TRANSITION RULES AND THE NEWLY ENACTED BUDGET CODE[1]

Every significant change in economic policy inevitably gains and losses for different economic groups. The recently adopted Budget Code is an example of such a policy change that, while it brings social benefits to the country as a whole, may make some communities worse off than they were before. In the case of the Budget Code, formula based transfers will become the basis for financing any discrepancy between the calculated expenditure needs of local governments and their assigned revenues. Expenditure needs will be determined by indicators of the demand for public services.

In the past, however, funding for local governments was guided by the relative abundance of public sector infrastructure in different communities. Communities that enjoyed a higher per capita amount of schools and health care facilities generally received more generous funding than other local governments. Many of these communities now face the prospect of reduced funding in the future and will be required to reduce their supply of pubic services to match their lower level of funding.

This adjustment process takes time and is both painful and costly for local governments to undertake. Downsizing may involve the closure, sale or rental of some public sector establishments and the layoff of some public sector employees. The Budget Code anticipated the need for these adjustments in the form of transitional assistance to local governments adversely affected by the provisions of the Budget Code. In article 3, section 6, a five-year transition fund is to be established in the State budget to cushion any downward adjustment in local budgets. In the first year, the fund will be equal to five per cent of the total amount of the equalization grant made by the State budget to local budgets. This funding is to taper off by one percentage point in each of the following four years until, by the fifth year, the fund will have shrank to one per cent of the equalization grant.

As in a number of budgetary areas, the Budget Code indicates what should be done but it does not spell out how to do it. The purpose of this note is to explore alternative methodologies for distributing transfers from the transition fund and to suggest appropriate criteria for choosing among these alternatives. A simple numerical example is used to illustrate the nature of the differences among these different approaches to providing transitional assistance.

Method (1): Equal Proportional Assistance to All Budgetary Losers

Assume there are only two local budgets, "a" and "b", that experience losses as a result of implementing the provisions of the Budget Code. Further assume that the size of their losses are measured as 100 and 20 UAH respectively. Finally, assume that the amount in the transition fund is 100 UAH. This same set of numbers will be used in the other numerical examples that follow.

One potential approach to allocating the transition fund is to compensate the budget losers by the same percentage amount taking into account the limitation on the size of the transition fund. The percentage compensation awarded would be calculated in this case as the ratio of the size of the compensation fund to the aggregate amount of losses. In terms of the numerical example, this percentage would be equal to 100/120 or 83.3 per cent. Local budget "a"

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would receive a transition transfer equal to the product of 100 and 83.3% or UAH 83.3. By a similar calculation, local budget "b" would be compensated in the amount of UAH 16.7(83.3% of 20).

This transition rule is reasonable but it leaves a bigger absolute adjustment burden on local budget "a" than on local budget "b". Local budget "a" has to reduce its spending by 16.7 units compared to only 3.3 units for local budget "b". It might be argued that this outcome does not provide for an equitable sharing of the burden of adjustment. Only in the unlikely case that both local budgets had identical losses would this transition rule result in the same amount of required adjustment.

Method (2): Equal Absolute Adjustment for All Budgetary Losers

Under the second approach to distributing transitional transfers, compensation would be give to all budgetary losers in such a way that they would all face the same absolute adjustment requirement. Some elementary algebra shows how this compensation arrangement could be achieved. If T_a is the amount of compensation to be paid to local budget "a" and T_b is the comparable amount allotted to local budget "b", the problem becomes one of solving for these two compensation figures using the requirement that net losses be the same for all local budgets in absolute value:

$$100 - T_a = 20 - T_b \text{ and } T_a + T_b = 100.$$

These two equations are easily solved to yield the result that $T_a = 90$ and $T_b = 10$. With these compensation values, both local budgets face the same transition hurdle of reducing their budgets by an identical 10 units in the current budgetary period.

While it appears that the second method for determining the procedures for transitional support offers equal sharing of the adjustment burden, this result fails to consider the fact that adjustment costs may be different in different sized communities. A plausible case can be made that, in general, smaller communities confront higher adjustment costs than larger communities. Smaller communities for example may offer fewer employment opportunities outside the public sector and have less flexibility than larger communities in adjusting the size of their public sector establishments and activities. In this situation, the relative size of the community should be taken into account in fashioning the desirable amount of transitional assistance. Of two communities with the same absolute losses, the one that was smaller would be expected to encounter higher adjustment costs.

Method (3): Equal Proportional Losses for All Budgetary Losers

Differences in the amount of revenues collected are one way of reflecting differences in community size in the transition formula. Adjustment burdens in this case would be measured as the ratio of budgetary losses to the amount of revenue collected and communities with a higher value for this ratio would be assumed to have a higher adjustment cost. The transition formula in this case would distribute compensatory transfers so that, after compensation was paid, every local budget would bear the same proportional adjustment burden.

If local budgets "a" and "b" receive revenues of 1000 and 100 UAH respectively, the previous problem is transformed into one of finding the set of transition transfers that will result in equal proportional losses for the set of budgetary losers:

$$(100 - T_a)/1000 = (20 - T_b)/100 \text{ and } T_a + T_b = 100.$$

This pair of transition equations is easily solved to give the result that $T_a = 81.8$ and $T_b = 18.2$ UAH. In this formulation of the transition arrangement, local budget "a" is required to make a downward adjustment of 18.2 UAH and local budget "b" a much smaller amount of 1.8 UAH . This inequality in adjustment requirements may be judged to be equitable because local budget "b" is assumed to have a harder, and more costly, adjustment task than local budget "a" faces. Losses, as a fraction of revenues, are 10 per cent in local budget "a" but at a higher level of 20 per cent in local budget "b". After compensation is paid, both budgets have to pare their expenditures by 1.8 per cent.

4. Which Transition Approach Is Preferable?

Choosing among the alternative transition schemes that have been presented is by and large an empirical matter. Choice in this issue should be guided by two considerations, the degree of disparity in the scale of loss across local budgets and evidence that adjustment costs are inversely related to the size of the community undertaking an transition adjustment.

- ✓ If losses among the group of budgetary losers are of roughly equal magnitude and adjustment costs are only weakly related to community size, method (1) is the simplest approach and would deliver acceptable results.
- ✓ If there are major disparities in the scale of loss among local budgets and adjustment costs do not depend much on community size, method (2) would generate the most equitable results.
- ✓ If losses vary significantly in scale among local budgets and adjustment costs are felt to be much higher in smaller communities, method (3) would become the best choice for determining the amount of the transitional transfer.

5. Empirical Issues Regardless of the Choice of Transition Scheme

In order to implement any transition scheme it is necessary to accurately identify the group of budgetary losers and measure their losses with some degree of precision. This sounds easy to do but in practice may be more difficult than it seems. A naïve approach would be to simply count the number of local budgets experiencing a drop in total revenue subsequent to the introduction of the Budget Code and measure their losses according to the reduction in total revenue. While straightforward, this is likely to give misleading results for several reasons.

First, only real revenue declines should be counted. If a local budget's revenue increases, but by less than the expected rate of inflation, it faces a decline in real revenue resources. Secondly, real revenues may decline but may not indicate a true loss of budgetary position. Some local budgets may have received a special grant to stage a one-time event such as a decennial festival and the disappearance of this grant in the following year would not signal a disruption in normal funding. Moreover, in 2001 a number of cities such as Cherkasy and Zaporizhia have transferred some of their public sector facilities to oblast budgets and any drop in funding would only correspond to drop in expenditure needs and responsibilities. Instances where this occurred would not constitute a legitimate budgetary loss and should not result in eligibility for a transition transfer.

6. Generalizing the Transition Rules to Many Governments

The alternative transition rules presented in this note have relied on a simple two government numerical example. This simplification was made in order to facilitate understanding of the differences among these alternative approaches to transition and the criteria for choosing among them. As shown below, all of these approaches generalize to the situation where there are a large number, "n", of local governments experiencing true losses as a result of introducing the Budget Code.

Some additional notation is needed to achieve the general results. As before, let T_i

denote the amount of the transition transfer paid to the i'th local government loser. Other variables appearing in the general transition rules have the following form:

L_i = measured loss of the i'th local government;

L^* = aggregate losses of all local governments;

F = size of the compensation fund to alleviate losses;

R_i = total revenues received by the i'th local government, including other transfers;

R^* = total revenues of all local governments.

Using the new notation, it is possible to write the transition rules in the general case in the following manner:

(a) Equal proportional assistance: $T_i = L_i / L^* \times F$;

(b) Equal absolute adjustment: $T_i = L_i - (L^* - F)/n$

(c) Equal proportional losses: $T_i = L_i - R_i (L^* - F)/R^*$.

In the special case where each local government experiences the same amount of loss it is easy to show that there is not difference between transition rules (a) and (b). With "n" local governments each having the identical loss it is clear that the relative loss of each local government, L_i/L^*, is equal to 1/n. Substituting this result into the first two general equations above yields the outcome that $T_i/F = 1/n$ in each case. In other words, if there were only two local governments, each would be entitled to one-half of the value of the transition fund.

As can be seen, applying any of these transition rules for determining the value of transition transfers is a relatively straightforward matter. A much more challenging task is to obtain accurate measures of the losses that any local government might sustain in the wake of the Budget Code's adoption.