12 Principles for Payment By Results (PbR) In International Development

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Payment by Results (PbR) gets a lot attention, and could be misunderstood as a silver bullet to provide the right incentives for higher impact in development. If it is implemented in the wrong setting, it will lead to poor programmes that perform worse than alternative contract designs. We offer 12 principles to ensure that PbR is used for the right things, in the right places and in the right way. If the principles here are not met, PbR is not the right route.

- 1. The promised benefit of PbR lies in the efficiency improvement that comes from linking aid transfers to performance against **pre-agreed** measures. Recipients must invest **first**, and will **only be compensated if measured results are achieved**. If a large upfront payment is required to get the programme started, or if the results cannot be unambiguously measured, then PbR is unlikely to be the best solution.
- 2. The principle factor that should determine whether PbR is used, and the strength of incentives, is the quality of the performance measure. It is not sufficient for a performance measure to be correlated with the underlying variable of interest *ex ante*, it **must also remain so** *ex post*. A good performance measure is affected by the same mix of **actions**, and to the same degree, as the underlying objective. For example, teacher absenteeism may be correlated (*ex ante*) with poor effort and low motivation of teachers, which in turn lead to poor learning outcomes. Punitive policies to reduce absenteeism may not increase learning outcomes as they leave teacher motivation unaffected. Absenteeism would not be a good performance measure in this case.
- 3. Gaming (deliberately improving the performance measure through otherwise socially-useless activities) receives a lot of attention as it is morally objectionable. However, **distortion** should be of greater concern as it will be more pervasive. For example, imagine a case where the measure of completion is used as a performance measure in education. The optimal mix of polices for achieving the underlying objective (increasing the numbers of educated children) may place a large emphasis on increasing teacher quality and a low emphasis on stopping excessive repetition. The optimal mix to improve measured performance may be the same basic policies, but with the opposite emphases. The use of this performance measure may lead to an efficiency loss by over-rewarding action on repetition and under-rewarding action on teacher quality, distorting incentives.
- 4. Risk transfer is only relevant as the mechanism to sharpen performance incentives for the implementing agency. Risk sharing itself is not a rationale for PbR, for two reasons. First, a bilateral donor will have a widely diversified portfolio of projects, and will thus be less risk averse than any implementing agency/recipient country. The greater an agent's risk aversion the less effort she will exert for a given promised payment, resulting in a decrease in efficiency. Second, any risk transferred to the recipient will compound risk, not mitigate it. For

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example, imagine an incentivised measure of immunisation rates for a country which is hit by excessively heavy rains that affect crop yield and transport. The recipient government may have a) invested heavily in an immunisation program, b) be adversely affected economically through misfortune and c) receive no compensation. Both greater risk aversion and positively correlated risks suggest a suboptimal level of agent effort in a PbR contract. In short risk sharing is not a goal of PbR in itself, and is only relevant as a mechanism to sharpen performance.

- 5. Economic theory states that in the case of full **alignment** of objectives (the donor and recipient want the same thing) the promised benefit of PbR is foregone as there is no additional effort towards the donor's priorities: if we truly want the same thing, **performance incentives are irrelevant**. The additional costs of PbR (relating to verification, risk aversion and costs of control) are still incurred. From an empirical perspective, it is an open question whether PbR is more successful in cases of high or low misalignment, as it is possible that countries with relatively low misalignment are most receptive to slight changes in priorities. In other words, little is known in practice about how alignment relates to the marginal benefit of measures-based policy pressure but being clear about the objectives of the recipient/implementer is important.
- 6. **PbR is only appropriate where there is low observability of effort**. If effort can be observed (e.g. inputs), these can be contracted upon directly. Where monitoring of actions/inputs is difficult or costly PbR has an advantage, otherwise other contracts are likely to be better.
- 7. PbR is more appropriate where recipients have a larger degree of control over the outcomes (a high signal-to-noise ratio). In cases of a low signal-to-noise ratio, where random variation or other actors are more important, recipients are more likely to be punished for misfortune and rewarded for good luck. This will in turn dampen their incentives to exert effort. In highly risky environments (where implementers have low control), PbR would be very costly as a large prize would be needed to incentivise effort.
- 8. The most tangible cost of PbR relative to other forms of aid is the cost of verification, which may be offset by a reduction in transaction costs and management time. Both are likely to be dwarfed in magnitude by other considerations (see point 3). Results measured in PbR contracts would need to be extremely hard to dispute, audited and stand up in court.
- 9. Microeconomic research shows that extrinsic motivation (monetary fines or rewards) rarely simply augments intrinsic motivation. Most worryingly, if **intrinsic motivation is eroded** by fines/rewards, there is evidence that it does not return once the extrinsic motivation is removed. At present, there is little relevant empirical evidence in the macro PbR setting, but we should be wary of settings where fines and rewards may undermine the personal commitment of implementers to make a success of the project.
- 10. A **pragmatic acceptance of donor limitations** is useful. If the donor can only contract over a relatively short time horizon (say, under 5 years), the control of the recipient may be low. The possible distortions mentioned in point 3 may become binding in the case of short time horizons, as the best actions may only pay-off over a longer time horizon than the donor is able to commit to. If the donor cannot withhold aid in the case of non-performance, the incentive effect is lost: **non-payment has to be credible**.
- 11. Any evidence of success in PbR that is measured only in terms of the incentivised performance measure should be treated with caution. For example, an apparently successful programme that only reports reductions in teacher absenteeism may have had no effect on learning outcomes. Other outcomes should be measured to gauge program performance.
- 12. There are other forms of aid, beyond PbR, that could also offer performance incentives. Examples are prizes or competitions which combine possible efficiency improvements with an element of peer learning. For example, a competition amongst NGOs to increase bed net use would publicise the strategies of the winning NGO.