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# Outsourcing Rules in the Public and the Private Sector

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## Abstract

There have been outsourcing and insourcing trends for decades. Most often benefits and costs of outsourcing are compared from the purely financial side. However, risks are those that eventually determine whether a particular product/service/asset should be outsourced or not. The aim of this chapter is to fill in the gap in the literature by analysing risk-reward or benefit-cost ratio in outsourcing decisions for services in the public and private sector. After comparing the process of strategic decision-making and pros and cons of outsourcing between the private and the public sector, a general rule of thumb is developed as a guideline for outsourcing decisions. The decision-making tree for outsourcing decisions is applicable to both typical outsourced services and outsourcing the implementation of complex projects. As a rule, the more complicated the service, the greater the chance of outsourcing. However, greater complexity of services is usually accompanied with higher risks, like in energy performance or public-private partnerships. Whenever the contract is not well prepared, outsourcing may not achieve the expected benefits and may enhance the costs and risks. Although some very specific cases cannot be generalised, the similarities in decision-making behaviour can be taken as guidance when opting for outsourcing possibilities.

**Keywords:** outsourcing decision, public procurement, public-private partnership, energy performance contracting

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## 1. Introduction

Outsourcing is defined as the procurement of products or services from sources that are external to the organisation [17]. It does not matter who owns the organisation or what is the size of the organisation. The organisations cannot do business alone, so each organisation uses outsourcing whenever contracting external parties to deliver a product or service. Companies have always tried to make up for the resources or references they do not have by engaging into

different types of arrangements with those private entities that could help them. Outsourcing is done even before a certain contract is awarded. The whole subcontracting procedure in (public) tenders can be considered as an outsourcing activity. Companies subcontract and engage into consortia to make up for the insufficient financial or operational capabilities (staff qualifications, technology and/or other physical resources). Outsourcing can also be done by creating equity partnerships like equity joint ventures or statutory public-private partnership agreements. Holweg and Pil [10] distinguish fee-for-service outsourcing and establishing a new, wholly or partially owned, enterprise, by outsourcing entity to take on the activities that are externalised (enterprise partnership).

The advantages of outsourcing can be operational, strategic or combined. It can be added that the advantage of outsourcing is ultimately financial. Expected cost savings arising from outsourcing tend to be mitigated by monitoring costs when the outsourced service is complex and requires constant quality control. The theory of outsourcing complex products is very well illustrated by Brown et al. [6]. Operational advantages usually provide for short-term trouble avoidance, while strategic advantages offer long-term contributions in maximising opportunities [17]. The prime reasons to outsource are lack of internal competencies, focus on core business, lower costs and greater flexibility. Outsourcing can also be interpreted as accelerating a business change (business restructuring). Outsourcing in general keeps fixed costs (of staff and/or technology) lower and controls the risks of goods or services availability on time and on budget. When considered from the point of flexibility (moving CAPEX into OPEX) and elasticity (capacity to expand or reduce the activities), outsourcing is all about the rental of technology (including leasing contracts) or external staff with certain competencies (contracted workforce). The portfolio of leased assets in Europe steadily grows each year and it reached 779.1 billion euro at the end of 2016 [16] which is a good guidance on outsourcing market growth. However, leasing contracts have traditionally been perceived as a financing option only. When the government wants to maintain public ownership of essential assets and transfers the responsibility for managing the assets to the private sector, it is called public sector outsourcing [11].

The goal of this chapter is to compare decision-making rules for contracting out services in the public and in the private sector, to compare the market size of outsourcing and to warn on proper preparation process before contracting out complex services. The chapter consists of five parts. After the introductory section, Section 2 deals with outsourcing market size development. In Section 3, a decision-making tree for contracting out in both the private and the public sectors has been developed. Section 4 deals with outsourcing complex contracts such as public-private partnerships and energy performance contracts and Section 5 concludes.

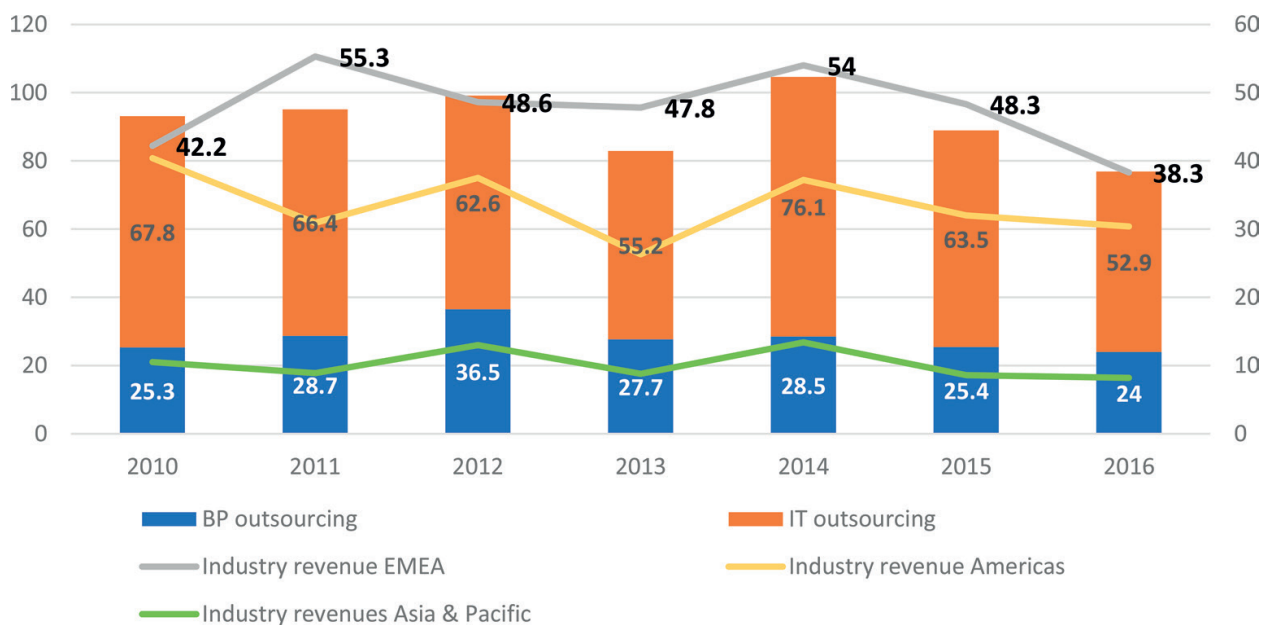
## **2. Outsourcing market size development**

According to Statista [23], global market size of outsourcing steadily grows each year. It climbed from 45.6 billion USD to 88.9 billion USD from 2000 to 2017. Information technology (IT) and

business process (BP) outsourcing as well as outsourcing industry revenue estimates at the global level are shown in **Figure 1**. Although these data cannot be taken as accurate as there are different statistics related to outsourcing, they represent a rough indication of outsourcing market size and its development. IT outsourcing is twice as larger as other business processes outsourcing. Europe, the Middle East and Africa (EMEA) region has the largest share in outsourcing industry revenue that exceeds the combined outsourcing industry revenue in Americas, Asia and Pacific.

Outsourcing market can be considered from the private and from the public sector's stance. According to Kircher [13], outsourcing of production of goods or services by private companies within the EU is most frequent in Finland (53% of overall activities). Nordic countries take a lead together with Portugal whose companies contract out 41% of their production or services. EU-28 average of private sector outsourcing is 27%, whereas least outsourcing prone countries are Croatia (15%) and Ireland (16%).

Government to business market within the EU is huge, with Germany, France, UK, Italy, the Netherlands, Spain and Sweden at the lead. These seven countries account for more than 80% of total public procurement value in EU-28. **Table 1** shows the market size in absolute and relative numbers per member countries. While the EU average for public procurement share in GDP is 13.8%, in some countries, government consumption climbs over 15% of GDP (yellow shade in **Table 1**). Government consumption is in some countries bound to the pan-European institutions' presence (Luxembourg and Belgium) and to the overall size of the central and local government. In general, the larger the value of contracting between the government and the private sector, the higher the proportion of outsourcing public services to the private sector. Hence, the more efficient public administration should be if the public procurement contracts are structured the right way and awarded according to the prevailing qualitative criteria, and if government employment is under controllable levels.



**Figure 1.** Global outsourcing industry, 2010–2016, in billions USD. Source: Statista [23].

Country name	2012	2013	2014	2015	Mean market size 2012–2015	Mean % share in GDP 2012–2015	Expenditure on government outsourcing as % of GDP 2014*	
							Goods and services used	Goods and services financed
Germany	408.7	425.5	442.0	461.7	434.5	15.1	4+	8
France	313.5	318.6	317.0	317.2	316.6	14.9	5	6
UK	290.3	285.4	312.6	349.7	309.5	13.9	11	0
Italy	171.7	171.6	169.2	170.3	170.7	10.5	6	2
Netherlands	134.8	133.9	134.9	135.6	134.8	20.4	6+	10+
Spain	113.0	105.9	104.9	111.4	108.8	10.4	5+	2+
Sweden	69.3	71.8	70.8	72.1	71.0	16.3	8	2+
Belgium	56.8	57.1	58.7	59.5	58.0	14.6	4	8
Poland	48.4	47.4	51.5	52.1	49.9	12.3	6	2
Austria	41.1	42.5	43.4	45.2	43.1	13.2	7	4+
Denmark	37.6	37.3	38.3	38.7	38.0	14.7	9	1+
Finland	35.8	37.4	37.7	37.0	37.0	18.2	12	2+
Czechia	22.2	21.4	21.5	24.2	22.3	13.9	5	6
Greece	20.0	19.0	18.9	19.0	19.2	10.6	4+	3
Portugal	17.2	16.6	17.0	17.7	17.1	9.9	6	2
Ireland	17.0	16.5	18.0	18.3	17.5	8.8	4+	0
Romania	15.6	16.2	16.4	18.7	16.7	11.3		
Hungary	13.1	14.3	16.2	17.3	15.2	14.7	8	2
Slovakia	9.9	10.1	10.9	13.4	11.1	14.7	5+	5
Croatia	5.7	6.0	6.0	5.7	5.9	13.5		
Luxembourg	5.6	5.7	5.9	6.3	5.9	12.3	4	
Slovenia	4.7	4.8	5.1	5.2	5.0	13.5	7	2
Bulgaria	4.5	4.9	5.5	6.2	5.3	12.2		
Lithuania	3.6	3.6	3.7	3.9	3.7	10.4		
Latvia	2.7	2.7	2.7	2.9	2.8	11.9	6	1
Estonia	2.6	2.6	2.7	2.9	2.7	14.1	7	2
Cyprus	1.3	1.1	1.0	1.0	1.1	6.0		
Malta	0.7	0.7	0.9	1.0	0.8	10.6		
Total	1867.4	1880.6	1933.4	2014.2	1923.9	13.8		

\*Source: European Commission [15, 18].

**Table 1.** Government to business market (public procurement contracts value) in EU-28 in billion USD.

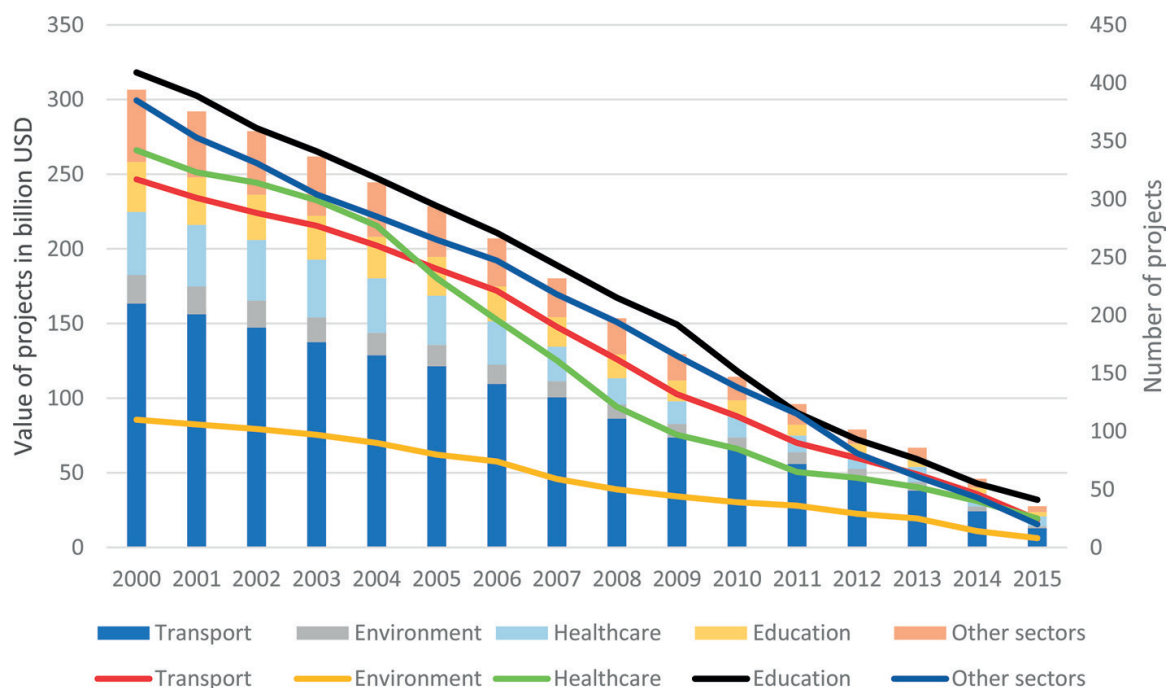
The value of public procurement is in general larger than the value of outsourcing of the public sector. Total outsourcing reached 8.7% of GDP in 2015 on average among the Organisation for Economic Cooperation and Development (OECD) countries. Therefore, governments provide outsourcing market value of at least 1.2 trillion USD each year that is considerably higher than business-to-business (B2B) outsourcing. In other words, governments create the largest outsourcing market in the world by public procurement of goods and services.

Outsourcing of public sector activities can take place in two ways. Governments can either purchase goods and services to be used as inputs, or they can pay a non-profit or private entity to provide the goods and services directly to the end user. Last two columns of **Table 1** represent outsourcing decisions of the governments of OECD countries only [5]. Complex projects such as bridges, highways and other major public works typically undergo many revisions and changes throughout the course of construction. One-third of the items experiences changes that alter the amount of work by more than 25% [19]. Contractual incompleteness lead to 15–27% subcontracting cost increase for the change in quantity of contracted works of up to 35% [19].

Complex outsourcing contracts, such as public-private partnerships, represent only a small part of the EU public budget. These financial instruments have been heavily promoted due to budgetary and efficiency reasons, but they require contracting capabilities of the public sector and well-defined public sector needs before entering into such contracts. Otherwise, public sector ends paying the assets/service it does not need for many years ahead.

Both the value and the number of public-private partnership (PPP) contracts are on decrease. Compared to the year 2000 when there were 306.5 billion USD public-private partnership contracts across the EU and 1563 of the projects, in 2015, the value of PPP contracts declined to only 27.6 billion USD, whereas the number of projects was only 118. **Figure 2** depicts an 11-fold decline in value and a 13-fold decrease in the number of projects. Interestingly, PPPs in the UK are not considered as PPPs in the European context as PPP contracts are considered as private finance initiative in this country.<sup>1</sup> The largest number of PPP projects in other EU states has been implemented in transport (more than 50% on average). Healthcare and education accounted together for about 25% stake in total value of the projects; environment protection stood in the fourth place with 6–8% stake in total project value. Despite most EU governments have deficits, only several countries engage into complex long-term contracts such as PPPs. They are primarily France, Spain, Portugal, Germany, Italy, the Netherlands, Belgium, Ireland and Greece. These data should be monitored combined with the data on concessions (which are not available at the pan-European level) and the data on energy performance contracts. The reason for inclusion of the latter is that there are no energy efficiency projects contracted as PPPs in EPEC's PPP statistics from 2000 to 2015. The adoption of the Directive on energy efficiency [7] that defined and encouraged energy performance contracting in EU member states to achieve Europe's 2020 goals, that is, 20% lower greenhouse gas (GHG) emissions than in 1990s, 20% electricity production from the renewables and energy efficiency increase by 20% until 2020 [8]. The total EU Energy Service Company (ESCO) market has been estimated at 2.4 billion euro revenue in 2015 [4]. Again, this is only an additional

<sup>1</sup>At the end of 2016, there have been 59.4 billion GBP operational PFI projects in the UK. <https://www.gov.uk/government/publications/private-finance-initiative-and-private-finance-2-projects-2016-summary-data>



**Figure 2.** PPP contracts by value in billion USD and number of projects. Source: European PPP Expertise Centre (EPEC).

confirmation that the public sector keeps trying to avoid fiscal barriers in implementing capital infrastructural projects with shortened time horizons of repaying the capital and other costs of the investments during the contract term. Besides, contracting EPC contracts can include energy supply contracts, shared savings contracts and other variants that can encourage the participation of the private sector in delivering energy-efficient infrastructural solutions.

### 3. Making decisions on outsourcing

Most frequently outsourced services are IT, legal, tax, accounting, finance, (digital) marketing and sale, procurement, customer care and call centres, intellectual property protection, project management, research and development and other business processes. The decisions on outsourcing vary depending on the following factors:

- Size of the organisation (the greater the number of employees, the less likely outsourcing of some business processes such as human resources, accounting, legal advisory).
- Type of the organisation and the origin of its revenues and costs (public organisations have estimated budgetary revenues. The higher the revenues they get from the public budget, the more likely that they would constantly outsource all activities. In times of budgetary contraction, only necessary services and goods are contracted out to the private sector. If there are no funds and there is a clear responsibility towards the public to have an operational infrastructure, engagement into more complex outsourcing contracts is more likely. The private sector earns revenues in the market, and hence, its outsourcing decisions are

more dependent on the expectations of their end users and the moves of their competition. If the competition has a service that is difficult, costly or slow to develop, then it needs to be bought regardless of its costs to keep the company in the market play).

- Type of business (manufacturing organisations are more likely to outsource business processes related to product/goods transport or delivery, manufacturing of some parts that do not hide intellectual property secrets or some administrative functions. Some manufacturing companies may engage into collaborative projects with research institutions to develop prototypes of future products or services. Service companies do not require a large portion of capital employed, and hence, they are more flexible in outsourcing certain business processes. For trade or personal secret sensitive outsourcing, a background national regulation of the country in which outsourcing is to be placed is required. Globally present companies are more likely to outsource certain business processes as they never have all processes in one place and decide to outsource based on the lowest cost principle (including lower tax).
- Integration of to be outsourced activities with the core business (the greater the integration of the activity into business processes, the less likely is the decision on outsourcing. Even relative simple activities can be classified as complex if they influence health, safety, security or personal data or environment protection).
- Possibility to build inside competences versus buying them on contract (it is all about 'hire or fire' decision related to the employees and technology. Even if technology purchase can be afforded, are there sufficient competences to make use of it?)
- Fixed versus variable costs and related flexibility (outsourcing gives flexibility to the organisations, enabling them better growth chance. Organisations that engage into loans to finance fixed costs are not prone to risk as they have fixed obligations to fulfil on a monthly basis. By moving CAPEX to OPEX, both financing and operational restructuring can be done. The service is there when needed and paid only when needed and used.
- Postponement of the obligations is like flexibility, but with different motive (even if outsourcing does not provide lower costs, time value of money often prevails in such decisions. If equipment is needed and it is too much to pay it at once, companies consider operational leasing that also enables them technology change after the end of the contract. In other words, the whole set of activities related to obsolete technology (whom to sell, at what price, how and where to decommission it are transferred to the lease companies).

**Figure 3** illustrates a decision-making tree in outsourcing. It starts with a dilemma on whether to outsource or not and what to outsource. After the identification of what to outsource, there is a set of check questions on the reason behind the outsourcing decision. The most frequent reasons to outsource are numbered, starting from the focus on core business over lower costs and higher efficiency, lack of internal competence and greater flexibility. If the reason behind the outsourcing decision is concentrating on core business, then the question is to what extent the business process to be outsourced overlaps with the core business. This question also considers intellectual property protection, if there is such. The more complex the process/activity to be outsourced, the higher the costs of outsourcing. Hence, outsourcing should not be done,



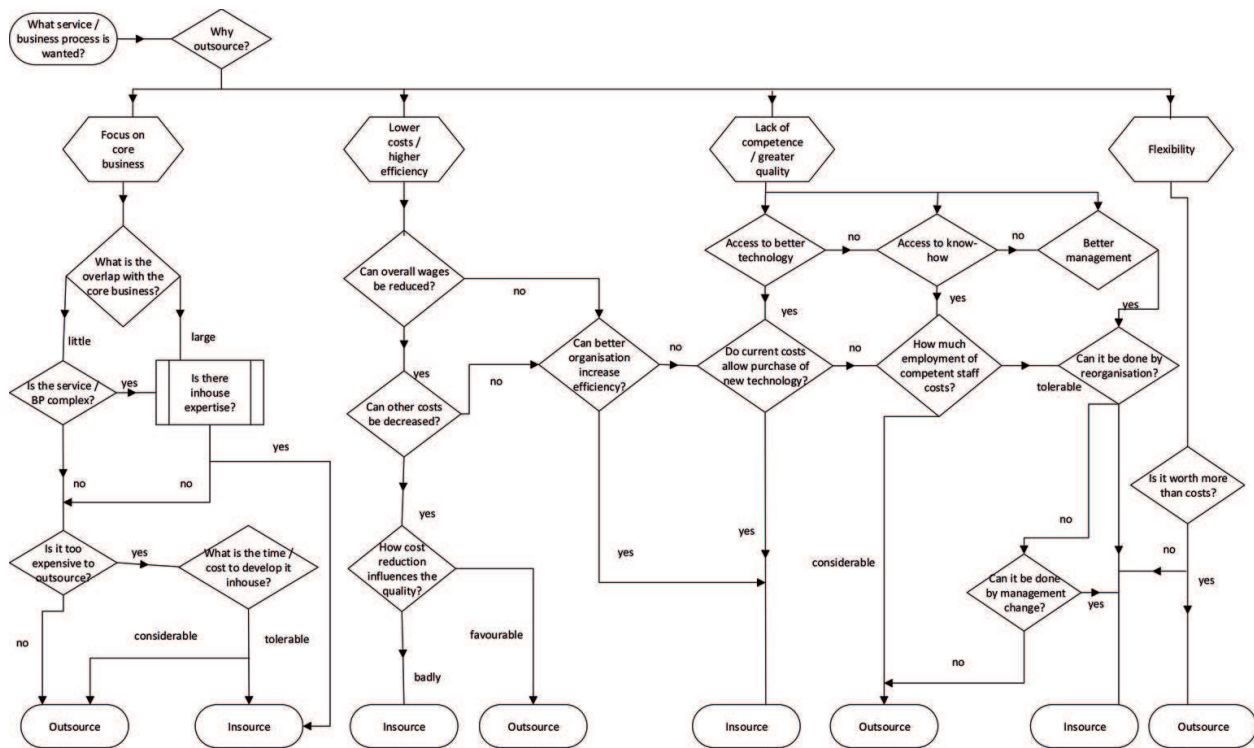


Figure 3. Decision-making tree in outsourcing. Source: Adapted according to Grubišić Šeba [9].

especially if there is an in-house workforce capacity to perform such business process. The questions on outsourcing encompass also the questions on financial capacity and operational/business restructuring. Probably, the simplest decision on outsourcing is flexibility as it requires answering only one question on whether greater flexibility is worth the costs.

The analysis conducted by Tadelis and Bajari [22] suggests that for long-term and steady provision, goods and services that are simple to contract should be outsourced with fixed-price contracts. Unlike them, complex goods and services should be internally produced as if they are procured with a cost-plus contract. In the latter case, the benefits of internal production are that the procurer retains the control over the process and flexibility. Kim and Brown [12] distinguish between simple and complex products. According to them, simple products encompass auditing, court reporting, janitorial service, landscaping, laundry and dry-cleaning, equipment maintenance and repair, security guard and patrol, solid waste collection and warehousing and storage. Complex products include advertising, computer systems development services, engineering, legal service, logistics support, professional and management training, programme management and support services and programme review and development services.

#### 4. Estimating risk: reward in outsourcing complex contracts

Public procurement or government to business (G2B) market has been considered the largest outsourcing market with between 15 and 20% of EU GDP or 1.3 trillion euro spent each year [14]. Effective contracting promises win-win exchanges, and markets are most likely to produce win-win outcomes when buyers and sellers can easily define and verify product

cost, quality and quantities. When markets fail, the win-win outcomes are replaced by lose-lose or win-lose outcomes where the winner's gains are greater than the loser's losses. Unlike simple products, the cost, quality and quantity parameters of complex products cannot be easily defined or verified, leaving buyers and sellers unable to clearly and completely define exchange terms [1]. Outsourcing complex assets or services delivery to the private sector has widely been known under different modalities of public-private initiative. While an extreme part of such outsourcing contracts is called sale or privatisation of once government assets or business, the mixed solutions that provide different ratios of public or private influence for a certain period are known as public-private partnership options, as illustrated in **Figure 4**. Contracting out needs to be considered whenever the government entity cannot take advantage of the economies of scale or scope, whereby it can be done either to the private or to the public sector. In other words, contracting out government services will neither reduce government outlays nor increase government efficiency unless decision makes economic sense [21]. Public-private partnership contracts outsource one or more of the following activities to the private sector: financing, design, construction, operation and maintenance. Such contracts are considered complex as each outsourced activity encompasses a few subactivities such as risk and responsibility transfer, employment of certain number of staff with designated competencies, avoidance of numerous public procurements for goods or service delivery and achievement of certain performance standards (quality of service). In other words, the entire set of the outsourced subactivities is known as know-how of the private partner which is expected to bring value for money to the public partner over the term of the contract.

Purely seen from the perspective of the traditional public procurement, complex outsourcing contracts such as public-private partnerships outsource public activities to the private partner for a certain period of time. The public partner in such contracts in fact combines a few usually separately publicly procured services into a single public procurement procedure. No wonder that such tenders are not governed under public procurement law, but under a more stringent law, that is, public-private partnership law. In addition, the project preparedness must be better, the procurement procedure is longer, often there are negotiations with interested prequalified private partners known as a competitive dialogue procedure in which prequalified bidders try to convince the public partner that they are the one to contract with, the contract must be approved and monitored by the governing institution such as the Ministry of finance or Public-private partnership agency. Public-private partnerships have been popularised within the new public management wave in the context of saving public budget, that is, achieving greater efficiency at lower costs [3].

It is often claimed that the project implementation is as good as its preparation. Hence, it is no wonder that complex projects are prepared years before public tenders are announced. Even though it is hard to calculate value for money in public-private partnership contracts as it not only consists of a financial part, more and more regulators require calculating public sector comparator before making decisions whether to perform a certain project via the traditional public procurement procedure or to engage into public-private partnership contract. The key is monetising some non-financial risks and benefits and comparing them with the calculations on the resources required to implement a project under the traditional public procurement procedure. The precondition for accurate calculations is setting good assumptions on traditional public procurement costs and time, as well as internal staff and resources necessary to implement



illustrate typical risks and rewards to which the public and the private partners are exposed to in complex outsourcing contracts, such as are public-private partnership contracts. Energy performance contracts are also considered as complex contracts, which, unlike public-private partnership contracts, do not require extra budget of the public partner.

Feature of the contract	Public-private partnership	Energy performance contracting
Long-term nature of the project	Yes	Yes
Risk-reward ratio	If contracted	Yes
Performance-based/quality of service contracting	If contracted	Yes
Different stages of project implementation included	Yes	Yes
Stakeholders presence	Yes	Yes
Occasional adjustment of the contract to market condition	If contracted	If contracted

Source: Author.

**Table 2.** Common features of complex contracts.

Project phase	Private partner		Public partner	
	Risk	Reward	Risk	Reward
Design	No	Fee	Yes, it should define what is wanted	A well-designed object in accordance with public needs
Finance	No	Coverage of all the costs of borrowing plus guaranteed rate of return over the contract	Yes	Off-balance sheet accounting, no immediate financial outflow
Construction	Performance on time and on budget if defined so	Guaranteed fee/reputational benefit	No, apart from obtaining certain permits on time and risks related to location selection	Avoidance of multiple public procurement procedures for contacting works or services, no need to engage plenty of internal staff in preparing and monitoring certain project phases; know-how of the private partner
Maintenance	Fixed costs of staff and variable costs of replacement parts	A right to exploit an object on your own if contracted so with the public partner	No	The object in good condition is there when needed
Operation	Fixed costs of staff, electricity, water, heating, cleaning	Guaranteed fee/reputational benefit	No, if quality of service is contracted	No need for employment of extra staff; good reputation of the public partner among stakeholders
Transfer	Overhauls	Reputation	No, accepts the object if everything is functional	Can decide whether to continue operating it on its own or to outsource operation and maintenance, that is, should prepare exit strategy

Source: Author.

**Table 3.** Risk-reward between public and private partners in complex outsourcing contracts.

**Table 3** also shows that the extent of reward to the public partner after engaging into complex contracts is mostly dependent on the public partner's capability to anticipate and balance between budgetary outlays, satisfaction of the end users and internal resources needed for contract implementation and monitoring.

The benefits of outsourcing complex contracts can be huge, but the huge can be the costs if the contracts are not balanced as well. In general, all the disadvantages of engaging into the complex contracts are the same as engaging into simple outsourcing contracts. They are nicely noted by Barthélemy [2] who called them seven sins of outsourcing: (1) outsource activities that should not be outsourced; (2) select the wrong vendor (private partner); (3) write a poor contract; (4) overlook personnel issues; (5) lose control over the outsourced activity; (6) overlook the hidden costs of outsourcing and (7) fail to plan an exit strategy. These can also be taken as precautionary measures before making outsourcing decisions and whenever evaluating whether outsourcing has been a good decision, regardless of the complexity of outsourcing contracts.

## 5. Conclusion

This chapter deals with outsourcing rules in the private and the public sectors as well as with the features of complex outsourcing contracts. Outsourcing activities are usually linked to the private sector organisations. Yet, contracting out is even more important within the public sector as the public procurement market represents the largest outsourcing market in the world. Making decisions on outsourcing can mostly follow the same path regardless of whether public or private organisation implements it. Hence, a decision-making tree on outsourcing is presented. It considers four most frequent reasons to outsource including: focus on core business, lower costs and higher efficiency, lack of internal competencies and greater quality of service and greater flexibility.

Complex activities (projects to be implemented) are usually outsourced to lesser or greater extent. However, engaging into complex contracts has often not been considered an outsourcing, but financing decision. However, such contracts should not be considered from the financial stance only, but from the stance of the quality of contract. Complex contracts should make up for the internal (not only financial) resources, simplify multiple public procurement procedures and achieve better quality of service provided to the end users (stakeholders).

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## References

- [1] Bajari P, Tadelis S. Incentives versus transaction costs: A theory of procurement contracts. *RAND Journal of Economics*. 2001;**32**:387-407
- [2] Barthélemy J. The seven deadly sins of outsourcing. *Academy of Management Executive*. 2003;**17**(2):87-98
- [3] Batran A, Essig M, Schaefer B. Chapter 8: Public Private Partnerships as an Element of Public Procurement Reform in Germany. In: Knight L, Harland C, Telgen J, Thai KV, Callender G, McKen K, editors. *Public Procurement – International Cases and Commentary*. New York: Praademic Press; 2005. pp. 127-149
- [4] Boza-Kiss B, Bertoldi P, Economidou M. Energy Service Companies in the EU, European Commission. JRC Science for Policy Report. 2017. Available from: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106624/kjna28716enn.pdf>
- [5] Boyle R. Public Sector Trends 2015, State of the Public Service Series, Research Paper No 17. Institute of Public Administration; 2015. Available from: [https://www.ipa.ie/\\_fileUpload/Documents/PublicSectorTrends2015.pdf](https://www.ipa.ie/_fileUpload/Documents/PublicSectorTrends2015.pdf)
- [6] Brown TL, Potoski M, Van Slyke DM. Contracting for complex products. *Journal of Public Administration Research and Theory: J-PART*. 2010;**20**(supplement 1: The State of Agents: A Special Issue):141-158
- [7] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC, Official Journal of the European Union, L 315/1. Nov 14, 2012. Available from: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0027&from=EN>
- [8] European Commission. Communication from the Commission Europe 2020— A Strategy for Smart, Sustainable and Inclusive Growth, Brussels 3.3.2010, COM(2010) 2020. 2010. Available from: <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>
- [9] Grubišić Šeba M. In: Musa A, editor. *Outsourcing javnih usluga/Outsourcing Public Services*, 7. Forum za javnu upravu: Od javnog prema privatnom—privatizacija i outsourcing javnih usluga. Zagreb: Friedrich Ebert Stiftung; Institut za javnu upravu; 2014. pp. 27-52
- [10] Holweg M, Pil FK. Outsourcing Complex Business Processes: Lessons from an Enterprise Partnership. Vol. 54(3). University of California, Berkeley: *California Management Review*; 2012. pp. 98-115
- [11] Jensen PH, Stonecash RE. The Efficiency of Public Sector Outsourcing Contracts: A Literature Review. Melbourne Institute Working Paper No. 29/04. 2004. Available from: [http://melbourneinstitute.unimelb.edu.au/downloads/working\\_paper\\_series/wp2004n29.pdf](http://melbourneinstitute.unimelb.edu.au/downloads/working_paper_series/wp2004n29.pdf)

- [12] Kim JW, Brown TL. The importance of contract design. *Public Administration Review*. 2012;**72**(5):687-696
- [13] Kircher S. Who performs outsourcing? A cross-national comparison of companies in the EU-28. In: Drahokoupil J, editor. *The Outsourcing Challenge—Organizing Workers across Fragmented Production Networks*. Brussels: European Trade Union Institute; 2015. pp. 25-45
- [14] European Commission. Public Procurement. 2018. Available from: [https://ec.europa.eu/growth/single-market/public-procurement\\_en](https://ec.europa.eu/growth/single-market/public-procurement_en)
- [15] European Commission. Public Procurement Indicators 2015—DG Growth G4—Innovative and e-Procurement. 2016. Available from: <https://ec.europa.eu/docsroom/documents/20679>
- [16] LeaseEurope. The Voice of Leasing and Automotive Rental in Europe, Annual Survey. 2016. <http://www.leaseurope.org/uploads/documents/stats/European%20Leasing%20Market%202016.pdf>
- [17] Lankford WM, Parsa F. Outsourcing: A primer. *Management Decision*. 1999;**37**(4):310-316. Available from: <http://gibs-mba-entrepreneurship.pbworks.com/f/2-Outsourcing%2Ba%2BPrimer.pdf>
- [18] The Organisation for Economic Co-operation and Development (OECD) Government at a Glance, 2017. <http://www.oecd-ilibrary.org/docserver/download/4217001e.pdf?expires=1519902634&id=id&accname=guest&checksum=04776AEC19A8837E738FB3617CFBAFA7>
- [19] Miller DP. Subcontracting and competitive bidding on incomplete procurement contracts. *RAND Journal of Economics*. 2014;**45**(4):705-746
- [20] PPIAF. Main types of Public Private Partnerships. New York: United States of America by Cambridge University Press; 2009. Available from: <https://ppiaf.org/sites/ppiaf.org/files/documents/toolkits/highwaystoolkit/6/pdf-version/1-13.pdf>
- [21] Prager J. Contracting out government services: Lessons from the private sector. *Public Administration Review*. 1994;**54**(2):176-184
- [22] Tadelis S, Bajari P. Incentives and award procedures: Competitive tendering vs. negotiations in procurement. In: Dimitri, Piga, Spagnolo, editors. *Handbook of Procurement*. Cambridge, New York: Cambridge University Press; 2006. [http://assets.cambridge.org/97805218/70733/frontmatter/9780521870733\\_frontmatter.pdf](http://assets.cambridge.org/97805218/70733/frontmatter/9780521870733_frontmatter.pdf)
- [23] Statista. 2018. Available from: <https://www.statista.com/statistics/189788/global-outsourcing-market-size/>