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Alternative Ways of Building and Operating Infrastructure – Lessons from International Research

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The background to this report is the great need for Sweden to invest in infrastructure and the government's current move toward using public-private partnerships (PPPs). This means that an updated overview of PPPs is warranted, especially focusing on which steps should be taken if Sweden decides to launch a national PPP program.

The report notes that PPPs should be considered if they may lead to higher efficiency—faster completion, lower costs, or better quality. PPPs involve private capital financing the project. However, the real benefit is not that more projects may thus be built, but rather it concerns adding expertise and creating incentives for efficiency throughout the project's life cycle. The potential advantages of PPPs can be summarized in seven key points:

› A narrow focus and dedicated management in a project lead to stronger governance.
› Bundling responsibilities—covering design, construction, operation, and maintenance—into one project incentivizes the private partner to make investments during construction that enhance life cycle efficiency.
› Incentives to avoid delays get stronger if the company in charge of the project only starts earning user fees or availability payments once the infrastructure is operational.
› PPPs can help filter out "white elephants"—projects that are not financially viable as user fees do not cover the costs—since private capital is only interested in profitable projects.
› In PPP projects, users can pay the company directly for construction and operation, thereby eliminating inefficiencies linked to government bureaucracy.
› PPPs use project financing, a method where loans are based on the project's cash flow, while lenders—often banks—play a crucial role by controlling design changes and disbursing funds gradually as project milestones are met, thereby controlling moral hazard in the project.
› Well-drafted contracts give project companies incentives to be efficient throughout the entire lifespan, which can be difficult for politically controlled organizations to achieve.

To reap the benefits of PPPs, it is critical that the contractual agreements offer the right incentives. This means that risks should be allocated to the parties most able to control or bear them. Proper risk distribution also reduces costly renegotiations later—an issue well-recognized in research.

International studies on the issue of renegotiating highlight a few key points:

› Renegotiations are a problem for PPPs but also for traditional procurement.
› Renegotiations are sometimes justified based on efficiency reasons.
› The ways in which contracts are structured play a decisive role in terms of whether renegotiations become problematic.

Overall, the effectiveness of PPPs depends heavily on the institutional context and specific project details, which makes it hard to make universal conclusions. However, there is clearly potential for efficiency gains by using this approach. Whether these gains are realized depends on project selection and contract design—both requiring a deep understanding of incentives for both public and private partners.

The three most important lessons from the research on how to shape successful PPP arrangements are:

1. Proper risk-sharing is essential. Risks should go to the party who is most able to control or bear them. Transferring demand risks to the wrong party may cause incentive problems, increase costs and lead to renegotiations.
2. Understanding and managing renegotiations is crucial. While these are not always negative, they can stem from opportunism and undermine efficiency. Well-drafted contracts can help minimize future opportunistic renegotiations while allowing flexibility for unforeseen events.
3. Contract design is critical. The contract is the core of the PPP setup and must be carefully tailored to create proper incentives while also taking into account transaction costs and information asymmetries.

Regarding Swedish experiences, such as the Arlanda railway project, the findings do not contradict the potential of PPPs to achieve efficiencies in terms of time, cost, and quality. However, they emphasize that the ways in which contracts are drafted are vital, which, in turn, requires highly skilled project owners. Three previous reports on PPPs in Sweden that were reviewed share similar conclusions and recommendations: there is a significant potential in PPPs that Sweden should seize, while building internal expertise through a systematic program of PPP projects is key to success.

In conclusion, the author recommends that Sweden should seriously consider testing PPPs. Success hinges on developing sufficient procurement skills in the context of PPPs—something that may partially be achieved in theory but ultimately requires actual projects, implemented and evaluated in the specific Swedish institutional context. It should be the government's responsibility to facilitate networks where different stakeholders can discuss and develop PPPs. To do this effectively, the government should establish a dedicated and highly skilled group tasked with creating these networks and developing a portfolio of suitable projects, overseeing their implementation, and assessing their outcomes.

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