

# Mortgage lending and flood insurance in Poland



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REASEKURACJI**

**2011**

# Agenda

1. General information on mortgage lending in Poland
2. Mortgage lendings and insurance
3. Polish flood exposure
4. Recent Polish major floods
5. Event management issues



# Mortgage lendings

- first credit institution on Polish land was established in the XVIII century in the region of current Silesia
- 1825 – first Polish Banking institution offering long-term loans.
- In the 1990's first mortgage lending offers based on market practice after over a 50 year gap
- from January 1998 an act concerning mortgage banks was implemented.



# Mortgage lendings

Current situation of the mortgage lendings in Poland:

- 67 commercial banks operating (only one is state owned)
- 23 banks offers mortgage lendings
- stable growth on the mortgage portfolio, despite a certain slowing-down in 4th qr of 2008 and 1st qr of 2009
- mortgage lendings is the most common way of buying a flat / house by individuals



# Mortgage lendings

Mortgage lendings in Poland as of 31.12.2010:

- number of 1,516.6 thousands, of which:
  - over 47% in foreign currency
  - over 58% up to 150k PLN (approx. 50 000 USD)
  - 47% of 20 – 30 years of repayment
- total value of 266,8 billion PLN (approx. 88,9 billion USD)  
of which 169,1 billion (56,4 billion USD) in foreign currency



# Mortgage lendings

Data as of 31.12.2010 – Mortgage lendings in numbers

	Mortgage lendings					
	Total	in PLN				
			Total	CHF	EUR	rest
1	2	3	4	5	6	7
Number of agreements						
Total, of which:	1 516 564	798 655	717 909	621 674	88 776	7 459
<b>in value:</b>	x	x	x	x	x	x
- up to 150 000 PLN	882 885	561 680	321 205	277 151	38 421	5 633
- from 150 000 PLN to 300 000 PLN	385 973	174 472	211 501	184 673	25 871	957
- from 300 000 PLN to 450 000 PLN	142 519	41 323	101 196	86 491	14 318	387
- from 450 000 PLN to 600 000 PLN	54 475	11 558	42 917	37 307	5 446	164
- above 600 000 PLN	50 712	9 622	41 090	36 052	4 720	318
<b>According to the lenth of lending</b>	x	x	x	x	x	x
- up to 10 years	207 996	162 731	45 265	38 639	5 625	1 001
- from 10 years to 20 years	447 139	256 312	190 827	160 175	27 310	3 342
- from 20 years to 30 years	723 672	340 293	383 379	334 871	45 840	2 668
- from 30 years to 40 years	124 331	34 875	89 456	79 521	9 663	272
- above 40 years	13 426	4 444	8 982	8 468	338	176



# Mortgage lendings

Data as of 31.12.2010 – Mortgage lendings in values

	Mortgage lendings					
	Total	in PLN				
			Total	CHF	EUR	rest
1	2	3	4	5	6	7
Values of mortgage lendings by nominal value in thousands PLN						
Total, of which:	266 806 798	97 700 783	169 106 014	148 427 560	19 597 968	1 080 486
- up to 150 000 PLN	58 674 723	34 295 468	24 379 255	22 065 908	2 119 221	194 126
- from 150 000 PLN to 300 000 PLN	81 245 710	34 791 869	46 453 841	40 757 539	5 508 758	187 545
- from 300 000 PLN to 450 000 PLN	51 422 895	14 034 750	37 388 145	32 189 921	5 061 626	136 597
- from 450 000 PLN to 600 000 PLN	27 844 1 94	5 597 667	22 246 527	19 421 856	2 743 586	81 084
- above 600 000 PLN	47 619 275	8 981 029	38 638 246	33 992 337	4 164 776	481 133

# Mortgage lendings

Data as of 31.12.2010 – Loans To Value ratio

	Mortgage lendings					
	Total	In PLN				
			Total	CHF	EUR	rest
1	2	3	4	5	6	7
LTV- estimated value of LTV credit portfolio - %						
<b>Number of loans</b>	x	x	x	x	x	x
- LTVup to 70%	847 794	494 492	353 302	304 831	44 020	4 402
- LTVfrom 70% to 80%	147 160	77 507	69 653	57 905	10 890	885
- LTVfrom 80% to 90%	122 585	60 763	61 822	46 890	14 358	594
- LTVfrom 90% to 100%	226 433	125 758	100 675	87 567	12 096	1 022
- LTVfrom 100% to 110%	50 387	19 486	30 901	26 451	4 294	156
- LTVabove 110%	102 153	8 536	93 617	92 119	1 288	201
<b>Value of loans</b>	x	x	x	x	x	x
- LTV up to 70%	102 249 799	47 893 617	54 356 181	47 388 232	6 642 897	332 620
- LTVfrom 70% to 80%	30 188 199	12 818 095	17 370 104	14 334 741	2 931 547	101 976
- LTVfrom 80% to 90%	29 338 157	11 362 810	17 975 347	13 701 131	4 160 753	112 299
- LTVfrom 90% to 100%	45 827 175	19 067 152	26 760 023	23 180 478	3 429 913	148 752
- LTVfrom 100% to 110%	15 642 425	4 099 823	11 542 601	9 929 452	1 547 458	64 952
- LTVabove 110%	41330741	1 682 008	39 648 733	38 867 440	481 778	296 571





# Mortgage lendings and insurance

- Insurance requirement of each mortgage loan (property, life, sickness or loss of occupation)
- approx. 800M PLN (266 M USD) of non-life premium sold via banks (3,8% of total non-life premium)
- estimated of 135M PLN (45M USD) of premium from mortgage policies (0,75% of non-life premium)



# Mortgage lendings and insurance

- Desired property insurance cover is basing on the most wide scope of cover (Flexa+EC, all risk).
- no focus on flood premium. Flood risk is assessed individually.
- benefits of cooperation in respect of CAT risk:
  - for banks – risk control individually and aggregate
  - for insurance companies - sales



# Polish flood exposure

Poland's geographical position



Topographical map



Mortgage lendings and flood insurance 2011



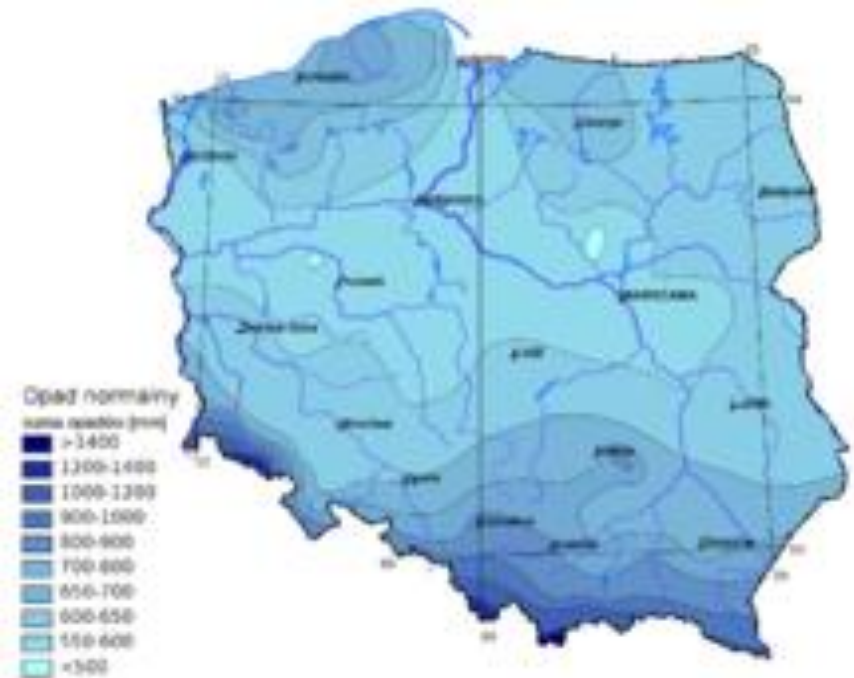
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# Polish flood exposure

Hydrological map



Rain fall map



# Polish flood exposure

## Types of flooding in Poland:

- precipitation flooding
- thaw flooding
- winter flooding
- storm flooding

## Categories of flood size:

- small – local range
- medium – regional range (have no influence of country's functionality)
- big – country range, has features of natural disaster, disturbs the country's functionality or its big part, need of international help



# Polish flood exposure

Main issues of Polish flood exposure:

- frequent intensive rainfall
- thaw floodings
- 98 water storage reservoirs
- rivers channel regulation
- flood bank construction, enforcement
- polders appointment
- flood exposure map



# Polish recent floods

Floodings within recent 15 years in Poland:

- some regional floods
- 2 major natural disasters:

1997 – „millennium flood”

2010 – central and eastern Europe flood



# Polish flood 1997

## Flood of summer 1997

- due to heavy rainfalls in beginning and mid of July 1997 (two fazes)
- Region affected: Poland, Czech Republic, E. Germany, N-W. Slovakia, E. Austria
- Poland - flood is spreading in W-S Poland - Odra, Nysa and less Vistula river
- economical loss of 3,5 billion USD
- insured loss 150 million USD
- destroyed: 680 000 housings, 843 schools, 4000 bridges, 14 400 km of roads, 2000 km of rail tracks, 613 km of flood banks and 665 835 ha earth, which is over 2% of whole territory of Poland





## Polish flood 1997



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# Polish flood 2010

## Flood in 2010

- Due to heavy rainfall flooding in May, June and August (three phases)
- Region affected: Poland, Czech Republic, Slovakia, Germany, Austria, Hungary, Romania, Ukraine and Serbia

Poland: – first phase focus on Vistula river, second both Vistula and Odra

- economic loss of 4 billion USD
- insured loss 570 million USD
- total losses of Insurers 566 million USD gross / 168 million net (70% share of Reinsurers)
- 271 thousands claims,
- average loss 2 100 USD gross / 630 USD net





## Polish flood 2010



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## Event management issues

Main problems arisen from recent flood experience:

- Municipal construction in flooding areas
- Development of urbanization (weaker water absorption, sewage systems)
- Necessity to regulate the river channel
- The spatial planning is not integral with flooding areas
- Flood bank enforcement and construction
- Water storage reservoirs
- Costs of rescue actions
- State offering for victims
- Maintenance of hydro technical objects
- Flood education (threat and awareness)



## Event management issues

Main steps undertaken and planned:

- Countrywide hydro meteorological monitoring system (10 cm of accuracy)
- River channel regulation (i.e. „project of flood protection in the basin of Odra river” in cooperation with IBRD and CEDB)
- Precise tool of flood identification – detailed map under preparation enabling to describe flood and subsidence exposure in each place in Poland. Tool allowing to simulate the threat of flood in a certain area.
- Local and international warning systems
- Plans and aims of flood risk management
- IT systems supporting flood risk management
- Education system of flood protection
- Flood insurance development



## Event management issues

Mortgage lendings in respect of further flood identification and management ?

- Construction in threatened areas will be forbidden
- Flooded areas will be considered in spatial planning
- Flooding can be simulated a certain water level
- Possible CAT aggregate recognition for mortgage lending institutions



# Resources

- Financial Service Authority (KNF) „Results for the questionnaire regarding mortgage lending”
- Financial Service Authority (KNF), „Financing of real estate by banks in Poland”
- Financial Service Authority (KNF), „The state of insurance sector after the 1st quarter of 2011”
- Institute of market economic research „Business and risk in mortgage lending market in 2014 perspective”
- National Bank of Poland, „Certain aspects of mortgage credit in Germany and Poland”
- Institute of meteorology and the water management, „IT system protecting the country from extraordinary threats”
- Polish Bank Association, AMRON and SARFIN report, „Mortgage lendings and transaction prices of real estate”
- BRE Hipoteczny, „The history of mortgage banks”
- National Civil Defense, „ Program of flood protection in the basin of Odra river”
- National Management Board of Water Management, „Extreme hydrological phenomena - floods and droughts”
- Government Security Centre, „Insurance as and element of crisis management”
- Swiss Re, „Floods - an insurable risk”
- Polish Chamber of Insurance, „Assumptions regarding the implementation of obligatory catastrophic insurances”
- Gazeta Prawna.pl, „Flood maps”
- Parkiet.com, „Bancassurance”

