

Educational Vouchers: Theory & Evidence

Tilman Slembeck, Professor of Economics / Center of Public Policy

Andreas Bergmann, Professor of Public Mgmt. / Director Institute of Public Management



Evaluating Innovative Approaches to Public Service Delivery
OECD Seminar, 30 October 2007, Madrid

Overview

1. Theoretical Considerations

2. Effects of Vouchers and Voucher Systems

3. Conclusions (Slembeck)

4. The Zurich Case

- a) New Public Management style reforms in the 1990s
- b) Educational Vouchers for “Gymnasien” State of Zurich
- c) Conclusions (Bergmann)

Why vouchers?



1. Theoretical Considerations

Introduce competition among schools in order to

- provide **school choice** for students/parents (*classical liberal view*)
- make provision of education more **cost efficient** (*economic view*)
- **reduce financial burden** of governments (*public finance view*)

Types of Vouchers

Goals and Design of the program

- **limited vs. unlimited vouchers (private vs. public schools)**
- **fixed-value vs. supplemental vouchers**
- **income related vs. unrelated vouchers**
- **co-payments required vs. not required vouchers**
- **transport included vs. not included in vouchers**
- ...

Overview

1. Theoretical Considerations

2. Effects of Vouchers and Voucher Systems

3. Conclusions (Slembeck)

4. The Zurich Case

- a) New Public Management style reforms in the 1990s
- b) Educational Vouchers for “Gymnasien” State of Zurich
- c) Conclusions (Bergmann)

2. General Effects of Vouchers

Vouchers help to

- **increase secondary school enrolment in general (Colombia, Czech Republic) or for a target group (eg. girls in Bangladesh, Guatemala)**
- **increase the share of private schools in the educational market (Chile, Sweden)**
- **increase the number of student places available (Sweden)**

Specific Effects of a Voucher System

Sector Effect: Shift to more private schools

- Are private schools more efficient?
- Do countries with more private schools spend less per student?
- Are private schools less costly?

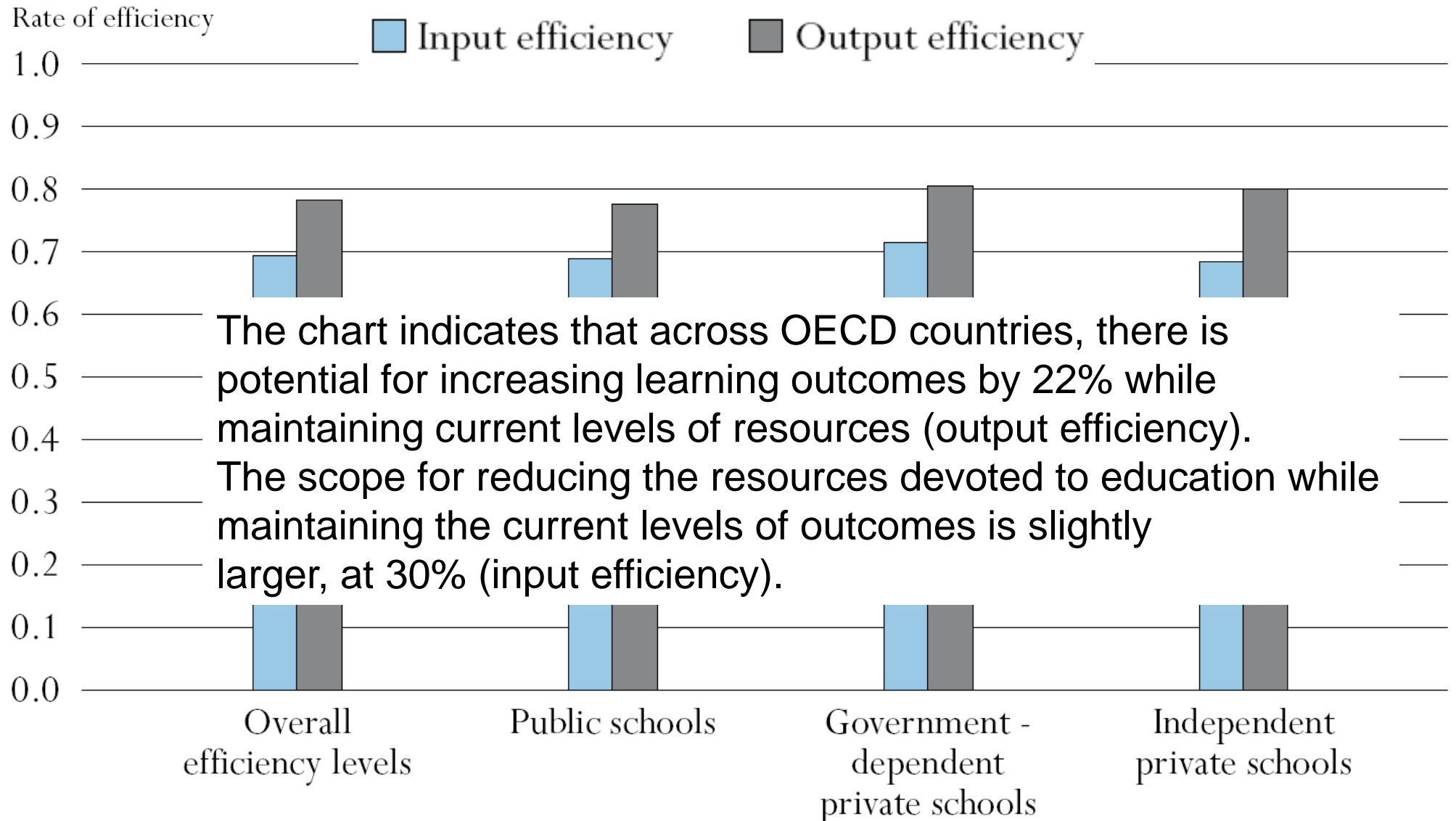
Effect on student achievement:

- Do students learn more?

Sorting Effect:

- Is racial and socioeconomic stratification / segregation increased?

Efficiency levels in primary and lower secondary education

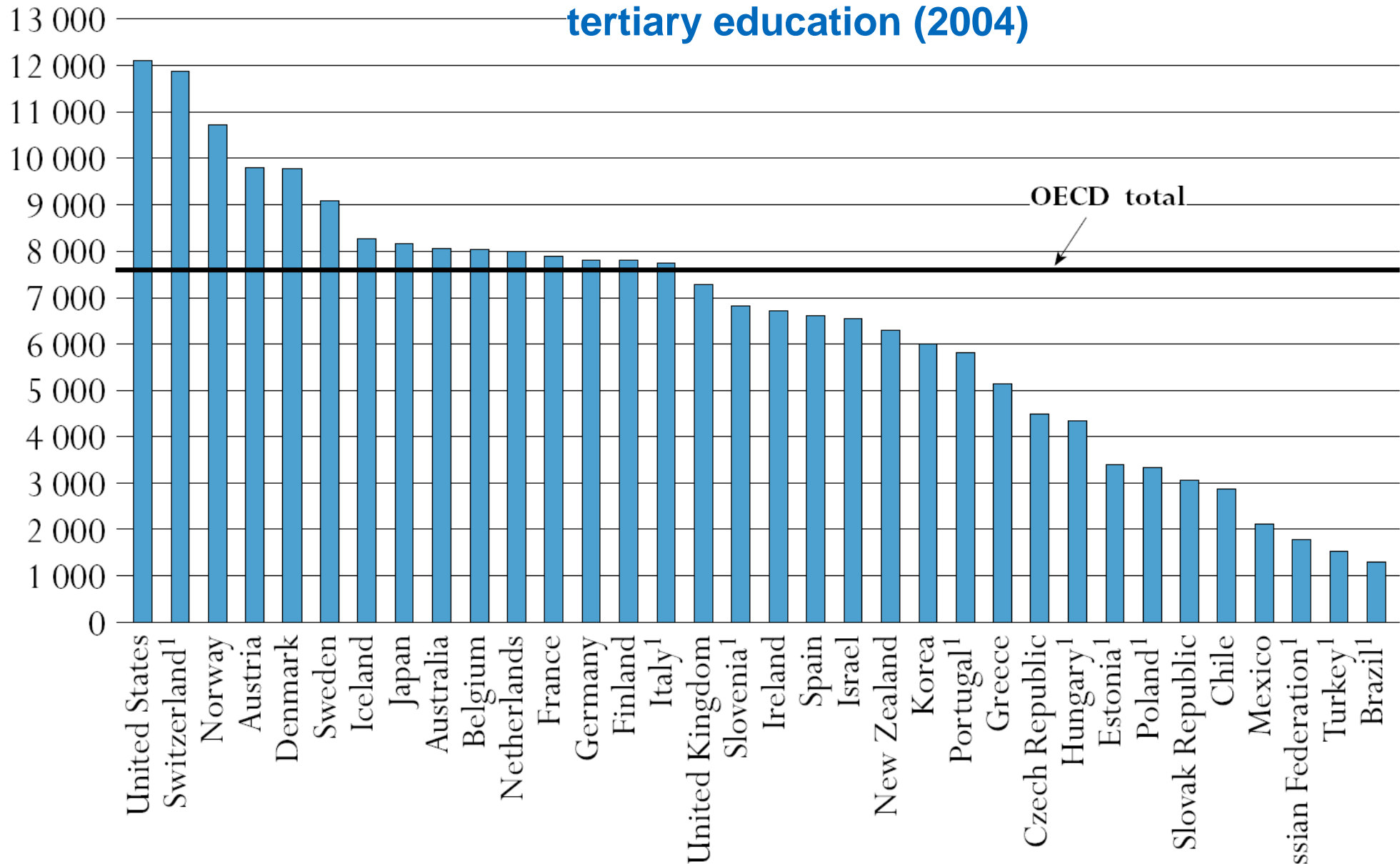


The chart indicates that across OECD countries, there is potential for increasing learning outcomes by 22% while maintaining current levels of resources (output efficiency). The scope for reducing the resources devoted to education while maintaining the current levels of outcomes is slightly larger, at 30% (input efficiency).

Source: Education at a Glance 2007, OECD Chart B7.1.

Annual expenditure on educational institutions per student in primary through tertiary education (2004)

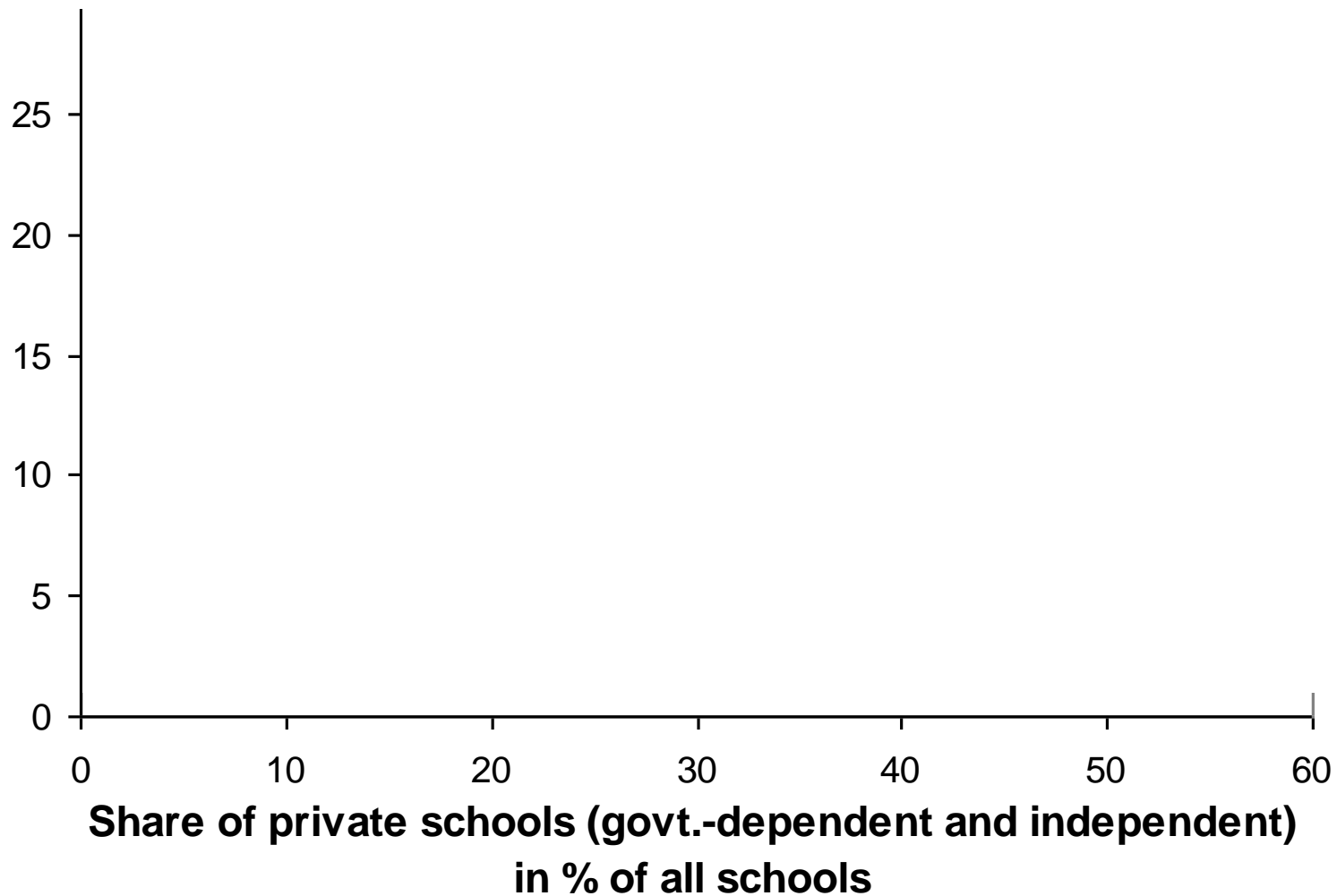
Expenditure per student
(in equivalent USD converted using PPPs)



Source: Education at a Glance 2007, OECD Chart B1.1.

Primary Schooling (2004-2005)

Expenditure per student*



Source: Education at a Glance 2007, OECD, Tables C2.9 and B1.4

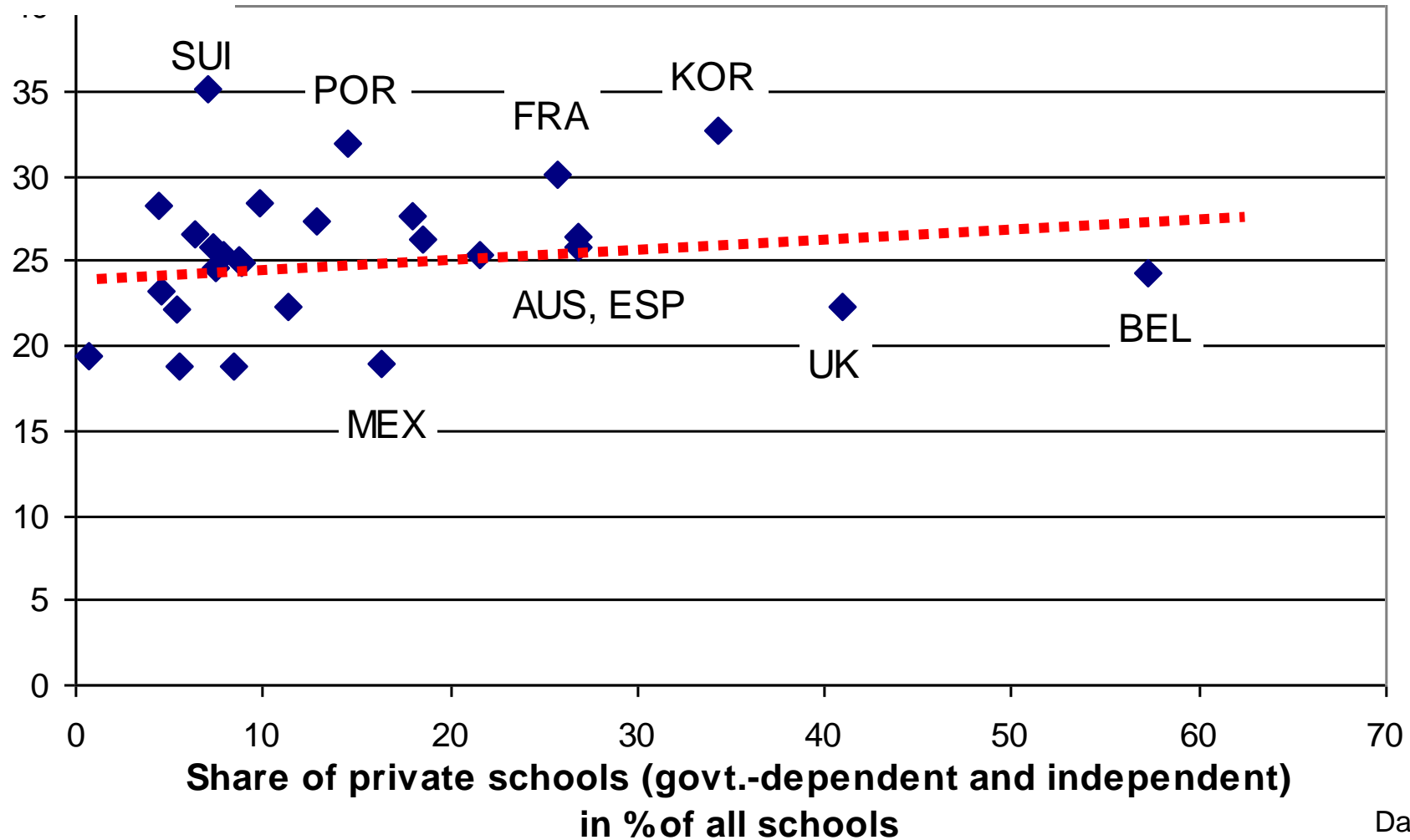
Data on Canada and Netherlands missing

*Annual expenditure on educational institutions per student for all services relative to GDP per capita

Secondary Schooling (2004-2005)

(upper and lower secondary education)

Expenditure per student*



Source: Education at a Glance 2007, OECD, Tables C2.9 and B1.4

Data on Canada and Netherlands missing

*Annual expenditure on educational institutions per student for all services relative to GDP per capita

Preliminary Conclusion (from eye-balling)

At the country level, educational spending per student seems uncorrelated with the share of private schools.

Effects on Costs

Voucher-induced competition from private schools may pressure traditional public schools to become more productive and force the weaker schools to close.

However:

- Public schools typically serve a **greater proportion of students who need costly services** such as special education or vocational education.
- Private schools, esp. religious private schools, **receive resources in many forms**: special fees, church subsidies, teachers working at below-market wages and donations of money, time, land and buildings (Levin, 1998).
- Competition may **force the public schools to offer a diverse and unfocused education program** as they struggle to be attractive to all comers (Fiske & Ladd, 2000).
- Unproductive public schools **may not go out of business** (Ladd, 2002).

Effects on School Achievement

Experiments with random assignment of vouchers

Dayton (OH), Washington (D.C.), New York City (NY)

- **Howell & Peterson (2002*)** find **no evidence of a general achievement difference** between public and private schools.
- **No difference for White and Hispanic students, some positive effects for Afro-American students.**

However, long term positive effects are possible, since public school personnel policies can be inefficient, and large-scale vouchers might **create important changes in the practices that govern hiring, promotion and pay among teachers.**

(Neal, 2002) → labor market effects**

*Howell, William G. and Paul E. Peterson (2002): The Education Gap: Vouchers and Urban Schools, Washington D.C.: Brookings Institution Press.

**Neal, Derek (2002): How Vouchers Could Change the Market for Education, Journal of Economic Perspectives, Vol. 16, No. 4. (Autumn, 2002), pp. 25-44.

Sorting Effects: Increase in racial and socioeconomic stratification?

Admissions rules and tuition policies matter!

Epple and Romano (1998 / 2002) show that

- **vouchers may exacerbate the cream skimming phenomena that is alleged to exist in private schools already.**
- **it is possible to design voucher systems that increase school efficiency but do not lead to increased ability stratification.**

Epple, Dennis and Richard E. Romano (1998): Competition Between Private and Public Schools, Vouchers, and Peer-Group Effects, American Economic Review. March, 88:1, pp. 33-62.

Epple, Dennis and Richard E. Romano (2002): Educational Vouchers and Cream Skimming, NBER Working Paper No. 9354.

Critical Review by Helen F. Ledd (2002, p. 13)

- One should expect **neither higher overall achievement nor lower resource costs** as a result of a shift of students from public to private schools.
- At most, there are likely to be **small achievement gains** for a selected group of African-American students.
- **Furthermore, a universal voucher program could possibly require the government to spend more public funds on education, because some of the voucher funds would undoubtedly go to families who would otherwise have paid all of the cost of putting their children in private schools.**

Helen F. Ladd (2002): School Vouchers: A Critical View, Journal of Economic Perspectives, Vol. 16, No. 4. (Autumn, 2002), pp. 3-24.

Overview

1. Theoretical Considerations

2. Effects of Vouchers and Voucher Systems

3. Conclusions (Slembeck)

4. The Zurich Case

- a) New Public Management style reforms in the 1990s
- b) Educational Vouchers for “Gymnasien” State of Zurich
- c) Conclusions (Bergmann)

3. Conclusions

- **The effects of a voucher system critically hinge upon its design.**
- **Vouchers can help to increase school enrollment (esp. in secondary, possibly in tertiary education).**
- **The effects of more private schools – especially the potential increase in student achievement and decrease in costs – are controversial.**
- **Voucher programs are most helpful when schools widely differ in quality.**

Misuse of Public Funds?

No existing models of agency or organizational structure provide clear guidance concerning whether **misuse of public funds would increase or decrease under vouchers...**

Under vouchers, some new schools might create significant social costs. Regulations and oversight could limit but not eliminate the possibility that some voucher parents would use public money to form a school that in practice, if not in name, operated as **Eastside Ku Klux Klan Academy**, and one can imagine other examples of potential voucher schools that might create more social costs than private benefits.

Neal, Derek (2002): How Vouchers Could Change the Market for Education, Journal of Economic Perspectives, Vol. 16, No. 4. (Autumn, 2002), pp. 25-44.

Overview

1. Theoretical Considerations

2. Effects of Vouchers and Voucher Systems

3. Conclusions (Slembeck)

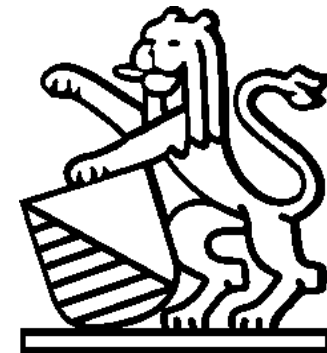
4. The Zurich Case

- a) New Public Management style reforms in the 1990s
- b) Educational Vouchers for “Gymnasien” State of Zurich
- c) Conclusions (Bergmann)

4.a) New Public Management style reforms

New Public Management

- No generally accepted scholarly definition: **mixture of reforms** including elements of **outcome/output oriented resource allocation, competition, privatization, decentralization, incentive schemes**
- In Switzerland, with the State of Zurich taking the lead: mainly **performance based budgeting**, a little more **competition** but hardly any privatization



4.a) New Public Management style reforms

“Wif!-Mittelschulen” one of the vanguard NPM-projects

- **Higher secondary education: 20 “Gymnasien”**
 - > high schools with an academic focus (~ grammar schools)
 - > about 20 percent of the 13/15 to 19 years old population
 - > owned by state (canton) and operated as agencies
 - > budget CHF 358 millions (2007), CHF 21,000 per student thereof 88 percent financed through state tax revenues (9 pct subsidies from local governments, 3 pct fees)
- **Reforms** started in 1995 with the following goals:
 - > performance based budgeting
 - > decentralization
 - > co-operation with private sector providers

Overview

- 1. Theoretical Considerations**
- 2. Effects of Vouchers and Voucher Systems**
- 3. Conclusions (Slembeck)**
- 4. The Zurich Case**
 - a) New Public Management style reforms in the 1990s
 - b) Educational Vouchers for “Gymnasien” State of Zurich
 - c) Conclusions (Bergmann)

4.b) Educational Vouchers for “Gymnasien”

New Law developed as part of the NPM-style reforms (LS413.21)

- **§37 Financial contributions to resident students at private schools**
 - > maximum 1/3 of cost of public provision (i.e. CHF 7'000)
 - > only valid for private schools which observe government rules and “act in the interest of the state”
- **Original idea: Tax allowance for private schooling**
 - > ruled out by federal legislation
- 1/3 is a **proxy for tax burden**
- **Cost of public provision is a proxy to avoid negotiations with private sector providers about costs of provision/fees**

4.b) Educational Vouchers for “Gymnasien”

New Law approved by referendum on June 13, 1999

- **60 percent approval rate**
- **Opposition/no-voter’s arguments, focussing on vouchers**
 - > competition would “damage” rigorous character of Gymnasien (teachers)
 - > misuse of public funds (left)
 - > enrollment already too high at public schools (right)
- **Decree only approved on January 29, 2003**
- **Currently **NO** vouchers/financial contributions to be paid**

4.b) Educational Vouchers for “Gymnasien”

Why not? Budget restrictions

- Disputed amount: CHF 5 millions
- Constitutional spending limits as well as opposition from the right wing: **no** additional funds **without full compensation!**
- Opposition from the left wing: **no funds to be taken away from state schools!** (new Labour MoE!)
- Minimum consent: **“currently” no funding due to budget restrictions** (Parliament Resolution Nr. 4047/2003, item 4)
 - > deemed legal as §37 only specifies “maximum contribution”, but no minimum levels

Overview

- 1. Theoretical Considerations**
- 2. Effects of Vouchers and Voucher Systems**
- 3. Conclusions (Slembeck)**
- 4. The Zurich Case**
 - a) New Public Management style reforms in the 1990s
 - b) Educational Vouchers for “Gymnasien” State of Zurich
 - c) Conclusions (Bergmann)

4.c) Conclusion

- **Referendum** could be won with relatively **modest form** of vouchers (one third of cost, only selected schools)
- **Budget restrictions** effectively **prevent introduction**
- **Different outcome likely** under unchanged political agenda of the Ministry of Education