Recommendations to the Commission on Revenue Allocation: Revising the Formula

July 2014
5 KEY MESSAGES
MESSAGE #1 Not one transfer, but several transfers

• We are suggesting multiple transfers with different logics and parameters
• More transparent and clarifies purpose/rationale of transfers, more legitimate as well
• We recommend a core Service Delivery Transfer, complemented by an Infrastructure Transfer, and some smaller transfers to deal with other issues, such as inherited debts, maintaining minimum services, intra-county inequalities, etc.
• May want to separate expenditure need transfer from transfers related to Capacity and Effort, including Fiscal Responsibility
Message #2 Parameters should be more closely linked to services provided by counties

- Parameters in original formula are good first generation, but not linked very closely to services
- Formula legitimacy/accuracy comes from this link, even if imperfect
- Health is the biggest/most expensive county function, so health drivers are key
- We look at some other functions, such as agriculture services and ECD as well
Message #3 Service delivery costs are closely related to population and this should be reflected in the formula

- The cost of devolved services is highly correlated with population
- Original CRA proposal had population weight at 60%
- Reduction to 45% and large equal share reduces population link below comparable international formulas (S. Africa, Ethiopia)
- Reduce “population” while actually augmenting population link through service variables
Population may be less significant for other transfers

• The core SDT should be heavily population driven
• But the Infrastructure Transfer should take into consideration other factors, such as infrastructure backlogs
• Infrastructure per capita is an important equalizing parameter, but we also look at infrastructure per area of a county
• Effort is also going to be less population-related
Message #4 Fiscal Responsibility
Index should be based in part on measures of transparency

- CRA requested submissions on FRI
- FR is a measure of effort that could be combined with tax effort, but challenging to do in Kenyan context
- It is not easy to measure “fiscal responsibility” as per principles of the PFMA (more on that later)
- But part of FR is making information available consistently as required by PFMA, encouraging participation
- Could also look at management of funds (Ward Development Fund, Bursary Funds, etc.), which is a growing issue at county level
Message #5 Legitimacy demands consideration of fiscal capacity (and effort)

• Given substantial differences in capacity across counties, fairness dictates some consideration of what a county can raise on its own
• This is limited because counties have limited taxing powers, but it is still important
• Better data is needed to create a proper measure of capacity, but we propose a temporary approach
M1: Multiple objectives, multiple transfers

- The core of the equitable share is a service delivery transfer to allow counties to manage the ongoing costs of delivering their functions.
- Service Delivery Transfer focuses on core services (health, agriculture, etc.) and is biased toward recurrent, operational.
- SDT is also more focused on “equalization” in traditional sense: objective distribution based on expenditure need, rather than primarily redistributive.
- Complemented by other transfers.
Other Transfers

• Proposed Infrastructure Transfer is more focused on capital spending and on infrastructure deficits
• Inherently more redistributive (larger backlog, more funding), more similar to “Equalization Fund” in constitution
• Driven by road, water, energy needs; less driven by population
• But also emphasizes maintenance costs in all counties as a driver of fair distribution
Capacity, effort, fiscal responsibility, and others

• We consider an additional transfer related to capacity and effort under M4 and M5
• We consider FR a part of effort
• We also advocate consideration of additional temporary grants to deal with inequality within counties, inherited debts/costs, etc.
M2: Parameters should reflect service costs

• Our proposal for Service Delivery Transfer is based on maintaining some parts of current formula and adding new elements
• For health, we follow South Africa in proposing an index that mixes demand (attendance at facilities) with a measure of need (index of risk of disease)
• We use quarterly data on visits to health facilities and we combine this with an index of incidence of 3 top causes of morbidity in Kenya: TB, malaria and HIV
### Health Needs Index

<table>
<thead>
<tr>
<th>HIV Score Index</th>
<th>TB Score Index</th>
<th>Malaria Score Index</th>
<th>Average Disease Index</th>
<th>Health Facility Attendance Sept-Dec 2013</th>
<th>Health Facility Score</th>
</tr>
</thead>
</table>

- Use incidences (risk of illness) to calculate quintiles for 3 diseases
- Combine into an index, averaging across them (higher risk of disease, higher share)
- Take share of county’s facility visits (more visits, higher share)
- Combine visits and disease index (50-50) to generate Health Needs Index
Additional variables

- To proxy need for agriculture services, we use proportion of crop-farming households in a county.
- To proxy need for ECD, we look at population of Under 1 year olds from the 2009 census.
- Because we lack good data on most other services, we maintain the direct measure of population as well as a proxy for all other services.
We maintain poverty, land area, equal share in SD Transfer

• We believe that poverty and land area are appropriate measures of differential costs of public services, although not as closely related as our health, education, agriculture measures

• We also believe that it is reasonable to retain a small fixed equal share to cover certain administrative costs common to all counties

• Our overall approach is shown on the next slide
## Options C and D

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Weight</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C: Proposal I (including Capacity and Effort)</strong></td>
<td></td>
<td><strong>D: Proposal II (excluding Capacity and Effort)</strong></td>
</tr>
<tr>
<td>Population-Related, Of Which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>20%</td>
<td>Measured as current</td>
</tr>
<tr>
<td>Health Needs Index</td>
<td>27%</td>
<td>Measured using facility attendance and risk of disease</td>
</tr>
<tr>
<td>Agriculture Service Needs</td>
<td>10%</td>
<td>Measured using Households in crop farming</td>
</tr>
<tr>
<td>ECD Need</td>
<td>3%</td>
<td>Measured using U1 year old population</td>
</tr>
<tr>
<td>Basic Equal Share</td>
<td>10%</td>
<td>Measured as current</td>
</tr>
<tr>
<td>Poverty</td>
<td>12%</td>
<td>Measured as current*</td>
</tr>
<tr>
<td>Land Area</td>
<td>8%</td>
<td>Measured as current</td>
</tr>
<tr>
<td>Capacity</td>
<td>5%</td>
<td>Prior year's collections for Single Business Permit and land rates</td>
</tr>
<tr>
<td>Effort</td>
<td>5%</td>
<td>Increase in collections relative to other counties and Fiscal Responsibility Index</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
M3: Population is crucial driver of Service Delivery Transfer

• We looked at the relationship between the final outcomes from the formula and their relationship to population
• While Kenya’s formula does have a strong link to population, the link is weaker than it is in comparable countries, like S. Africa or Ethiopia
# Relationship between formula outcomes and population

<table>
<thead>
<tr>
<th>Country</th>
<th>Correlation with Population (Total Allocations)</th>
<th>Dispersion Ratio of Top to Bottom Allocation Per Capita</th>
<th>Deviation from Equal Per Capita Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>0.917</td>
<td>1.66</td>
<td>17%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>0.999</td>
<td>3.56</td>
<td>11%</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.861</td>
<td>5.30</td>
<td>25%</td>
</tr>
<tr>
<td>Kenya Proposals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option B: Population 60%; Basic Share 10%</td>
<td>0.910</td>
<td>3.49</td>
<td>20%</td>
</tr>
<tr>
<td>Option D: Expenditure Need Only; no capacity/effort</td>
<td>0.952</td>
<td>3.28</td>
<td>17%</td>
</tr>
</tbody>
</table>
Other Transfers=Other Measures

• Infrastructure Transfer measures other needs and types of need
• We look at household access to electricity and water as one measure
• We look at paved roads per person, but also per square kilometer of county area as another
• It would be possible to look at other areas here as well, such as the health infrastructure backlog
Infrastructure Transfer

<table>
<thead>
<tr>
<th>Electricity and water Allocation</th>
<th>Roads Allocation</th>
<th>Equal Share Maintenance</th>
<th>Total</th>
</tr>
</thead>
</table>

- Calculate index of household access to electricity and water, and then group counties into quintiles based on access (lower access, higher share).
- Similar approach to roads, but 50% based on population per paved road, and 50% based on km2 per paved road (high population/high land area, higher share of road funds).
- 50% of fund based on roads index.
- 30% based on water/electricity index.
- 20% of fund is equal share for maintenance of existing and new infrastructure.
M4: Transparency is key to Fiscal Responsibility Index

- The PFMA has “fiscal responsibility” principles, but these are currently not easy to measure (e.g., no clear guidelines on classification, etc.)
- Some of these are also county-specific (share of wages or debt)
- We propose focusing on facilitating transparency and accountability at county level as the core of the FRI
- We create an index based on disclosures and meeting certain legal mandates
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Possible response</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Estimates Available Online w/in 3 days of tabling</td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Budget: Programme-Based?</td>
<td>Yes</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Budget: Standard Chart of Accounts?</td>
<td>Yes</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Quarterly Reports Available within 30 days to public</td>
<td>Last 4 Quarters</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Last 3 Quarters</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>Last 2 Quarters</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>Otherwise</td>
<td>0</td>
</tr>
<tr>
<td>Formation and Meetings of CBEF</td>
<td>Formed and meeting regularly to discuss CFSP, etc.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Formed but irregular meetings</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>Not formed</td>
<td>0</td>
</tr>
<tr>
<td>County Funds Follow PFMA 116 rules for management of funds?</td>
<td>Yes (or no funds)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Possible Points</strong></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>
M5: The Three Principles of Need, Capacity and Effort

• Main focus of transfers is need, which is appropriate, given limited taxing powers of counties

• Nevertheless, capacity and effort are important principles of fairness

• Effort can be covered largely under the FRI, though tax effort should ideally be considered as well

• Capacity is a challenge to measure but important to consider
Capacity and Effort

• We think it is important to measure and incorporate these concepts.
• But may be appropriate to keep them separate from core formula as additional transfer.
• Capacity should be based on size of economy and what is available to county government.
• Effort should be based on differential extraction of resources for a given size of the economy.
• Not easy to distinguish with existing data.
Capacity: representative tax system?

• An ideal capacity measure is based on a representative tax system, or an estimate of what a county could collect
• This avoids negative incentives based on actual collections
• Data not available to do this in Kenya
• Using current collections could introduce negative incentives
Capacity: Fiscal Distance

• We propose using older revenue data and estimating counties’ fiscal distance from the highest per capita tax collector (Nairobi) on business and land rates, the core revenue sources

• Avoids negative incentive effects in short-term (collecting less today does not entitle to larger share tomorrow)

• Complement with effort measure that is not biased against high capacity counties
Effort: Increasing Per Capita Revenues

• Ideally, FRI can be combined with a measure of tax effort

• We look at the total increase in per capita revenue between two years

• A county’s share of that increase is their share of the effort pool (decreases mean the county does not receive anything for effort)

• May want to use only temporarily as counties build tax systems; after that may incentivize collections that are too high
Summary

- Multiple transfers for multiple purposes
- Parameters more closely linked to service costs
- Importance of population weight
- Fiscal Responsibility should emphasize transparency and participation
- Capacity and effort are challenging but should be considered for a small transfer as well
Thank you