

IT cost survey for Swiss banks 2008

Evaluation report

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Introduction I

- itopia

 - Small independent Swiss consulting company with 10 professionals
 - Specialized in IT governance and project services

- IT cost survey

 - Performed on a yearly basis since 2000
 - Participants are small to medium-sized retail and private banks
 - Pragmatic approach: questionnaire with seven raw data plus profile for bank complexity

- participants
2007/2008

 - 28 banks (15 retail banks, 4 universal banks and 9 private banks)
 - High constancy and comparability: $\frac{3}{4}$ of year 2000 participants are still participating today
 - Due to ongoing core banking system migrations there are less participants in year 2007

- iR = itopia Ratio

 - Main coefficient used in the IT cost survey
 - Based on IT costs, balance assets and assets under management
 - We consider this coefficient to be better than volatile earning-based ratios (e.g. cost-income-ratio)

iR_{raw}
$$iR_{raw} = \frac{IT\ costs\ excl.\ data\ feed}{1.1 \times (balance_assets) + 0.3 \times (assets_under_management)}$$

- iR_{adj}

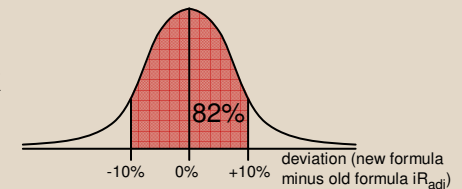
 - To allow comparability of banks the bank, complexity (f_{Bank}) has to be considered in the formula
 - Bank complexity is derived from a profile form filled in by the bank

$$iR_{adj} = \frac{IT\ costs\ excl.\ data\ feed}{1.1 \times (balance_assets) + 0.3 \times (assets_under_management)} \times \frac{1}{f_{Bank}}$$

Introduction II

factor adjustments

- We slightly adjusted the factors for `balance_assets` and `assets_under_management` this year. This was necessary because costs for data feed are no longer considered as part of the IT costs
- Using the new factor values 1.1 (former 1.2) and 0.3 (former 0.4) 82% of all banks are in the bandwidth of +/- 10% deviation for the `iRadj` calculations with the old and the new formula
- All ratios were calculated back with the new formula until year 2000. Thus the time series can be done properly with the same underlying formula
- The old formula is used for comparison purposes in slide 5 and will not be used any more in the future



aggregated evaluations

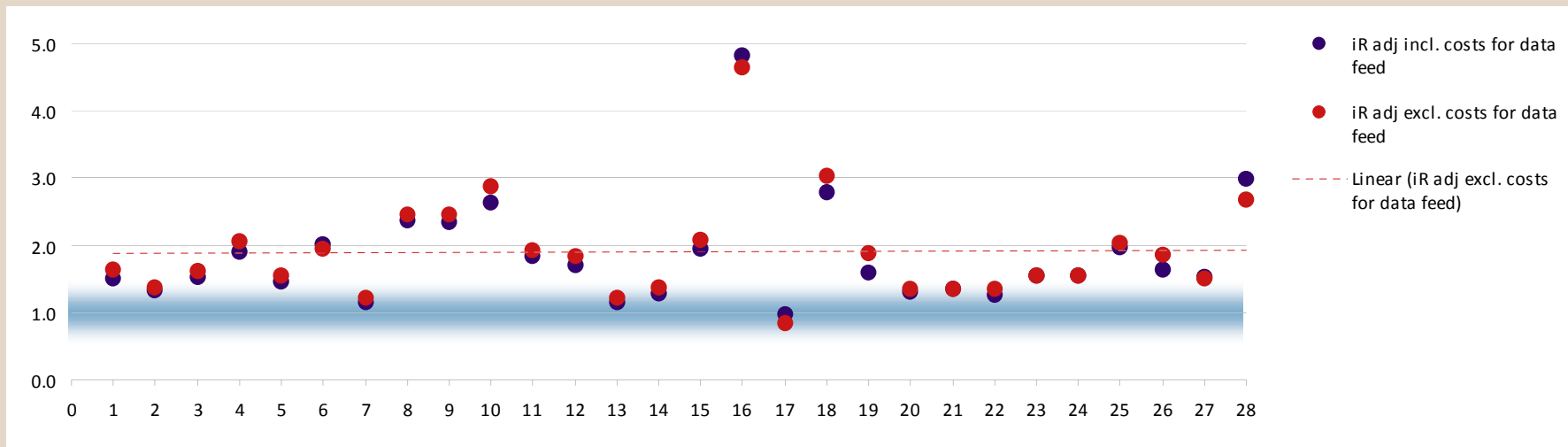
- For aggregated evaluations (e.g. IT policy, bank type or bank size) the median is used instead of the arithmetic average. The median is described as the number separating the higher 50% of a sample from the lower 50%

time series

- For the time series (2000 to 2007) only those banks were considered that participated during the years 2006 and 2007. This implicates less banks for the past years (2000 to 2005) but higher quality and constancy. The number of banks is listed in separate tables next to the diagrams

Year 2007

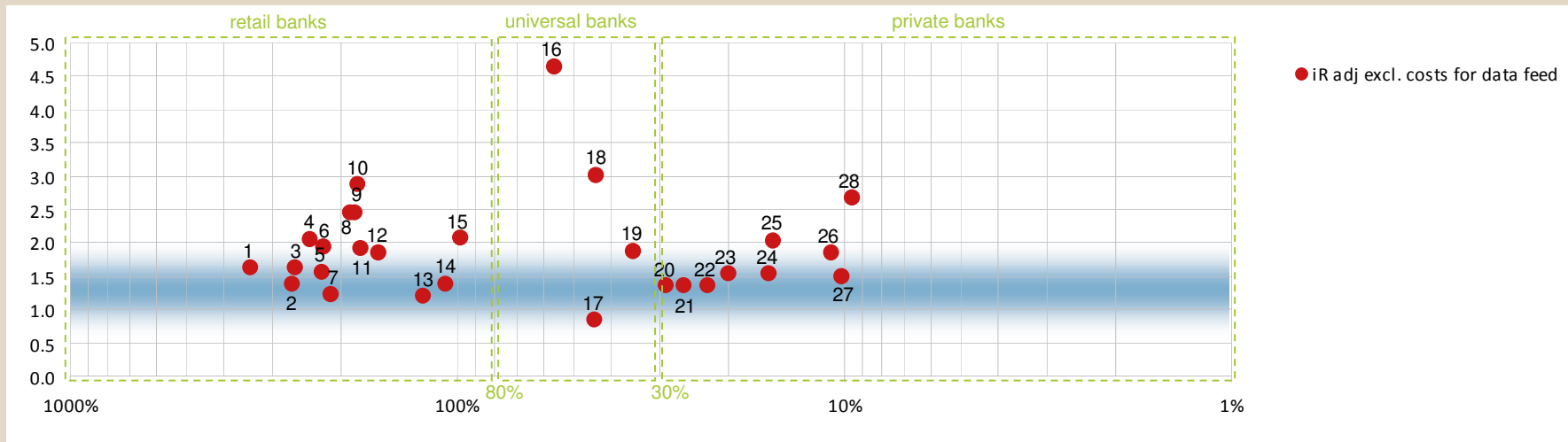
IT cost coefficient iR adj (view 1)



- The banks are represented by a unique id. The sorting criteria is balance assets / assets under management. Thus retail banks are located at the left side of the diagram, private banks on the right side
- The red dots represent the adjusted IT cost coefficient (iR adj) excl. costs for data feed (new formula), the blue dots incl. costs for data feed (old formula). As the diagram shows the difference is minimal
- The blue band represents the target zone for iR adj
- The red dotted line is the linear trend for iR adj. Its horizontal position indicates that the underlying model is applicable for retail and private banks. Hence the IT cost efficiency of retail and private banks can be compared directly
- A bank with an iR adj of 2.0 spends +100% more IT costs as an ideal typical bank (iR adj = 1.0)
- Most of the banks succeeded in reducing (improve) their iR adj over the years (see separate evaluation slides 9 ff)

Year 2007

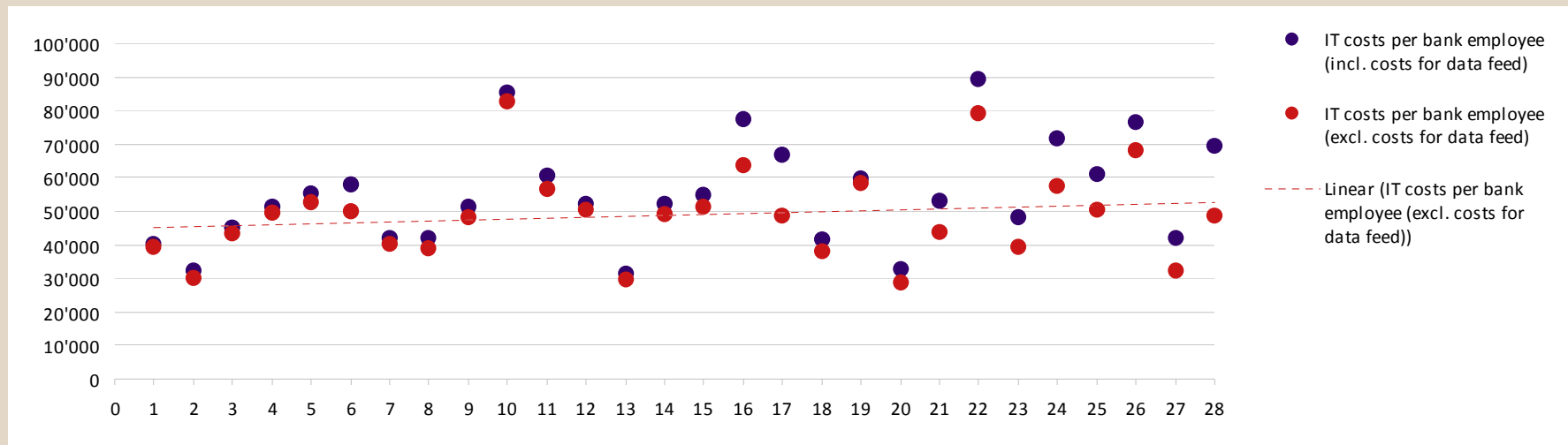
IT cost coefficient iR adj (view 2)



- This diagram gives a different view on iR adj: Again, the banks are sorted according to their balance assets / assets under management. But the horizontal distance is measured in percentages. Thus the closer two banks are, the similar is their ratio of balance assets / assets under management
- Three types of banks are identified:
 - retail banks: $\geq 80\%$ (banks with id's 1 to 15)
 - universal banks: $< 80\%$ and $> 30\%$ (banks with id's 16 to 19)
 - private banks: $\leq 30\%$ (banks with id's 20 to 28)

Year 2007

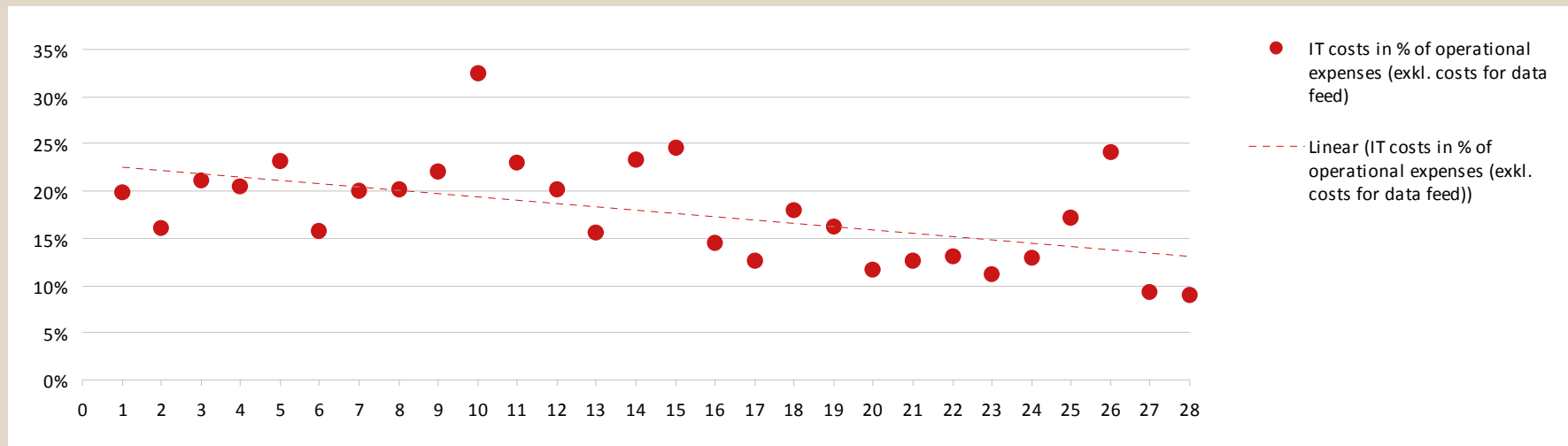
IT costs per bank employee (excl. IT staff) 2007



- Red dots: IT costs per bank employee (excl. IT staff) **excl.** costs for data feed
- Blue dots: IT costs per bank employee (excl. IT staff) **incl.** costs for data feed
- As private banks (on the right hand side of the diagram) spend more CHF on data feed than retail banks (left side) the differences for red/blue dots with private banks are larger
- The IT cost spending has a large bandwidth from approx. CHF 30'000 up to CHF 90'000
- It seems that private banks spend more CHF per bank employee than retail banks (see red dotted trend line).
Please note: regarding the IT cost efficiency (which in contrast to the IT costs per employee considers the bank complexity) there is no significant difference between bank types

Year 2007

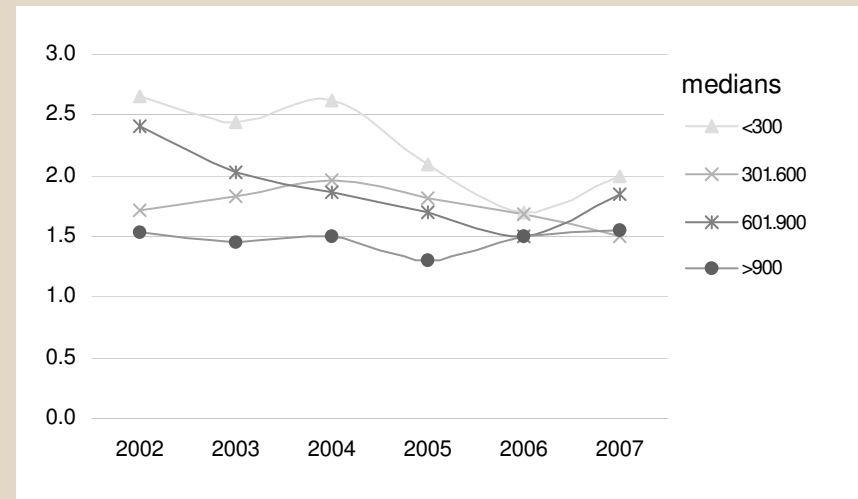
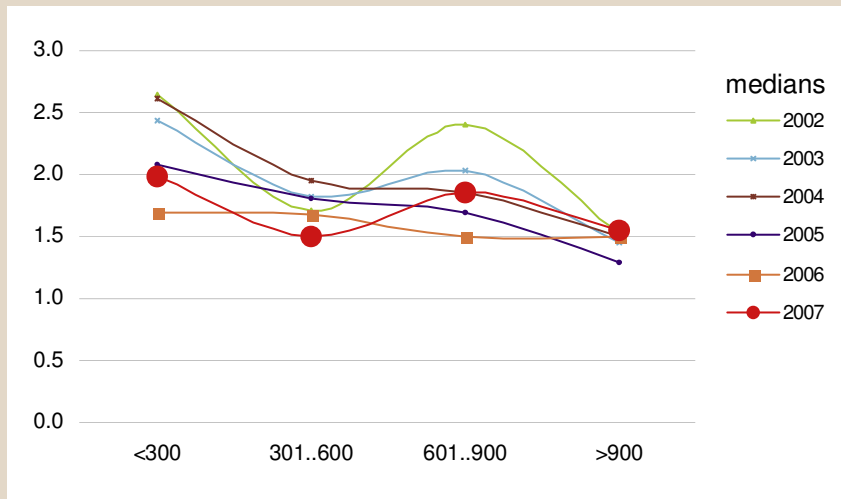
IT costs in percentage of operational expenses 2007



- Red dots: IT costs in percentage of operational expenses (excl. costs for data feed)
- The share for retail banks is significantly higher than for private banks (see red dotted trend line). One reason for this observation is the higher personal expenses in private banks compared to retail banks
- There can be made no interpretation regarding IT benefit or degree of IT automation out of this diagram

Time series

IT cost coefficient iR adj in relation to bank size

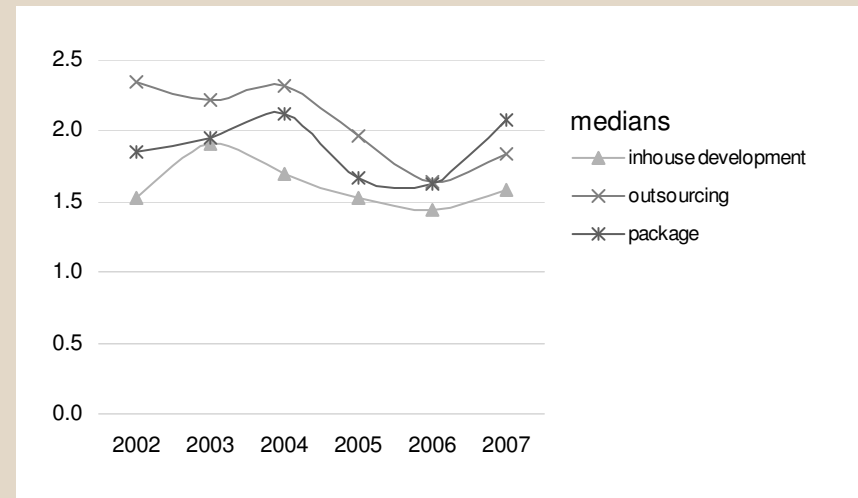
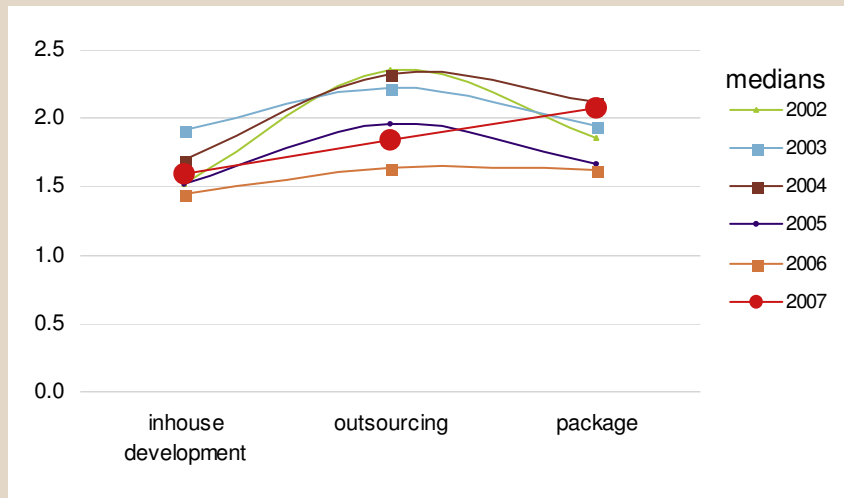


year	sample size				total
	<300	301..600	601..900	>900	
2000	7	4	4	6	21
2001	10	4	5	6	25
2002	17	10	3	5	35
2003	19	10	5	4	38
2004	19	9	7	4	39
2005	16	9	8	3	36
2006	17	10	7	4	38
2007	14	6	3	5	28

- Small banks (<300 bank employees/FTE) are less IT cost efficient than larger banks. Therefore it is possible to realize economies of scale for larger banks
- Due to a change in the class sizes, the typical bathtub-curve observed in the past years is not present anymore in this evaluation. The class size re-arrangement had to be done because of the small sample size in the class `600..800`
- In 2007 only the class `301..600` could improve their IT cost efficiency

Time series

IT cost coefficient iR adj in relation to IT policy

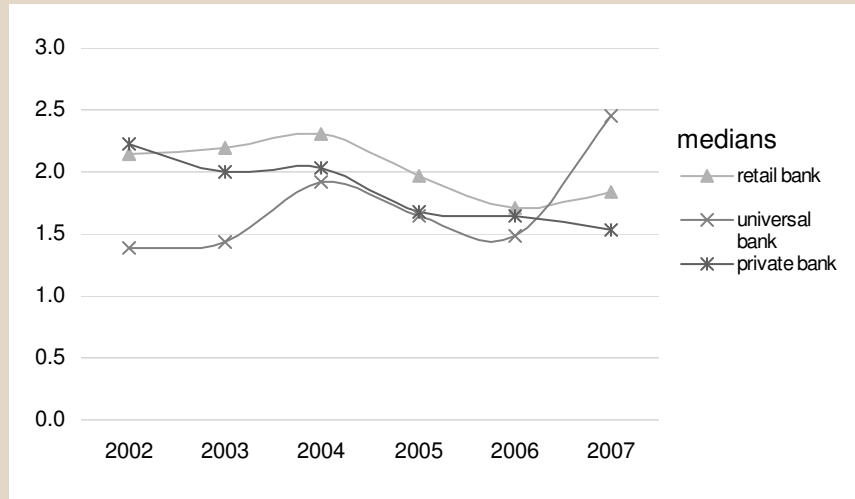
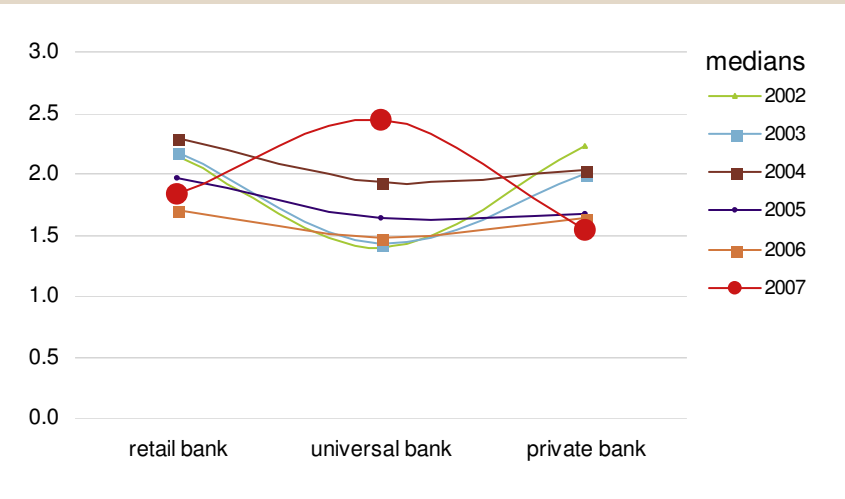


year	sample size			
	inhouse development	outsourcing	package	total
2000	5	12	3	20
2001	6	14	5	25
2002	8	16	11	35
2003	9	17	12	38
2004	9	18	12	39
2005	8	17	11	36
2006	6	18	14	38
2007	4	14	9	28

- Three IT policies are given:
 - inhouse development: core banking system is developed inhouse. IT operations are inhouse, too
 - outsourcing: a standard core banking package is used. IT operations are outsourced
 - package: a standard core banking package is in place. IT operations are inhouse
- In 2007 the IT policy `inhouse development` was still slightly more cost efficient than `outsourcing` and `package`. To a certain degree the capex back-log `inhouse development` has to be taken into account
- The IT cost coefficient increases in 2007: Is this an indication for the end of the IT cost saving era or the result of the core banking system migrations?

Time series

IT cost coefficient iR adj in relation to bank type

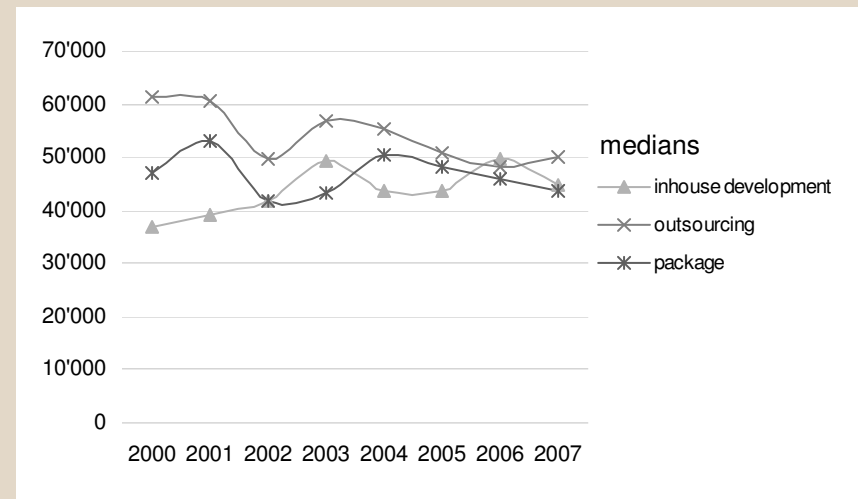
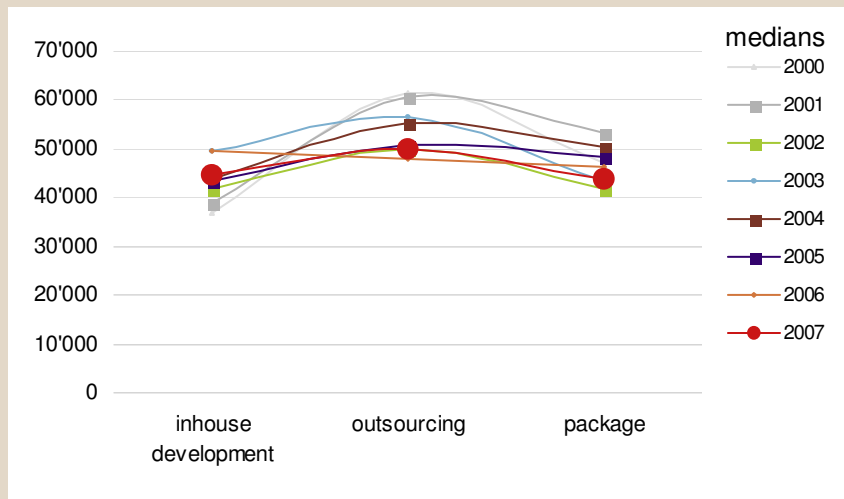


year	sample size			
	retail bank	universal bank	private bank	total
2000	13	1	7	21
2001	15	2	8	25
2002	17	6	12	35
2003	18	7	13	38
2004	19	6	14	39
2005	18	5	13	36
2006	16	7	15	38
2007	14	4	9	28

- In average private banks seem to have a slightly better IT cost coefficient compared to retail banks
- Due to a relatively small sample size for `universal banks` the 2007 data has to be interpreted with caution
- Except for privat banks the iR adj for the other two bank types seem to increase (get worse) for 2007

Time series

IT costs per bank employee in relation to IT policy

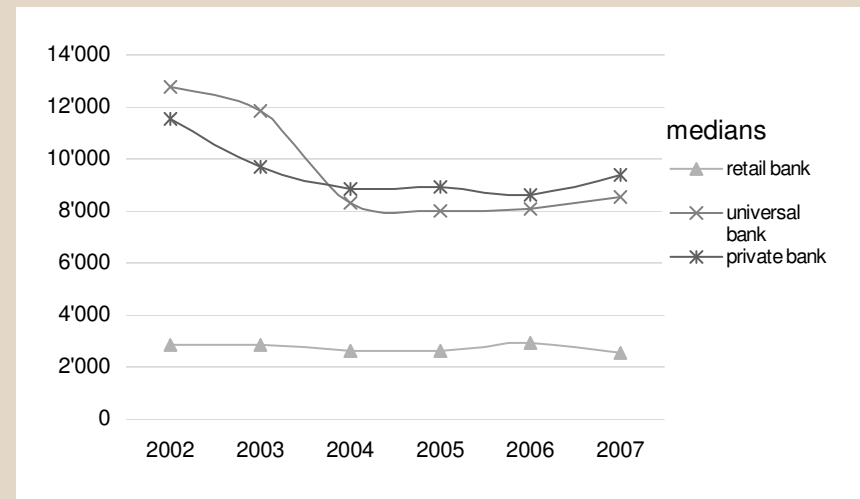
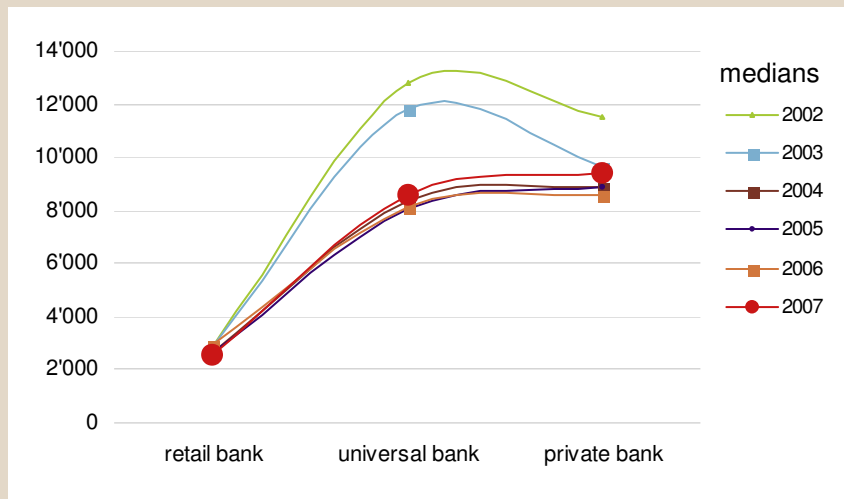


year	sample size			
	inhouse development	outsourcing	package	total
2000	5	12	3	20
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2002	8	16	11	35
2003	9	17	12	38
2004	9	18	12	39
2005	8	17	11	36
2006	6	18	14	38
2007	4	14	9	28

- There are only small differences regarding the IT cost spending for the three IT policy types
- Over the past years the gap between the three IT policies seems to disappear

Time series

Costs for data feed in relation to bank type



year	sample size			
	retail bank	universal bank	private bank	total
2000	13	1	7	21
2001	15	2	8	25
2002	17	6	12	35
2003	18	7	13	38
2004	19	6	14	39
2005	18	5	13	36
2006	16	7	15	38
2007	14	4	9	28

- Retail banks spend approx. CHF 2'000 per bank employee for data feed, whereas universal banks spend CHF 8'000 and private banks CHF 9'000
- Private and universal banks succeeded in reducing their costs for data feed during 2002 to 2004. In 2007 the costs appear to increase again

Thank you.

