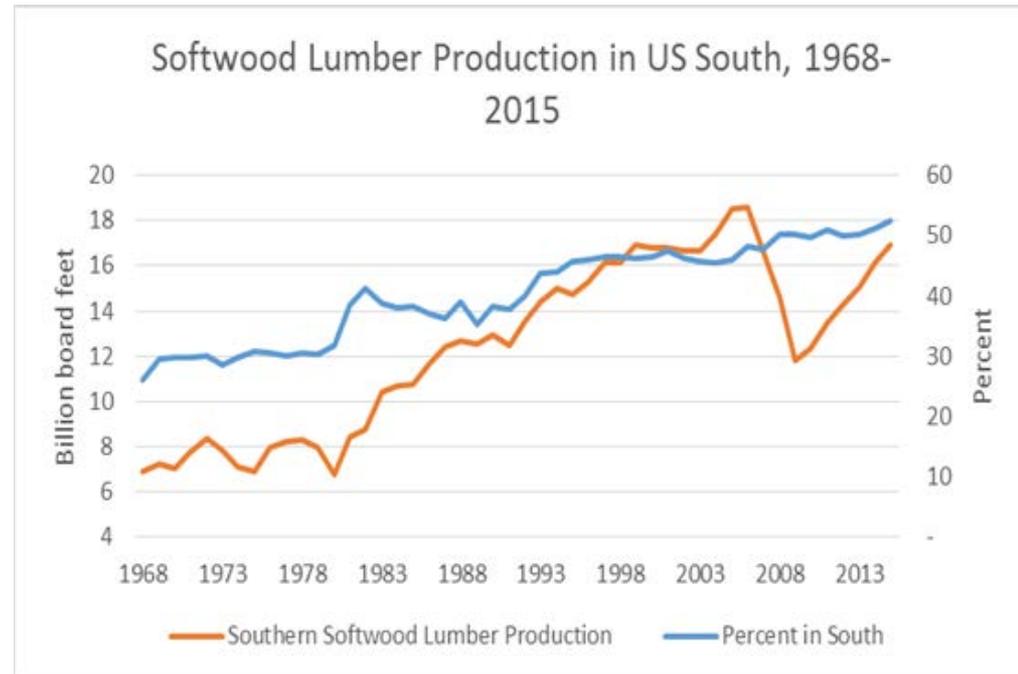
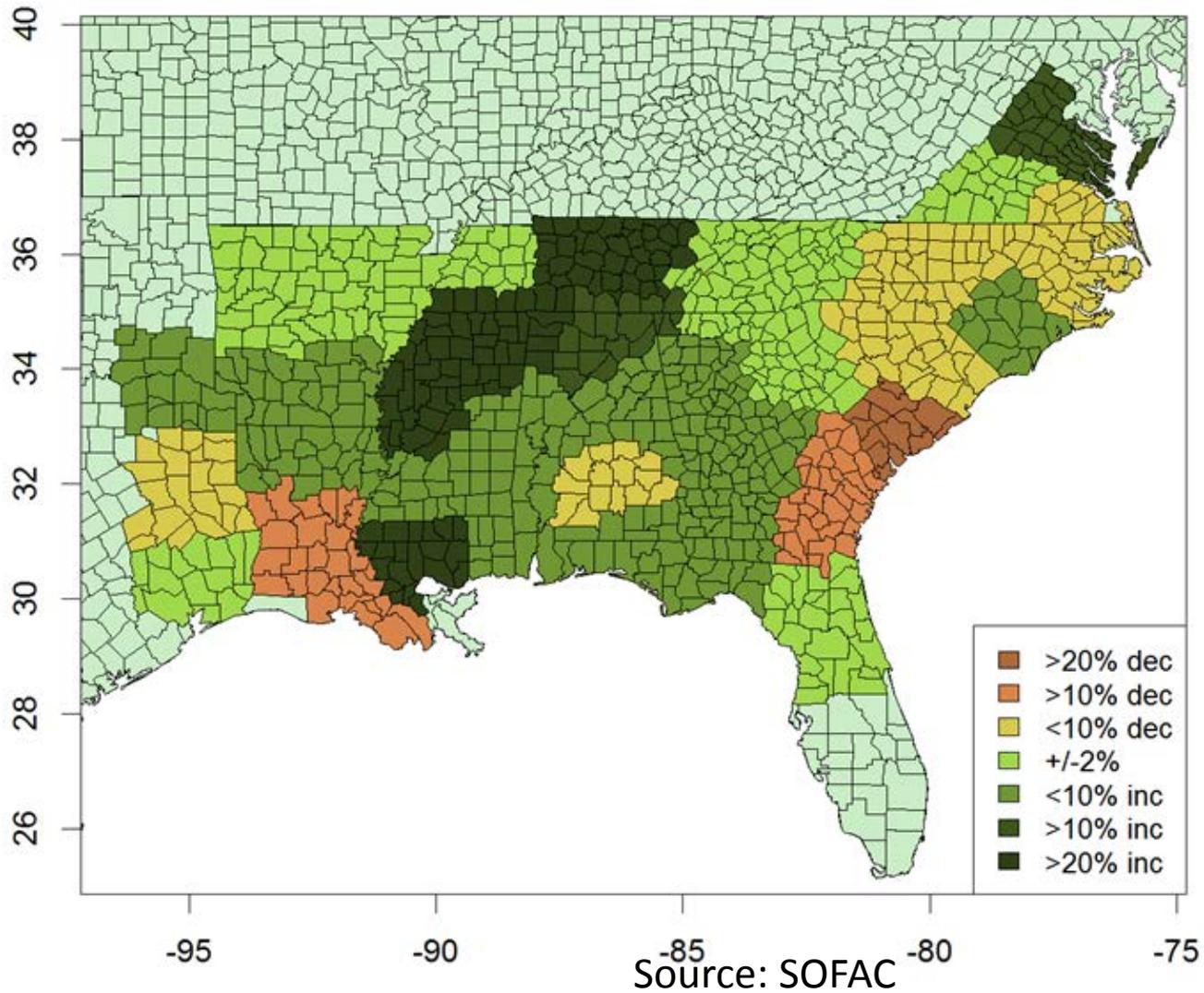


Trends in Forest Products Markets (summary of the handout)

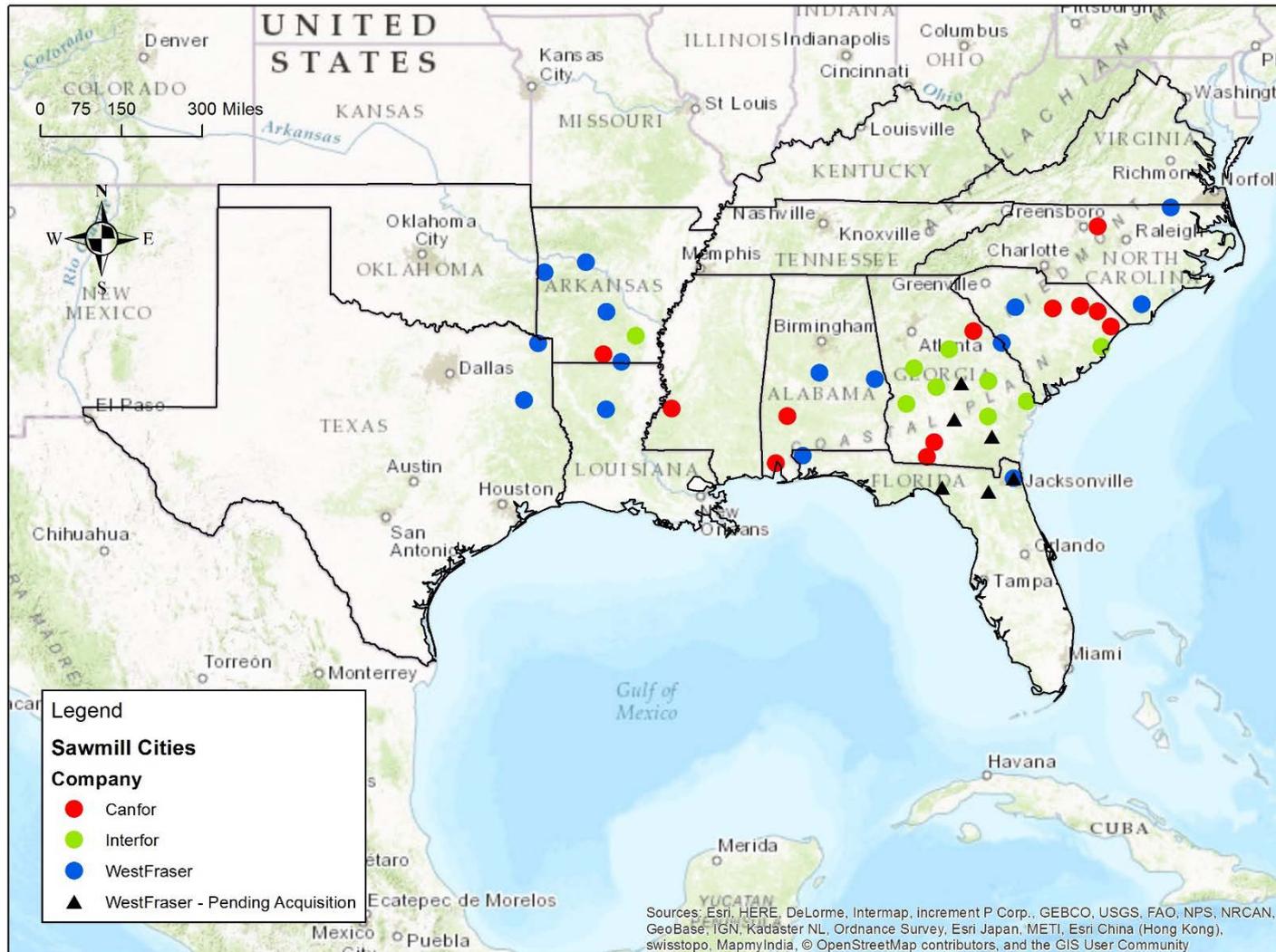
- SW lumber has recovered— sawtimber prices have not. It could be a long time...
- Paper production is steady—packaging/ paperboard.
- HW pulpwood...may not recover. Pellet use helps.



Pine Sawtimber Relative Removals Change: 2020 Comparative Advantage Relative to 34% Regionwide

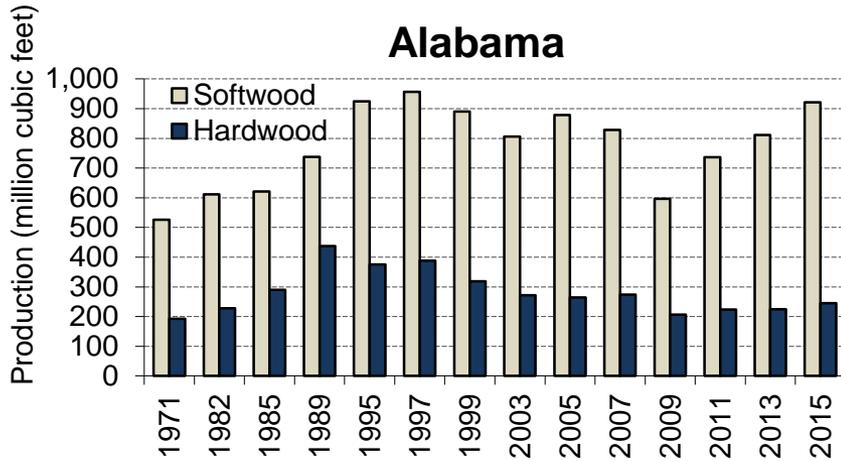


What can we glean from the Canadian acquisition of sawmills?

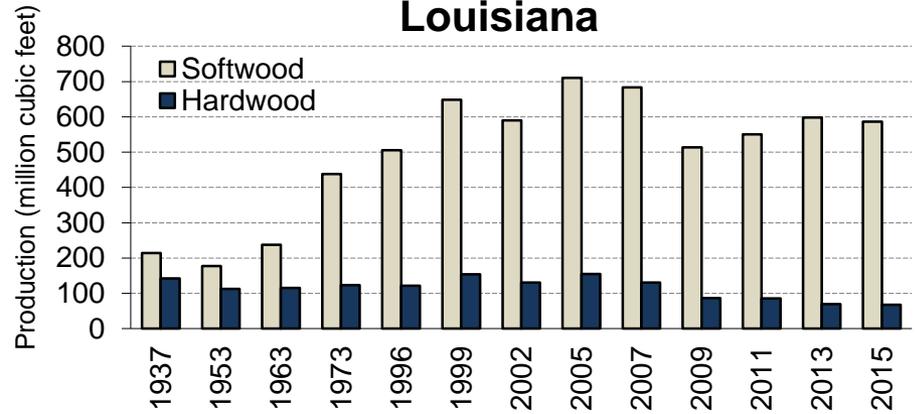


Output of Industrial Products by State, Species Group, and Year

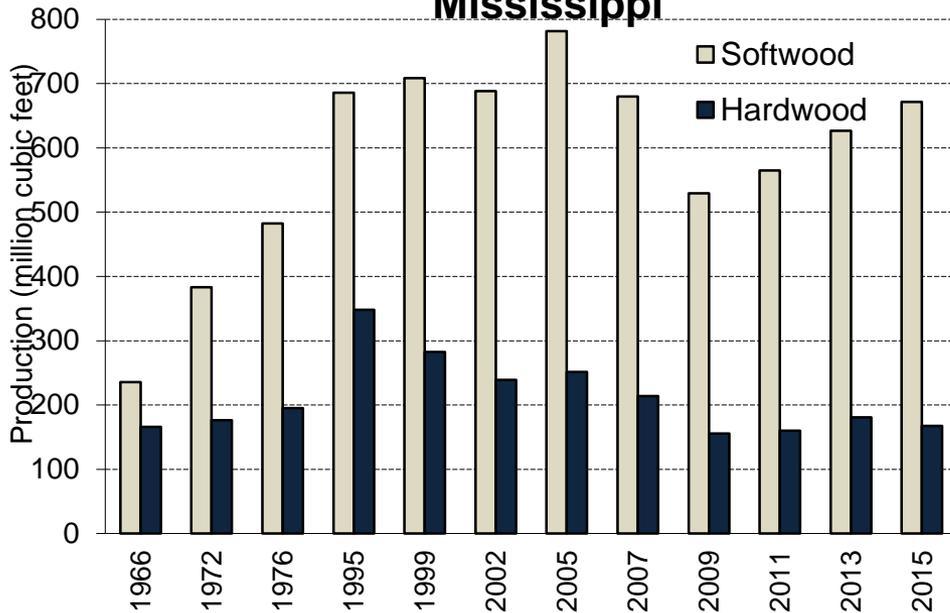
Alabama



Louisiana

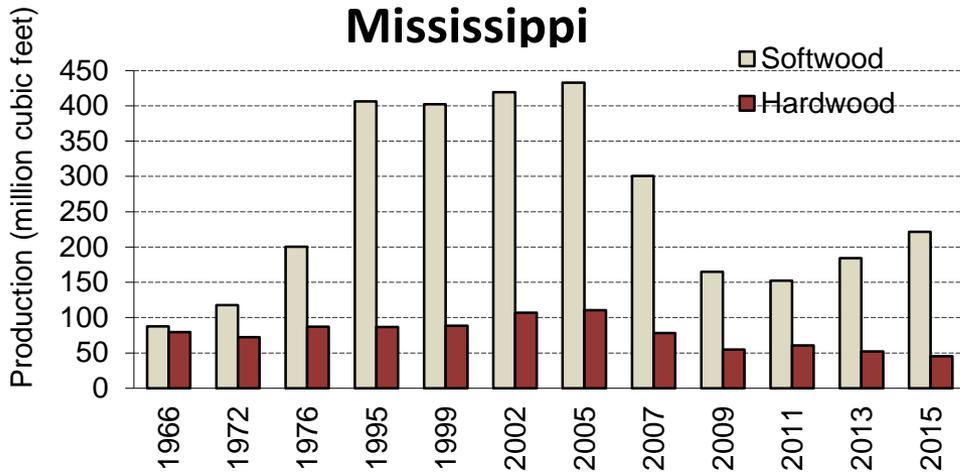
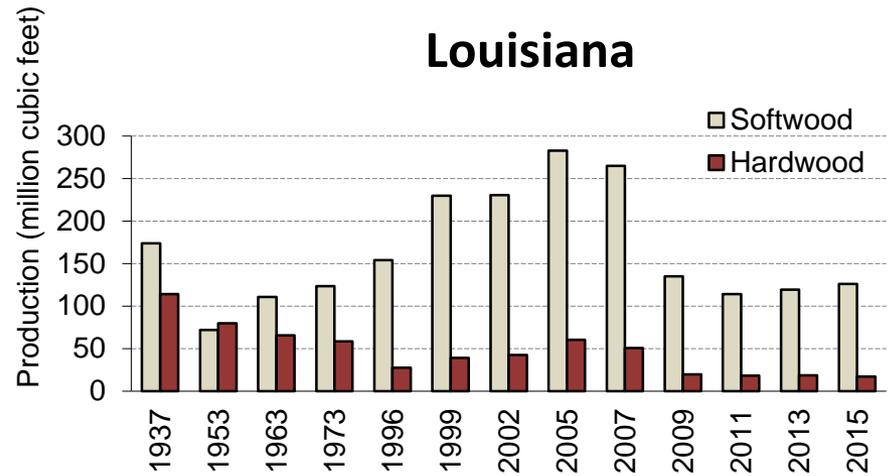
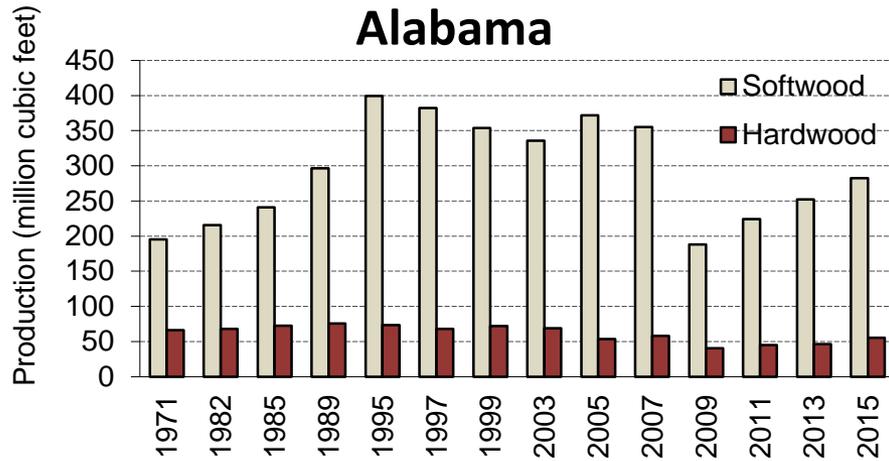


Mississippi



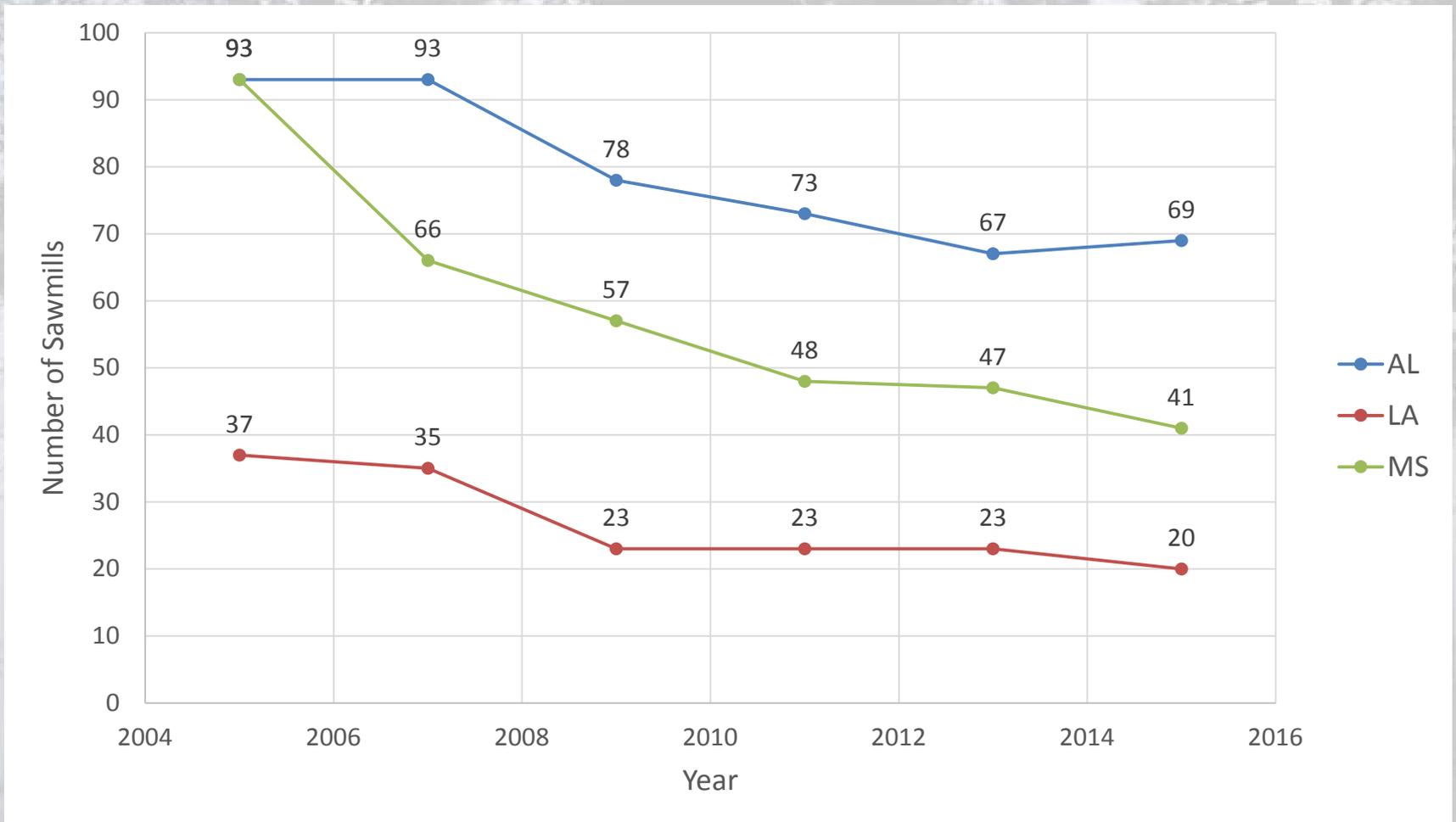
- Different scales for production
- Older data is for different years
- 2009 was generally the low point for softwoods, but is recovering
- Hardwood production has not recovered
- Not on this chart but sawlog production dropped in 2009 and has not recovered

Saw-log Production by State, Species Group, and Year

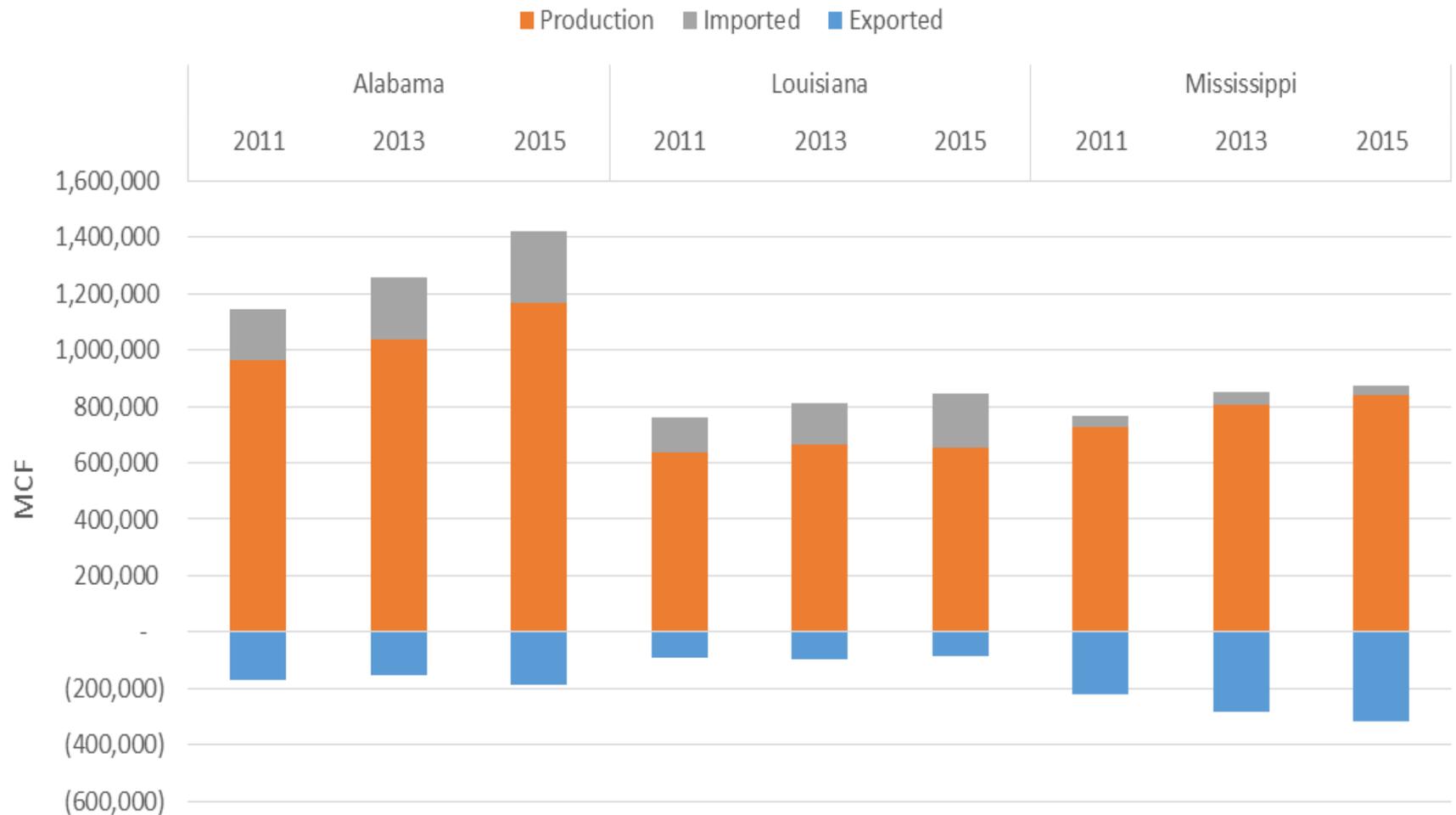


- Different scales for production
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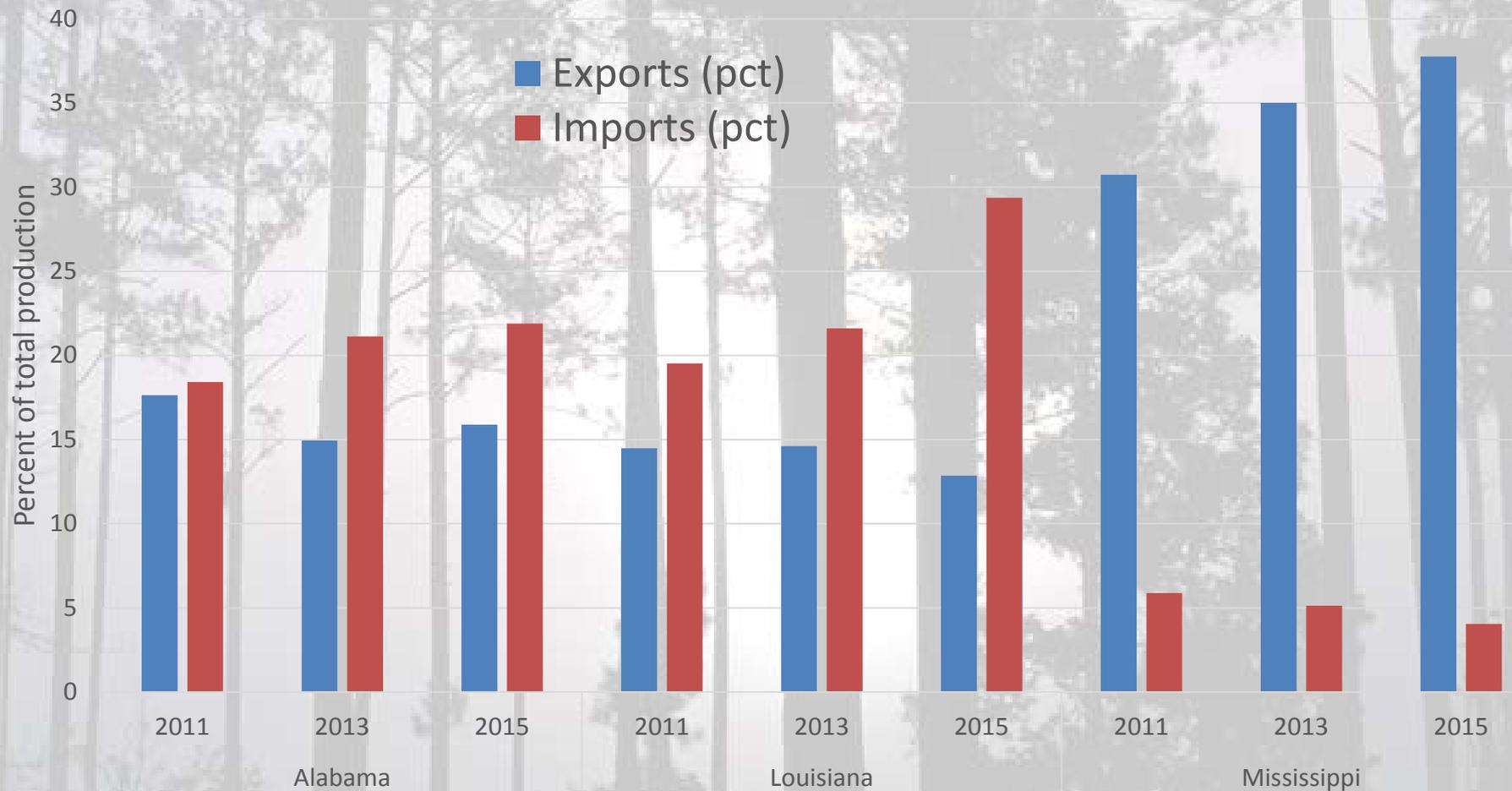
Sawmills in AL, LA, and MS by Year – 2005 through 2015



Production by Year and State including Import and Export Volumes



% of Production by Year and State for Import and Export Volumes



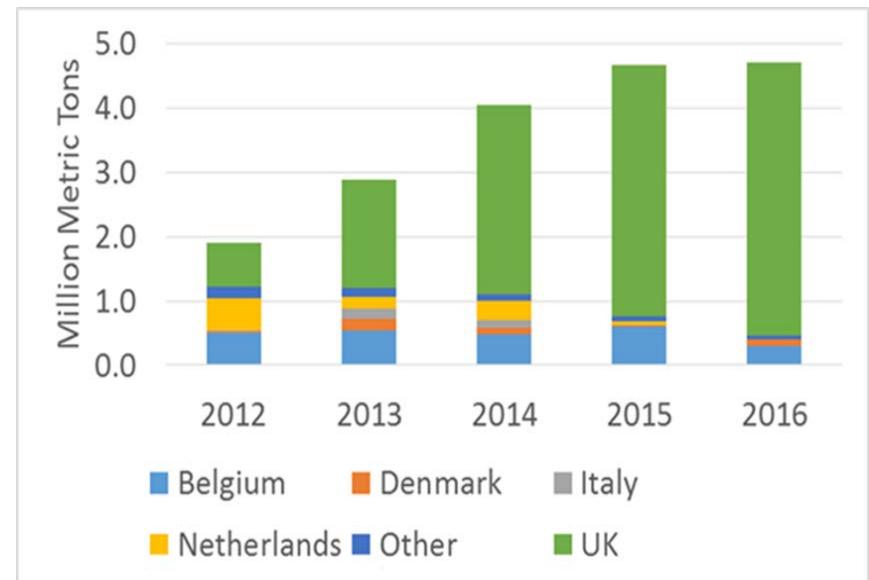


Questions and Discussions

Pellets are likely here to stay...for a while

- USG is many levels removed from Euro Gov sustainability rules. Contractors are lining up...
- We do NOT have the rules in the US or in any states that will fulfill the sustainability requirements without monitoring.

Pellet Exports from the US



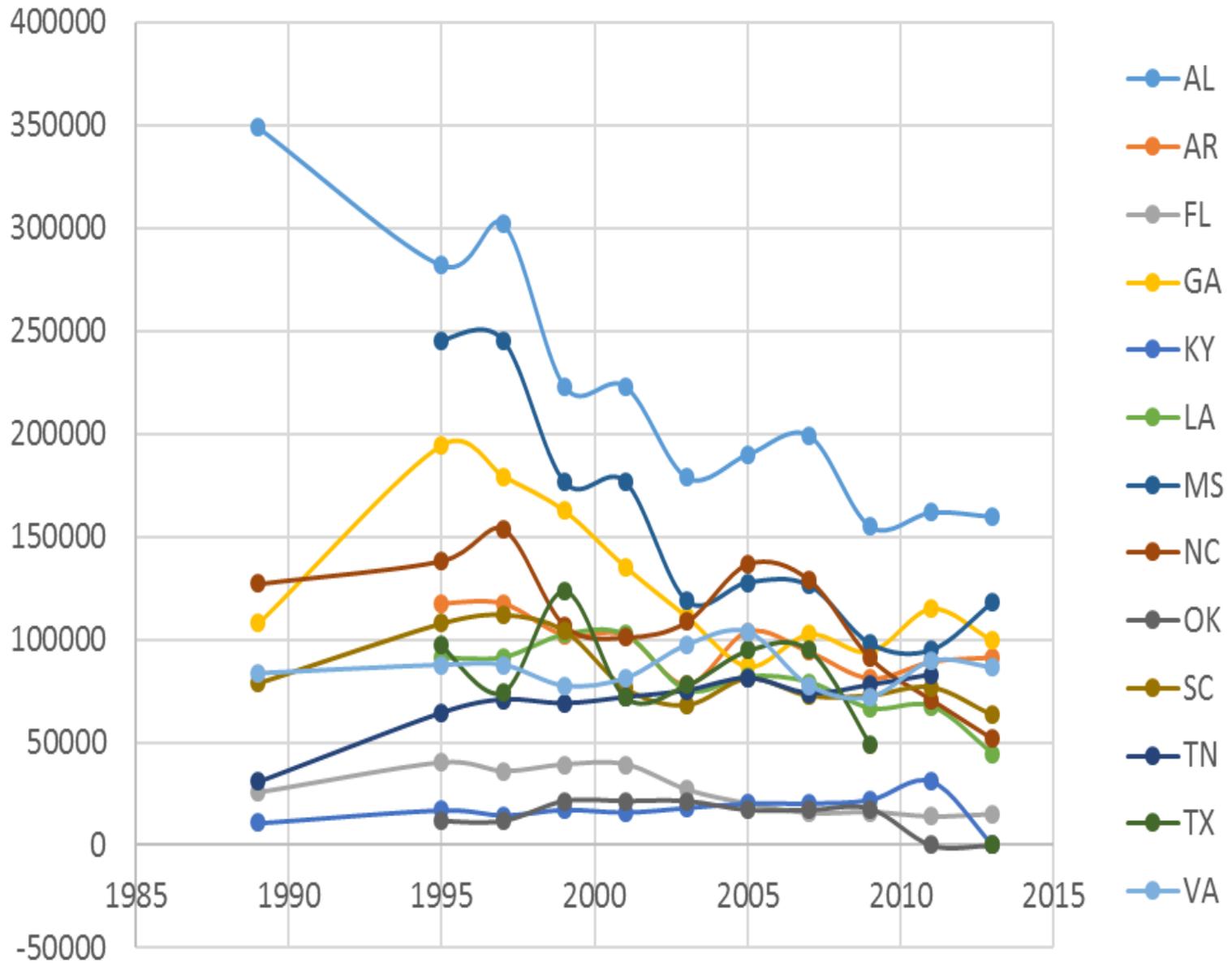
Response to UK Policymaker Field Tour from May 2017 w/Representatives from MS

Summarized eNGO concerns from presentation:

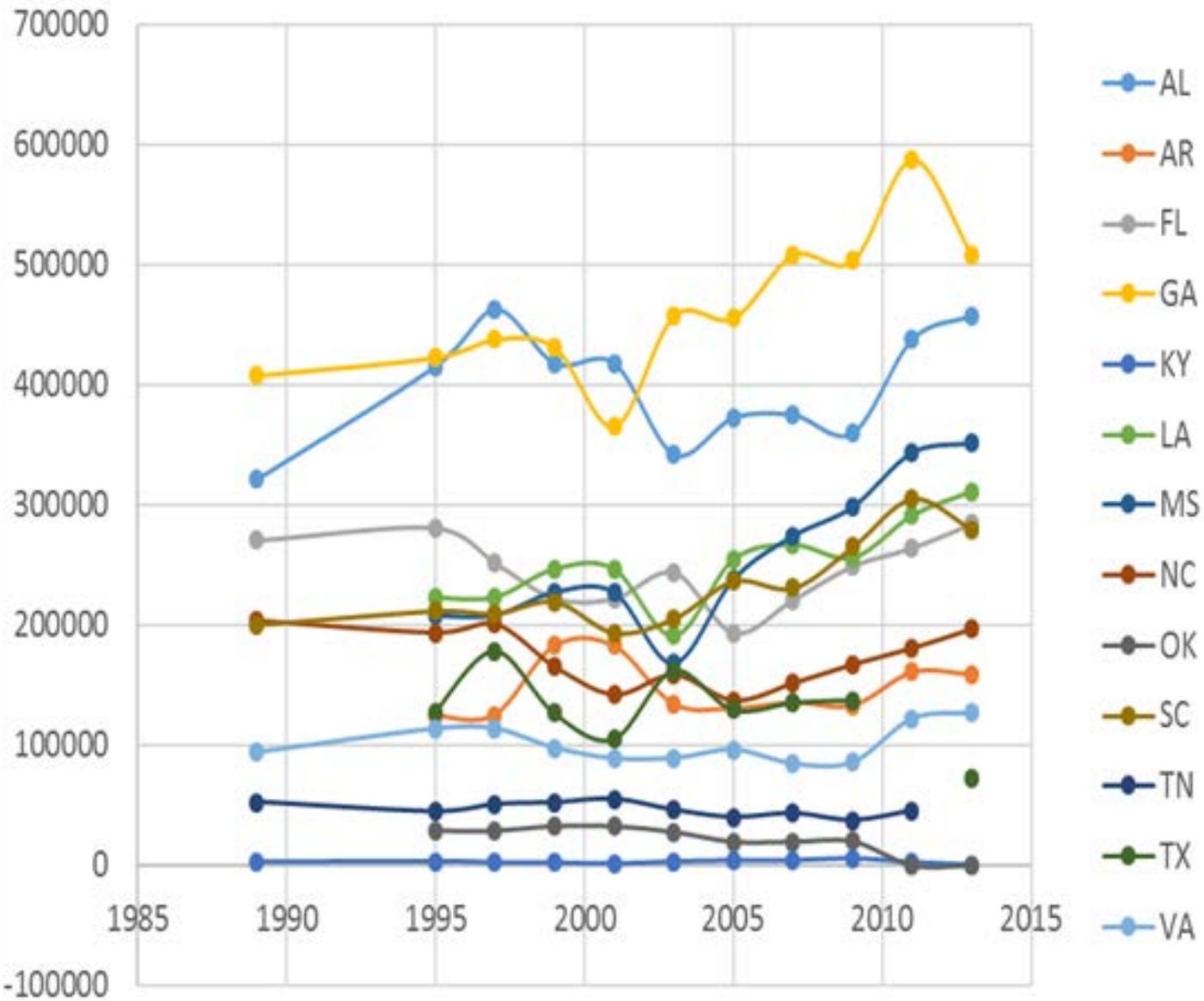
- Changes in forestry practices involving increased wood harvesting which could lead to changes on forest canopy, water table, tree species, and biodiversity.
- Limited/variable protection of forested areas – i.e. this could lead to deforestation.
- There are claims of exclusive harvesting for biomass.
- Whole tree harvesting and high carbon flux changes.
- Quantification of competition effects with non-energy wood users.
- Scale is not a consideration.
- Bioenergy use has changed from local/small scale to corporate-level/large scale.
- Lack of verification on the ground which leads to a lack of trust.

BOTTOM LINE – bioenergy must be zero carbon only (processing residues), low/no transport costs, combined heat/power as a minimum, selective harvesting, no “whole trees”.

HW Pulpwood Production

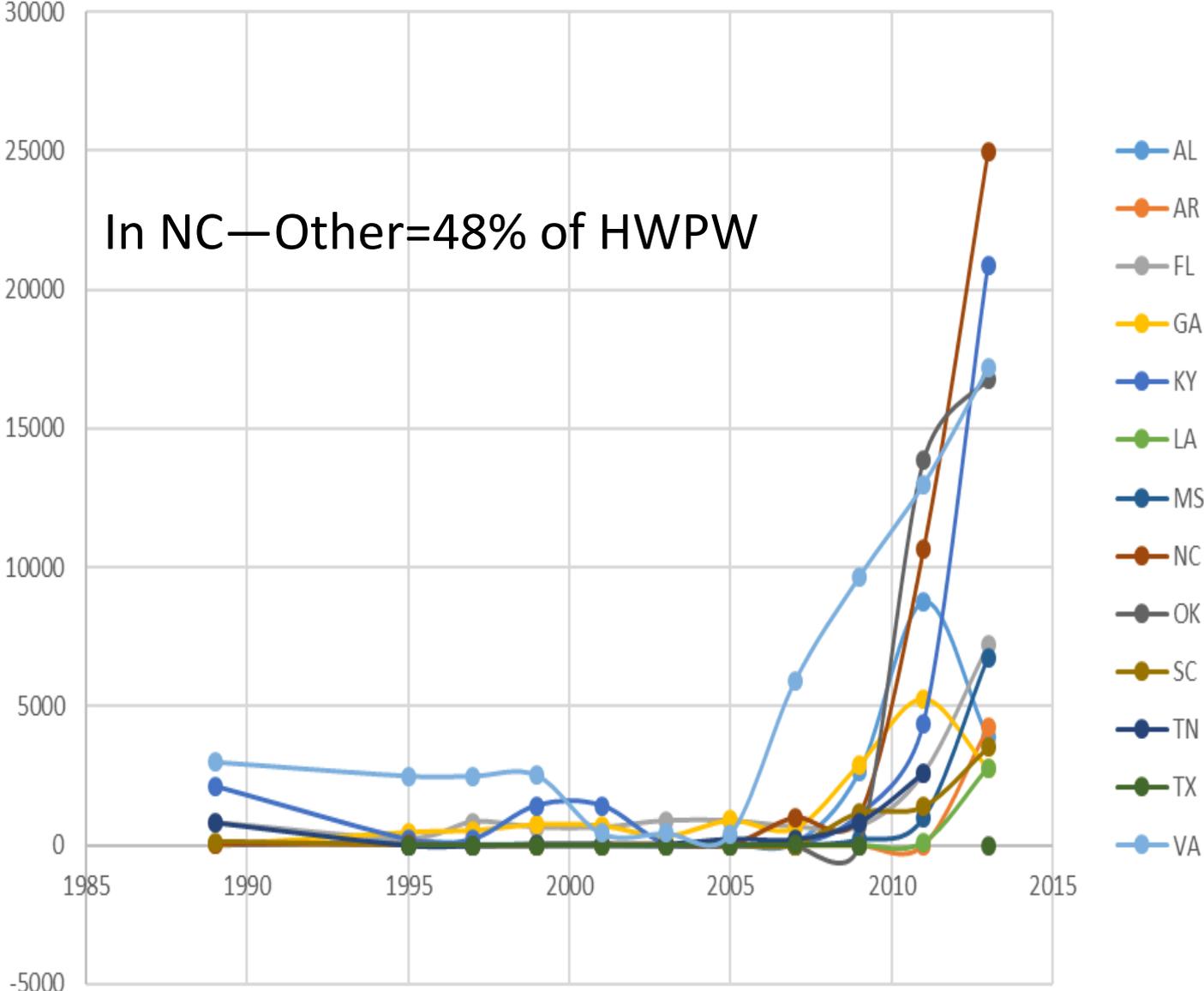


SW Pulpwood Production

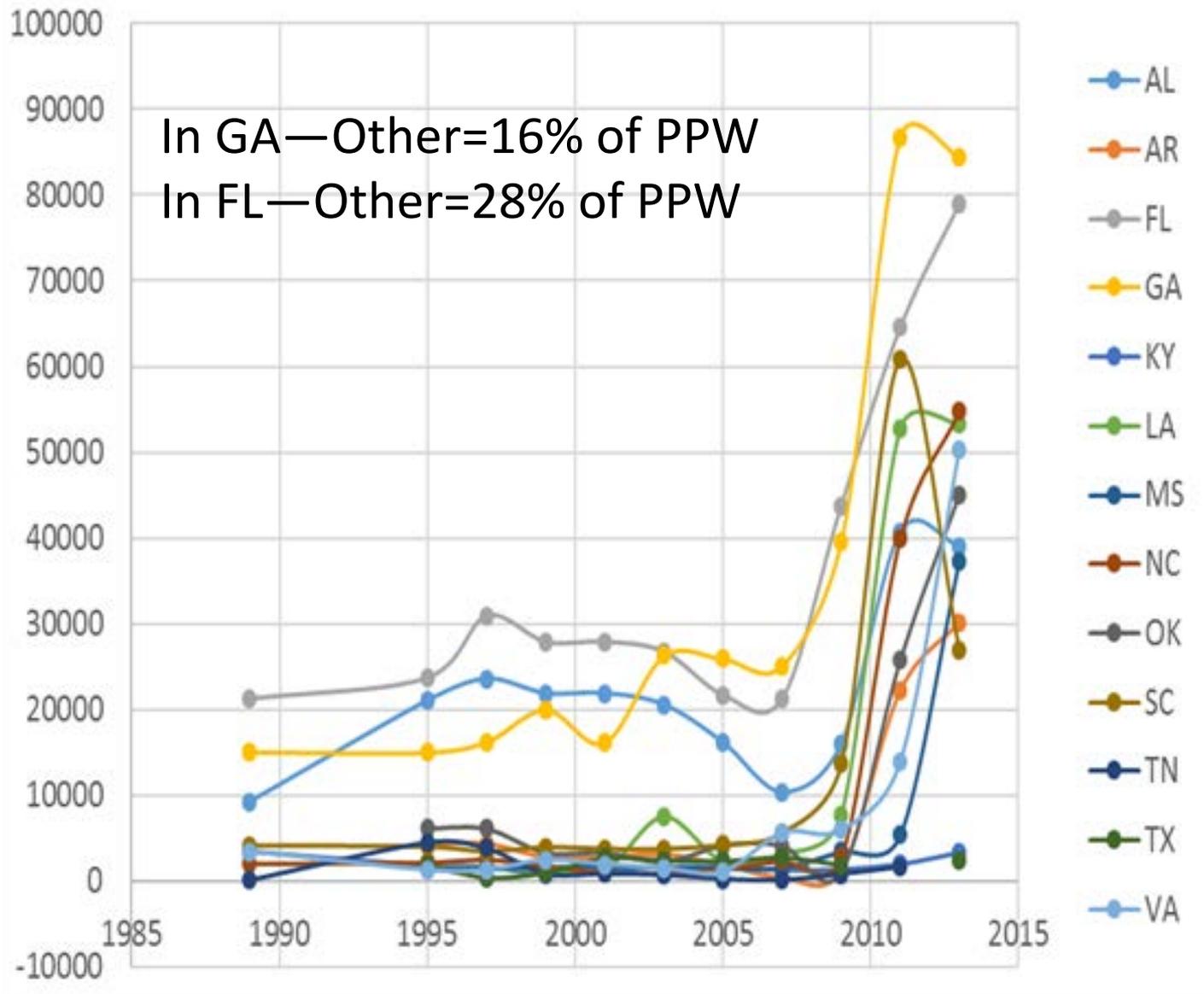


Source: SORAC

HW Other Industrial Production



SW Other Industrial Production



Three Main Issues when Dealing with International Sustainability Questions

1. What measures, indices, statistics, etc. could be used to meet the information needs on the sustainability of Southern US forests?

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1. What measures, indices, statistics, etc. could be used to meet the information needs on the sustainability of Southern US forests?
2. And probably more important: at what spatial and/or temporal scale or scales?
3. Need to ensure that all terms are clearly defined and consistently used.

Example Using Louisiana Growth and Removals Ratio Data from 2015

Unit code	Species group - Major		
	Total	Softwoods	Hardwoods
State	1.55		
Unit 1: North Delta			
Unit 2: South Delta			
Unit 3: Southwest			
Unit 4: Southeast			
Unit 5: Northwest			

Example Using Louisiana Growth and Removals Ratio Data from 2015

Unit code	Species group - Major		
	Total	Softwoods	Hardwoods
State	1.55	1.50	1.70
Unit 1: North Delta			
Unit 2: South Delta			
Unit 3: Southwest			
Unit 4: Southeast			
Unit 5: Northwest			

Example Using Louisiana Growth and Removals Ratio Data from 2015

Unit code	Species group - Major		
	Total	Softwoods	Hardwoods
State	1.55	1.50	1.70
Unit 1: North Delta	2.15	2.15	2.14
Unit 2: South Delta	2.77	7.17	2.11
Unit 3: Southwest	1.30	1.27	1.47
Unit 4: Southeast	1.28	1.41	0.95
Unit 5: Northwest	1.65	1.61	1.80

What About Data Queries Using FIA Data?

Radius, miles	30	50
Area, square miles	2,826	7,850
Area, acres	1,808,640	5,024,000
Plots	301	837
60% forested	181	502

Response to UK Policymaker Field Tour from May 2017 w/Representatives from MS

Generalized Questions:

1. Is biomass harvesting leading to deforestation?
2. Is biomass demand changing where and how we harvest?
3. Is biomass harvesting reducing high biodiversity forests?
4. Is biomass harvesting reducing either carbon stocks or flows?
5. What are the changes in land use and land cover?



Questions and Discussions

Response to UK Policymaker Field Tour from May 2017 w/Representatives from MS

Specific Questions (Two additional considerations - Who has this role and at what scale?):

1. What is the role of the State in forest planning, inventory, promotion of best practices, monitoring of resource and how does this feed into the requirements for evidence of sustainability?
2. What are the trends in certification? Is there an increased emphasis to increase certification?
3. What information is collected on sustainability and biodiversity protection practices?
4. What type of carbon analyses are being done? Is any assessment made of the carbon stock and carbon stock changes being conducted and reported? Are any whole life cycle carbon models calculated?
5. Are there additional data elements over current requirements that would help us understand sustainability and forest carbon?

Response to UK Policymaker Field Tour from May 2017 w/Representatives from MS

Specific Questions (Two additional considerations - Who has this role and at what scale?):

6. What do we know about harvesting practice in general especially thinning and clearcutting?
7. Is a distinction between coarse and fine residues meaningful and important? If so, can we separate them? Can we quantify how much of each is actually removed?
8. Is information collected which can demonstrate forest cover retention after harvest?
9. Is material from clearcutting separated from material obtained from forestry management during the rotation? Do you differentiate wood extracted directly from the forest from industrial residues (e.g. sawmill co-products)?