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Forest Industry
what´s up?

Tomas Elander

June 28, 2019

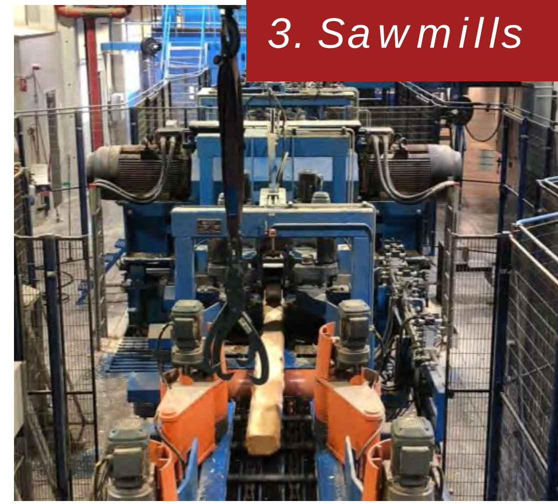
pwc

Agenda

1. Forest ownership

2. Forestry

3. Sawmills



7. News

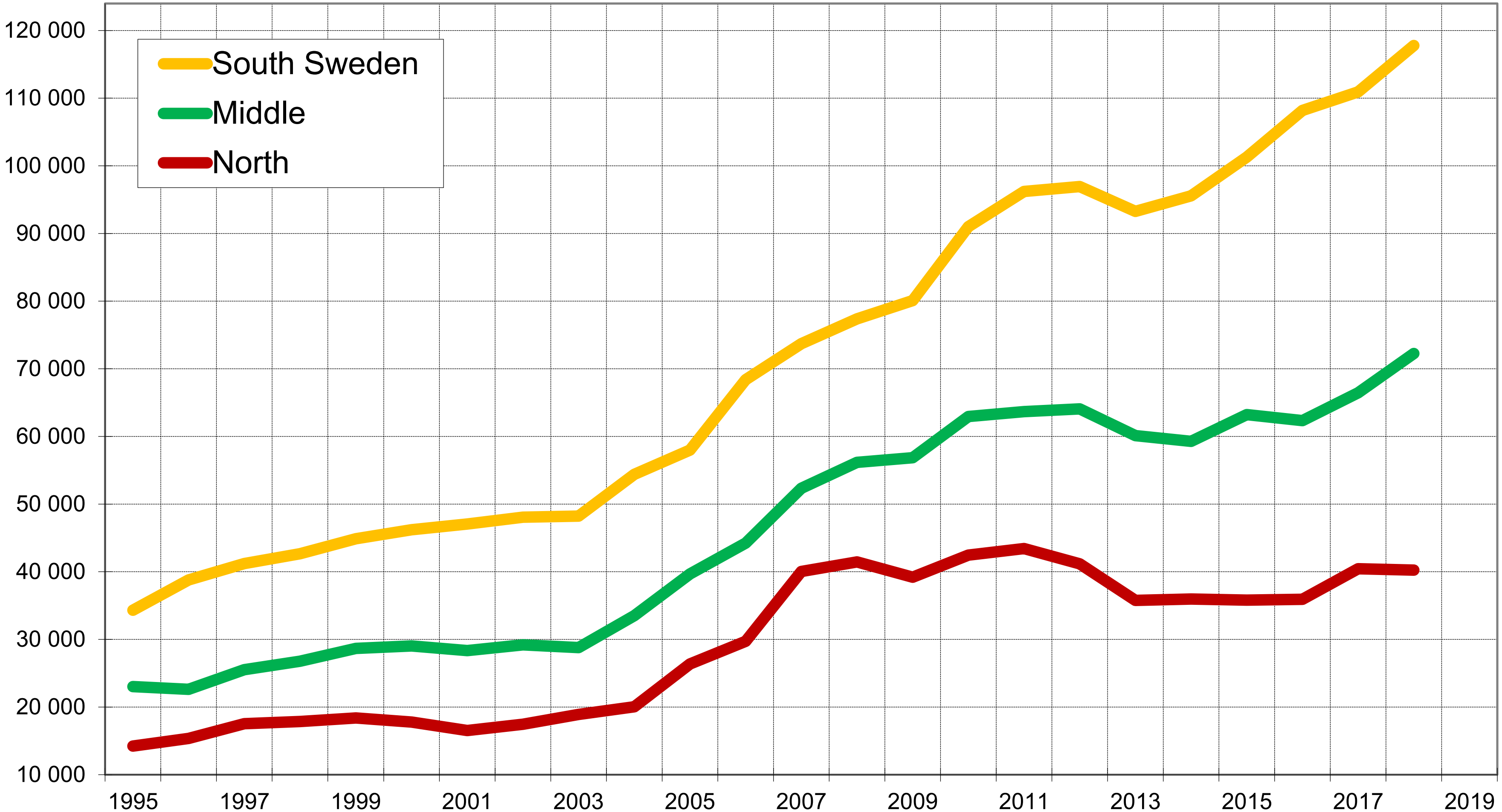
4. Pulpindustry

6. Performance

5. Papermills

Forest ownership

Forest price *SEK / hectare (NB average !!!)*



Source: LRF Konsult and own calculations

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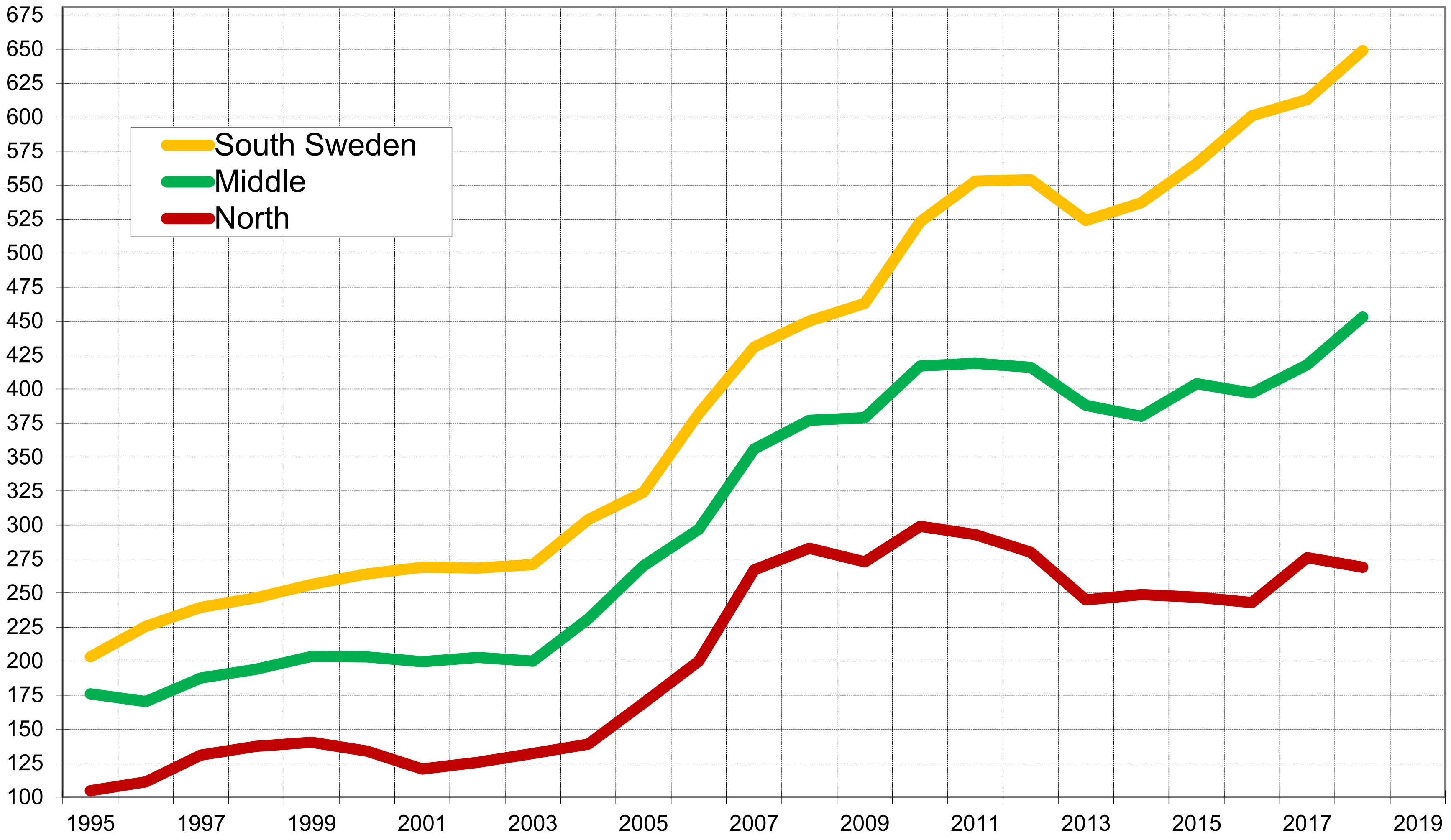
Forest price SEK / m³f



Source: LRF Konsult and own calculations

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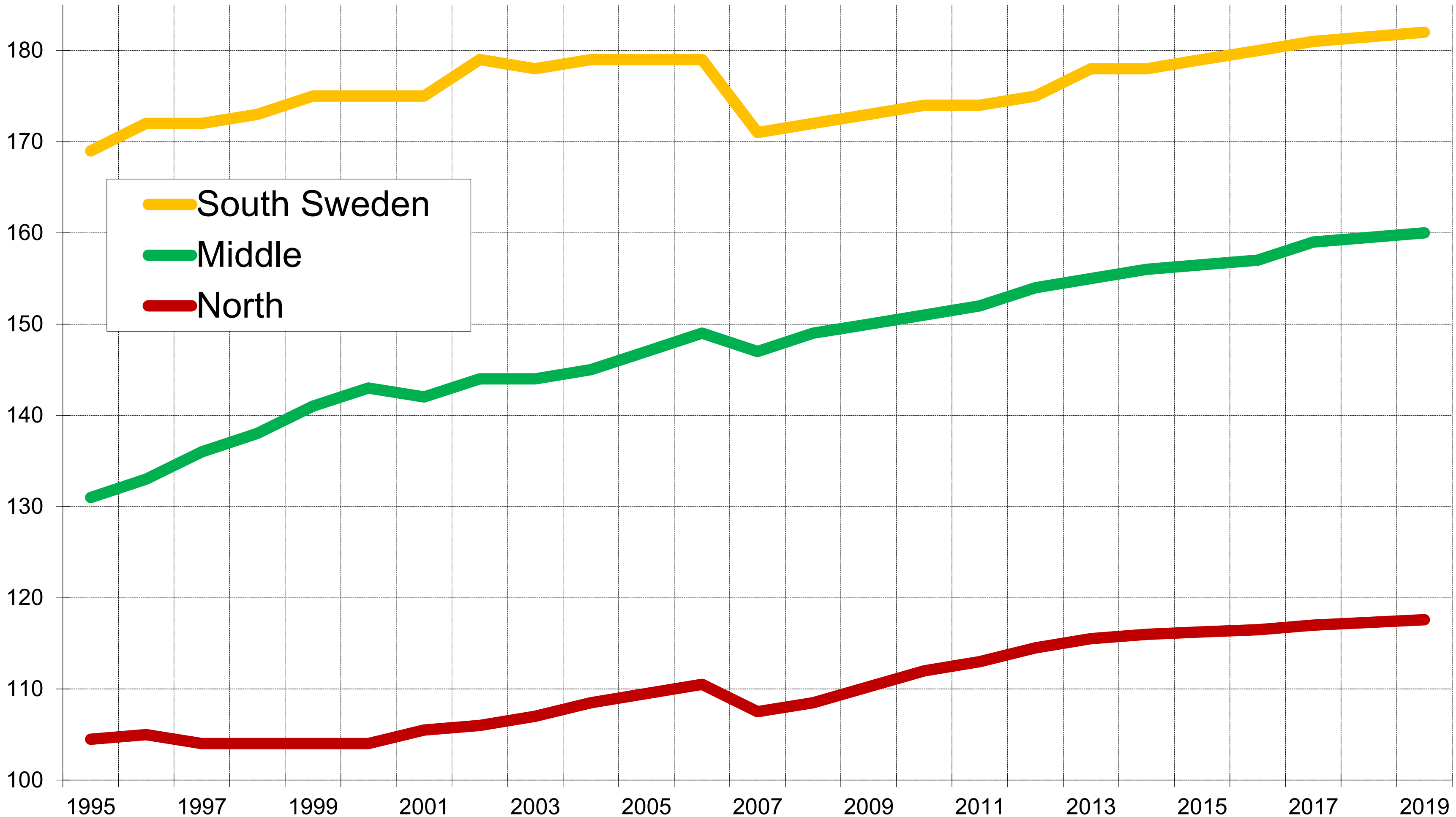
Standing volume *m³f / hectare*



Source: Skogsstyrelsen and own calculations

1 hectare forest - calculation life cycle *north Sweden*

	year						SEK								
scarification	2						-2 200								
planting	2	2,75	SEK	2 300	plants		-6 325								
beeting	4	250	SEK	1	hours		-250					SEK /m^3sub			
pre.thin. (extra)	10	25%	of the area				-1 000					330	530		
pre.thin. (main)	15						-4 000								
		m^3f	m^3sub	cost SEK / m^3sub	income SEK	net inc SEK		pulp wood	m^3sub	saw timber	m^3sub	KSEK pulp w	KSEK saw t	SEK total	SEK / m^3sub
thinning (1st)	40	40	29	220	350	130	3 741	90%	26	10%	3	9	2	10	350
thinning (2nd)	60	68	56	160	370	210	11 705	80%	45	20%	11	15	6	21	370
cleaning							-1 400								
harvesting	100	292	246	105	450	345	85 013	40%	99	60%	148	33	78	111	450
share of thin.	26%	400	331	124	428	304	85 284		169		162	56	86	142	428
annual growth	4,0								51%		49%				
annual operating income							853								
maintenance							-100								
planning		170	SEK	8	year		-21				*income*	*sawtimber*		68	68%
administration / supervision							-75					*pulpwood*		33	32%
hunting, netincome							15				*operating costs*			-33	
annual operating income							672				*operating income*			67	KSEK
value of return		2,5%	discount rate				26 863								
market value		120	m^3f/ha	275	SEK/m^3f		33 000								
added to value of return for "other values"							23%								
"other values" share of total market value							19%								
direkt return (yield)							2,0%								

Source: own calculations

1 hectare forest - calculation life cycle *middle Sweden*

	year	m^{3}f	m^{3}sub	cost SEK / m^{3}sub	income SEK	net inc SEK	SEK	pulp wood	m^{3}sub	saw timber	m^{3}sub	KSEK pulp w	KSEK saw t	SEK total	SEK / m^{3}sub
scarification	2						-2 400								
planting	2	3,00	SEK	2 500	plants		-7 500								
beeting	4	250	SEK	1	hours		-250					SEK /m^{3}sub			
pre.thin. (extra)	10	50%	of the area				-3 000					330	580		
pre.thin. (main)	15						-6 000								
thinning (1st)	35	68	49	235	355	120	5 892	90%	44	10%	5	15	3	17	355
thinning (2nd)	50	98	80	175	380	205	16 383	80%	64	20%	16	21	9	30	380
cleaning							-1 300								
harvesting	75	322	272	100	505	405	109 965	30%	81	70%	190	27	110	137	505
share of thin.	32%	488	401	132	462	330	111 790		190		211	63	122	185	462
annual growth	6,5								47%		53%				
annual operating income							1 491								
maintenance							-125								
planning		170	SEK	8	year		-21								
administration / supervision							-100								
hunting, netincome							30								
annual operating income							1 274								
value of return		2,5%	discount rate				50 972								
market value		160	m^{3}f/ha	440	SEK/m^{3}f		70 400								
added to value of return for "other values"							38%								
"other values" share of total market value							28%								
direkt return (yield)							1,8%								

income	*sawtimber*	99	75%
	pulpwood	33	25%
operating costs		-37	
operating income		96	KSEK

Source: own calculations

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1 hectare forest - calculation life cycle south Sweden

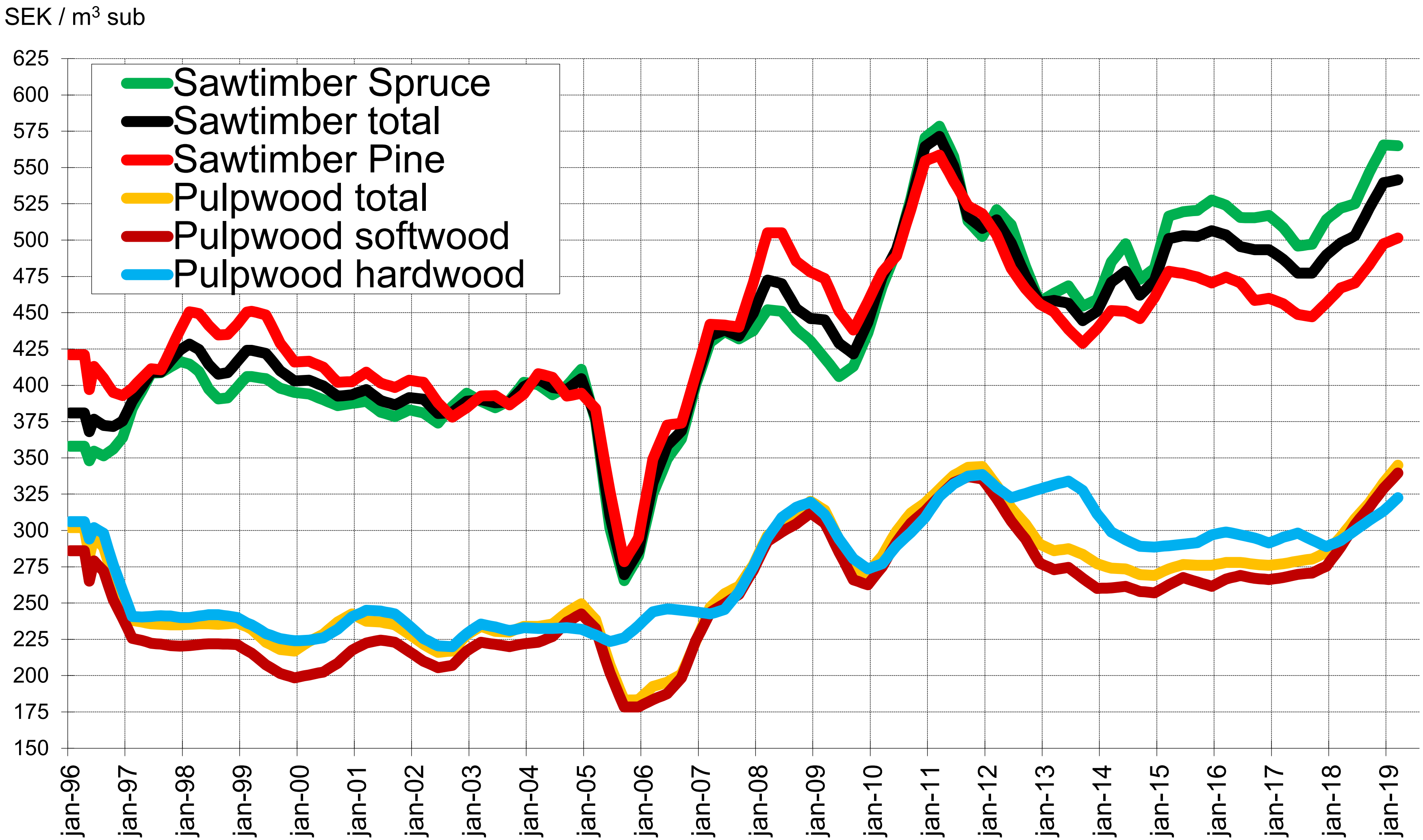
	year	m^3f	m^3sub	cost SEK / m^3sub	income SEK	net inc SEK	SEK	pulp wood	m^3sub	saw timber	m^3sub	KSEK pulp w	KSEK saw t	SEK total	SEK / m^3sub
scarification	2						-2 600								
planting	2	3,50	SEK	2 700	plants		-9 450								
beeting	4	250	SEK	1	hours		-250					SEK / m^3sub			
pre.thin. (extra)	8	75%	of the area				-7 500					380	690		
pre.thin. (main)	12						-10 000								
thinning (1st)	35	71	51	250	411	161	8 173	90%	46	10%	5	17	4	21	411
thinning (2nd)	45	96	73	190	442	252	18 492	80%	59	20%	15	22	10	32	442
thinning (3d)	55	35	29	160	473	313	9 051	70%	20	30%	9	8	6	14	473
cleaning							-1 200								
harvesting	70	302	255	95	613	518	132 061	25%	64	75%	191	24	132	156	613
share of thin.	37%	504	408	158	547	389	136 776		188		220	72	152	223	547
annual growth	7,2								46%		54%				

				SEK				
annual operating income				1 954				
maintenance				-150				
planning	170 SEK	8 year		-21	income	sawtimber	129	75%
administration / supervision				-150		pulpwood	43	25%
hunting, netincome				45	operating costs		-55	
annual operating income				1 678	operating income		117 KSEK	
value of return	2,5% discount rate			67 108				
market value	180 m^3f/ha	640 SEK/m^3f		115 200				
added to value of return for "other values"				72%				
"other values" share of total market value				42%				
direkt return (yield)				1,5%				

Source: own calculations

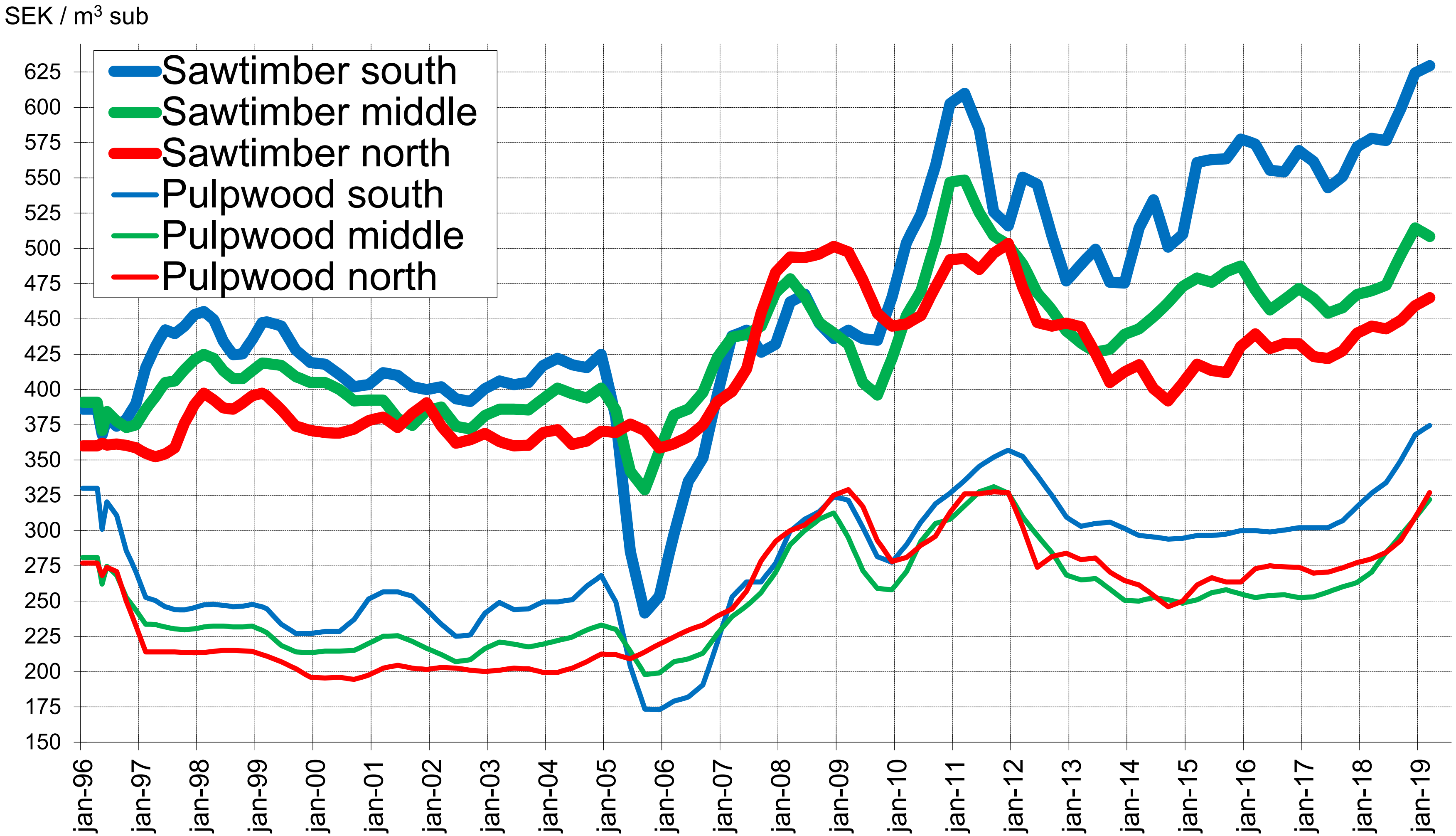
Forestry

Sawtimber and pulpwood



Source: Skogsstyrelsen and own calculations

Sawtimber and pulpwood

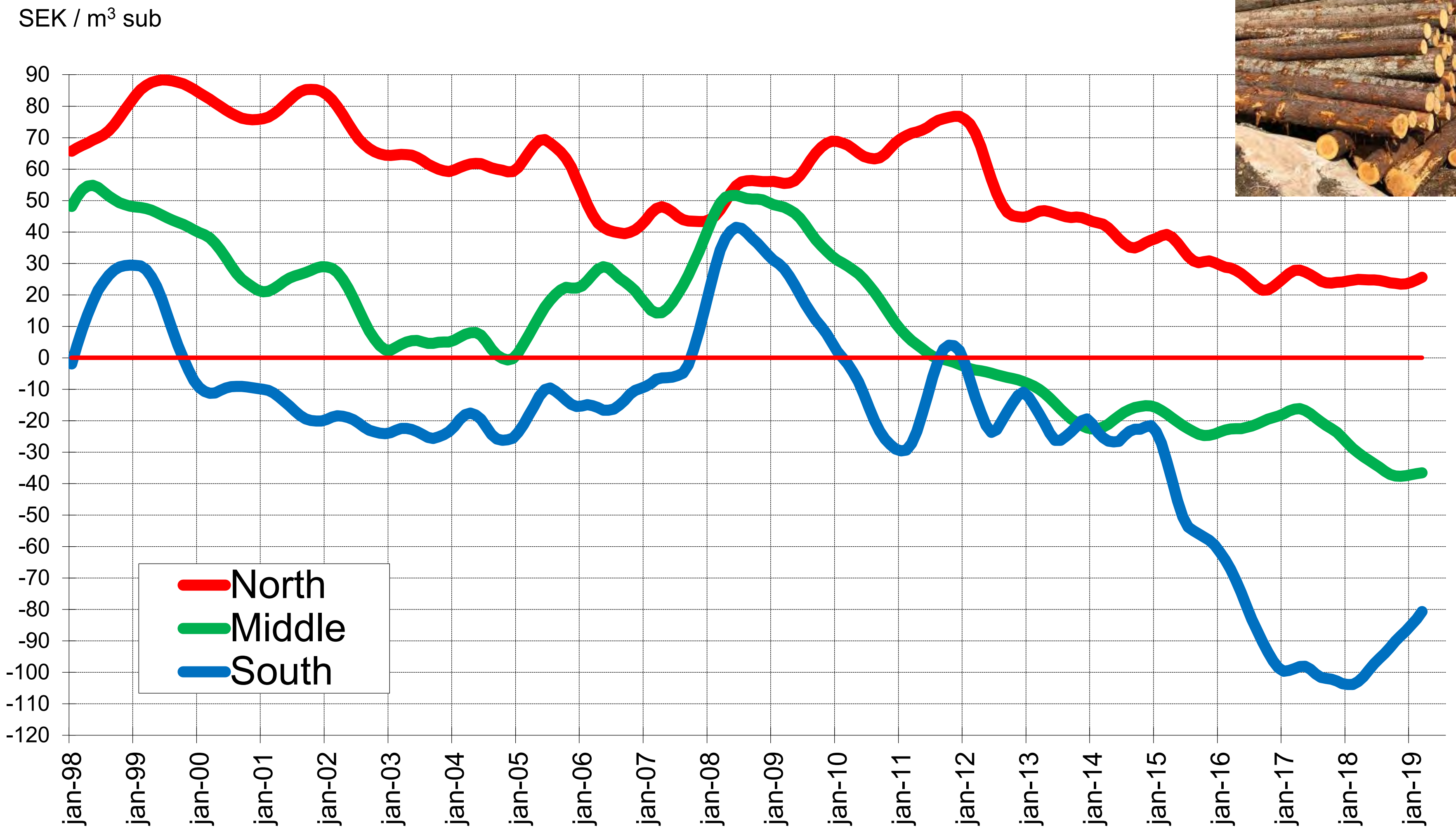


Source: Skogsstyrelsen and own calculations

Price difference southern Sweden vs. middle

Source: Skogsstyrelsen and own calculations

Price difference pine vs. spruce sawtimber



Source: Skogsstyrelsen and own calculations

Forestry plan

- Use the plan as a planning tool
- Update the plan continuously with implemented actions
- Review the plan each 8 - 10th year
- Take a stand on the designer's harvesting proposal and proposals for forestry

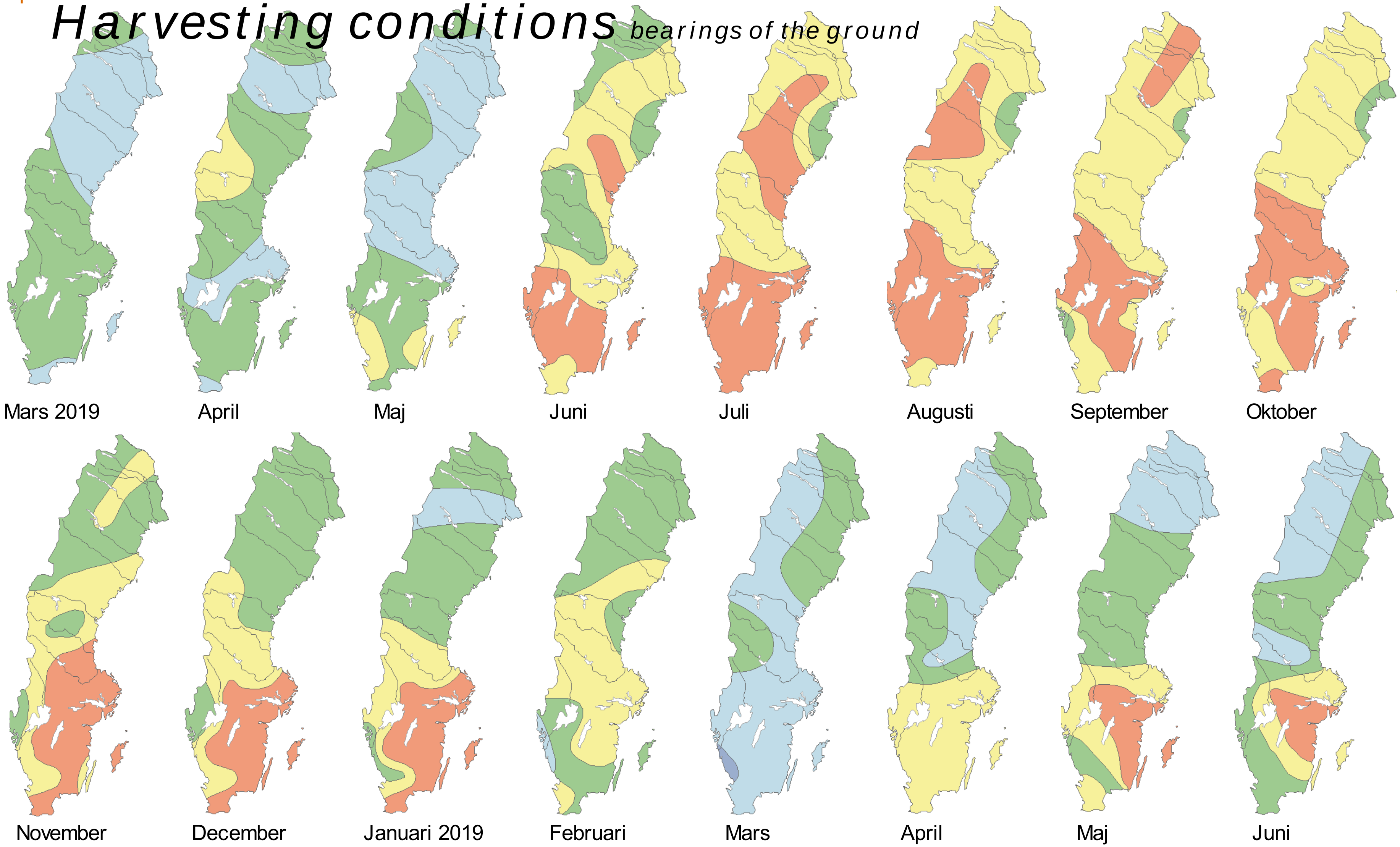
- Follow the plan regardless liquidity requirement
- Follow the plan regardless tax situation
- Follow the plan regardless price of timber (almost ...)

sometimes it will not be as we thought

Storms

Gorm	November 29, 2015 South Götaland	2 mm^3f
Egon	January 10, 2015 Götaland	3 mm^3f
Ivar	December 12, 2013 Jämtland, north Gävleborg and Västernorrland	8 mm^3f
Hilde	November 16, 2013 Jämtland and Västerbotten	3 mm^3f
Simone	October 28, 2013 Middle Götaland	2 mm^3f
Dagmar	December 25, 2011 North Gävleborg, south Västernorrland and east Jämtland	5 mm^3f
Per	January 14, 2007 Middle and north Götaland	12 mm^3f
Gudrun	January 8-9, 2005 Southwest Götaland	75 mm^3f
Storm	December 3-4 1999 Götaland	5 mm^3f
Storm	November 16-17 1995 Götaland	6 mm^3f
Storm	1981 Götaland	4 mm^3f
Ada	September 22, 1969 Northwest Götaland	37 mm^3f
Storm	Oktober 17-18 1967 South Götaland	4 mm^3f
Storm	1966 North coastline	6 mm^3f
Storm	January 3, 1954 East Svealand	18 mm^3f

Harvesting conditions *bearings of the ground*



the level of water in the ground
- much above normal
- above normal
- normal
- below normal
- much below normal

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Källa: SGU

Fires

Dry and unusually hot weather gave periods of very high fire risk during the summer of 2018.

Forest fires hit areas mostly in Northern Sweden. In total damages hit 25,000 hectares with 2.6 million m^3f.

As comparison, the forest fires in Västmanland 2014 damaged 13,100 hectares with 1,4 million m^3f.

A number of felling contractors chose to stop their forestry machinery. The fire risk was estimated to be too high.

Even 2019 has started with very high fire risk and a number of forest fires.

The rescue service is pushed very hard in forrest fires and a far-reaching guarding and shelter work follow for the forest owners.

Bark beetle

Increased risk of attack on standing spruce

A dry and hot summer 2018 has stressed the spruce which has become weaker and thus more susceptible to attack.

Important with "forest hygiene" ie get the wood out of the forest as soon as possible !! Wood harvested during winter should be out not later than midsummer and wood harvested during summer not later than one month after harvesting

Inspect the forest continuously!!! look for dark drill flour below the tree, like coffee powder, insect holes or color changes in the crown

Get damaged wood out of forest as soon as possible to reduce risk of greater spread and to save as much as possible off it´s value.

Root rot

Calculations point to that root rot costs Swedish forestry about SEK 1bn a year in a decrease in wood value.

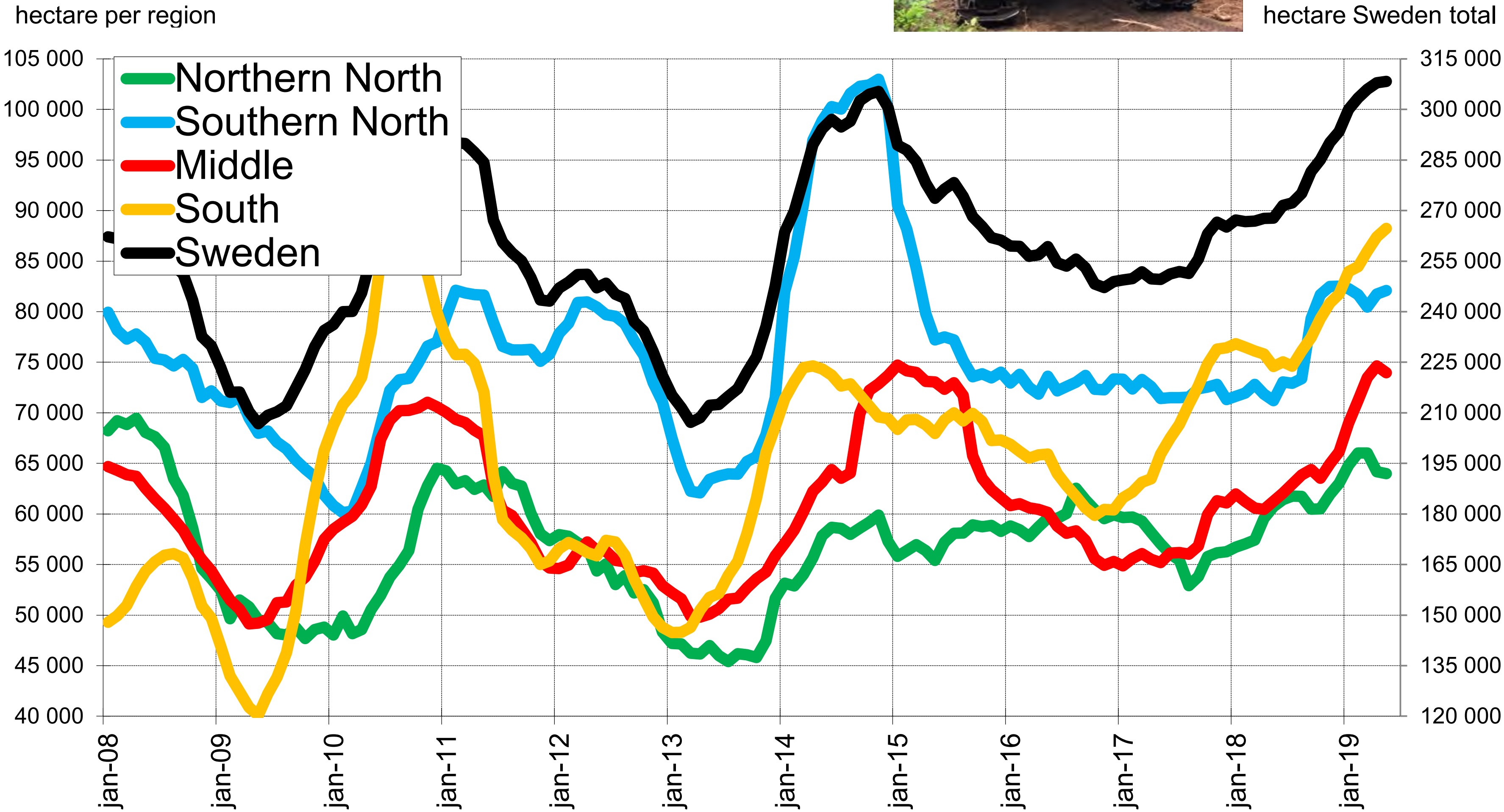
The proportion of rotten dead end trees has doubled in southern Sweden since the 1970s.

Older spruce on fertile land is particularly vulnerable.

Winter harvesting and / or treatment of the stubs are established methods to reduce the spread risk.

Harvest mature trees on time !!

Applications on permission to harvest forests



Source: Skogsstyrelsen and own calculations

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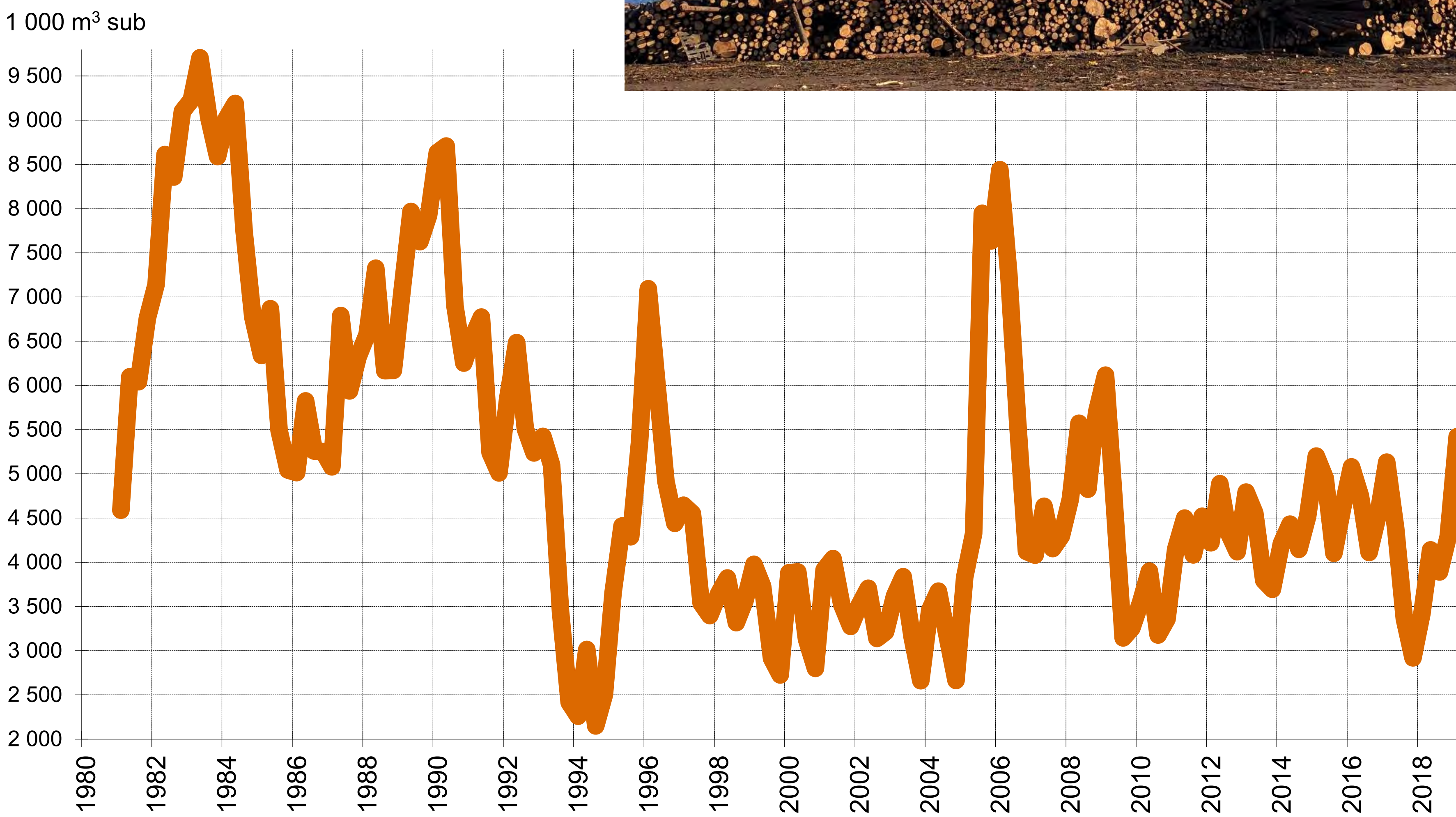
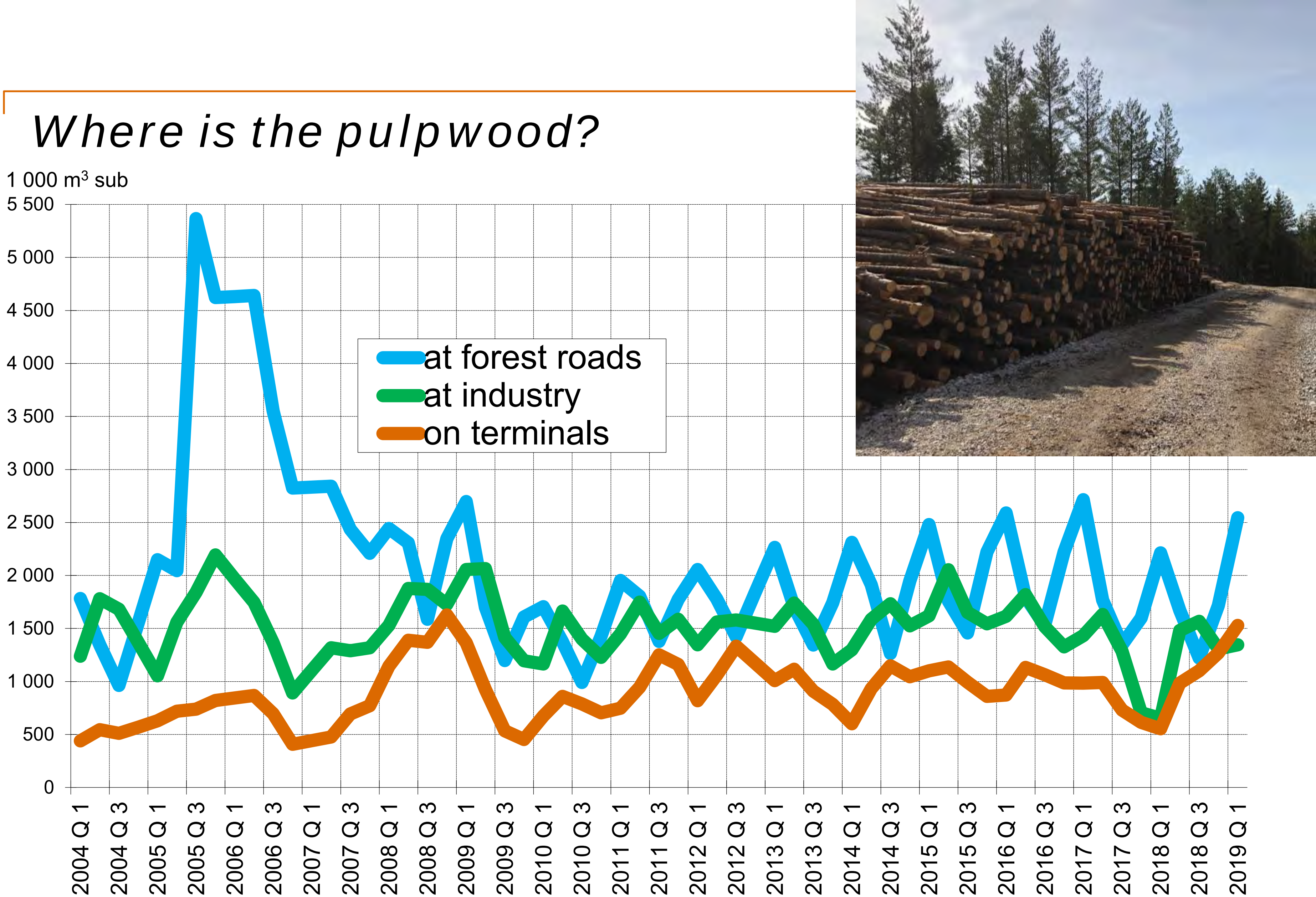
Stock of pulpwood



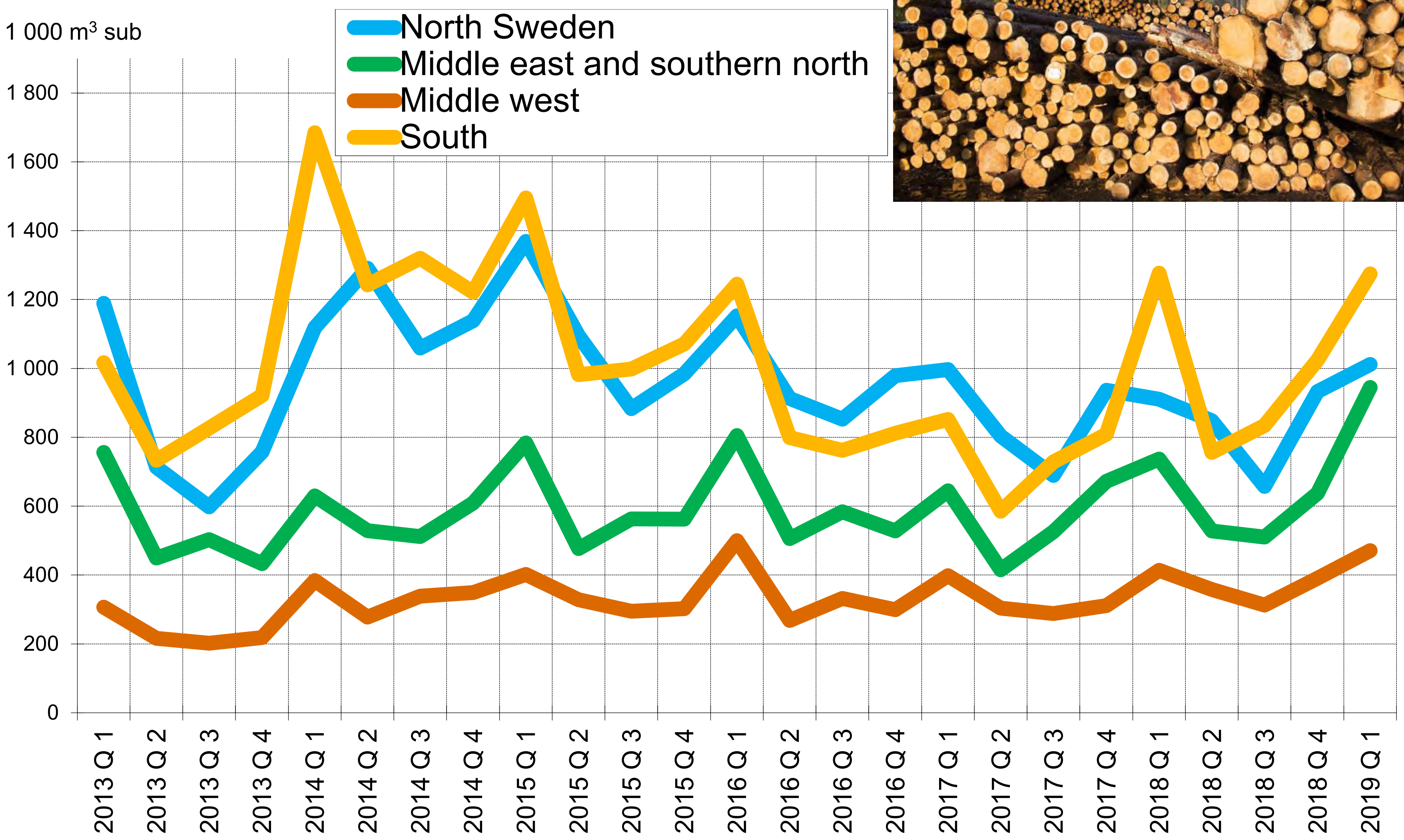
Source: Skogsstyrelsen and own calculations

Where is the pulpwood?



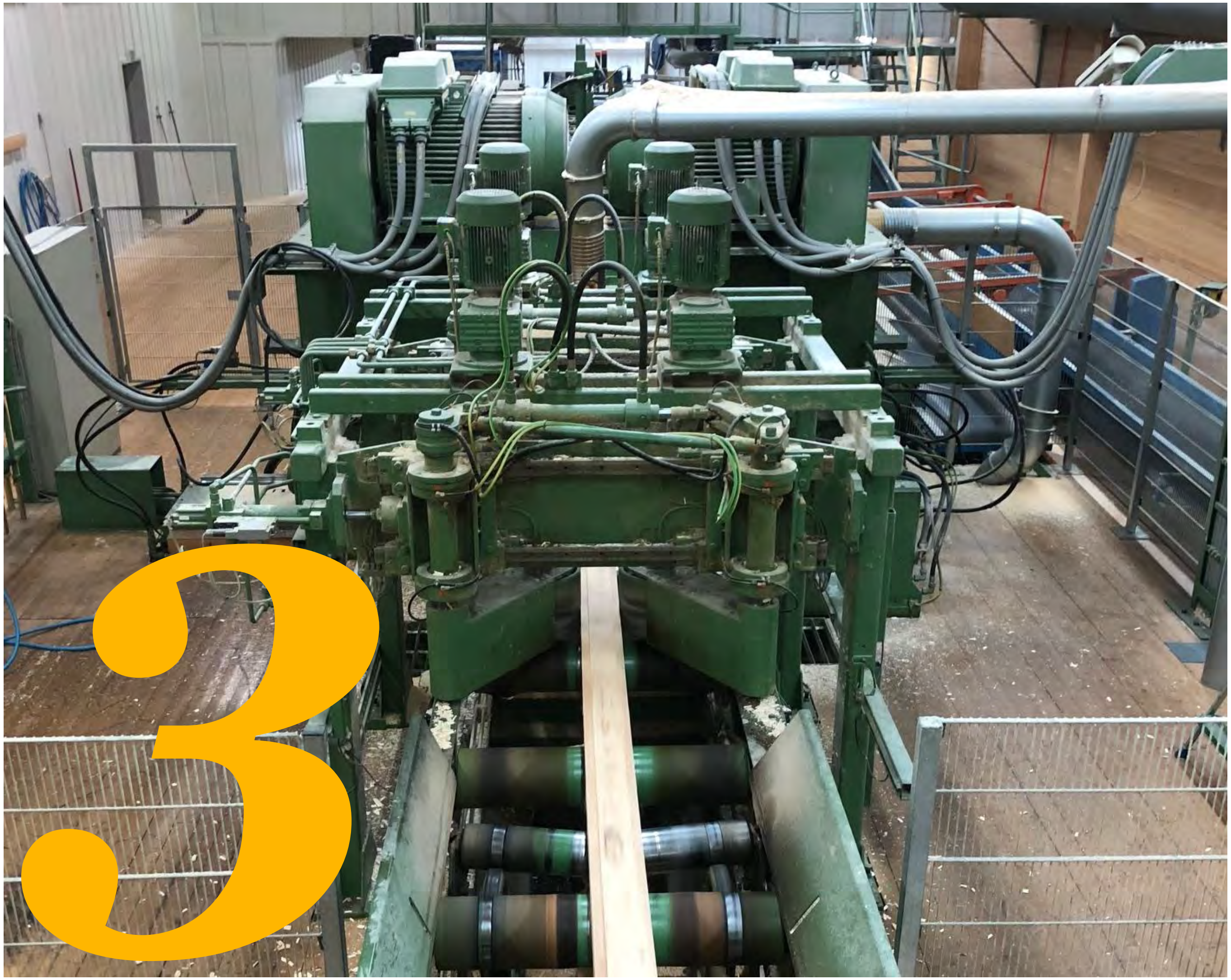
Source: Skogsstyrelsen and own calculations

Stock of sawtimber



Source: Skogsstyrelsen and own calculations

Sawmills



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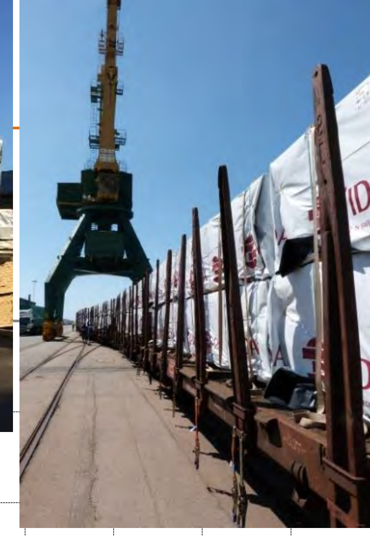
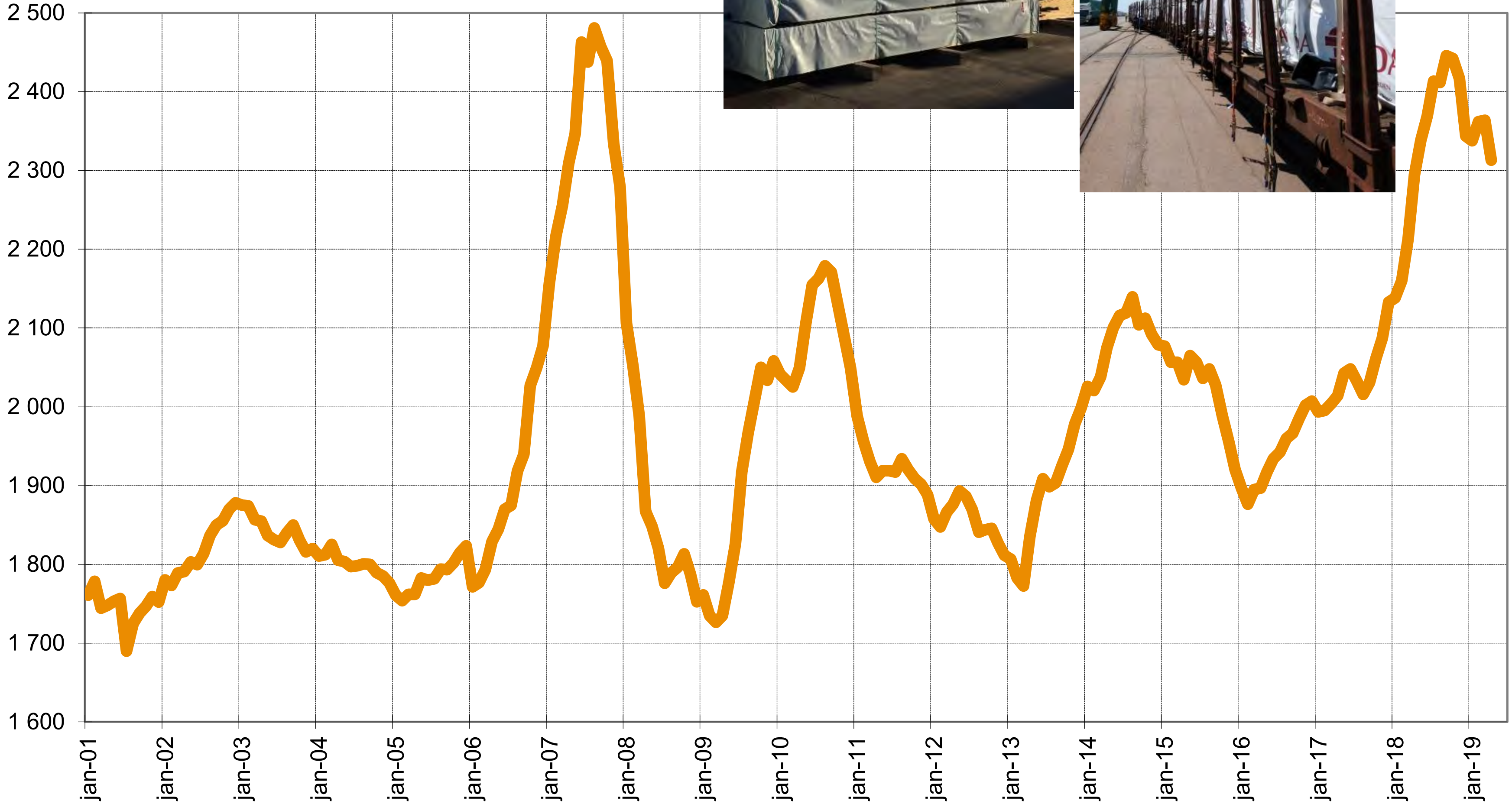
Export price sawn wood





Source: SCB, Skogsstyrelsen and own calculations

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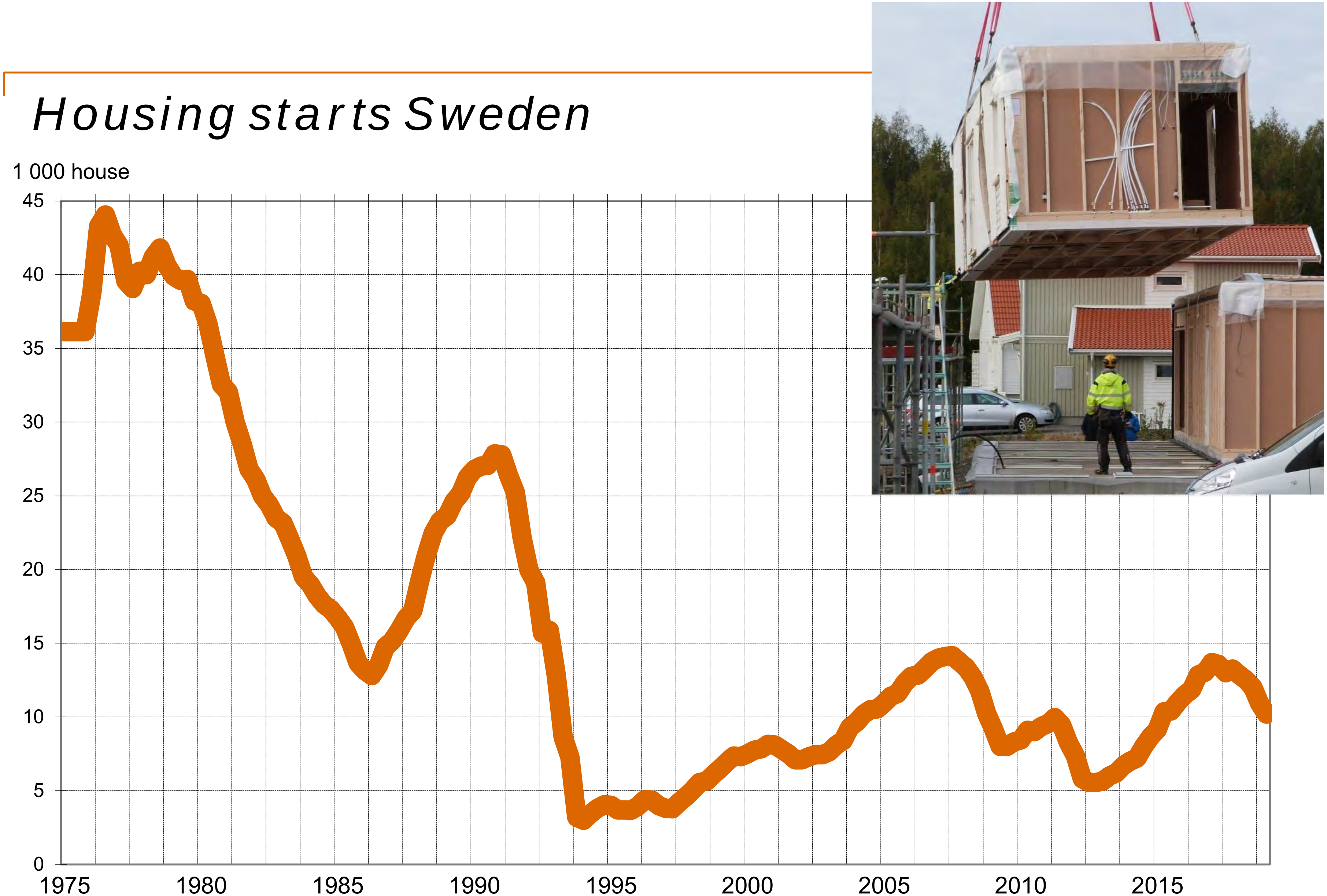
Export of sawn wood

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
UK	23%	23%	23%	22%	24%	23%	24%	24%	24%	24%	25%	22%	23%	21%	19%	19%	20%	20%	21%	21%	20%	21%
Denmark	12%	12%	11%	11%	11%	11%	12%	11%	11%	12%	11%	9%	8%	7%	7%	6%	6%	7%	7%	7%	7%	7%
Norway	7%	7%	6%	7%	7%	7%	7%	7%	8%	7%	9%	7%	7%	7%	7%	8%	8%	9%	8%	7%	8%	8%
Netherlands	9%	10%	9%	9%	8%	8%	8%	8%	7%	7%	8%	8%	8%	8%	8%	7%	6%	7%	7%	7%	7%	8%
Germany	15%	14%	13%	10%	9%	9%	8%	7%	6%	8%	6%	8%	9%	9%	9%	9%	9%	8%	8%	7%	7%	7%
France	4%	4%	4%	4%	5%	4%	5%	4%	4%	4%	4%	4%	4%	5%	4%	4%	3%	3%	2%	3%	3%	3%
other Europe	6%	7%	7%	7%	15%	14%	16%	15%	17%	16%	15%	14%	10%	9%	10%	9%	8%	8%	9%	9%	10%	10%
Europe total	75%	76%	74%	71%	79%	76%	78%	77%	76%	77%	79%	72%	69%	66%	66%	63%	61%	61%	62%	61%	61%	63%
USA (north am)	3%	3%	3%	2%	3%	5%	4%	4%	6%	5%	2%	1%	1%	1%	1%	1%	1%	1%	2%	2%	3%	3%
Japan	4%	3%	5%	6%	6%	7%	8%	7%	7%	6%	5%	6%	6%	7%	7%	7%	8%	6%	5%	6%	6%	6%
China	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	4%	4%	6%	7%	5%
Middle East	3%	3%	3%	2%	2%	3%	3%	3%	2%	3%	3%	3%	4%	4%	5%	5%	4%	6%	5%	4%	4%	4%
Egypt	7%	7%	6%	6%	4%	4%	2%	2%	3%	3%	2%	9%	9%	10%	9%	11%	10%	13%	10%	9%	10%	7%
other Africa	4%	4%	4%	3%	4%	4%	5%	6%	5%	6%	8%	8%	10%	11%	10%	11%	10%	10%	10%	9%	7%	9%
other	4%	5%	5%	10%	0%	1%	1%	1%	1%	0%	1%	1%	1%	2%	2%	2%	2%	0%	2%	3%	3%	3%
Export total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Export	69%	68%	67%	69%	67%	68%	68%	68%	67%	70%	66%	69%	73%	68%	70%	73%	71%	73%	71%	71%	71%	69%
Sweden	31%	32%	33%	31%	33%	32%	32%	32%	33%	30%	34%	31%	27%	32%	30%	27%	29%	27%	29%	29%	29%	31%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

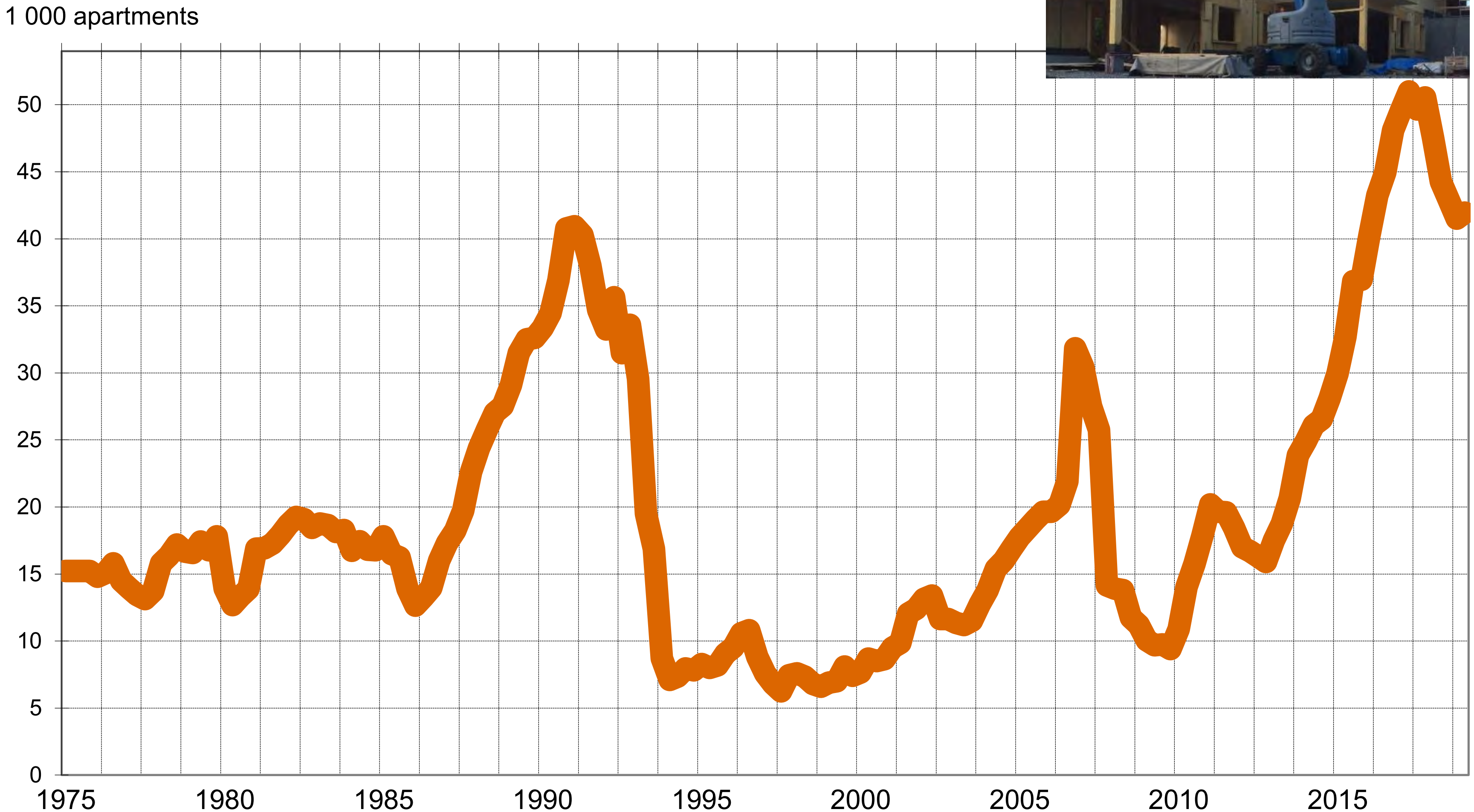
Source: Skogsstyrelsen and own calculations

Housing starts Sweden



Source: SCB and own calculations

Housing starts apartments Sweden



Source: SCB oand own calculations

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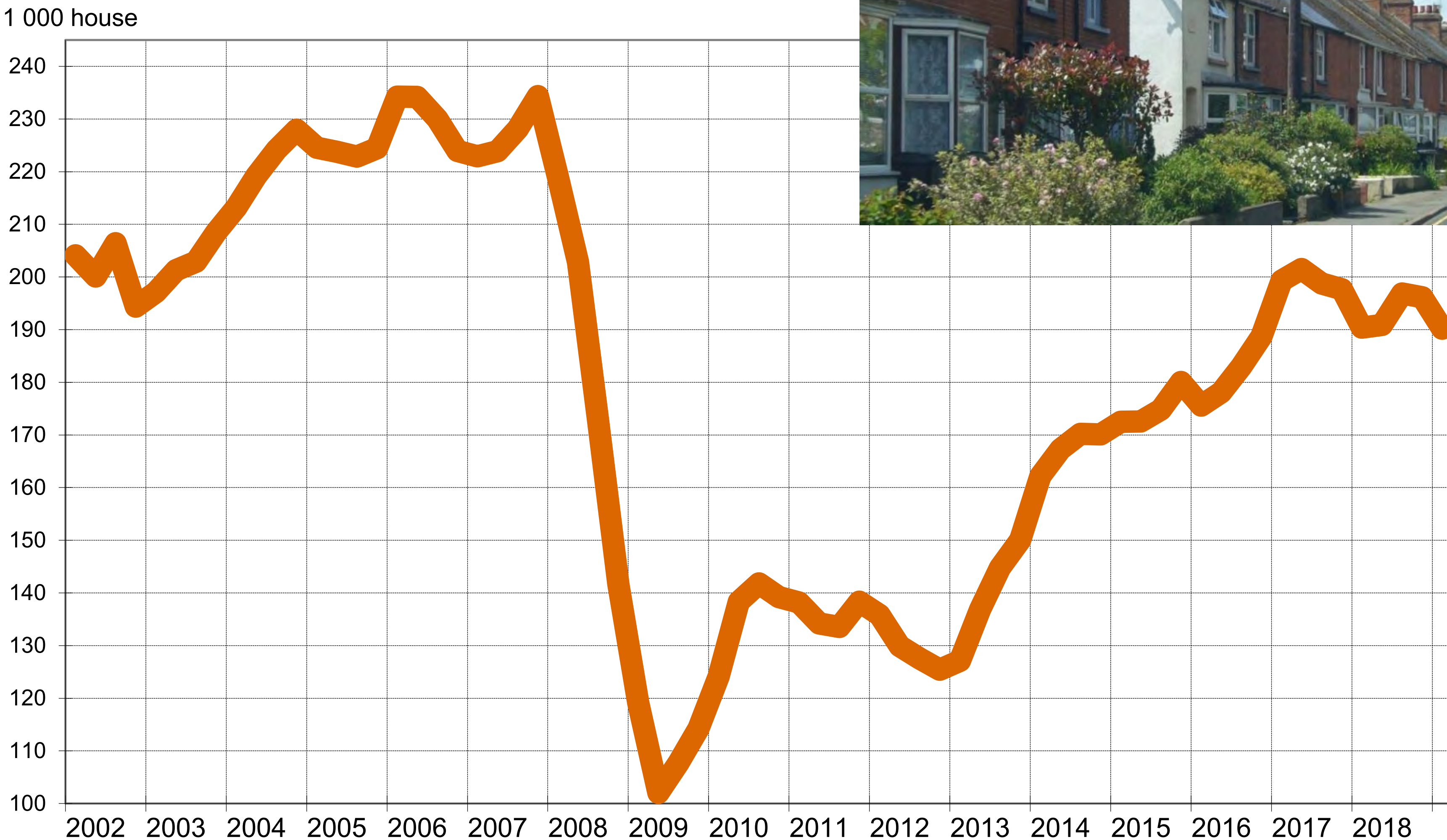
Housing starts UK



Source: National House-Building Council (NHBC) and own calculations

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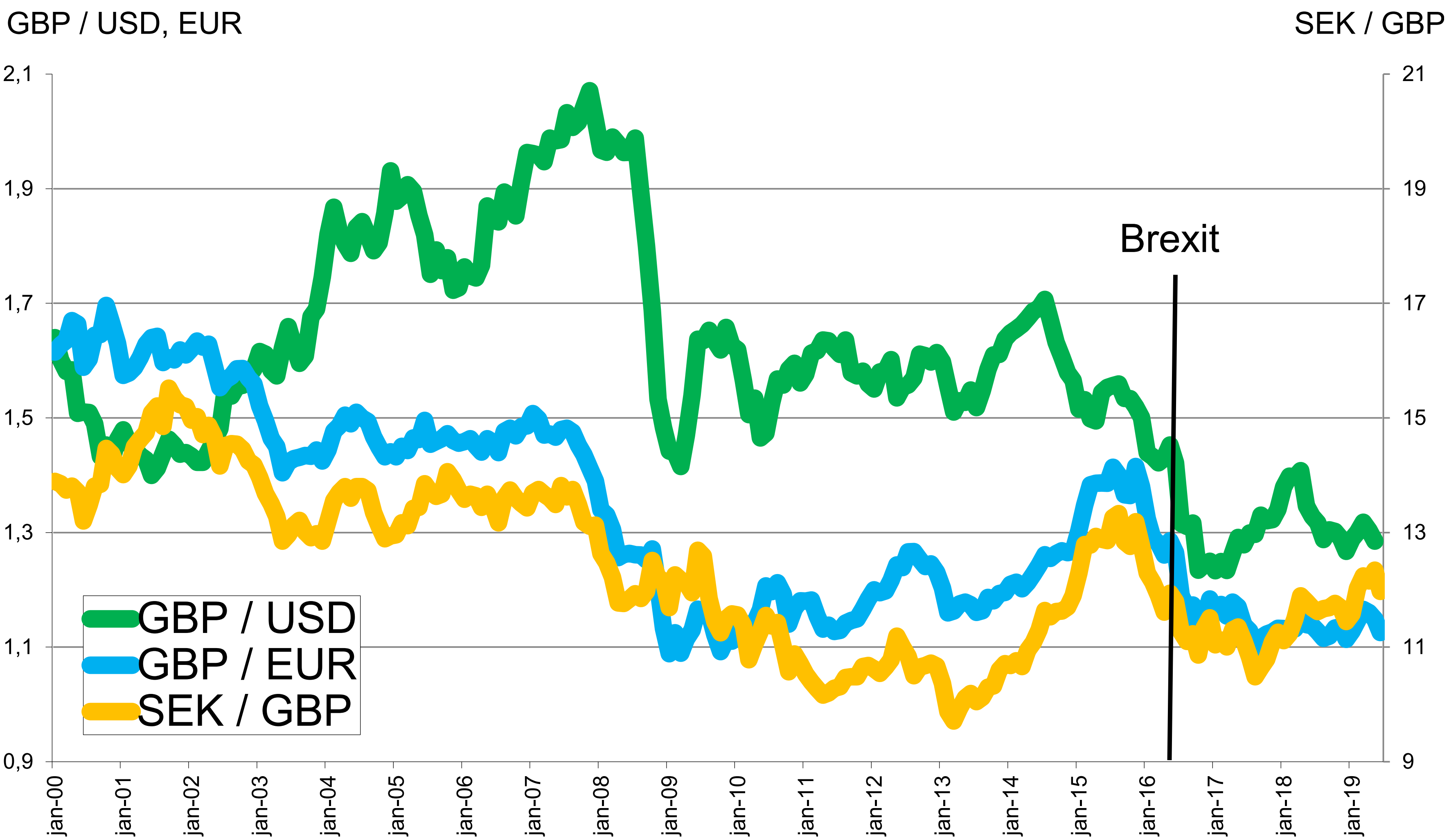
Exchange rate Pound



Source: Sveriges Riksbank

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Housing starts US

Source: U.S. Department of Commerce and own calculations

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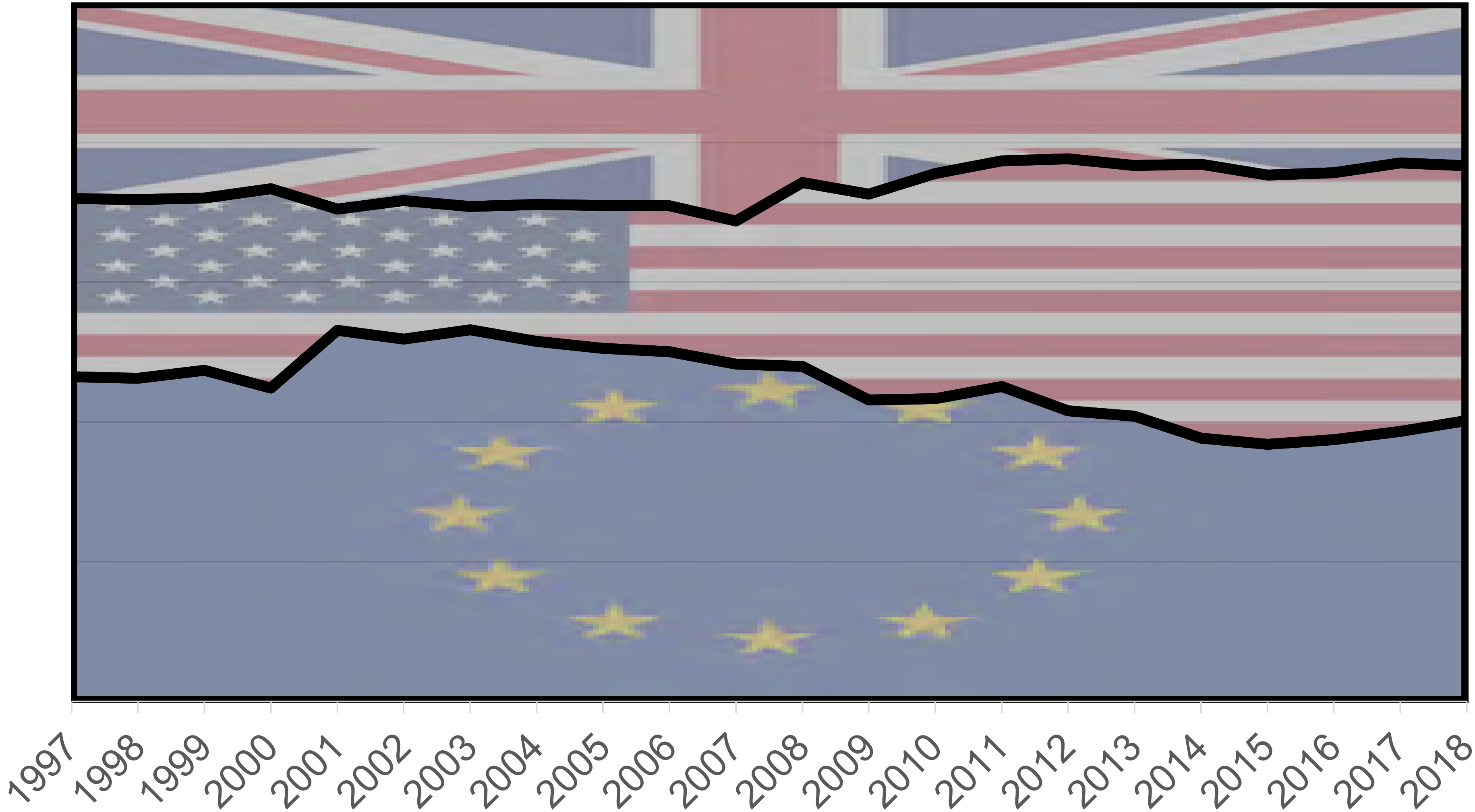
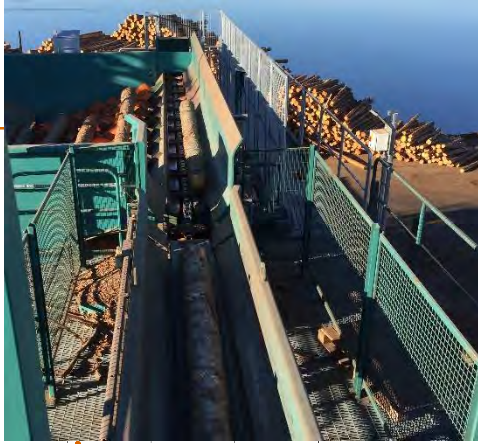
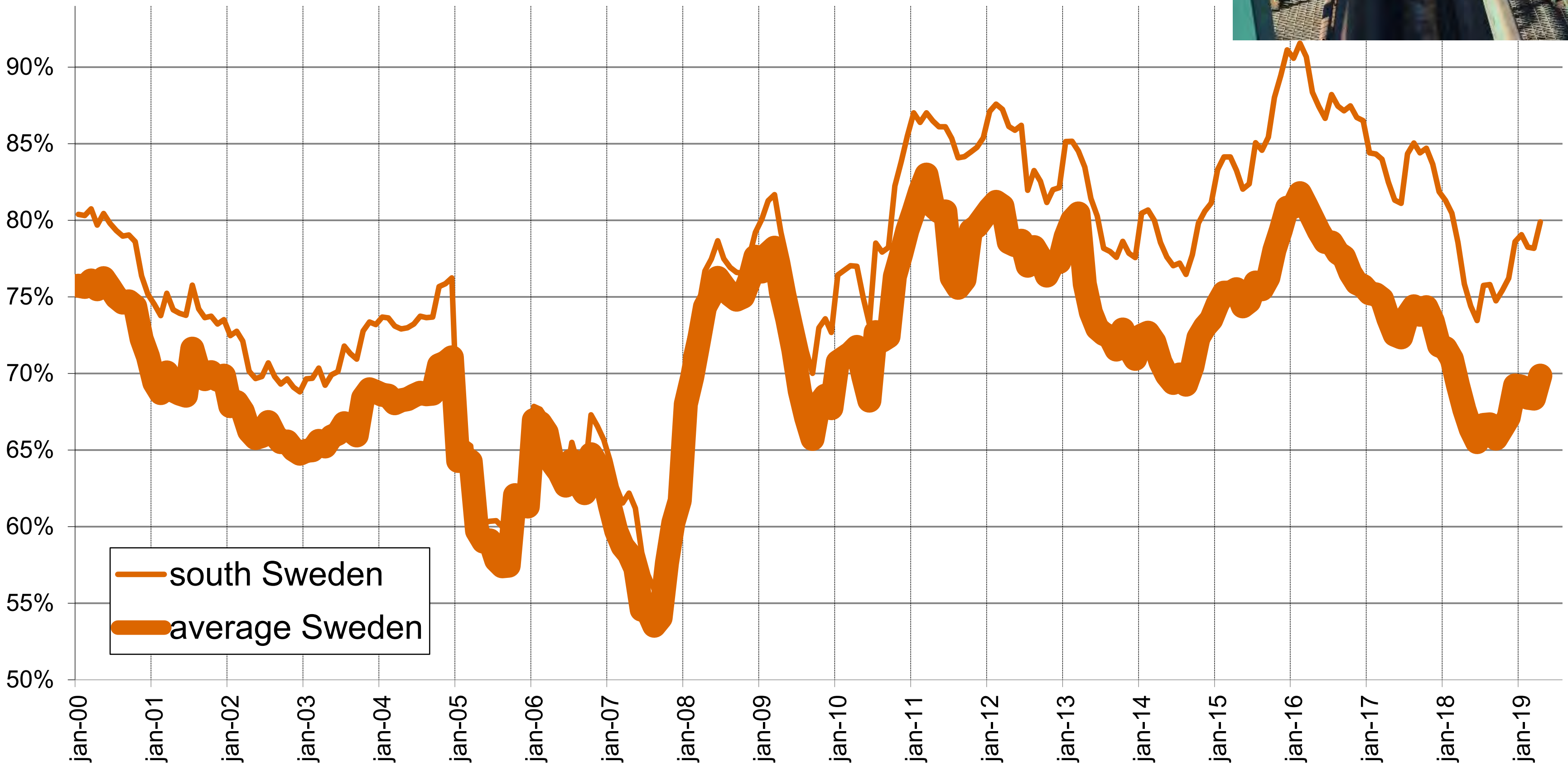
Share of exportcurrency sawn wood



Saw's cost of timber in relation to price of sawn wood

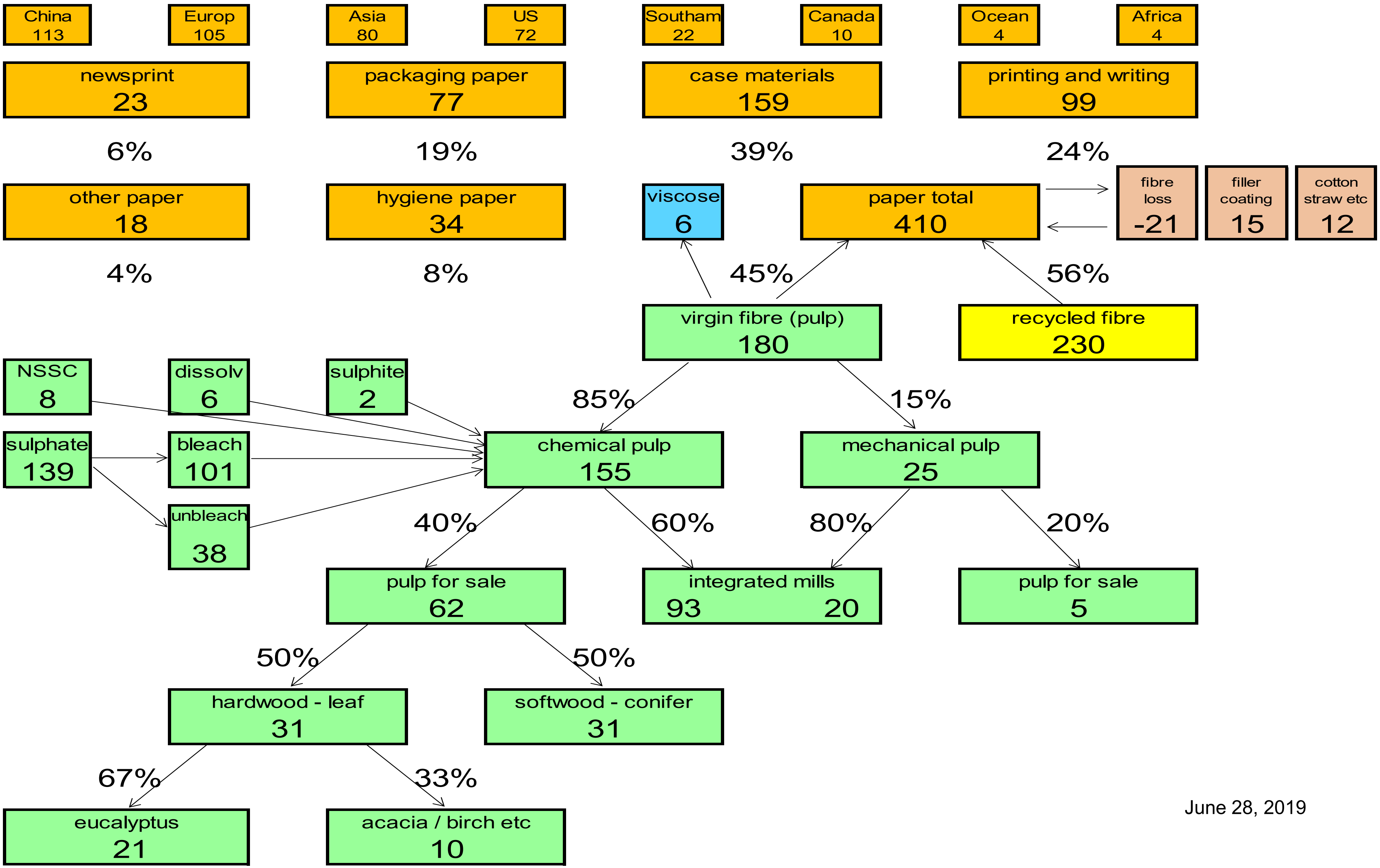




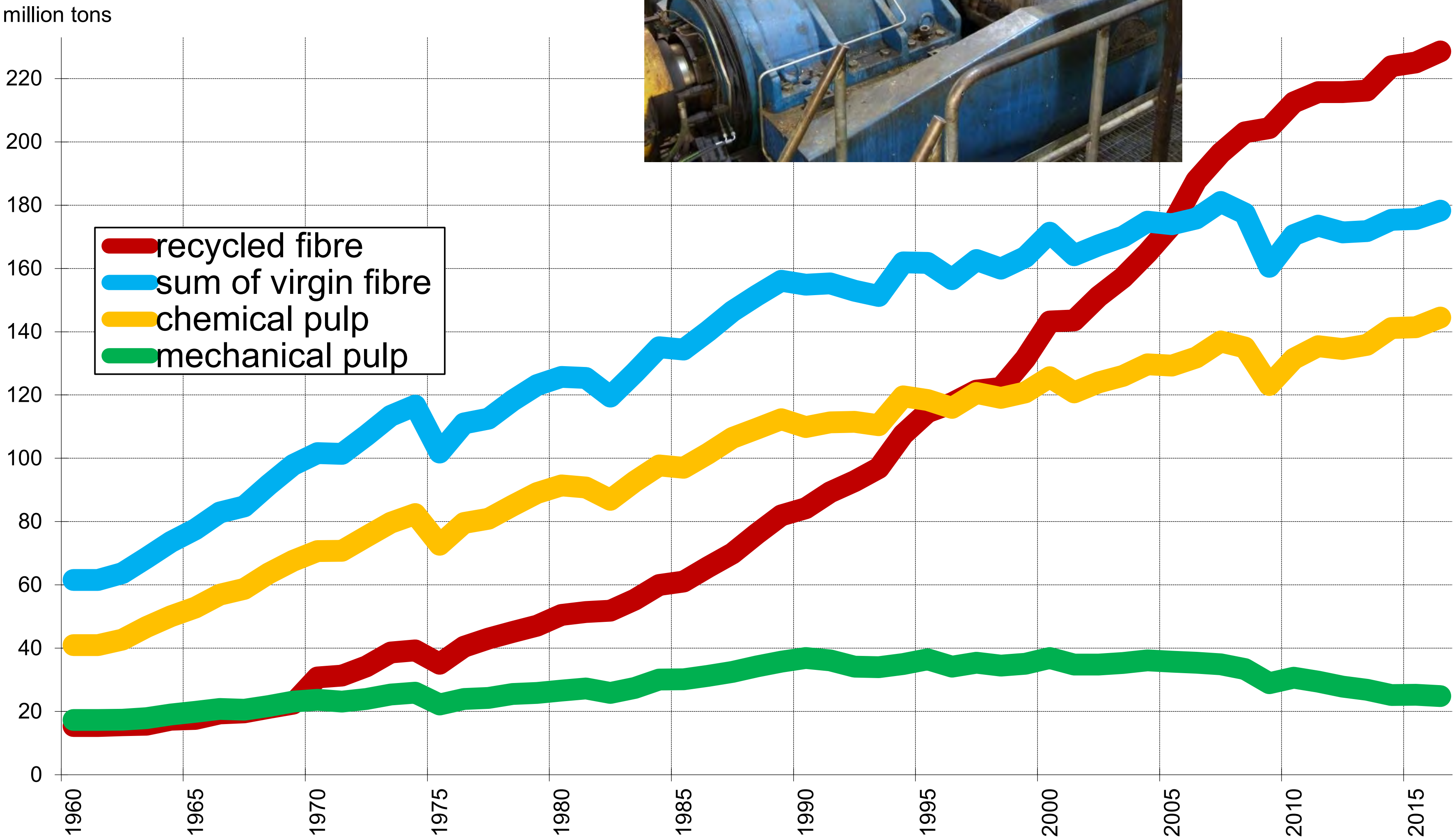
Source: own calculations

Pulpindustry

World's pulp and paper production *million tons*

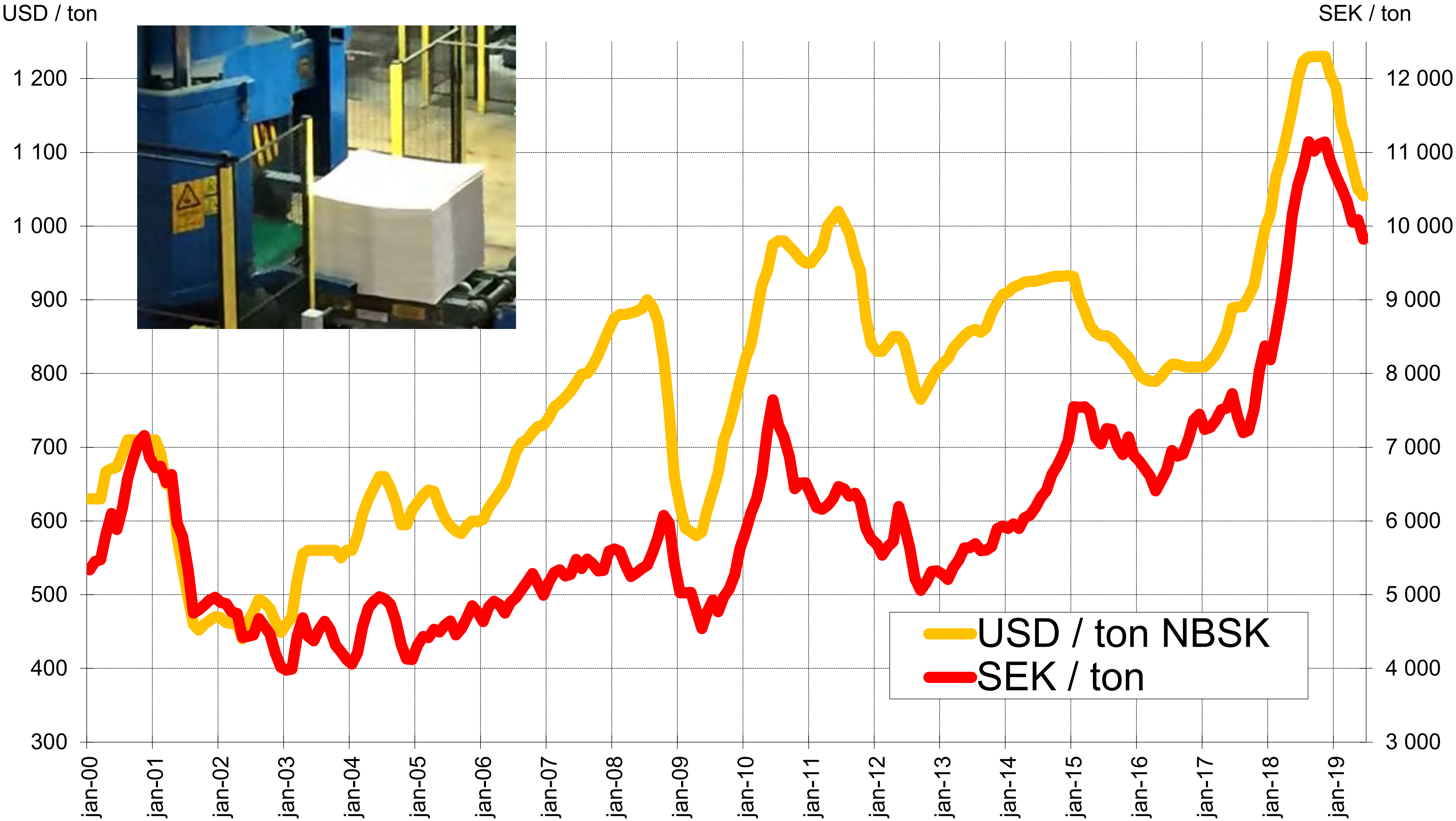


Pulp



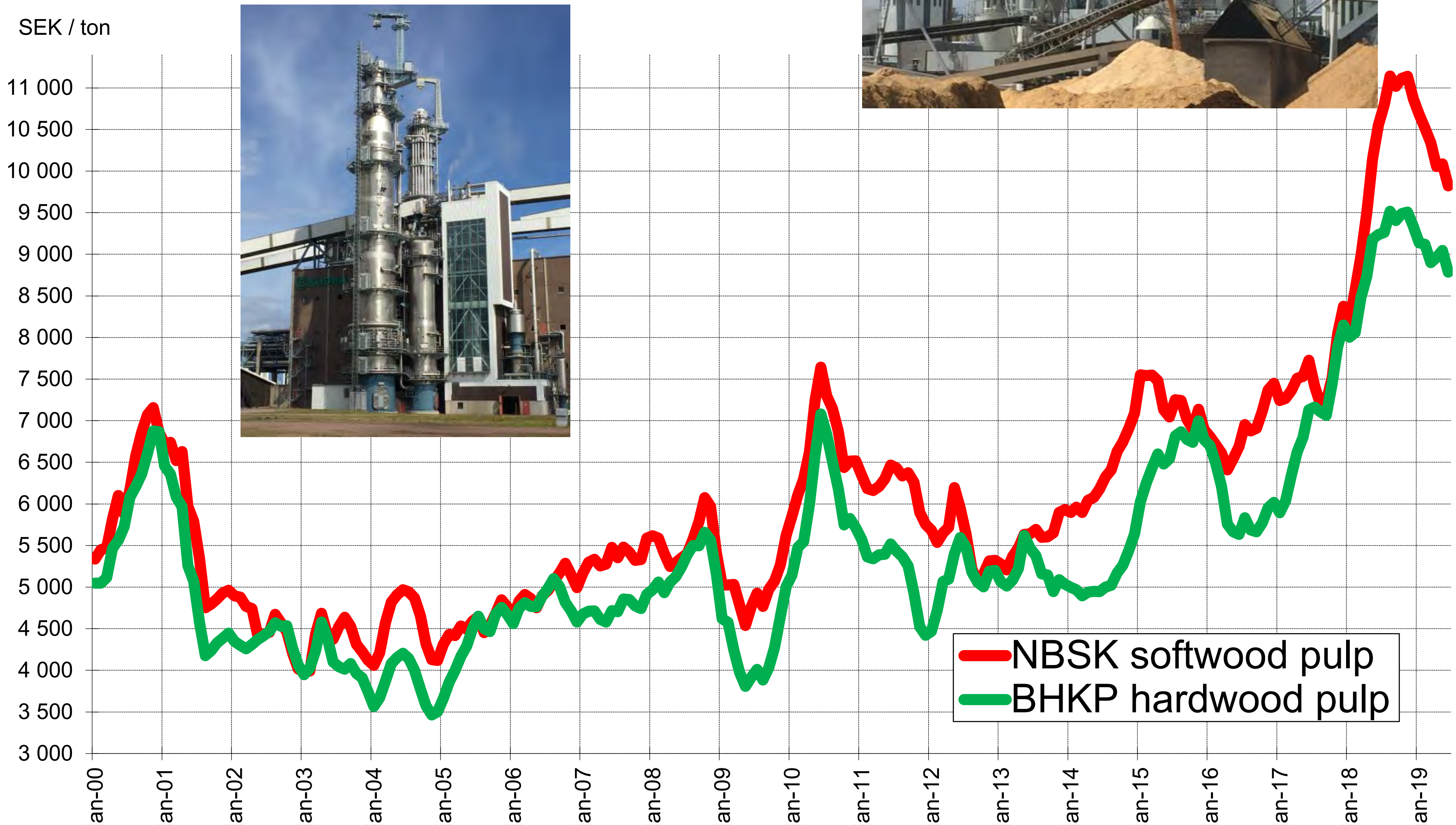
Source: FAOSTAT and own calculations

Pulp softwood



Source: FOEX, DI, Sveriges Riksbank and own calculations

Pulp softwood and hardwood



Source: FOEX, DI, Sveriges Riksbank and own calculations

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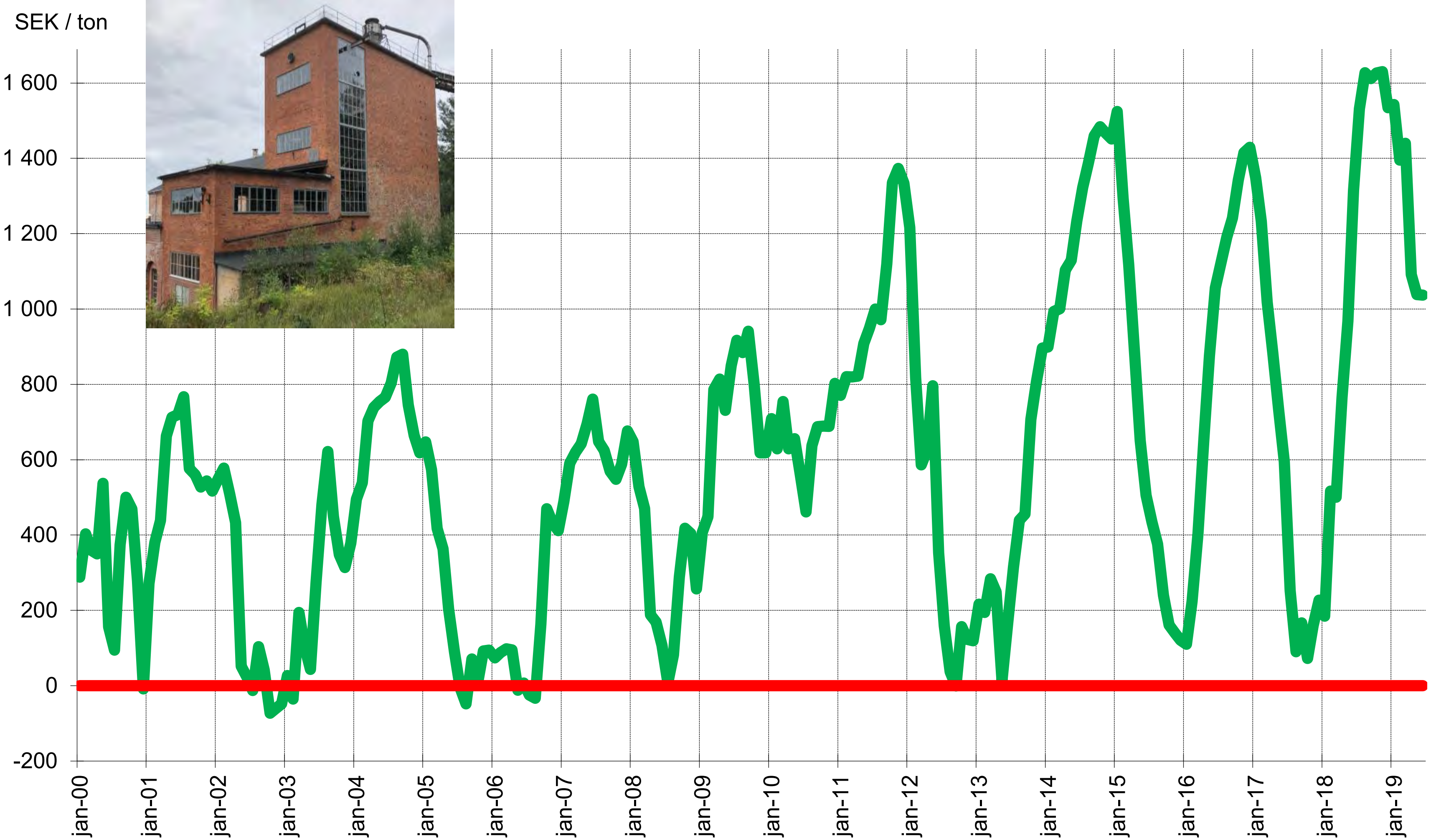
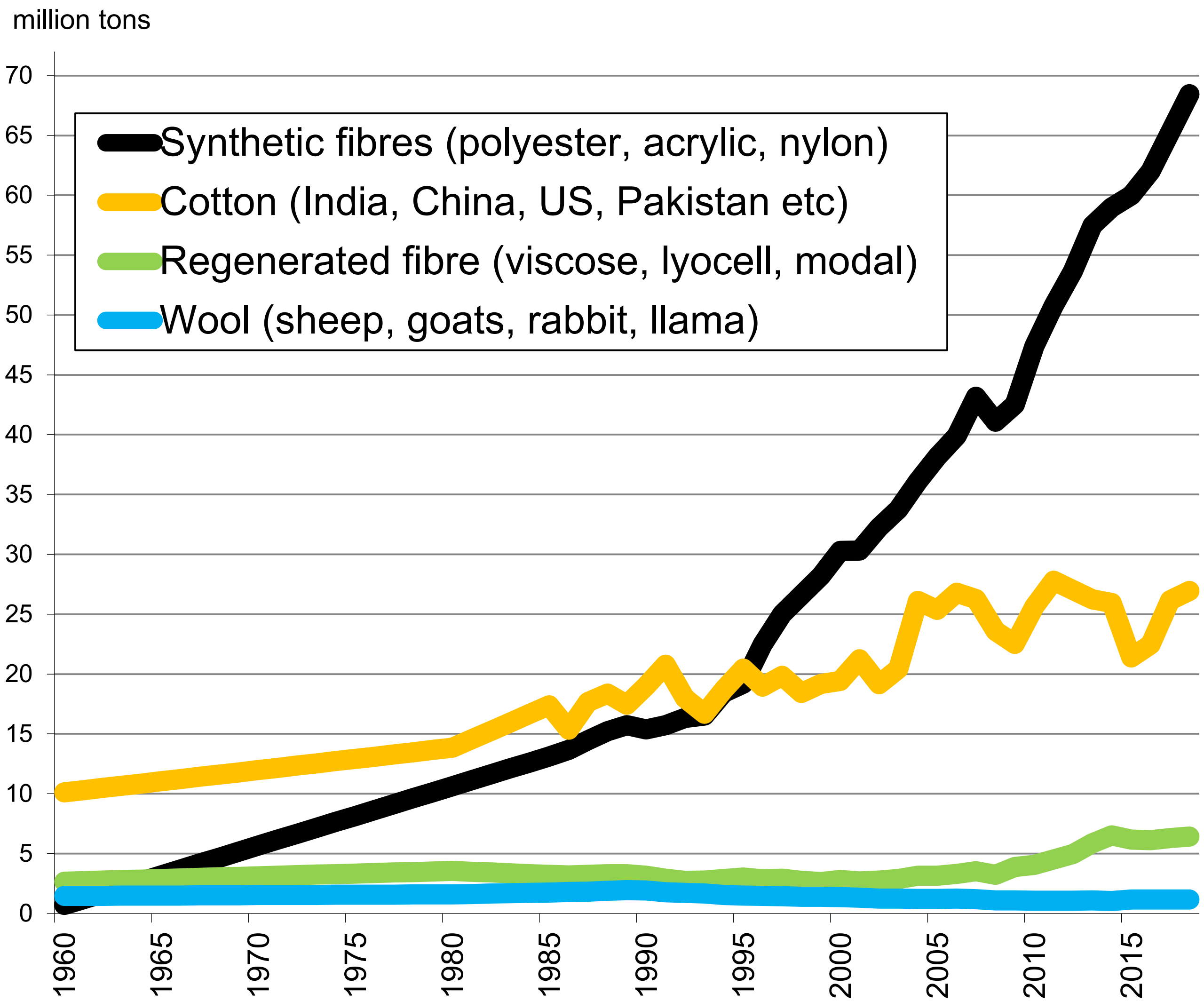
Price difference pulp softwood vs. hardwood



Source: FOEX, DI, Sveriges Riksbank and own calculations

Dissolving pulp - clothes of wood!



Source: SIRFS, Lenzing, Birla and own calculations

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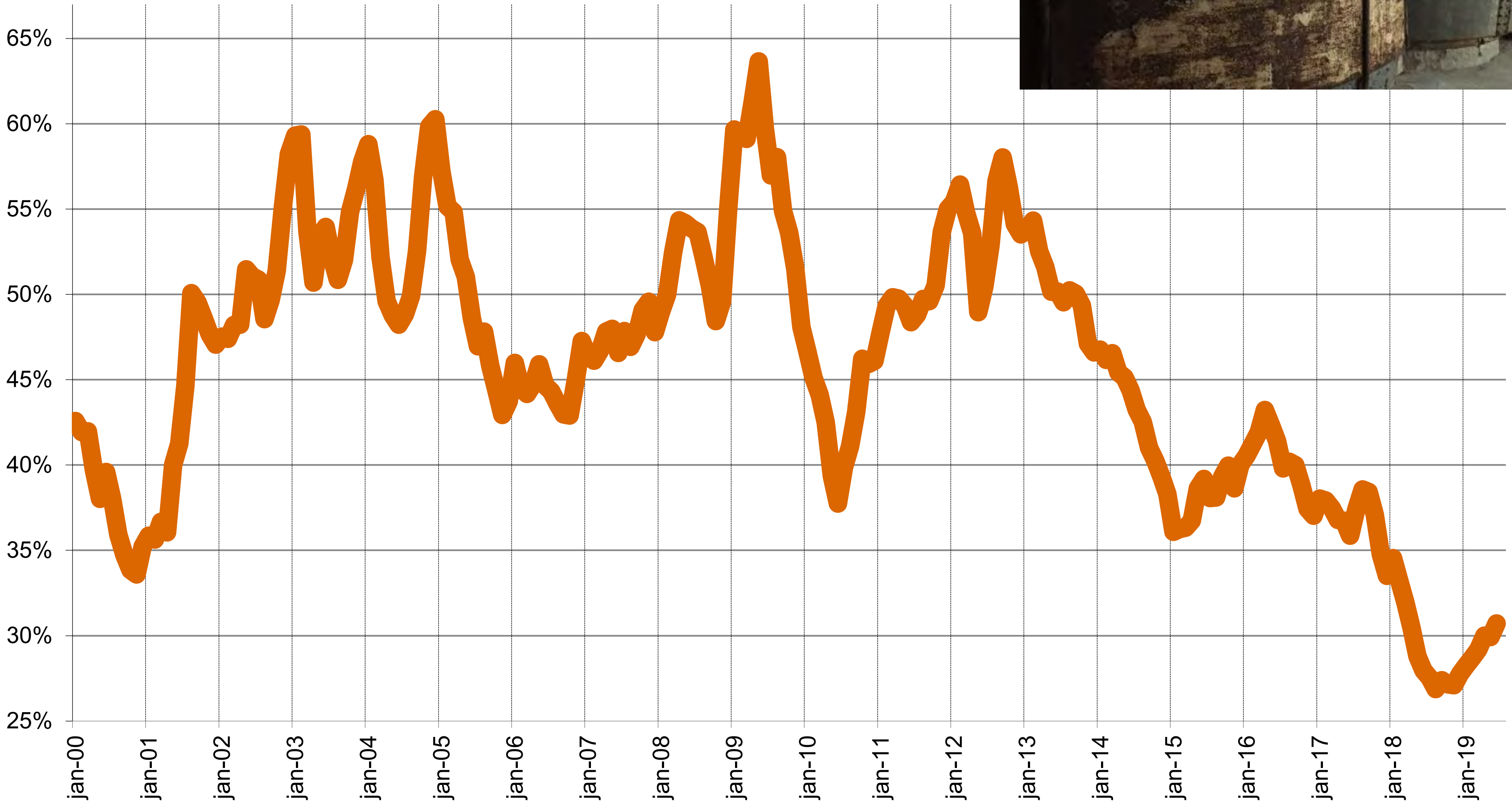
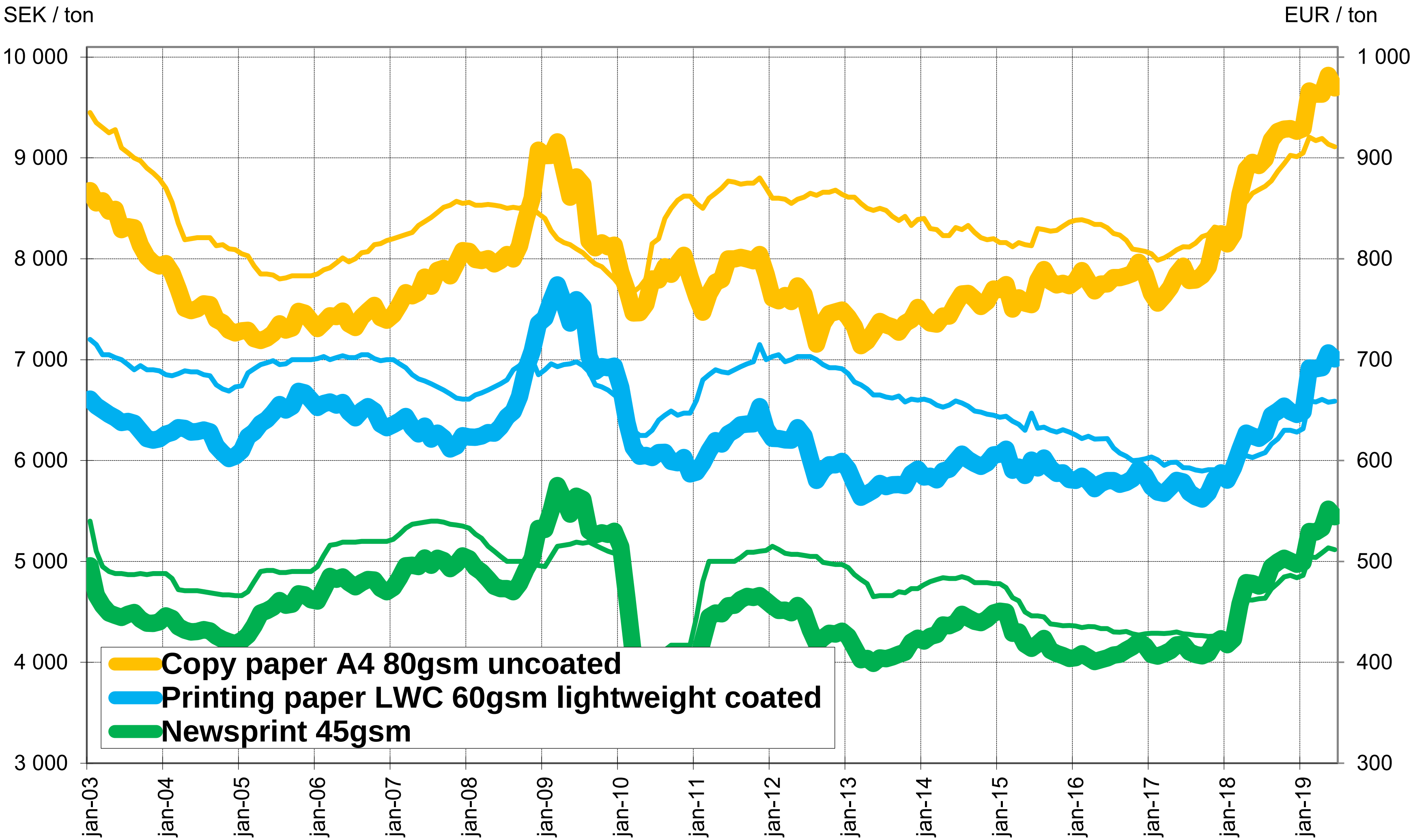
Mill's cost of pulpwood in relation to market price of pulp



Source: own calculations

Papermills

Paper



Källa: FOEX, Sveriges Riksbank and own calculations

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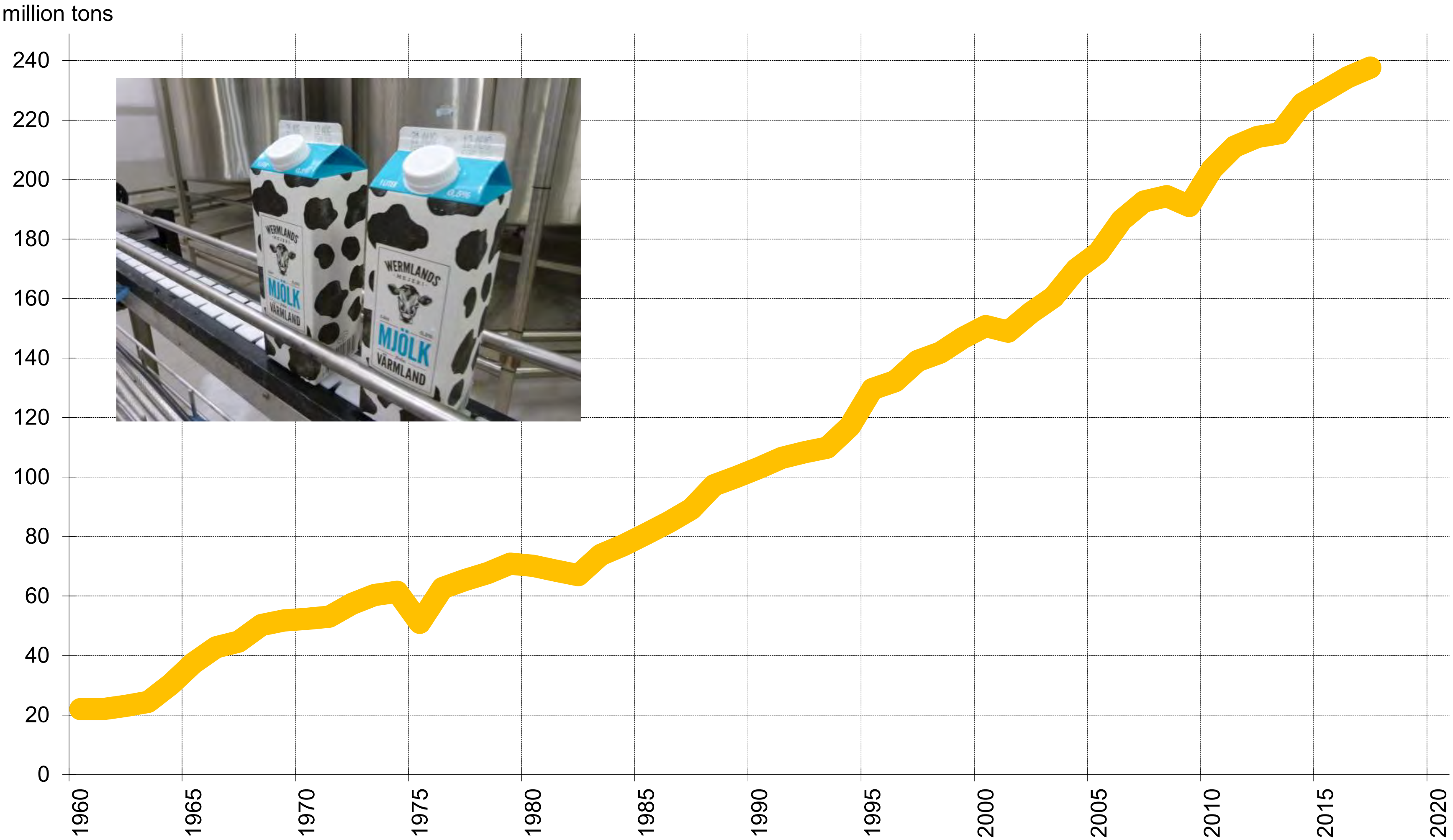
Packaging paper and cardboard



Source: FAOSTAT and own calculations

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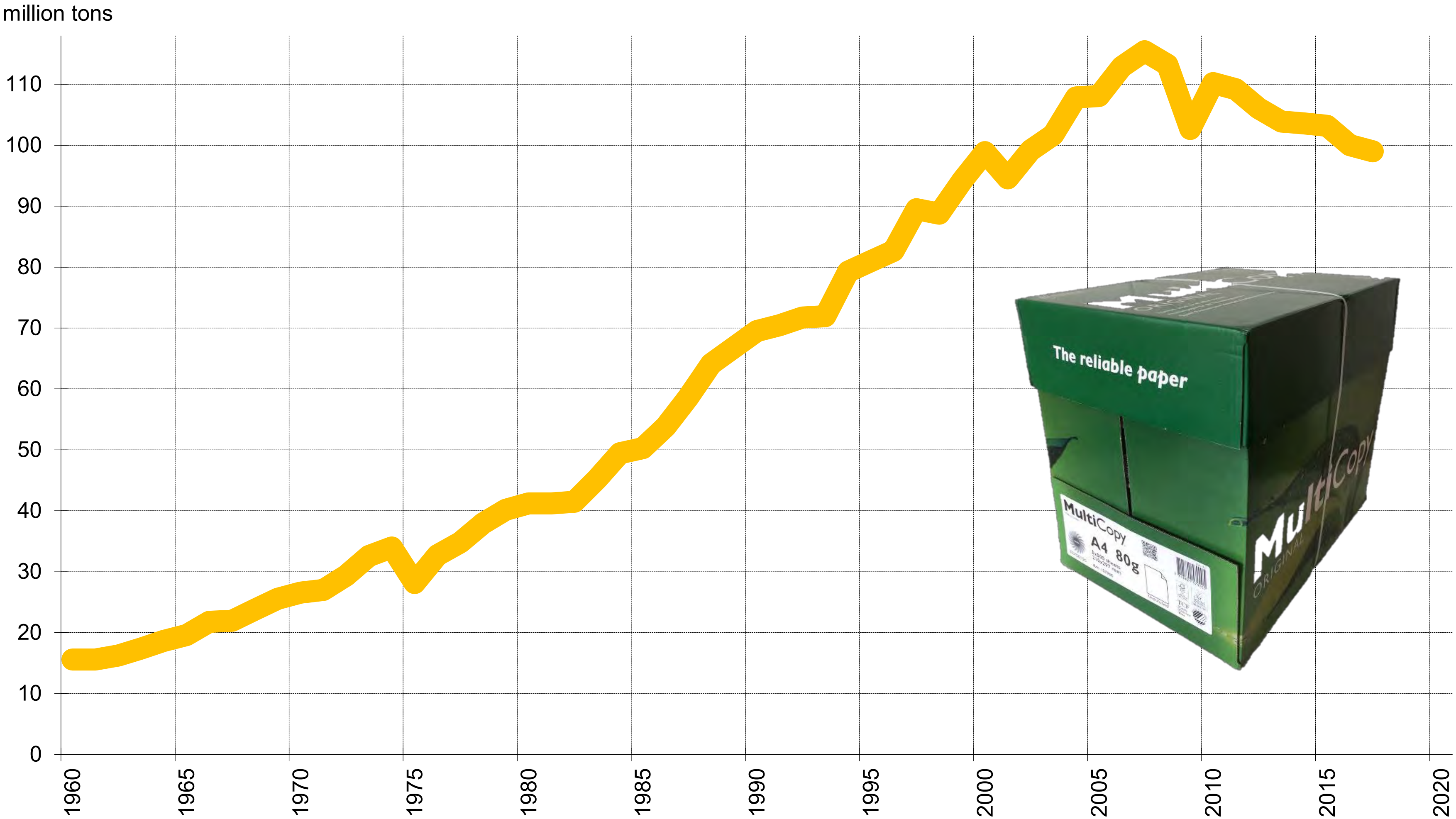
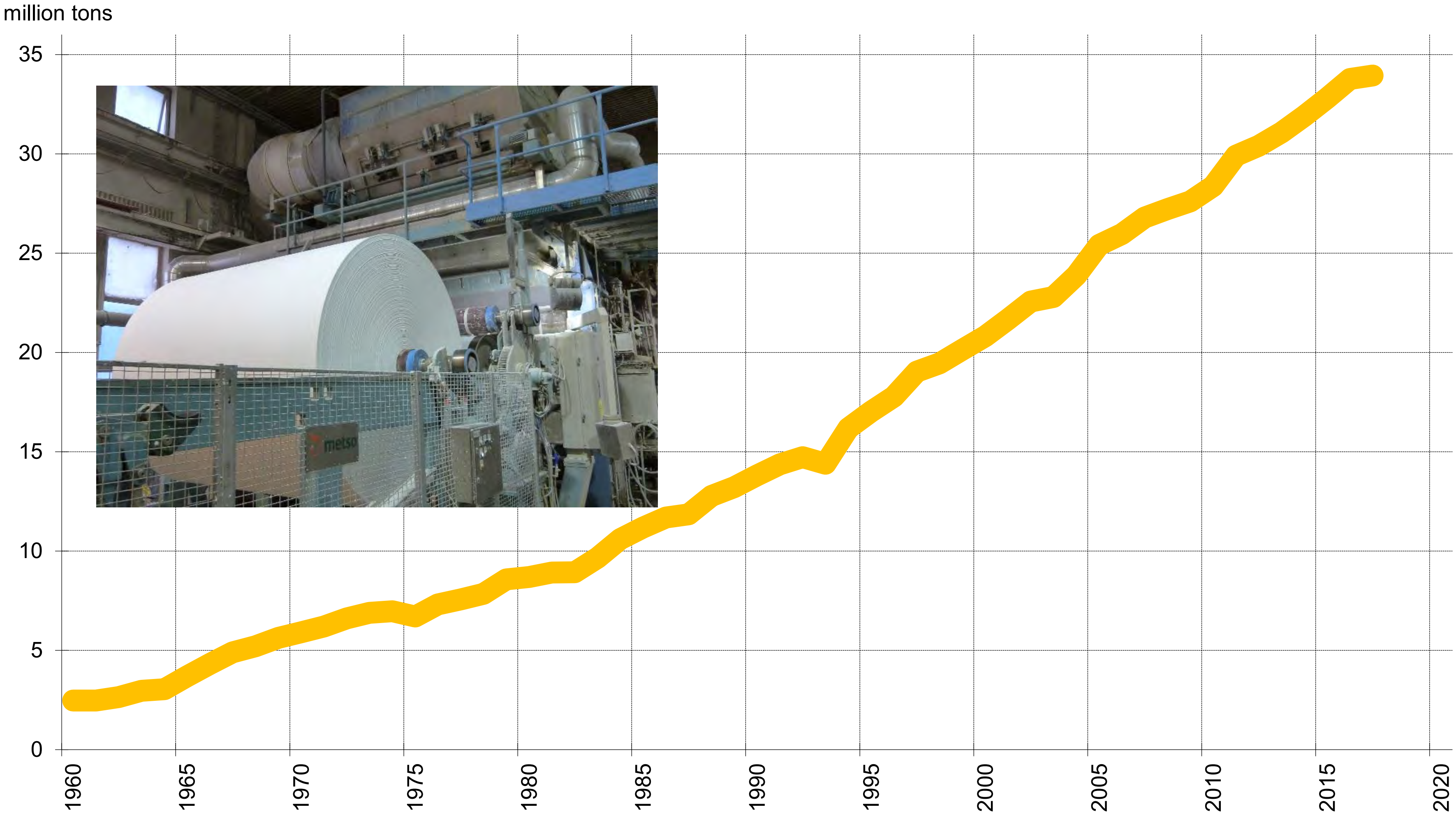
Printing and writing paper



Source: FAOSTAT and own calculations

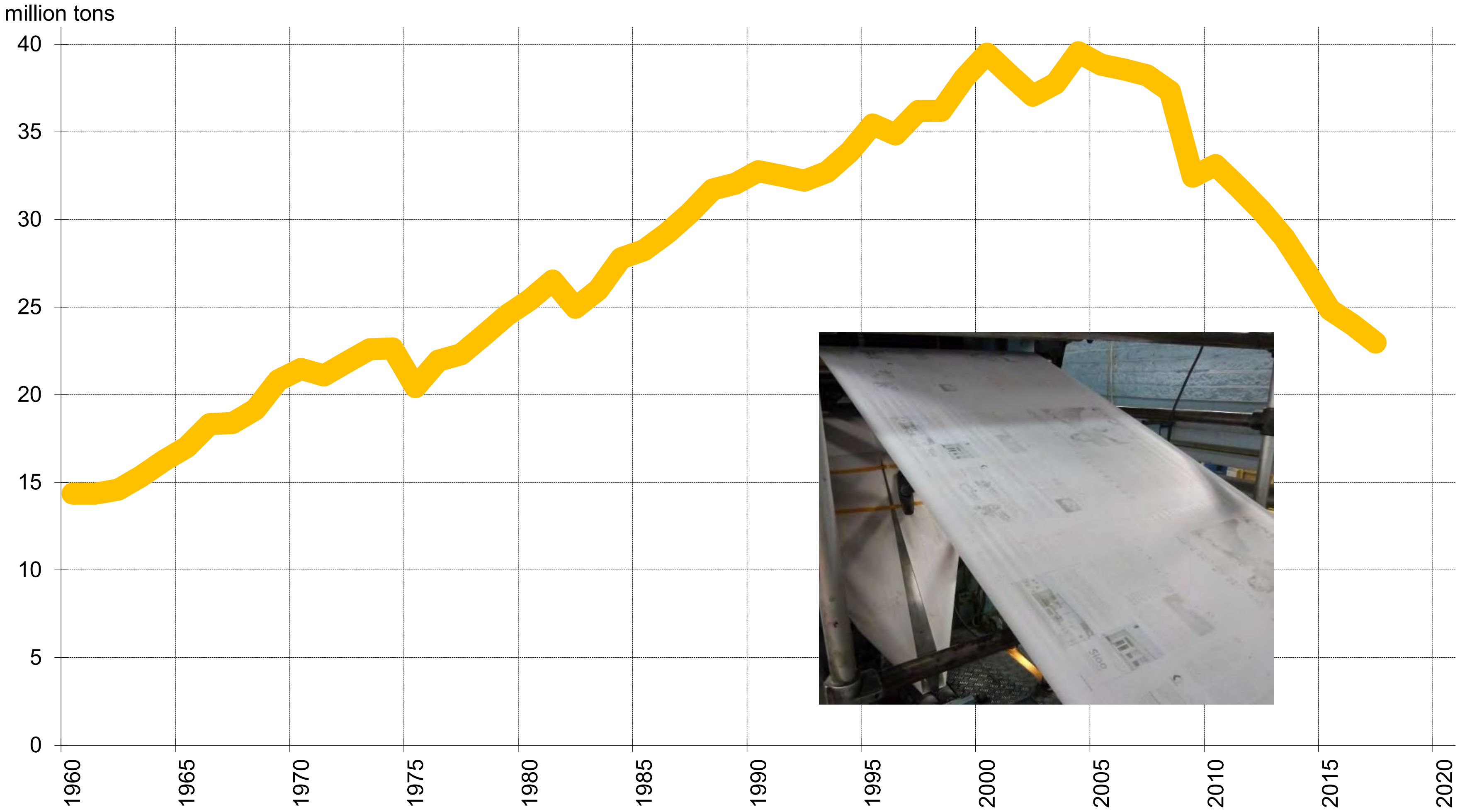
June 28, 2019

Hygiene/tissuepaper



Source: FAOSTAT and own calculations

Newsprint



Source: FAOSTAT and own calculations

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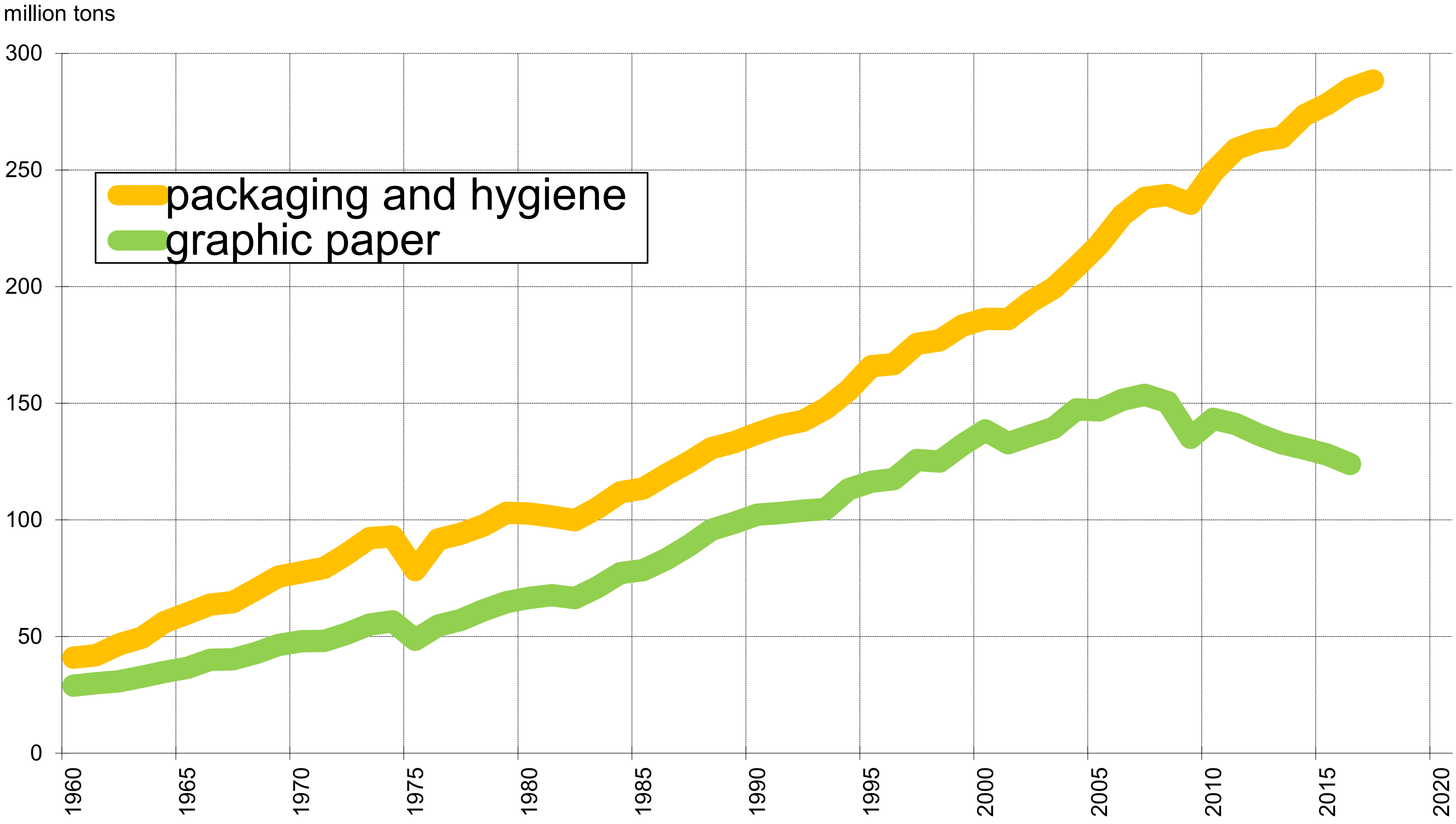
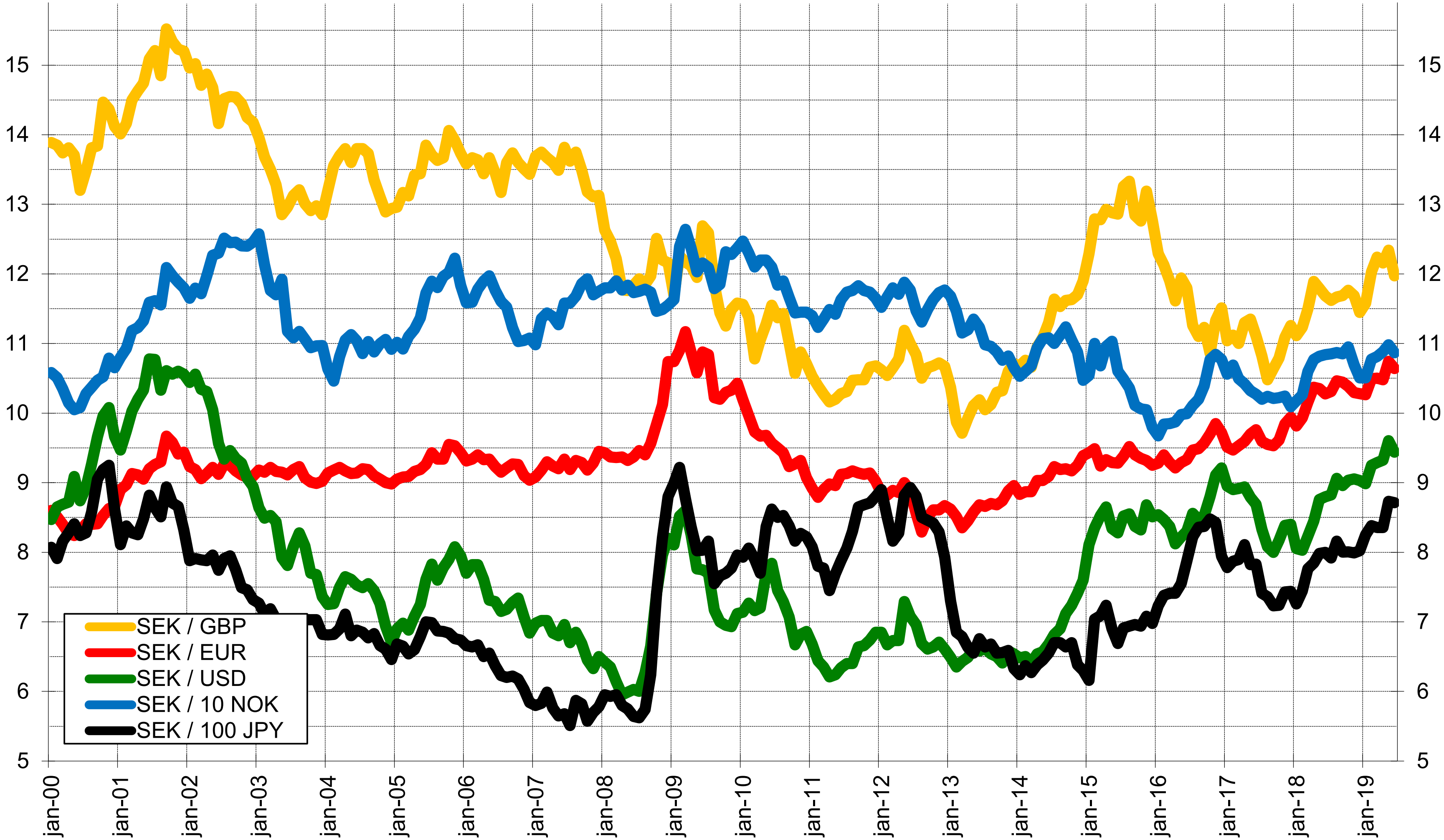
Packaging and hygiene vs. graphic paper



Source: FAOSTAT and own calculations

Exchange rate



Source: Sveriges Riksbank

June 28, 2019

Electricity

SEK / 100 kWh	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	average 5 year
jan	17	14	16	18	23	64	26	21	37	25	44	44	67	62	34	36	29	29	29	30	32	56	35
febr	16	13	11	24	19	44	25	23	41	28	37	42	93	57	45	34	27	28	18	31	40	48	33
marsh	14	11	10	24	17	36	26	28	49	22	30	40	57	56	26	37	24	24	20	29	46	41	32
april	13	9	11	24	16	28	24	28	46	21	41	38	43	48	28	37	25	24	20	28	40	42	31
may	11	10	12	20	15	27	25	29	33	20	36	35	38	49	27	32	32	21	22	29	34	37	29
june	12	9	11	23	18	24	29	25	42	25	54	39	40	44	24	30	29	14	31	26	45		29
july	7	9	7	21	16	26	24	27	45	21	56	37	44	36	12	30	27	8	27	30	54		29
aug	7	13	10	20	21	31	30	29	62	25	61	38	41	39	22	35	32	16	29	32	57		33
sept	8	14	14	19	24	30	26	28	60	30	70	36	47	29	25	40	34	20	28	35	52		34
oct	11	14	14	18	29	32	24	30	48	35	59	36	48	28	30	37	29	22	35	29	46		32
nov	14	13	15	20	39	32	25	30	42	43	54	38	52	40	29	33	28	24	40	31	51		35
dec	15	15	15	23	67	27	23	33	29	28	48	50	83	30	38	29	30	18	32	30	52		33
average	12	12	12	21	25	33	26	28	45	27	49	39	54	43	28	34	29	21	28	30	46	45	32

Source: NordPool and own calculations

June 28, 2019

Performance

storaenso

SCA

LESSEBO
1·7·1·9

ATA TIMBER

MOELVEN

Setra

Duni

SOFIDEL

SANDÅSA TIMBER AB

Bergkvist Insjön

HOLMEN

NORDIC PAPER

AB KARL HEDIN

VIDA

AHLSTROM MUNKSJÖ

mondi

Högland

Derome

Stenvalls Trä AB

1637 Fiskeby

KLIPPAN 1573

ARCTIC PAPER

BERGS TIMBER

siljan

MetsäBoard

J G A

NWP Norrskog Wood Products AB

Smurfit Kappa

swedpaper

BILLERUDKORSNÄS

HAL

martinsons

ADITYA BIRLA Domsjö

BOXHOLMS SKOGAR AB

BERGVIK SKOG

ROTTNEROS

WAGGERYD CELL

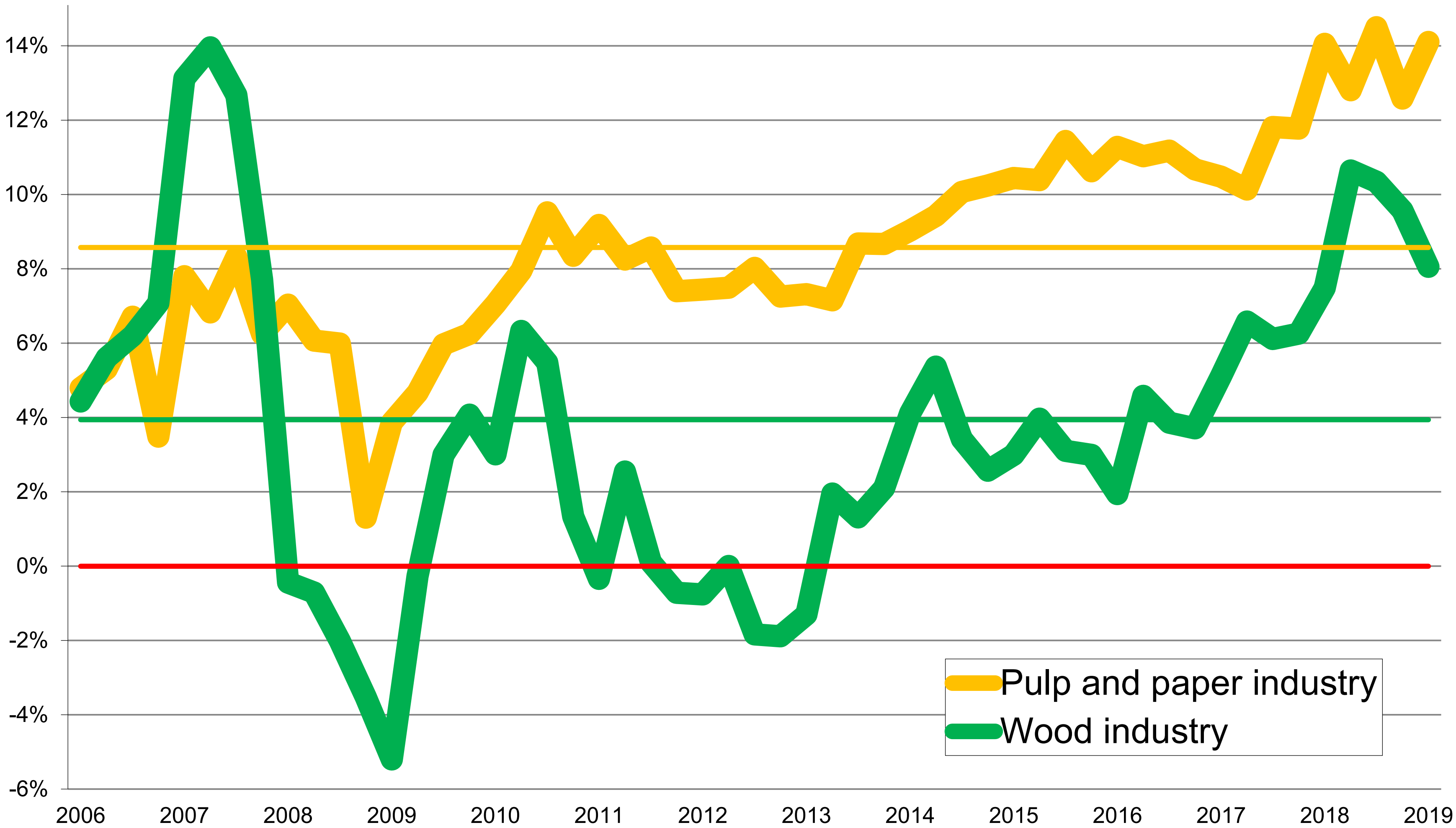
Svenska kyrkan

SÖDRA

PERSSON INVEST SKOG

SVEASKOG

Operating profit



Source: annual accounts and own calculations

Operating profit – *EBIT pulp and paper industry*

> 5
0-5
neg

	snitt	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4
storaenso	8%	6%	5%	5%	5%	7%	5%	8%	4%	7%	4%	6%	2%	1%	3%	6%	6%	6%	8%	10%	7%	10%	8%	8%	6%	6%	6%	8%	7%
Smurfit Kappa	8%	-3%	7%	7%	2%	9%	9%	9%	8%	9%	8%	7%	-8%	5%	6%	3%	3%	6%	7%	8%	8%	8%	7%	9%	8%	8%	8%	10%	7%
mondi	11%	6%	6%	7%	7%	8%	8%	8%	8%	8%	8%	6%	6%	5%	5%	6%	6%	7%	7%	9%	9%	12%	12%	10%	10%	10%	10%	10%	10%
BILLERUDKORSNÄS	9%	8%	8%	14%	2%	11%	8%	13%	6%	9%	8%	9%	-7%	2%	5%	10%	12%	10%	11%	15%	10%	13%	10%	15%	5%	9%	9%	10%	4%
Ahlstrom Munksjö	5%	5%	5%	5%	5%	3%	3%	3%	3%	-1%	-1%	-1%	-1%	1%	1%	1%	1%	8%	8%	8%	8%	4%	4%	4%	4%	3%	3%	3%	3%
MetsäBoard	3%	2%	-5%	1%	-17%	3%	0%	4%	1%	2%	0%	0%	-7%	-10%	-12%	-4%	1%	6%	6%	8%	6%	6%	5%	1%	-4%	1%	4%	5%	5%
SÖDRA	11%	11%	11%	11%	11%	9%	9%	9%	9%	6%	6%	6%	6%	4%	4%	4%	4%	15%	15%	15%	15%	10%	10%	10%	10%	2%	-1%	-9%	-8%
HOLMEN	10%	13%	10%	13%	12%	13%	11%	13%	9%	9%	7%	8%	6%	10%	8%	10%	8%	7%	6%	9%	8%	13%	11%	13%	10%	11%	9%	7%	7%
SCA	9%	7%	8%	8%	9%	8%	9%	9%	9%	8%	7%	7%	6%	7%	8%	9%	9%	7%	8%	9%	9%	8%	7%	8%	9%	9%	10%	10%	10%
ARCTIC PAPER	3%	0%	0%	0%	0%	2%	2%	2%	2%	4%	4%	8%	5%	11%	11%	11%	7%	3%	-4%	0%	4%	0%	-3%	2%	3%	3%	1%	2%	0%
Duni	10%	6%	9%	8%	11%	8%	8%	10%	13%	9%	9%	9%	6%	7%	10%	13%	15%	8%	9%	11%	15%	7%	9%	11%	14%	7%	10%	7%	12%
NORDIC PAPER	8%	1%	1%	1%	1%	1%	1%	1%	1%	3%	3%	3%	3%	2%	2%	2%	2%	6%	6%	6%	6%	5%	5%	5%	5%	8%	8%	8%	8%
ADITYA BIRLA Domsjö	7%	-4%	-4%	-4%	-4%	1%	1%	1%	1%	-5%	-5%	-5%	-5%	-3%	-3%	-3%	-3%	22%	22%	22%	22%	21%	21%	21%	21%	21%	4%	4%	4%
ROTTNEROS	2%	-6%	6%	7%	10%	3%	1%	-12%	-43%	-15%	-6%	-2%	-25%	-25%	2%	-20%	2%	2%	10%	16%	4%	5%	9%	5%	-13%	-1%	10%	-8%	0%
SOFIDEL	6%	7%	7%	7%	7%	7%	7%	7%	1%	1%	1%	1%	10%	10%	10%	10%	7%	7%	7%	7%	7%	4%	4%	4%	4%	5%	5%	5%	5%
Fiskeby	4%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	0%	0%	0%	0%	4%	4%	4%	4%	9%	9%	9%	9%	6%	6%	6%	6%	7%	7%	7%	7%
WAGGERYD CELL	9%	8%	9%	9%	9%	9%	13%	13%	13%	13%	15%	15%	15%	15%	7%	7%	7%	7%	4%	4%	4%	4%	1%	1%	1%	1%	3%	3%	3%
swedpaper	3%																												
LESSEBO	-1%			-4%	-4%	-4%	-4%	-4%	-4%	-7%	-7%	-7%	-7%	-1%	-1%	-1%	-1%	1%	1%	1%	1%	-1%	-1%	-1%	-1%				
	4%											2%	2%	2%	2%	7%	7%	7%	7%	3%	3%	3%	3%	2%	2%	2%	2%	4%	4%
	9%	5%	5%	7%	3%	8%	7%	8%	6%	7%	6%	6%	1%	4%	5%	6%	6%	7%	8%	10%	8%	9%	8%	9%	7%	7%	7%	8%	7%

	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1
storaenso	5%	4%	8%	6%	8%	8%	9%	9%	10%	9%	11%	11%	11%	9%	10%	9%	9%	9%	12%	12%	16%	13%	14%	10%	13%
Smurfit Kappa	7%	8%	10%	9%	9%	10%	10%	10%	8%	9%	10%	11%	9%	10%	11%	11%	8%	9%	10%	11%	12%	12%	13%	13%	14%
mondi	11%	11%	11%	11%	12%	12%	12%	12%	14%	14%	14%	14%	16%	16%	13%	13%	14%	14%	15%	15%	17%	17%	18%	18%	18%
BILLERUDKORSNÄS	8%	6%	7%	5%	10%	9%	10%	9%	12%	10%	12%	6%	12%	10%	13%	10%	10%	9%	12%	11%	12%	5%	9%	8%	10%
Ahlstrom Munksjö	3%	4%	0%	1%	5%	5%	3%	5%	5%	4%	3%	3%	6%	9%	6%	8%	8%	8%	7%	6%	6%	6%	7%	5%	4%
MetsäBoard	6%	5%	4%	6%	7%	6%	7%	7%	8%	9%	12%	7%	8%	9%	8%	8%	10%	9%	10%	12%	14%	11%	13%	13%	15%
SÖDRA	0%	4%	10%	9%	7%	10%	14%	12%	18%	18%	18%	12%	10%	11%	11%	10%	13%	11%	12%	15%	20%	22%	25%	18%	21%
HOLMEN	6%	7%	7%	8%	9%	7%	11%	12%	10%	9%	11%	9%	15%	11%	12%	14%	15%	11%	12%	9%	14%	12%	11%	13%	12%
SCA	9%	9%	11%	13%	10%	11%	11%	11%	10%	11%	12%	11%	11%	11%	12%	12%	11%	14%	17%	20%	19%	17%	26%	24%	21%
ARCTIC PAPER	0%	-12%	-1%	-7%	2%	3%	7%	3%	4%	4%	6%	-1%	5%	5%	6%	3%	6%	5%	5%	-1%	6%	6%	7%	-3%	6%
Duni	6%	10%	9%	14%	8%	10%	12%	14%	11%	10%	14%	15%	9%	11%	13%	14%	9%	10%	11%	13%	8%	8%	9%	9%	7%
NORDIC PAPER	8%	8%	8%	8%	10%	10%	10%	10%	16%	16%	16%	16%	13%	13%	13%	13%	16%	16%	16%	16%					
ADITYA BIRLA Domsjö	4%	3%	3%	3%	3%	4%	4%	4%	4%	8%	8%	8%	8%	10%	10%	10%	10%	5%	5%	5%	5%				
ROTTNEROS	-2%	-1%	-3%	-13%	6%	8%	13%	4%	23%	17%	18%	1%	16%	12%	10%	-4%	12%	13%	9%	-1%	15%	16%	20%	2%	22%
SOFIDEL	7%	7%	7%	7%	7%	7%	7%	7%	6%	6%	6%	6%	4%	4%	4%	4%	2%	2%	2%	2%					
Fiskeby	7%	7%	7%	7%	6%	6%	6%	6%	3%	3%	3%	3%	10%	10%	10%	10%	-2%	-2%	-2%	-2%					
WAGGERYD CELL	3%	3%	3%	3%	3%	7%	7%	7%	7%	8%	8%	8%	8%	13%	13%	13%	13%	18%	18%	18%	18%				
swedpaper			5%	5%	6%	6%	6%	6%	-4%	-4%	-4%	-4%	1%	1%	1%	1%	6%	6%	6%	6%					
LESSEBO					6%	6%	6%	6%	-1%	-1%	-1%	-1%	2%	2%	2%	2%	-1%	-1%	-1%	-1%					
	4%	4%	7%	7%	7%	7%	5%	5%	5%	5%	4%	4%	4%	4%	5%	5%	5%	5%	0%	0%	0%	0%			
	7%	7%	9%	9%	9%	9%	10%	10%	10%	10%	11%	11%	11%	11%	11%	11%	10%	10%	12%	12%	14%	13%	15%	13%	14%

June 28, 2019

Operating profit – EBIT wood industry

> 5 / 0-5 / neg	snitt	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1
StoraEnso	4%	1%	3%	5%	5%	12%	11%	8%	0%	-6%	-3%	-4%	-5%	-9%	-3%	3%	4%	2%	7%	6%	2%	3%	8%	2%	2%	3%	2%	0%	2%	1%	6%	5%	4%	4%	8%	5%	2%	4%	5%	6%	5%	4%	8%	6%	4%	5%	8%	7%	6%	7%	11%	12%	11%	7%
Moelven	3%	6%	6%	6%	6%	14%	14%	14%	9%	6%	4%	0%	-3%	-6%	1%	6%	4%	1%	7%	6%	-2%	-1%	3%	-1%	0%	1%	2%	-1%	-2%	-3%	1%	-1%	2%	2%	4%	1%	2%	1%	4%	4%	3%	1%	6%	3%	1%	4%	5%	3%	5%	3%	7%	5%	7%	5%
Södra	1%	7%	7%	7%	7%	14%	14%	14%	14%	0%	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%	-5%	-5%	-5%	-5%	-11%	-11%	-11%	-11%	-6%	-6%	-6%	-6%	1%	0%	-1%	0%	1%	0%	-1%	0%	-5%	-3%	0%	1%	0%	3%	1%	-2%	7%	14%	12%	10%	10%
SCA																																										3%	6%	7%	8%	6%	6%	8%	9%	8%	10%	13%	11%	14%
Derome	7%	9%	9%	9%	9%	11%	11%	11%	11%	3%	3%	3%	3%	4%	4%	4%	4%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%	5%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	9%	9%	9%	9%					
Vida	7%	10%	10%	10%	10%	16%	16%	16%	16%	3%	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	2%	2%	2%	2%	-2%	-2%	-2%	-2%	3%	3%	2%	2%	7%	7%	5%	5%	6%	6%	1%	1%	2%	2%	6%	6%	8%	8%	10%	10%	14%	14%	14%	14%	
Setra	3%	2%	4%	3%	8%	10%	18%	16%	5%	0%	-6%	-9%	-10%	-21%	-6%	-3%	4%	2%	9%	6%	-6%	-4%	3%	1%	-4%	-3%	2%	-3%	-6%	-3%	5%	3%	5%	6%	8%	3%	1%	2%	5%	1%	-3%	1%	5%	0%	3%	3%	5%	2%	6%	8%	11%	6%	6%	7%
Bergs Timber	3%	7%	3%	10%	9%	21%	24%	22%	13%	-4%	-1%	-4%	-10%	-23%	3%	10%	7%	-1%	3%	7%	-1%	-12%	-9%	-9%	-4%	-2%	-5%	-6%	-9%	-19%	-6%	-9%	-6%	-6%	1%	2%	0%	-1%	2%	-2%	3%	-2%	-1%	-2%	2%	0%	6%	3%	6%	5%	12%	8%	7%	7%
Holmen	3%	14%	17%	16%	21%	21%	26%	28%	25%	15%	-2%	-1%	-6%	-13%	4%	9%	12%	5%	7%	5%	-4%	-18%	-17%	-12%	-16%	-11%	-8%	-9%	-20%	-13%	-5%	-8%	-2%	3%	5%	5%	-3%	2%	2%	-3%	2%	-1%	0%	0%	1%	5%	5%	7%	4%	9%	16%	19%	12%	11%
AB Karl Hedin	9%	12%	13%	13%	13%	19%	19%	19%	19%	4%	4%	4%	4%	5%	5%	5%	5%	11%	11%	11%	11%	3%	3%	3%	3%	2%	2%	2%	2%	6%	6%	6%	6%	11%	11%	11%	11%	11%	11%	11%	11%	10%	10%	10%	10%	11%	11%	11%	11%					
martinsons	3%	4%	4%	4%	12%	12%	12%	12%	1%	1%	1%	1%	-5%	-5%	-5%	-5%	5%	5%	5%	5%	-1%	-1%	-1%	-1%	-4%	-4%	-4%	-4%	0%	0%	0%	0%	5%	5%	5%	5%	4%	4%	4%	4%	4%	1%	1%	1%	1%	11%	11%	11%	11%	6%	6%	6%	6%	
siljan	1%	5%	5%	5%	5%	14%	14%	14%	14%	-7%	-7%	-7%	-7%	2%	2%	2%	2%	1%	1%	1%	1%	-5%	-5%	-5%	-5%	-6%	-6%	-6%	-6%	-3%	-3%	-3%	-3%	3%	3%	3%	3%	2%	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%					
NWP	1%	7%	7%	7%	7%	16%	16%	16%	16%	-14%	-14%	-14%	-14%	-2%	-2%	-2%	-2%	4%	4%	4%	4%	-1%	-1%	-1%	-1%	2%	2%	2%	2%	-1%	-1%	-1%	-1%	5%	5%	5%	5%	-2%	-2%	-2%	-2%	-1%	-1%	-1%	-1%	1%	1%	1%	1%					
Bergkvist Insjön	0%	1%	1%	1%	5%	5%	5%	5%	-6%	-6%	-6%	-6%	-4%	-4%	-4%	-4%	3%	3%	3%	3%	-3%	-3%	-3%	-3%	-8%	-8%	-8%	-8%	-9%	-9%	-9%	-9%	3%	3%	3%	3%	-1%	-1%	-1%	-1%	2%	2%	2%	2%	6%	6%	6%	6%	9%	9%	9%	9%		
Stenvalls Trä AB	3%	8%	8%	8%	14%	14%	14%	14%	7%	7%	7%	7%	3%	3%	3%	3%	8%	8%	8%	8%	2%	2%	2%	2%	-5%	-5%	-5%	-5%	-4%	-4%	-4%	-4%	5%	5%	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	-1%	-1%	-1%	-1%					
ATA Timber	7%	10%	21%	21%	21%	21%	16%	16%	16%	16%	10%	10%	10%	10%	12%	12%	12%	12%	1%	1%	1%	1%	1%	1%	1%	1%	-4%	-4%	-4%	-4%	-3%	-3%	-3%	-3%	1%	1%	1%	1%	0%	0%	0%	0%	3%	3%	3%	3%	15%	15%	15%	15%				
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HAL	6%	6%	6%	6%	6%	15%	15%	15%	15%	1%	1%	1%	1%	6%	6%	6%	6%	8%	8%	8%	8%	4%	4%	4%	4%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	5%	5%	7%	7%	7%	7%	6%	6%	6%	6%	11%	11%	11%	11%					
Högland	3%	3%	3%	3%	3%	9%	9%	9%	9%	-12%	-12%	-12%	-12%	2%	2%	2%	2%	3%	3%	3%	3%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	6%	6%	6%	6%	3%	3%	3%	3%	2%	2%	2%	2%	6%	6%	6%	6%					
SANDÅSA TIMBER AB	6%	10%	10%	10%	10%	22%	22%	22%	22%	7%	7%	7%	7%	9%	9%	9%	9%	6%	6%	6%	6%	3%	3%	3%	3%	4%	4%	4%	4%	3%	3%	3%	3%	4%	4%	4%	4%	3%	3%	3%	3%	4%	4%	4%	4%	3%	3%	3%	3%					
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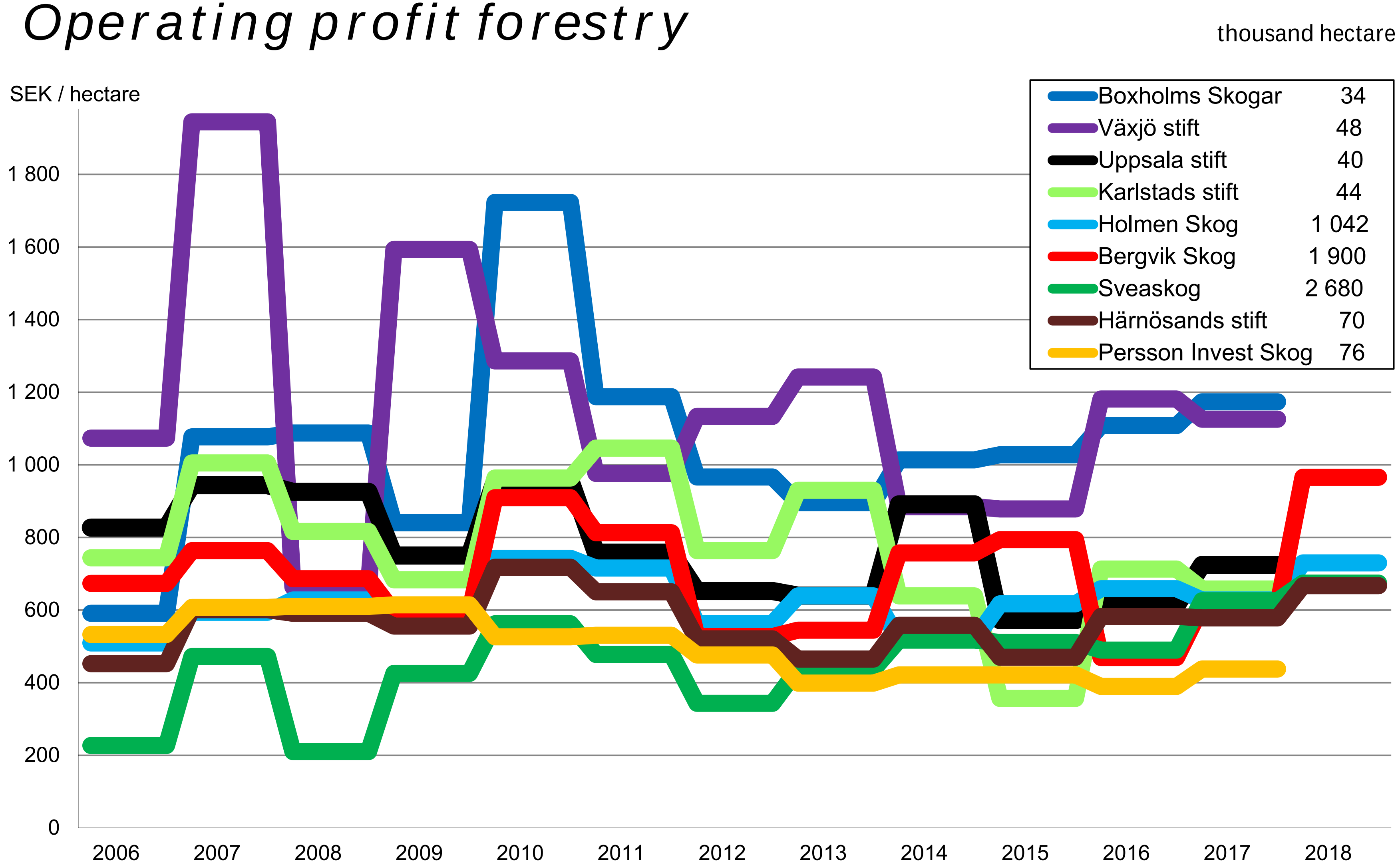
June 28, 2019

Operating profit forestry



Source: annual accounts and own calculations

News

June 28, 2019

BillerudKorsnäs invest SEK 8bn in Gruvön

BillerudKorsnäs announced December 12, 2016 the Group has decided to build a new cardboard machine KM 7 at Gruvön mill in Värmland.

The new machine will have a capacity of 550,000 tons, mainly liquid carton and similar qualities for packaging of food.

Current production of kraftpaper is moved to other mills within the group.

Today, the mill produce 685,000 tons, mainly kraft paper and raw materials for corrugated board (fluting and liner).

Start-up was in May 2019.

StoraEnso invest SEK 0,5bn at Gruvön sawmill

StoraEnso announced July 4, 2017 the Group decided to build a plant for cross laminated timber (CLT) at Gruvön sawmill in Grums, Värmland.

The plant is expected to have a capacity of 100,000 m^3. StoraEnso currently has a total capacity of 150,000 m^3 CLT at two plants in Austria.

Gruvön saw produce 350,000 m^3 of which 150,000 m^3 is further processed in a planer and they produces 100,000 tons of pellets.

CLT production was up and running in March 2019.

Klippan invests SEK 150m in a new machine

Klippans Bruk AB announced Januari 5, 2018 the company has decided to built an new paper machine at Klippan mill, east Helsingborg.

The mill produces deep-coloured tissue (napkin paper). The new machine (PM 11) has a capacity of 30,000 tons.

The existing machine (PM 9) is from 1962 but has been rebuilt several times, by 2011 at the latest, to 10,000 tons capacity.

The expansion means that the mill will have a total capacity of 40,000 tons and the staff will increase from 45 to about 65 people.

Start-up is calculated to July 2019.

First paper machine in Sweden was set up in Klippan on June 20, 1832. The machine was in operation until 1981, almost 150 years !!!

June 28, 2019

Setra invests in component manufacturing and a new CLT factory in Långshyttan

Setra announced January 21, 2018 the Group invest in a door and window component factory, and on February 20, 2018, a plant for cross laminated timber (CLT), the two investments being made at Setra's facility in Långshyttan, near Avesta.

The new component plant is expected to have a capacity of 45,000 m^3 and the CLT facility 55,000 m^3. Setra has since long time a facility in Långshyttan for production of 45,000 m^3 glulam.

With the latest investments, we are given the opportunity to create a new wood industry center in Långshyttan, while continuing to develop our existing glulam production, says Olle Berg, Marketing Director Setra.

SCA increases the volume of Obbola

SCA announced March 7, 2018 the Group apply for increased production at its Obbola plant, near Umeå, from today's permission 500,000 to 850,000 tons.

The Group plan to build a new paper machine and upgrade it´s equipment for sulphate pulp and recycled fiber.

Obbola produces 450,000 tons of liner, used for corrugated board. The raw material consists of self-made sulphate pulp and recycled paper.

In 2015, a new continuous cookery was built, replacing a 8 units batch cookery from 1962.

The existing paper machine was built 1975 and was with it´s just over 9 meters, the world's widest paper machine for liner at that time.

Holmen invests in Braviken

Holmen announced October 24, 2018 the Group invests SEK 170m in Braviken's sawmill, Norrköping.

At the same time, a transport solution is established by train to transport wood from the own forest in northern Sweden to Holmen's facilities in Norrköping.

Braviken sawmill was built in 2011 and has since been further developed in several stages, by spring 2018 with a new impregnation plant. Now invested in timber kilns and dry sorting equipment.

It is natural to utilize a larger part of the saw's capacity by raising production by 150,000 m^3. Because we are able to do it with timber from our own forest in northern Sweden and with a marginally higher crew has been crucial for the decision, says Johan Padel, business area manager.

Vida - biggest structural change in Swedish sawmill history !!

Vida announced November 15, 2018 the current owners have agreed with Canadian Canfor to sell 70% of their shares to them.

Canfor is one of the world's largest producers of sawn timber, based in Vancouver, Canada. They saw 10 million m^3 at 25 sawmills in Canada and United States. The company is listed on the Toronto Stock Exchange.

Vida saw 1,7 million m^3 at 9 sawmills in southern Sweden.

We have had a relationship with Canfor for several years. We are proud to have Canfor as a shareholder, and that Vida can grow and strengthen on the global market, says Santhe Dahl, CEO Vida.

Canfor acquires 70% of the shares for SEK 4bn on cash and debt-free basis.

Arctic closes a machine in Grycksbo

Arctic Paper announced November 15, 2018 the Group intends to stop PM 7 in Grycksbo, north Falun.

PM 7 is with its 45,000 tons the mills least efficient machine, remaining PM 9 and PM 10 produce about 220,000 tons together.

PM 7 was delivered in 1928 from Karlstad Mekaniska Werkstad (KMW) as a combined machine with MG cylinder and a capacity of 20,000 tons, but has been rebuilt and modernized several times. The MG cylinder was moved early to another machine, and PM 7 became a standard fourdrinier type.

The second paper machine in Sweden was set up in Grycksbo in 1836.

Lessebo reopens the pulp production

Lessebo Paper, east Växjö, has previously announced they will start its production of pulp which has been down for some years.

The fiber line is a sulphite-based batch cookery with capacity of 30,000 tons. The fiber supply is based on chips from sawmills. With SEK 50m in investments and 20-25 newly employed, the pulp mill is scheduled to start after the holiday in 2019.

During 2018 preparations have been made and during the first half of 2019 major upgrades will be carried out. This investment will give increased flexibility, reduced environmental impact as well as improved profitability, says Eric Sigurdsson, CEO Lessebo.

Lessebo manufactures colored and white paper on three machines with a total capacity of approx. 48,000 tons. The fourth paper machine in Sweden was set up in Lessebo 1837.

Bergs Timber close Broakulla sawmill

Bergs Timber announced February 27, 2019 the Group close its sawmill Broakulla midway between Växjö and Kalmar.

Broakulla saw produce 50,000 m^3, by small logs of spruce and pine. Berg's mills in Gransjö and Mörlunda will, after the closure, increase production with Broakullas volume. The plant in Broakulla will then be developed into further processing and logistics.

Bergs bought the plant in Broakulla by Norvik in 2016. Norvik has since been Berg's largest shareholder.

Closing is calculated to Q 2 2019.

Södra invests in CLT production in Värö

Södra announced April 25, 2019 the Group invests in a plant for cross laminated timber (CLT). The investment will be done at their site in Värö, near Varberg, where Södra already has their first plant for CLT placed, a sawmill and a pulpmill.

The new CLT facility is expected to have a capacity of 100,000 m^3, the existing CLT line in Värö have a capacity of 5 000 m^3. The sawmill in Värö produce next to 600,000 m^3 and the pulpmill 700,000 tons softwood-pulp. Start-up is calculated to Q 1 2022.

As we get two production lines, we get both delivery security and flexibility towards our customers. Over time, Södra's total production of CLT will be approx. 140,000 m^3, which corresponds to 5,000 apartments, says Jörgen Hermansson, business area manager.

Bergkvist-Insjön and Siljan Group merge

The owners of Bergkvist-Insjön AB and Siljan Group AB announced June 12, 2019 they create a sawmill group. New main owner of Bergkvist-Insjön is Dilasso Timber AB, since 2018 owner of Siljan Group AB, the Bergkvist family remains as significant owner.

Bergkvist-Siljan group gets production in Insjön, Mora and Blyberg, in Dalarna. Bergkvist-Insjön AB was founded in Insjön 1925, sales of SEK 1.5 billion with 200 employees. Siljan Group AB was founded in Mora 1897, sales of SEK 1.4 billion with 200 employees.

This merge gives us the opportunity to create a competitive sawmill group in a really good timber region, says Anders Nilsson, CEO Bergkvist-Insjön, who will be CEO for the new Bergkvist-Siljan.

Thanks for your interest!

Tomas Elander

Forest industry issues, market, commodity issues, earnings trend in the industry

tomas.elander@pwc.com