

Hannover Re's reserves as at 31 Dec 2017

Extended Scope



Data description and information

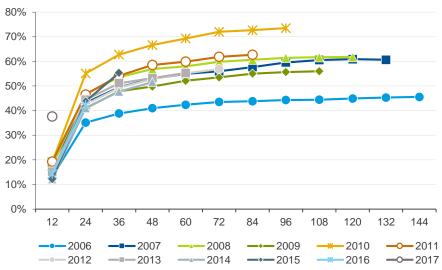
Understanding the data is crucial for interpretation, analysis and results!

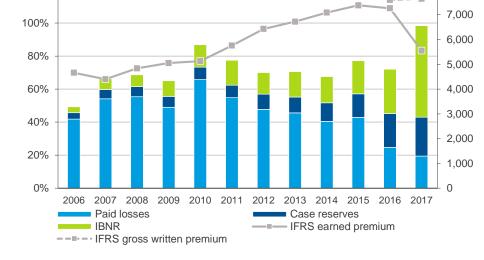
- ➤ Financial gross reported loss triangles for Property & Casualty Reinsurance business based on booking date of Hannover Re (paid and case reserve information)
- Converted to EUR with exchange rates as at 31 December 2017
- ▶ Data on underwriting-year basis, for the last 12 underwriting years
- ▶ Data are combined triangles for companies Hannover Re SE including Branches, E+S Rückversicherungs AG, Hannover Re Ireland, Hannover Re Bermuda, Hannover Re Takaful
- ► Figures in triangles do not include business written in Hannover Re South Africa and in the primary insurance subsidiaries
- All triangles are on a consolidated data basis

Reported claims triangle of Reinsurance business for HR-Group

							HR- financ	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	4,662	13.3%	35.1%	38.8%	41.0%	42.4%	43.5%	43.8%	44.3%	44.4%	44.9%	45.3%	45.6%	49.3%	41.8%	3.8%	3.6%
2007	4,399	18.5%	43.1%	49.5%	52.9%	54.9%	56.0%	57.7%	59.6%	60.5%	60.9%	60.6%		66.2%	54.2%	5.6%	6.4%
2008	4,838	17.8%	46.8%	53.6%	56.9%	58.0%	59.8%	60.6%	61.4%	61.7%	61.7%			68.7%	55.4%	6.1%	7.2%
2009	5,050	14.5%	41.0%	47.9%	49.8%	52.1%	53.5%	55.0%	55.7%	56.0%				65.0%	49.0%	6.5%	9.5%
2010	5,132	19.1%	55.1%	62.8%	66.6%	69.3%	72.0%	72.7%	73.5%					86.9%	65.8%	7.5%	13.5%
2011	5,757	19.3%	46.5%	54.1%	58.5%	59.9%	61.8%	62.7%						77.5%	54.8%	7.6%	15.1%
2012	6,431	13.3%	42.5%	49.3%	52.8%	55.1%	56.9%							70.0%	47.7%	9.2%	13.1%
2013	6,724	15.2%	44.4%	51.1%	53.2%	55.3%								70.6%	45.6%	9.6%	15.4%
2014	7,088	12.2%	41.1%	47.7%	51.6%									67.6%	40.5%	11.3%	15.9%
2015	7,383	12.2%	43.7%	55.3%										77.2%	42.9%	14.2%	20.0%
2016	7,262	14.2%	42.4%											72.1%	24.7%	20.5%	26.9%
2017	5,555	37.6%												98.4%	19.5%	23.5%	55.5%

120%





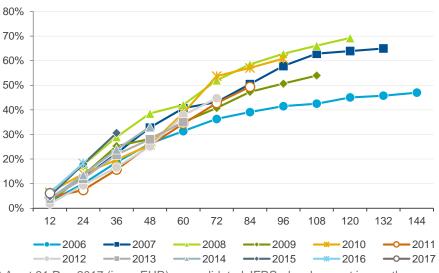
^{*} As at 31 Dec 2017 (in m. EUR), consolidated, IFRS, development in months

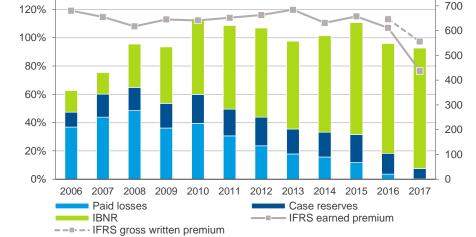
8,000

1 General liability non-proportional (HR/E+S)

							HR- financ	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	680	2.7%	10.0%	18.7%	26.3%	31.4%	36.3%	39.1%	41.5%	42.5%	45.0%	45.8%	47.0%	62.6%	36.8%	10.5%	15.3%
2007	655	3.9%	12.3%	22.4%	32.8%	40.7%	43.1%	50.5%	57.8%	62.8%	63.9%	65.0%		85.8%	43.9%	16.3%	25.6%
2008	617	6.4%	17.6%	29.0%	38.5%	42.0%	52.0%	58.5%	62.8%	66.1%	69.2%			95.5%	48.4%	16.4%	30.6%
2009	645	2.4%	13.4%	25.3%	28.2%	35.0%	40.7%	47.3%	50.7%	54.0%				93.5%	36.2%	17.4%	40.0%
2010	641	6.5%	14.0%	19.7%	25.7%	38.7%	53.7%	57.0%	60.8%					113.5%	39.5%	20.4%	53.7%
2011	652	4.4%	7.4%	15.7%	25.6%	34.4%	42.8%	49.4%						108.7%	30.6%	18.9%	59.2%
2012	663	1.8%	9.4%	16.6%	25.1%	37.8%	44.7%							106.9%	23.6%	20.2%	63.0%
2013	684	4.0%	12.0%	21.8%	28.0%	35.0%								97.5%	17.9%	17.6%	62.0%
2014	631	3.9%	13.5%	23.9%	33.1%									101.4%	15.7%	17.5%	68.2%
2015	657	4.9%	17.9%	30.6%										110.7%	11.8%	19.8%	79.1%
2016	611	6.1%	18.3%											95.9%	3.6%	14.7%	77.6%
2017	437	6.1%												92.6%	0.2%	7.4%	85.0%

140%





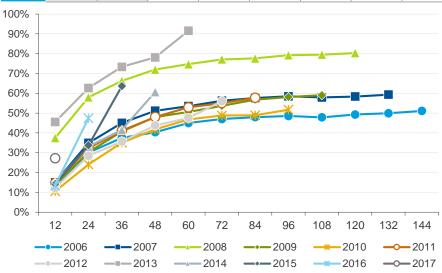
^{*} As at 31 Dec 2017 (in m. EUR), consolidated, IFRS, development in months

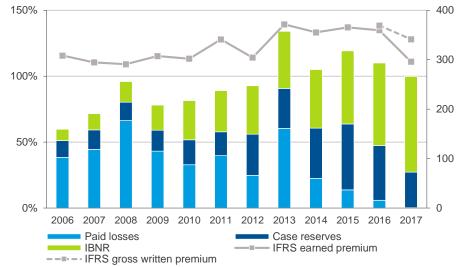


800

2 Motor/Accident non-proportional (HR/E+S)

							HR- finan	cial year							Booke	ed data	
	IFRS																
U/W	earned													Ultimate	Paid	Case	IBNR
year	premium	12	24	36	48	60	72	84	96	108	120	132	144	loss ratio	losses	reserves	balance
2006	308	13.2%	30.1%	37.5%	40.3%	45.0%	47.0%	47.9%	48.5%	47.8%	49.3%	49.9%	51.1%	59.8%	38.4%	12.8%	8.7%
2007	294	15.0%	34.9%	45.0%	51.2%	53.5%	56.2%	57.6%	58.5%	57.9%	58.3%	59.3%		71.5%	44.5%	14.9%	12.2%
2008	291	37.4%	58.0%	66.3%	72.0%	74.7%	77.1%	77.6%	79.3%	79.5%	80.3%			95.9%	66.4%	13.9%	15.6%
2009	307	13.8%	30.3%	40.7%	48.0%	50.6%	53.7%	56.8%	58.1%	59.0%				78.1%	43.2%	15.8%	19.1%
2010	302	10.5%	24.1%	35.1%	41.8%	46.8%	48.8%	48.9%	51.7%					81.4%	32.8%	18.9%	29.7%
2011	341	14.7%	32.3%	41.1%	48.0%	52.9%	55.1%	57.7%						89.0%	39.8%	18.0%	31.3%
2012	304	12.2%	28.4%	35.7%	43.7%	47.6%	56.0%							92.8%	24.8%	31.2%	36.8%
2013	371	45.5%	62.7%	73.3%	78.1%	91.5%								134.0%	60.4%	30.3%	43.3%
2014	355	15.1%	33.1%	41.5%	60.6%									105.0%	22.5%	38.1%	44.3%
2015	365	14.2%	33.7%	63.6%										119.2%	13.8%	50.0%	55.4%
2016	360	13.4%	47.4%											110.0%	6.0%	41.4%	62.6%
2017	296	27.2%												99.8%	0.4%	26.9%	72.5%

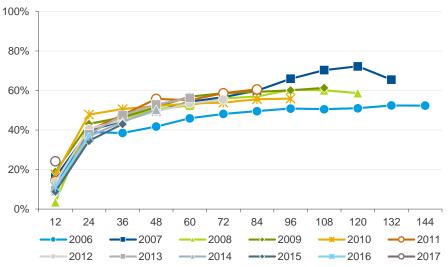




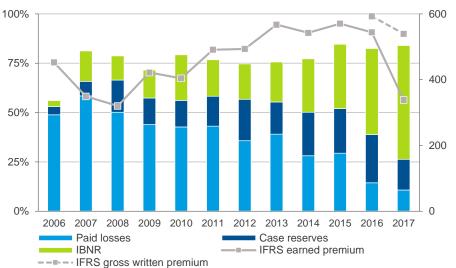
^{*} As at 31 Dec 2017 (in m. EUR), consolidated, IFRS, development in months

3 General liability proportional (HR/E+S)

							HR- finan	cial year							Booke	ed data	
	IFRS																
U/W	earned													Ultimate	Paid	Case	IBNR
year	premium	12	24	36	48	60	72	84	96	108	120	132	144	loss ratio	losses	reserves	balance
2006	453	12.2%	38.9%	38.5%	41.7%	45.9%	48.1%	49.6%	50.8%	50.5%	51.0%	52.4%	52.4%	56.1%	48.9%	4.1%	3.1%
2007	349	16.1%	39.5%	44.7%	49.5%	54.2%	56.6%	59.9%	66.0%	70.3%	72.2%	65.5%		81.2%	58.4%	7.4%	15.4%
2008	320	3.5%	43.3%	45.6%	50.4%	52.4%	56.0%	56.9%	60.4%	60.1%	58.7%			78.7%	50.1%	16.3%	12.2%
2009	422	18.8%	43.1%	46.5%	51.6%	56.9%	58.6%	59.3%	60.1%	61.3%				71.6%	43.9%	13.4%	14.2%
2010	404	17.5%	47.8%	50.6%	52.1%	53.4%	53.8%	55.5%	55.9%					79.3%	42.7%	13.5%	23.1%
2011	491	14.1%	39.8%	47.6%	55.7%	55.1%	58.6%	60.6%						76.8%	43.1%	15.2%	18.5%
2012	493	13.6%	40.6%	44.9%	49.4%	53.5%	55.3%							74.6%	35.7%	21.0%	17.9%
2013	567	9.5%	37.9%	47.4%	52.9%	56.2%								75.6%	39.0%	16.3%	20.3%
2014	542	9.1%	36.8%	44.1%	50.3%									77.3%	28.1%	22.1%	27.1%
2015	570	8.8%	34.5%	43.0%										84.7%	29.4%	22.7%	32.6%
2016	544	11.2%	36.8%											82.4%	14.4%	24.4%	43.6%
2017	338	24.2%												84.0%	10.8%	15.5%	57.7%



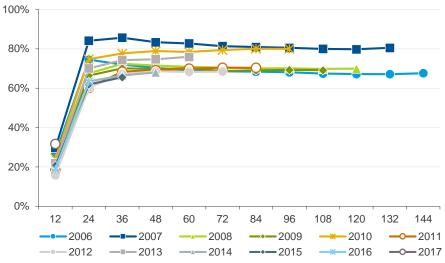






4 Motor/Accident proportional (HR/E+S)

							HR- finan	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	604	26.6%	74.5%	72.0%	70.3%	69.0%	68.6%	68.4%	68.1%	67.4%	67.2%	67.1%	67.6%	68.3%	64.3%	3.3%	0.6%
2007	397	29.7%	84.1%	85.7%	83.3%	82.7%	81.3%	80.9%	80.5%	79.9%	79.7%	80.5%		80.1%	74.0%	5.9%	0.2%
2008	705	19.5%	67.5%	72.4%	71.5%	70.8%	70.4%	70.1%	70.1%	69.7%	69.9%			69.4%	65.1%	3.7%	0.6%
2009	801	19.5%	66.4%	70.1%	69.7%	70.1%	68.7%	69.0%	69.2%	69.1%				70.2%	65.1%	4.5%	0.6%
2010	582	24.2%	74.7%	77.7%	78.9%	78.4%	79.4%	80.0%	80.0%					81.0%	71.9%	8.0%	1.1%
2011	836	18.5%	60.1%	68.4%	69.1%	70.0%	70.4%	70.4%						71.1%	64.3%	5.9%	0.9%
2012	1,004	15.8%	60.3%	67.2%	68.5%	68.2%	68.4%							69.1%	62.5%	5.7%	0.9%
2013	974	21.9%	70.0%	74.3%	74.6%	75.9%								76.1%	68.4%	7.2%	0.5%
2014	1,382	19.9%	63.4%	66.4%	68.0%									69.4%	61.3%	6.7%	1.4%
2015	1,388	20.6%	61.8%	65.5%										70.3%	56.8%	10.0%	3.5%
2016	1,528	18.9%	63.2%											77.5%	46.7%	21.3%	9.5%
2017	1,613	31.7%												76.3%	25.1%	17.2%	34.0%



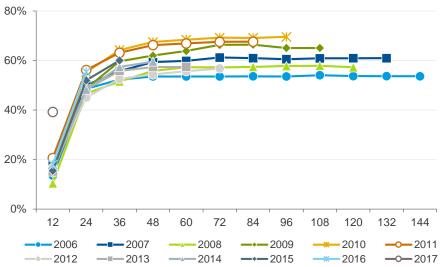






5 Property proportional (HR/E+S)

							HR- finan	cial year							Booke	ed data	
	IFRS																
U/W	earned													Ultimate	Paid	Case	IBNR
year	premium	12	24	36	48	60	72	84	96	108	120	132	144	loss ratio	losses	reserves	balance
2006	802	13.5%	48.5%	52.3%	53.5%	53.5%	53.5%	53.6%	53.5%	54.0%	53.7%	53.6%	53.6%	54.0%	52.6%	1.0%	0.3%
2007	773	17.9%	50.0%	55.7%	59.3%	59.8%	61.2%	60.9%	60.5%	60.9%	60.9%	60.9%		61.3%	59.6%	1.2%	0.5%
2008	958	10.4%	46.6%	51.5%	55.8%	57.2%	57.2%	57.4%	57.8%	57.9%	57.2%			57.9%	55.7%	1.6%	0.6%
2009	896	14.5%	48.6%	59.7%	62.0%	63.8%	66.3%	66.4%	65.0%	65.0%				64.9%	62.4%	1.9%	0.6%
2010	1,019	15.8%	55.2%	64.2%	67.4%	68.4%	69.2%	69.1%	69.5%					71.0%	66.6%	2.9%	1.4%
2011	1,142	20.6%	56.1%	63.1%	66.2%	66.9%	67.5%	67.6%						67.9%	63.4%	3.4%	1.1%
2012	1,307	16.7%	45.0%	52.6%	54.3%	55.6%	56.8%							58.8%	53.2%	4.2%	1.4%
2013	1,452	15.1%	48.3%	55.8%	57.3%	57.4%								60.1%	52.8%	4.3%	3.1%
2014	1,495	17.4%	48.2%	57.4%	59.5%									65.3%	50.9%	8.9%	5.5%
2015	1,771	15.5%	51.9%	60.0%										69.0%	52.0%	8.9%	8.1%
2016	1,769	18.0%	55.4%											75.1%	43.1%	15.9%	16.1%
2017	1,078	39.2%												95.4%	24.1%	24.6%	46.8%



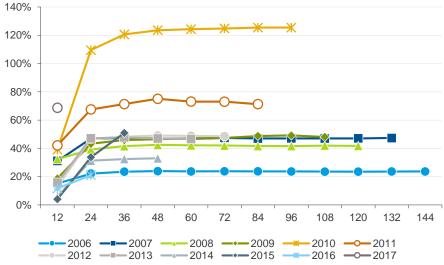




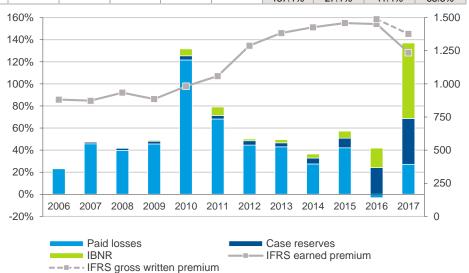


6 Property non-proportional (HR/E+S)

							HR- finan	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	881	15.2%	22.2%	23.5%	23.9%	23.7%	23.8%	23.8%	23.7%	23.6%	23.6%	23.7%	23.7%	23.8%	23.1%	0.6%	0.0%
2007	873	31.2%	47.0%	47.4%	47.0%	46.8%	47.4%	47.0%	47.1%	47.0%	47.1%	47.4%		47.3%	45.7%	1.4%	0.1%
2008	934	32.4%	39.3%	41.6%	42.5%	42.2%	42.1%	41.7%	41.6%	42.0%	41.8%			42.0%	39.7%	1.9%	0.4%
2009	885	18.7%	43.3%	45.9%	46.5%	47.2%	47.4%	48.8%	49.2%	48.1%				48.9%	45.6%	2.5%	0.8%
2010	982	39.2%	109.5%	120.6%	123.5%	124.3%	124.8%	125.4%	125.4%					131.7%	121.7%	3.7%	6.2%
2011	1,059	42.1%	67.6%	71.4%	75.1%	73.1%	73.0%	71.3%						79.1%	68.2%	3.1%	7.7%
2012	1,289	12.9%	46.8%	48.3%	49.1%	48.9%	48.7%							50.1%	44.5%	4.0%	1.6%
2013	1,384	15.8%	47.1%	47.8%	47.0%	46.6%								49.5%	43.0%	3.5%	2.9%
2014	1,428	6.0%	31.3%	32.5%	33.0%									36.5%	27.4%	5.5%	3.6%
2015	1,460	4.1%	33.7%	50.9%										57.2%	42.1%	8.6%	6.5%
2016	1,452	11.7%	21.1%											38.5%	-3.2%	24.2%	17.6%
2017	1,237	68.7%												137.1%	27.1%	41.4%	68.5%



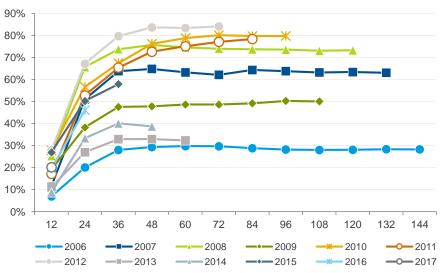




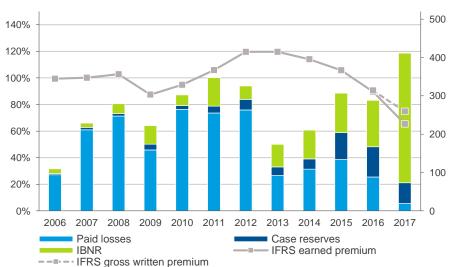


7 Marine (HR/E+S)

							HR- financ	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	345	7.0%	20.1%	28.0%	29.3%	29.8%	29.7%	28.8%	28.2%	28.0%	28.1%	28.4%	28.3%	31.7%	27.2%	0.9%	3.5%
2007	347	11.6%	51.0%	63.8%	64.8%	63.3%	62.2%	64.4%	63.8%	63.2%	63.4%	63.1%		66.1%	61.0%	1.9%	3.3%
2008	356	25.3%	65.7%	73.7%	75.7%	74.6%	74.0%	73.7%	73.6%	73.1%	73.3%			80.6%	71.3%	1.8%	7.4%
2009	303	19.2%	38.3%	47.6%	47.8%	48.7%	48.7%	49.2%	50.3%	50.1%				64.2%	45.8%	4.3%	14.0%
2010	329	27.9%	56.6%	67.4%	76.2%	78.8%	80.1%	79.7%	79.8%					87.2%	76.3%	2.9%	8.0%
2011	367	17.2%	52.8%	65.4%	72.6%	75.1%	77.1%	78.4%						100.2%	73.6%	5.2%	21.4%
2012	415	27.9%	67.2%	79.7%	83.7%	83.4%	84.1%							94.0%	76.0%	7.9%	10.2%
2013	415	11.1%	27.0%	33.0%	33.0%	32.4%								50.1%	26.6%	6.5%	17.0%
2014	395	8.8%	33.4%	40.1%	38.7%									60.7%	31.4%	7.7%	21.6%
2015	366	27.0%	50.3%	57.9%										88.6%	38.6%	20.3%	29.8%
2016	311	19.6%	46.1%											83.2%	25.4%	22.8%	34.9%
2017	227	20.2%												118.7%	5.5%	15.7%	97.5%

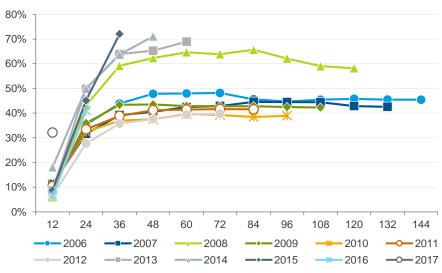


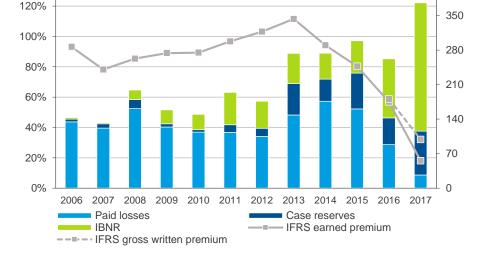




8 Aviation (HR/E+S)

							HR- financ	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	287	9.5%	35.3%	43.9%	47.8%	48.0%	48.1%	45.6%	44.7%	45.4%	45.8%	45.5%	45.4%	46.5%	43.7%	1.8%	1.0%
2007	241	11.3%	31.6%	39.2%	40.5%	42.4%	42.9%	44.6%	44.4%	44.4%	42.9%	42.6%		43.2%	39.6%	2.8%	0.7%
2008	263	5.9%	43.0%	59.2%	62.3%	64.7%	63.9%	65.6%	62.1%	59.0%	58.2%			64.7%	52.4%	6.0%	6.3%
2009	274	9.0%	35.9%	43.4%	43.5%	42.9%	42.8%	42.8%	42.4%	42.3%				51.7%	40.3%	2.1%	9.3%
2010	275	11.1%	32.4%	36.9%	37.5%	39.6%	39.2%	38.5%	38.9%					48.7%	37.0%	1.5%	10.2%
2011	298	10.3%	33.4%	38.9%	41.2%	41.4%	41.6%	41.5%						63.1%	36.7%	5.0%	21.4%
2012	318	6.5%	27.7%	35.8%	37.6%	39.3%	39.7%							57.3%	34.1%	5.4%	17.8%
2013	343	8.7%	49.8%	63.9%	65.3%	68.9%								88.9%	48.2%	20.7%	19.9%
2014	290	18.0%	49.9%	63.7%	71.1%									89.0%	57.4%	14.5%	17.1%
2015	247	8.7%	45.1%	72.0%										97.2%	52.3%	23.7%	21.3%
2016	175	6.5%	41.1%											85.3%	28.8%	17.6%	38.9%
2017	56	32.1%												122.2%	8.6%	29.0%	84.6%





^{*} As at 31 Dec 2017 (in m. EUR), consolidated, IFRS, development in months



9 Credit/Surety (HR/E+S)

							HR- financ	cial year							Booke	ed data	
U/W year	IFRS earned premium	12	24	36	48	60	72	84	96	108	120	132	144	Ultimate loss ratio	Paid losses	Case reserves	IBNR balance
2006	301	16.4%	31.8%	36.1%	38.2%	40.1%	41.2%	40.4%	42.3%	42.9%	43.8%	45.1%	44.8%	45.6%	42.1%	2.6%	0.9%
2007	470	19.9%	40.8%	51.2%	57.0%	59.9%	61.5%	62.7%	66.4%	66.3%	66.9%	66.8%		68.2%	64.1%	2.6%	1.5%
2008	394	13.7%	54.1%	66.9%	69.5%	71.9%	76.1%	75.3%	75.5%	75.7%	74.2%			78.7%	68.8%	5.3%	4.6%
2009	516	11.2%	27.5%	32.5%	34.2%	37.6%	38.2%	39.3%	40.8%	40.6%				43.9%	37.2%	3.6%	3.1%
2010	597	4.5%	20.5%	28.5%	33.9%	35.0%	37.0%	36.9%	37.6%					42.5%	34.7%	3.0%	4.9%
2011	571	6.0%	30.2%	41.3%	43.3%	43.9%	46.4%	46.8%						54.3%	42.5%	4.3%	7.4%
2012	638	9.6%	35.0%	47.0%	55.1%	58.5%	60.5%							72.5%	53.4%	7.3%	11.8%
2013	534	7.9%	26.1%	36.8%	41.8%	43.5%								63.5%	36.8%	7.3%	19.4%
2014	570	5.0%	33.1%	46.1%	52.6%									71.5%	43.4%	10.3%	17.8%
2015	558	5.1%	40.5%	53.9%										82.0%	49.9%	10.0%	22.1%
2016	513	7.0%	25.9%											63.4%	22.2%	11.4%	29.8%
2017	274	19.3%												69.9%	9.5%	12.5%	47.9%

