

REGULATION, REMAINDER RISK, AND PUBLIC INVESTMENT FUND: A THEORETICAL ANALYSIS

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Abstract. *In the EU member countries that obey the rule of law principle, the legislative work of the parliament supports the market economy by producing public capital. In many cases, legislation is connected to public investment projects, and sometimes also to socially important private projects. Both include public benefits and costs, but also public risks. Moreover, as the public commitment to major private undertakings may preclude both immaterial and material contributions, there is a noteworthy threat that an accidental actualization of the remainder risk caused by some unforeseen incident would fall heavily on the taxpayers. This paper constructs a club theoretic model for the analysis of representative democracy. In the model, the public commitment to a private project is decided by the simple majority voting rule in the parliament. The analysis shows that strict assessment of the remainder risk may halt the whole undertaking implying that the promised social benefits are also lost. As a solution, we propose a constitutional Investment Fund, which would launch short-maturity public bonds to citizens and pension funds, earmarked to the material part of the public commitment to private projects. The system could partly privatize the public remainder risk so that only the immaterial part remains to common taxpayers thus increasing the probability of a majority vote for the project. At the same time, the government would get equity finance for its investments, and the citizens and pension funds would hold securities with tangible net asset value. The system should increase precision in public debt and risk management and bring democracy, public governance, and the market economy closer to each other.*

Keywords: *democracy, investments, bonds, public capital, risk management, simple majority voting*

Reikšminiai žodžiai: *demokratija, investicijos, akcijos, viešasis kapitalas, rizikos valdymas, balsavimas paprasta balsų dauguma*

Introduction

In a democratic society, the enfranchised citizen is a constitutional principal, represented by an authorized agent, the politician. In representative democracy, universal and equal suffrage grants the citizens a right to affect the allocation of economic resources in the market.

An essential economic feature of legislation is that it creates both negative and positive rights to promote market efficiency and social welfare. In that sense, the institutionally structured legal framework can

be called public capital (*Law as Public Capital*, Buchanan 1975; Buchanan & Brennan 1985). Public capital is a concrete element of the more versatile but economically important concept of social capital (Hall & Jones 1999; Alanen & Pelkonen 2000).

Public capital gets accumulated when social issues are dealt with in legislative work. The consequential implications of long-acting regulation appear often slowly, like in environmental protection, and sometimes more rapidly, like in public investments. Big private investment projects often necessitate material and immaterial public participation. Immaterial participation means regulation, which starts from background studies including social cost-benefit and environmental impact analyses, committee work, expert hearings, preparation and so on, and ends to final decision making. In its turn, material participation means in- and out-sourced construction of infrastructure and other facilities, but some cognizance is usually needed for that, too.

Public participation in private projects in one way or the other means that private and public returns as well as risks intertwist. Profit is the investor's remainder right, and the investor's remainder risk is the unanticipated part of the investments risk. When the public sector regulates or takes part in private projects, public remainder rights and risks are also due (Hartmann et al. 2021). Yet, the connection between regulation and public remainder risk is most striking when regulation is absent or too weak. For example, the 2008 financial crisis was erected from the cut-down of regulation, and the consequence was that a huge remainder of risk was shifted from private financial giants to the public. One may argue that social risk-bearing is the most effective way of risk management, but the 2008 crisis offers an indisputable counterargument (Blyth, 2013).

This paper aims to develop a market-based supplement to the legislative handling of public remainder risk. The decisions on these matters are usually made by the simple majority rule in the parliament. Emerson (2020) provides powerful critics on the simple majority rule and proposes better alternatives to it. However, the analysis of this paper accepts the common practice.

The paper proceeds as follows. Chapter 2 summarizes the concept of public capital, and chapter 3 sketches a club theoretical model of optimal regulation in representative democracy. Chapter 4 deals with the assessment of public remainder risk in joint ventures with private investors, and chapter 5 presents the public Investment Fund as a partial solution to the problem of public remainder risk. Chapter 6 concludes, and the main findings from the theoretical analyses are the following:

- Regulation can gain majority if the public remainder risk is belittled.
- Careful risk assessment may cause the ban of the whole project with its social benefits.
- Public bond finance could reduce the public remainder risk and warrant the majority vote.

Law as Public Capital

The concept of public capital connects to the efficacy of the market economy (Buchanan 1975), and trust between the market operators is a crucial prerequisite for the proper working of the market. The nature of trust has been investigated within many disciplines, from many angles and with various definitions (Giddens 1990; Dietz 2011). Niklas Luhmann (1988) separates trust from trustfulness - what is believable is not necessarily trustworthy. Basically, trust is a subjective stance, but various protocols make it impersonal. On the organizational level, trust is versatile and hierarchical (Zaheer et al. 1998; Jalava 2006). For example, the limited liability companies act is an important trust factor, which encourages business firms to invest by reducing the shareholders' risk.

Broader social trust is a public liability. It begins from public organizations and institutions, continues to the economic environment of domestically and internationally operating people and firms, stretches to the country's international agreement and credit standing, and ends up in rule-based world order with its institutions. On the national level, the basic guarantees of trust are the citizens' universal and equal suffrage, and the constitutional set of values, which materialize in the legislation produced by democratic parliamentarism.

Constitutionally based public capital creates social stability and mitigates risks in economic relations and in their continuity. Public capital is a legislative entity consisting of constitutional, strategic, and operative components. The order prescribed for the enactment of constitutional legislation makes it the slowest to evolve, while the operative components, like statutes and rules of interpretation can be changed most rapidly. The strategic components usually include legislation that can be decided by simple majority of votes. Moreover, the regulation by the EU has its effects on the accumulation of public capital in the member states.

Legal regulation facilitates efficient working of the market mechanism by securing property rights, correcting market failures, and advancing social equity and cohesion as vital bolsters of trust in the market economy. Since public capital is proactive in nature, the legislative structure must not conflict with the constitutional set of values. Therefore, the order prescribed for the enactment of constitutional legislation should be followed in any deep-acting cases. However, the economic dimension of public capital also precludes certain reactivity, for example when external shocks hit the economy. These problems can then be handled with strategic and operative measures in compliance with the constitution.

The strategic measures, commonly decided by the simple majority rule, are the main vehicles of enhancing both public capital and economic prosperity. Big social reforms need lots of regulation and so do also socially important physical investments, particularly because they often involve some kind of participation with the private sector. In closer public private partnerships, returns and risks should be divided accordingly, but the righteous principle is hard to maintain by purely regulative means (Yescombe & Farquharson 2018).

Simple Majority Voting

To start with, we consider the parliamentary processing of a legislative work concerning some purely regulatory issue. The process is assumed thoroughly rational. The citizens reveal their preferences to their representatives, the representatives maximize social welfare, the administration is efficient, and all participants have perfect information. The administration provides a preliminary account of the case, and the voters take their political stands on it. In principle, the simple majority rule means support from most of the enfranchised citizen, while in parliamentary practice it means most votes in the plenum of the parliament.

We tackle the issue by presenting a club theoretic model of representative democracy. Basically, a club is a collective in which each member's net benefit from the club good depends on positive and negative externalities caused by other members (Cullis & Jones 2009). Therefore, they collectively accept new members as far as the optimal size of the club gets reached and exclude incomers after the optimum point. In our model, the primary incomers are those who give their successive votes for the regulation, and the externalities emerge in the political discussion during the whole process: The proponents benefit from each other in the pursuit of simple majority, while the opponents provide controversial aspects to the discussion.

There are two main differences between the basic club model and our model. First, while the club good is fixed in the basic model, it is variable in our model. This is because our club good is a regulatory entity so that the political process essentially concerns the extent of regulation. That is, more votes for regulation means more regulation. Second, if the proponents of the regulatory entity gain simple majority, all taxpayers get included in the club to share the production costs of the club good. Figure 1 illustrates the model of political decision-making process in the parliamentary practice.

In Figure 1, the variable ϵ on the vertical axis is the monetary value of the measuring quantities, and the variable on the horizontal axis is the number of votes measured from zero to α , which denotes full plenum and converts to the number of taxpayers.

In the figure, graph b derives from utilitarian social benefit from regulation:

$$B = \alpha b$$

where the individual benefit b from the club good g , namely regulation, depends on its extent which in turn depends on the voters' support to it, $g = g(\alpha)$, $g' > 0$, $g'' < 0$. The voters experience positive (supportive)

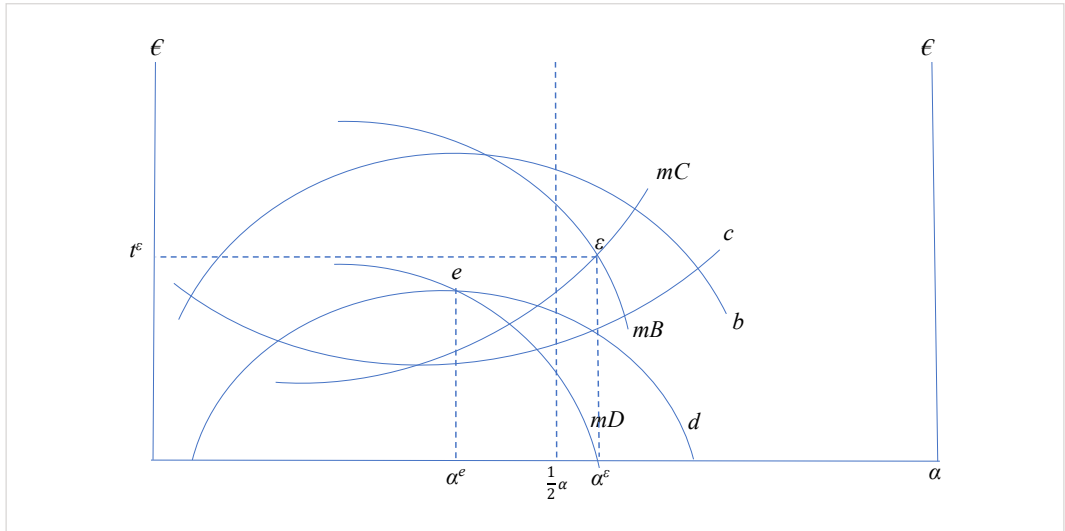


Figure 1. Majority voting rule

and negative (antagonistic) externalities from each other, and the existing support determines the extent of regulation. Thus, graph *b* shows how the political conception of from the regulatory entity develops from the viewpoint of an average taxpayer:

$$b = \frac{B}{\alpha} \tag{1}$$

The inverse U-shape of the graph $b(\alpha)$, $b' > 0$, $b'' < 0$, means that the origin function *B* is S-shaped. The intuition is that, in the political debate, there is more support for modest than comprehensive regulation so that the effect of increased regulation in producing social benefits is first positive but retarding and turns acceleratingly negative at the top of the *b* curve.

The taxpayers' marginal benefit from regulation is:

$$mB = \frac{dB}{d\alpha} \tag{2}$$

In the figure, graph *mB* strikes through graph *b* from above in its top point¹. The downward sloping marginal benefit graph *mB* below *b* depicts the "market" demand for regulation, that is the taxpayers' declining willingness to pay for it. In this sense, regulation is like a normal good with declining marginal benefit.

In Figure 1, graph *c* derives from a standard cost function, consisting of fixed and variable procedural costs of regulation:

$$C = f + v(g)$$

The fixed cost *f* is the expenditure from the existing institutional apparatus, while the variable cost *v* depends on the extent of the club good $g = g(\alpha)$, $g' > 0$, $g'' < 0$. Increasing support for broader regulation necessitates more labor input throughout the whole process, including referrals back to committee, law drafting, expert hearings and so on. Since *f* is fixed, an increase in *v* makes *C* grow first acceleratingly and then deceleratingly so that the cost function *C* is of inverse S-type in both *g* and α .

¹ Since $b = \frac{B}{\alpha} \Rightarrow B = ab$, from which the marginal benefit $mB = \frac{dab}{d\alpha} = b + ab'$. Thus, when $b' = 0$, $mB = b$; when $b' > 0$, $mB > b$; and when $b' < 0$, $mB < b$.

The average cost per taxpayer is:

$$c = \frac{C}{\alpha} \quad (3)$$

In the figure, graph c is U-shaped because scale economies in producing g are first positive, constant at the bottom of c and negative thereafter thus reflecting the inverse S-shape of the C function.

The marginal cost concept:

$$mC = \frac{dC}{d\alpha} \quad (4)$$

represents the supply of regulation. In Figure 1, the graph mC strikes through c from below in its bottom, where the average cost is at its minimum². Therefore, the “market” supply curve mC above c is rising in α because more support for regulation implies broader regulation thus adding to total costs from it.

The net benefit from regulation is:

$$D = BC$$

and the graph d in the figure depicts the average net benefit per taxpayer:

$$d = \frac{D}{\alpha} = \frac{B}{\alpha} - \frac{C}{\alpha} = b - c \quad (5)$$

Thus, the graph d illustrates the vertical distance between graphs b and c at each value of α . The marginal net benefit from regulation reads:

$$mD = \frac{dD}{d\alpha} \quad (6)$$

and the graph mD in Figure 1 strikes through graph d from above³.

In Figure 1, increased regulation gets support until the demand and supply of regulation meet at the intersection of the graphs mB and mC at point ε with votes $\alpha^\varepsilon > \frac{1}{2}\alpha$. At the same time, the marginal net benefit graph mD strikes trough the horizontal axis at α^ε .⁴ Since all taxpayers are invited to the club by the majority vote, the average tax price is:

$$\frac{\alpha\varepsilon}{\alpha} t^\varepsilon$$

In the static framework of Figure 1, optimal regulation by simple majority rule at α^ε gets realized from the beginning to the end of the whole procedure. However, the framework erects some remarks concerning the additivity of individual preferences. First, wouldn't a majority decision at the intersection of the mB and c graphs with lower taxes be fair to the taxpayers? No, because it would be inefficient compared to the optimum at ε because of excessive regulation. There would emerge a negative externality caused now by the proponents, measured by the vertical distance between mC and mB , and a welfare loss measured by the area between mC and mB . Second, if the set of curves were much closer to the right axis so that $\alpha^\varepsilon > \frac{1}{2}\alpha$, wouldn't the solution at the top of the average net benefit graph d be fair? Again, it would be inefficient because of the welfare loss measured by the area between mB and mC compared to the ε type optimum farther to the right. Thus, efficiency precludes maximization of social welfare from regulation measured by area

² By expression (3), $c = \frac{C}{\alpha} \Rightarrow C = \alpha c$, from which the marginal cost $mC = \frac{d\alpha c}{d\alpha} = c + \alpha c'$. When $c' = 0$, $mC = c$; when $c' < 0$, $mC < c$; and when $c' > 0$, $mC > c$.

³ Since $D = B - C = \alpha b - \alpha c = \alpha d$, from which the marginal net benefit $mD = \frac{d\alpha d}{d\alpha} = d + \alpha d'$. When, $d' = 0$, $mD = d$; when $d' > 0$, $mD > d$; and when $d' < 0$, $mD < d$.

⁴ Recall that at α^ε , $mB = mC \Rightarrow b + \alpha b' = c + \alpha c' \Rightarrow d = \alpha(c' - b') \Rightarrow d = -\alpha d'$. At the same time, $D = \alpha d$ from which $mD = d + \alpha d'$. Combining the results yields $mD = -\alpha d' + \alpha d' = 0$.

between graphs mB and mC , which reveals a pitfall in representative democracy: The obligation of the parliamentary agents to maximize social welfare may conflict with their average principals' individual wishes.

Public Remainder Risk

Over time, all long-acting investments yield remainder rights and cause remainder risks. Remainder right is a compensation for bearing the investment risk. In other words, it a right to profits. Remainder risk is something that remains after a thorough risk analysis, considered small enough to be accepted. Common risk analyses usually omit totally unforeseen happenings with minuscule random variation. Thus, remainder risk can be interpreted as the infinitesimal random error in the risk estimation.

If the private investment account is waterproof, the remainder right turns out quite as expected and the remainder risk is next to nothing. But if, say, an external shock strikes during the investment's life span, the remainder risk may explode, and the forecasted profits can turn even to losses. Firms, stakeholders, and financiers may then suffer, but all of them have based their voluntary participation in the project on appropriate calculations. In private market exchange, remainder rights and risks tie together.

The tie-up is more complicated when the public sector gets involved in private investments. In many cases, both immaterial and material involvements are needed, particularly when the private project is large and socially remarkable. That kind of a project necessitates parliamentary regulation, and continuous surveillance by public offices under the guidance of the parliament. Moreover, there is usually need for public construction of infrastructure as a material public input in the project. Commitment to the joint project means public remainder rights and risks from the project, and both depend on the private risks.

Since the public sector may end up as a consequential sufferer from the realization of the private risk, it must be most careful in its own risk assessments. For example, after the fall of Soviet Union, many European firms, leading businessmen and state leaderships erred to understate Russia's country risk. When the war in Ukraine started in February 2022, the country risk realized, numerous business activities and projects seized, and huge remainder risks, both private and public, exploded. The lesson from the incident is that at least the state leadership should be very cautious about unexpected risks, and it also quite reasonable that the officials are better aware of external threats than private entrepreneurs.

The problem of public remainder risk in public-private partnerships can be tackled in the model presented above. Figure 2 presents the initial stage of the project, namely the parliamentary handling of the complex set of permissions, regulations, and infrastructural commitments that are needed before the project can get started.

In Figure 2, the solid b and mB graphs represent benefit concepts based on the traditional manner of risk assessment. Namely, the probability of unforeseen happenings is assumed minuscule so that the public remainder risk should include in the random error with zero expectation value. This would lead to the same kind of a result as in Figure 1, given by the intersection of the mB and mC graphs at point e . Public commitment to the private investment project would then be accepted by simple majority α^c , and the project could get started.

As emphasized above, the state leadership must and should also be able to take risks more seriously. In dealing with genuine uncertainty, one must at least abandon the traditional assumption of thin tailed normal distribution. Accepting that the tails of the statistical distribution may be thick means that the expectation value of unforeseen events is not zero (*black swans*, Taleb 2010). Thus, more sophisticated statistical methods must be used in the administration, and the risk awareness should be appropriately mediated to the decision-makers.

Higher risk estimates make the proponents of the initiative more cautious and reinforces the arguments of the opponents. In the political debate, the result is that the benefits commonly anticipated from the project diminish. That makes the average and marginal benefit graphs shift inwards as illustrated by

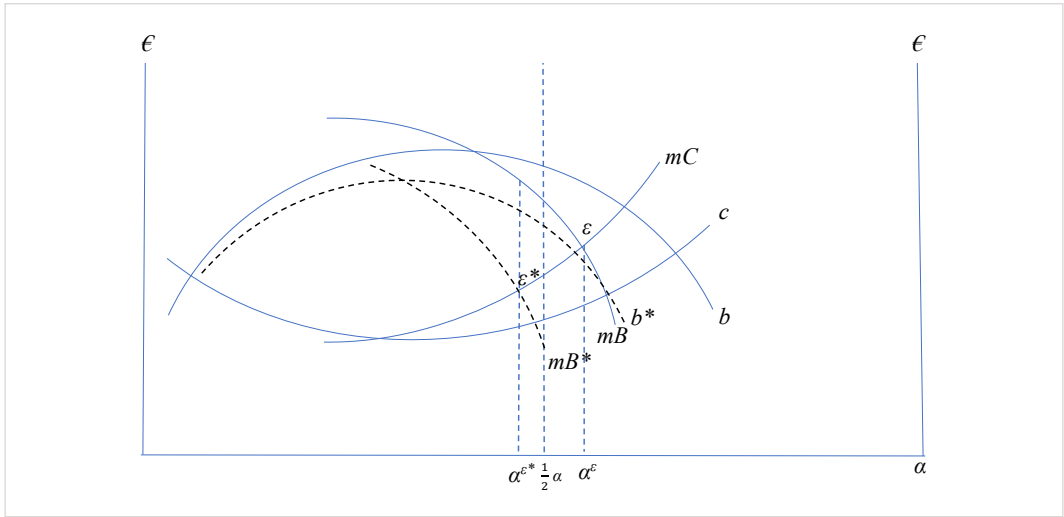


Figure 2. Public remainder risk

the dashed graphs b^* and mB^* in Figure 2. Consequently, the simple majority voting rule occurs in their intersection at point ϵ^* with votes α^ϵ . At that point, the vertical distance between mB and mB^* measures the monetary value, or price, of the politically anticipated public remainder risk.

Since $\alpha^{\epsilon^*} > \frac{1}{2}\alpha$, the price of the remainder risk is anticipated too high to warrant participation in the private project. Thus, regulation and other public commitments as well as the whole private investment project are banned in the parliament. Then, if an unexpected catastrophe should really take place, the representatives can be congratulated for their prudence. But if nothing extraordinary takes place, the ban would mean that the promised social benefits get lost. On the hindsight, the decision might then seem too hasty.

It must be noted that Figure 2 is again intentional - drawn otherwise, $\alpha^{\epsilon^*} > \frac{1}{2}\alpha$ would be possible as well. Its mere purpose is to theoretically show that public support for uncertain private endeavors is not granted in parliamentary handling and to emphasize the importance of thorough risk assessment. Moreover, the example illuminates the virtue of penetrating political debate in the parliament.

Public Investment Fund

The main question about long-acting public investments concerns their returns. In principle, the returns should be measured in terms of the effect on citizens' future wellbeing, which is very difficult. In practice, the returns are usually evaluated from budgetary perspective, that is in terms of future tax revenues, which is not accurate either. In many European countries the parliament's budgetary autonomy has deteriorated after joining the EU and particularly the Eurozone. The EU has also been criticized from its democratic deficit and lack of politicians' accountability, while expert organizations like the European Central Bank and the Court of Justice of EU have been praised for their impartial promotion of the public interest (Scharpf 1999; Follesdal & Hix 2006).

The fiscal rules of the EU stress the member counties' budgetary balance and avoidance of debt finance, but public debt has still increased in many countries due to the successive external shocks. Essentially, debt is as natural element of budgetary planning of the public sector as in the private sector, but public debt has a much worse reputation. Undoubtedly, the reputation would improve if debt could be connected to its returns more clearly. This could be achieved by partial replacement of external capital by equity funding.

By Jed Emerson (1998), novel applications of traditional debt securities could help in handling the connection between ownership and investment risks.

A constitutional Investment Fund would be a noteworthy solution to the problem of public remainder risk. Dedicated to financing socially important investment projects, the Investment Fund would be a politically independent organization with top expertise in the evaluation of returns and risks of all kinds of public investment projects. The Fund would consist of founding capital, and security loans from pension funds and private citizens. Like any government bonds, the securities would be tradable on the secondary market.

The securities should be ear-marked to ascertained investments or projects with project specific yields and maturities. In long term projects, the yield of short maturity securities could be adjusted according to the economic environment to reflect possible changes in the anticipated risk. In this way, the securities would be an appealing alternative to other modes of asset management by pension funds and the public. Thus, the Investment Fund would provide equity funding to public investment projects, including public private partnerships.

From macroeconomic perspective, the general virtue of the Investment Fund can be demonstrated by the balance of resources and expenditure:

$$Q - T = C + I + G - T + X - M \quad (7)$$

where Q is the gross national product or income, T is taxes, C is private consumption, I is private investment, G is public expenditure, X is exports and M is imports. Assuming that the economy is in external balance, $X = M$, and defining $S = Q - T - C$ as private savings, the identity (7) reduces to:

$$S - I = G - T$$

This version tells that the surplus or deficit of the private component $S - I$ must correspond to that of the public component $G - T$ of the economy. In the long run, both must balance:

$$S - I = G - T = 0 \quad (8)$$

Separating public expenditures to consumption and investment expenditures, $G = G^E + I^G$, assuming that the public investments are financed by public bonds, $I^G = B$, and substituting these into expression (8) produces:

$$(S - B) - I = G^E - T = 0 \quad (9)$$

On the left-hand side of (9), the residual $S - B$ of private savings covers only private investments I and, on the right-hand side, the public bond type saving B has absolved taxation T from financing public investments I^G . Thus, the citizens' saving in terms of public bonds is a voluntary and targeted input to public investments instead of obligatory and untargeted taxation, and a smaller tax revenue T is needed to cover nothing but consumption expenditures G^E . The system is allocatively efficient precluded that the social yield from public investments does not fall short of that of private investments.

Voluntary public bonds are public debt, but since the debt is from domestic citizens as a part of their total savings, the effect resembles that of taxation. The only difference is that a bond is a voluntary contribution with a tangible net asset value, which is a much more concrete measure than the return value of taxes. The public bonds could be sold in the secondary market for their real value, guaranteed by the high expertise of the Investment Fund. The Fund could estimate the development of the remainder risk during the life span of the project and incorporate the calculated risk price into the yield of the sequence of the short maturity bond batches.

Concerning public remainder risk in public private partnerships, the public bond finance system would separate the risk connected to immaterial regulation from the risk of material public investments. Defining total public expenditure as $G = G^E + I^{GG} + I^{GP}$, where I^{GG} denotes purely public investments and I^{GP} denotes those connected to private projects, and if $I^{GP} = B$, expression (9) turns to:

$$(S - B) - I = (G^E + I^{GG}) - T = 0 \quad (10)$$

By expression (10), purely public investments I^{GG} are financed by taxation while those connected to private projects I^{GP} are bond financed. Selling the risk of the physical part to voluntary market agents means that only the risk included in the legislative part of the project remains to be carried by the collective of taxpayers. This means that the citizens express their individual preferences in two modes: On one hand, they choose their commitment to the public authorization of the project as taxpayers, and on the other hand, they choose their commitment to the public investments as voluntary financiers. The simple majority voting rule then determines whether the latter decision mode is actualized or not.

Figure 3 illustrates how the introduction of voluntary public bond finance could affect simple majority voting in the parliament.

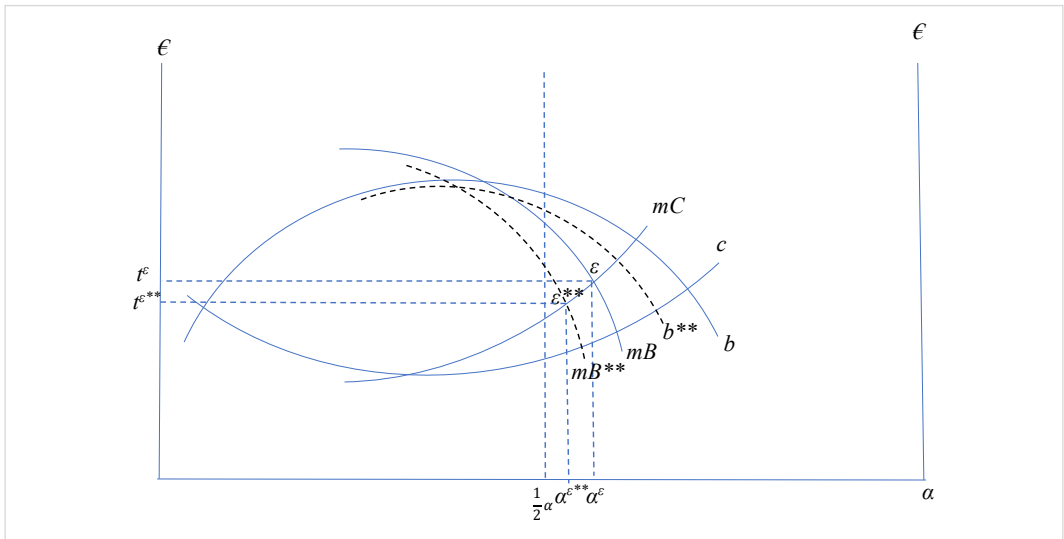


Figure 3. The taxpayers' remainder risk

Figure 3 repeats Figure 2 by assuming that the material public contribution to a private investment project is enforced by voluntary public bonds and only the remainder risk connected to the legislative contribution to the project belongs to the mass of taxpayers. The effect is that the average benefit and marginal benefit graphs b^{**} and mB^{**} slope more gently compared to those in Figure 2. As a result, the estimated price of public remainder risk, that is the vertical distance between mB and mB^{**} at ϵ^{**} is diminished, and the tax price is lower than because there is less demand for regulation such that is partly contaminated by remainder risk. The average tax price is also lower:

$$\frac{\alpha \epsilon^{**}}{\alpha} t^{\epsilon^{**}} < \frac{\alpha \epsilon}{\alpha} t^{\epsilon}$$

Again, the presentation is intentional and other outcomes would be possible as well. The argument is only that regulation may be accepted and public private partnership investment projects can get green light, if the public remainder risk is polished from all the risk that can be privatized via the Investment Fund.

The principle of voluntary exchange included in the Investment Fund would connect public finances to the citizens' preferences like Knut Wicksell (1896) and Antonio de Viti de Marco (1936) already emphasized. The later public choice theory has the same emphasis: Market driven collective action is possible

when enhancing common goals need broad cost sharing (Olson 1971). In principle, the voluntary exchange of public bonds corresponds to the use of vote case-by-case. In that sense, the Investment Fund could narrow the democratic deficit, sharpen the worth for money principle, and foster intergenerational justice.

Conclusions

In the EU member countries, public capital accumulated in the legislature is a core stanchion of the market economy. Regulation is commonly needed in connection with socially important undertakings, and the parliamentary decisions are usually made with the simple majority rule. Sometimes the public sector participates in big private projects also by material inputs, like infrastructure. In these cases, public remainder risk is often present. In principle, profits and risk bearing should belong to the same party, but the interrelation of public and private risks blurs the principle.

The paper presented a club theoretic model of regulation with simple majority voting assuming that citizens' rational preferences are perfectly reflected in the decisions of their representatives in the parliament. It was theoretically shown that:

1. Regulation can be accepted by the demand-supply equilibrium of the majority, but the underestimation of accidental risks can make the public remainder risk fall on the taxpayers.
2. On the other hand, a more careful risk assessment could lead to the ban of the whole project, implying that the social benefits from the project would remain unobtained.

As a solution to the problem of public remainder risk, the paper proposed a constitutional Investment Fund. The Fund would issue public bonds earmarked to physical investments, like infrastructure, connected to the private project. The bonds would be market securities, whose buying, holding, and selling would be purely voluntary. In this way, the public remainder risk could be washed from material public involvement to the project, and the remainder risk could consist only of the immaterial that is legislative part of it. Thus:

3. Bond financing could reduce the public remainder risk so that the joint project would be accepted by the majority rule, and the possibility of social benefits could be rescued.
4. The bonds would replace compulsory and universal taxation by voluntary and targeted saving thus enhancing the value for money principle.

The voluntary public bonds would have net asset value to their holders thus being an alternative mode of saving. In public finances, the bonds would be equity capital thus being an alternative to credit capital. The stability of the bond value would be guaranteed by the high expertise of the Investment Fund. The yield of the short maturity bonds, rolling over the life span, could be adjusted according to the changes in the risk expectations so that the risk bearing could be set on the voluntary bond buyers. Therefore:

5. As a market-based system, the Investment Fund would provide equity funding for public finance, and assets with tangible net value as a saving mode for the public.
6. The system would engage the citizens to the democratically steered market economy, narrow the democratic deficit, and foster intergenerational justice.

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REGULIAVIMAS, LIKUTINĖ RIZIKA IR VALSTYBINIS INVESTICINIS FONDAS: TEORINĖ ANALIZĖ

Anotacija. *Teisinės valstybės principo besilaikančiose ES valstybėse narėse parlamento teisėkūros veikla remia rinkos ekonomiką, kurdama viešąjį kapitalą. Daugeliu atvejų teisėkūra yra susijusi su viešaisiais investiciniais projektais, o kartais ir su socialiai svarbiais privačiais projektais. Abu šie projektai apima ne tik viešąją naudą ir sąnaudas, bet ir viešąją riziką. Be to, kadangi viešieji įsipareigojimai svarbioms privačioms įmonėms gali užkirsti kelią tiek nematerialiems, tiek materialiams įnašams, kyla nemaža grėsmė, kad dėl ko-kio nors nenumatyto įvykio atsitiktinai aktualizavus likusią riziką, didžioji našta teks mokesčių mokėtojams. Šiame straipsnyje konstruojamas klubų teorijos modelis atstovaujamosios demokratijos analizei. Modelyje valstybės įsipareigojimas privačiam projektui sprendžiamas pagal paprastosios balsų daugumos taisyklę*

parlamente. Analizė rodo, kad griežtas likusios rizikos vertinimas gali sustabdyti visą projektą, o tai reiškia, kad bus prarasta ir žadėta socialinė nauda. Kaip išeitį siūlome įsteigti konstitucinį Investicinį fondą, kuris piliečiams ir pensijų fondams platintų trumpo termino valstybės obligacijas, skirtas valstybės išpareigojimų privatiems projektams materialinei daliai padengti. Ši sistema galėtų iš dalies privatizuoti valstybės likutinę riziką, kad bendriems mokesčių mokėtojams liktų tik nematerialioji dalis, taip padidinant tikimybę, kad už projektą balsuos dauguma. Tuo pat metu vyriausybė gautų nuosavų lėšų savo investicijoms, o piliečiai ir pensijų fondai turėtų vertybinių popierių su apčiuopiama grynąja turto verte. Ši sistema turėtų padidinti valstybės skolos ir rizikos valdymo tikslumą ir suartinti demokratiją, viešąjį valdymą ir rinkos ekonomiką.

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