

AN OVERVIEW OF THE WOOD PRODUCT IMPORT SECTOR IN THE UNITED STATES WITH AN EMPHASIS ON OPPORTUNITIES FOR SRI LANKAN EXPORTERS

MS Thesis Defense

Rangika Perera

The School of Renewable Natural Resources

April 2, 2008



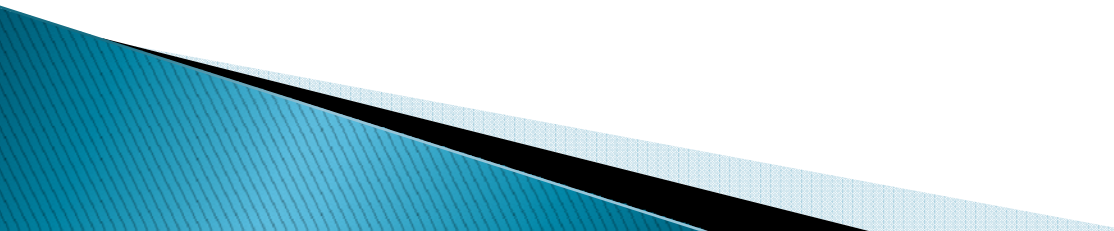
Outline

- ▶ Overview of U.S. Wood Product Imports and Sri Lanka exports
 - ▶ Study Objectives
 - ▶ The Studies
 - U.S. Wood Product Importers
 - Sri Lanka Wood Product Exporters
 - ▶ Conclusion and Discussion
- 

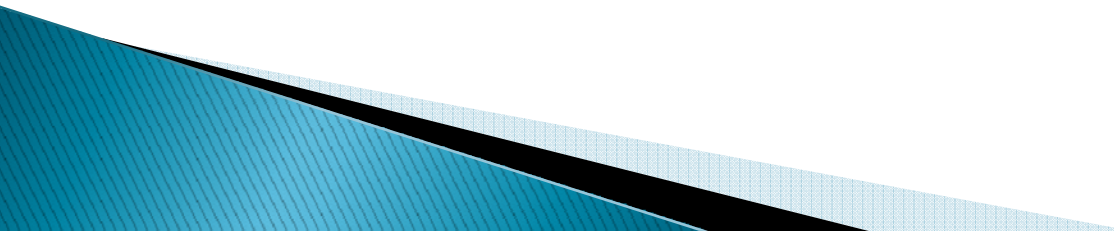
Introduction

- ▶ Growing demand for wood has exerted pressure on global primary old growth forests.
- ▶ Alternatives:
 - Secondary timber resources
 - Forest plantations
 - Imports
- ▶ Rapid increase in domestic wood demand has driven some nations from being net exporters of wood to becoming net importers.
- ▶ These global developments have intensified the need for cross-boundary trade of wood products.

The U.S. wood product import market

- ▶ Leading global wood product importer.
 - ▶ Currently a small consumer of tropical hardwoods.
 - ▶ Markets for tropical wood products will increase in the future.
 - ▶ The trend towards higher demand of pre-finished products will create opportunities for suppliers that can provide high quality tropical wood products.
- 

The U.S. wood product import market

- ▶ Tropical timber imports/trade in the U.S. is highly fragmented : Even small to medium scale export manufacturers can thrive on these opportunities.
 - ▶ Design and quality of wood products are means of maintaining or increasing market share.
- 

Sri Lanka wood product sector

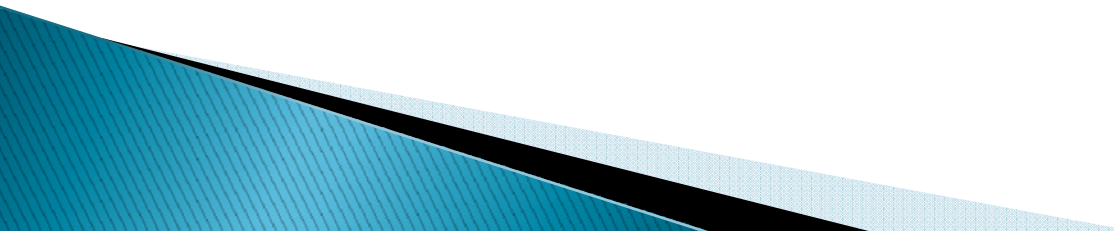
- ▶ Sri Lanka's wood product manufacturing sector is characterized by low volume producers, inefficient production, and quality products.
- ▶ The wood-based manufacturing sector consists of a variety of industries including:
 - lumber, furniture, parquet flooring, wood-based panel products and carvings/crafts.
- ▶ The sector depends almost entirely on local wood supply for raw materials.

Sri Lanka wood product sector

- ▶ There are over 9,000 furniture and other woodworking manufacturers in Sri Lanka with an estimated employment of 28,000.
 - ▶ These firms predominantly supply their products to the domestic market.
 - ▶ 60 manufacturers target export markets.
- 

The studies

Market structure, behaviors and perceptions related to forest certification for:

1. U.S. wood product import market
 2. Sri Lanka wood product export market
- 

Objectives

1. Characterize the structure of the U.S. wood product import market.
 2. Explore demand factors and opportunities for international exporters selling into the U.S. market.
 3. Identify the status and perceived barriers for exporting wood products from Sri Lanka.
 4. Identify U.S. importer and Sri Lankan exporter perceptions towards forest certification.
- 

Study 1

U.S. Wood Product Importers



U.S. wood product importers
Methodology-Mail Surveys
Tailored Design Method (Dillman 2000)

Pre-Testing Questionnaires

```
graph TD; A[Pre-Testing Questionnaires] --> B[Revision]; B --> C[Pre-Notification Postcards]; C --> D[1st Mailing]; D --> E[Reminder Postcards]; E --> F[Second Mailing to Non-Respondents];
```

Revision

Pre-Notification Postcards

1st Mailing

Reminder Postcards

Second Mailing to Non-Respondents

U.S. wood product importers

Response rate

Sample frame:

Census of 158 US wood products importers listed in 2006 (Buyers and Sellers Directory of the Forest Products Industry, 2007)

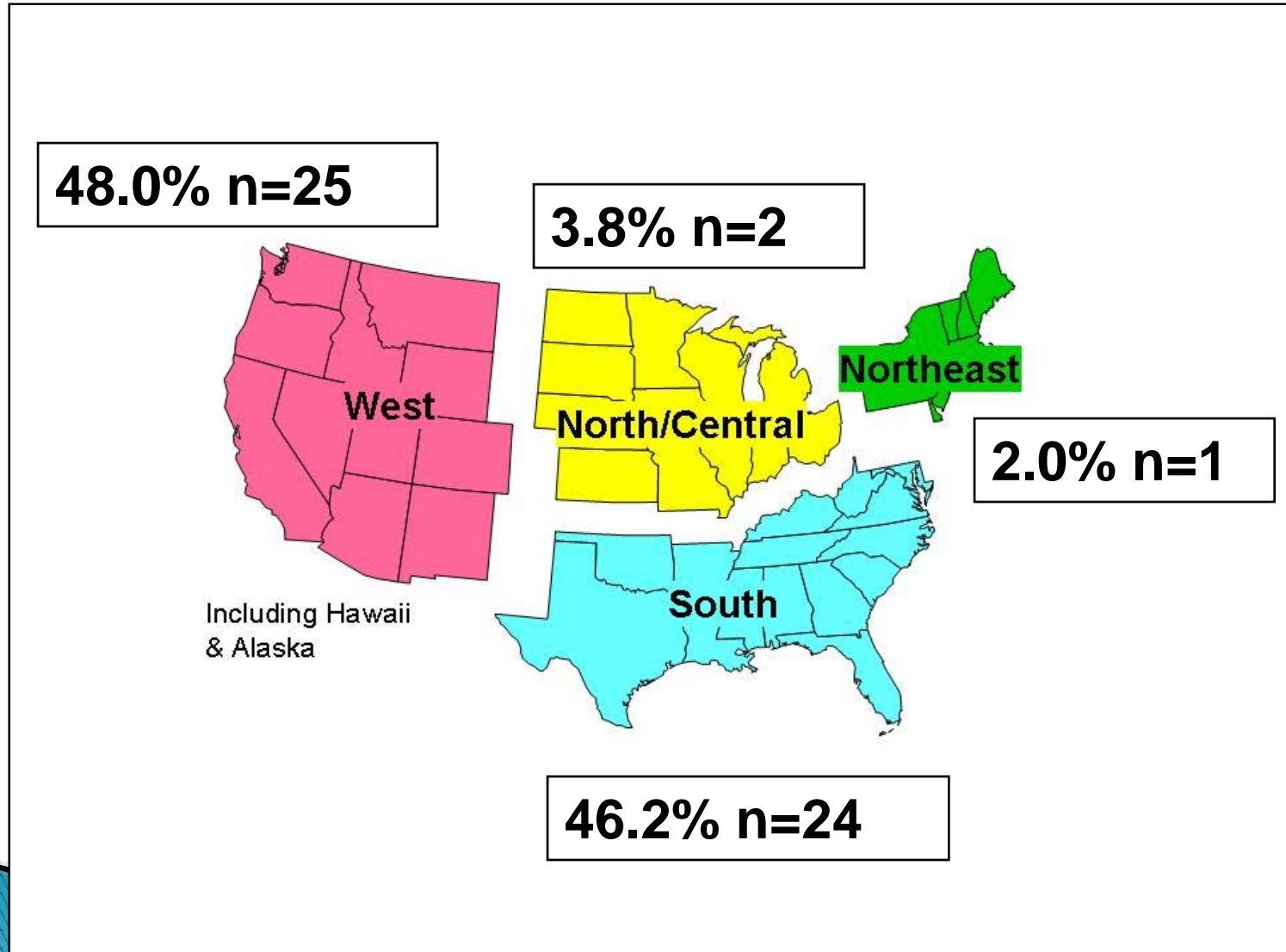
$$\text{Adjusted } R_{\text{rate}} = \frac{\text{Usable responses}}{\text{Total sample} - \left(\text{Undeliverable} + \text{nonusable responses} \right)}$$

$$\text{Adjusted } R_{\text{rate}} = 40.6 \%$$

U.S. wood product importers

Distribution of respondent corporate locations

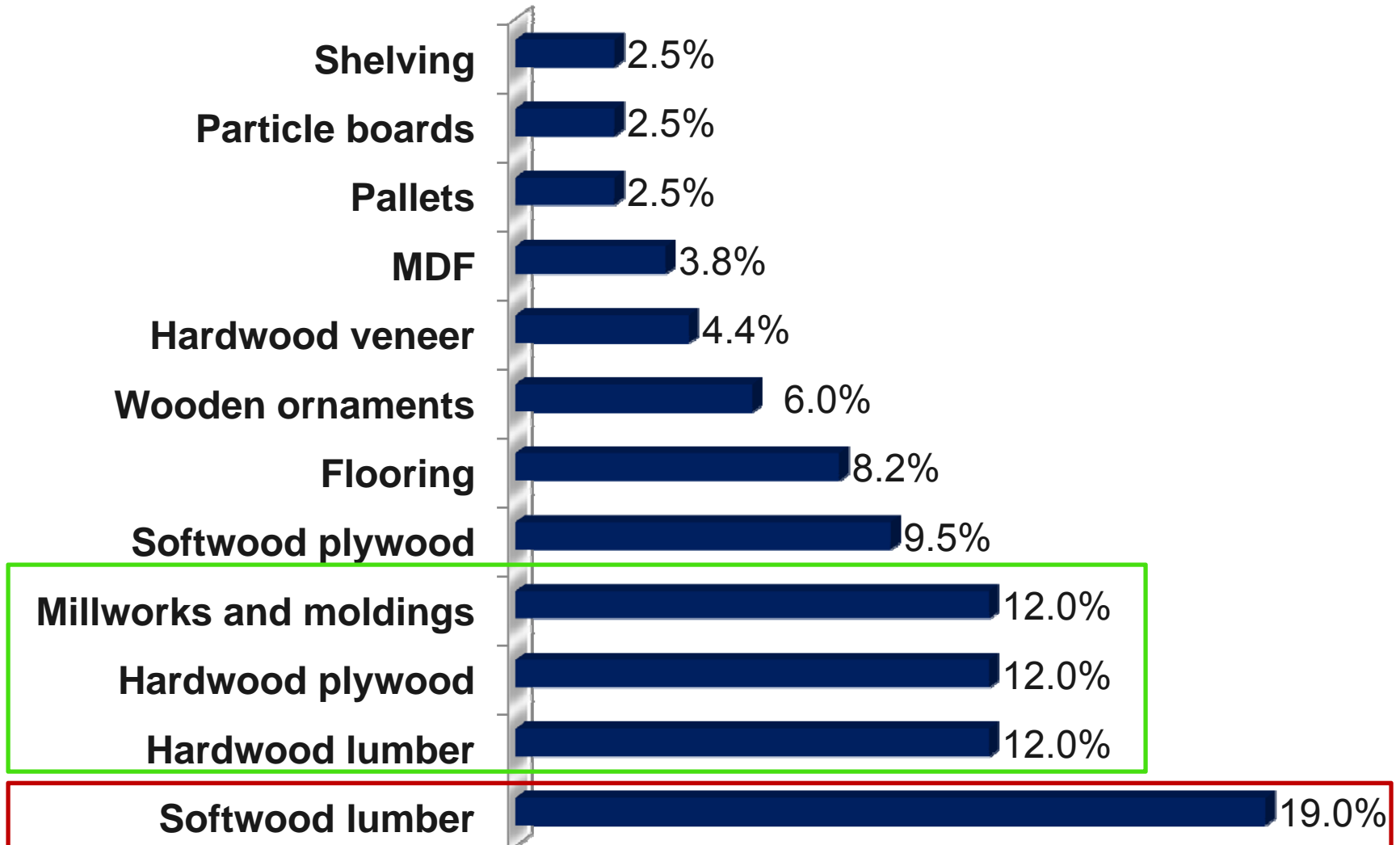
percent of respondents (n=52)



U.S. wood product importers

Wood products imported by respondents

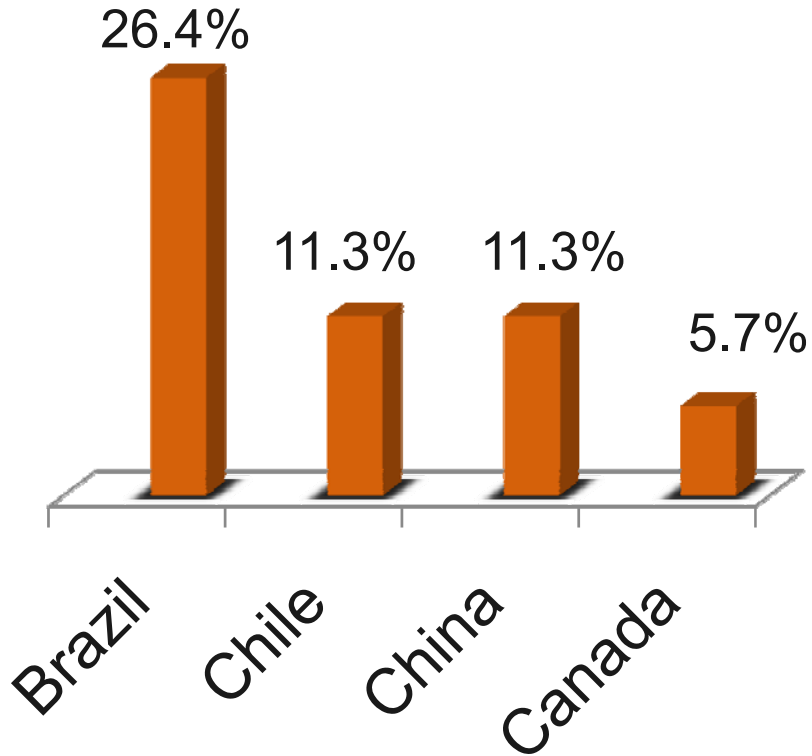
percent of respondents (n=54) (multiple responses possible)



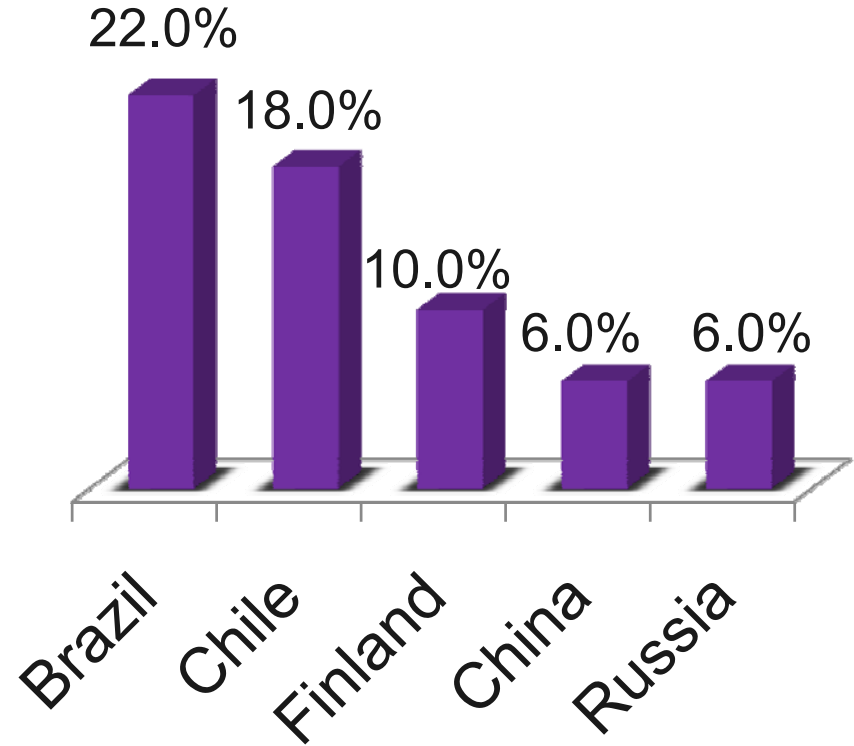
U.S. wood product importers

Major export partner countries (2006)

percent of respondents (n=54)



By purchase value



By product quality

U.S. wood product importers

Grouping of Respondent Companies (Cluster analysis)

Variable	Scale	Minimum	Maximum
Total number of employees	1- 6	1-10 employees	More than 500 employees
Total gross sales	1- 9	\$0-\$5 million	More than \$ 1 billion
Number of containers imported	1- 4	1-25 containers	More than 10 containers
Percentage of sales from imports	1- 10	1%-9%	90-100%

U.S. wood product importers

Grouping of Respondent Companies (Cluster analysis)

Group		Number of employees	Total gross sales	Number of containers imported	Percent of sales from imports
1	Mean	1.31	1.46	2.23	3.69
	N	13	13	13	13
2	Mean	4.29	5.21	3.57	3.14
	N	14	14	14	14
3	Mean	1.32	2.08	3	9.4
	N	25	25	25	25

*Differences between clusters are significant at $\alpha = 0.05$ significance level

U.S. wood product importers

Cluster profile: Market segments

Cluster 1 : Small to medium scale but moderate
importers

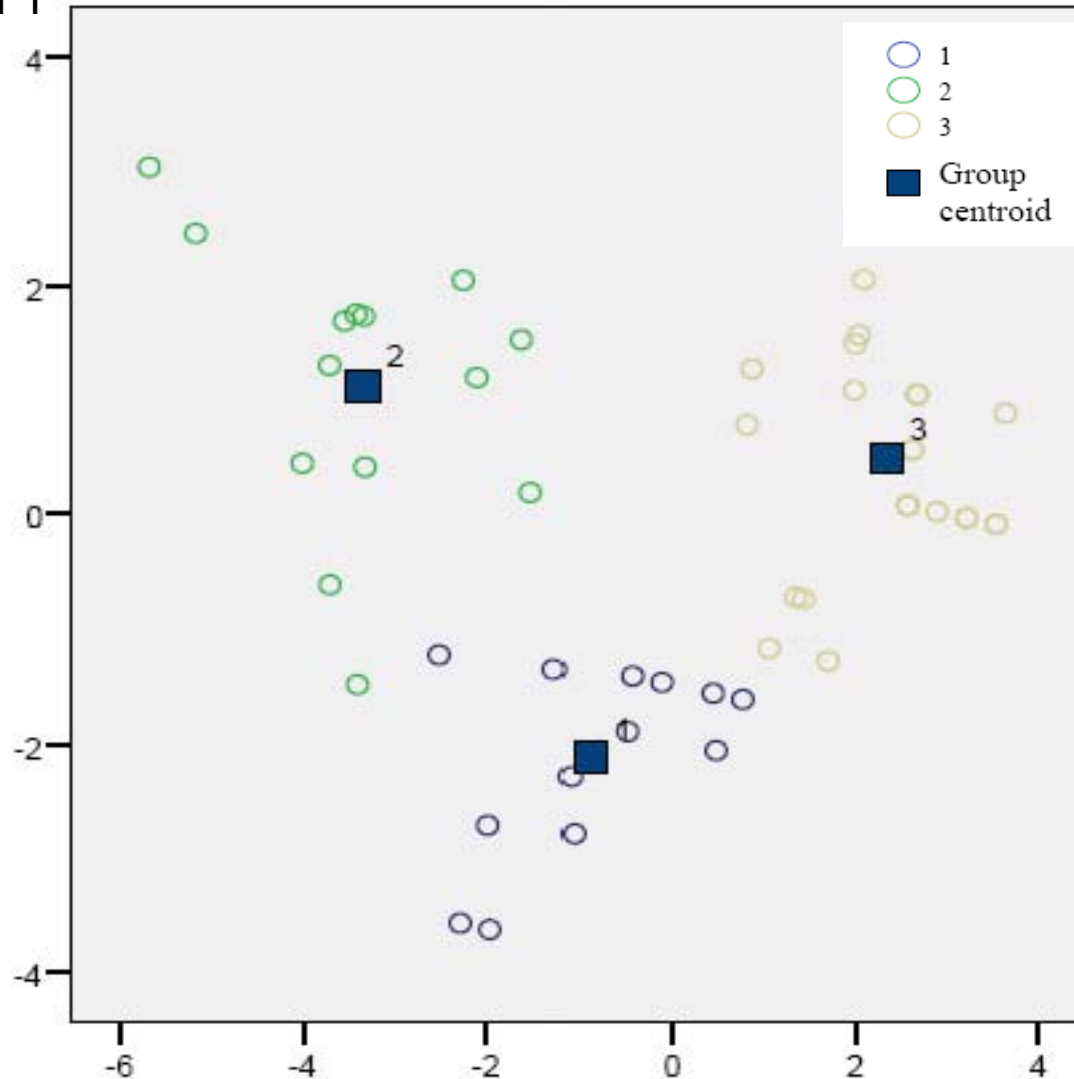
Cluster 2: Medium to large scale but minor
importers

Cluster 3: Small to medium scale but major
importers

U.S. wood product importers

Distinct market segments

Function 1



Function 2

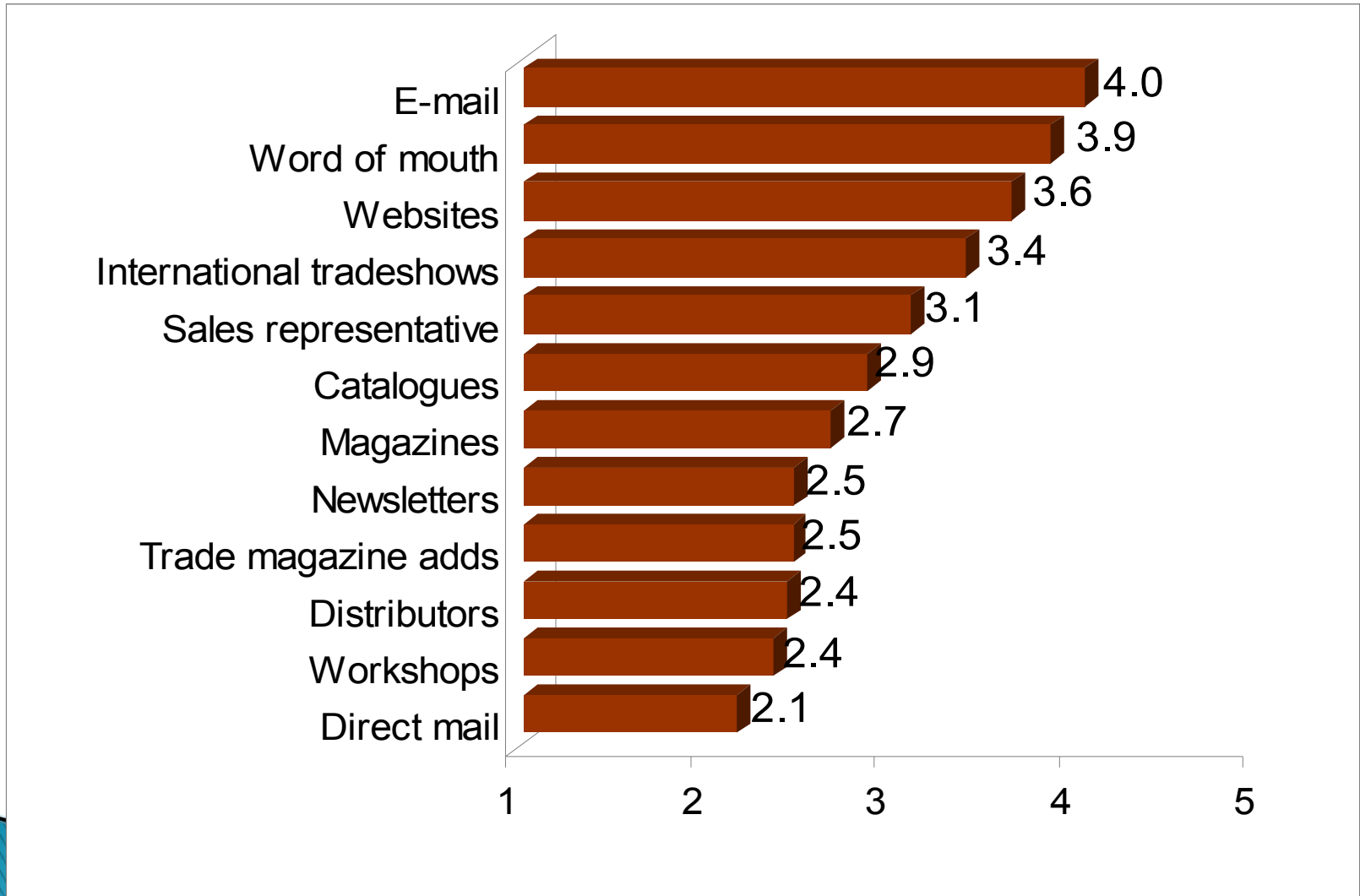
Function 1: percentage of sales from imports

Function 2: total gross sales, number of employee, number of containers import

U.S. wood product importers

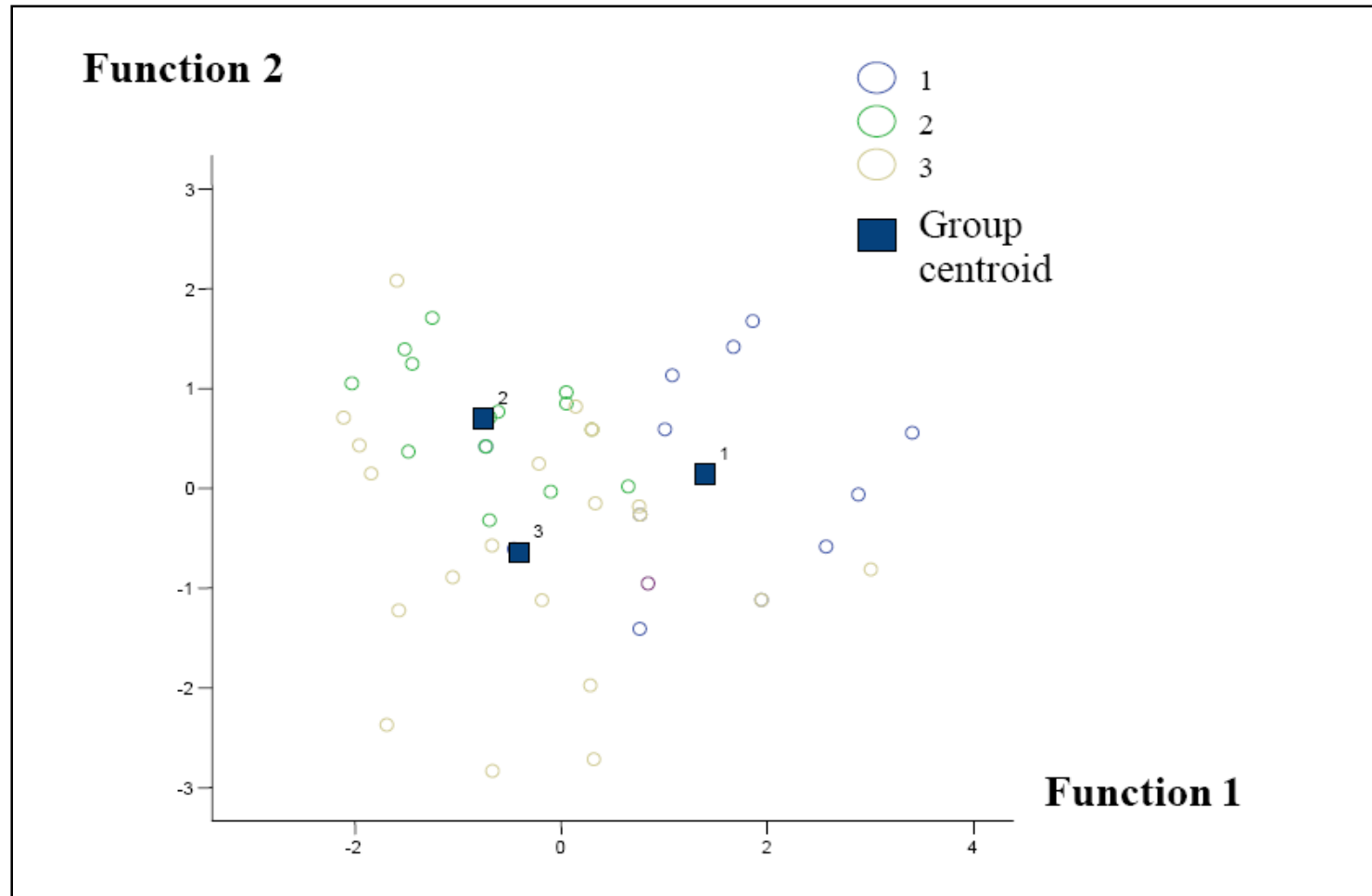
Sources of information

Scale: 1=not important at all; 3=somewhat important; 5=very important, (n=54)



U.S. wood product importers

Foreign supplier selection criteria by company grouping



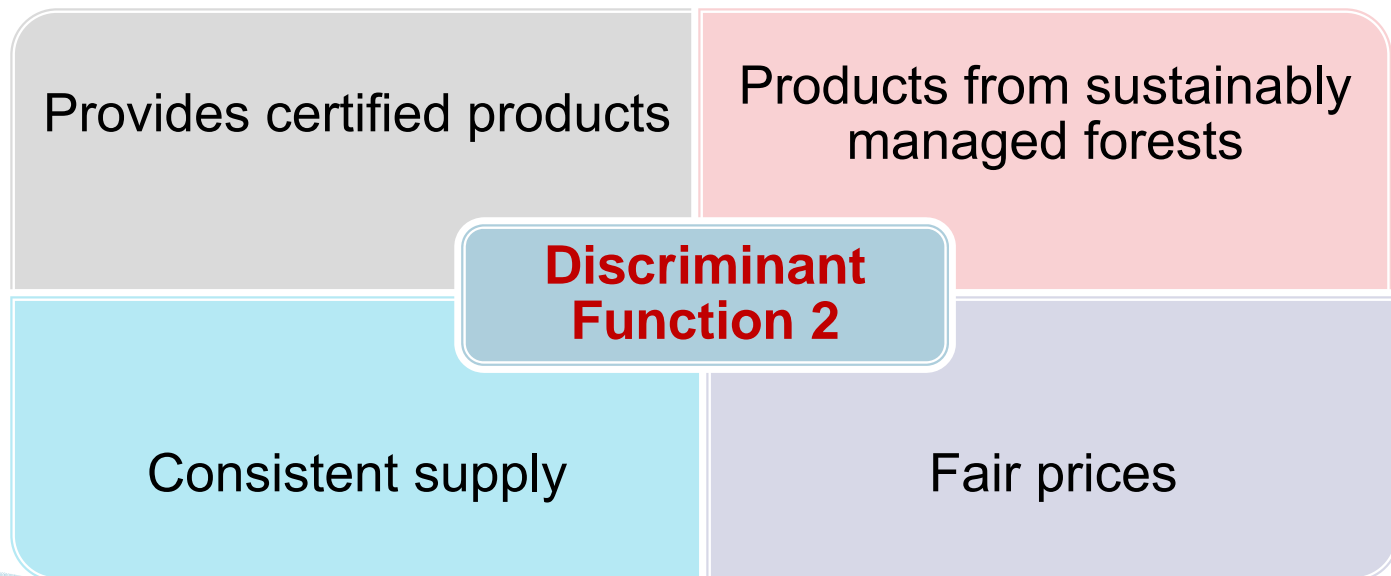
Function 1:supplier speaks English, knowledgeable sales people

Function 2:provides certified products, products from sustainable managed forests, consistent supply, fair prices

U.S. wood product importers

Foreign supplier selection criteria by company grouping

Function 2 separates group 1 (small to medium scale but moderate importers) from group 2 (medium to large scale but minor importers) & group 3 (small to medium scale but major importers).



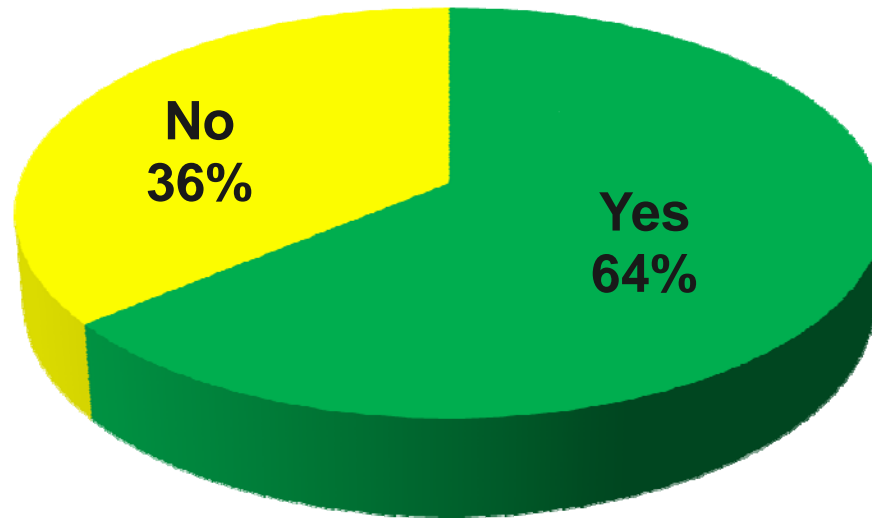
U.S. Wood product importers
Foreign supplier selection factors
(Factor analysis)



Variable	Factor				
	Certification and marketing	Product attributes	Client contact	Quality / product supply	Timber species and supplier reputation
Products from sustainable managed forests	0.893	-0.041	0.089	0.151	0.058
Ability to provide certified products	0.837	0.263	-0.029	-0.018	-0.002
Uniqueness	0.614	0.365	0.446	-0.055	0.273
Distribution capabilities	0.555	0.445	0.269	0.178	0.162
Marketing skills	0.508	0.434	0.504	-0.029	0.147
Warranty	0.096	0.852	0.034	0.160	-0.003
Design	0.300	0.712	0.062	-0.058	0.330
Fast delivery	0.330	0.546	0.168	0.362	0.071
Supplier speaks English	0.024	0.089	0.844	-0.156	0.086
Long term customer relationship	-0.007	-0.356	0.738	0.154	0.290
Computer capabilities	0.262	0.277	0.713	0.178	0.055
On time delivery	0.000	0.110	0.052	0.897	-0.043
Quality	0.235	-0.031	-0.124	0.730	0.330
Consistent supply	-0.033	0.184	0.214	0.625	0.139
Products from traditional species	0.054	-0.085	0.273	0.012	0.820
Supplier reputation	-0.026	0.163	-0.088	0.288	0.644
Products from lesser used species	0.142	0.296	0.372	-0.046	0.579
Fast response to my inquiries	0.187	0.323	0.007	0.260	0.540

U.S. Wood product importers
Forest certification

Does your company currently import certified wood products?



Q1: Certified products can help my company reach diversified markets.

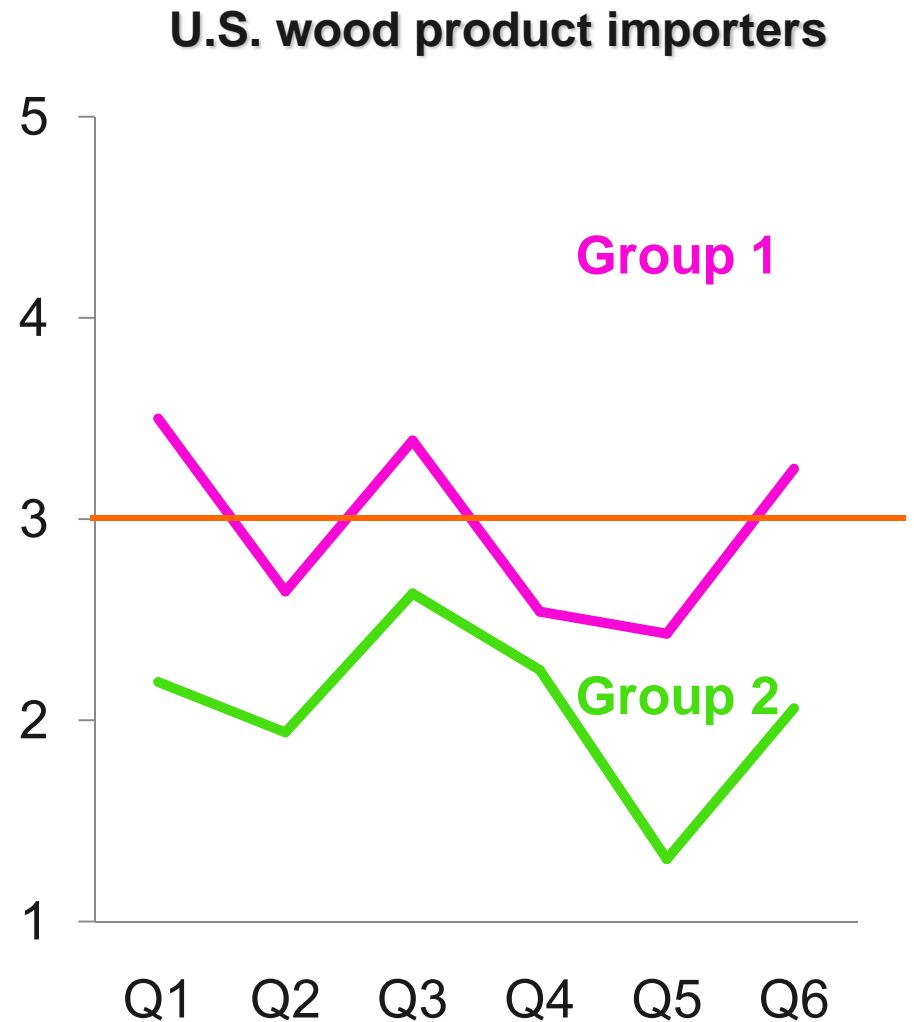
Q2: Certified products can capture price premiums.

Q3: Certified products help to protect the environment.

Q4: I would like to get information about certification.

Q5: I would pay a premium for certified products.

Q6: If available, I would seek out certified wood products.



Group 1: Certified wood product importers

Group 2: Non-certified wood product importers

U.S. wood product importers

Comparison of perceptions towards forest certification between Group 1 and Group 2

*Q1: Certified products can help my company reach diversified markets.

*Q2: Certified products can capture price premiums.

*Q3: Certified products help to protect the environment.

Q4: I would like to get information about certification.

*Q5: I would pay a premium for certified products.

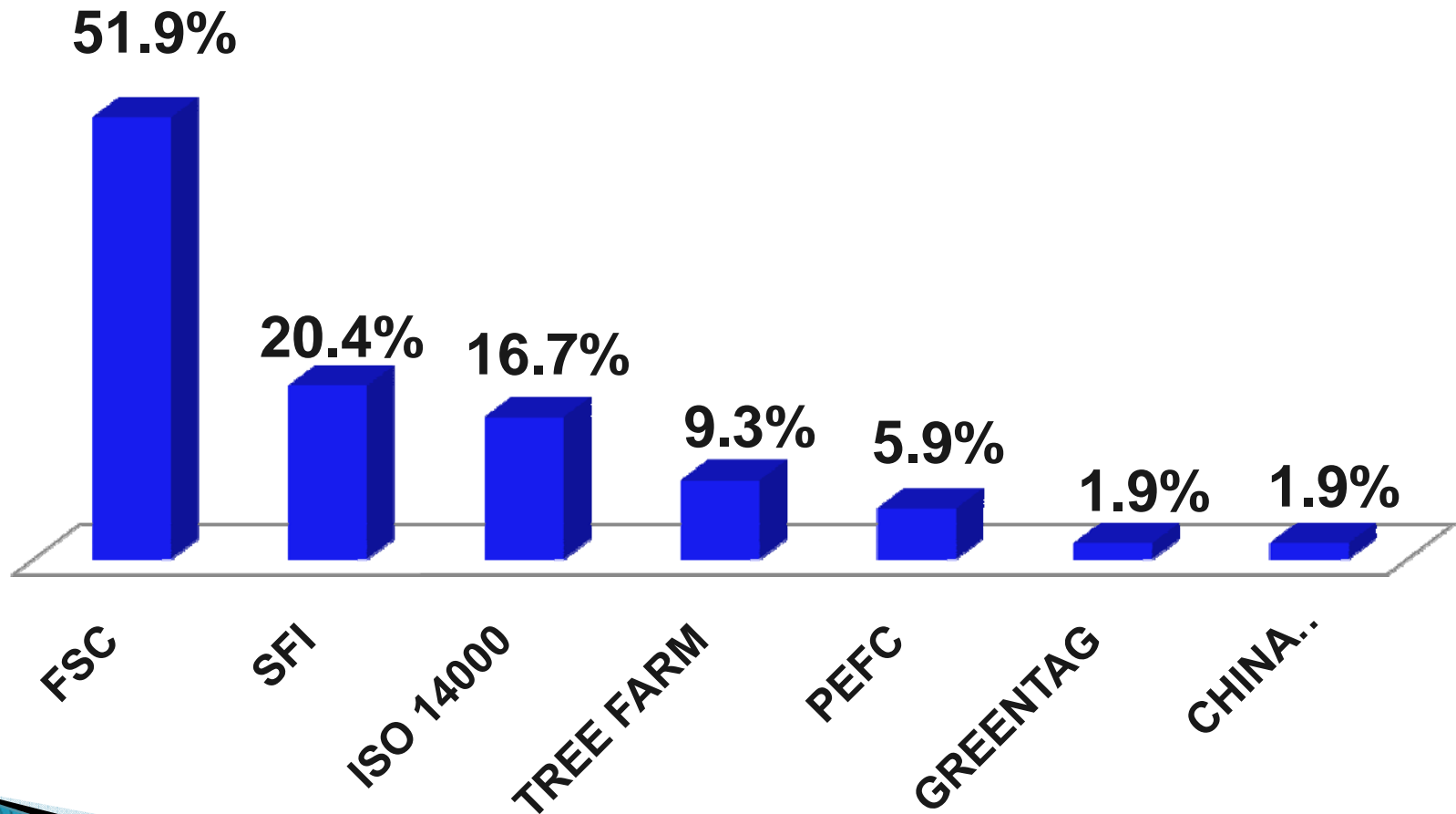
*Q6: If available, I would seek out certified wood products.

* Mann Whitney statistics : P-value is significant at $\alpha=0.05$ significance

U.S. wood product importers

Accepted certification programs

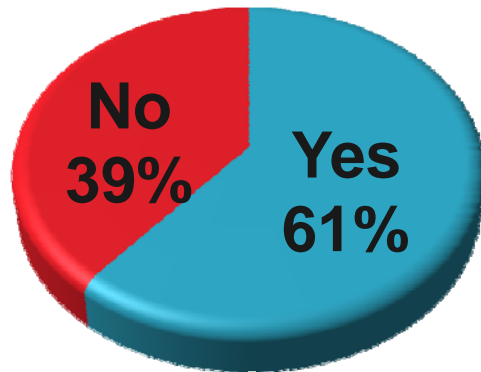
percent of respondents (n=54) (multiple responses possible)



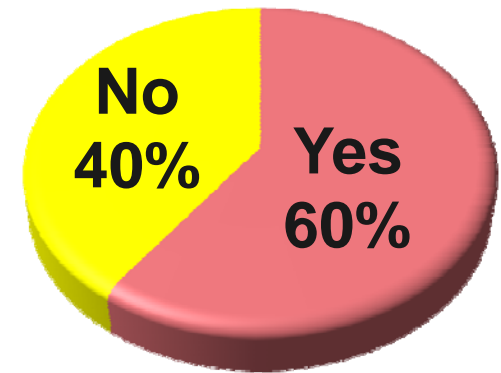
U.S. Wood product importers

Opportunities for Sri Lankan exporters

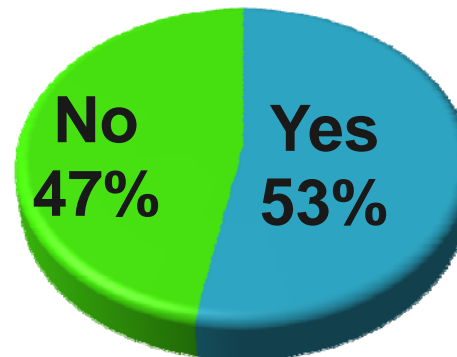
Would you like to receive information about Sri Lanka wood products?



Are you seeking new suppliers?



Do you plan to diversify the wood products you import in the next 5 years?



Study 2

Sri Lanka wood product exporters



Sri Lanka wood product exporters
Methodology-Personal interviews

Pre-Testing Questionnaires



Revision



Pre-Notification Postcards



Follow Up Phone Calls



Personal interviews

Sri Lanka wood product exporters

Response rate

Sample frame:

All 60 registered wood product exporters in 2006. (Export Development of Board of Sri Lanka, 2007)

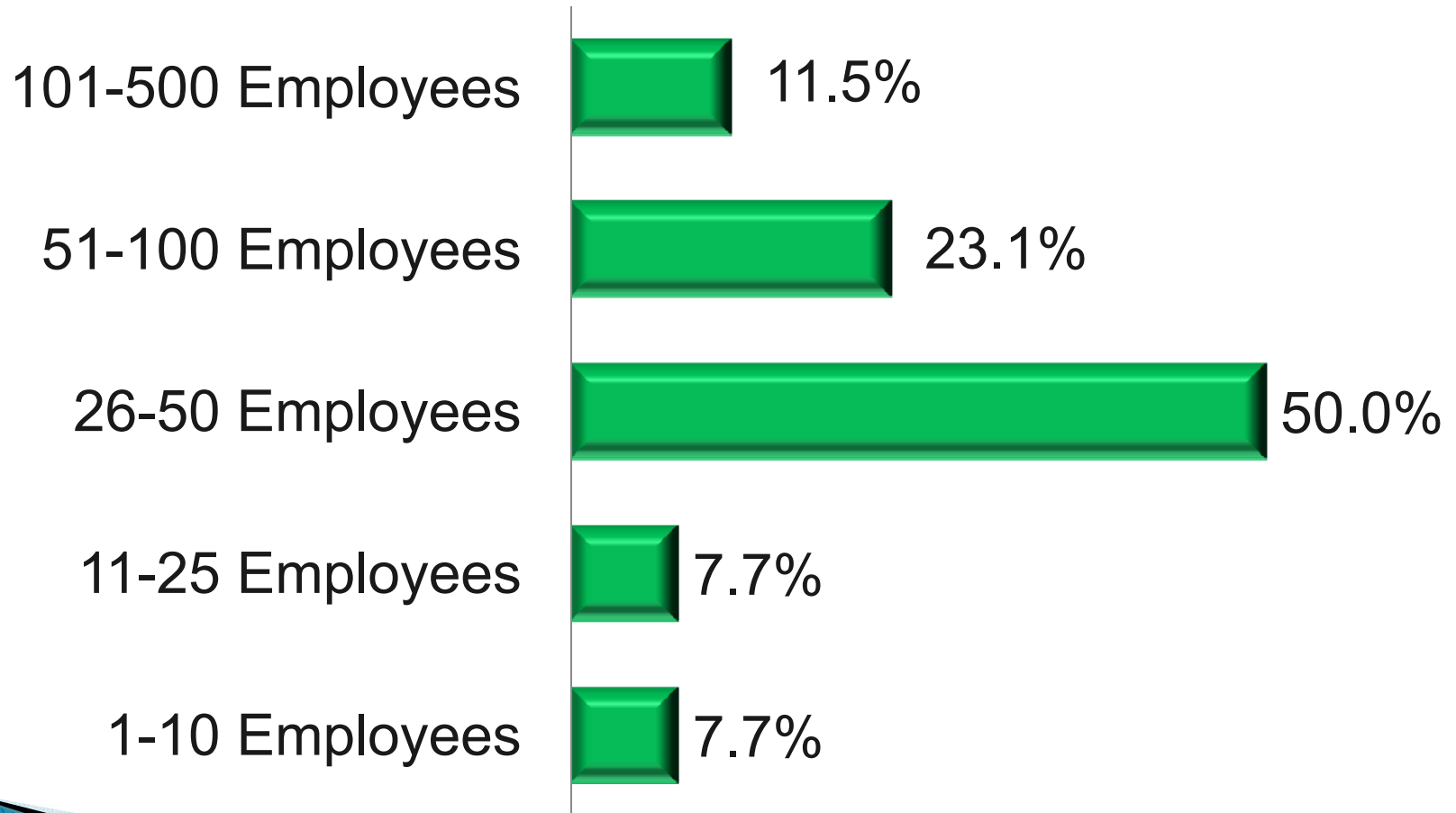
$$R_{\text{rate}} = \frac{\text{Usable responses}}{\text{Total sample} - \text{nonusable responses}}$$

$$R_{\text{rate}} = 43.4\%$$

Sri Lanka wood product exporters

Number of employees

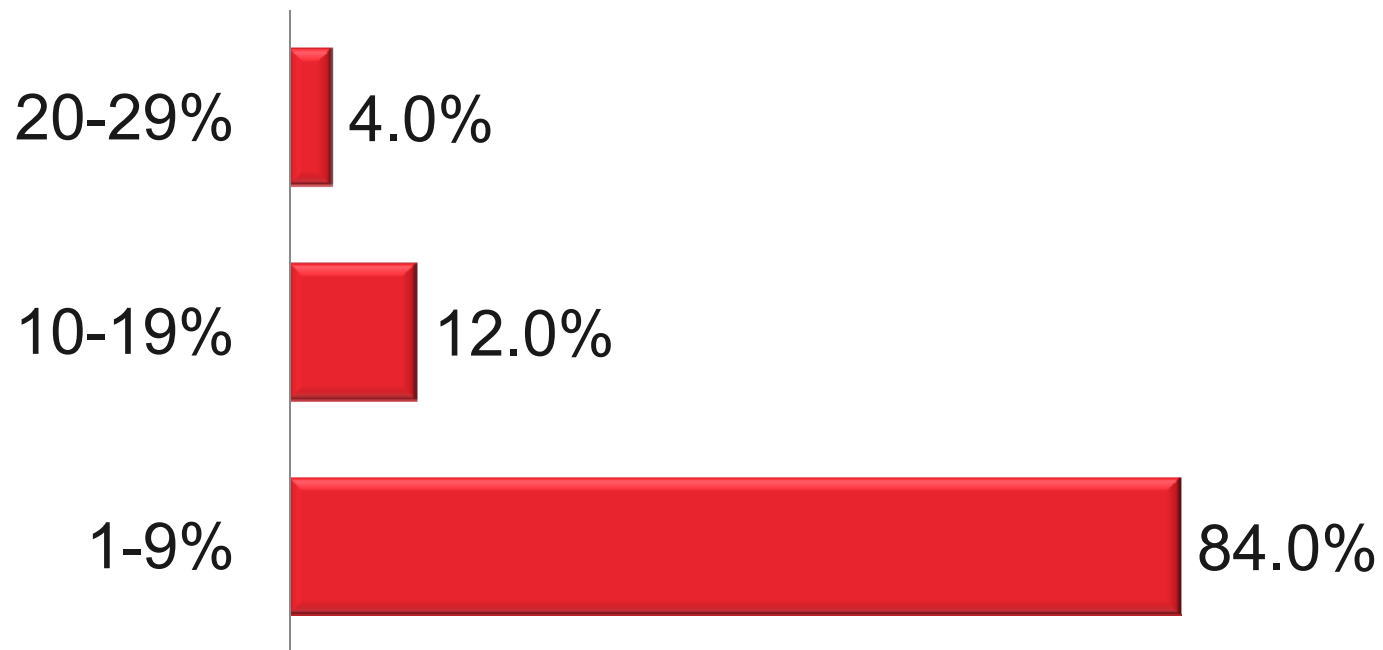
Percent of respondents (n= 26)



Sri Lanka wood product export

Percent of sales from exports in 2006

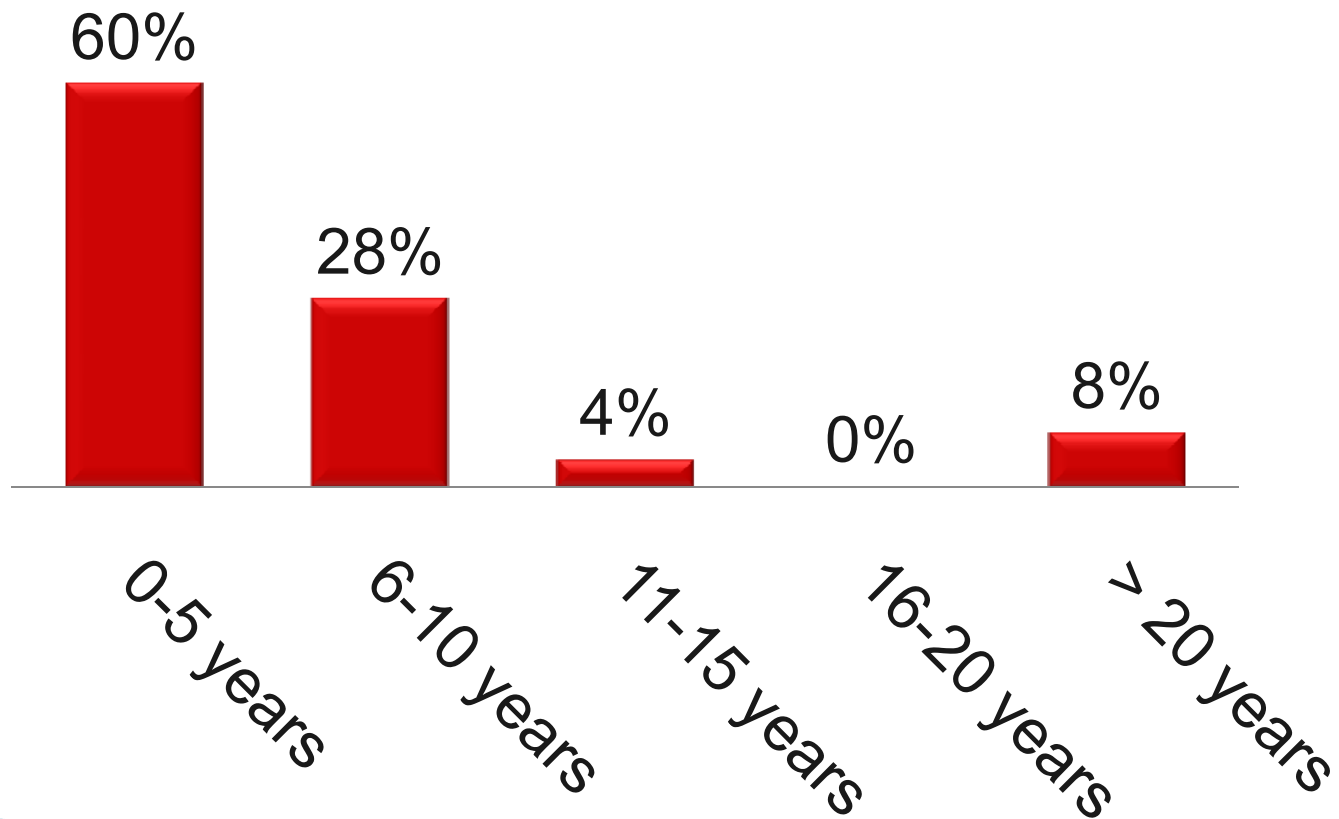
Percent of respondents (n= 26)



Sri Lanka wood and wood product exporters

Company experience with exporting-number of years

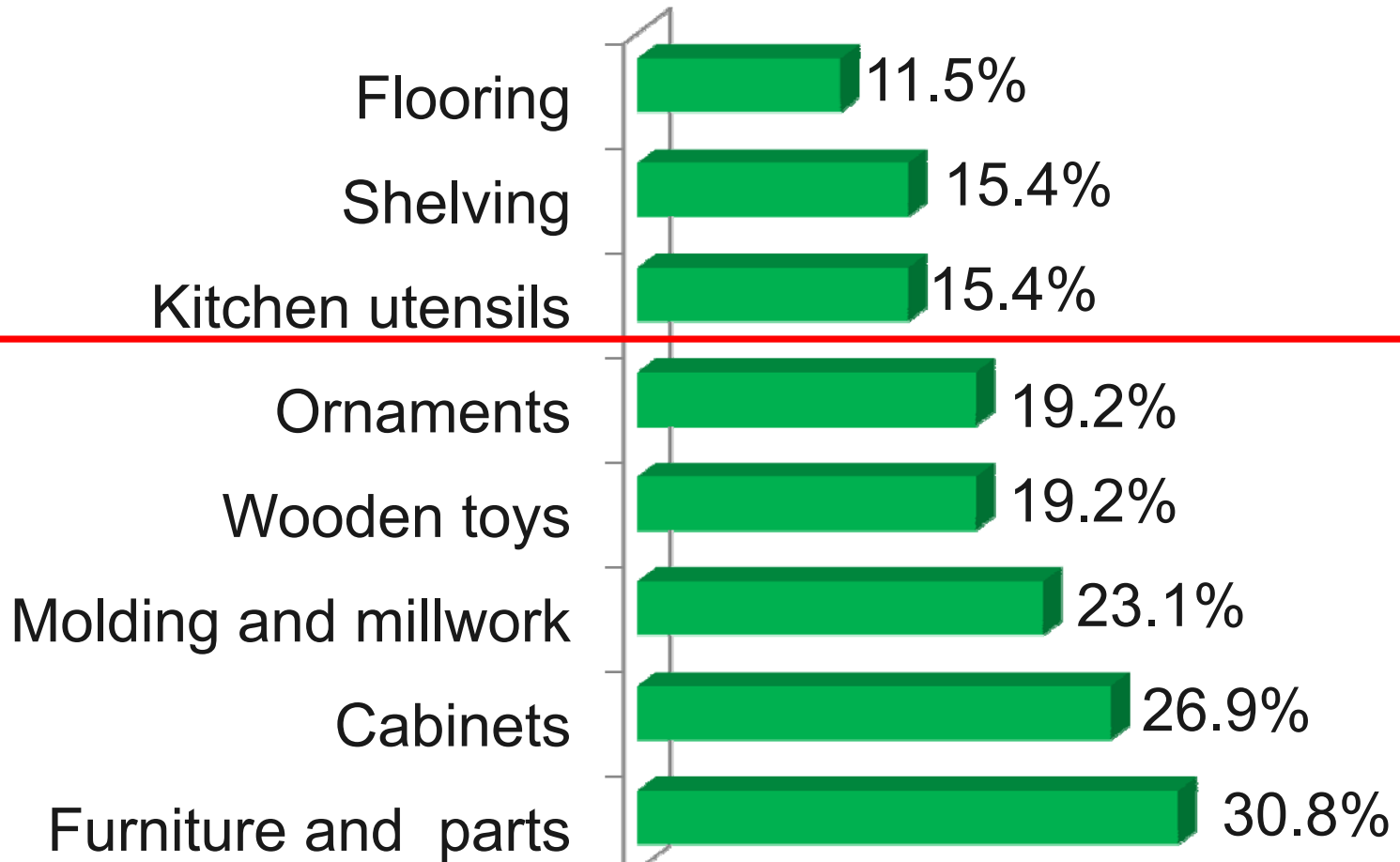
percent of respondents (n= 26)



Sri Lanka wood product exporters

Wood Products exported by respondents

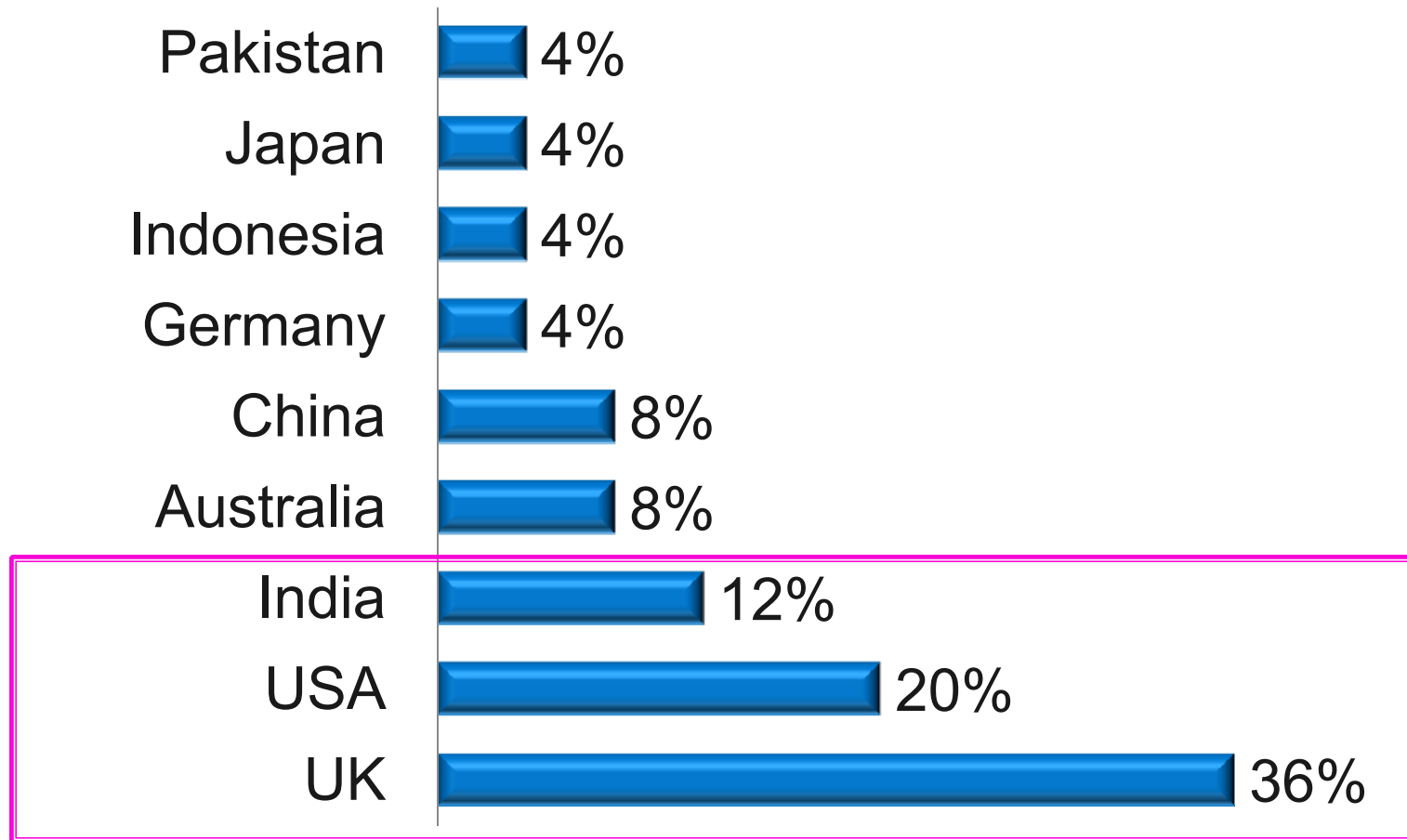
percent of respondents (n=26) (multiple responses possible)



Sri Lanka wood product exporters

Importer partner countries

percent of respondents (n=26) (multiple responses possible)



Sri Lanka wood product exporters

Marketing efforts

percent of respondents (n=26)

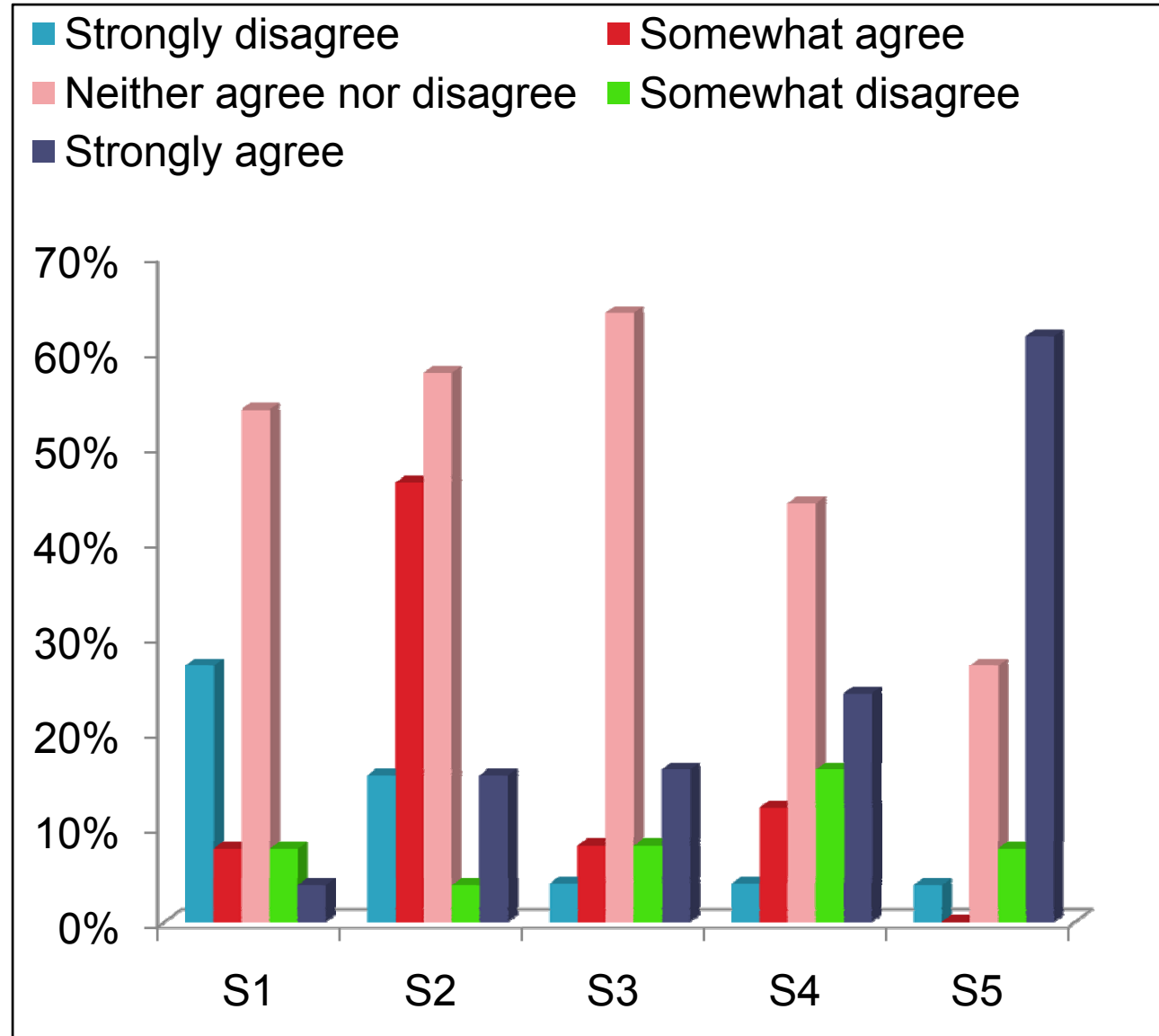
S1 - doing market research prior to introduction of their products

S2 - having a strategic plan for wood product exporting

S3 - understanding competitor strengths and weaknesses

S4 - prepare a marketing plan

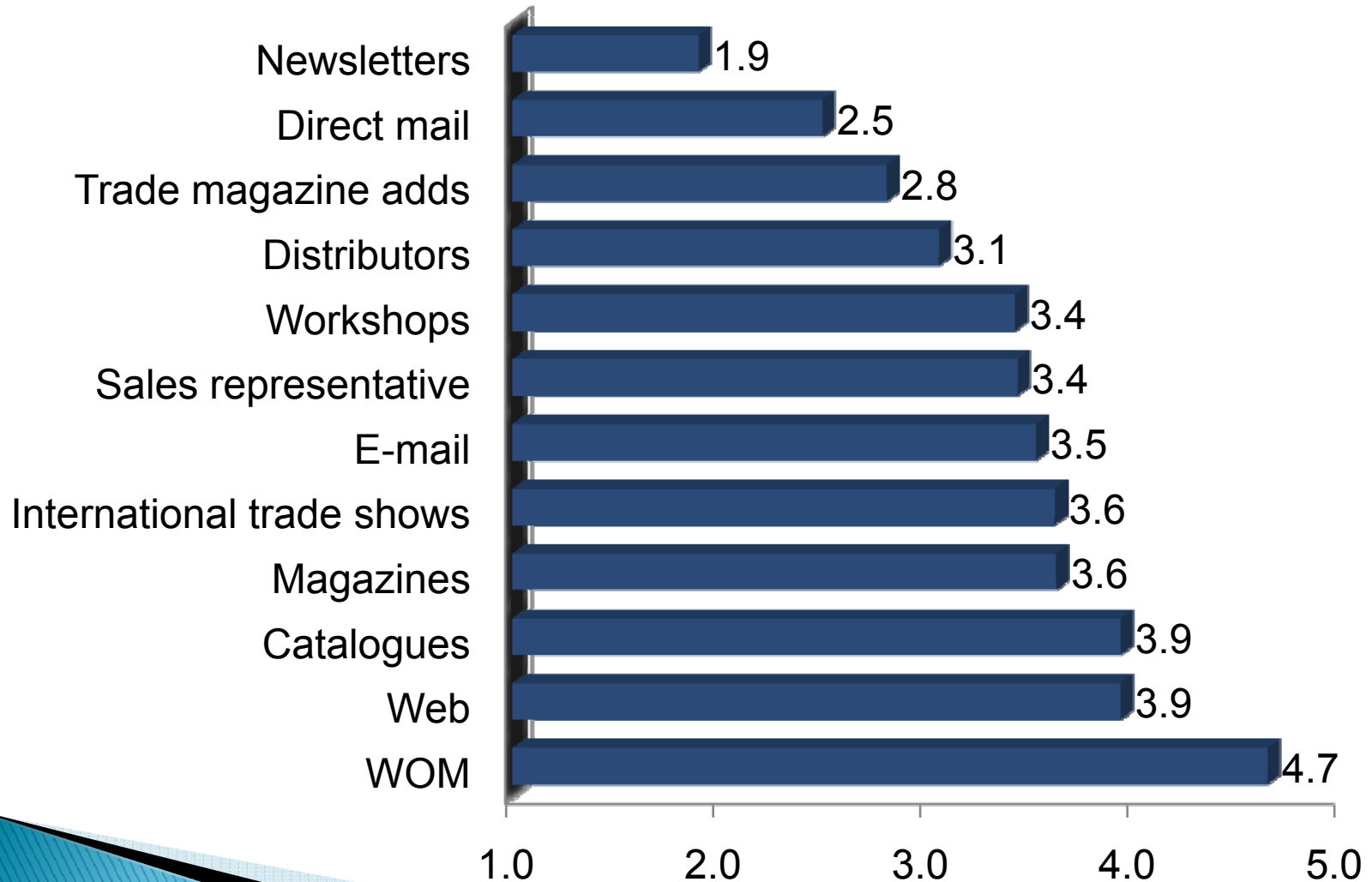
S5 - targeting specific markets



Sri Lanka wood product exporters

Sources of market information

Mean values of scale: 1=not important at all; 2=somewhat important; 3=very important, (n=26)



Sri Lanka wood product exporters

Certification issues

percent of respondents (n=26)

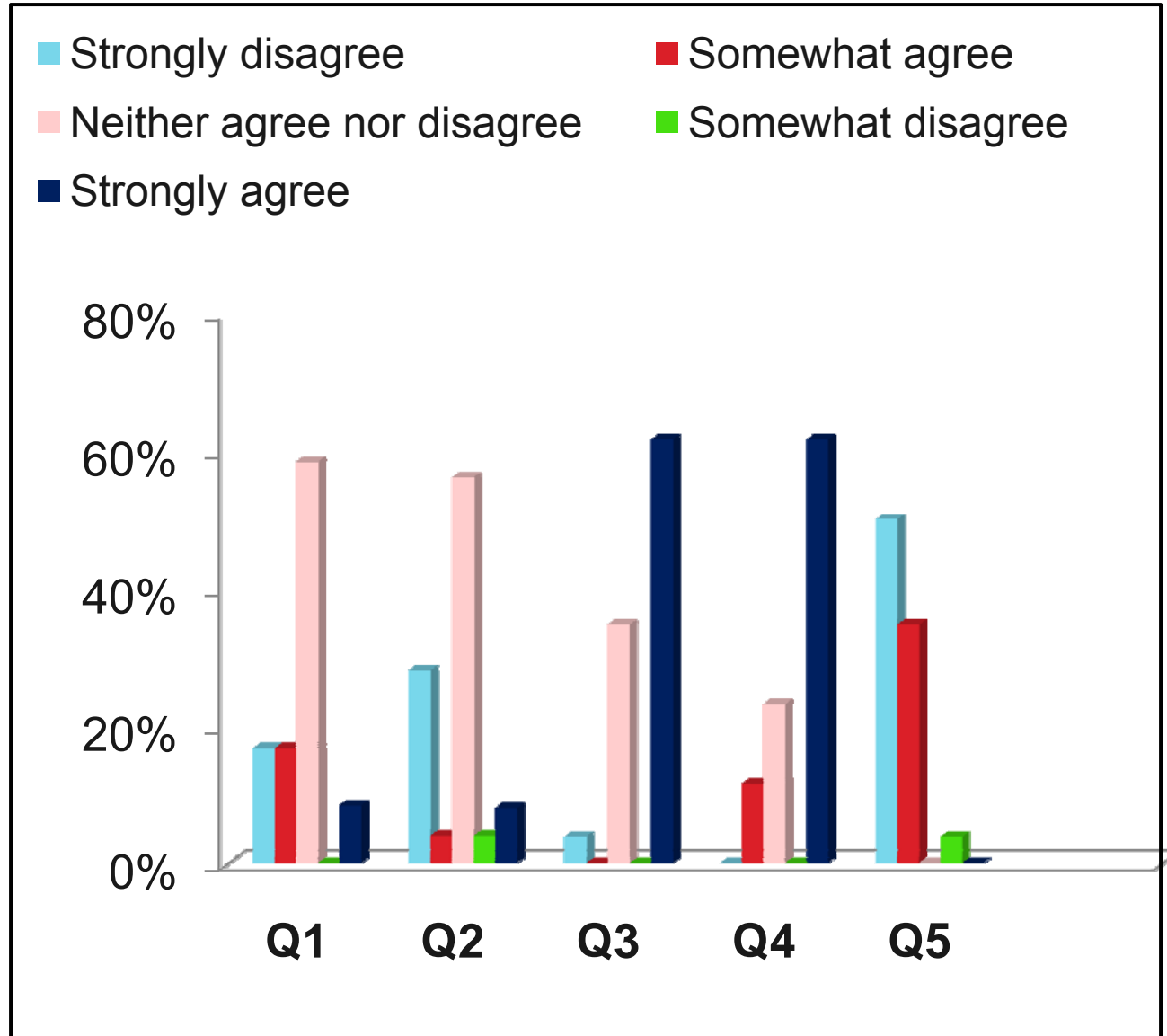
Q1 - Certified products can help my company reach diversified markets

Q2 - Certified products can capture price premiums

Q3 - Certified products help to protect environment

Q4 - I would like to get information about forest certification

Q5 - I would incur an extra cost to certify my wood products



Sri Lanka wood product exporters

Export limitations

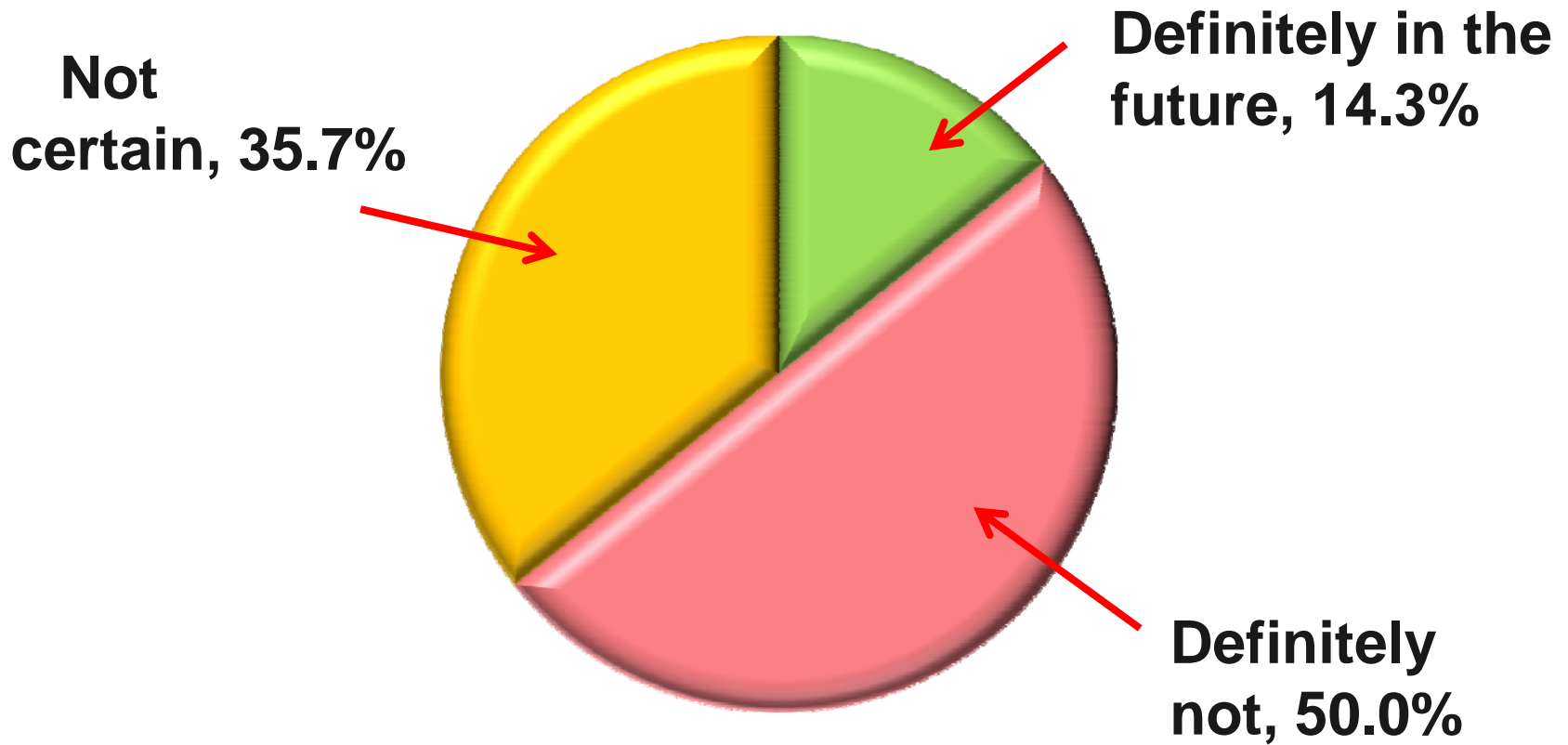
Mean values of Scale: 1= Strongly disagree; 3= Neither agree nor disagree; 5= Strongly agree



Sri Lanka wood product exporters

Future exports to the U.S. for respondents not currently doing so

percent of respondents (n=14)



* 38.4 % of respondents are currently exporting to the U.S. market

Conclusion and Discussion

Conclusion and Discussion

- ▶ Three market segments in U.S.:
 - Small to medium scale but moderate importers
 - Medium to large scale but minor importers
 - Small to medium scale but major importers

Exporters can tailor marketing strategies and plans to target market segments.

- ▶ Most important buyer selection factors for U.S. wood product importers: Certification and marketing, product attributes, client contact, quality products supply, and timber species and supplier reputation

Exporters should focus on selected factors to penetrate or maintain presence in the U.S. market.

Conclusion and Discussion

- ▶ Word of mouth, e-mail, and web sites are the most used sources of information for U.S. importers.

Suppliers should take develop relationships and use Internet technologies to effectively convey product information to U.S buyers/importers.

- ▶ Most popular certification programs for U.S. importers are FSC, SFI, and ISO 14000.

If wood products exporters wish to exploit U.S. certified wood products markets, they should gain an understanding of these programs.

Conclusion and Discussion

- ▶ Both U.S. and Sri Lanka respondents are unlikely to pay a cost for certification. Neither importers nor exporters agree that certified products can capture price premiums.

Need to bring down the cost of certification or make certification profitable.

- ▶ Wooden toys are a major exported product from Sri Lanka .

Lead contaminated toys has become a serious issue in U.S. particularly for products from China. This can be an opportunity for Sri Lanka exporters to export certified lead-free wooden toys.

Conclusion and Discussion

- ▶ Sri Lanka respondents was interested in receiving more information about forest certification.

Need for outreach and extension, build awareness about certification.

- ▶ Major limiting factors for Sri Lanka wood product export expansion: Inefficient internal and external transportation, lack of supportive government policies and lengthy custom procedure, lack of experienced labor, old production technology, and difficulty meeting buyer required delivery schedules.

Government institutions could play an expanded role in supporting industry export development.

Conclusion and Discussion

- ▶ Sri Lankan respondents were interested in exporting their products to the U.S. in the future.
- ▶ U.S. importers are seeking new suppliers and would like to obtain information about Sri Lanka wood products.
- ▶ Half of U.S. respondents are intending to diversify their import product mix in the next 5 years.

These findings suggest that there is an opportunity for Sri Lanka exporters to take advantage of new markets in the U.S.

Acknowledgements

- ▶ ***Dr. Richard Vlosky***, School of Renewable Natural Resources: Committee Chair
 - ▶ ***Dr. Michael Dunn***, Department of Ag. Economics and Agribusiness: Committee Member
 - ▶ ***Dr. Niels de Hoop***, School of Renewable Natural Resources: Committee Member
 - ▶ ***Dr. Todd Shupe***, School of Renewable Natural Resources: Committee Member
 - ▶ **Louisiana Forest Products Development Center**
 - ▶ **The School of Renewable Natural Resources, LSU**
- 



Questions?

