Macro-Economic Dimensions of the Swiss Cadastre –
A few glimpses

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Benefits of a Cadastral System

  • landownership brings incentives to invest, and in consequence increased land productivity
  • formal land titles reduce the risk for investors to invest
  • better productivity per unit of land
  • empirical evidence from Latin America (doubling the investments and amount of credits), rural Thailand, urban Philippines, urban Indonesia, rural India, and rural Africa support these statements
Benefits of a Cadastral System

- De Soto (2001). Case study from Peru: value of national telephone company increased from 53 million to 2 billion USD just by bringing it into the formal land registry system.
Q11/12) Mortgage per population and per value of real estate

- >120,000 EUR mortgage per pop.
- 80-120,000 EUR mortgage per pop.
- 40-80,000 EUR mortgage per pop.
- 10-40,000 EUR mortgage per pop.
- < 10,000 EUR mortgage per pop.

Mortgage per total value of real estates

For comparison: AUS
## Legal basis for cadastre and geoinformation

<table>
<thead>
<tr>
<th>Year</th>
<th>Legal act</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>1912</td>
<td>Civil code</td>
<td>Security of ownership, efficient land market, and mortgaging of real estates</td>
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<tr>
<td>1919</td>
<td>Instructions for cadastral surveying</td>
<td>Definition of standardized methods</td>
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<td>1993</td>
<td>Ordinance on cadastral surveying</td>
<td>Digital format of cadastral surveying, extension of purpose beyond land registry to information systems</td>
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<td>2004</td>
<td>New article in Constitution</td>
<td>Stronger legal foundation for national surveying, cadastral surveying, and geodata infrastructures</td>
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| 2008 | Law on Geoinformation (GeoIG)            | • A uniform legal basis for all land information based on the various federal decrees (incl. cadastral surveying)  
                                             • A legal basis for the introduction of a cadastre for public legal restrictions on landownership rights (PLR-Cadastre) |
Swiss civil code (in force since 1912)

Art. 942

1 All rights on real estates have to be registered in the land registry.

2 The land registry consists of the main book with its associated maps, the auxiliary registers (in particular the list of property owners), the deeds (records and evidences), the description of properties, and the day book.

Art. 950

1 Registration and description of the properties in the land register have to be done on the basis of a map, which as a rule, has to be the result of an official cadastral survey.

2 The Federal Council decides on which principles these maps have to be based upon.
Systematic approach
Impact of PLR-Cadastre on Mortgage Volume

The Swiss cadastral system secures real estate values in the order of EUR 2,000 billion, of which approx. EUR 800 billion of mortgages are given out (close to EUR 100,000 per population).

The additional documentation of Public-Law Restrictions (PLRs) potentially can improve transparency and security of landownership. If the effect is 0.1%, this would correspond to an increase of the mortgage volume of EUR 800 million.
Cost/Benefit Study for PLR-Cadastre (2006)

• **estimated costs**: for implementation and operation: 95 – 337 million CHF for the first 20 years
  → 10-20 million CHF per year

• **expected benefits**: better transparency in legal terms and for land market, lower risk for banks, lower interest rates for mortgages, new innovative products that become possible
  → positive effects of approx. 100 million CHF per year

  • Erläuternder Bericht zur Verordnung über den Kataster der öffentlich-rechtlichen Eigentumsbeschränkungen (ÖREBKV) vom 2. September 2009, Kap. 1.1.5.
Evaluation of PLR-Cadastre (2017)

- Mandate by law (GeoIG) is to evaluate the PLR-Cadastre with regard to:
  - need
  - expediency (fit-for-purpose)
  - effectiveness
  - economics
- 1st evaluation in 2017
- 2nd evaluation in 2021

Results of Evaluation 2017

- The need for a centralized availability of PLR data is evident among the target groups.
- The PLR cadastre is already at a level of quality where it can be considered to be suitable.
- For the majority of users in the target groups, there already are considerable gains in efficiency. For example, the cantons' operating costs can be offset against the higher benefits that the three main target groups (municipalities, notaries, surveyors) are reporting.
- A cross-comparison of target groups in cantons with and without the PLR-Cadastre shows that the PLR-Cadastre is having an economic impact.
User Statistics

From: Annual Reports of the Cantons
Economical Aspects of Further Extensions

- cadastre of underground utilities
- 3rd dimension

\(\rightarrow\) not done yet
However...

We should not forget that land has not just an economic dimension only. There is also a social and environmental dimension of land!


• Indigenous people have believed it all along: land and water are sacred, living relatives and ancestors whose well-being humanity depends upon for our continued health and existence upon this earth.

• Between the productivity of property and the recognition of indigenous rights and the rights of nature, there lies the potential for a more just future for the land, the water and their human relations.
Thank you for your attention!

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