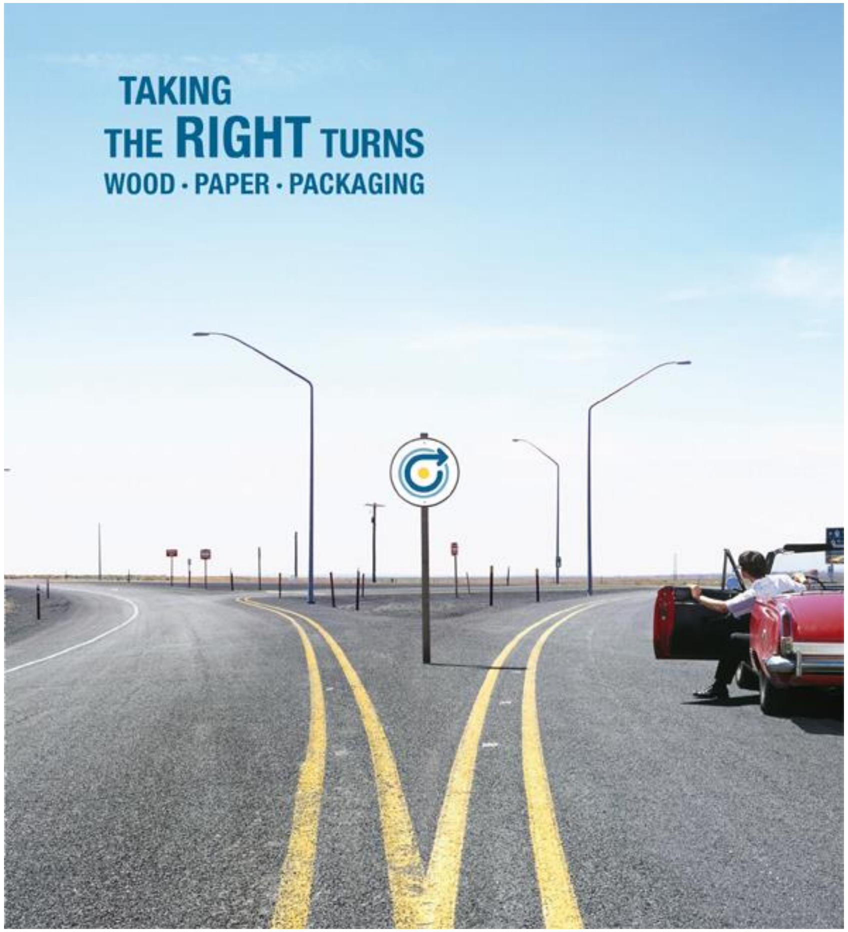
Russian sawmilling industry heading high?

Vancouver, May 5-6, 2016

Who we are

StepChange Consulting



- Management consultancy specialized on the pulp & paper manufacturing industry
- Focus on sustainable performance improvements
- Interdisciplinary and collaborative project approach
- International team
- Primarily top tier paper & packaging companies among client base
- Vienna office founded in 2006
- US operations started in 2010
- Projects in more than 25 countries

DRIVING CHANGE
TO DELIVER RESULTS

Our service portfolio ranges from strategy development to operational performance improvement for all industry stakeholders

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StepChange Consulting service portfolio

Stakeholder Services

- Merger & Acquisition
- Industry Studies
- Investment Decision Support
- Benchmarking & Performance Assessment
- Market Research

Industry Services

Wood & Timber → Pulp & Paper → Converting & Packaging → Distribution

- Strategy Definition
- Operational Performance Improvement
- Turnaround Management
- Post-Merger Integration
- Supply Chain Transformation
- Raw Material Supply and Strategic Sourcing
- Restructuring & Organizational Design
- Sales Strategy and Effectiveness

Agenda

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Content

Russian sawnwood exports growing
Sawmilling in a Soviet cage?
Into the woods – challenges in wood procurement

Russian export share of softwood sawnwood has grown to 69%

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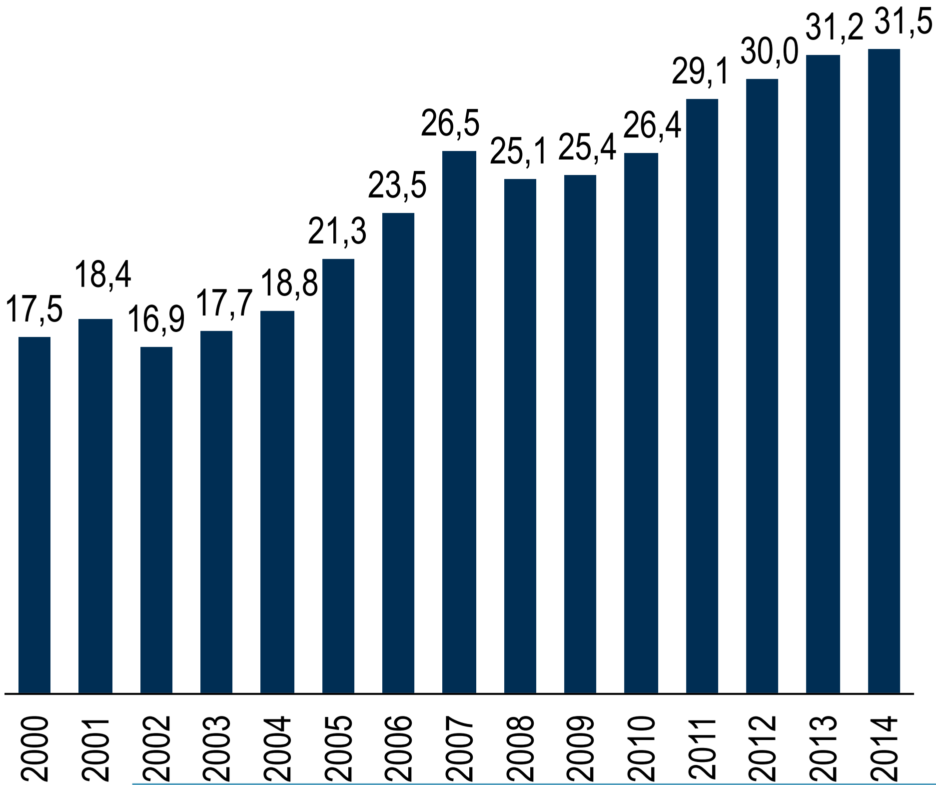
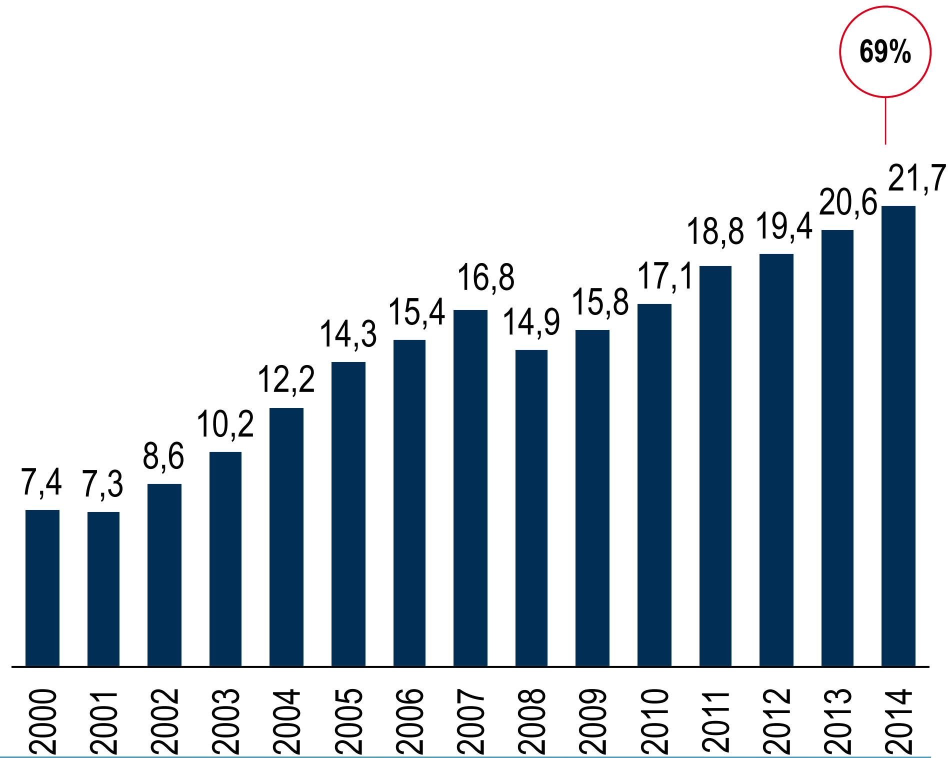
Russian softwood (SW) sawnwood production and export

Exports

Russian SW sawnwood production, million m^3



Russian SW sawnwood export, million m^3



Softwood sawnwood has become the most important forest industry export item. China is the most important destination for sawnwood export

Source: FAO

Devaluated Russian Rouble supports export of sawnwood

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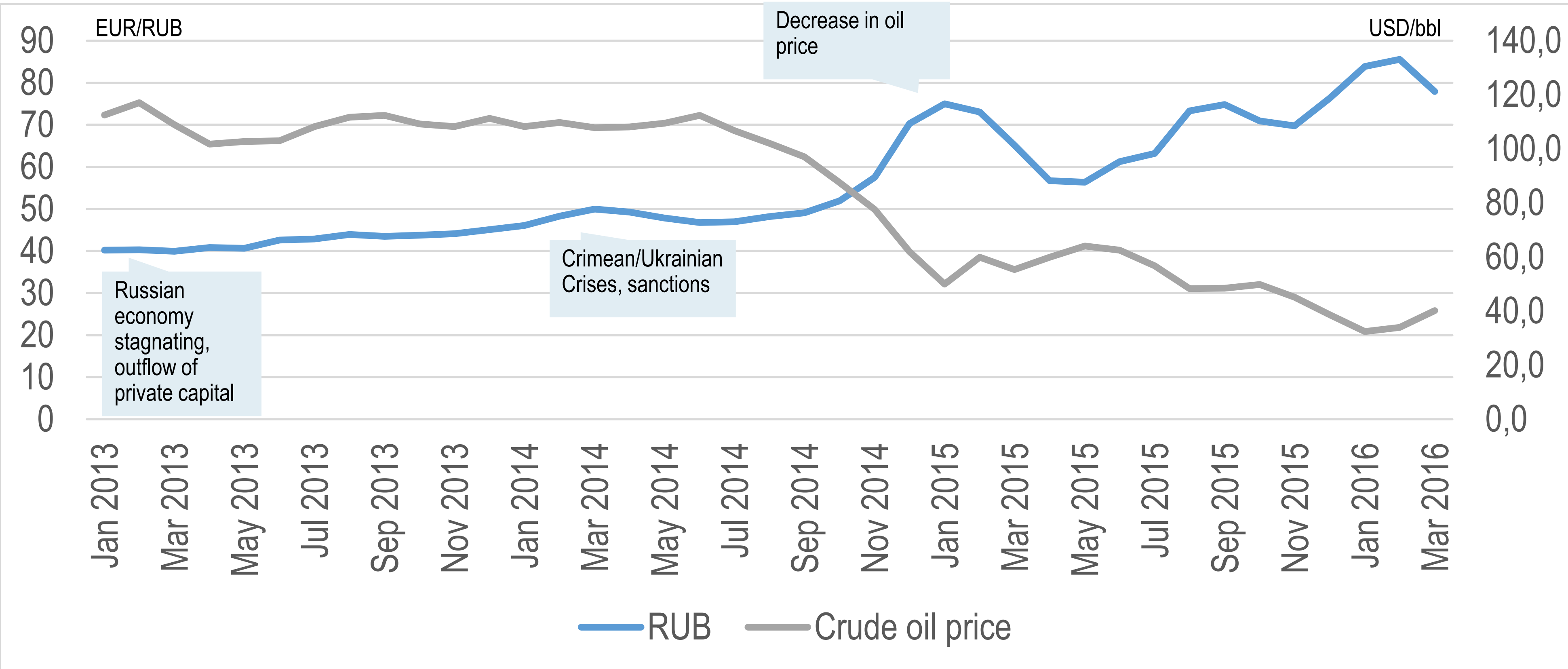
Exchange rate EUR/RUB and average price of crude oil

Exports



Devaluated Russian Rouble supports cashflow

Source: BOF, P&BA

Russian capacity and export increments difficult – wood procurement bottle neck

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Exports

Traditional export sawmills strong

- Russian traditional exporting sawmills strong in Europe and Japan
  - Long term partnerships with import agencies key to success
  - Opportunity to deliver large volumes
  - Sustained price level (not „over-competed“ by other Russian operators)
- Russian sawmills with declining profitability in sales to China, CIS and Egypt
  - Strong Russian competition drives pricing down

Sawnwood supply growth restritced

- Russian increments in export difficult; challenges to increase sawlog supply
- Investment climate difficult, high cost of capital
- Russian import substitution program may restrict machinery import crucial for to Russian harvesting and sawmilling sector
- Current situation that favors Russian sawmill industry will sustain, if no major currency changes occur

Agenda

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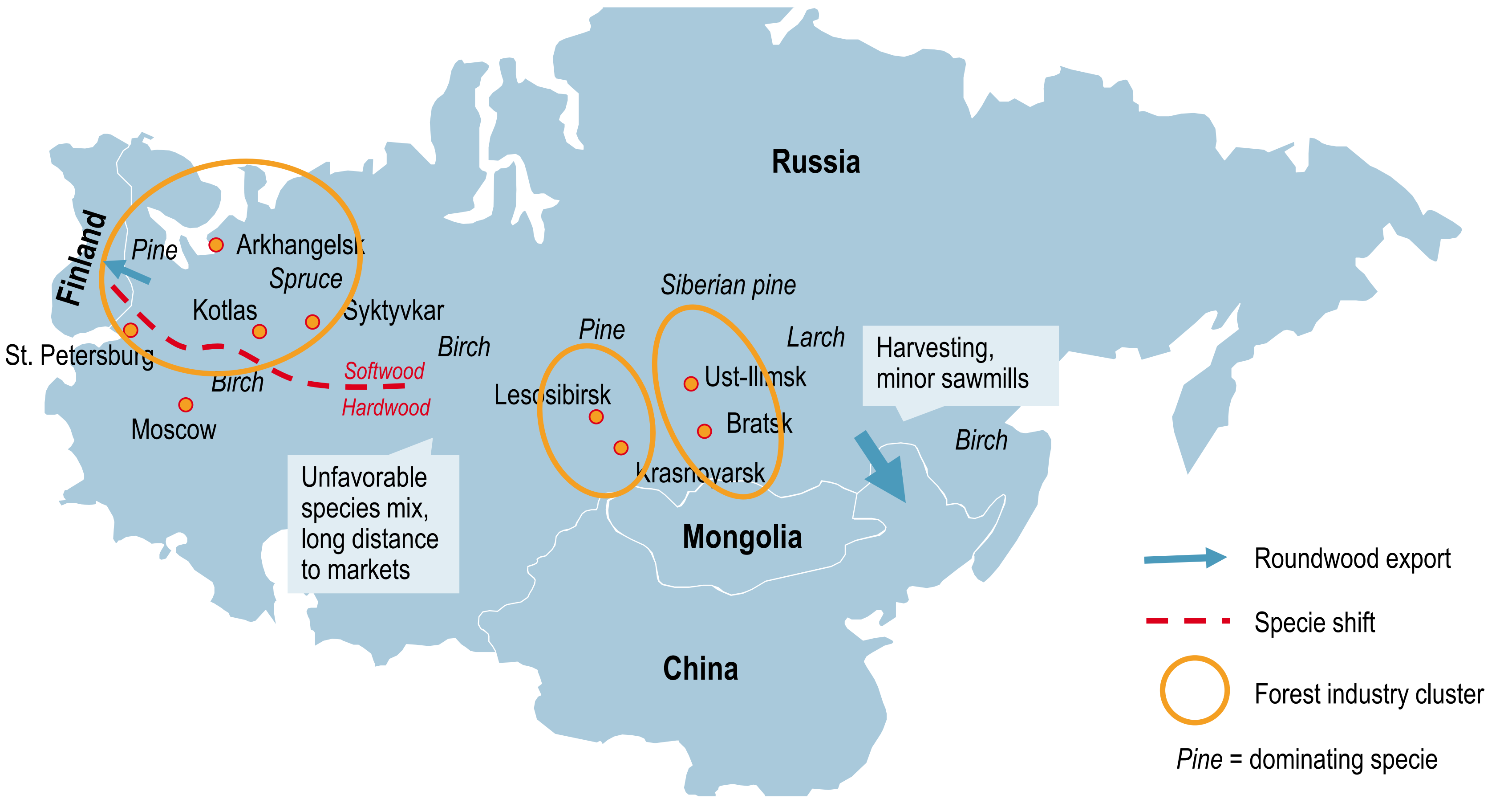
Largest sawmilling companies are located in forest industry clusters originating from Soviet era – expansion in Northwest

Sawmilling



Half of the investments to the forest industry has been directed to the sawmilling industry

Low pressure to cost increments

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Sawmilling

Sawmilling industry in a change

- Russian sawmills are clustered in three main areas, in European part: 1) Leningrad-Karelia, 2) Arkhangel, in Siberia; 3) Irkutsk-Krasnoyarsk
- Major players posess one sawmill
- Sawmill industry is mainly driven by Russian ownership, however, European part of Russia has foreing players who entered Russia some 10-15 years ago (StoraEnso, Metsä Fibre, Ikea, Mayr-Melnhof, Norvik). In comparison, major pulp-paper producers have foreign ownership
  - Some seven million m^3 new capacity in last 15 years, of which 65% to Northwest Russia
- Growing number of new smaller sawmills with Chinese background close to the Chinese border

Low pressure to cost increments

- Main cost items in sawmilling
  - **Wood cost**, regional differencies within Russia
    - Strong connection to pulp industry
    - Low wood cost compared to competitors (Finland, Sweden, Baltic countries, Austria, Germany)
  - **Personnel cost**, no pressure to increments as government salaries are cut/have no increments
- Tax and customs authorities increased insepctions to collect more income to the state budget
  - Risk to be obliged to cover fees of partners
    - Long term partnerships favoured
  - State transportation fees cancelled?

Agenda

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Russian forest resources have huge potential – low usage currently

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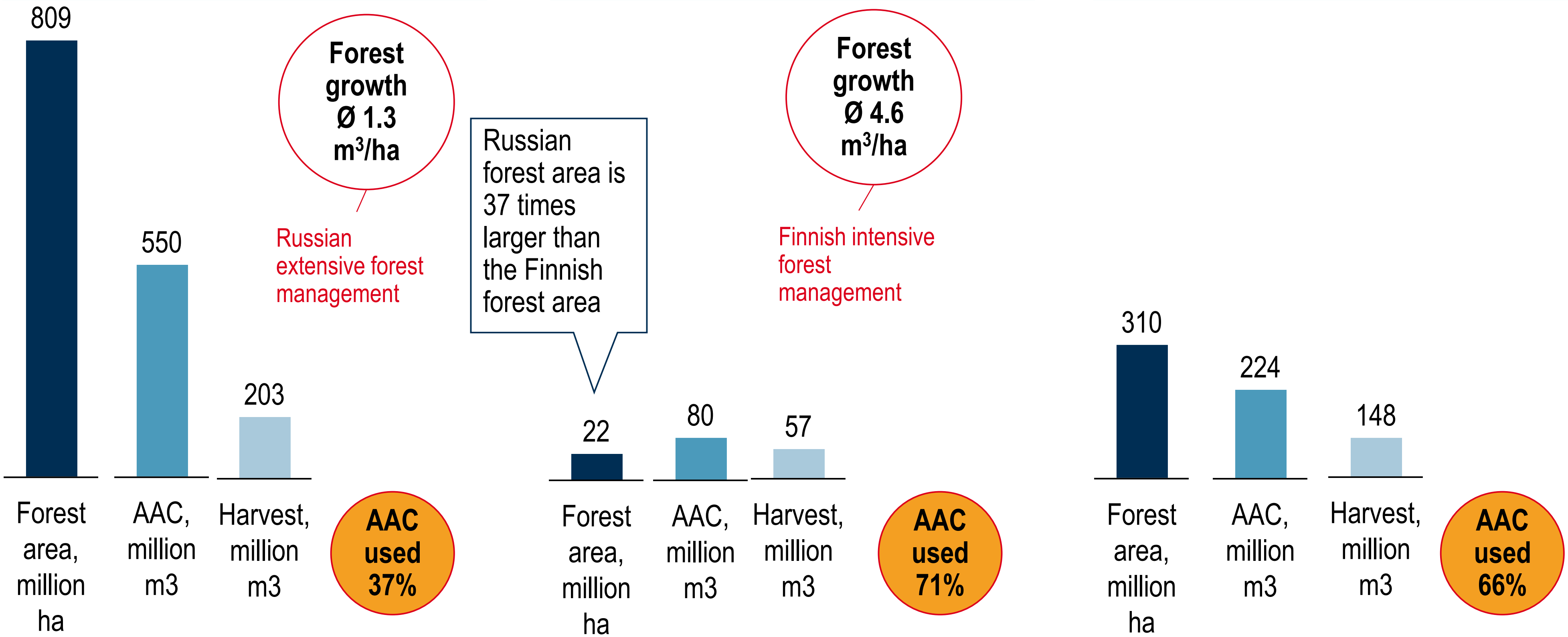
Forest area, annual allowable cut (AAC) and harvesting in selected coutries

Forest resources

Russia, 2015 | Finland, 2015 | Canada, 2015



Russian extensive forest management is performing poorly

Source: Rosleshoz, Luke, Natural Resources of Canada

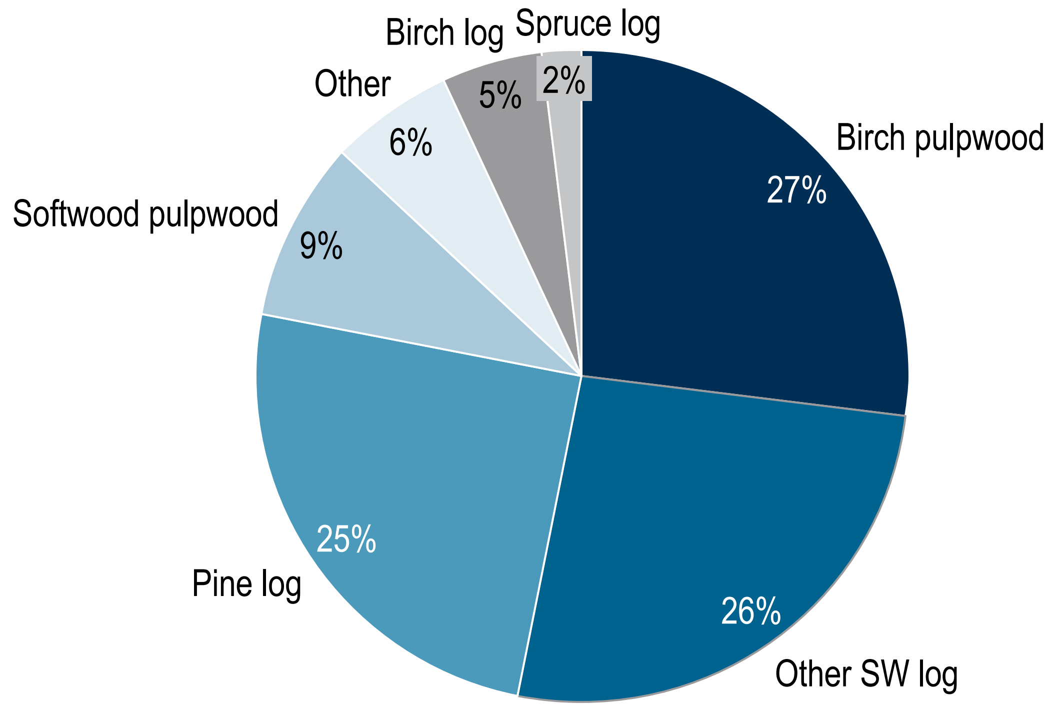
Russian WTO membership didn‘t increase roundwood exports though export quotas support it

Russian roundwood export in total and by assortment

Forest resources

Russian roundwood export, million m^3

Russian roundwood export by assortment, 2015



Russian roundwood exports decreased 7% compared to 2014

Source: Russian customs

Customs policy substitutes forest industry policy?

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Forest resources

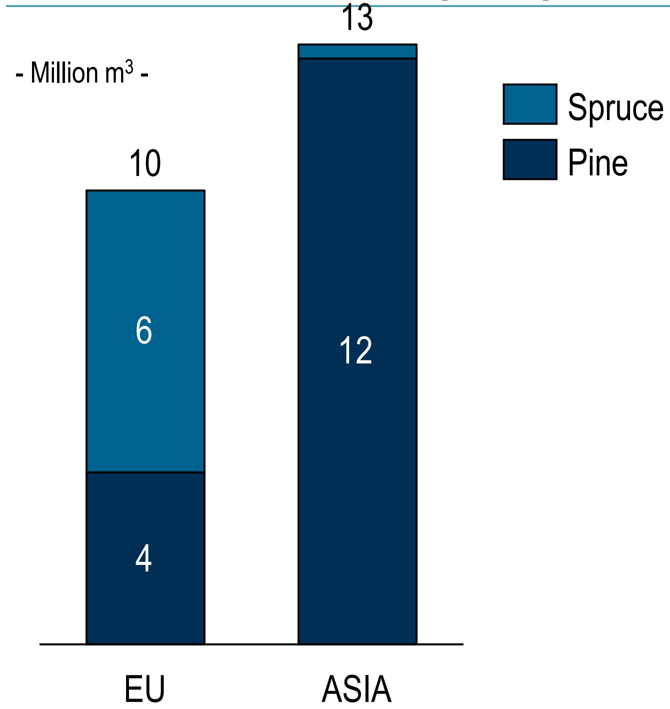
Russian export duties on roundwood by specie

Specie	Up to 1.6.06	1.6.06	1.7.07	1.4.08	23.8.12
Spruce, EUR/m³	2.5	4	10	15	13%
Pine, EUR/m³	2.5	4	10	15	15%
Birch >15 cm, EUR/m³	0	0	10	15	7%
Birch <15 cm, EUR/m³	-	-	-	-	-
Aspen, EUR/m³	0	0	5	5	5%

Plan to increase export duty to 50 EUR/m³ didn't realize 1.1.2009

Duties within the quota

Russian roundwood export quota



EU usage of quota very low (~15%), Asia higher (~70%)

Source: Luke, FFIF

In 2015, China received 60% of Russian roundwood and 83% of Russian softwood. Birch exported mainly to Finland

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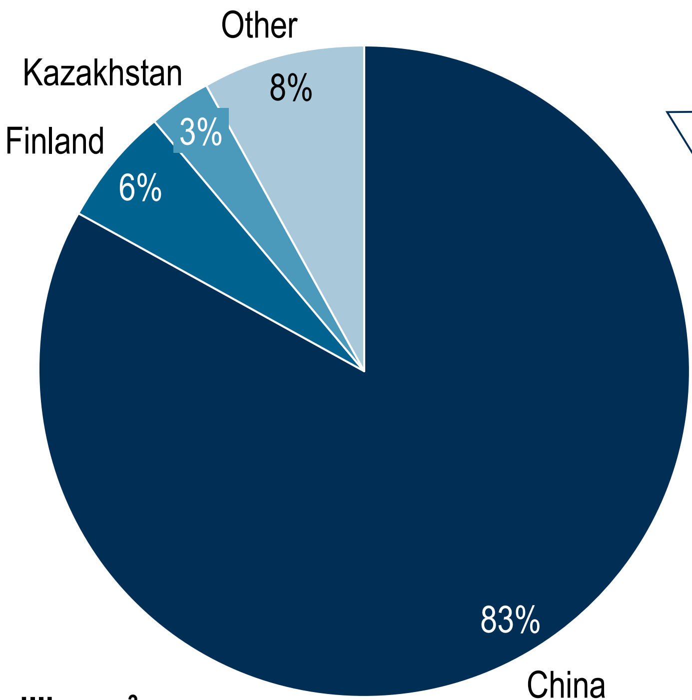
Russian roundwood export by destination, 2015

Forest resources

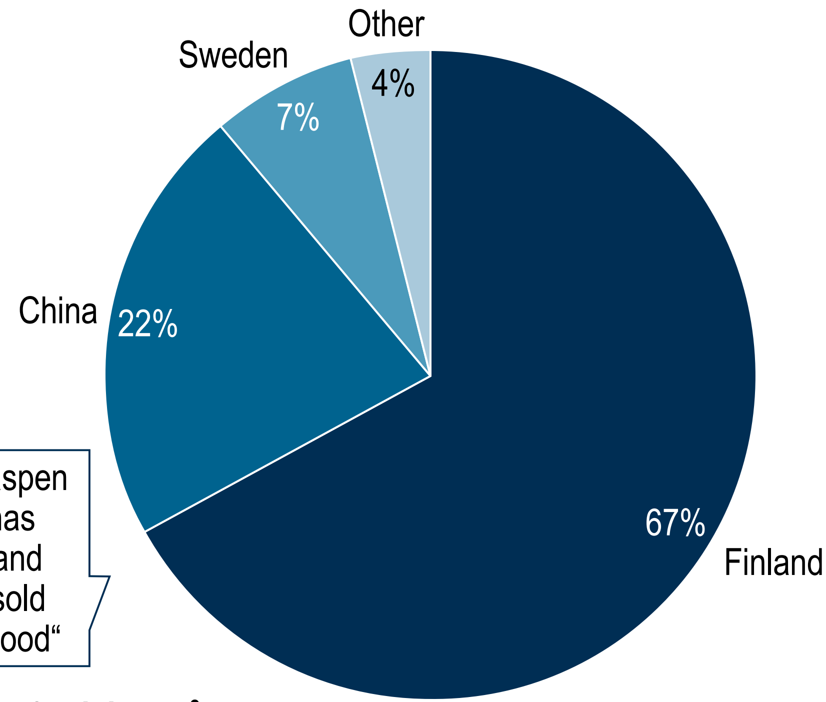
Russian softwood roundwood export, million m³



Russian forest industry mainly consumes softwood

11.8 million m³

Russian hardwood roundwood export, million m³



Birch and aspen pulpwood has minor demand in Russia, sold as „wastewood“

7.2 million m³

Russian roundwood exports are substituted with wood from other countries and with Russian softwood sawnwood

Source: Russian customs

Russian harvesting sector is in stagnation

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Forest resources

Legislative development

- Lack of reforms
- Implementing intensive forest management in pilot regions
- Russian low cost of stumpage on wood expected to remain

Forest resources

- Deteriorating forest resources – hardwood share increasing in growing stock
- High cost of harvesting and transport
- Good log quality, but low share of logs in stands

Harvesting operations

- Utilization of all harvested assortments difficult
- High cost of capital restricting outsourcing / entrepreneurship in harvesting
- Seasonality still strongly influences wood procurement, winters becoming shorter

Wood cost largely depends on efficiency of operator‘s own operations and practices

Success factors for harvesting

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Forest resources

Optimizing forest lease usage

- Best forest areas already leased, purchasing a harvesting company to acquire best forest leases
- Optimizing current forest asset utilization
- Transport optimization: capacity and route
- Location / control of storage to decrease effect of seasonality
- Priority status for the operations

Best practices in harvesting

- Efficiency of harvesting machinery
- Maintenance of machinery – spare parts in the woods
- Legality, transparency and certification

Waste management

- Optimization of assortments
- Usage of excess harvested wood

Summary – Russia gains foot due to weak Rouble

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Summary

- Long term risk of restrictions in softwood log supply – higher softwood log cost
- Cost of wood delivered to mills in Russia on the low side compared to other regions. Future wood cost largely depends on efficiency of operator‘s own operations
- Russian suppliers better off due to Rouble devaluation
- Sawnwood demand growth shifted to Asia. Siberia and Russian Far East well located to serve China
- Doing business in Russia remains challenging

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