

Výzvy na trhu s informačními zdroji

Challenges of the Information Resources Marketplace



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Overview



- What are the global information market challenges?
 - How does the global information market look like?
 - What are the challenges?
 - What are the trends?
- What is the situation of information resources in (academic) libraries in CZ?



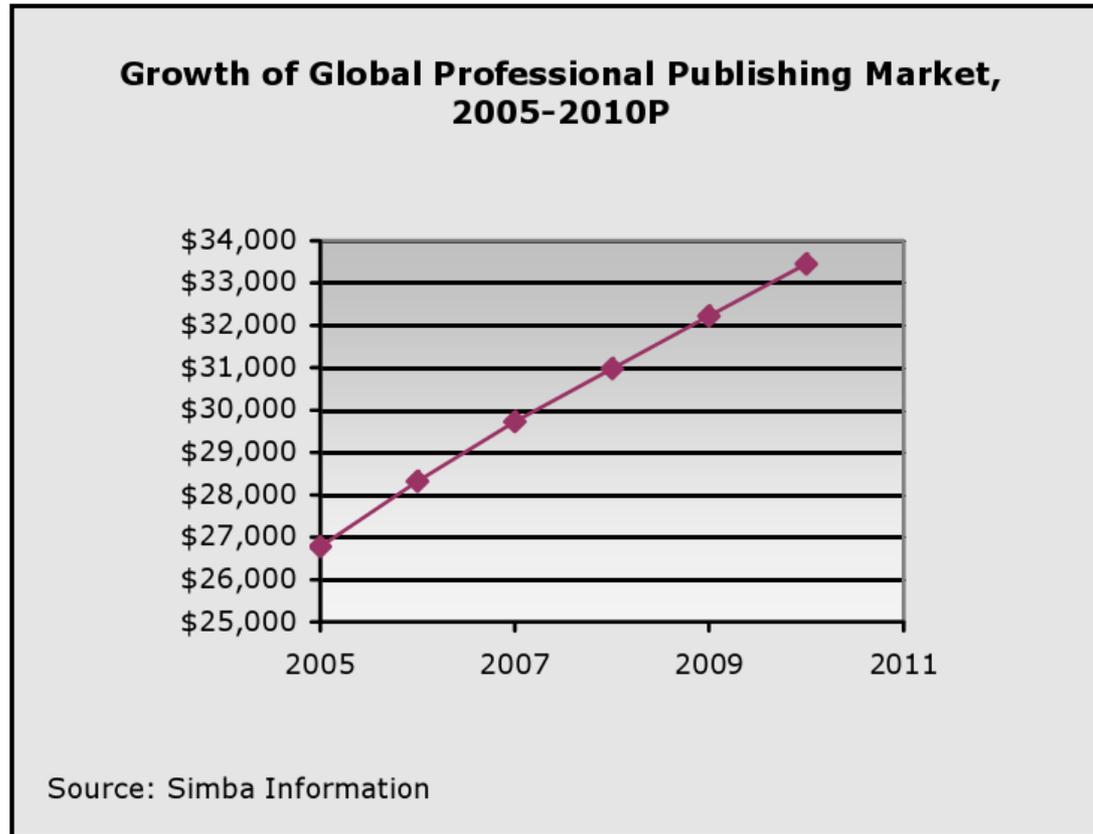
Global information market



- 2007P: \$381 bn. (*mld.*) +5,3% (2006: +6%)
- Main players:
 - Google (2006: +73%, 2007: +57%)
 - Thomson Reuters
 - Reed Elsevier
 - Pearson
 - Yahoo! (2006: +22%, 2007: +10%)
 - Gannett (USA Today...)
 - McGraw-Hill
 - Bloomberg
 - Wolters Kluwer

Source: Outsell Inc.

Global professional publishing market



(figures relate to publishing in English language, unless otherwise stated)

Source: Simba Information – available via **MarketResearch.com Profound**

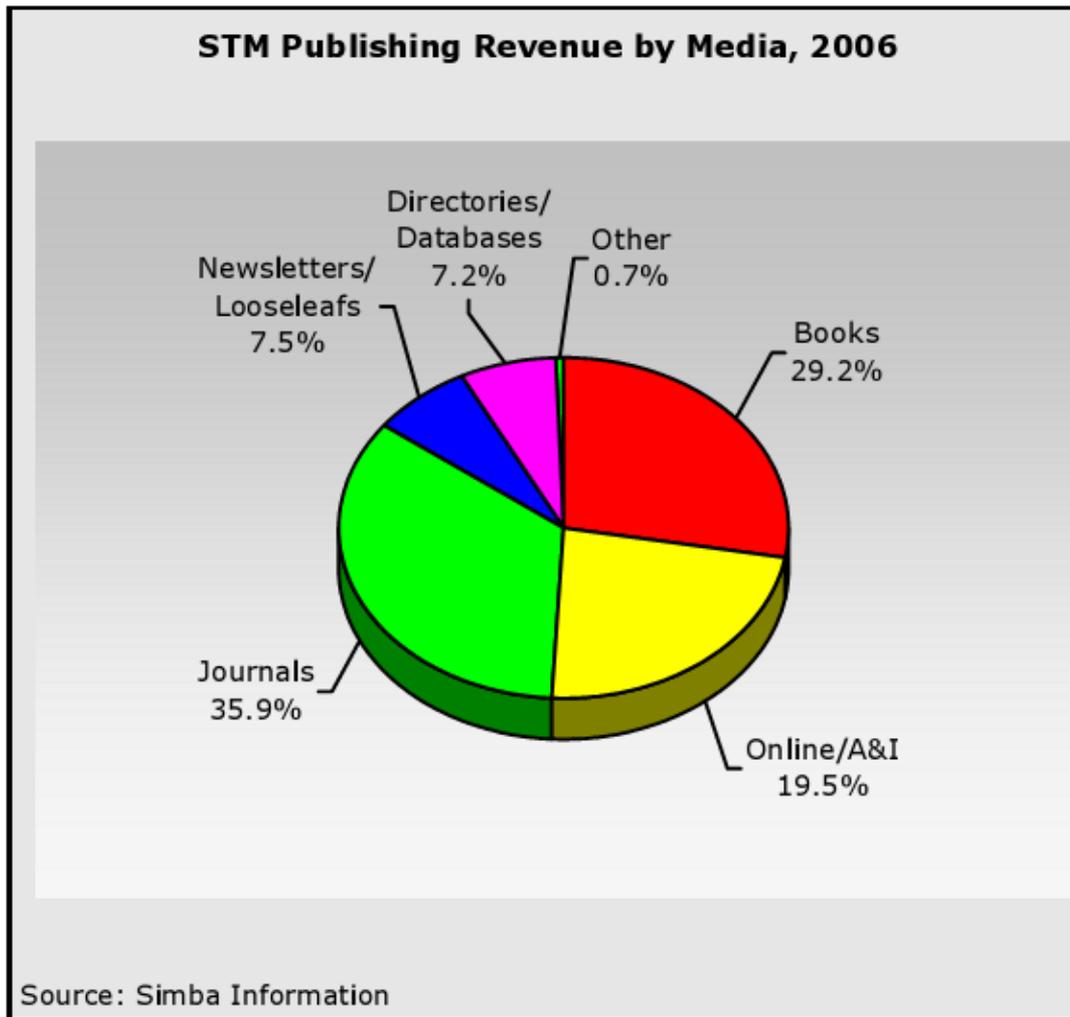
Global STM publishing



- 1. Reed Elsevier – 20% share!
 - 2. Thomson – 7%
 - 3. Wolters Kluwer – 7% (most from medicine)
 - 4. Wiley-Blackwell
 - 5. Springer
-
- university publishers (OUP, CUP, Harvard)
 - learned societies (ACS, AMA, IEEE)

Source: Simba Information – available via **MarketResearch.com** **Profound**

Global STM publishing



- Journals – most important titles already available electronically
- Online (secondary) – biggest growth

Challenges to publishers



- Library budget pressures
- Fulltext preference
- Electronic access (journals, books)
- Decrease of advertising revenue
- Open Access option (journals)
 - U.S.: free access demanded to publicly funded research after 12 months
 - „Author Pays“ model (\$1500-3000)
- Non-US/UK, non-English language content
- Web 2.0 (wait and see)

Challenges to libraries



- Library budget pressures
- Transition from print to electronic
 - Increasing users' demand for electronic resources
- New positioning of themselves in the electronic age

Trends in scientific publishing



■ Market consolidation

■ Mergers & Acquisitions

- Thomson: Information Holdings, Proux (2007), Reuters (2007-8)
- Wiley: Blackwell (2007)
- CIG: ProQuest (-> CSA 2006-7), RefWorks (2008)
- ProQuest: Serials Solutions
- Reed Elsevier: Beilstein Database (2007)
- Informa: Taylor & Francis (2004), Datamonitor (2007)

■ Sale

- Reed Elsevier, Thomson, Wolters Kluwer -> Education div.

Trends in scientific publishing



- Backfile digitization (print content -> online)
- New services & functionality based on existing content
- New services (functionality, contents) outside of the traditional journal or book formats
- E-resource access & management tools

Examples of pioneering products



■ Knovel Library



- engineering handbooks contents enhanced with „live“ equations, tables and graphs

■ CSA Illustrata



- the concept of „deep indexing“ of graphical contents of journal articles

■ Evidence Matters



- unique EBM tool providing numeric/factual data from controlled trial reports etc.

Examples of pioneering products



■ OvidSP



- new research interface by leading publisher
- streamlined searching, results manager, personal notes etc.

■ CSA Research Package



- COS Scholar Universe - 1,3 mil. scholars and institutions
- COS Funding Opportunities - 440 000 grants, awards, scholarships, total value over \$33 bn.
- PapersInvited – research publishing opportunities

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1 of 1320

Properties, magnetic susceptibility, critical currents and irreversibility fields of $(Tl_{0.5}Pb_{0.5})Sr_2(Ca_{1-x}Gd_x)Cu_2O_z$ bulk superconductors

W M Woch R Zalecki A Kolodziejczyk H Sudra and G Gritzner
2008 *Supercond. Sci. Technol.* 21 085002 doi: 10.1088/0953-2048/21/8/085002



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Properties, magnetic susceptibility, critical currents and irreversibility fields of $(\text{Tl}_{0.5}\text{Pb}_{0.5})\text{Sr}_2(\text{Ca}_{1-x}\text{Gd}_x)\text{Cu}_2\text{O}_z$ bulk superconductors

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Abstract Bulk $(\text{Tl}_{0.5}\text{Pb}_{0.5})\text{Sr}_2(\text{Ca}_{1-x}\text{Gd}_x)\text{Cu}_2\text{O}_z$ superconductors with $x = 0.1, 0.2$ and 0.3 were prepared by a wet chemical gel technique followed by a special heat-treatment procedure. X-ray diffraction analysis revealed practically phase-pure samples with tetragonal structure (space group $P/4mmm$). The temperature dependence of the real and imaginary parts of the ac susceptibility and the dependence on the ac applied magnetic field were investigated to learn about the superconducting and magnetic properties of bulk $(\text{Tl}_{0.5}\text{Pb}_{0.5})\text{Sr}_2(\text{Ca}_{1-x}\text{Gd}_x)\text{Cu}_2\text{O}_z$ superconductors. The critical current densities of the samples were

Volby

- 1. Introduction
- 2. Experimental det
- 3. Results and disci
- 4. Conclusions
- Acknowledgments
- References

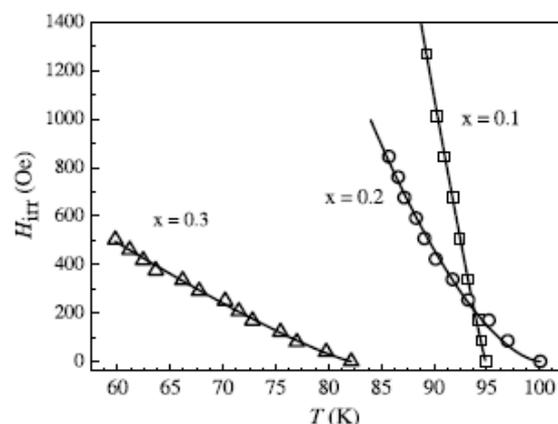


Figure 9. Irreversibility fields of $(\text{Tl}_{0.5}\text{Pb}_{0.5})\text{Sr}_2(\text{Ca}_{1-x}\text{Gd}_x)\text{Cu}_2\text{O}_z$ superconductors with $x = 0.1$ (open squares), $x = 0.2$ (open circles) and $x = 0.3$ (open triangles). The solid lines are fits to equation (1).

Table 6. Fitting parameters H_{ir0} , n and T_{c0} for the temperature dependence of the irreversibility field and the irreversibility fields calculated at 77 K according to equation (1).

x	H_{ir0} (kOe)	n	T_{c0} (K)	H_{irr} (77 K) (kOe)
0.1	27 ± 2	1.08 ± 0.03	94.89	4.48
0.2	20.3 ± 3	1.65 ± 0.07	101.1	1.82
0.3	2.3 ± 0.11	1.19 ± 0.03	82.15	0.087

The irreversibility field at 77 K of the sample with $x = 0.1$ is almost three times higher than that for the sample with $x = 0.2$. A very low irreversibility field (87 Oe) was found for the sample with $x = 0.3$.

Acknowledgments

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References

- [1] der Brake H J M *et al* 2006 *Physica C* **439** 1
- [2] Heiml O and Gritznier G 2002 *Supercond. Sci. Technol.* **15** 956
- [3] Woch W M, Zalecki R, Kolodziejczyk A, Chmíst J, Heiml O and Gritznier G 2004 *Acta Phys. Pol. A* **106** 785
- [4] Woch W M, Zalecki R, Kolodziejczyk A, Heiml O and Gritznier G 2006 *Physica C* **434** 17
- [5] Enengl M, Kuzmann E, Homonnay Z and Gritznier G 2002 *Physica C* **377** 565
- [6] Tonies S, Weber H W, Gritznier G, Heiml O and Eder M 2002 *Physica C* **372–376** 755
- [7] Gritznier G, Eder M, Cigan A, Manka J, Plesch G and Zrubec V 2002 *Physica C* **36** 69
- [8] Woch W M, Zalecki R, Kolodziejczyk A, Deinhofer C and Gritznier G 2007 *J. Alloys Compounds* **442** 209
- [9] Woch W M, Zalecki R, Kolodziejczyk A, Deinhofer C and Gritznier G 2007 *Acta Phys. Pol. A* **111** 737
- [10] Kim B-J, Matsui Y, Hourichi S, Jeong D-Y, Deinhofer C and Gritznier G 2004 *Appl. Phys. Lett.* **85** 4627
- [11] Lu X F, Gao H, Wang Z, Zhang Y Z, Shan L, Lu R T, Yan S L and Wen H H 2005 *Physica C* **423** 175
- [12] Mans M, Schneidewind H, Buenfeld M, Schmidl F and Seidel P 2006 *Phys. Rev. B* **74** 214514
- [13] Pissas M, Stamopoulos D, Psycharis V, Ma Y C and Wang N L 2006 *Phys. Rev. B* **73** 174524
- [14] Pissas M, Stamopoulos D, Ma Y C and Wang N L 2006

Non-English academic contents online



Global periodicals	total	online	%	CZ	total	online	
active periodicals	221 928	57 499	26%		1 024	133	13%
<i>in English</i>	148 517	45 582	31%		301	59	20%
	67%	79%			29%	44%	
academic (28% of active)	62 201	27 101	44%	(31% of	317	55	17%
<i>in English</i>	41 661	21 421	51%	active)	200	48	24%
	67%	79%			63%	87%	
peer-reviewed (39% of acad.)	24 093	15 721	65%	(41% of	130	40	31%
<i>in English</i>	21 282	14 719	69%	acad.)	118	38	32%
	88%	94%			91%	95%	
in JCR (30% of acad. peer-rev.)	7 238	6 766	93%	(18% acad.	24	15	63%
<i>in English</i>	6 969	6 549	94%	peer-rev.)	24	15	63%
	96%	97%			100%	100%	

Source: Ulrichsweb.com (journal title counts)

CEE scientific contents online



■ C.E.E.O.L.

- 321 e-journals from Central & Eastern Europe
 - 23% in English, 11% German, 3% Czech, 3% Slovak
- www.ceeol.com

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■ Versita

- 67 e-journals from Central & Eastern Europe (38 Polish, 2 Czech Academy of Sci, 5 SAV)
- e-publishing – distributed worldwide by Springerem (54)
- full publishing – completely in-house (13)
- new: e-books in collaboration with ebrary
- www.versita.com

E-resource access & management tools



- The increase in number of e-resources – **hard to manage** (especially by conventional library tools)
- Top priority task change: from collection development to **providing access and managing** e-resources
- Need to **know, manage and use** the real value of the collection
- Access to e-resources is **24/7, but restrictions apply** (IP addresses, pwds...)

Tools: End User Perspective



- Resource discovery
 - *Google-addiction!*
 - federated searching
 - current awareness services
- Finding known resources
 - AtoZ lists
- Linking among heterogenous e-resources
 - OpenURL linking
- Remote access
- Personal database systems
 - bibliographic, fulltext
- Personal current awareness services

Tools: Library Perspective



- E-collection lifecycle management
 - selection
 - trials
 - acquisition
 - support
 - evaluation (incl. usage analysis)
 - renewals
 - etc.
- Library workflow integration

Conclusions



- The global info market is a mature market with steady growth outlook
- Major challenges to major providers and customers
- Market consolidation
- Further growth possible on providing better products and value-added services to customers

Situation in Academic Libraries of the Czech Republic



General perceptions



- We have enough info resources, but our users need to learn how to make better use of them
- Many professors scarcely use info resources themselves, so they do not teach students to use them
- Library budget is too tight to allow for more/better info resources
- Annual subscription price increases force us to cut subscriptions

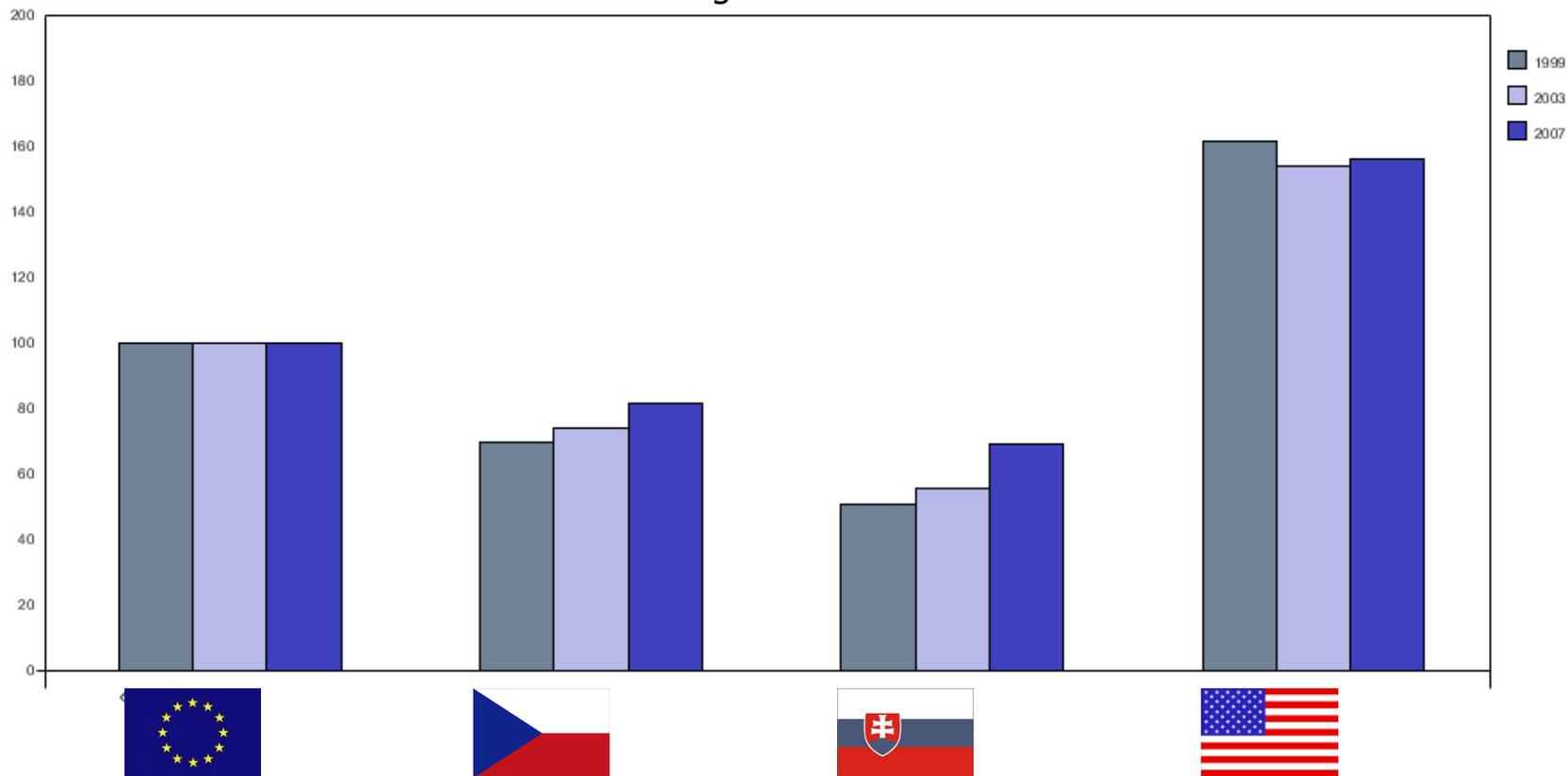
General perceptions



- How does the macro- & microeconomic situation in CZ translate into libraries' situation?

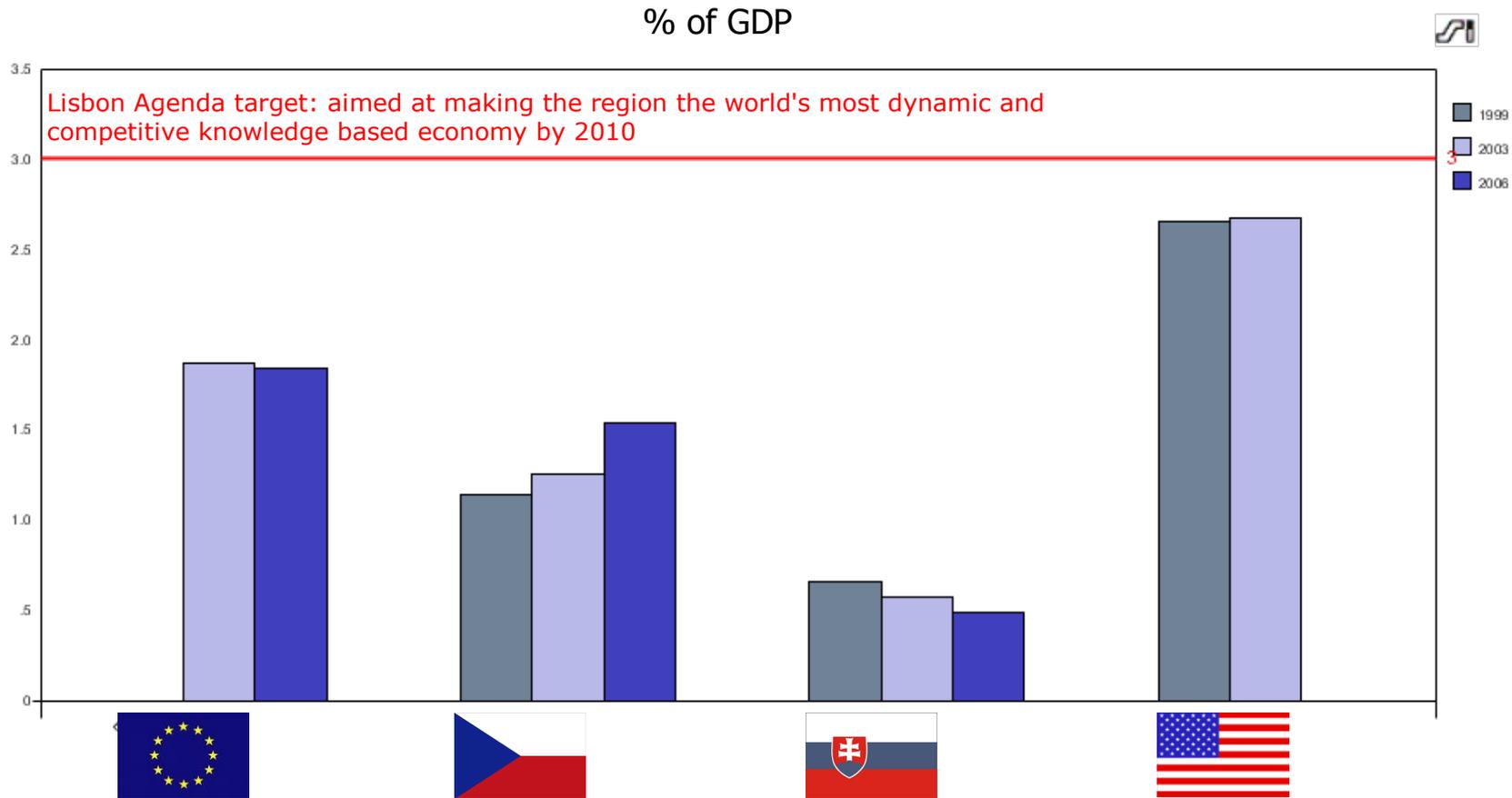
GDP per capita in PPS 1999/2003/2007

EU-27 = 100%
PPS = Purchasing Power Standards



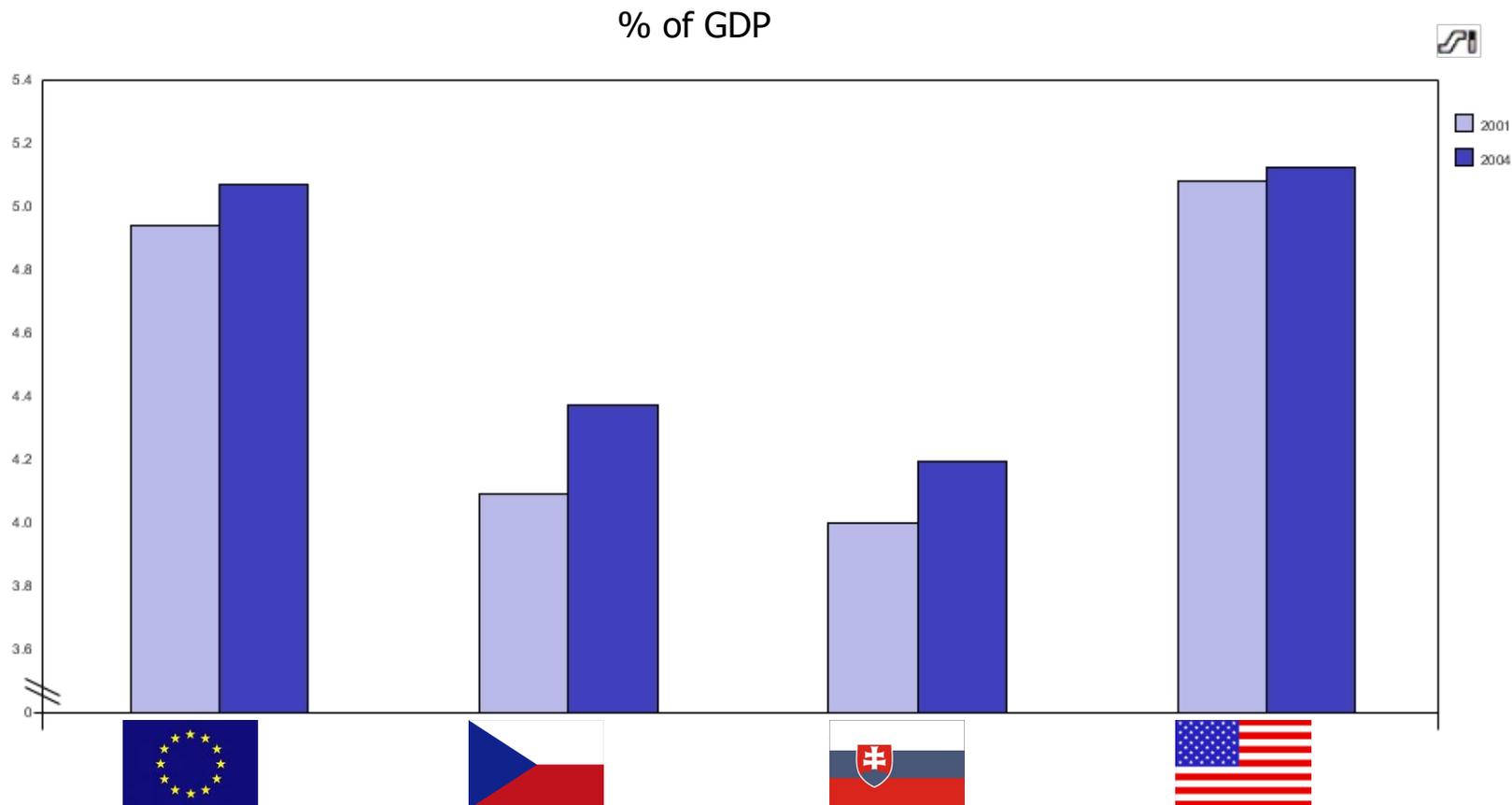
Source: Eurostat

Gross domestic expenditure on R&D (GERD) 1999/2003/2006



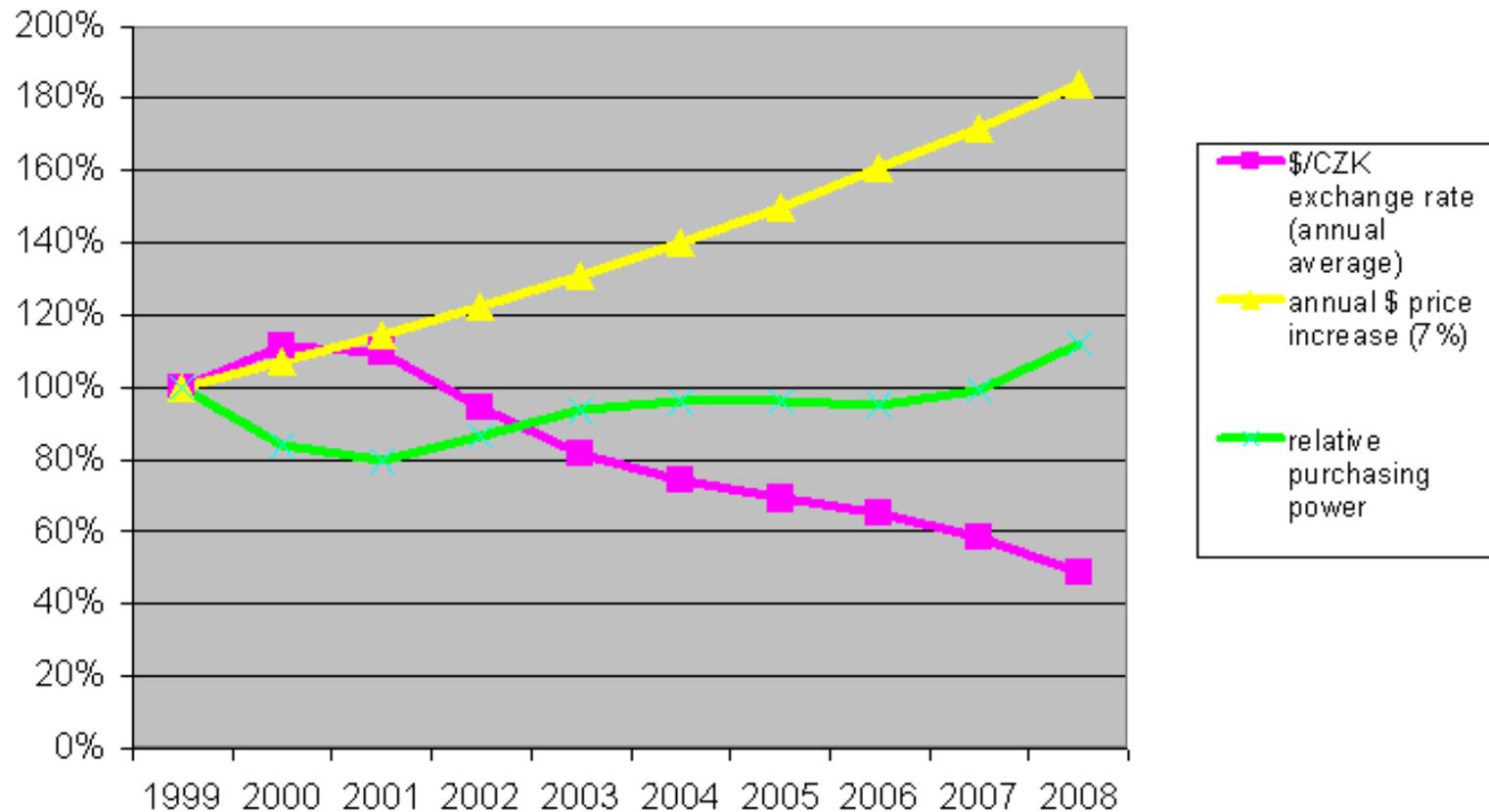
Source: Eurostat

Public spending on human resources 2001/2004



Source: Eurostat

Academic libraries in CZ - relative purchasing power \$

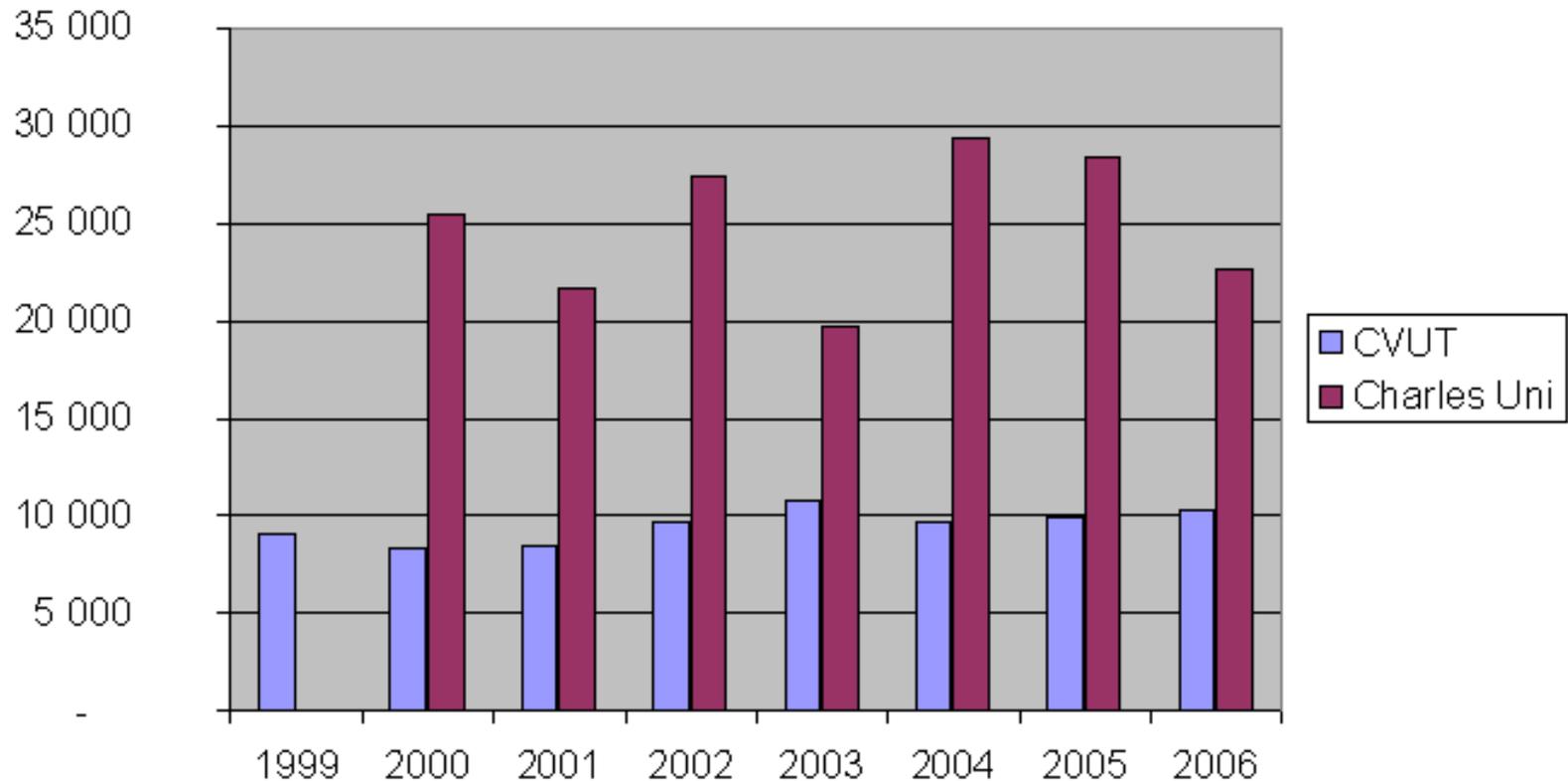


Data source: Czech National Bank

Academic libraries in CZ – acquisition budgets



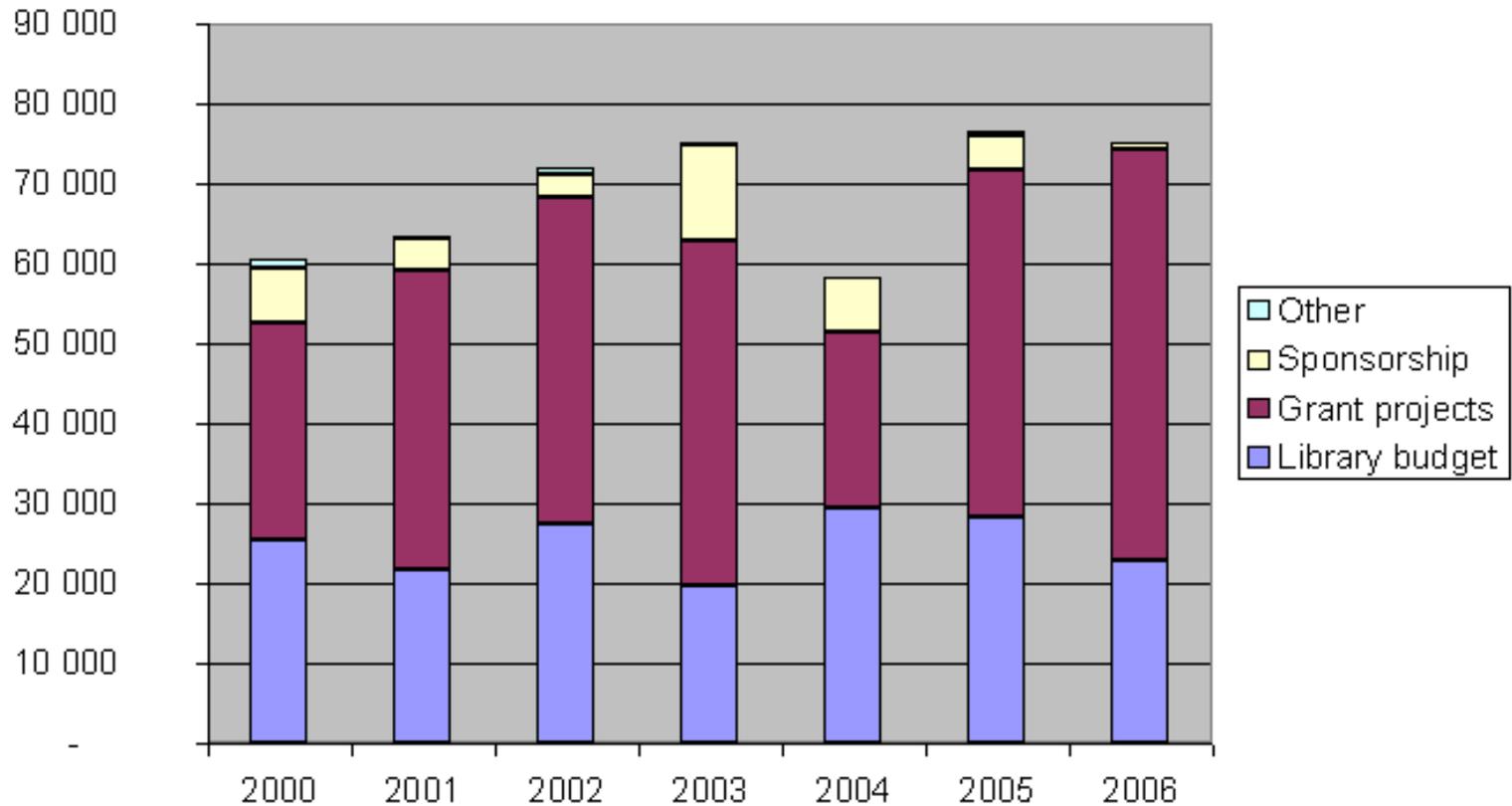
Library acquisition - own budgets (CZK thousands)



Source: CVUT, Charles Uni

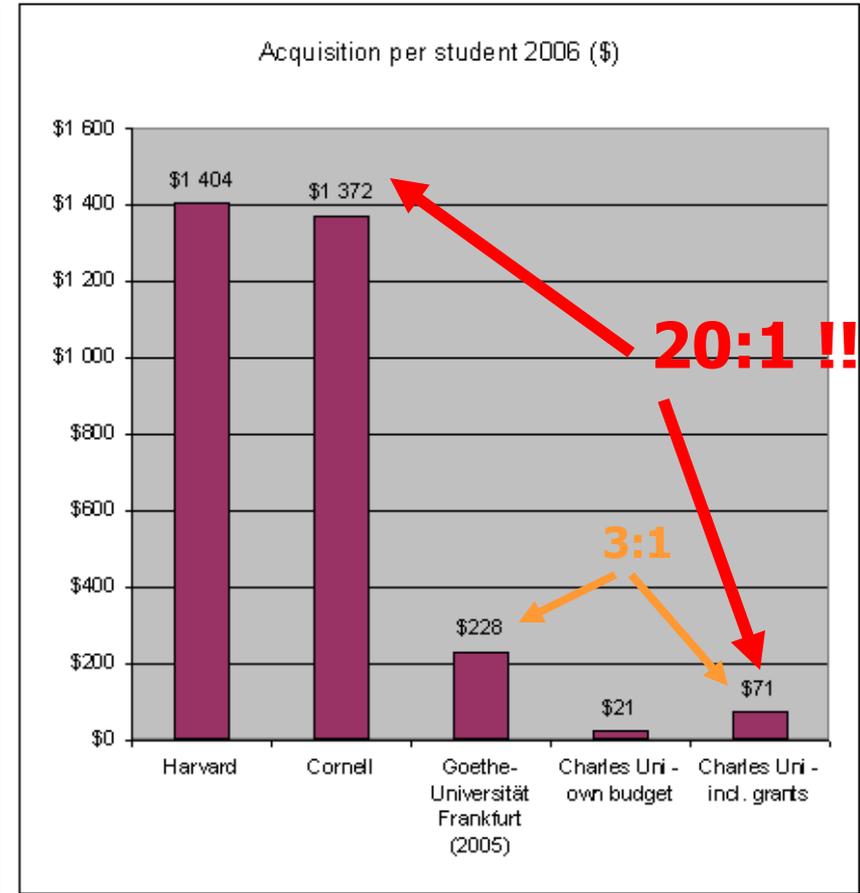
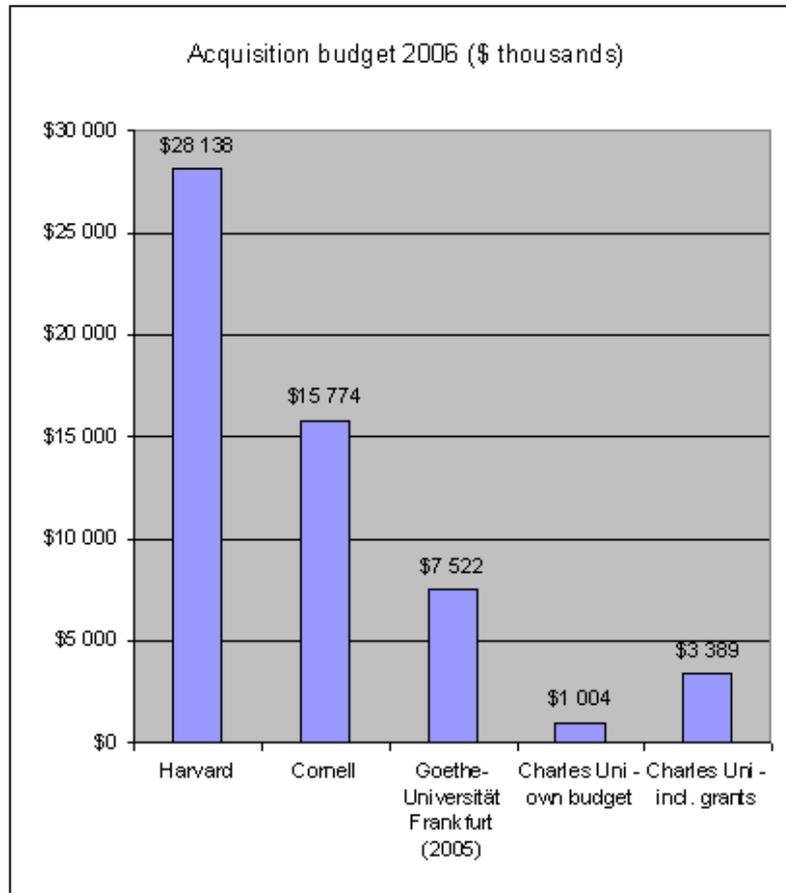
Academic libraries in CZ acquisition budgets

Total acquisition structure - Charles Uni (CZK thousands)



Source: Charles Uni

Academic libraries acquisition comparison



Source: Harvard, Cornell, Goethe-Uni, Charles Uni

Academic libraries general comparison



2006	Harvard	Cornell	Goethe-Universität Frankfurt	Charles Uni
total holdings (mil.)	15,8 mil.	7,6 mil.	7,5 mil.	4,6 mil.
holdings increase 2006	240 336	220 559	>135 000	78 236
e-journals	32 000	38 000	>20 000	>20 000
total active print journals	?	47 305	17 500	5 715
library staff	1 200	509	270	268
registered readers	?	?	41 120	91 060
students	20 042	11 500	33 000	47 831

Source: Harvard, Cornell, Goethe-Uni, Charles Uni

Libraries in CZ productivity tools needed



- E-resources represent major portion of available journals – need to be used!

	Czech Academy of Sciences	Czech National Library	Thomas Bata University
print (incl. local)	1 401	831	250
e-journals	19 344	11 000	17 694
Total	20 745	11 831	17 944
e-journals %	93%	93%	99%

Source: AiP minisurvey 04/2006

Conclusions

- CZ libraries are fully comparable to US & West-European libraries although their budgets are much lower
- Importance of e-resources grows quickly – and so does of productivity tools
- **Message to publishers:**
Discounting of US/international pricing in CZ is still necessary – and fully justifiable!

Thanks for your attention

Děkuji za pozornost

Questions?

Otázky?

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