,,The Real Estate Database and Price Modeling''

,,System for Analyses and Monitoring of Real Estate Market Transaction''
(Polish acronym AMRON)
Agnieszka Gorska

Agenda

- Why data base was build ?
- Little history
- Benefits
- Our achievements
- Future (development plans)

Regulating requirements

- 20 July 2000, General Inspectorate of Banking Supervision - **Recommendation J** - creation by banks database about real estate market

- 10 December 2001 (amended on 10 of December 2003) Minister of Finance Ordinance about principles of creating reserves on risk with activity of bank relate

- New Capital Accord – Basel II

- March 2006 - Recommendation S

- 2006 - Banking Supervision Committee's Resolution on loans currency exposure - draft

Realities in banking sector

- Fragmentary databases

- Differentiated range of information

- Traditional form

Little history (1)

- 2002 - Starting dialog with the banks

- Identifying existing databases

  - Main Office of Geodesy and Cartography creation plan of system about estate package

  - Electronic land and mortgage book (pilot project)

  - Local systems in gminas (counties)

  - Local systems of valuator and real estate brokers

Little history (2)

- 2003 – Polish Bank Association decided to create inter - bank database

- 2004 – Cooperation with leading academicians

Purposes of System AMRON

- Implementation by banks of supervisory regulations' requirements ,

- Effective management risk,

- Depending on current market rate value estate prediction

- Rationalization of bank activity cost,

- Cutting costs incurred by clients.

System's Functionality

- Information about all types of estate

- Collecting and providing access to chosen data concerning the property (transactions, offers, in-kind contribution, appraisal, others)

- Property attribute thesaurus

- Automatic verification of important parameter in introduced record

- Sharing analyses that present statistical data and current trends on real estate market

- Data export to MS Excel

- Possibility of generating individual analysis in relation with micro and macro economical data

AMRON SYSTEM Attributes of Housing Prices

x_1 – number of months between real estate transaction (valuation) date and 1 January of each year, i.e. the date of conducted analysis

x_2 – law pertaining to the considered real property

x_3 – city zone

x_4 – year of construction completion or recent major repair

x_5 – land development

x_6 – building plot area [100 m^2]

x_7 – facility floor area [m^2]

x_8 – access to means of communication

x_9 – shape of plot and land topography

x_{10} – accommodation plan

x_{11} – attractiveness of location

x_{12} – location of story in the building

x_{13} – kind of building

x_{14} – outfit standard

x_{15} – administrative and legal restrictions

x_{16} – degree of unit price objectivity

x_{17} – additional attribute – expert

x_{18} – source of price information

c – real estate unit price [zł/m^2]

d – rent for accommodation area unit [zł/m^2 x year]

Analyses and monitoring

- Models of scaling of ratios of risks,
  - In free transactions of sales
  - In free transactions of sales in different intervals of times
  - In foreclosure procedures
  - In future transactions of sales
  - On base of offered property prices

- Property value prediction models,
- Discount rate calculation models

AMRON SYSTEM Property Value Prediction Module

- Linear model (additive)
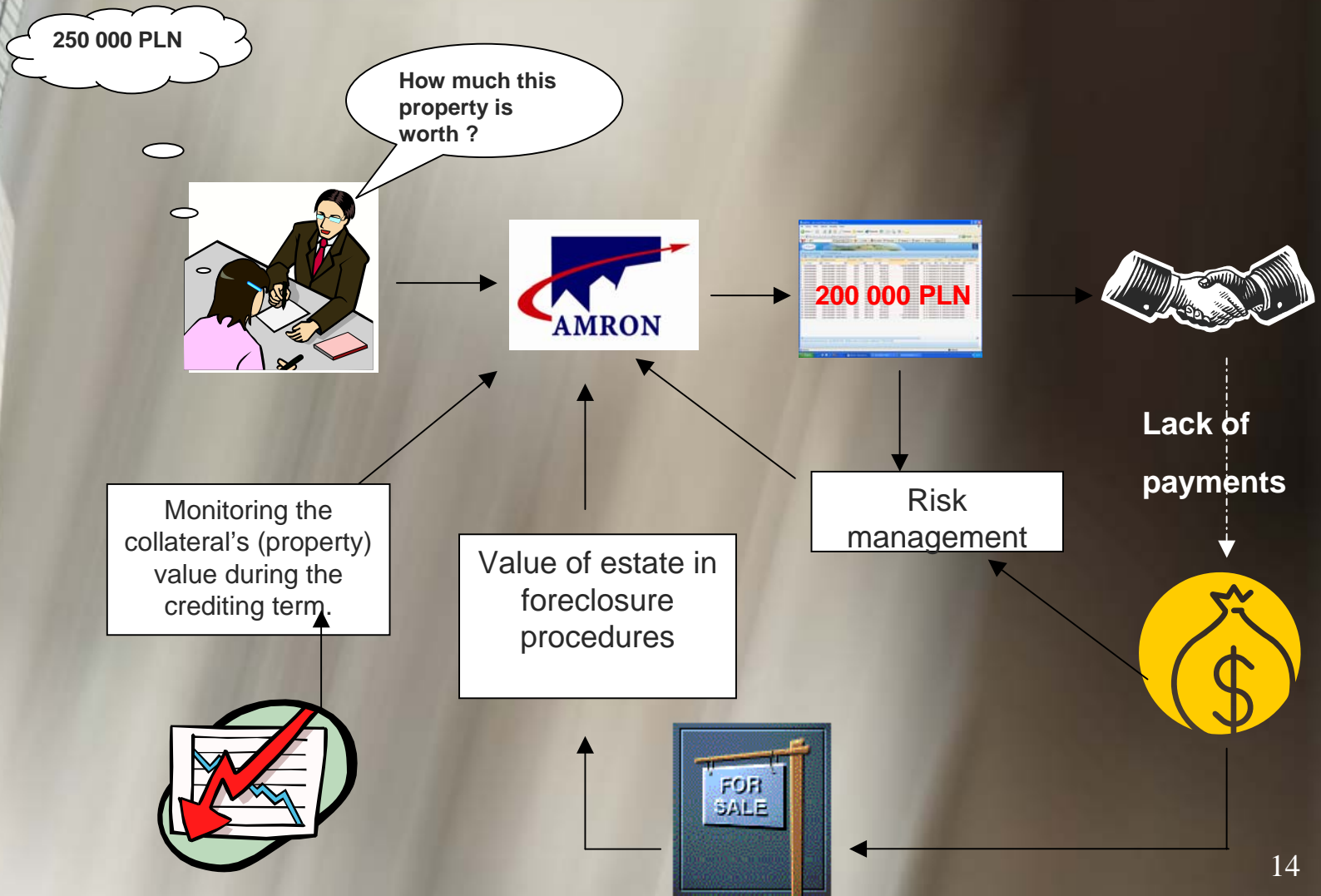
- Non-linear model (multiplicative)

Examples of types of reports

- Report A - general, descriptive (property type, area, transaction price etc., presented in the territorial aspect)

- Report B - detailed, describing a particular property (full data on property gathered in the database)

- Report C - summary – cross-section of the given real estate market (region, type).

- Report D – presenting trends on the real estate market (generated periodically).

Little history (3)

- 2003-2004 – Building up of AMRON System

- 2004 September – AMRON System launched

How system is taken advantage?

250 000 PLN

How much this property is worth ?

AMRON

200 000 PLN

Lack of payments

Monitoring the collateral's (property) value during the crediting term.

Value of estate in foreclosure procedures

Risk management

FOR SALE

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Benefits of AMRON

- Access to all data on estate market
- Increasing risk management in real estate financing market including limiting risk associated with undervalued collateral.
- Possibility for a trustworthy verification of property appraisals through comparison of external appraisals with data from system.
- **Shortening the time of credit decision** – fast verification of property value will decrease the time the client waits for the banks decision.
- Limiting the possibility of a unfair and negligent valuation of property that might cause an undercolleralization of the loan value.
- **Possibility of monitoring the collateral's (property) value during the whole crediting period.**

Benefits of AMRON

- Wider access to data gathered by particular participants of the system, giving a better picture of the real estate market.
- Possibility of predicting demand for mortgage loans from the territorial perspective.
- Creating analyses with statistics and current trends on the real estate market.
- Facilitating and developing the mortgage baked liabilities transfer.
- Granting loans with high LTV values.
- Improving data concerning the propertied legal status.
- Decreasing costs resulting from the creation of a private database.
- Decreasing costs of credit (Valuator 100$ / statistical methods – 20$)
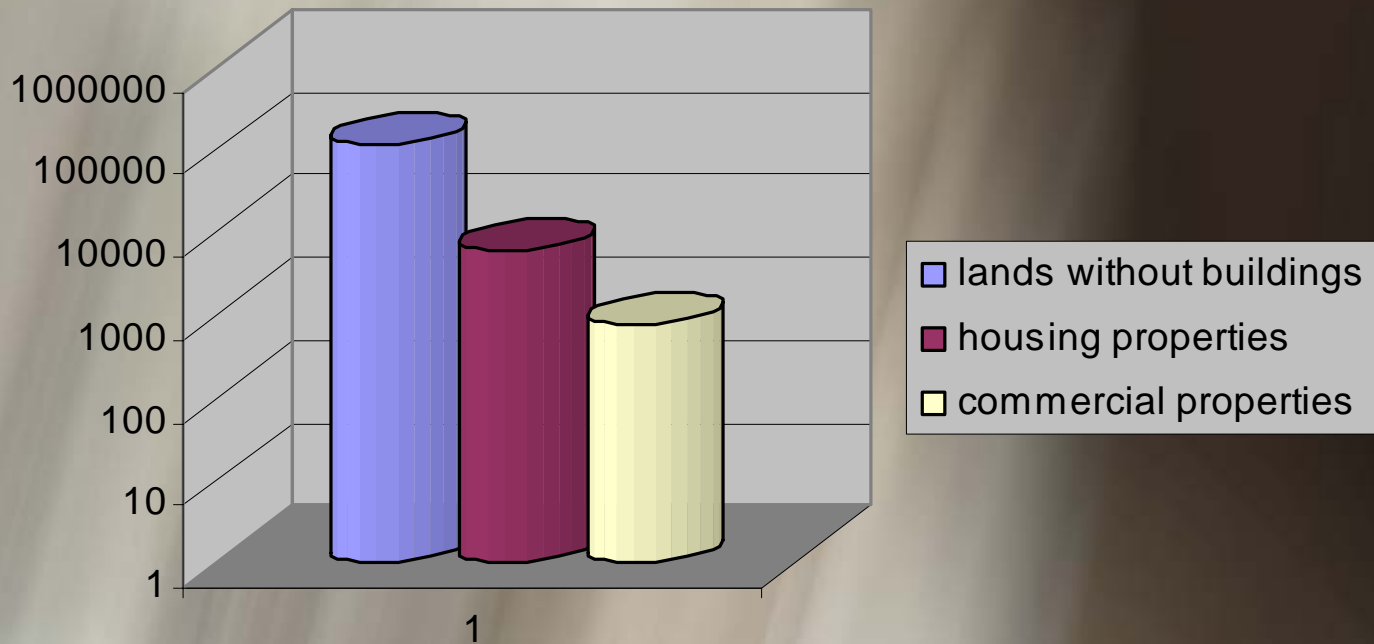
Our achievements

- 7 Banks (next 8 during negotiation)

- Advanced conversations with lease firms, real estate brokers, valuators, and others

- More than 100 new information per day
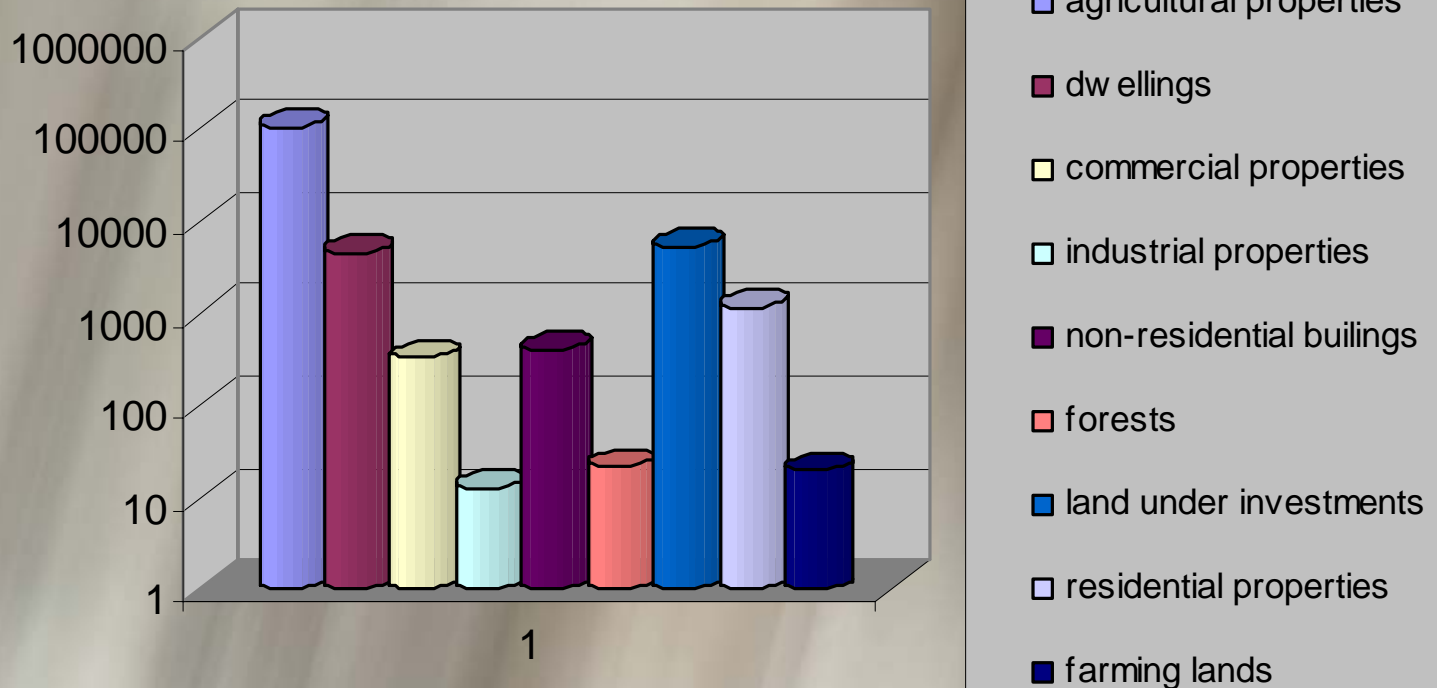
- 890 users

- Ca 300 reports sold per month

Number of granted certificates
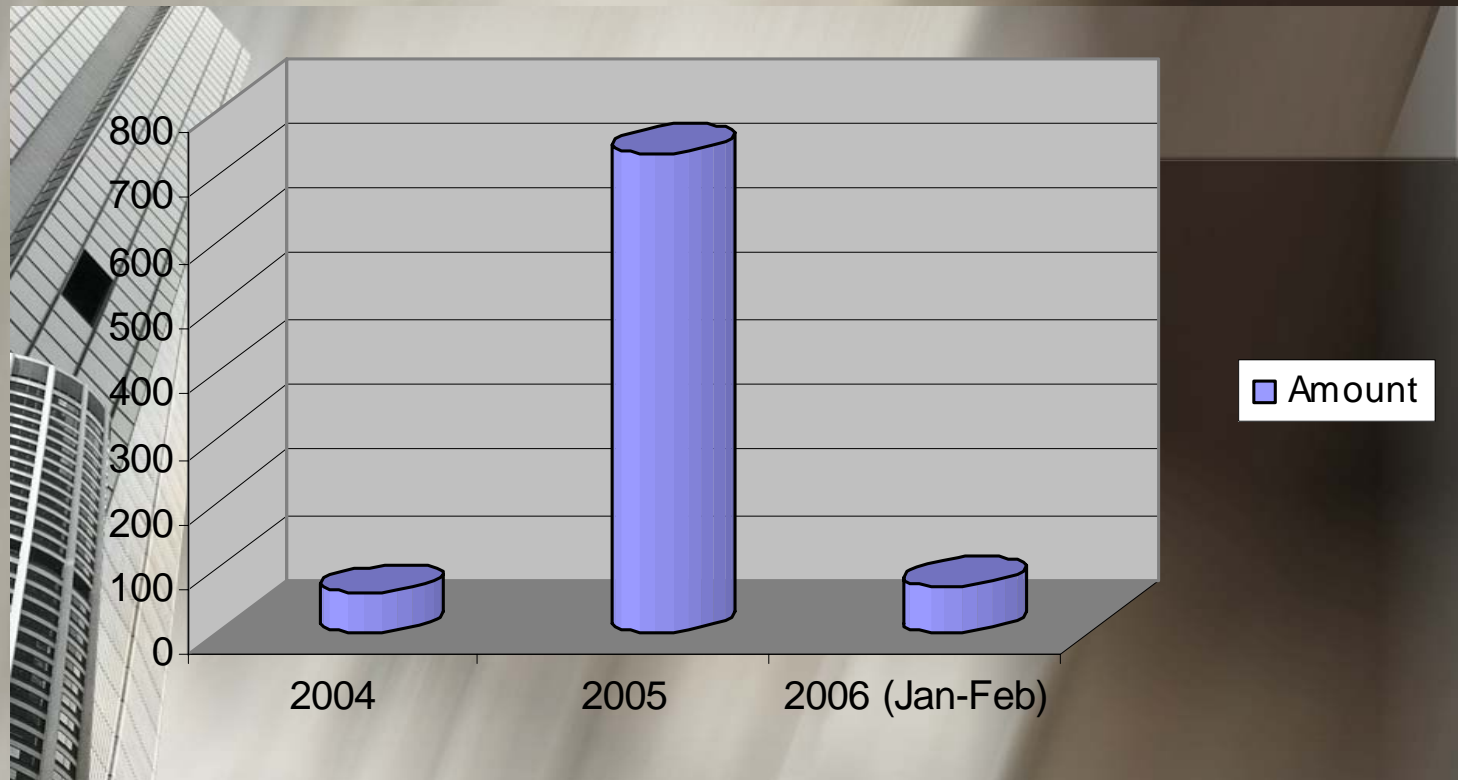
Numer of records for a given type of property - summary

Number of records for a given type of property- detailed

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Plans

- Invitation for cooperation to insurance companies

- Creation interface between credit information, and information about client

- Monitoring of estate market and observation of business cycle.

- Cooperation with National Bank of Poland on market analysis creation

- House Pricing Index

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Agnieszka Górska
Mail:agnieszka.gorska@cpb.pl