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# Governing Public-Private Partnerships: The Problem of Low-Cost Decisions

Karsten Mause\*

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**Abstract:** In many cases, the expected efficiency advantages of public-private partnership (PPP) projects as a specific form of infrastructure provision did not materialize *ex post*. From a Public Choice perspective, one simple explanation for many of the problems surrounding the governance of PPPs is that the public decision-makers being involved in the process of initiating and implementing PPP projects (namely, politicians and public bureaucrats) in many situations make low-cost decisions in the sense of Kirchgässner. That is, their decisions may have a high impact on the wealth of the jurisdiction in which the PPP is located (most notably, on the welfare of citizen-taxpayers in this jurisdiction) but, at the same time, these decisions often only have a low impact on the private welfare of the individual decision-makers in politics and bureaucracies. The latter, for example, in many settings often have a low economic incentive to monitor/control what the private sector partners are doing (or not doing) within a PPP arrangement. The purpose of this paper is to draw greater attention to the problems created by low-cost decisions for the governance of PPPs. Moreover, the paper discusses potential remedies arising from the viewpoint of Public Choice and constitutional political economy.

**Keywords:** Public-Private Partnerships, PPPs, Efficiency, Public Choice, Government Failure, Governance.

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## 1. Introduction

Governments can often choose whether to produce public services like, for example, refuse collection, road maintenance, fire services, park maintenance, or public transport not in-house (i.e., by public employees/agencies) but through private sector companies. Apart from this option of contracting out, which has been widely used in the USA, the United Kingdom, and Australia for a long time (see Guttman, 2003, for an overview), there is the possibility of producing public services in the form of a public-private partnership (PPP). In such a joint venture, the public and the private partner(s) contractually agree on a certain division of work with respect to the financing and/or production of public services or infrastructures. PPPs may take a variety of forms depending on which tasks in the chain of financing/producing are carried out by the private partner. There is, for example, the so-called *DBFO* model in which the private sector company designs, builds, finances, and operates a hospital, school, prison, motorway, administrative building, or another public infrastructure; see Grimsey and Lewis (2007) and OECD (2008) for overviews of further PPP models. The conventional way—usually denoted as ‘public procurement’—is to publicly finance and operate such infrastructure, while the task of building is undertaken by a private contractor.

If a government is in financial difficulties, then the instrument of a PPP may offer a promising solution. The capital from private partners can make feasible infrastructure projects for which there is not enough public money available (Welch, 2006; Hammami et al., 2006). Moreover, consulting firms frequently report that PPP arrangements in many sectors can be expected to be more cost-efficient (i.e., cheaper) than conventional public procurement (see, e.g., PWC, 2005; Deloitte, 2006; Ernst & Young, 2007; KPMG, 2009). The efficiency argument is often used by public actors, too. Policymakers often justify the use of this type of privatization policy by arguing that the particular PPP project is a ‘better’ way of infrastructure provision (e.g., cheaper, faster, better quality, etc.) than conventional public procurement. For example, in the mission statement of Germany’s official “PPP-Project Database”, one can read that “PPP stands for modern and efficient executive governance. Through a long-term cooperation between the public and private sector, it is possible to realize public infrastructure

projects more efficiently” (BMVBS, 2019, own translation from the German source).

However, in many real-world cases, the *ex ante* theoretically expected efficiency advantages of PPP projects did not materialize *ex post*. Hence, in the debate about this form of infrastructure provision, critics sometimes translate the acronym PPP as “P3 – Problem, Problem, Problem” (Bowman, 2000). From the perspective of Public Choice theory (Downs, 1957; Mueller, 2003; Wagner, 2016), one simple explanation for many of the problems surrounding the governance of PPPs is that the public decision-makers involved in the process of initiating and implementing PPP projects (namely, politicians and bureaucrats) in many situations make low-cost decisions in the sense of Kirchgässner (1992). That is, their decisions may have a high impact on the wealth of the jurisdiction in which the PPP is located (most notably, on the welfare of citizen-taxpayers in this jurisdiction) but, at the same time, these decisions often only have a low (or even no) impact on the private welfare of the individual decision-makers in politics and bureaucracies. As a result, in many settings, the latter often have a low economic incentive to monitor/control what the private sector partners are doing (or not doing) within a PPP arrangement.

The purpose of this paper is to draw greater attention to the problems created by low-cost decisions for the governance of PPPs. Moreover, the paper discusses a number of potential remedies that arise from the point of view of Public Choice theory and constitutional political economy (Buchanan, 1987; Vanberg, 2005). In so doing, this paper intends to contribute to the wider debate and literature on the adequate governance of PPPs (for a survey, see Vining and Boardman, 2008) as well as to the politico-economic literature on “government failure” (Shleifer and Vishny, 1998; Tullock et al., 2002) and “policy fiascos” (Oppermann and Spencer, 2016).

## **2. The problem**

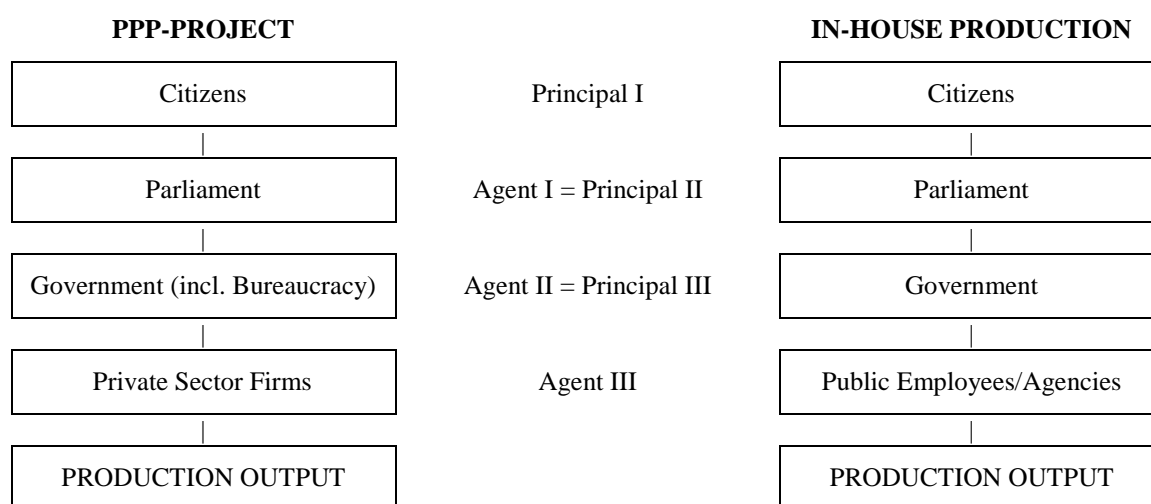
Many reasons may contribute to an outcome where a PPP project turns out to be a bad deal for citizen-taxpayers and society as a whole. In real-world settings, however, it is often very difficult or even impossible (a) to identify all factors that have led to this type of policy fiasco,

and (b) to disentangle to what extent each single factor has caused and contributed to the bad-deal outcome. But what we have is a huge body of anecdotal evidence (e.g., media reports, reports by audit offices) that makes the point that in a number of cases, the public partners—*viz.*, political decision-makers and public bureaucrats involved in a PPP project—at least to some extent contributed to the awkward outcome. The main argument of this paper is that from the perspective of Public Choice theory in the tradition of Downs (1957) and others (Mueller, 2003; Wagner, 2016), one reason for this type of government failure is that the decisions of the public partners within a PPP arrangement are often low-cost decisions in the sense of Kirchgässner (2008, p. 140): “The decision of the single individual is irrelevant for the individual himself, but it is highly relevant for a single other individual (or for a group of other individuals)” (see also Kirchgässner, 1992; Kirchgässner and Pommerehne, 1993).

Applying this concept to the specific context under investigation, one can say that the decisions of politicians and public bureaucrats involved in PPP projects may have a high impact on the wealth of the jurisdiction in which the PPP is located (particularly on the welfare of citizen-taxpayers in this jurisdiction) but, at the same time, these decisions often only have a low or even no impact on the private welfare of the individual decision-makers in the political sphere and the bureaucratic hierarchy. For instance, in many settings public bureaucrats often have a low economic incentive to monitor/control what the private sector partners are doing (or not doing) within a PPP arrangement. In other words, the problem is that politicians and bureaucrats often do not really have any ‘skin’ in the PPP game—to paraphrase Taleb (2018) who, however, does not mention or refer to the Public Choice concept of low-cost decisions as developed by Kirchgässner and Pommerehne.

To have an analytical framework to discuss this control issue, it makes sense to model a PPP project as a multi-level principal-agent relationship (see Figure 1, left column). In this setting, democratically elected parliamentarians (as citizens’ Agent I) actually should control the work done (or not done) by the executive branch, that is, by government politicians and public bureaucrats. The latter constitutes ‘the government’ of a jurisdiction and, as citizens’ Agent II, actually should control the work done (or not done) by the private sector partners

(Agent III). As the term 'control' may have many meanings, it should be noted that 'control' is defined here following the economic agency theory (e.g., Arrow, 1985; Sappington, 1991) as the activity of monitoring and, if necessary, sanctioning the behavior of certain agents. If one takes into account the old proverb that 'whoever pays the piper calls the tune', then in the multi-level principal-agent constellation displayed in the left column of Figure 1, the citizens in the last instance have to be regarded as the ultimate principals of the private sector firms. For via their tax payments, the citizens within a jurisdiction not only finance the politico-administrative apparatus but they also fund the provision of public services contracted out to private sector producers. Furthermore, besides the possibility of tax-financing, citizens often pay a user charge directly to the private producer (e.g., in the case of toll roads).



Source: Own illustration, inspired by Blankart (2008, p. 477)

**Figure 1.** Public-private collaboration as principal-agent relationship.

The crucial question is whether the principals in this multi-level game (i.e., citizens, parliament, government) are willing and able to control the activities of the private sector agents. For instance, governmental authorities have opportunities to control whether private firms involved in a PPP project really meet the contractually specified objectives. Yet the main problem in this context seems to be whether government politicians and public bureaucrats can (or want to) adequately fulfill their control task. Undoubtedly, there may be an

informational asymmetry between the government (Principal III, Figure 1, left column) and the private sector firm (Agent III), which makes control difficult and expensive. There is, for instance, the risk that private firms will exploit their informational advantages (e.g., concerning production costs or quality) at the expense of their principals (e.g., pursuing a low-quality, high-price strategy). As pointed out in studies dealing with the relative (in)efficiency of public production, the transaction costs after the conclusion of a PPP project contract (e.g., in the form of monitoring costs) may climb so high that conventional public procurement or in-house production by public employees/firms gets the more cost-efficient production mode (Borcherding et al., 1982; Hodge, 1999; Vining and Boardman, 2008).

As an aside, one should take into account that an informational asymmetry also exists in the relationship between the government (Principal III) and the public producer (Agent III) in the case of in-house production of goods and services (see Figure 1, right column). Even in the in-house case, monitoring costs may accrue. So, in both cases, there is a task to 'democratically' control the private or public producer by the Principals I to III (i.e., government, parliament, and citizens). However, without looking at a concrete empirical case, it is difficult to evaluate what would be the more difficult: to control in-house producers (to prevent shirking/slacking by public employees, for instance) or to control external private sector producers (i.e., to detect breach of contract in whatever form).

Furthermore, instead of one-dimensionally claiming that there is a loss of democratic control by government officials in the case of PPP deals, one should also account for the possibility that the democratically legitimized controllers (i.e., government politicians and public bureaucrats) have a weak or even no incentive to control the private sector partners within a PPP. Public Choice scholars in the tradition of Downs (1957) do not tire of emphasizing that public actors are not always and everywhere perfect agents of their citizen-principals (see, e.g., Tullock et al., 2002; Mueller, 2003; Besley, 2006). They may have other objectives in mind than, for example, carefully controlling the activities of the private contractors. It cannot be ruled out that actors in the governmental apparatus and their private contractors make bad deals at the citizen-principals' expense (see, e.g., the anecdotal

evidence in Rügemer, 2004; von Weizsäcker et al., 2005; Progressive States Network, 2007).

A bad deal in this context means that a PPP project turns out to be less efficient (e.g., more expensive) than traditional public procurement. Moreover, it may be the case that the decision to enter into a partnership with a certain private sector company (particularly the decision as to who gets the PPP project) is affected by the private sector contacts of the politicians making such decisions. For example, it cannot be ruled out that local politicians and/or their relatives and friends are on the payroll of construction firms (e.g., via consultant contracts). This could particularly be the case at the local level where many councilors are ‘only’ part-time politicians, who need to carry out other jobs to earn their living. In other words, not only in the area of conventional public procurement (e.g., Hyytinen et al., 2009; Coviello and Gagliarducci, 2017) but also in the field of PPP, it may be the case that relationships between public and private partners (lobbying, corruption, etc.) play a role in the decision-making of public agents. For instance, there may even be political corruption during the call for tenders or other phases of the process of public-private collaboration (OECD, 2008; Noltensmeier, 2008).

### **3. Potential remedies: Making low-cost decisions more costly**

From the viewpoint of Public Choice theory (Downs, 1957; Mueller, 2003; Wagner, 2016) and constitutional political economy (Buchanan, 1987; Vanberg, 2005), a fundamental institutional-design issue with respect to PPPs as a specific type of privatization policy is the question of how to design the rules of the PPP game in such a way that the public players (i.e., politicians and bureaucrats) have an incentive to act in the interest of the jurisdictions’ citizens. This is because the latter are the ultimate principals in the multi-level principal-agent structure depicted in the preceding section. Also, as mentioned above, it is by no means self-evident that the citizens’ agents in the politico-administrative system are motivated to monitor the behavior of private sector contractors. Instead of simply ignoring or accepting the problem at hand (i.e., adopt a *c’est la vie* attitude), in what follows the paper will discuss potential remedies for the possible problems caused by low-cost decisions in the area of PPP policy.



### 3.1 More transparency: Informing citizen-voters

One may argue that the choices political decision-makers make in the various phases of a PPP project are actually not low-cost decisions as citizen-voters may ‘punish’ bad PPP deals in the next election. So, being involved in a PPP fiasco may have a negative impact on re-election-oriented politicians in terms of popularity and votes (see Kirchgässner, 2019, for a survey of the Public Choice literature on voting and popularity). Moreover, losing a political office may have financial consequences if resigning politicians do not find an at least equally high-paid job inside or outside politics afterwards. However, in this context, it should be mentioned that elected politicians in advanced democracies often ‘fall softly’ as—depending on age and seniority—they receive transitional payments or pensions after losing office (Warfelmann, 2015). That is, for politicians nearing the official pension age, their political decisions increasingly become low-cost decisions both in monetary terms (because they can expect generous pensions) and in terms of votes and popularity (because they do not want to be re-elected). In the legislative studies literature, it is well documented that the fact that elected politicians are in their last period in office poses serious accountability problems as these policymakers can no longer be held accountable by citizen-voters at the ballot box (see, e.g., Geys and Mause, 2016, for a survey of the literature on the last-period problem).

Another problem that drives the PPP decisions of elected politicians towards low-cost decisions is the fact that, in many situations, those actors who have the power to sanction PPP fiascos at the voting box do not have sufficient information about the PPP projects. For example, in Germany, there is a PPP database that includes more than 150 PPP projects. But the information in this database is incomplete in the case of many projects and it can be expected that many citizens are not aware at all that there exists a PPP database (Mause and Krumm, 2011). Moreover, the database only includes ‘good news’ in the sense that, for many PPP projects, the *ex ante* calculated efficiency gain of a PPP project compared to conventional public procurement is reported. Usually, the implemented PPP projects are only those which exhibit an expected cost-efficiency gain compared to conventional public procurement. But readers do not get information about what happened after the conclusion

of the particular PPP contract. For instance, in a number of cases, it turned out that German audit offices, which evaluated selected projects, calculated afterwards that the respective PPP project was in fact more expensive than traditional public procurement (German Courts of Auditors, 2011; see also European Court of Auditors, 2018). And this was the case not only in Germany, but also in many other countries where there is currently no reliable official data source providing information on PPP projects (OECD, 2008).

Thus, it would be helpful to have an official and publicly accessible database that includes all relevant information for all PPP projects in a jurisdiction, so that citizen-voters, who are the ultimate principals in the PPP game, have the opportunity to take into account what their political agents are doing (or not doing) in the area of PPP policy in the next election. Such a database could be hosted by a politically independent body, such as an audit office or statistical office that has the power to collect the necessary information (Heine and Oltmanns, 2016). The Organization for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (EUROSTAT), and national statistical offices provide more or less detailed information on the activities of firms operating in the private sector of the economy; for example, official data is available for the number of firms, the value added, or the number of employees in different industries (energy, finance, mining, and so on). Why is similar data not publicly available for (sub)national governments' PPP activities in each of the member countries of the EU and the OECD?

At this point, one may argue that providing more information to citizen-voters still does not make bad PPP decisions more costly for elected politicians. Because from the viewpoint of Public Choice theory, it can be expected that many citizen-voters behave rationally ignorant in the sense that they—given that their individual vote will not be decisive in a large electorate—will neither participate in elections nor will they inform themselves about politics at all (Caplan, 2011). Moreover, it has to be taken into account that it may be the case that many citizens in a jurisdiction may be dissatisfied with a PPP project and its political management but they do not consider this in their individual voting decision as other factors (e.g., partisanship, a certain policy problem, the niceness or charisma of a certain candidate;

see Poutvaara, 2017) are more important for them.

However, regardless of whether citizen-voters really use the provided PPP information, it would be important to have the official and publicly accessible PPP database mentioned above in a jurisdiction, so that at least the media (in particular, investigative journalists), taxpayers' associations, public finance experts, and interested citizen-voters can use them. And it does not seem to be so far off to assume that at least some citizen-principals are eager to know what is being done with taxpayers' money and, therefore, have an incentive to cast a critical look at the contractual relationships between the public and private actors. This may especially apply for infrastructure projects at the local and regional level in the neighborhoods of the citizens. Moreover, due to the rise of Internet-based social media, both individual journalists and individual citizens have the power to cheaply distribute information about politics (e.g., PPP fiascos) to a large number of people in a society. Though this offers new options and powers to hold policymakers accountable, it is clear that social media in this context may bring about new problems, such as the distribution of so-called 'fake news' (Schnellenbach, 2018).

### **3.2 Referenda: Allowing citizens to vote on PPP projects**

In line with the principle of "normative individualism" as applied in constitutional political economy, one may argue that the citizens of a jurisdiction in their role as "the ultimate sovereigns" (Buchanan, 1991, p. 227) should have a say in the public policy area under investigation. For instance, one may require that a (binding) referendum is held before a PPP project is established. This certainly would not prevent problems from occurring in a PPP project after the referendum. However, such a referendum would force policymakers to explain to the public (a) why an infrastructure project has to be implemented via a PPP in the specific situation, and (b) what the advantages of the PPP project are compared to other modes of infrastructure provision. In short, it can be expected that due to information provision and public debate prior to a referendum, there would be more transparency for citizens compared to a case where PPP decisions are made in parliamentary meetings or even behind

closed doors (Siemiatycki, 2007). Moreover, it can be expected that the announcement of a referendum would trigger a lively public debate on the pros and cons of the respective infrastructure project and the planned PPP, which would possibly lead to a better-informed electorate (*cf.* the general discussion of this argument in Benz and Stutzer, 2004; Frey and Stutzer, 2006; Frey et al., 2011). So, why are citizens not given the option to vote on PPP projects in a referendum?

### **3.3 Linking public-sector pay to PPP project performance**

Applying the pessimistic self-interest assumption of Public Choice theory, it can be expected that the actors on both sides of the PPP market generally pursue not only the public interest but also, or primarily, their private interests. Media reports and case study research provide anecdotal evidence that politicians sometimes become ‘victims’ of private sector firms’ lobbying activities, in extreme cases leading to political corruption (Noltensmeier, 2008; Rügemer, 2008). In any case, what seems to make sense is that politicians and administrative staff are paid properly, so that they have little incentive to engage in corrupt activities. What can be called ‘fair’, ‘just’ or ‘adequate’ pay for politicians and bureaucrats is, however, a matter of a controversial public debate (Mause, 2014). Moreover, one may consider the possibility of introducing a performance-based salary component for those public sector actors entrusted with PPP projects in addition to the basic salary they receive. If a PPP project is successfully implemented, then these actors would receive a bonus payment. Since it is often the case that decision-makers are no longer in office when a PPP project turns out to be a bad deal, one may also think about whether to subsequently ‘punish’ decision-makers, by reducing their pension payments. To the author’s knowledge, no one in the public administration literature has so far made this somewhat unusual proposal, but it may be worth considering. The impending loss of a pension in the future would increase the costs of decision-makers in their current PPP decisions.

#### 4. Concluding remarks

Public-private partnerships between governments and private sector companies have received significant scholarly attention in recent years. Much has already been written about PPPs as a tool of government and a specific type of privatization policy. Despite the huge amount of literature, however, much remains to be explored with respect to this much-researched phenomenon. The aim of this paper is to draw more attention to a phenomenon that has so far been rather neglected in the PPP literature, namely that politicians and bureaucrats—from a Public Choice perspective—often make low-cost decisions in the area of PPP policy. The existence of low-cost decisions in this context provides an explanation, among others, for the problems encountered in PPP projects. Apart from drawing more attention to the low-cost phenomenon/problem, this paper has sketched potential remedies to make low-cost decisions more costly for the decision-makers in the political sphere and in the bureaucratic apparatus.

Most likely, there are no ‘perfect’ governance mechanisms that are able to completely avoid problems occurring within PPP projects. Yet, the same also holds for conventional public procurement transactions. But instead of simply doing nothing to tackle the low-cost issue (i.e., to take up a *c’est la vie* stance), one can at least try to design the rules of the PPP game in such a way that the likelihood of problems and PPP ‘fiascos’ is reduced. However, what has to be taken into account in this context is that measures to tackle the low-cost issue have to be designed in a manner that does not increase policymakers’ decision costs to a level that is so high that politicians and administrative staff no longer dare to initiate PPP projects at all. Despite the PPP project ‘fiascos’ that can occasionally be observed in the UK, Germany, and other countries, it may well be that PPP projects are a success story and are beneficial for both the private sector partners and for the society in which the PPP project is located. Under certain conditions, public-private partnerships can improve efficiency in building infrastructure.

## References

- Arrow KJ (1985). The economics of agency. In: Pratt JW and Zeckhauser RJ (eds.). *Principals and agents. The Structure of Business*. Boston, MA: Harvard University Press, 37–51.
- Benz M and Stutzer A (2004). Are voters better informed when they have a larger say in politics? – Evidence for the European Union and Switzerland. *Public Choice*, 119(1-2): 31–59. <https://doi.org/10.1023/B:PUCH.0000024161.44798.ef>.
- Besley T (2006). *Principled Agents? The Political Economy of Good Government*. Oxford, UK: Oxford University Press.
- Blankart CB (2008). *Öffentliche Finanzen in der Demokratie: Eine Einführung in die Finanzwissenschaft* [Public Finance in a Democracy: An Introduction to Public Finance]. 7th ed. Munich, Germany: Vahlen.
- BMVBS (2019). Database hosted by German Federal Ministry of Transport, Building & Urban Affairs (BMVBS). Accessed June 11. Available from [www.ppp-projektdatenbank.de](http://www.ppp-projektdatenbank.de).
- Borcherding TE, Pommerehne WW and Schneider F (1982). Comparing the efficiency of private and public production: The evidence from five countries. *Zeitschrift für Nationalökonomie*, 82(2, Supp): 127–156.
- Bowman L (2000). P3 – Problem, problem, problem. *Project Finance*, 206(June): 25–27.
- Buchanan JM (1987). The constitution of economic policy. *American Economic Review*, 77(3): 243–250.
- \_\_\_\_\_. (1991). The foundations of normative individualism. In: Buchanan JM (ed). *The Economics and the Ethics of Constitutional Order*. Ann Arbor, MI: University of Michigan Press, 221–229. <https://doi.org/10.3998/mpub.13054>.
- Caplan B (2011). *The Myth of the Rational Voter: Why Democracies Choose Bad Policies*. Princeton, NJ: Princeton University Press. <https://doi.org/10.2307/j.ctvc4m4gf2>.
- Coviello D and Gagliarducci S (2017). Tenure in office and public procurement. *American Economic Journal: Economic Policy*, 9(3): 59–105. <https://doi.org/10.1257/pol.20150426>.
- Deloitte (2006). *Closing the Infrastructure Gap: The Role of Public-Private Partnerships*. Hong Kong: Deloitte.
- Downs A (1957). *An Economic Theory of Democracy*. New York, NY: Harper & Row.
- Ernst & Young (2007). *Privatisierungen und öpp als Ausweg? Kommunalfinanzen Unter Druck – Handlungsoptionen für Kommunen* [Privatizations and PPP as a Way Out? Local Finances Under Pressure – Options for Action for Municipalities]. Stuttgart, Germany: Ernst & Young.
- European Court of Auditors (2018). Public private partnerships in the EU: Widespread shortcomings and limited benefits. Special Report No. 9. Luxembourg: European Court of Auditors.
- Frey BS and Stutzer A (2006). Direct democracy: Designing a living constitution. In: Congleton RD and Swedenborg B (eds.). *Democratic Constitutional Design and Public Policy: Analysis and Evidence*. Cambridge, MA: MIT Press, 39–80.
- Frey BS, Stutzer A and Neckermann S (2011). Direct democracy and the constitution. In: Marciano A (ed.). *Constitutional Mythologies: New Perspectives on Controlling the State*. New York, NY: Springer, 107–119. [https://doi.org/10.1007/978-1-4419-6784-8\\_8](https://doi.org/10.1007/978-1-4419-6784-8_8).
- German Courts of Auditors (2011). *Gemeinsamer Erfahrungsbericht zur Wirtschaftlichkeit von ÖPP-Projekten* [Joint report by the national and state-level audit courts on the efficiency of PPP projects]. Wiesbaden, Germany: German Courts of Auditors.
- Geys B and Mause K (2016). The limits of electoral control: Evidence from last-term politicians. *Legislative Studies Quarterly*, 41(4): 873–898.

- <https://doi.org/10.1111/lsq.12136>.
- Grimsey D and Lewis MK (2007). *Public Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance*. Cheltenham, UK: Edward Elgar Publishing.
- Guttman D (2003). Privatisation, public purpose and private service: The twentieth century culture of contracting out and the evolving law of diffused sovereignty. *OECD Journal on Budgeting*, 2(4): 85–154. <https://doi.org/10.1787/budget-v2-art23-en>.
- Hammami M, Ruhashyankiko J-F and Yehoue EB (2006). Determinants of public-private partnerships in infrastructure. IMF Working Paper 06/99. Washington, DC: International Monetary Fund. <https://doi.org/10.5089/9781451863598.001>.
- Heine K and Oltmanns E (2016). Towards a political economy of statistics. *Statistical Journal of the IAOS*, 32(2): 201–209. <https://doi.org/10.3233/SJI-160955>.
- Hodge GA (1999). Competitive tendering and contracting out: Rhetoric or reality? *Public Productivity & Management Review*, 22(4): 455–469. <https://doi.org/10.2307/3380930>.
- Hyytinen A, Lundberg S and Toivanen O (2009). Politics and procurement: Evidence from cleaning contracts. Working Paper No. 196. Helsinki, Finland: Helsinki Center of Economic Research.
- Kirchgässner G (1992). Towards a theory of low-cost decisions. *European Journal of Political Economy*, 8(2): 305–320. [https://doi.org/10.1016/0176-2680\(92\)90028-F](https://doi.org/10.1016/0176-2680(92)90028-F).
- \_\_\_\_\_ (2008). *Homo Oeconomicus: The Economic Model of Behaviour and Its Applications in Economics and Other Social Sciences*. New York, NY: Springer.
- \_\_\_\_\_ (2019). Voting and popularity. In: Congleton RD, Grofman BN and Voigt S (eds.). *The Oxford Handbook of Public Choice. Volume 2*. Oxford, UK: Oxford University Press, 853–879.
- Kirchgässner G and Pommerehne WW (1993). Low-cost decisions as a challenge to Public Choice. *Public Choice*, 77(1): 107–115. <https://doi.org/10.1007/BF01049224>.
- KPMG (2009). *The Changing Face of Infrastructure. Frontline Views from Private Sector Infrastructure Providers*. Amstelveen, the Netherlands: KPMG International in cooperation with the Economist Intelligence Unit.
- Mause K (2014). Self-serving legislators? An analysis of the salary-setting institutions of 27 EU parliaments. *Constitutional Political Economy*, 25(3): 154–176. <https://doi.org/10.1007/s10602-013-9150-y>.
- Mause K and Krumm T (2011). Public-private partnership as a tool of government: Exploring its determinants across German states. *German Politics*, 20(4): 527–544. <https://doi.org/10.1080/09644008.2011.606313>.
- Mueller DC (2003). *Public Choice III*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/CBO9780511813771>.
- Noltensmeier S (2008). *Public Private Partnership und Korruption [PPP and corruption]*. Berlin, Germany: Duncker & Humblot.
- OECD (2008). *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money*. Paris, France: OECD. <https://doi.org/10.1787/9789264046733-en>.
- Oppermann K and Spencer A (2016). Studying fiascos: Bringing public and foreign policy together. *Journal of European Public Policy*, 23(5): 643–652. <https://doi.org/10.1080/13501763.2015.1128228>.
- Poutvaara P (2017). Beauty in politics. *CESifo Forum*, 18(1): 37–43.
- Progressive States Network (2007). *Privatizing in the Dark: The Pitfalls of Privatization & Why Budget Disclosure is Needed, with a 50-State Comparison of Privatization Trends*. New York, NY: Progressive States Network.
- PWC (2005). *Delivering the PPP Promise: A Review of PPP Issues and Activity*. London, UK:

- PricewaterhouseCoopers.
- Rügemer W (2004). Maut und mehr. Toll Collect oder der Ausverkauf der Politik [Toll and more. Toll collect, or the sale of politics]. *Blätter für Deutsche und Internationale Politik*, Issue 4, 415–426.
- \_\_\_\_\_ (2008). *“Heuschrecken” im Öffentlichen Raum: Public Private Partnership – Anatomie eines Globalen Finanzinstruments* [“Grasshoppers” in the Public Sphere: Public Private Partnerships – Anatomy of a Global Financial Instrument]. Bielefeld, Germany: Transcript Verlag.
- Sappington DEM (1991). Incentives in principal-agent relationships. *Journal of Economic Perspectives*, 5(2): 45–66. <https://doi.org/10.1257/jep.5.2.45>.
- Schnellenbach J (2018). On the behavioral political economy of regulating fake news. *ORDO - Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft*, 68(1): 159–178. <https://doi.org/10.1515/ordo-2018-0008>.
- Shleifer A and Vishny RW (1998). *The Grabbing Hand: Government Pathologies and Their Cures*. Cambridge, MA: Harvard University Press.
- Siemiatycki M (2007). What’s the secret? Confidentiality in planning infrastructure using public/private partnerships. *Journal of the American Planning Association*, 73(4): 388–403. <https://doi.org/10.1080/01944360708978520>.
- Taleb NN (2018). *Skin in the Game: Hidden Asymmetries in Daily Life*. London, UK: Allen Lane.
- Tullock G, Seldon A and Brady GL (2002). *Government Failure: A Primer in Public Choice*. Washington, DC: Cato Institute.
- Vanberg VJ (2005). Market and state: The perspective of constitutional political economy. *Journal of Institutional Economics*, 1(1): 23–49. <https://doi.org/10.1017/S1744137405000032>.
- Vining AR and Boardman AE (2008). Public-private partnerships: Eight rules for government. *Public Works Management & Policy*, 13(2): 149–161. <https://doi.org/10.1177/1087724X08323843>.
- von Weizsäcker EU, Young OR and Finger M (eds.) (2005). *Limits to Privatization: How to Avoid Too Much of a Good Thing. A Report to the Club of Rome*. London, UK: Earthscan.
- Wagner RE (2016). *Politics as a Peculiar Business: Insights from a Theory of Entangled Political Economy*. Cheltenham, UK and Northampton, MA: Edward Elgar Publishing. <https://doi.org/10.4337/9781785365485>.
- Warfelmann AC (2015). *The Politics of Parliamentary Pensions in Western Democracies: Understanding MPs’ Self-Imposed Cutbacks*. Frankfurt, Germany: Peter Lang. <https://doi.org/10.3726/978-3-653-05445-3>.
- Welch J (2006). Public-private partnerships in Germany: German budget deficits present investment opportunities. *Infrastructure Journal*, (Spring issue): 37–39.