

Assessing the Economic and Social Contributions of Forests: Implications for the Private Sector Role in Forest Financing



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Overview of “White Paper” to be discussed at proposed side event on “Private sector and forest financing” during the United Nations Forum on Forests’ (UNFF) conference “Forests and Economic Development”, Istanbul, April 2013.

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NOTE: This is an independent analysis conducted for presentation to UNFF with financial support provided by APP.

OVERVIEW

I. PURPOSE

- Two related tasks
 - 1) Identify key challenges and opportunities facing private sector financing of “forests and trees outside forests”
 - 2) Develop a framework capable of identifying the range of direct and indirect social and economic contributions of forests.
- We draw on task #2 to develop task #1
- This allows us to expand beyond traditional financing discussions to assess important, but less studied, factors.

OVERVIEW

II. "WHITE PAPER" APPROACH

- Collect known data, identify gaps in information
- Foster discussion/learning, ideas "outside the box"
- Provide overall conclusions/findings that do emerge
- Develop recommendations for future strategies
- How governments can cooperate with private sector to foster financing
- How greater cooperation might be encouraged among industry and government

OVERVIEW



II. CAST WIDE NET

- UNFF purview: natural forests, plantations, trees outside of forests, timber and non-timber and forests products
- Role of other sectors: agriculture, mining, oil and gas, tourism, transportation etc.
- UNFF definition of financing: "investment choices" and "revenues, incomes, fees, & bilateral and multilateral resources allocated to forests"

OVERVIEW

IV. TASK #1: Private Sector Financing

1) Map the Universe

- UNFF identifies four categories of financing
 - Public National, Public International
 - Private National, Private International
- We focus primarily on private
- Who are traditional private financing organizations?
- Identify potentially new organizations for mobilizing finance

2) Review current financing instruments

3) Review current “well known” challenges/opportunities

4) Identify new issues through Task #2

OVERVIEW

V. TASK #2: Economic and Social Contributions of Forests

- We developed a framework
 - Capable of assessing multi-faceted direct and indirect contributions of forests at global and regional scales
 - The paper illustrates its application to discussions about forest finance
 - Can also be applied to other issues

THE CLASSIFICATION FRAMEWORK

•TYPE 1: DIRECT EFFECTS

- Captures impacts within forest sector
 - Economic results such as forest related** employment, forest contribution to GDP, trade
 - Social:** when forest organizations directly provide services including schools, education, training, social services

•TYPE 2: DIVERSIFICATION EFFECTS

- Captures impacts forest sector elsewhere
 - Economic results** such as effects of forest activity on economy as a whole
 - Social:** on government revenues, provision of general social services, education, health care, and so on

THE CLASSIFICATION FRAMEWORK

•TYPE 3: REINFORCING EFFECTS

- Captures “feedback loop” effects
 - Cultural traditions** maintained/reinforced
 - Environmental conservation** increased/strengthened
 - Alongside **economic contributions**
- Not implying these effects is always occur. Rather directing attention to less explored activities, making it difficult for policy makers to proactively nurture
- The remainder of power point presents select results
 - See white paper for greater detail

SELECTED RESULTS: TASK 1



MAPPING THE FINANCING UNIVERSE



		Classifying Forest Finance	
		National	International
Public		Para-statal Government corporations Norway International Climate and Forest Initiative	ODA lenders World Bank IMF, Asia Development Bank, Global Environment Facility (GEF)
	Private	Local Family Firms Institutional Investors (Pension funds, TIMOs) Non-integrated corporations Commercial Banks Professional Services Firms Trusts	Integrated Multinational Corporations Institutional investors Merchant Banks Trading companies Non-governmental conservation groups

FINANCING INSTRUMENTS

- Private national
 - Extensive privately financed Pulp mills and pulpwood plantations in Indonesia, Uruguay, Brazil.
 - Sawmills, value added plants, and radiata plantations in Chile, by publicly traded local corporations
- Private international
 - Investment in pine plantations by Weyerhaeuser in China
 - Green Forest plantations in China and elsewhere
 - Poplar plantations on wheat lands in Haryana, India. (Investment largely by individual large farmers.)

KEY CHALLENGES

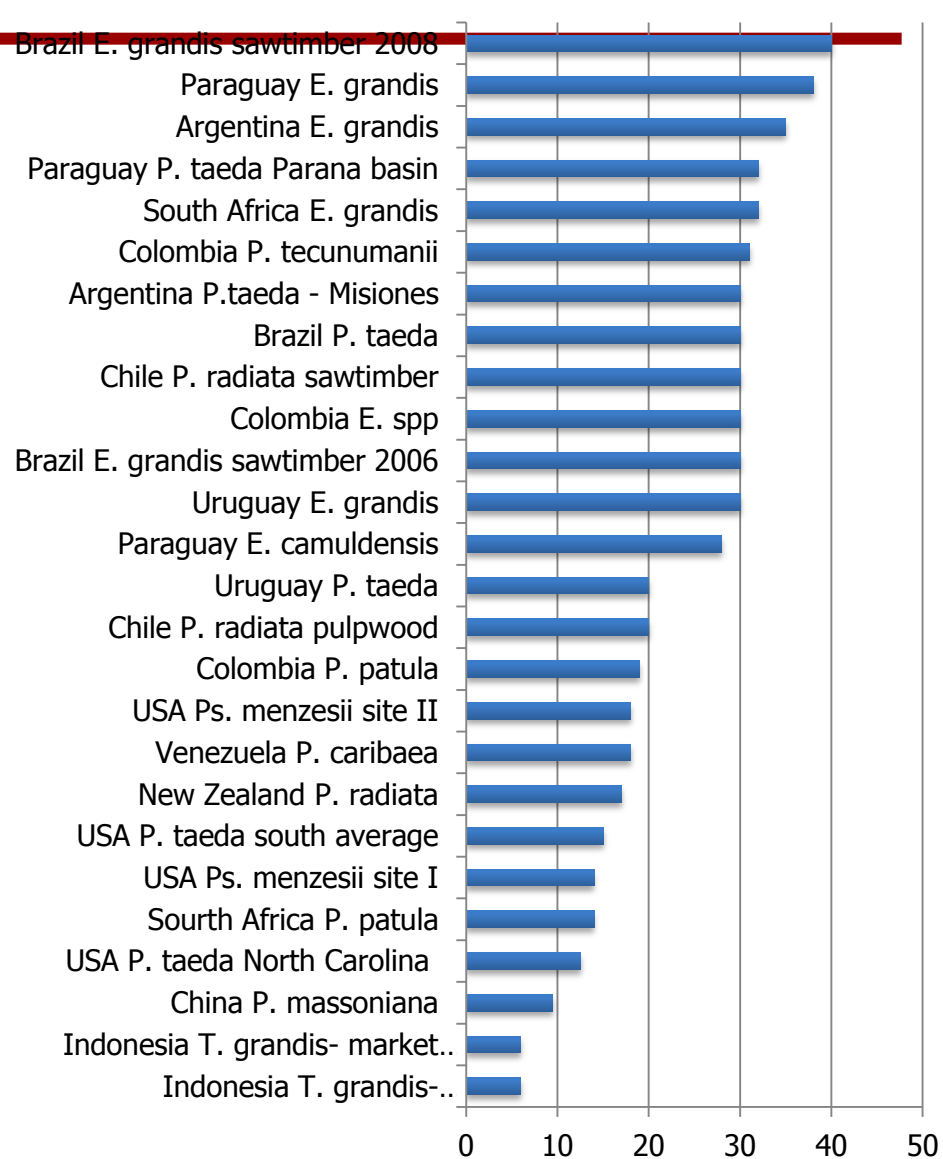
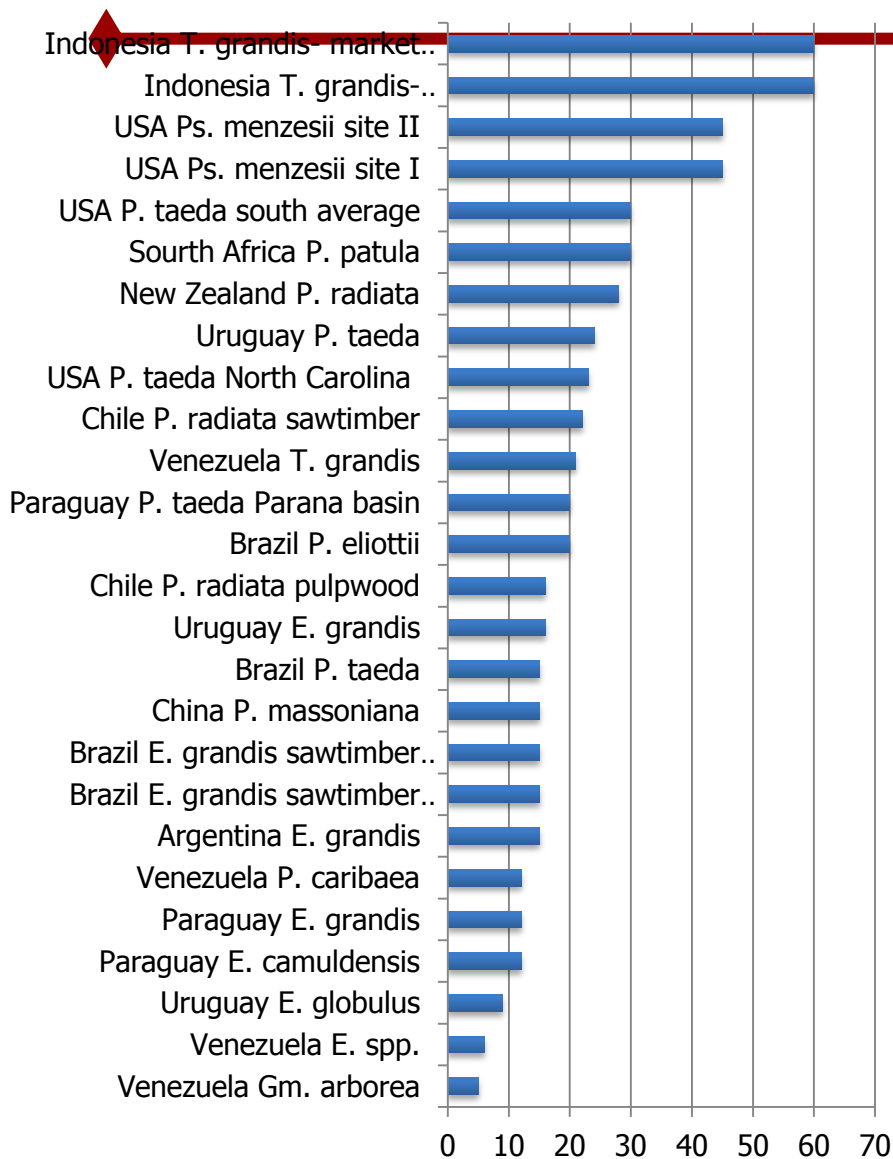
- Need to better identify finance opportunities and risks
- Cash flow profile
- Return on investment
- Role of technology
- Political/reputational risks
- Impact of governance conflicts
- Financing options
- Ability to get money out of the country?
 - Rules on offshore investment/ownership
- Disposition options and risks
 - Market liquidity

FINANCING DATA

- The White Paper has many charts on these questions
- Following chart is one example
- Sheds light on following questions
 - How much need to invest, return over time
- Overall trends
 - Rotations/yields vary widely across commonly used commercial species and regions.
 - Highest annual yields and shortest rotations typically are in well-controlled plantation estates managed by paper companies.
 - Private investors will not invest in longer rotation species when they feel enabling environment is weak.

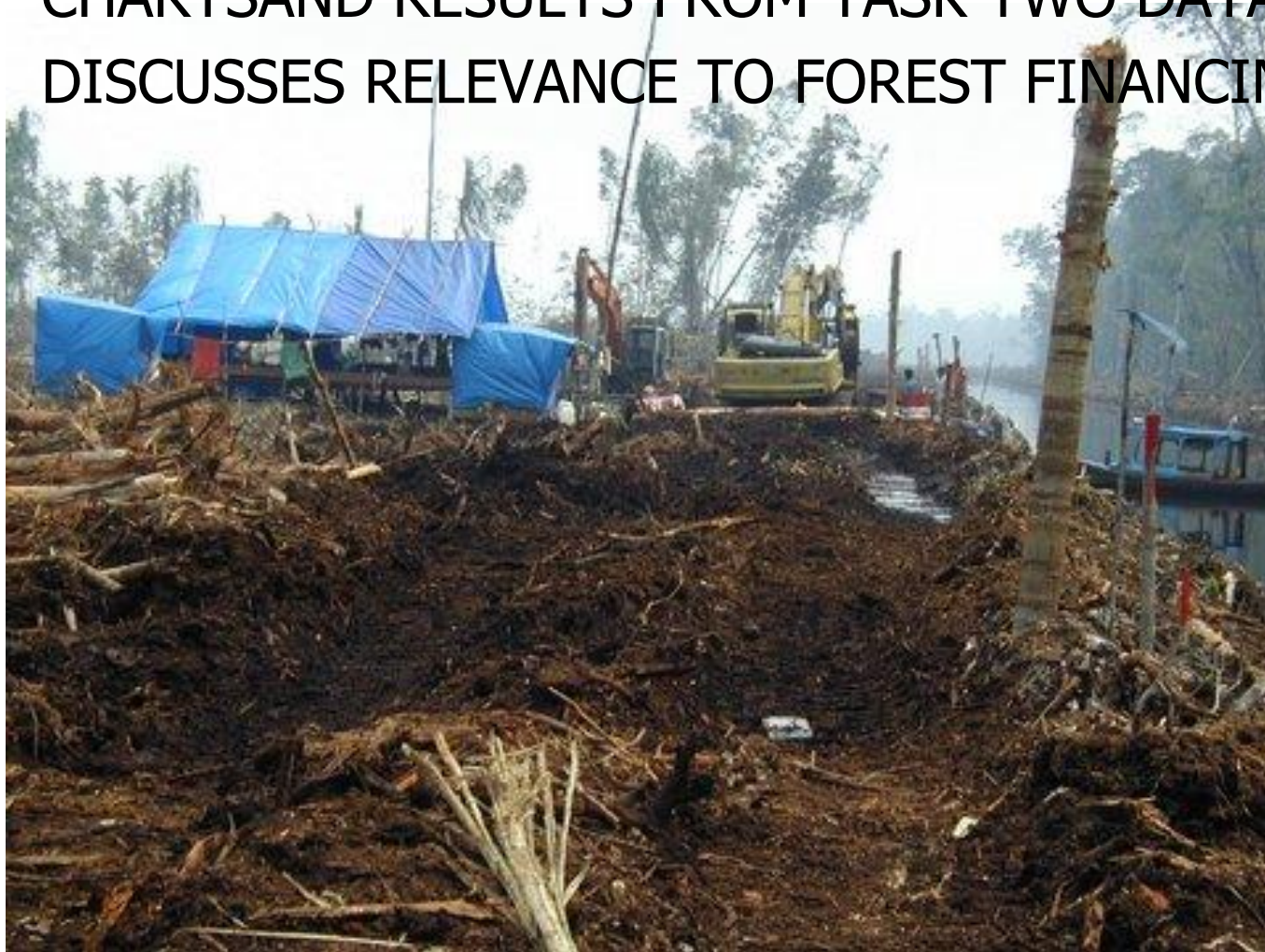
Plantation Rotation Age, 2008 (Years)

Plantation Annual Yields, 2008 (m³/ha/yr)



SELECTED RESULTS: TASK 2

- THE FOLLOWING REPRESENTS SELECT CHARTS AND RESULTS FROM TASK TWO DATA
- DISCUSSES RELEVANCE TO FOREST FINANCING



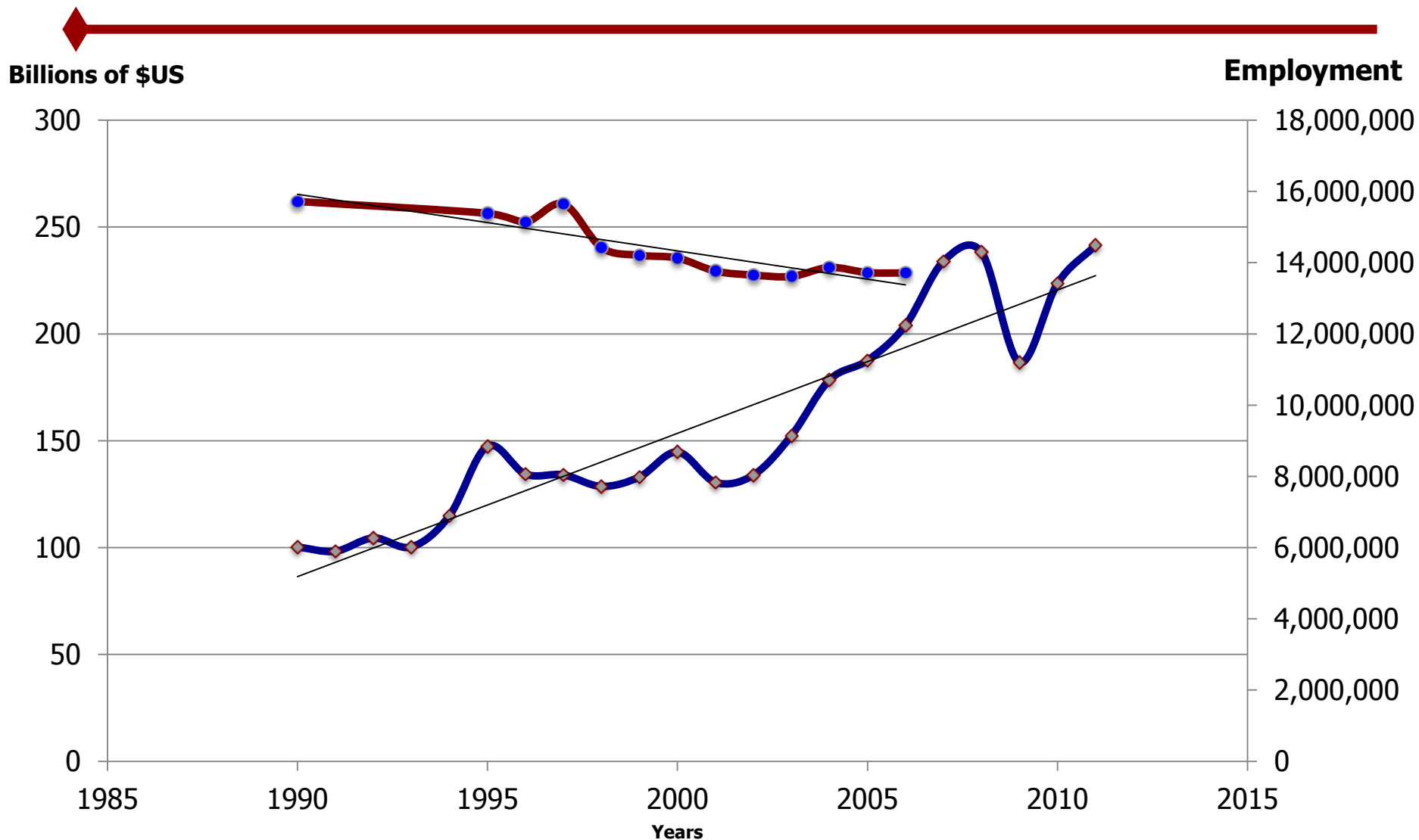
TYPE 1: DIRECT (ECONOMIC)

- Forest contribution to GDP & employment important but
 - But overall forest employment has been declining
 - Actual number of jobs
 - as % of GDP (Owing to TYPE 2 contributions?)
 - However, if we follow UNFF definition and include “palm oil” as “non-timber forest product”, forest employment increases
 - E.g. in Indonesia forest employment not including palm oil down 25% in Indonesia since 1990
 - Including palm oil employment is up 25%
- GDP indicators miss many economic impacts including
 - Non-cash economic values
 - natural capital World Bank is working on
- At same time critics point to low wages, need for higher levels of employment

TYPE 1: DIRECT (ECONOMIC)

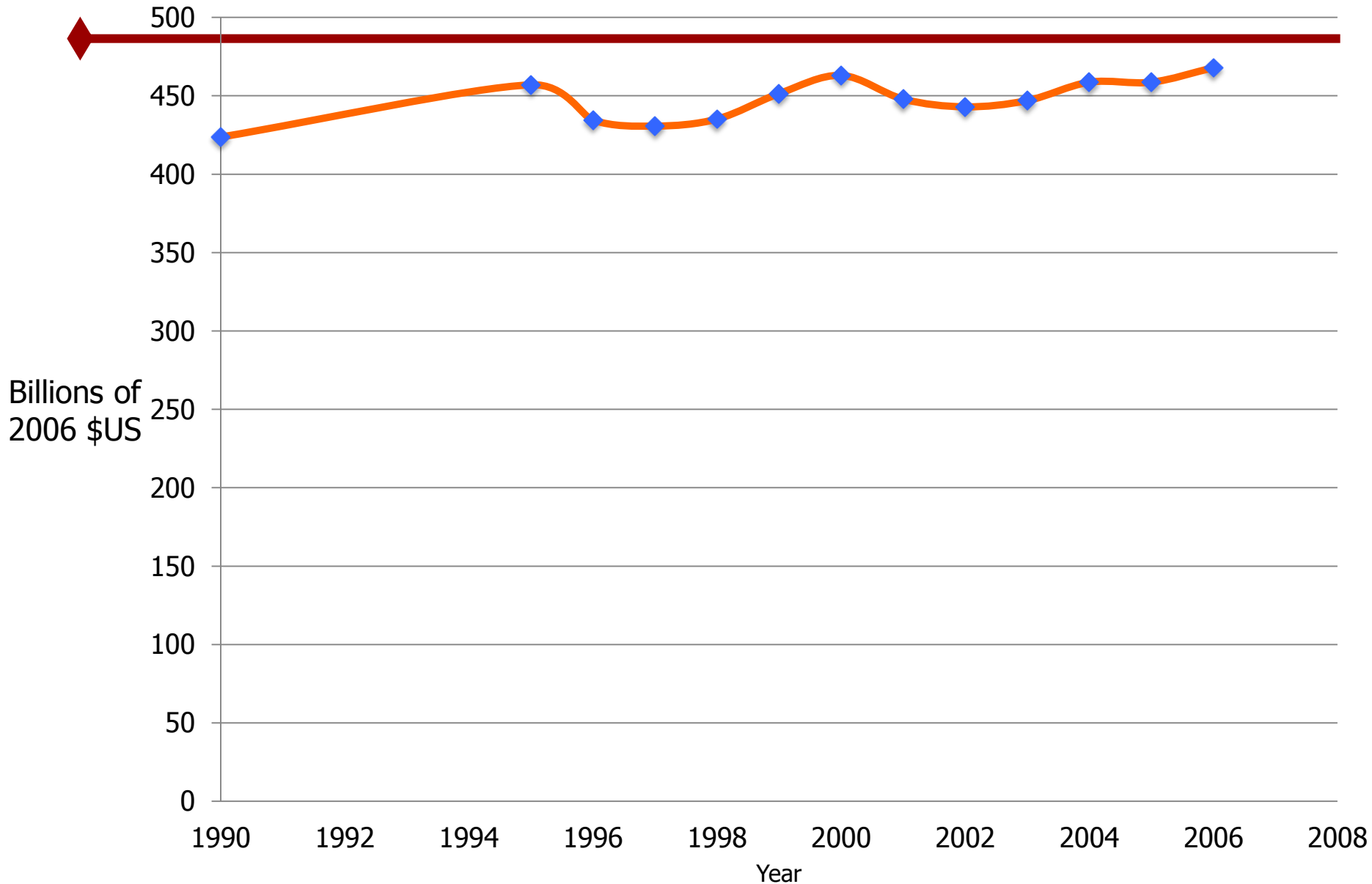
- Forest impact has been increasing on
 - Global trade
 - Dramatic increases for Indonesia and Brazil
 - Value added

Total Value of Forest Product Exports and Forest Sector Employment



Source: FAOStat and Lebedys, Arvydas. "Contribution of the forestry sector to national economies, 1990-2006." *Forest Finance: Working Paper* (2008).

Global Forest Sector Value Added (Billions of 2006 \$US)



Source: Lebedys, Arvydas. "Contribution of the forestry sector to national economies, 1990-2006." *Forest Finance: Working Paper* (2008).

IMPLICATIONS FOR FOREST FINANCING



- Value added/processing

- What types of products are most likely to generate increased exports in next 10-20 years?
- How does greater return on “non-timber forest products” such as palm oil, affect financing needs?
- How does impact from other agricultural sectors affect forest financing decisions in natural forests, plantations, and NTFPs?
- What is the impact of other sectors affecting forest financing for natural forests and plantations

- Integration

- Do financing efforts across traditional and non-timber forest products, such as palm oil and plantations, foster greater possibilities for employment, GDP?

TYPE 1: DIRECT (SOCIAL)

- There is a lack of systematic data on direct provision of social services
- We found many cases
 - Firms that provide schools, hospitals, and recreational facilities
 - Forest entities provided financial support for health care, recreation, and even funerals
 - Forest operations provided skills training and other advancement/enrichment activities to its employees and the greater community.
- However, more research needed
 - To assess how prevalent
 - How to nurture

IMPLICATIONS FOR FOREST FINANCING

- How does private sector financing view direct provision of social services?
 - As a positive owing to enhance societal impacts, employee retention? Do these become prerequisites?
 - As negative owing to increased costs?
- What types of direct provisions seems most important?
 - Employee training (higher production?)
 - Health Care (fewer disruptions?)
 - General education (employee satisfaction?)
 - Community services (great stability?)

TYPE 2: DIVERSIFICATION (SOCIAL)

- Focus on general contribution of forests on social life
- Indirect impact on publicly available services
 - Health care, public schools
 - Livelihoods including “non-cash values”
 - Mortality rates, quality of life
- Report shows correlations
 - Among economic growth, jobs, and tax revenue.
 - But more systematic information needed
 - For example
 - Role of import tariffs as revenue generators
- At same time
 - Social services are critiqued by many as weak and needing further attention

IMPLICATIONS FOR FOREST FINANCING

- How important is knowledge about indirect impacts of forest activity on broader provisions of social services?
- Does a country's ability to provide health care, education, and so on, create a "hospitable" investment climate?
- If so, how might this best be measured?

TYPE 3: REINFORCING

- When economic contribution of forests *reinforces* cultural and environmental goals
- Much of literature/scholarship documents
 - challenges of economic globalization, development and industrial operations on:
 - traditional cultural values/indigenous communities
 - Biodiversity loss
- We probed examples of synergistic impacts
 - NOT arguing these are prevalent
 - But to assess whether they might be nurtured
 - Paves way for discussion of
 - How to foster such interactions
 - Impact on investment in creating “politically stable” climate

TYPE 3: ENVIRONMENTAL CONSERVATION CASE EXAMPLES

- OECD

- New Zealand forest accord

- Great Bear rainforest agreement

- Boreal forest accord

- Where increased extraction occurred alongside increased protection

- Southeast Asia and Latin America

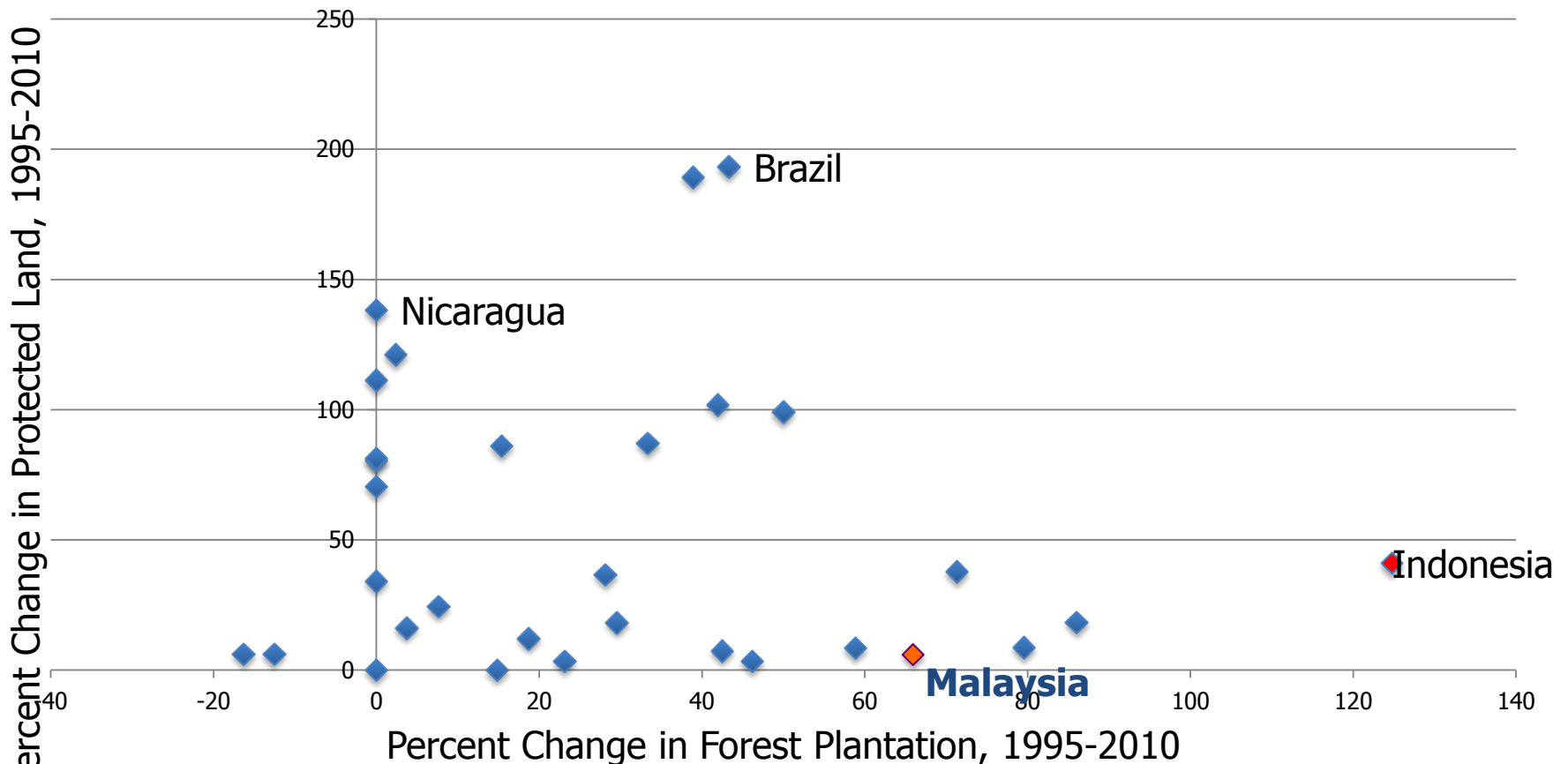
- UNESCO biosphere reserves (Atlantic forest in Brazil, Indonesia), Trafino (Guatemala, Honduras, El Salvador)

TYPE 3: REINFORCING EFFECTS

OBSERVATIONS

- Traditional assumptions are that environmental conservation is a zero or negative sum game.
- **Question emerges**
 - Does intensive commercial extraction (plantations, palm oil, soya and so on) occur alongside increased protected area designations. Data indicates potential correlation?
 - Answering this question does not take away from legitimate concerns about deforestation and degradation, and whether protected areas are enforced.
 - But if answer is yes, raises question about whether there might be more nuanced pathways to protection

Relationship Between Forest Plantation and Land Protection in Southeast Asia, South Asia, and Latin America with Palm Oil Plantations Added in Indonesia and Malaysia



Source: FAOStat, United Nations Environmental Program, World Conservation Monitoring Centre, USDA, Palm Oil World

IMPLICATIONS FOR FOREST FINANCING

- How important are Type 3 reinforcing cultural and environmental conservation effects for forest finance decisions?
 - i.e. where intensive extraction reinforces, rather than detracts from, cultural traditions and environmental goals?
- When these relationships exist do they address financing challenges such as:
 - Reducing political instability
 - Reducing Uncertainty
 - Provide "social license to operate?"
 - Reducing "risk"?
 - Provide for safeguards of interest to financing?
- What types of Type 3 impacts most relevant?