International Practices in Fiscal Equalization

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Outline

• Why Fiscal Equalization Transfers (FET)?
• Alternate Approaches to Fiscal Equalization
• Canada: A Federal Program of Fiscal Capacity Equalization
• Germany: A Solidarity Program of Fiscal Capacity Equalization
• Australia: A Federal Program of Fiscal Capacity and Expenditure Need Equalization
• Switzerland: A Mixed Program
• Sweden and Denmark: Central-local and local-local equalization
• Some Lessons from International Practices
Fiscal Equalization Transfers: Why?

- **Political**: Large regional fiscal disparities can be politically divisive. May even create threat of secession. Fiscal equalization grants to create a sense of political unity.

- **Fiscal efficiency and fiscal equity**: Makes it possible for all citizens to be treated alike by the public sector regardless of the places of residence. Thereby advances social justice (fiscal equity) and efficiency in market resource allocation (fiscal efficiency).

- **But with full capitalization** – case weaker as you pay more for private services (housing) and less for public services in richer states and vice versa in poorer states. Hence matter of political taste (USA perspective).

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Fiscal Equalization: How?

• Fiscal Capacity Equalization using
  – Macroeconomic Indicators
  – Representative Tax System

• Fiscal Need Equalization through
  Representative Expenditure System
Measurement of Fiscal Capacity: Macroeconomic Indicators

- State Gross Domestic Product
- State Factor Incomes
- State Factor Incomes Accruing to Residents only
- Personal income
- Personal disposable income
A Representative Tax System approach to fiscal capacity equalization

Equalization from revenue source \( i \) =

\[
\left( \text{National average tax rate}_{i} \right) \times \left( \frac{\text{Per capita base in all states}_{i}}{\text{State’s own base per capita}_{i}} \right)
\]

= \[
\left( \frac{\text{Per capita potential revenue in All states (i)}}{\text{Per capita standardized revenue in state A (i)}} \right)
\]

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A Representative Expenditure System approach to Fiscal Need Equalization

Equalization entitlement from expenditure category i 

EQUALS

Per capita potential expenditure of State A for category i based upon own need factors if it had national average fiscal capacity

MINUS

Per capita potential expenditure of State A on expenditure category i if it had national average need factors and national average fiscal capacity

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An Alternate Representative Expenditure System

• Internal standards – equalize to what states on average actually spend.
International practices in transfers to reduce regional fiscal disparities

◆ **Design:** General non-matching fiscal capacity equalization transfers.

◆ **Better practices:** Fiscal equalization programs *(sources of data: CGC, Morris, Finance Canada, Dafflon, Lotz, Shah, Spahn & Werner)*

  ◆ **Paternal:** Australia (fiscal capacity plus fiscal needs) and Canada (fiscal capacity only)

  ◆ **Solidarity, Fraternal or Robin Hood:** Germany (fiscal capacity)

  ◆ **Mixed:** Switzerland, Sweden, Denmark

◆ **Practices to avoid:** General revenue sharing with multiple factors e.g. practices in Brazil, India and South Africa.

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Equalization programs are concerned with inter-jurisdictional equity (horizontal fiscal equity) not with interpersonal equity (vertical equity).

- **Australia**: capacity to provide services at the same standard with same revenue effort and same operational efficiency
- **Canada**: “reasonably comparable levels of public services at reasonably comparable levels of taxation across provinces”
- **Germany**: “to equalize the differences in financial capacity of states”
- **Switzerland**: “to provide minimum acceptable levels of certain public services without much heavier tax burdens in some cantons than others”.

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<table>
<thead>
<tr>
<th>Fiscal Equalization Program</th>
<th>Australia</th>
<th>Canada</th>
<th>Germany</th>
<th>Switzerland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal Status</strong></td>
<td>Federal Law</td>
<td>Constitution</td>
<td>Constitution</td>
<td>Constitution</td>
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<tr>
<td><strong>Paternal or Solidarity</strong></td>
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<td>Paternal</td>
<td>Solidarity</td>
<td>Mixed</td>
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<tr>
<td><strong>Total Pool determination</strong></td>
<td>Ad hoc</td>
<td>Formula</td>
<td>Formula</td>
<td>Ad hoc</td>
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<td><strong>Allocation</strong></td>
<td>Formula</td>
<td>Formula</td>
<td>Formula</td>
<td>Formula</td>
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<tr>
<td><strong>Fiscal capacity equalization</strong></td>
<td>Yes, RTS</td>
<td>Yes, RTS</td>
<td>Yes, Actual Revenues</td>
<td>Yes, major macro tax bases</td>
</tr>
<tr>
<td>Fiscal Equalization Program</td>
<td>Australia</td>
<td>Canada</td>
<td>Germany</td>
<td>Switzerland</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------</td>
<td>--------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Fiscal Need Equalization</td>
<td>Yes</td>
<td>No</td>
<td>No (only pop size and density)</td>
<td>some</td>
</tr>
<tr>
<td>Program Complexity</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Political Consensus</td>
<td>No?</td>
<td>Yes (?)</td>
<td>Yes (?)</td>
<td>Yes</td>
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<tr>
<td>Who recommends</td>
<td>Independent agency</td>
<td>Intergov. Committees</td>
<td>Solidarity pact II</td>
<td>Federal Government</td>
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<tr>
<td>Sunset clause</td>
<td>no</td>
<td>Yes (5 years)</td>
<td>no</td>
<td>no</td>
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<tr>
<td>Dispute resolution</td>
<td>Supreme court</td>
<td>Supreme Court</td>
<td>Constitutional court</td>
<td>Supreme court</td>
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</table>
Canada – Fiscal Equalization

• Separate equalization programs for provinces and territories.
• Provinces (10): RTS based fiscal capacity equalization. In addition Canada Health (CHT) and Social Transfers (CST) with strong equalizing impacts.
• Territories (3): Territorial Formula Financing includes fiscal capacity equalization and expenditure need compensation where
  – Expenditure need = base year expenditure * average growth in provincial spending * (pop growth in Ts/pop growth in Canada)
  – Fiscal capacity = NATR * own base adjusted for special circumstances
Federal equalization transfers to provinces:

- Basic principles enshrined in the constitution.
- “Glue that holds the federation together”.
- Considers all provincial-local revenue sources.
- GNP growth rate cap
- Floor: Yearly decline limited to 1.6% of the equalization standard
- Formula determined Level and Allocation
The Equalization Formula
2004-2005

$ per capita

Standard: $6,126

Equalization Payments

Fiscal Capacity

Excludes floor provisions

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Germany – Fiscal Equalization in 3 stages

- **Stage 1**: Equal per capita distribution of 75% of States’ share of VAT revenues (47.8% of total) to all 16 states and remaining 25% as supplement to financially weak states.

- **Stage 2**: Formal Fiscal Equalization Program through Solidarity Pact II – Rich state contribute to the pool through a progressive tax (45 – 72.5% rate) and poor states receive progressive subsidy from the pool.

- **Stage 3**: Federal Supplementary grants
The equalizing impact of distribution of VAT revenues

Revenue per capita relative to average

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How will the new Finanzausgleich 2005 work under Solidarity Pact II

• A fiscal capacity yardstick is defined as national average states (100% in the pool) and municipal (64% in the pool) per capita revenues (state population inflated by 1.35 for city states and 1.05 for thinly populated states.)

• Each State’s fiscal capacity per capita is measured against this yardstick

• ‘Poor’ States with fiscal capacities in the range 50-95% are raised to 86-98 % of national average.

• ‘Rich’ States pay in progressive steps with marginal tax rate in range of 45-72.5%

• The Finanzausgleich is a pure horizontal clearing mechanism.

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Compensation of marginal tax revenue
Solidarity Pact II - 2005 German Equalization Program

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„Effectiveness“ of Finanzausgleich

Per capita revenue before and after Finanzausgleich relative to average

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Australia

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ASSESSSED GRANT 
\((B_i)\) 
EQUALS 
REVENUE NEEDS 
PLUS 
EXPENDITURE NEEDS 
MINUS 
ASSESSSED NEEDS MET BY 
OTHER FEDERAL TRANSFERS
EXPENDITURE NEED FACTORS

(a) SCALE FACTORS

(b) POPULATION AND RELATED FACTORS
   - Dispersion
   - Urbanization
   - Social composition
   - Age structure

(c) ENVIRONMENT FACTORS
   - Physical
   - Economic

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PROCESS

COMMONWEALTH GRANTS COMMISSION

↓

FEDERAL CABINET REVIEW

↓

PREMIERS CONFERENCE

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THE AUSTRALIAN PROGRAM: An Impressionistic View

- Comprehensive and precise calculations by an independent agency. A Theoretician’s dream program – full equalization – focus on absolute comparability of services across states and Ts.
- Independent agency with dedication to professional excellence
- CGC relativities have gone largely unchallenged except June 1982 Premiers’ conference.
- Agency Model replicated by India (1948) and RSA (1995)
- Five year moving average – stability of payments
- Massive amount of data analyzed – 40 programs, 18 tax bases and countless relevant factors.

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THE AUSTRALIAN PROGRAM: Impressions - 2

- Policy neutrality? – strategy possible
- Data issues: large amount of data not certified by ABS.
- Past allocations influence current entitlements.
- Accountability in governance concerns
- Disincentives for revenue raising, development of new bases
- Lack of incentives for benchmarking, competition, cost saving and innovation
- Perverse incentives for imprudent fiscal management especially public sector wages and employment.
- Perverse impact on factor mobility – probably not significant.
Australian Program – General Comments

• Highly complex. A black box even for a serious student.
• “Given the number of conceptual and empirical difficulties.. and numerous judgments.. different relativities (and grant outcomes) could be just as valid as those presented”. (CGC 2000/07, October 2000)
• Total pool arbitrarily determined. A growing revenue base – growing equalization payments but why?
• RTS difficulties: State revenues small (16% of total revenues) and difficult to define tax bases
• Expenditure need assessment highly complex yet subjective and imprecise.
• SPP equalization adjustment rationalization ?

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CGC Evaluation of Fiscal Capacity – Some pitfalls

- No comparable tax base data for: payroll taxes, land revenues, financial transaction taxes, gambling taxes, insurance taxes, vehicle registration fees, and mining revenues.
- Proxies with pitfalls e.g. “Household disposable income discounted by judgment” for gambling taxes. Rationale?
- Achilles Heel of RTS - mining revenues. Disincentive for net recipient states in exploitation (“base tax-back” problem). Also WA and NT perceptible influence on NATR- incentive to reduce – “rate tax-back” problem. If higher than average cost of exploitation in a recipient state its tax capacity overstated. If rent received in a form other than revenues – capacity understated.
- Overall- small revenues- non-comparable bases. Are we doing better than a macro tax base indicator?

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CGC Evaluation of Expenditure Needs

• Absolute comparability – is it worth pursuing? Is equal access to all services in remote areas desirable at any cost – trade off between efficiency and horizontal equity. If a rich state decides to send a man to the mars or pave its roads with gold or buy limousines for its officials– why should equalization payments go up? Focus on a few merit goods more desirable.

• Diverts states energies to proving that they “need more to do less” or “money does not buy much” as opposed to “doing more with less”. Papakura example.

• Some rewards for bad behaviors e.g. excessive use of services by specific groups; States offer tax expenditures, assume contingent and non-contingent liabilities.

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CGC- Expenditure Need Assessment - technical issues

• Overall approach sound and defensible but pursuit of idealism and constant refinements led to super complexity and non-transparency. Highly data and subjective judgment intensive.

• For highly correlated factors - disabilities artificially magnified through double counting and multiplication.

• Use of judgment on factors and weights inevitable but controversial
CGC Expenditure Needs Assessment .. continued

- Determinants of expenditure needs using broad judgments rather than econometric analysis.
- Functional forms - how various factors are combined also arbitrary. Using multiplication for interacting factors accentuate disabilities.
- State expenditures not independent of past CGC allocations.
- Assumes costs independent of management paradigm and use independent of incentives.
An Example – Government Secondary Education (non-govt. in bold)

- Uses a mixture of **actual and notional** enrollments and includes students from diplomatic families
- Students from disadvantaged backgrounds weighted 1.1 - 1.7
- Grade costs – years 11 and 12 weighted by 1.2
- **Administrative scale, admn. input cots**, service delivery scale, Urban influences, humanitarian refugees, **cross border students**, vandalism, dispersion, isolation, school input costs, wages, accommodation, electricity, rural students, isolation
- Different weights for factors for government and non-government schools.
- If above average in non-govt - increase in grant although state not educating them
An Example of Expenditure Need Determination in Australia: Secondary Education Expenditure Need Factors

Table 4 - Government Secondary Education Factors - 1995-96

<table>
<thead>
<tr>
<th>Disability Factors</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
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</thead>
<tbody>
<tr>
<td>Dispersion</td>
<td>0.9973</td>
<td>0.9921</td>
<td>1.0093</td>
<td>1.0106</td>
<td>0.9972</td>
<td>0.9952</td>
<td>0.9885</td>
<td>1.0710</td>
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<tr>
<td>Grade Cost</td>
<td>1.0014</td>
<td>1.0028</td>
<td>0.9966</td>
<td>0.9950</td>
<td>0.9992</td>
<td>0.9998</td>
<td>1.0016</td>
<td>0.9979</td>
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<tr>
<td>Input Costs</td>
<td>1.0120</td>
<td>0.9950</td>
<td>0.9860</td>
<td>1.0030</td>
<td>0.9910</td>
<td>0.9900</td>
<td>1.0080</td>
<td>1.0340</td>
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<tr>
<td>Relevant Population</td>
<td>0.9749</td>
<td>0.8874</td>
<td>1.0983</td>
<td>1.1639</td>
<td>0.9679</td>
<td>1.1422</td>
<td>0.9750</td>
<td>1.2226</td>
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<td>Administrative Scale</td>
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<td>0.9946</td>
<td>0.9946</td>
<td>1.0065</td>
<td>1.0105</td>
<td>1.0304</td>
<td>1.0463</td>
<td>1.1139</td>
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<tr>
<td>Service Delivery Scale</td>
<td>0.9922</td>
<td>0.9906</td>
<td>1.0031</td>
<td>1.0153</td>
<td>1.0166</td>
<td>1.0380</td>
<td>0.9714</td>
<td>1.1141</td>
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<td>Vandalism &amp; Security</td>
<td>1.0023</td>
<td>1.0023</td>
<td>0.9973</td>
<td>0.9973</td>
<td>0.9973</td>
<td>0.9923</td>
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<td>Cross-border</td>
<td>0.9965</td>
<td>1.0001</td>
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<td>1.0001</td>
<td>1.0660</td>
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<td>Category Disability</td>
<td>0.9692</td>
<td>0.8658</td>
<td>1.0815</td>
<td>1.1941</td>
<td>0.9772</td>
<td>1.1917</td>
<td>1.0440</td>
<td>1.6605</td>
</tr>
</tbody>
</table>
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**STATES’ RELATIVE REVENUE RAISING CAPACITIES, AVERAGE 1998–99 TO 2002–03**

![Chart showing relative revenue raising capacities of different states.

**STATES’ RELATIVE COSTS OF PROVIDING SERVICES, AVERAGE 1998–99 TO 2002–03**

![Chart showing relative costs of providing services of different states.

Source: Figures 1 and 2 from Report on State Revenue Sharing Relativities 2004 Review (Main Report)

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Tax effort in a majority of net recipient states is lower.
Zero Sum Game: Interstate transfers with HFE 2004-05

- NT: $1391m
- Queensland: $849m
- NSW: ($2336m)
- ACT: ($9m)
- Victoria: ($1733m)
- TAS: $1454m
- SA: $386m
- WA: $722m
Robin Hood at work in Australia

Per Capita Subsidy (Tax) for 2004-05 Distribution compared to Where GST revenues were collected.

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HFE: Variations from equal per capita distribution of GST

Australia: Variation of Actual GST Distribution from Equal Per Capita Distribution (of $1900 per capita)
Does the program really equalize?

• With reference to equal per capita?
• Correlations with macro fiscal capacity indicators?
  – State GSP  0.308
  – State factor incomes  0.485
  – State gross household income  - 0.049
  – State disposable income  0.017
SWITZERLAND: Proposed New Equalization Program effective 2006

- **Reassignment of responsibilities**, federal, cantonal, shared, and inter-canton
- **Fiscal capacity equalization component (2430m Fr – Fed 1430, rich Cantons:1000)**
  - Based upon factor incomes
- **Cost Equalization Component (550m Fr by fed):**
  - Population density, population size, area
  - Population 80 plus years
  - Large cities
  - Foreign adults resident for more than 10 years
  - Unemployed
  - People requiring canton social assistance

- **Cohesion fund**: Compensation of specially difficult cases (430m Fr by fed)

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Switzerland: Motivations for Reform

• Attempt to simplify. Frequent ad hoc changes led to complexity and loss of global vision
• Used multiple factors with arbitrary weights and functional forms
• Move from purely macro to macro tax base indicators
• Clarify responsibilities
Sweden: Fiscal Equalization at the Local Level

• Central transfer to bring all local governments to national average fiscal capacity

• Special grant for population size, composition and location

• Municipalities above 135 percent of the average contribute to the pool.
### Denmark: Equalization models and standards

<table>
<thead>
<tr>
<th>Equalization type</th>
<th>Counties</th>
<th>Metropolitan areas</th>
<th>Local Govts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal capacity</td>
<td>85% Robin Hood</td>
<td>90% Robin Hood</td>
<td>50% central grant</td>
</tr>
<tr>
<td>Fiscal Needs</td>
<td>85% Robin Hood</td>
<td>60% Robin Hood</td>
<td>35% Robin Hood</td>
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</table>

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Alternate Institutional Arrangements for ET

• Central government agency
• Intergovernmental Forums
• Intergovernmental cum civil society forums
• Sub-national government forums
• Independent agency model – reporting to executive – permanent or periodic
• Independent agency model reporting to legislature
Fiscal Equalization Grants: Some Lessons from International Experiences

- Equalization formula must determine both the pool and allocations.
- Fiscal capacity equalization with an explicit standard is desirable and do-able in most countries.
- Fiscal need equalization is much more complex – desirable but may not be worth doing. Rough justice may be better than precise justice.
- Output based transfers offers a promising alternative for fiscal need compensation. Enhance results based accountability.
- Equalization transfers must not be looked at in isolation of the broader fiscal system especially conditional transfers.
- For local equalization – one size does not fit all.
- Important to have societal consensus on the standard of equalization.
- Must have a sunset clause and provision for a review and renewal.
- Institutional arrangements for a continuous review and periodic revision require serious thoughts as independent grants commission typically recommend more complex formulae.

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