

Ticino facing its neighbours and competitors

Findings based on the International Benchmarking Report 2006
of BAK Basel Economics

Confronti 2006

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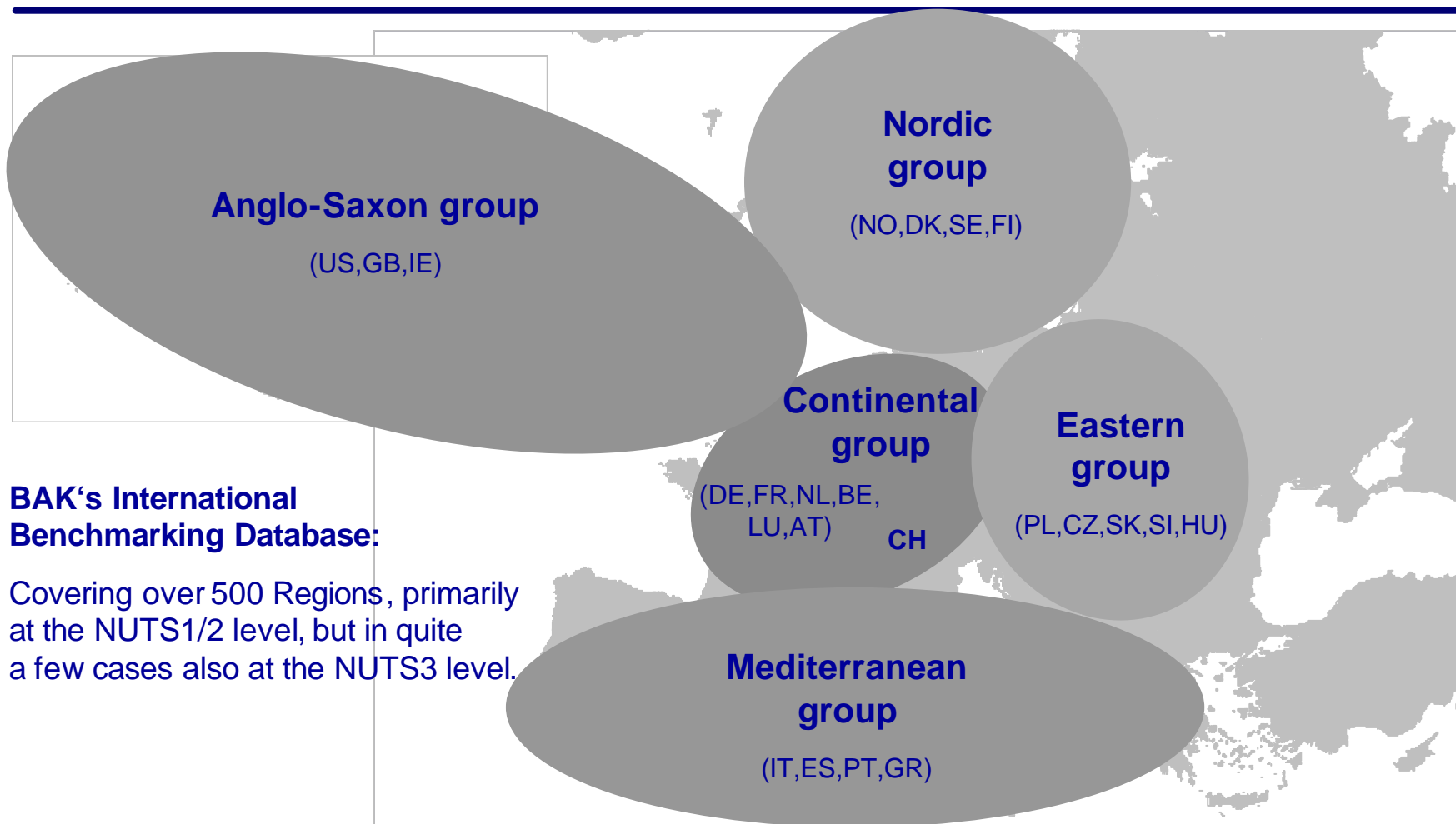
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1. Ticino: its neighbours and competitors in a global setting

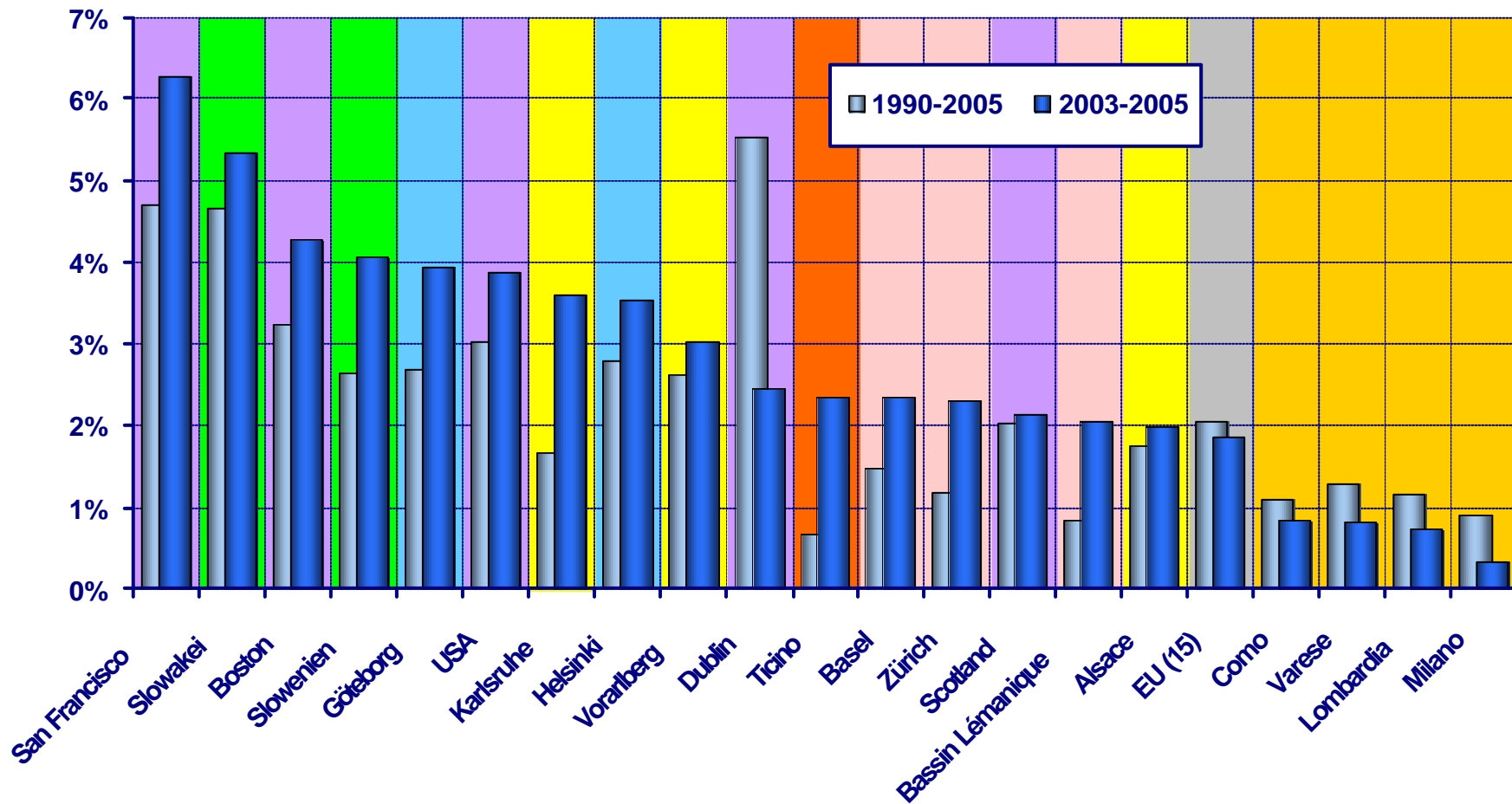
<u>Region</u>	<u>Political unit covered</u>	<u>Region</u>	<u>Political unit covered</u>
Ticino	Cantone Ticino	Gothenburg	Västsverige
Zurich	Kanton Zürich	Helsinki	Uusimaa
Basel	Kantone BS, BL	USA	USA
Bassin Lémanique	Cantons GE, VD	Boston	Massachusetts
Como	Provincia di Como	San Francisco	San Francisco Bay Area
Varese	Provincia di Varese	Dublin	Greater Dublin Area
Milan	Provincia di Milano	Scotland	Scotland
Lombardia	Regione di Lombardia	Slovenia	Slovenia
Alsace	Région d'Alsace	Slovakia	Slovakia
Karlsruhe	AAB Karlsruhe und Rastatt	European Union (15)	European Union (15)
Vorarlberg	Bundesland Vorarlberg		

The five groups of regions covered in this analysis



2. Recent economic performance

Growth of real GDP p.a. (based on USD at 2000 prices and 1997 PPP)



Source: BAK International Benchmarking Database 2005

3. The quality of framework conditions

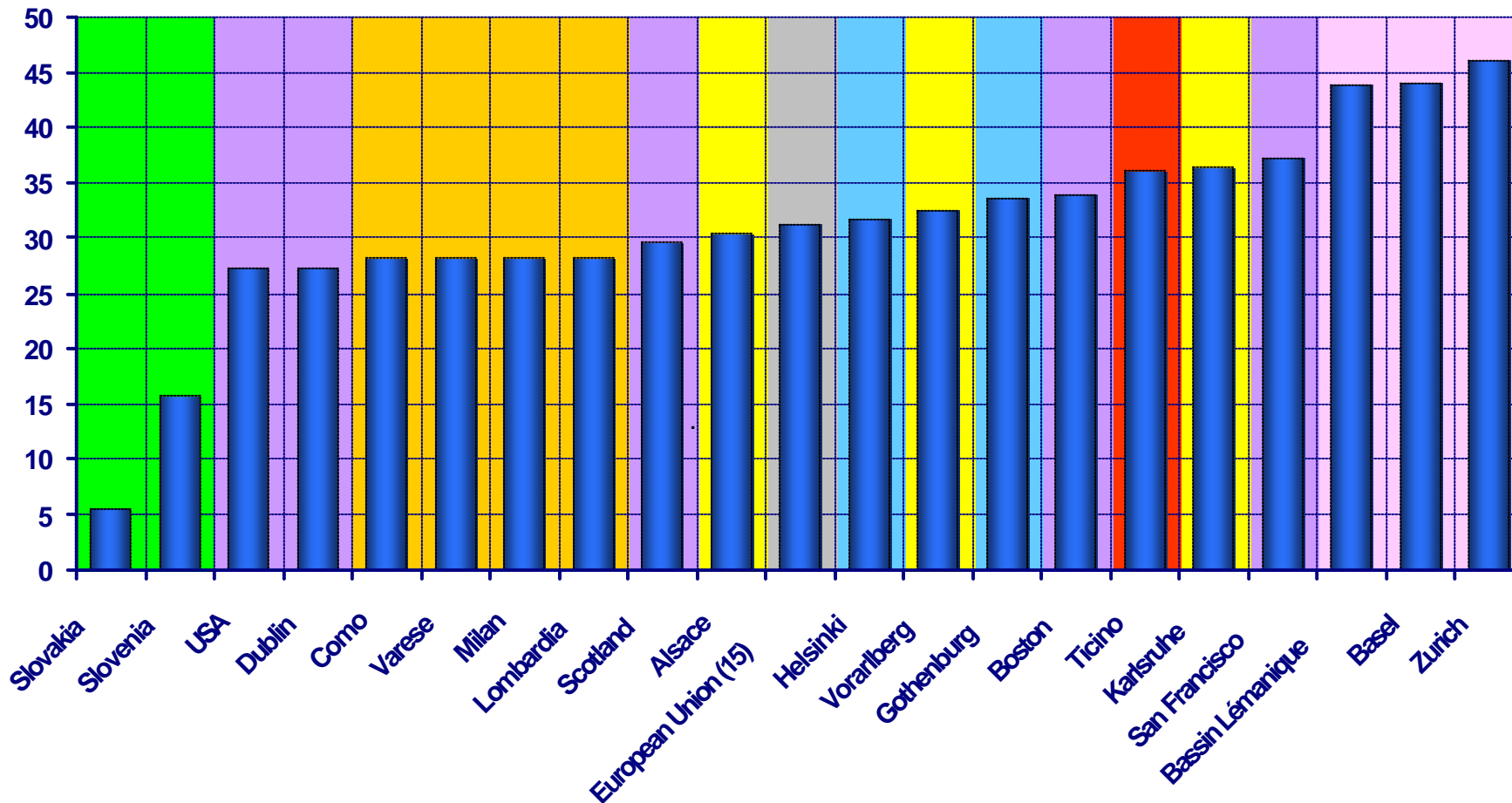
3.1 Labour cost

3.2 Innovation capacity

- **innovation resources**
 - human capital: share of employees with tertiary education
 - expenditures on research and development
 - research quality of universities
- **private sector innovation environment**
 - regulation of product and labour markets
 - taxation of companies and highly qualified manpower
 - connectivity: global accessibility

3.1 Labour cost per hour

2005, in USD



Source: BAK International Benchmarking Database 2005

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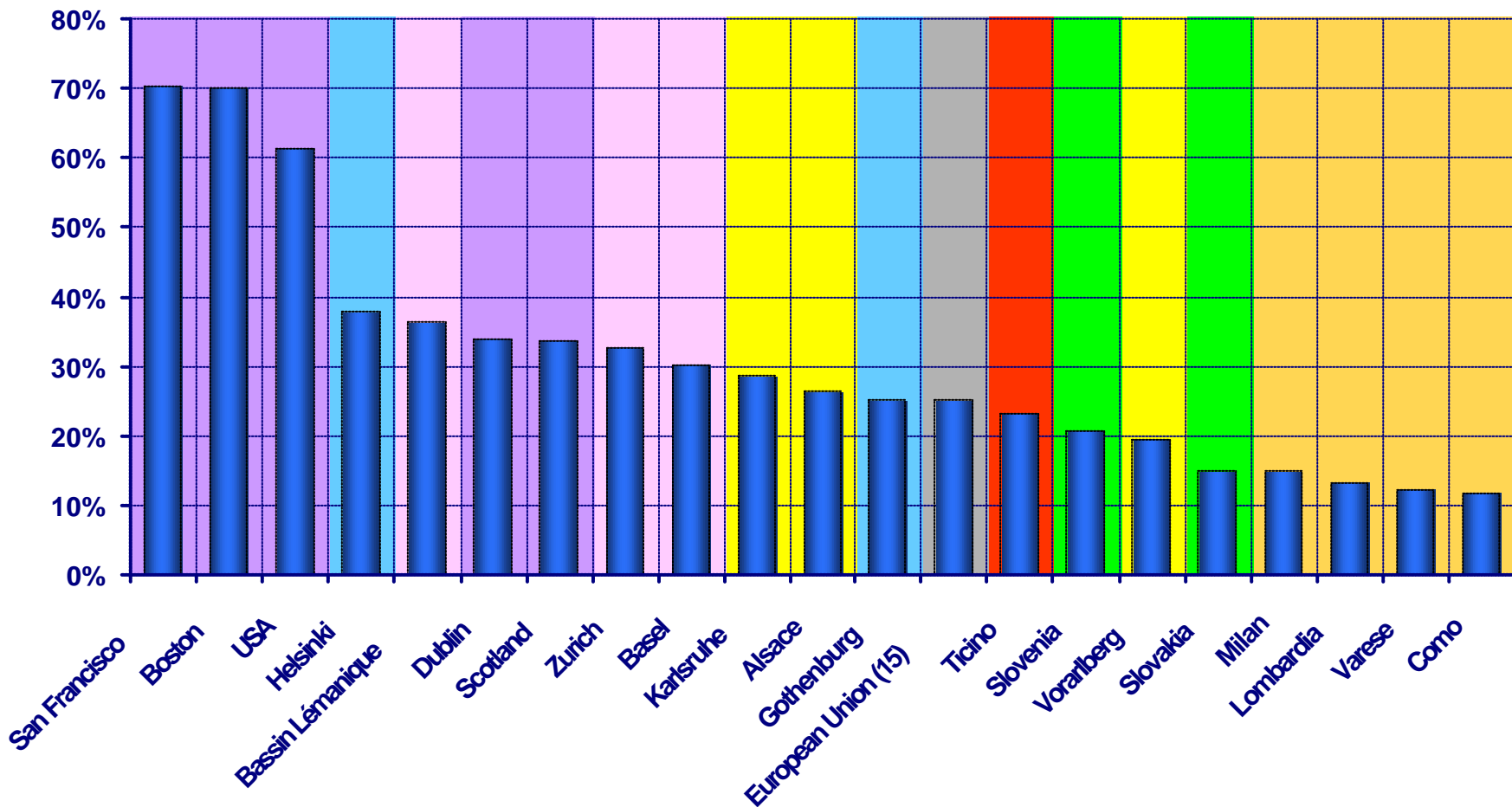
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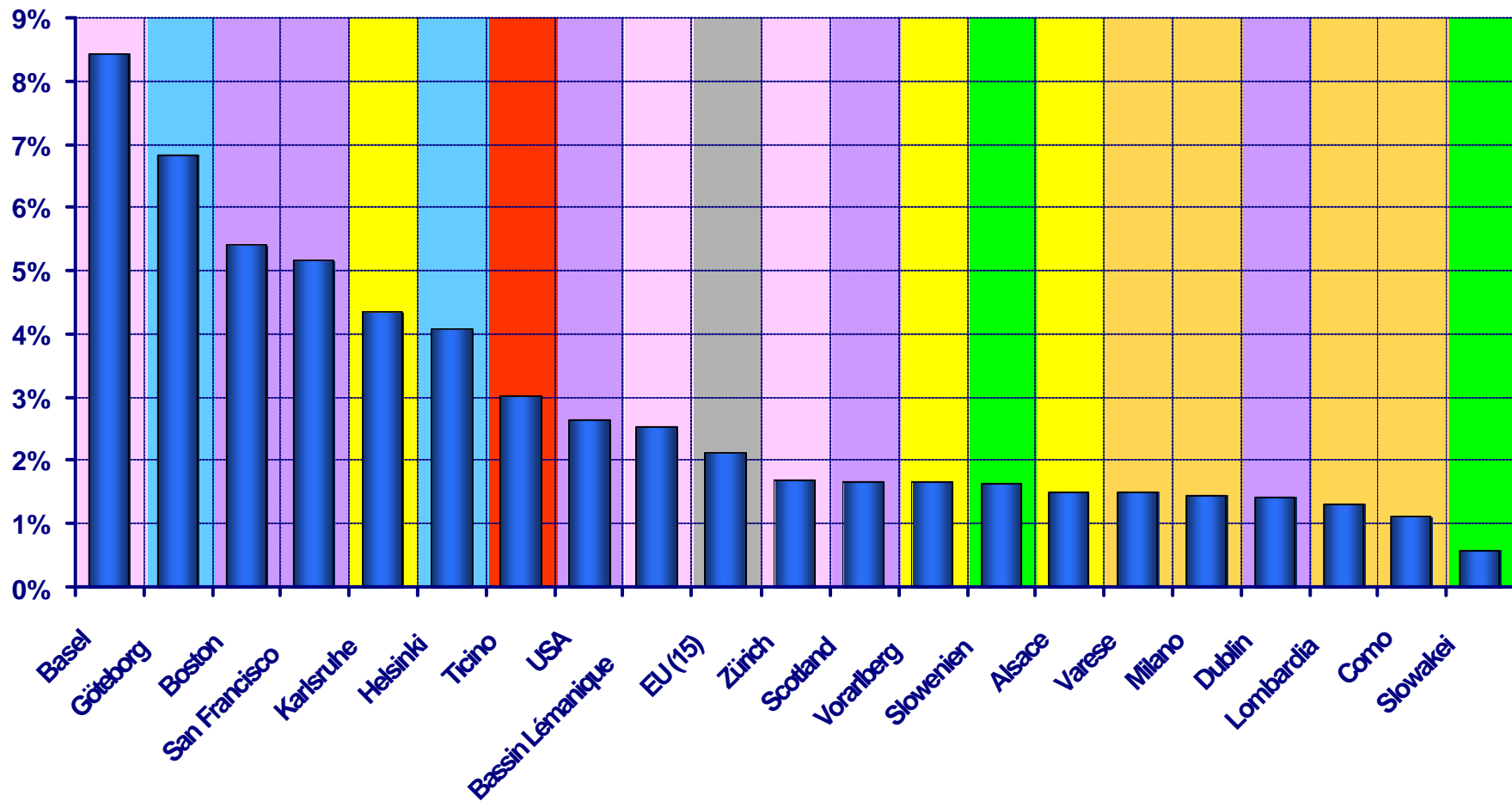
Share of employees with tertiary education in total employment, 2005



Source: BAK International Benchmarking Database 2005

Innovation resources:

Share of expenditure on research and development in GDP, 2005



Source: BAK International Benchmarking Database 2005

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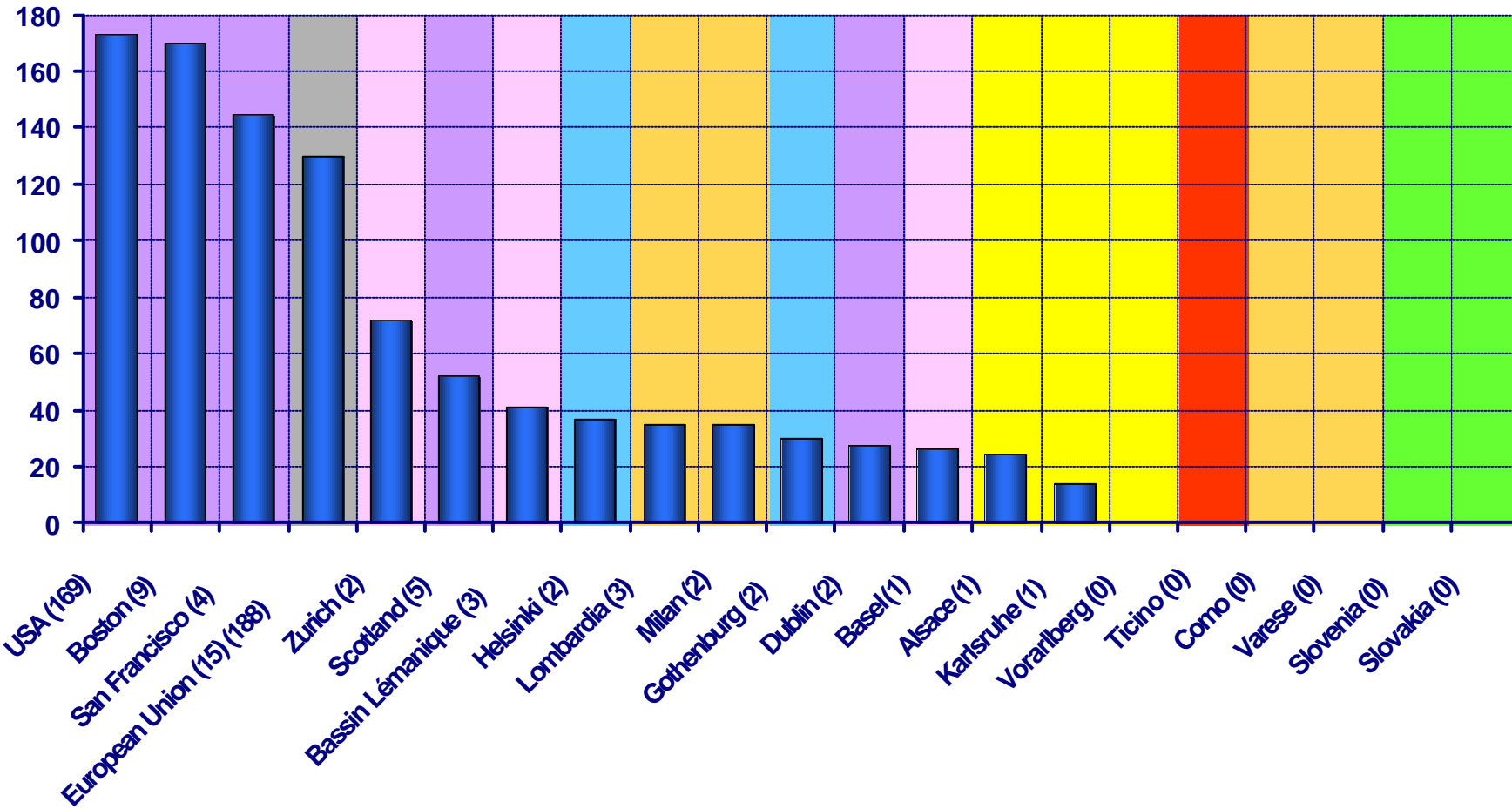
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Innovation resources: The research quality of universities 2006

Shanghai index of the 500 best universities of the world

Sum of scores of the Top 2 universities in the region



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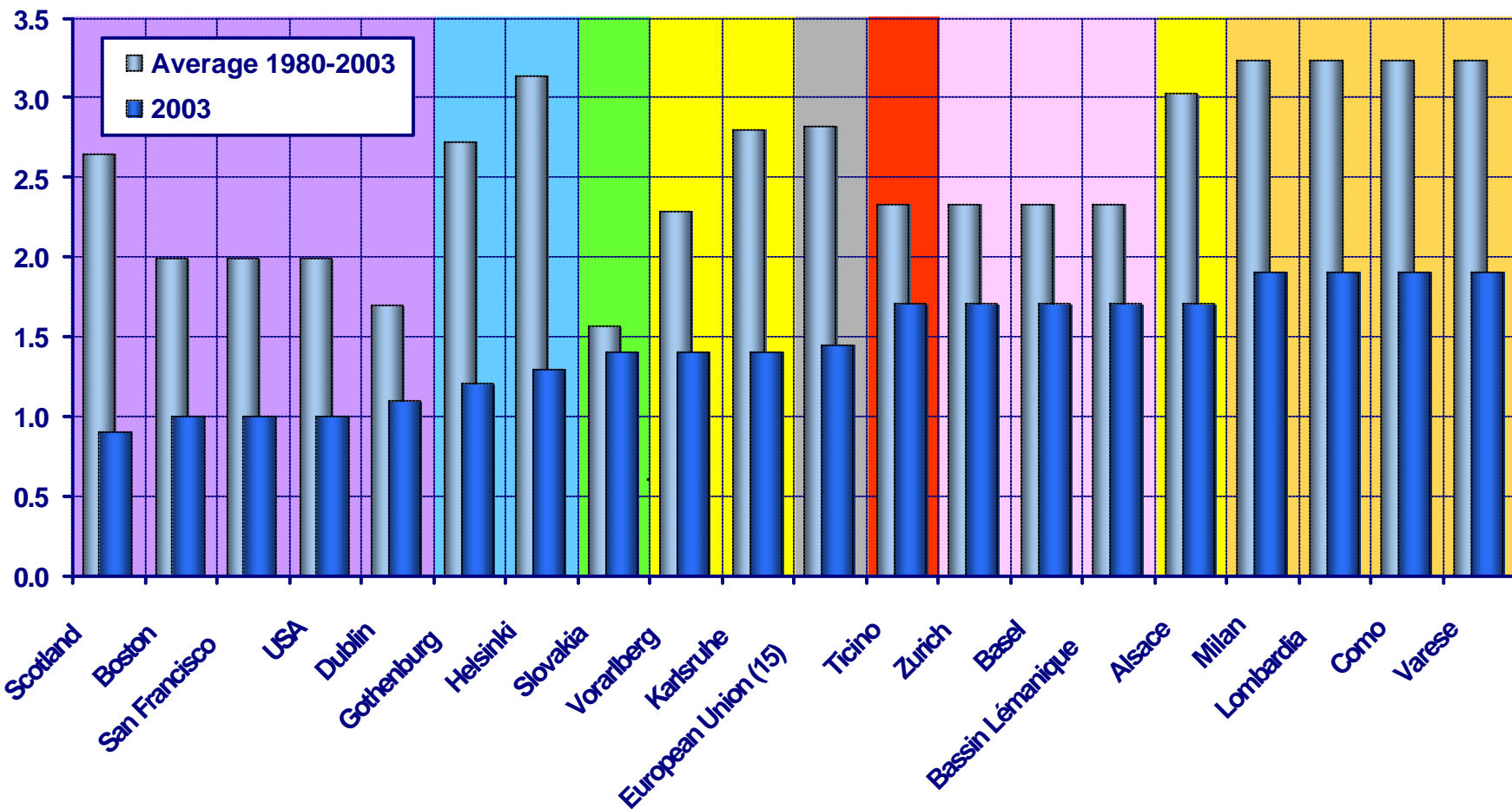
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Source: BAK International Benchmarking Database 2006

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Regulation of product markets

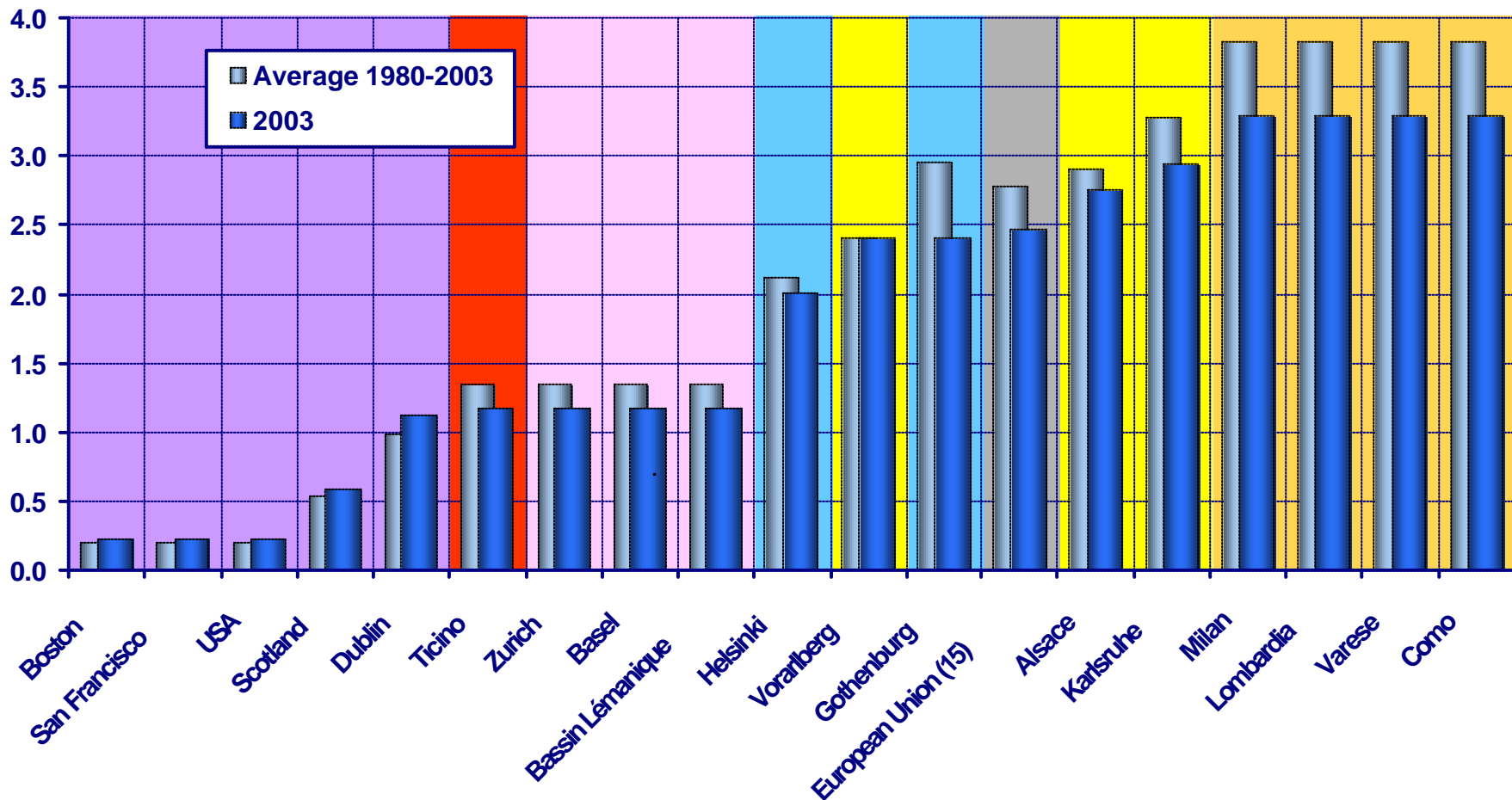
Index (0 = very liberal / 6 = very restrictive)



Source: OECD / BAK International Benchmarking Database 2003

Regulation of labour markets

Index (0 = very liberal / 6 = very restrictive)

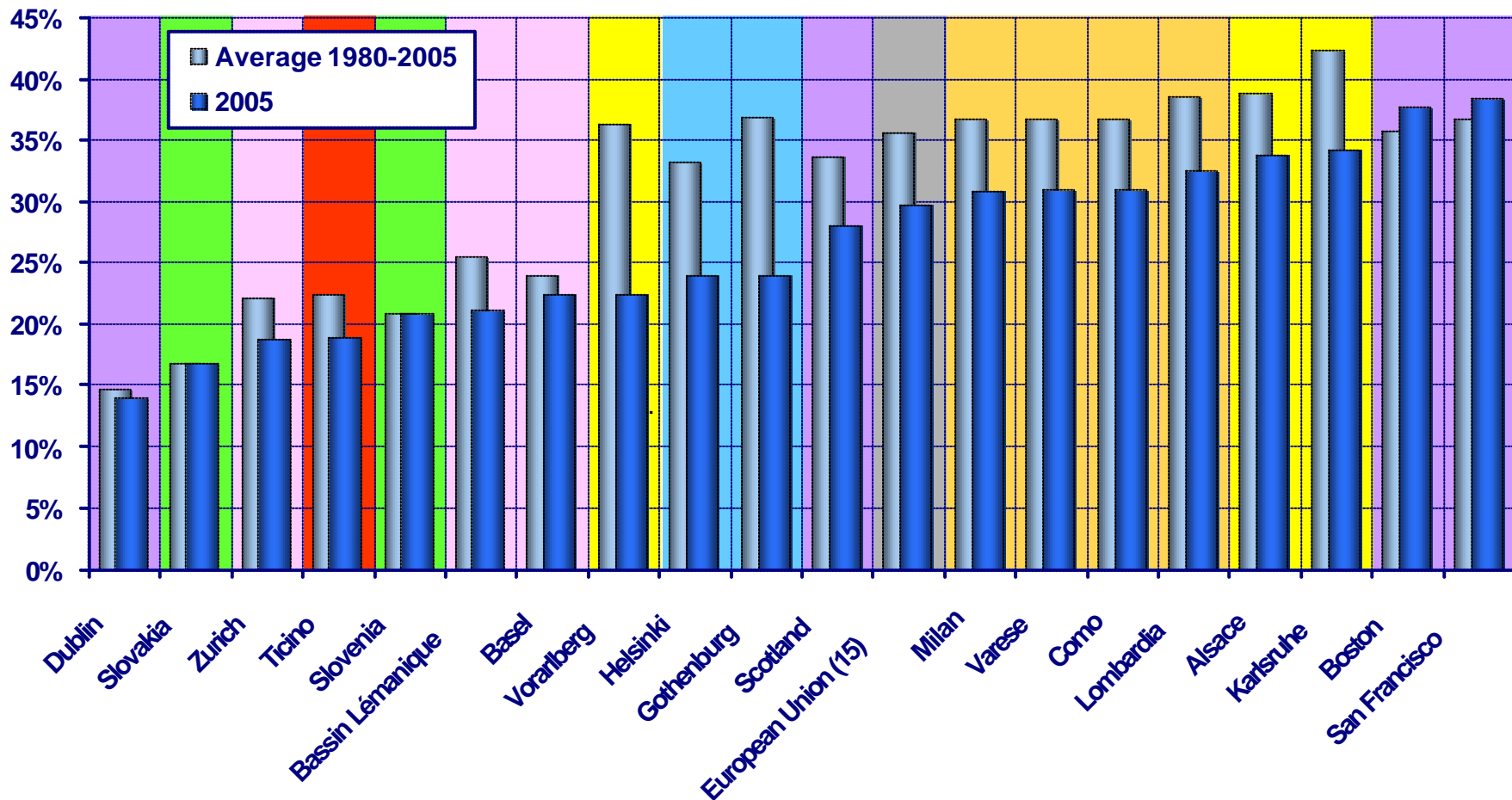


Source: OECD / BAK International Benchmarking Database 2003

Private sector innovation environment.

Company taxation

Effective annual tax rate



Source: ZEW / BAK International Benchmarking Database 2005

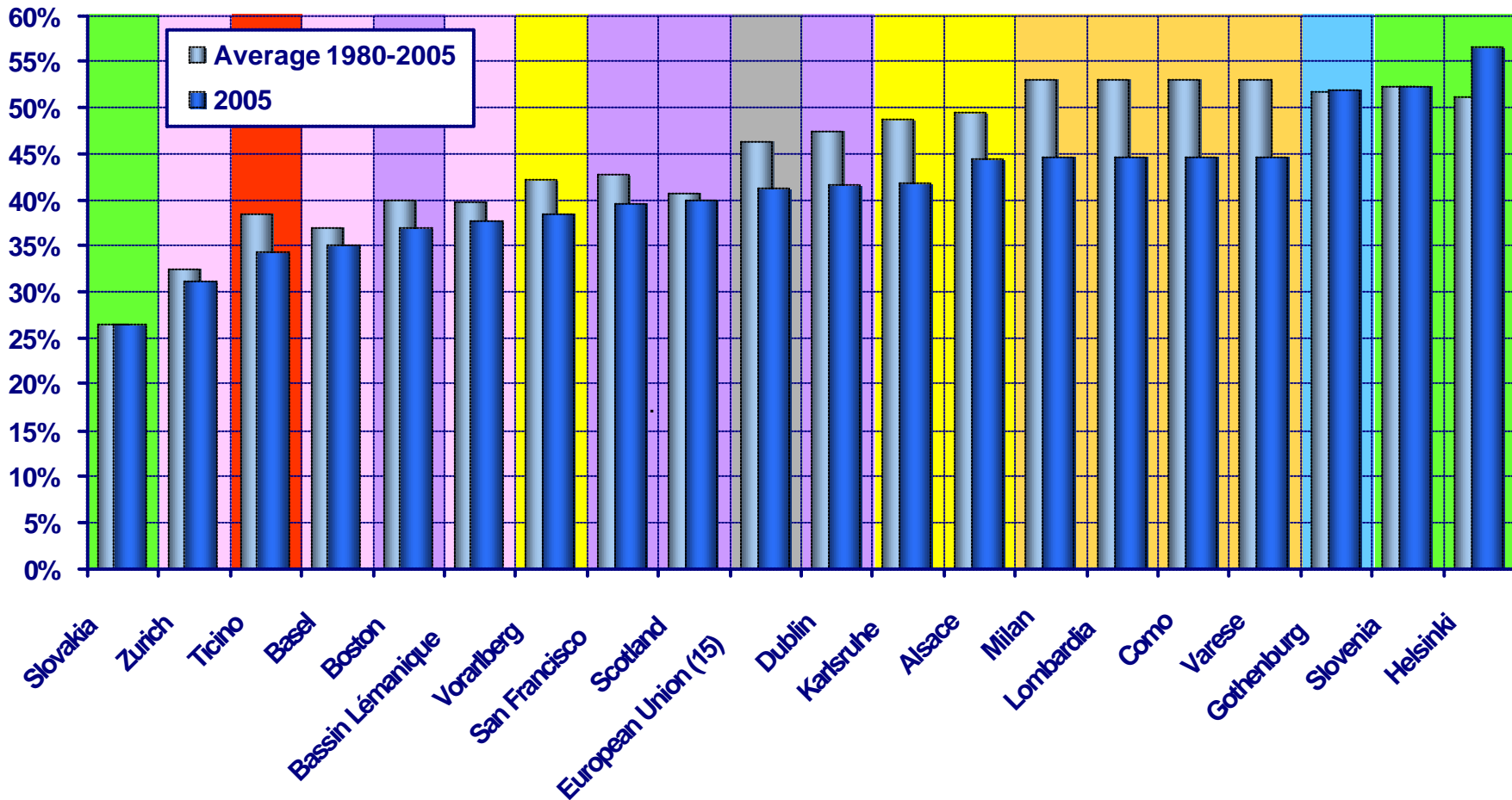
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Taxation of highly skilled* manpower

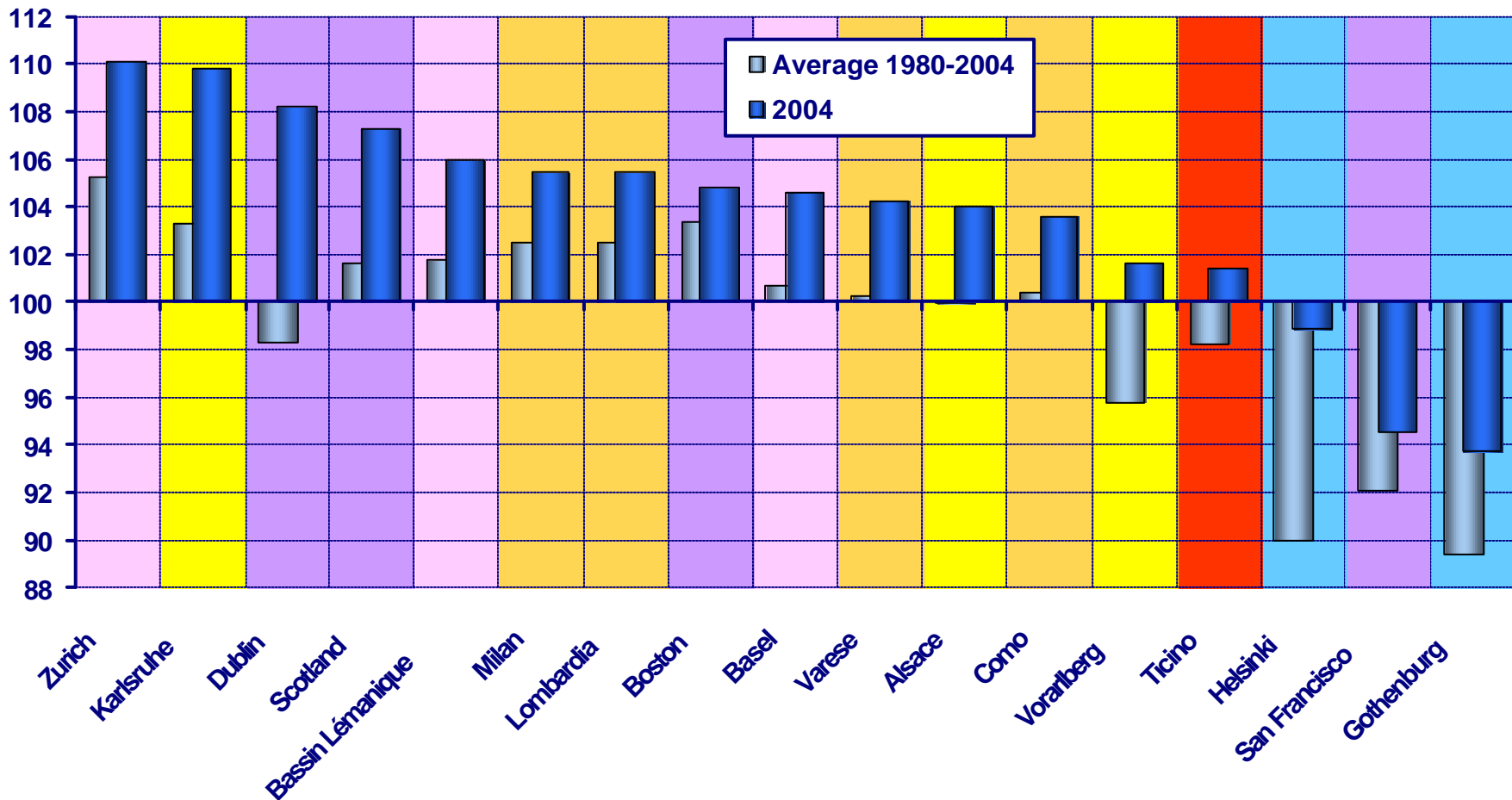
Effective annual tax rate (*disposable income of EUR 100'000/single person)



Source: ZEW / BAK International Benchmarking Database 2005

Global accessibility

Index, Average US/European Accessibility 2002 = 100



Source: IVT-ETH / BAK International Benchmarking Database 2004

A loose idea regarding a ranking of the innovation capacity of regions covered in this presentation

	Innovation resources				Private sector innovation environment						Overall Rank
	Human capital	Research quality	Exp. on R&D	Rank	Regulation		Taxation		Connect.	Rank	
					Product markets	Labour markets	Comp.	Manpower	Global		
Boston	2	2	3	1	2	1	19	5	9	5	1
Zurich	8	5	11	7	12	6	3	2	1	1	2
Bassin Lémanique	5	7	9	5	12	6	6	6	5	4	3
Scotland	7	6	12	8	1	4	11	10	4	3	4
USA	3	1	8	3	2	1	20*	7*	18*	9	5
Basel	9	13	1	6	12	6	7	4	10	7	6
San Francisco	1	3	4	2	2	1	21	9	20	11	6
Dublin	6	12	18	12	5	5	1	12	3	2	8
Helsinki	4	8	6	4	7	12	9	21	19	15	9
Ticino	14	16	7	13	12	6	4	3	15	8	10
European Union (15)	13	4	10	10	11	15	12	11	6*	12	11
Karlsruhe	10	15	5	11	8	17	18	13	2	13	12
Gothenburg	12	11	2	8	6	14	10	19	21	16	12
Vorarlberg	16	16	12	15	8	13	8	8	14	10	14
Slovakia	17	16	21	20	8	10*	2	1	16*	6	15
Slovenia	15	16	14	16	12*	10*	5	20	16*	14	16
Alsace	11	14	15	14	12	16	17	14	12	17	17
Milan	18	10	17	16	18	18	13	15	7	17	18
Lombardia	19	9	19	18	18	18	16	15	7	19	19
Varese	20	16	15	19	18	18	14	15	11	20	20
Como	21	16	20	21	18	18	15	15	13	21	21

*ad hoc estimate

Source: BAK International Benchmarking Database 20

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4. Conclusions

General:

International **cost advantages** can be seen as important determinants of regional competitiveness – at least temporarily - for

- regions from new EU member countries
- to a certain extent also for regions from Mediterranean Europe (primarily in Spain and in Greece and to a lesser extent in Italy and Portugal)

BUT: Asian regions compete even more on cost grounds!

High cost locations can only compete by maintaining/improving their **innovation capacity**:

- regions from Anglo-Saxon countries generally rank best, followed by most Nordic regions and then by the majority of regions from Continental Europe

BUT: Asian regions will become strong innovators in the not too distant future!

4. Conclusions

Ticino / Switzerland:

Cost disadvantages are compensated by relatively well developed **innovation capacity**: **Swiss regions** can compete successfully with regions from Anglo-Saxon countries.
The intra-Swiss ranking: Zurich, Bassin Lémanique, Basel, Ticino.

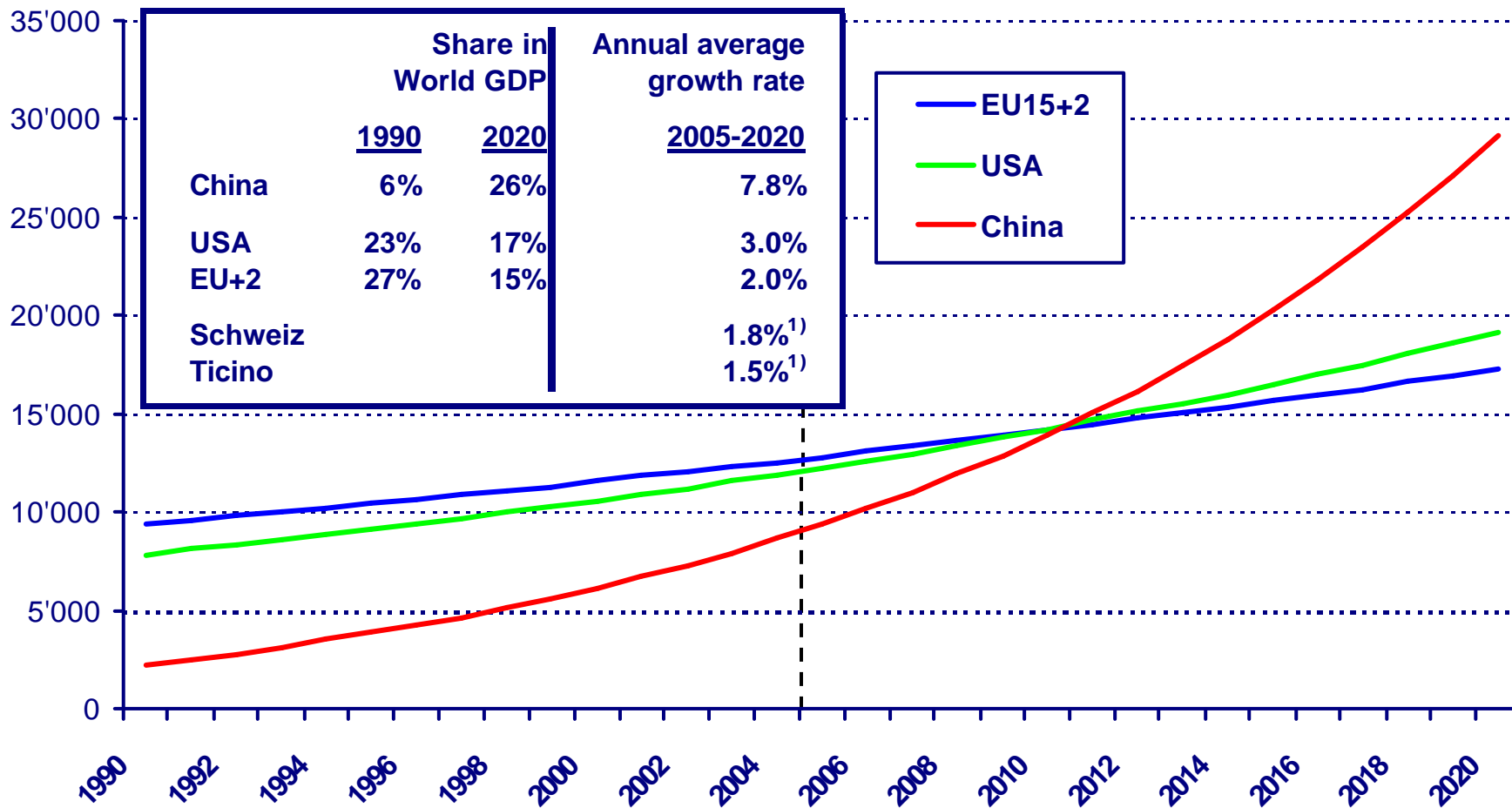
Ticino clearly better than its north Italian neighbours and competitors with the exception of Milano which is better connected and has universities covered by the Shanghai index (and Ticino not)

Political lessons for regions and countries:

- higher investment in education and research
- improving the efficiency of the innovation system (primarily universities)
- more innovation-friendly regulation of markets
- lower taxation

The Asian challenge: China as an example

Real GDP in Mrd. USD at 2000 prices and 1997 PPP



1) BAK forecast of October 2006 still reflecting an unchanged long term Swiss population and productivity growth scenario

Quelle: IMF / BAK