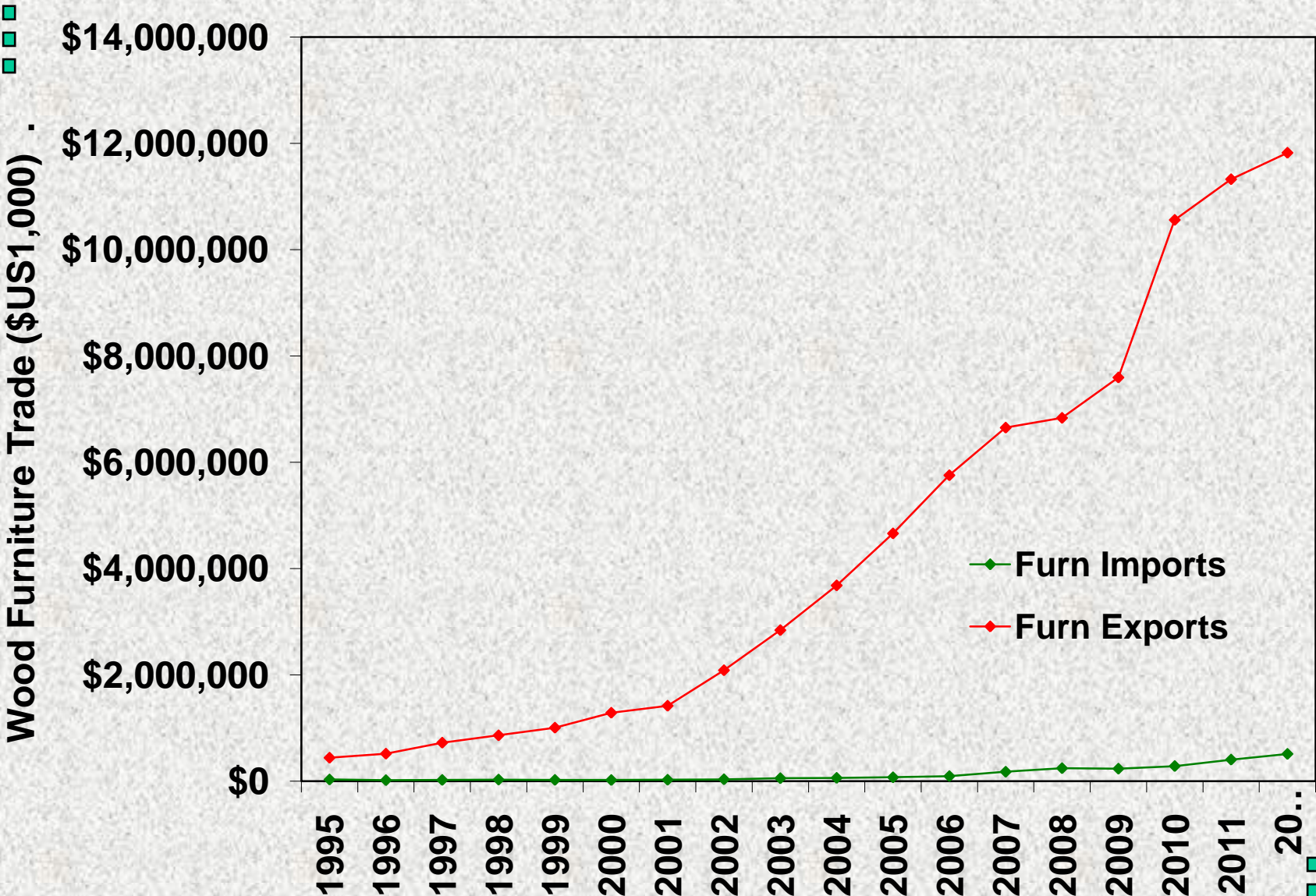


China Commodity Wood Trade Summary



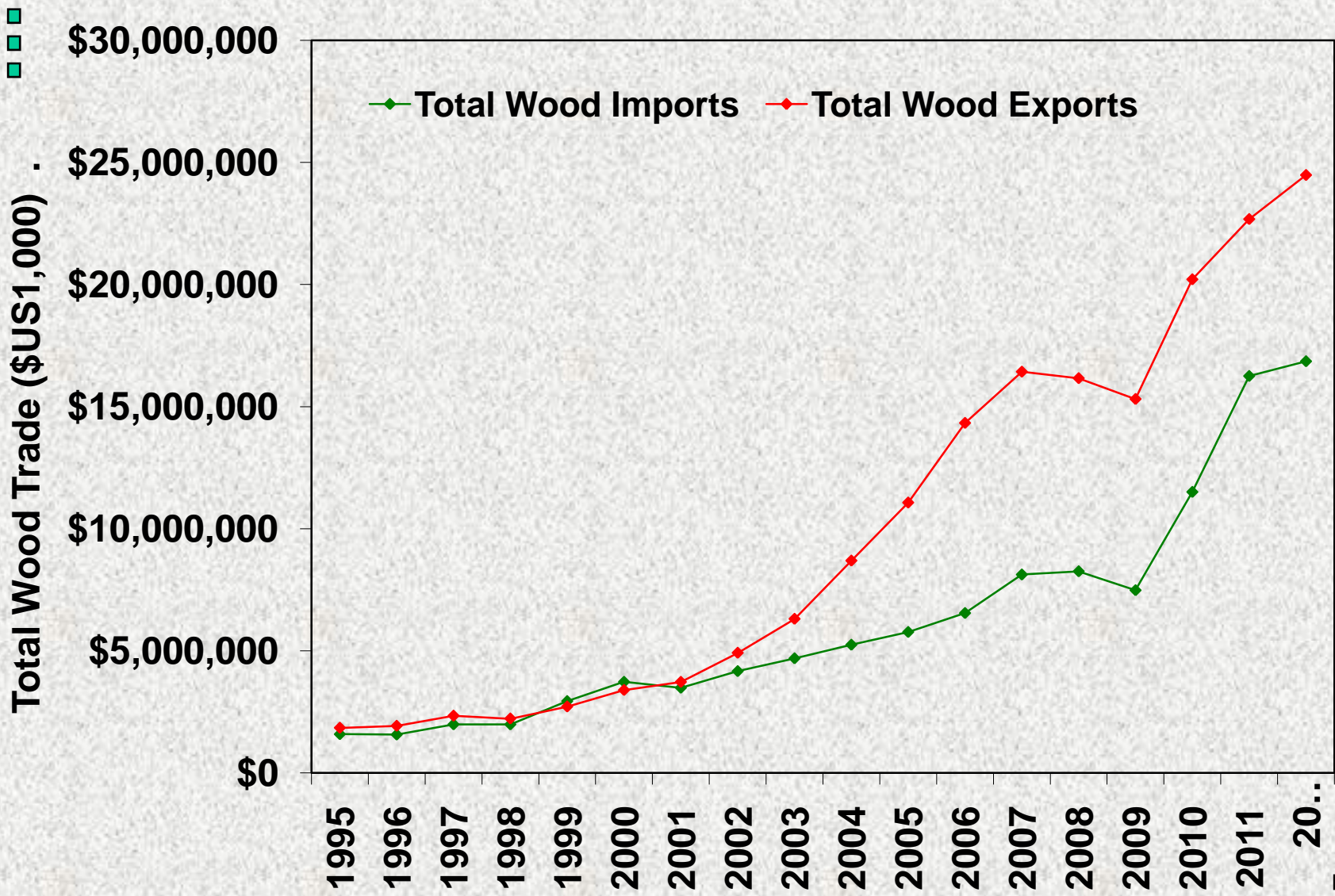
2010 saw China move into a trade deficit with respect to the trade of commodity wood products...

China Furniture Trade Summary



... although with furniture imports growing by 36% since 2006...

China Total Wood Trade Summary

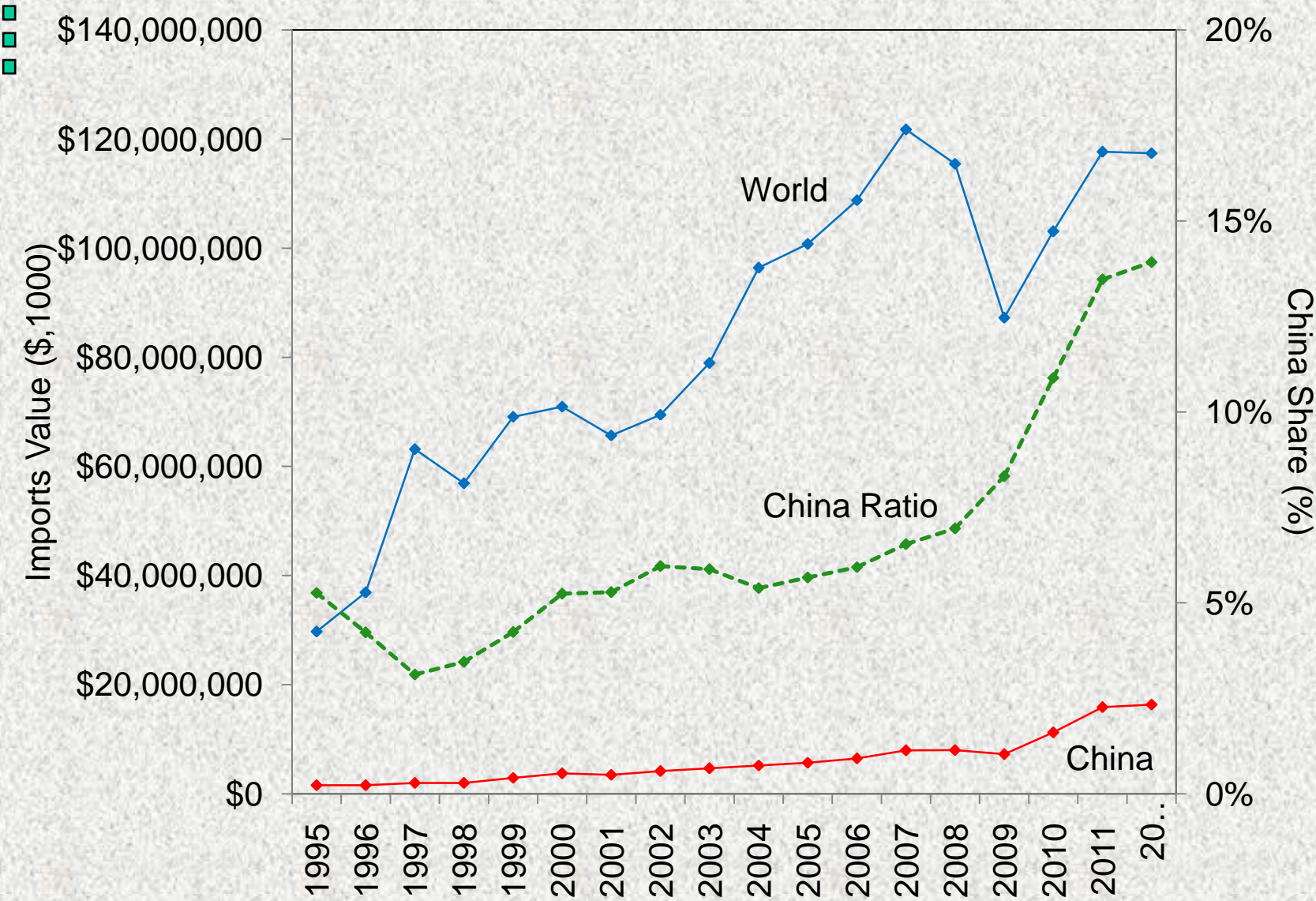


...China continues to show a healthy trade surplus for all wood products.

China Wood Trade Trends



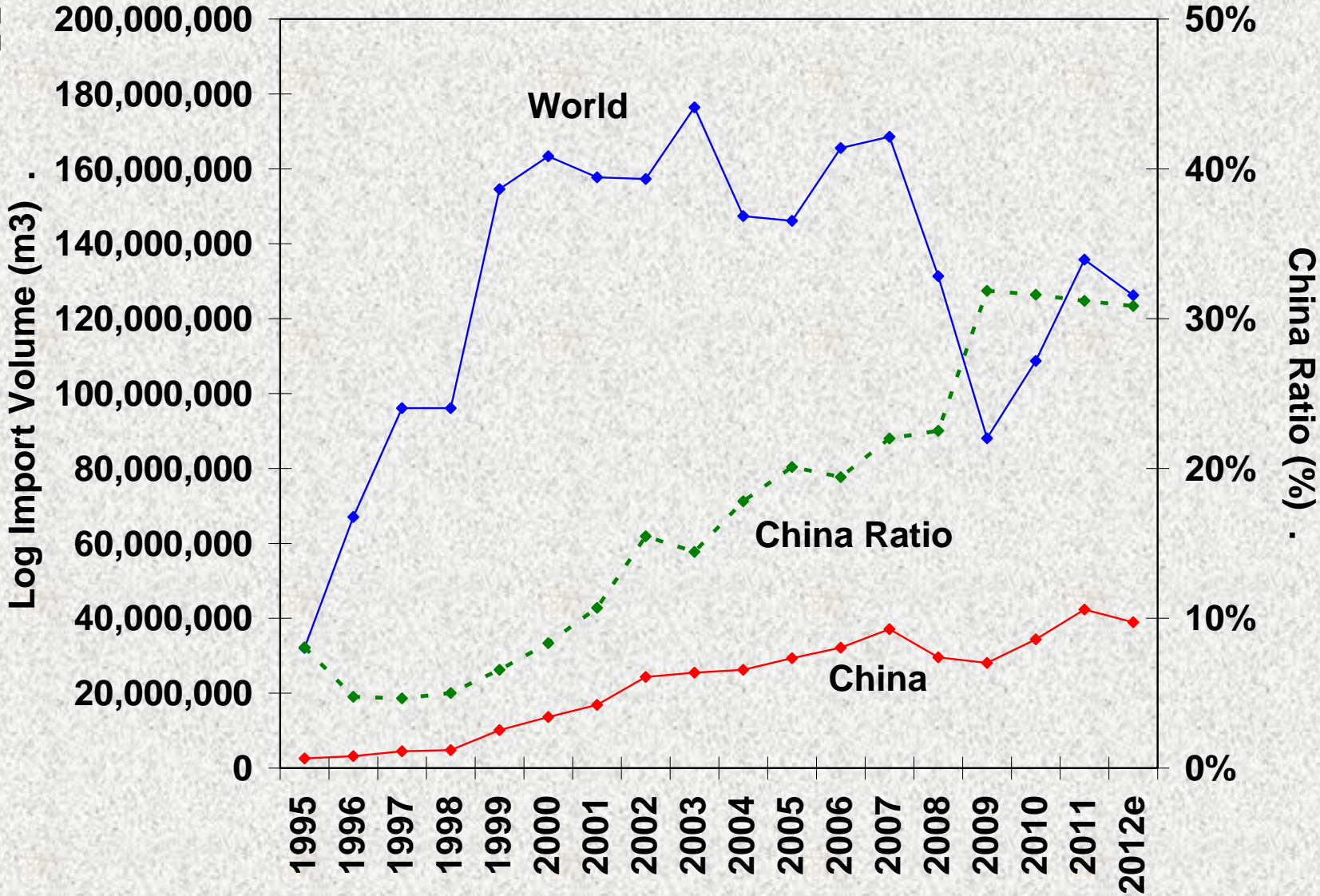
Global Wood Imports and China



As a result of the economic crisis in the US, China became the largest importer of wood products in 2010.

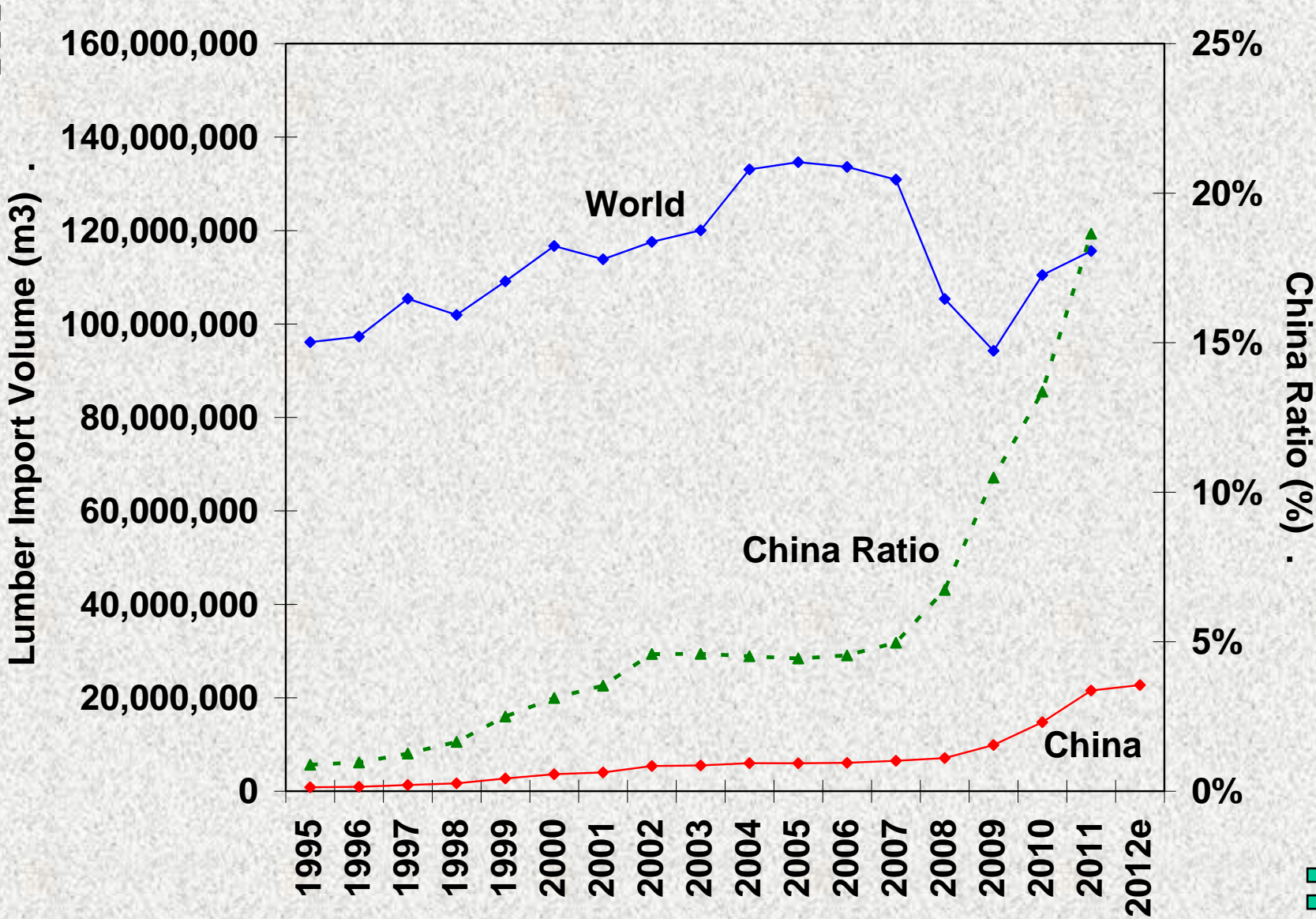


Global Log Imports and China



For example, China imports over 30% of all log exports...

Global Lumber Imports and China



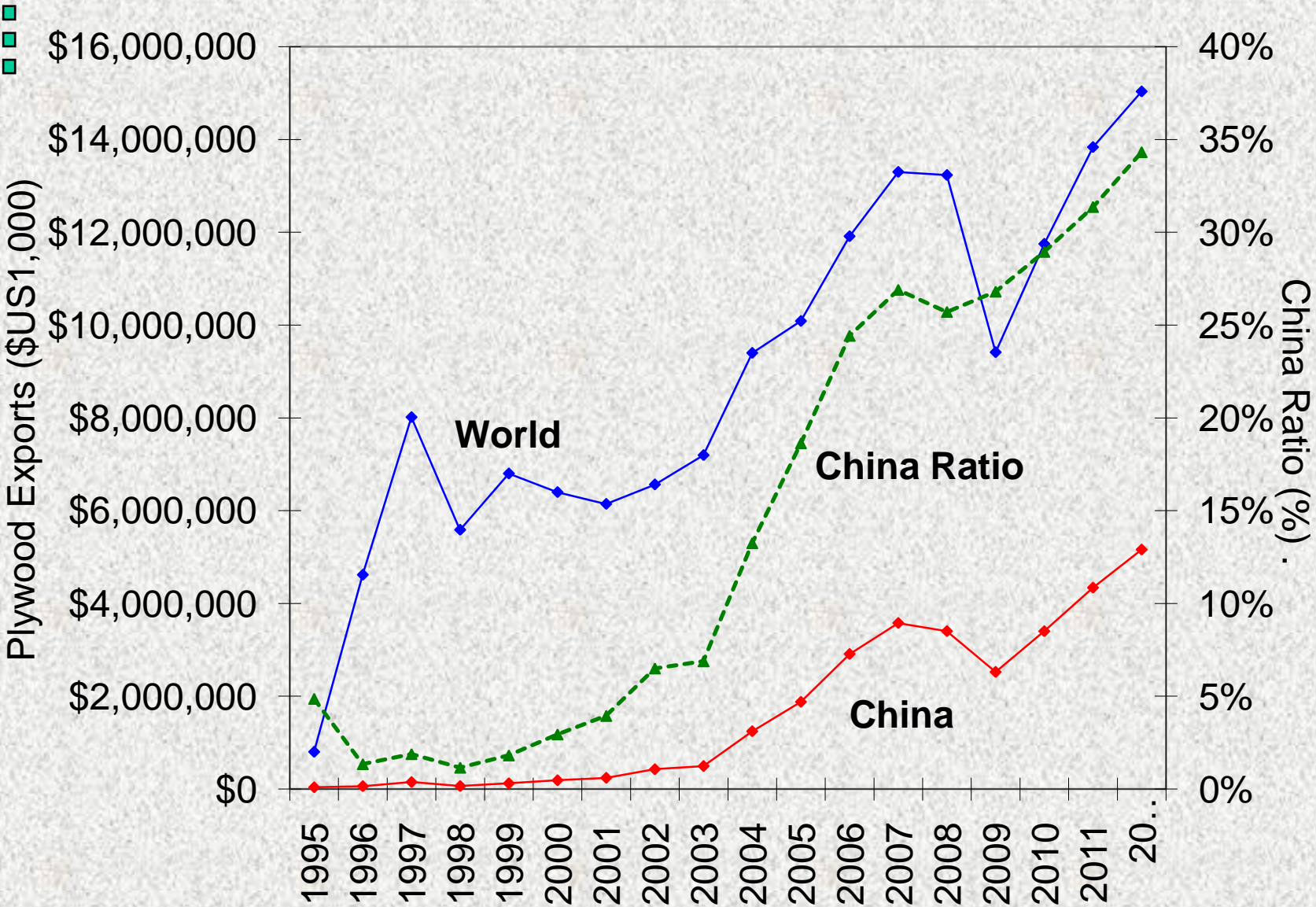
...while Chinese lumber imports are approaching a 20% global market share.

Global Wood Exports and China



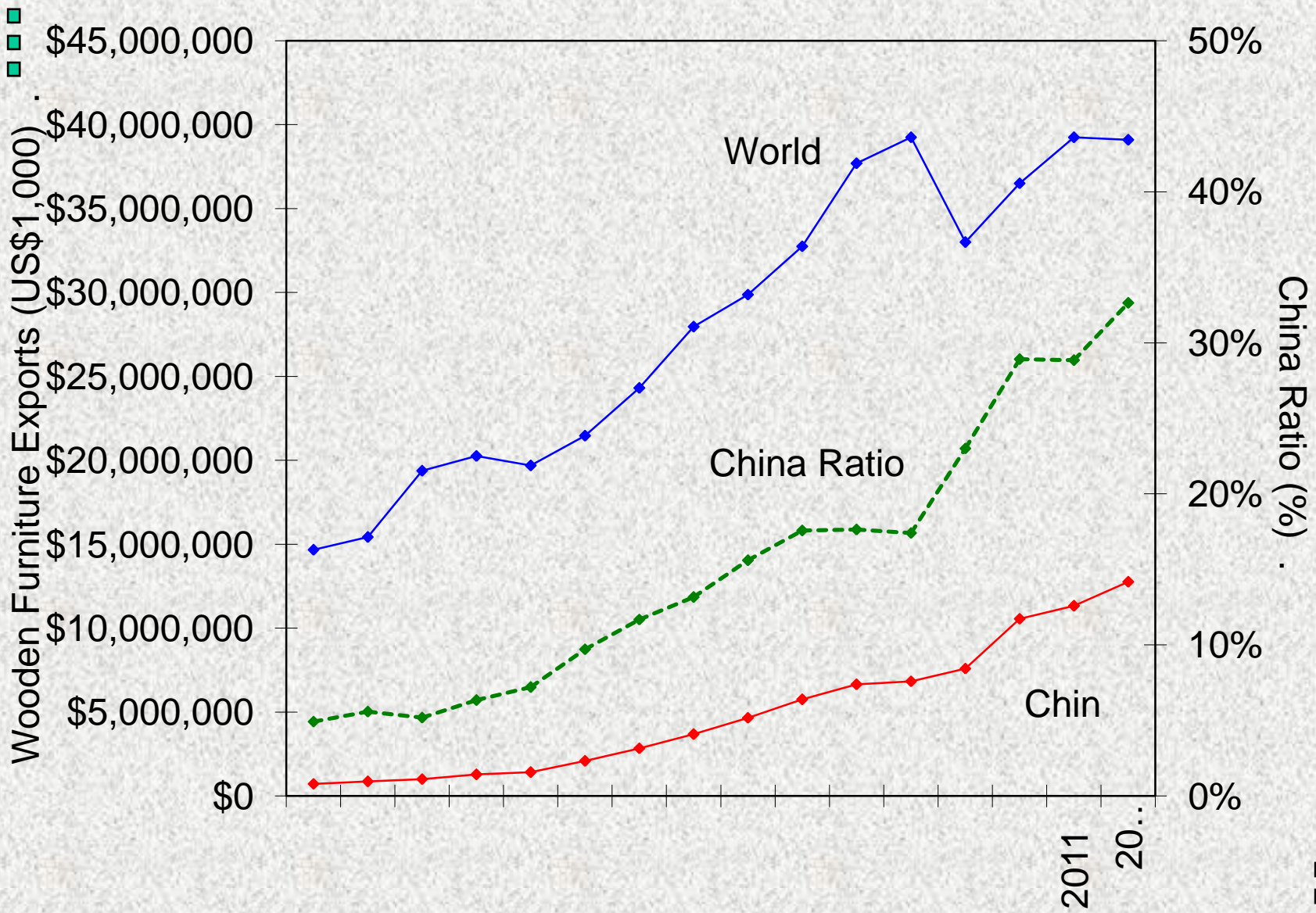
China is also a leader in wood exports, generating an estimated 11% of global exports in 2012.

Global Plywood Exports and China



For example, China plywood exports represent over a third of the global plywood trade...

Global Furniture Exports and China

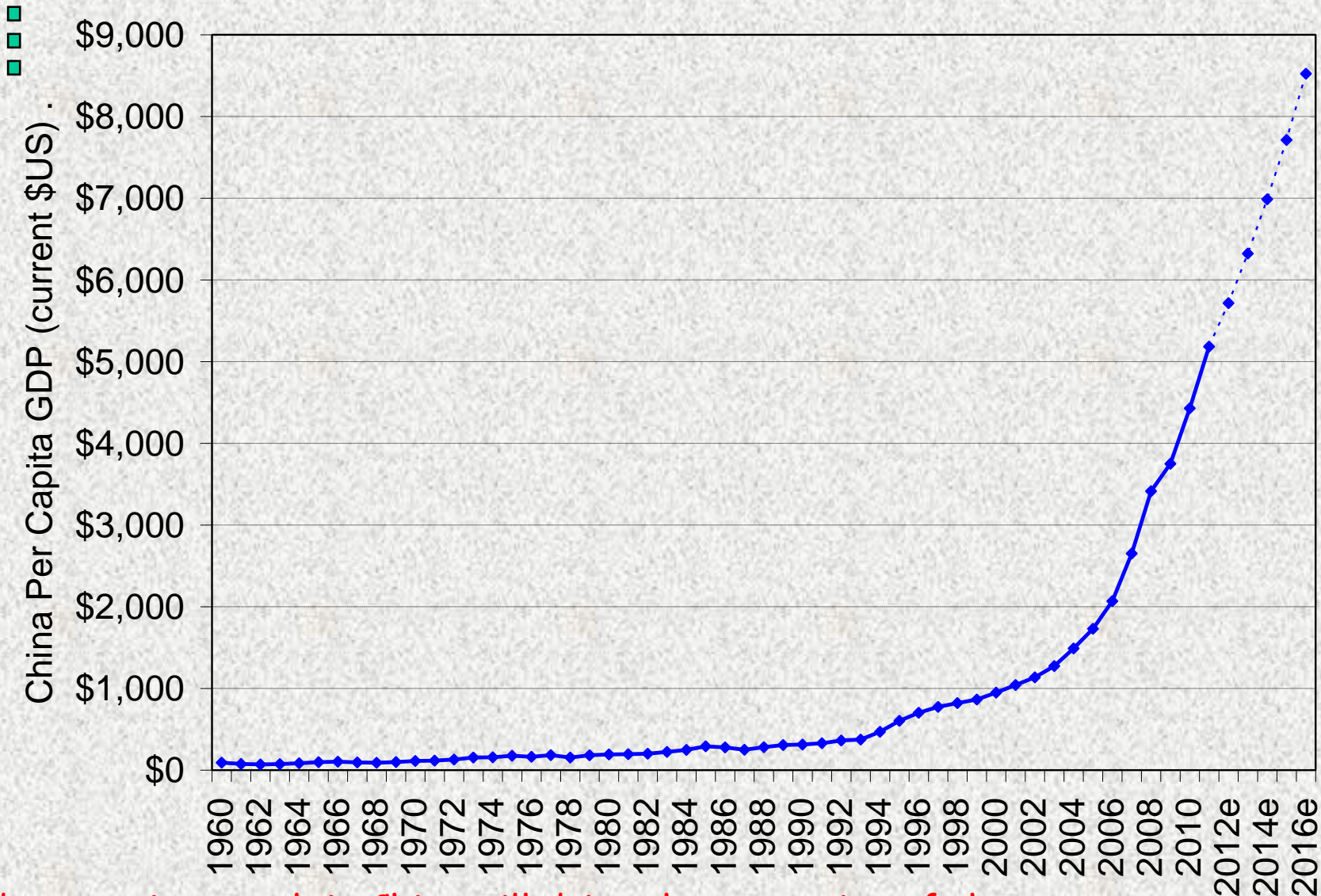


... while Chinese wooden furniture exports have a similar share of global trade.

China Social Factors

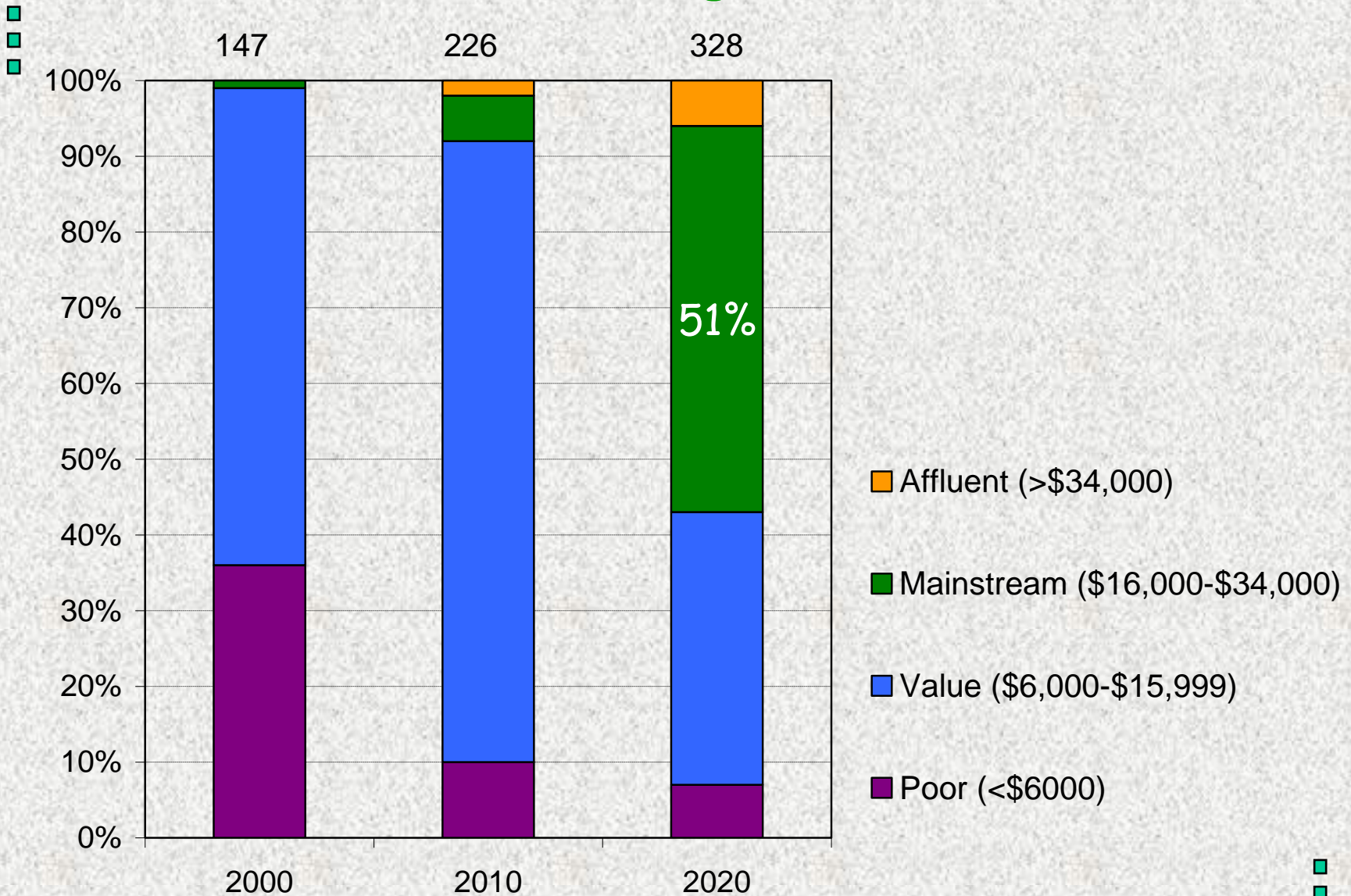


China GDP per Capita Growth



Rapid economic growth in China will drive the expansion of the middle-class and help transform the economy from being export driven to a more balanced mix of exports and domestic consumption

China's Growing Middle Class

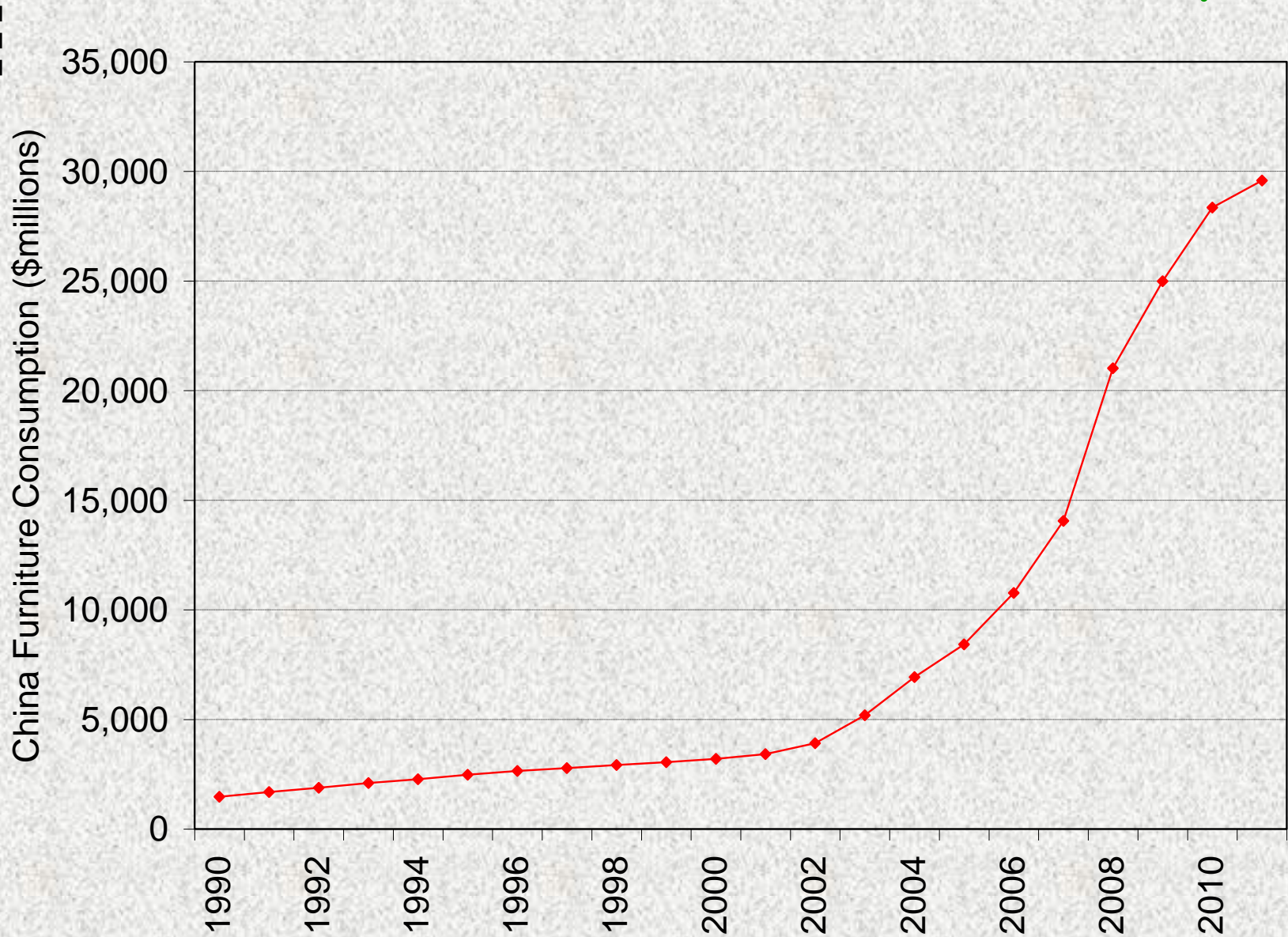


The growth of the mainstream and affluent income groups is estimated at 26.6% and 20.4% per year, respectively...

Center for International Trade in Forest Products

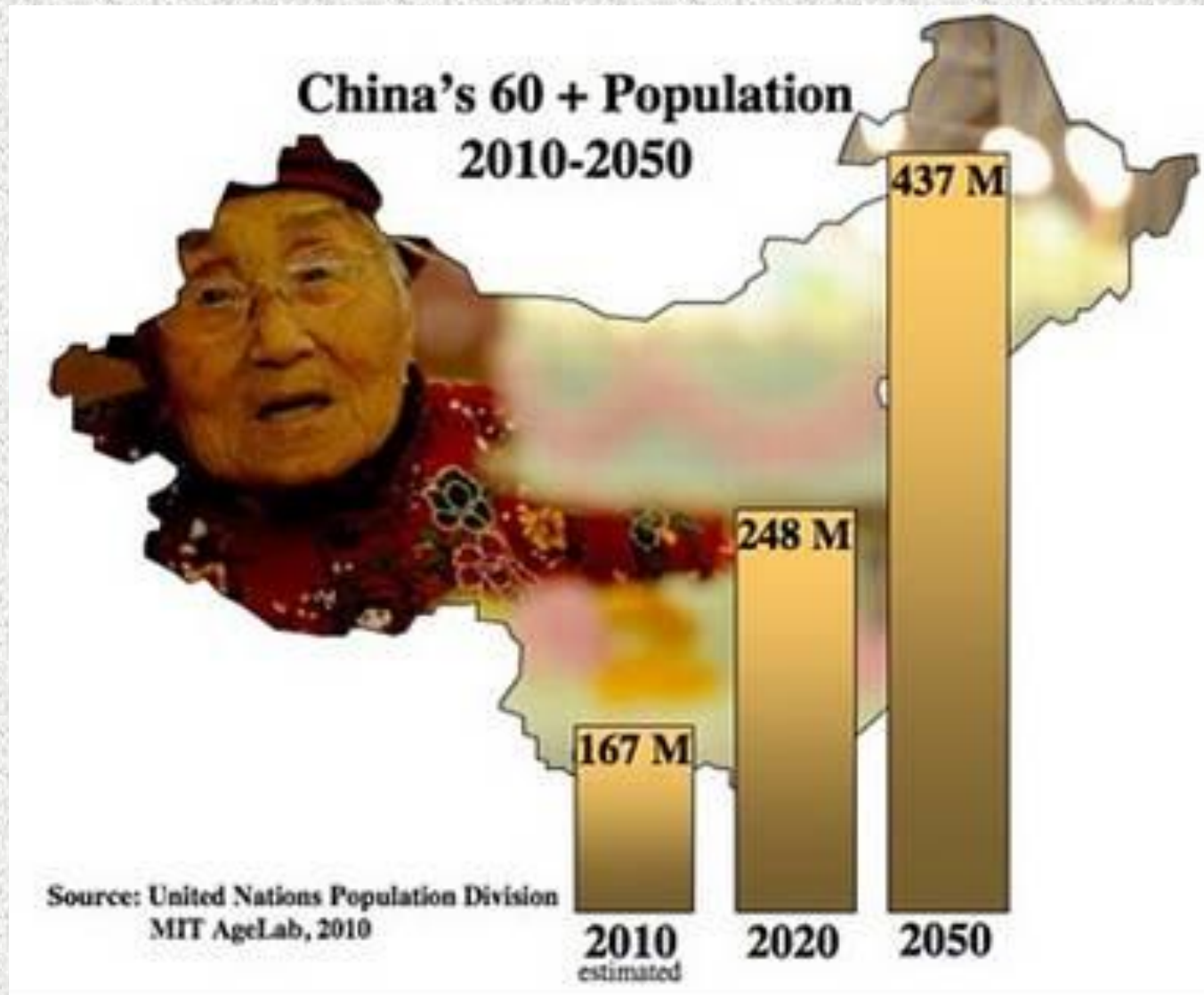
(Source: McKinsey 2012)

China Domestic Furniture Consumption



...which should lead to the increased consumption of wood products.

Demographic Trends

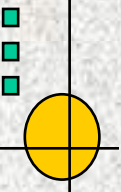


The number of seniors will increase by more than 2.6 times by 2050

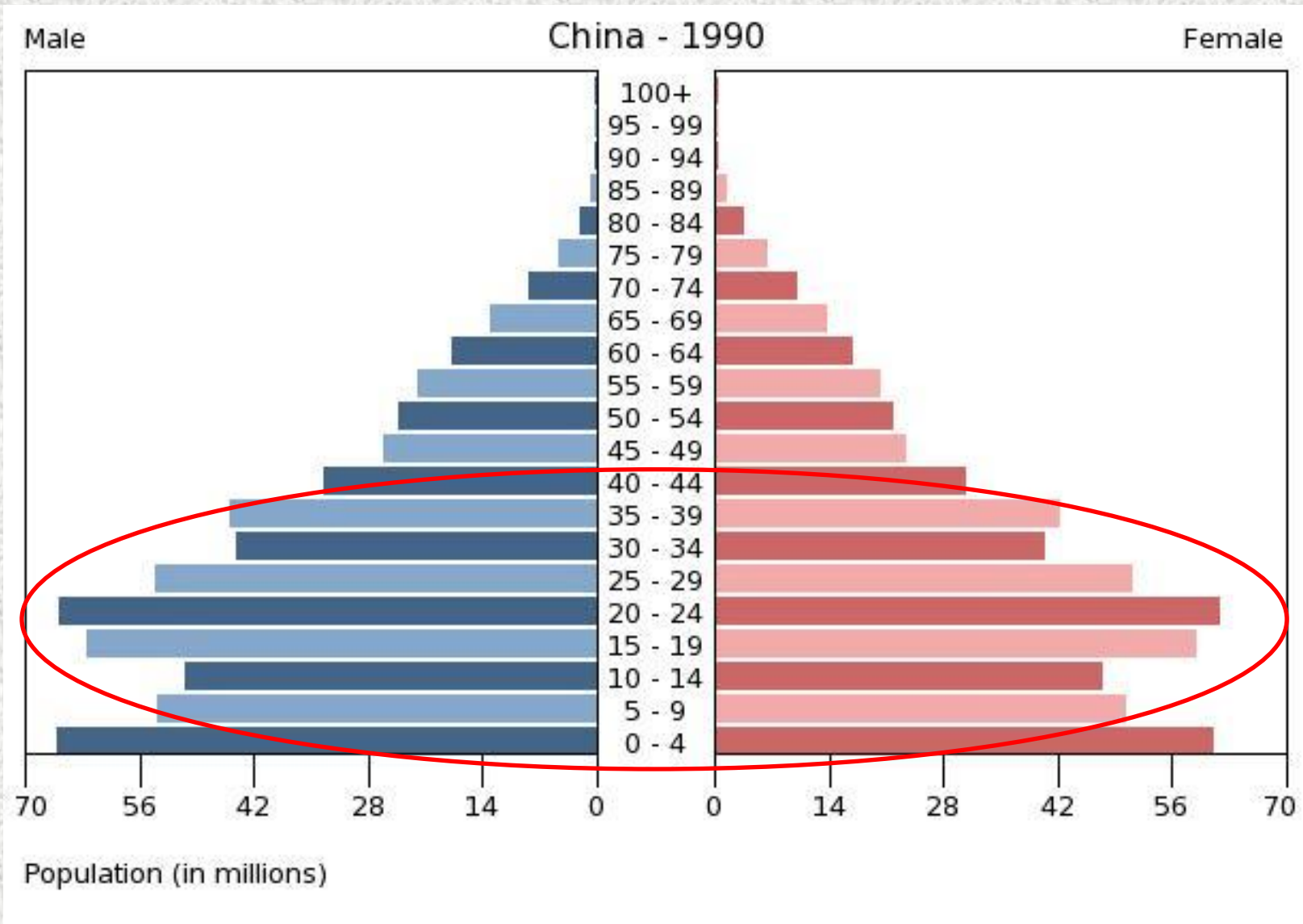


Demographic Trend

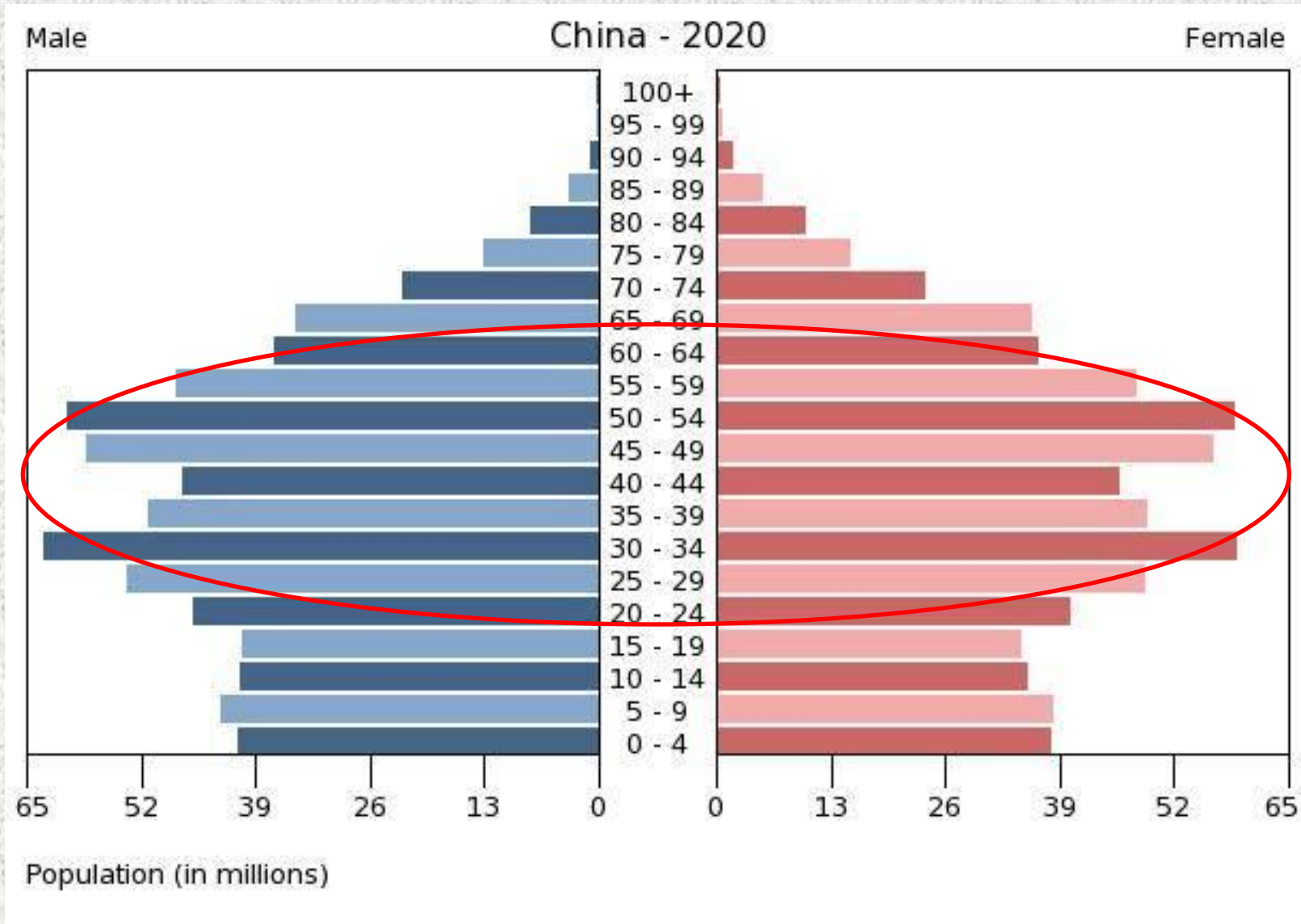
Even as China per capita income continues to grow, China's population is aging at a rapid rate. China is likely to become the first country to begin graying before it becomes rich. Lack of a strong pension system, the 4-2-1 problem (the sandwich generation) and the movement of young people away from their parents to urban areas means that China is actively looking to develop a robust senior housing sector to support the rapidly growing senior population.



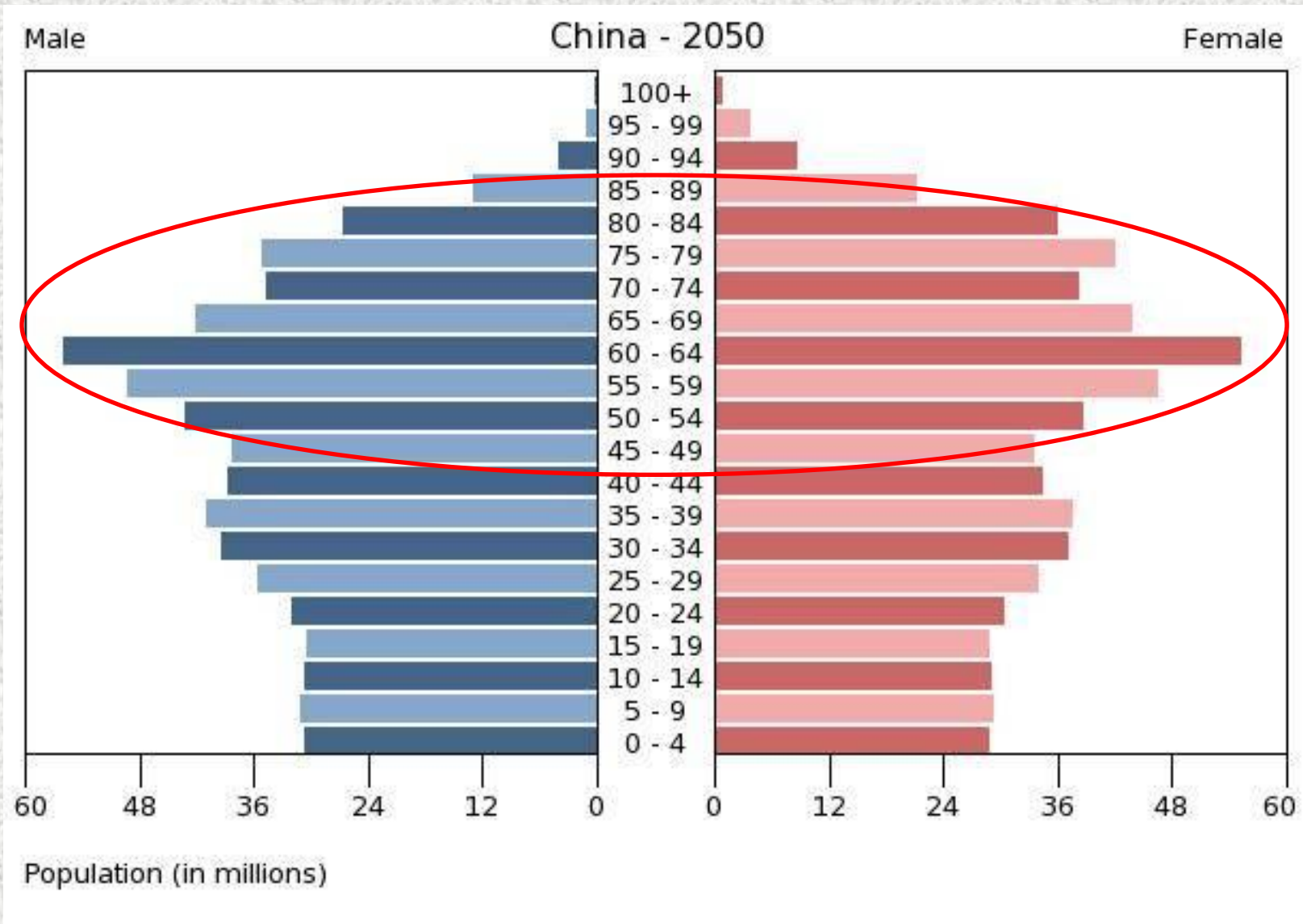
China Population 1990



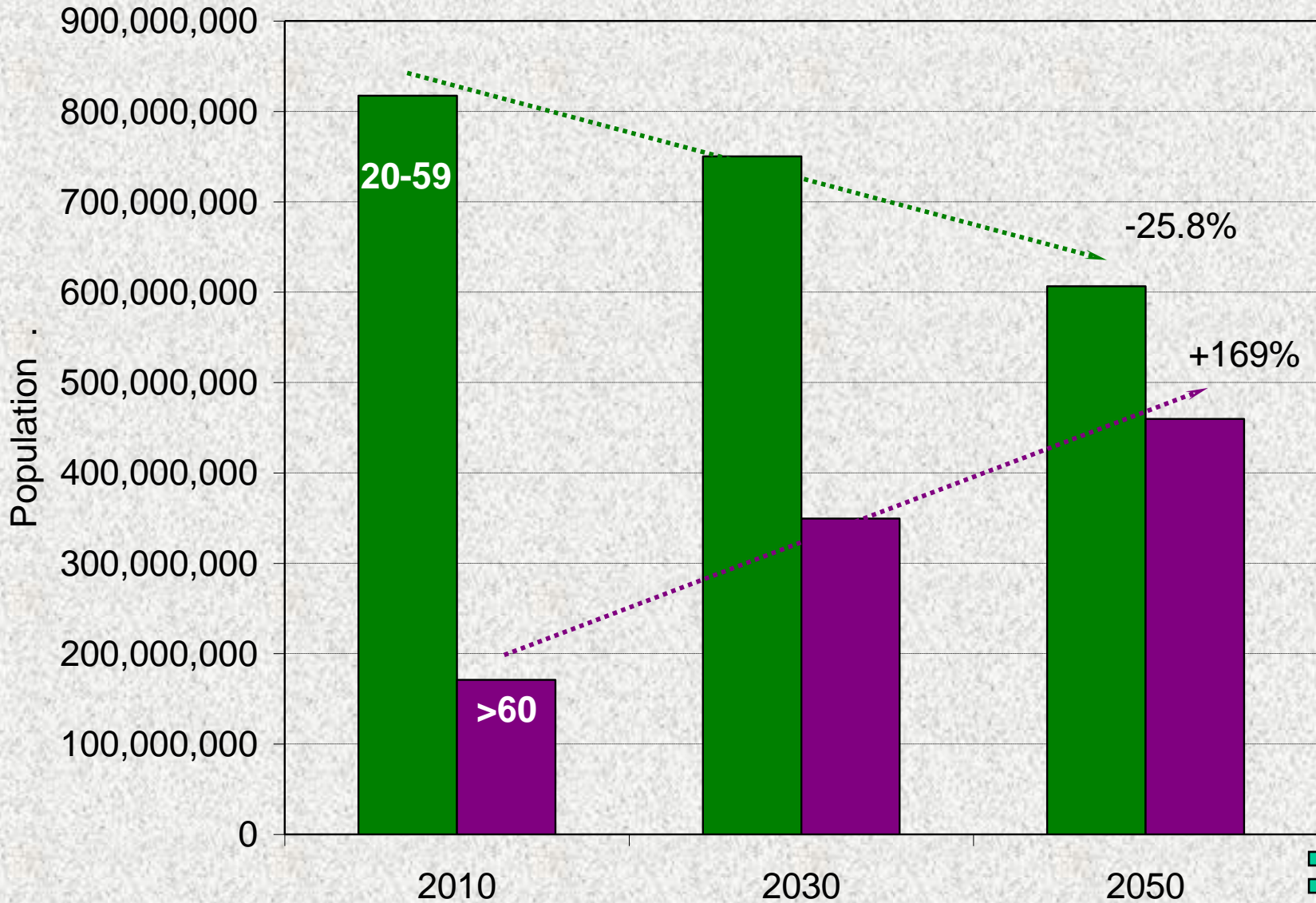
China Population 2020



China Population 2050

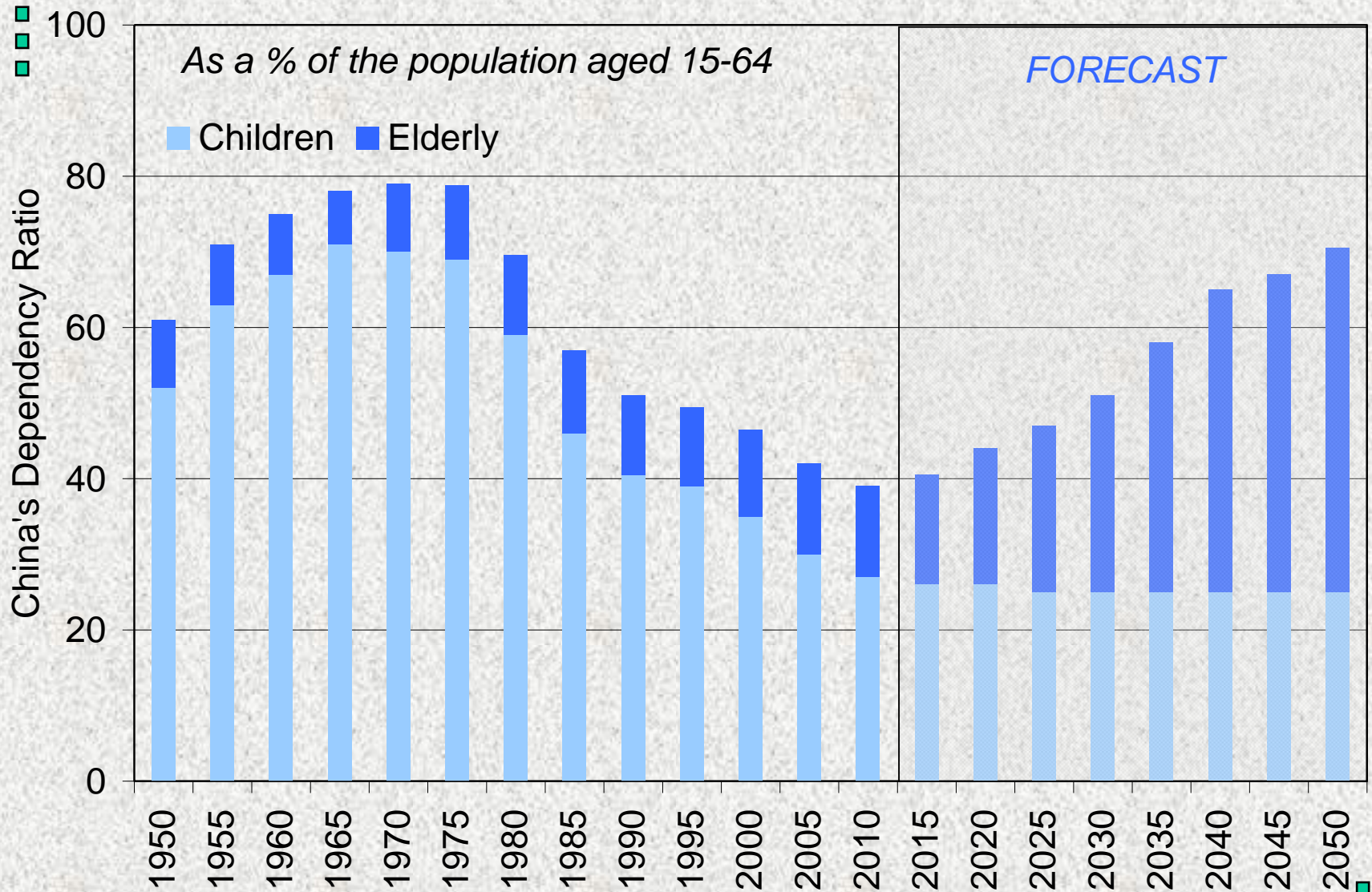


Demographic Trend



*The number of workers will **decline slowly**, while the number of seniors will **increase rapidly***

Demographic Trend



As a result, the ratio of seniors to working age adults will jump from 12% in 2010 to 46% by 2050

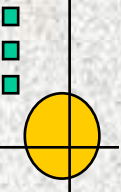
China Construction Trends



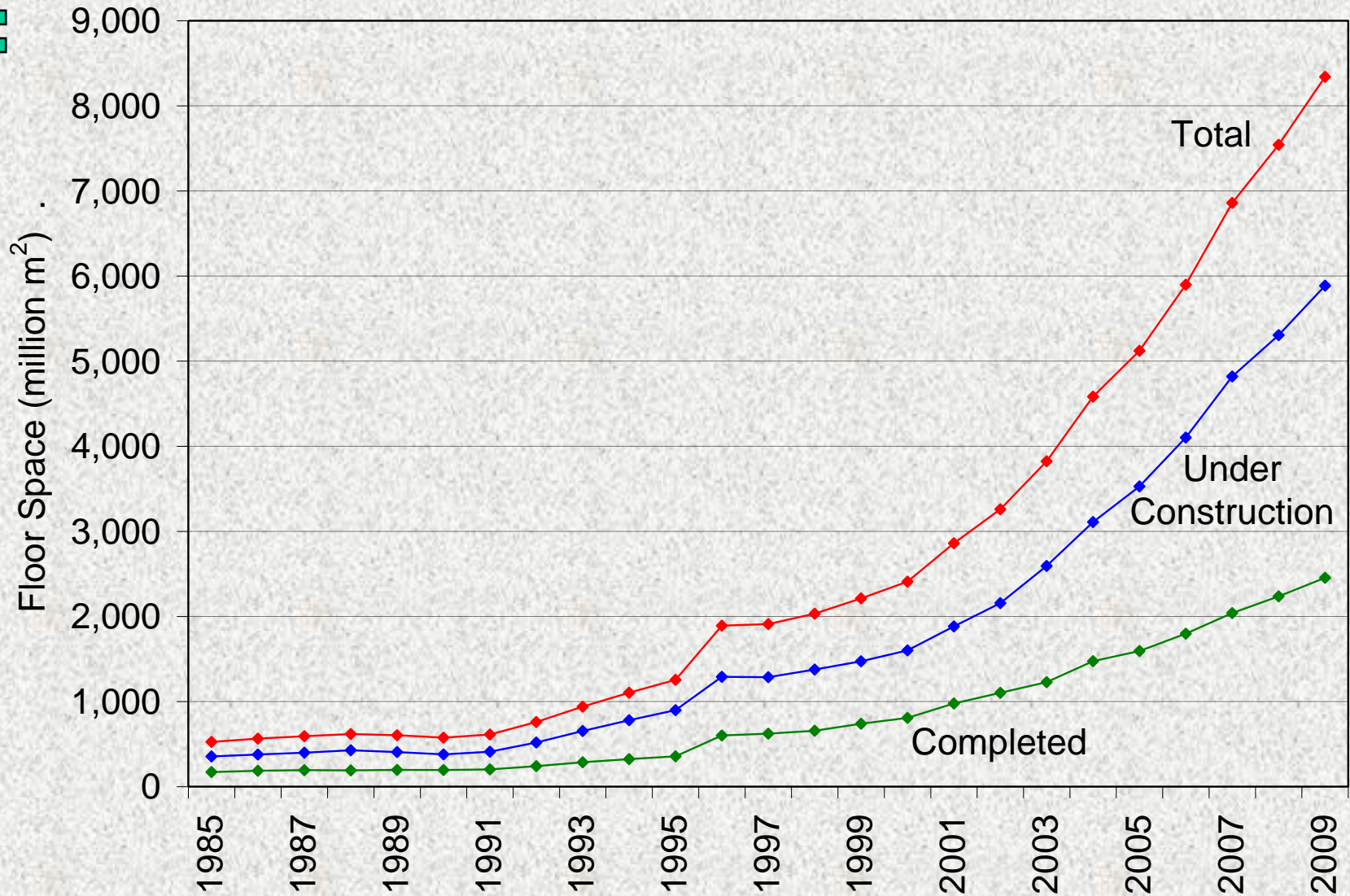


China Construction Trend (1)

China's current Five Year Plan calls for building 36 million affordable housing units between 2011 and 2016, something never before done in the history of the world. While housing units in China are generally multi story concrete and brick buildings, interior finishes (flooring, wall panels, cabinets, doors, moldings and furniture) use a substantial volume of wood. Increasing personal wealth will support the increased consumption of wood products in China.



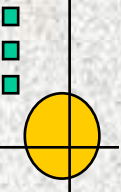
Residential Construction Activity in China





China Construction Trend (2)

China has an inadequate senior housing infrastructure. As the senior population continues to grow and the middle to upper-middle class segment of society continues to grow, there will be a larger number of retired people who will be able to afford senior housing (especially with the financial support of their children), thereby encouraging the development of senior communities. This represents a good opportunity for wood frame construction and wooden building materials.



China Construction Trend (2)

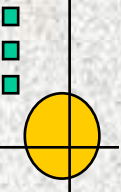
Beijing Sun City is a senior retirement community located on the outskirts of Beijing





China Construction Trend (3)

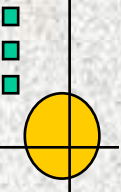
In addition, a growing concern about earthquake safety and energy conservation could help convince Chinese authorities to use wooden and hybrid construction technologies to build low to medium-rise public buildings (e.g., schools, senior communities and clinics) in rural and semi-rural areas.





Benefits of Wood in Construction

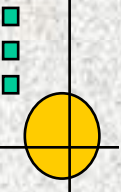
Recent perceptual research has found that the aesthetic impact of using more wood in public structures can have a positive psychological impact on people's health, happiness, ability to learn and increase their feeling of relaxation. In addition, life-cycle impact research has show that wooden structures have a lower carbon footprint and are more energy efficient than either steel, concrete or brick buildings.





Benefits of Wood in Construction

These results suggest that increasing the use of wood in public structures such as schools, health clinics and senior housing could have a positive impact on society and the environment. This information played a key role in the recent adoption of the “Law to Increase the Use of Wood in Public Structures” in Japan requiring that, whenever possible, wood be given preference over other building materials in all publicly funded buildings.



Strategic Observations

- China has rapidly become a leading trader of wood products
- While China runs a trade deficit in commodity wood products, it's overall balance of trade is positive
- A rising standard of living will inevitably lead to increased domestic consumption of wood products and a growing emphasis on product brands by Chinese wood manufacturers
- Shifting demographics will increase demand for housing and related wood products by Chinese senior citizens
- New building codes and increased interest in increasing the energy efficiency of buildings could increase interest in wood construction in China, particularly for low rise residential and public buildings (such as health clinics, senior housing and schools)



谢谢!
您有什么问题?

The image shows two electric guitars standing upright on a wooden wall. The wall is made of horizontal wooden planks. In the background, there is a large blue logo of a tree with the letters 'FSC' above and below it. The guitar on the left is a dark wood finish, and the guitar on the right is a light wood finish. Both guitars have two humbucker pickups and are mounted on small black stands with wheels. The text 'Timber Legality Legislation' is overlaid in the center of the image in a white, sans-serif font.

Timber
Legality
Legislation



Timber Legality Verification

- 
1. Japan Public Procurement Policy (Goho Wood)
 2. US Lacey Act
 3. EU FLEGT Due Diligence Policy (March 2013)
 4. Australia Illegal Logging Prohibition Bill
(passed House and in Senate)

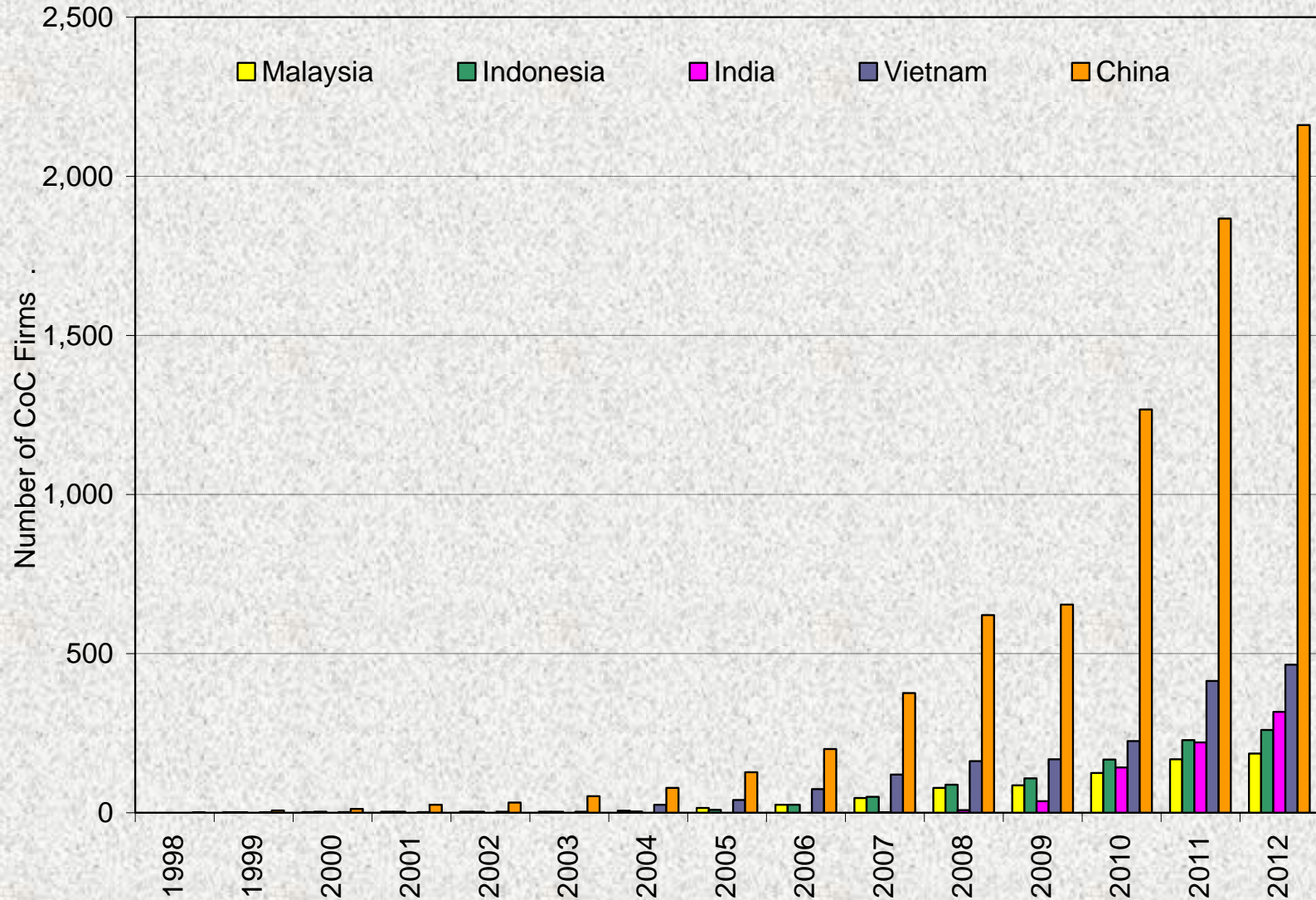
Timber legality legislation essentially requires that importers perform due diligence in documenting that they are sourcing products manufactured from legally harvested timber.



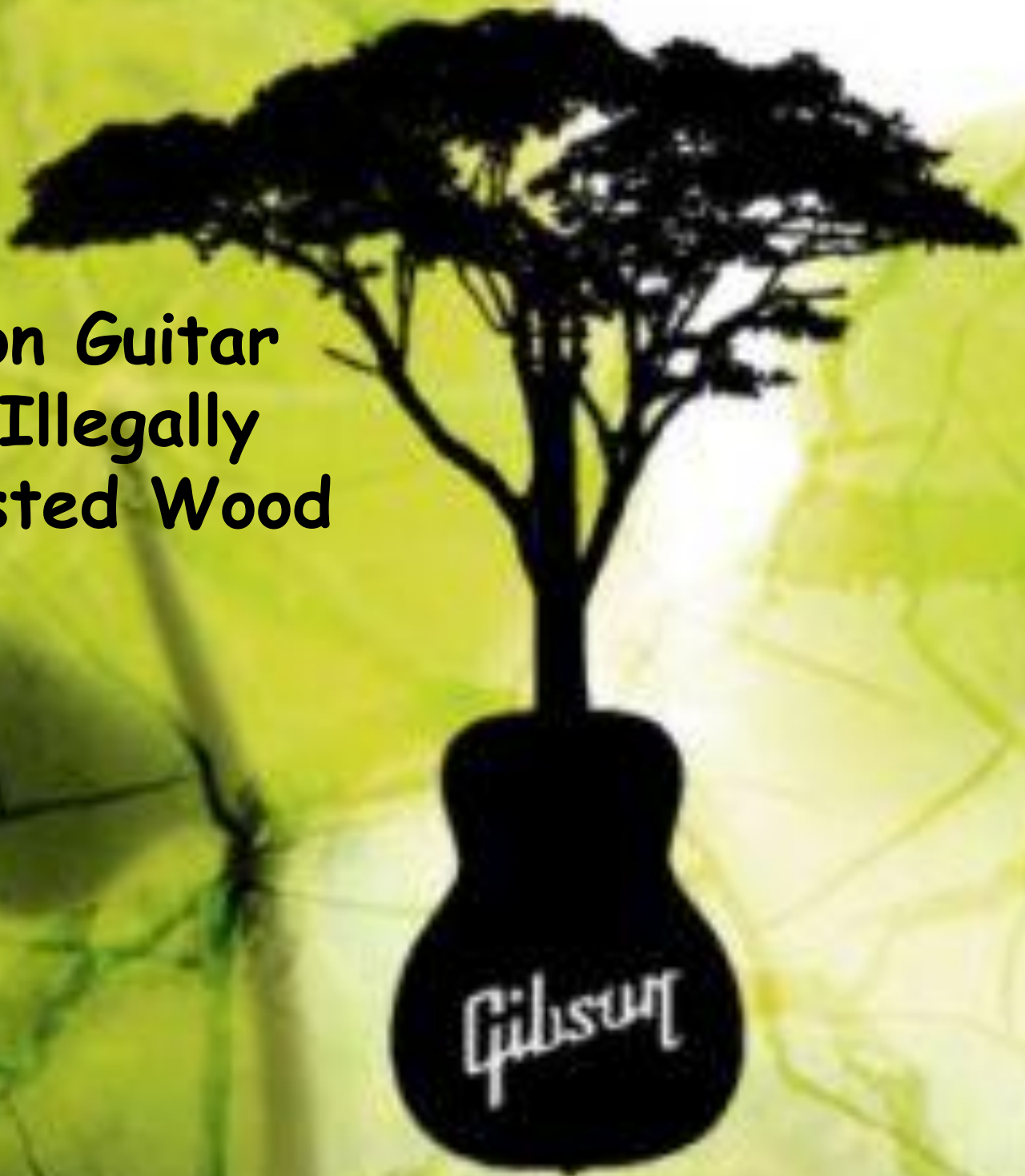
Timber Legality Verification

The Lacey Act, which requires documentation of legality for all wood products exported to the US, is a big concern for wood manufacturers in China, Thailand and Vietnam and could help to boost exports of US wood products to these countries. It has already caused many Asian firms to acquire chain-of-custody certification in order to track their wood materials through the supply chain.

Certification of Chain-of-Custody Trends



**Gibson Guitar
and Illegally
Harvested Wood**



Gibson Guitar Accepts Responsibility for Importing Illegally Harvested Wood

Complying with Lacey Act requirements is going to become increasingly important as a result of the Gibson Guitar case



Federal agents seize illegally harvested wood from a Gibson plant



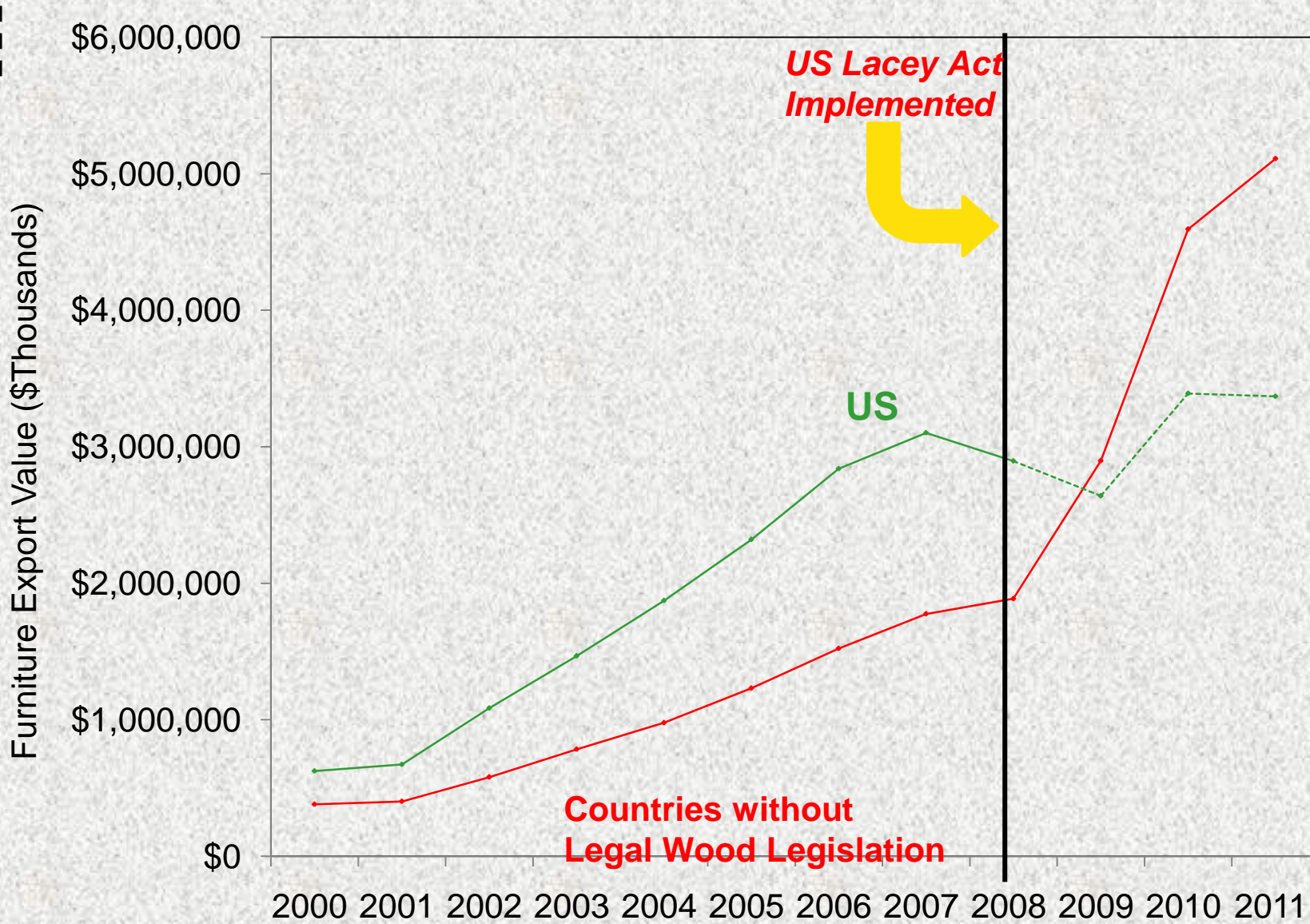
Timber Legality Implications



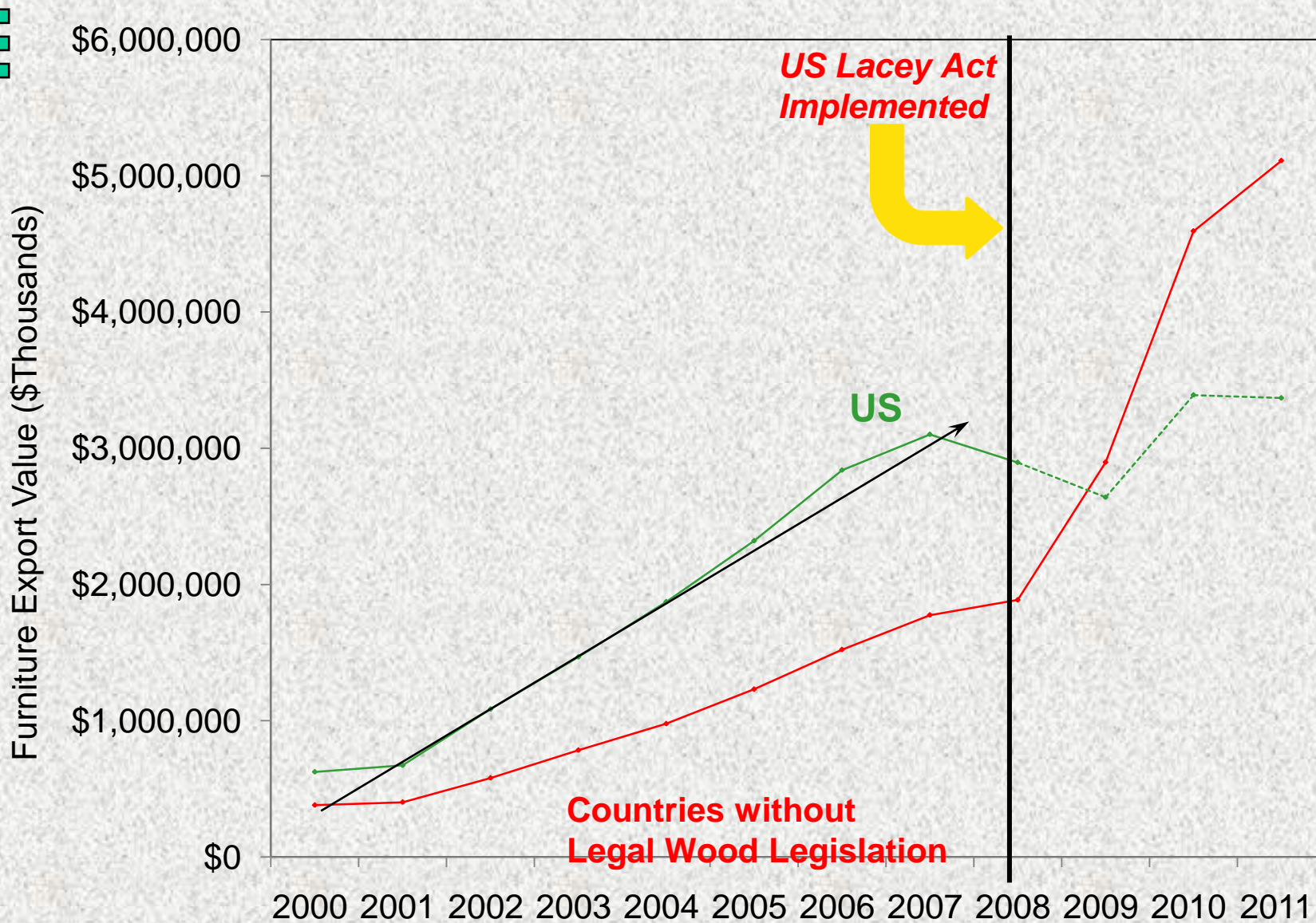
Since many Asian firms are heavily dependent on western markets for their wood product exports, legality legislation could encourage some manufacturers to either source wood materials from western countries in order to more easily show compliance with timber legality legislation and reduce the risk of having a product shipment seized and held at the port. Alternatively, manufacturers could expand exports to countries that have not adopted timber legality legislation.



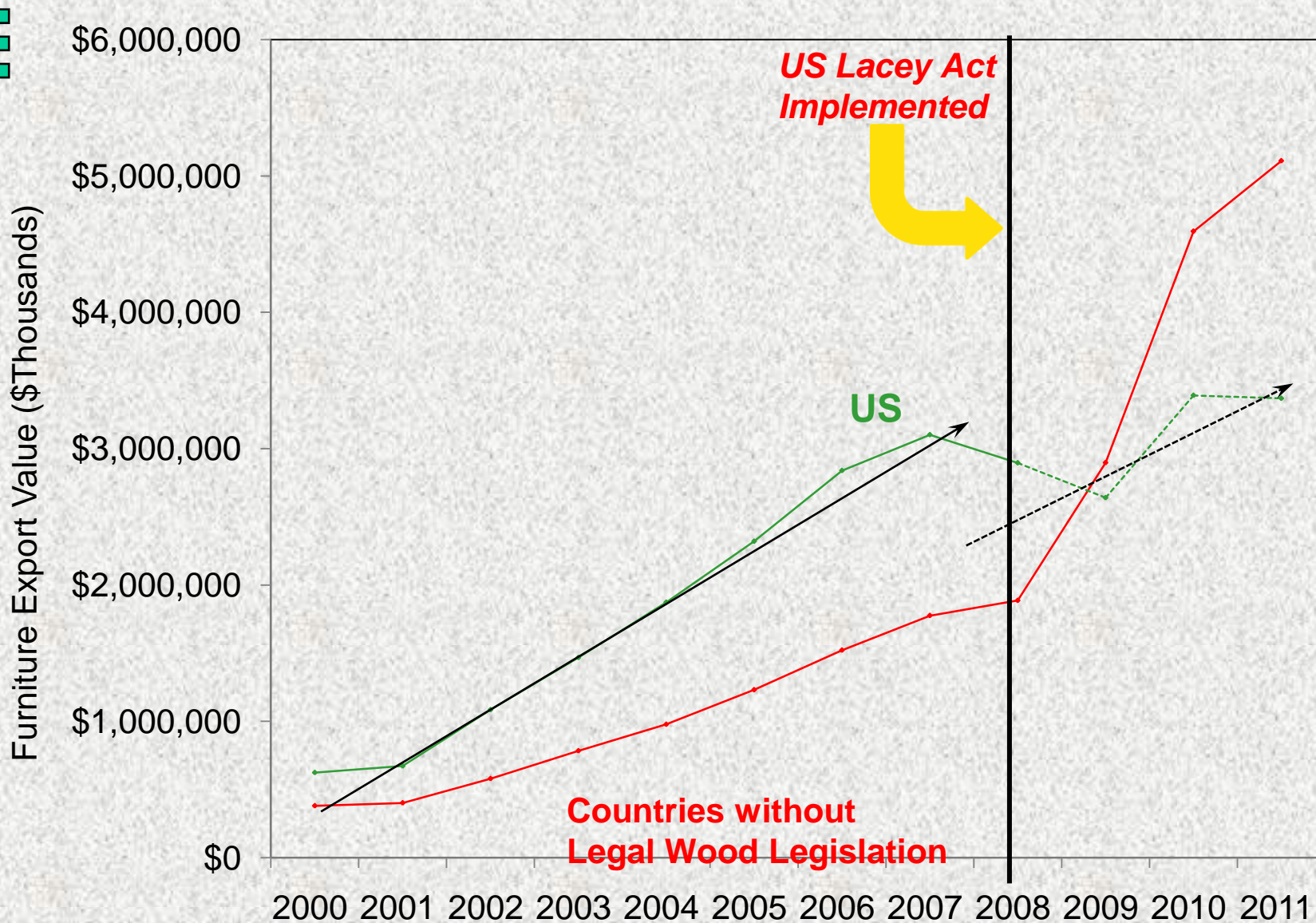
China Wooden Furniture Exports



China Wooden Furniture Exports



China Wooden Furniture Exports



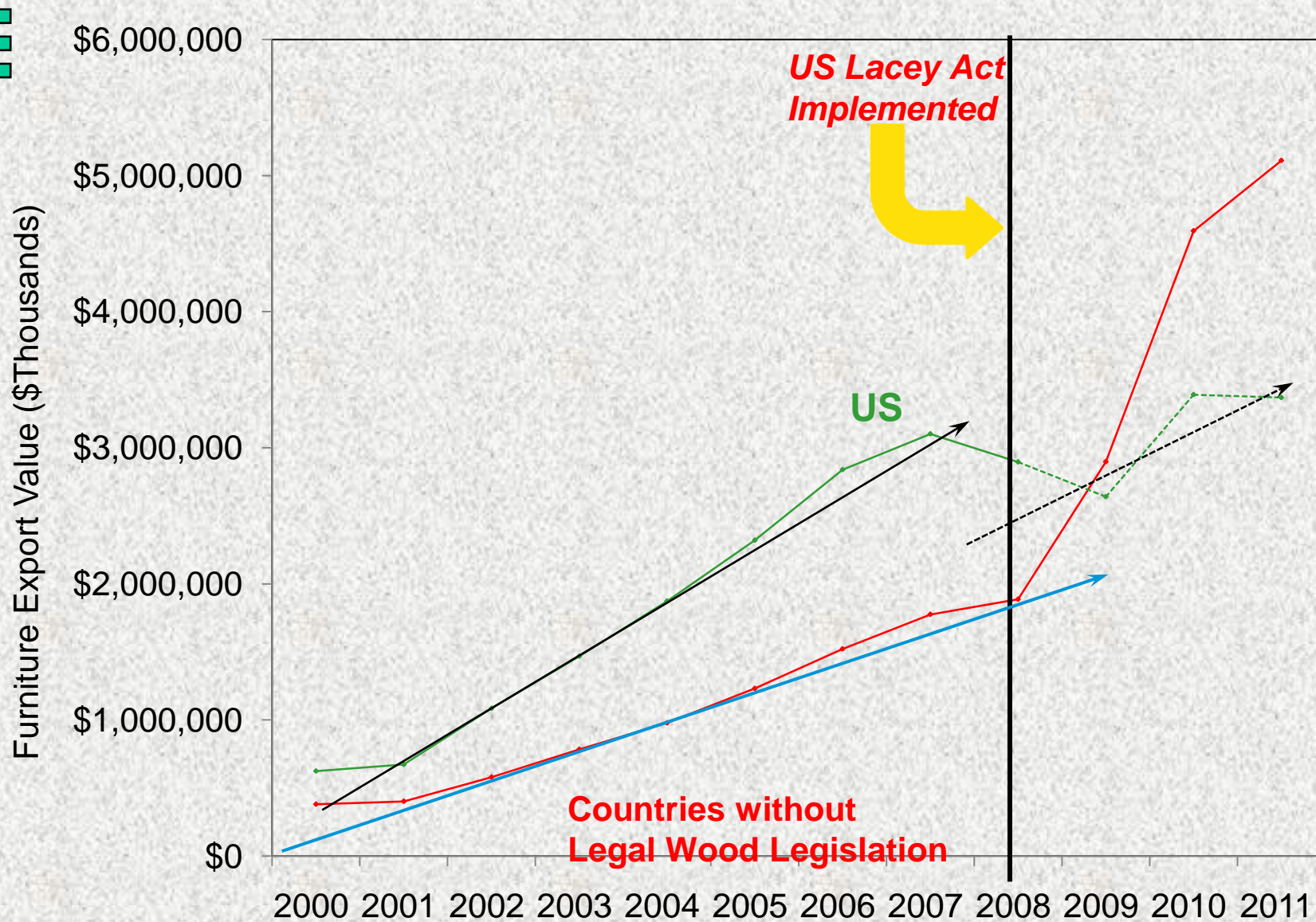
US Lacey Act Implemented



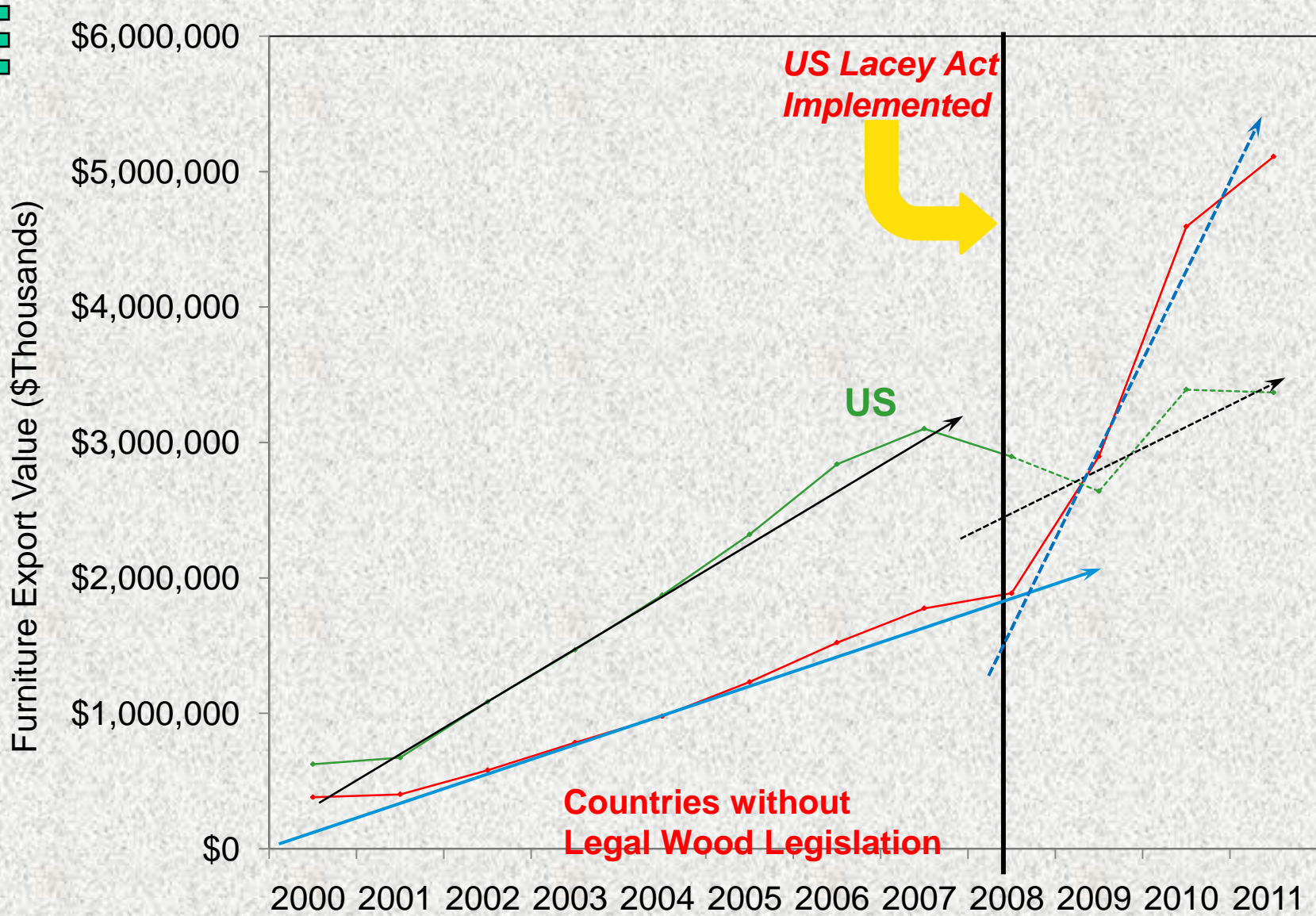
US

Countries without Legal Wood Legislation

China Wooden Furniture Exports



China Wooden Furniture Exports



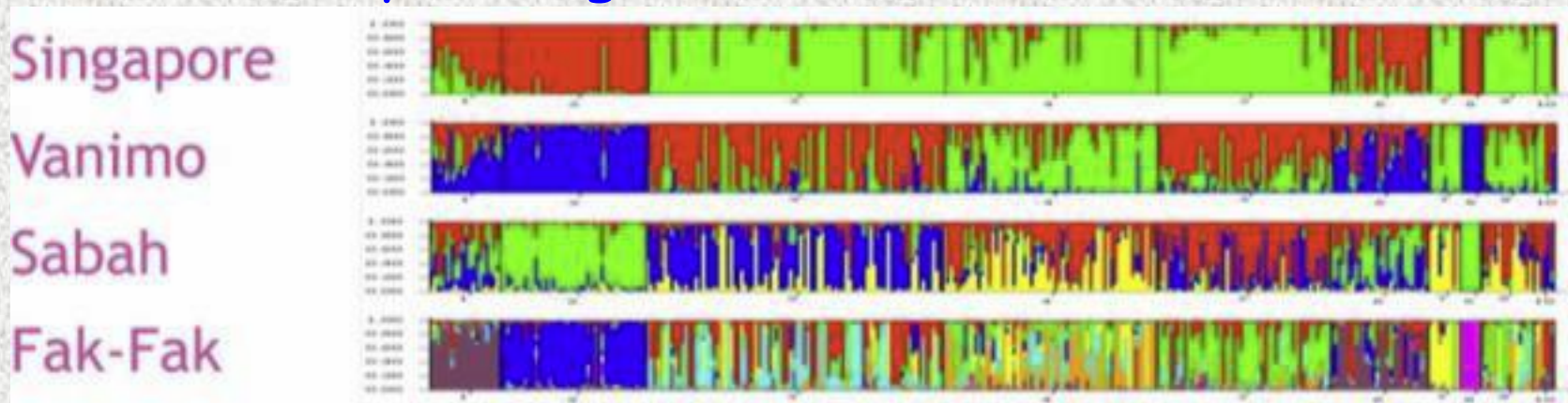
Timber Legality Legislation New Developments



New Developments in Enforcing Timber Legality

- DNA testing of wood to ID illegally harvested wood
- Map of tree genetics for 20 tropical species completed
- Increasingly being used by large US and European retailers to track logs to sawmill and lumber to market
- Cost of testing down to about .5% of the wood's value
- Using DNA database, ENGO's currently conducting undercover spot testing in retailers across the US and Europe to identify illegally harvested wood

DNA sequencing of merbau from four locations



Timber Legality Legislation New Developments

Global Forest Watch

- web-based service using NASA satellite
- 500m x 500m resolution
- images updated every 16 days
- opportunity for crowd-sourcing to ID illegal logging

