

# »» Allemagne en marche?! Municipal investment backlogs in France and Germany

No. 217, 16 July 2018

Authors: Dr Stephan Brand, phone +49 69 7431-6257, stephan.brand@kfw.de  
Dr Johannes Steinbrecher, phone +49 69 7431-2306, johannes.steinbrecher@kfw.de  
Leszek Wächter

For years, German municipalities have lamented an investment backlog of well over EUR 100 billion. A recent study by the European Investment Bank shows that German municipalities report a major investment backlog in an international comparison as well. French municipalities, on the other hand, are doing much better.

The analysis suggests that this result cannot be explained by the centralist structure of the French state. Federal and decentralised countries on average have a lower municipal investment backlogs. The reason for France's good result lies rather in the specific structure and funding of the municipal level.

With respect to reducing the municipal investment backlog in Germany, this means that transferring more and more funding responsibility to the federal level and introducing one-off special programmes does not provide a viable solution. Instead, the municipalities should be given more financial leeway again. This includes, in particular, a clear definition of responsibilities and adequate funding when functions are delegated from higher levels to municipalities.

The municipal investment backlog is a recurrent theme in economic-policy debate. In Germany the KfW Municipal Panel provides insight into the municipalities' investment activity and investment backlogs. In the KfW Municipal Panel, municipalities have reported an investment backlog of well over EUR 100 billion since 2012. For 2017 the perceived backlog is almost EUR 160 billion. Around two thirds of surveyed municipalities have reported a generally severe or substantial investment backlog.<sup>1</sup>

## Municipal investment backlog is above-average by international standards as well

The figures for Germany were previously seen in isolation; a European benchmark did not exist. A recent study by the European Investment Bank (EIB) has now provided a first overview of the municipal investment situation in Europe (see info box).<sup>2</sup>

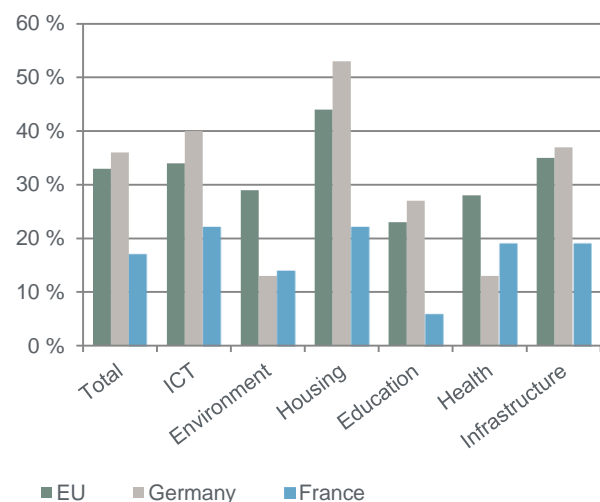
## The study

Supplementing its 2017 annual investment survey, the EIB interviewed 555 municipalities in Europe about their investment activities and needs. The telephone interviews with political decision-makers took place between May and August. The low case numbers limit the representative value of the survey but the findings nevertheless provide first indications of regional differences in municipal investment in Europe.

The findings not only reveal a generally higher level of investment activity in Europe but also clear regional differences in investment behaviour and perceived investment backlogs. While southern Europe in particular is behind, Germany's investment spending has developed better than average. Nevertheless, an above-average number of German municipalities – 36% – also reported an investment backlog in the EIB survey. In view of the significantly increased perceived investment backlog of the latest KfW Municipal Panel, these figures may even underestimate the current situation.

**Figure 1: Comparison of municipal investment backlogs**

Percentage of municipalities with an investment backlog



Note: ICT = information and telecommunications technology.

Source: European Investment Bank 2017, own rendition.

In a European comparison, the low percentage of French municipalities reporting an investment backlog is particularly noteworthy. At 17% it is just half the level of the European average of 33%. The generally much better performance of France is also evident in the individual investment categories (see Figure 1).

**The degree of federalism determines what powers should be given to each of the government levels**

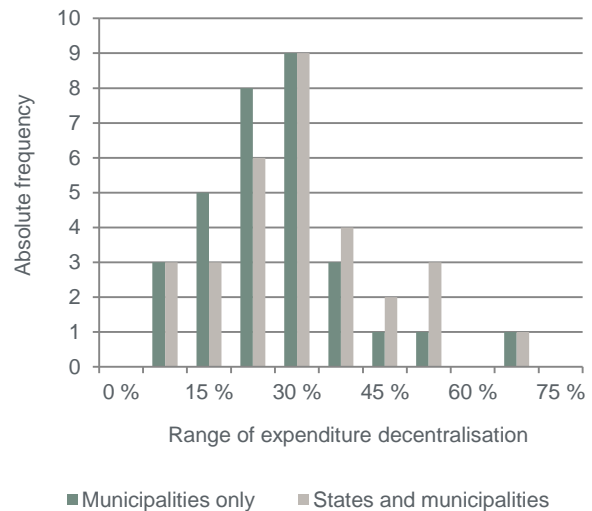
State functions and competences can, in principle, be structured very differently. The central question, quite literally, is what role and competences the central state should have and whether decentralised government levels should be introduced and what competences should be conferred upon them. Federalism is the principle of political organisation in which government activities are divided between regional and central, that is, national decision-making levels.<sup>3</sup> Each of these levels has the power to decide on selected policy areas. The opposite of a federalist structure is the centralised state in which the central government has the exclusive and final power to decide on policies. The difference to the federalist system therefore lies primarily in the constitutional distribution of (law-making) competencies and decision-making powers. Germany is a federalist country while France is a unitarist country.<sup>4</sup>

**The degree of decentralisation determines what powers each government level actually has**

The degree of decentralisation, in turn, decides the actual allocation of powers and resources between the levels of government and administration. This can involve various dimensions (e.g. administrative, political, fiscal).<sup>5</sup> Fiscal decentralisation, for example, refers to the assignment of spending and revenue-raising powers to lower government levels. The actual distribution of powers is independent of the constitutional framework. Thus, the degree of decentralisation may vary significantly between individual federal states.<sup>6</sup> However, federalist structures usually involve a high degree of decentralisation.<sup>7</sup>

In Europe the degree of decentralisation varies widely from one country to another. In Figure 2 this is illustrated by expenditure decentralisation, that is, the share of state expenditure by lower government levels such as states and municipalities. It is evident that there is not a single country in the EU that has not assigned at least part of its expenditure to lower government levels.<sup>8</sup> However, the degree of decentralisation varies greatly. On average across Europe, lower levels account for some 33% of total state expenditure (with municipalities alone taking 23.5%). Most countries have decentralised 20 to 30% of their expenditure. According to Eurostat, lower government levels account for around 20% of total expenditure in France and 47% in Germany (states and municipalities combined).

**Figure 2: Very wide range of expenditure decentralisation in Europe**



Note: For each interval the chart shows the number of countries with a corresponding degree of decentralisation. The interval widths are 7.5 percentage points. Taller bars represent higher frequencies. Accordingly, the highest frequency for both categories depicted has a decentralisation degree of >22.5–30%.

Source: Eurostat, own calculation.

Accordingly, France is a unitarist country and has a significantly more centralist structure than the European average. The opposite is true for Germany. These differences raise the question whether France’s better performance in the EIB survey may be explained by the institutional framework and administrative structure of the regions. Is the French model ultimately even an option for solving Germany’s investment backlog? We will address this question analytically below.

**The study shows that federal and decentralised countries have lower backlogs**

In economic theory, an argument in favour of decentralisation is that the local citizens’ preferences can be better identified by a local government than by the central state. Decentralising revenue and expenditure thus enables the costs and benefits of public services to be adapted more efficiently to the citizens’ preferences.<sup>9</sup> But decentralisation can also carry some disadvantages. For example, coordination efforts can grow considerably with the number of levels or regions. This, in turn, can lead to socially inefficient strategies, for example when regions constantly undercut each other as they vie for tax revenue until they can no longer provide the socially required infrastructure.<sup>10</sup>

Empirically, there are a number of indications of the positive influence of decentralisation on the development of regions. For European countries, for example, it can be demonstrated that decentralisation leads to higher investment, both overall and at subnational government levels.<sup>11</sup> In addition, decentralisation has predominantly positive effects on economic growth and the reduction of regional inequalities.<sup>12</sup>

On the basis of these findings it might be presumed that decentralised countries should also generally have lower municipal investment backlogs. In order to investigate this question, we try to explain the investment backlogs reported in the EIB survey<sup>13</sup> by using institutional and economic indicators in a regression analysis (see table).

Indicators	Explanation
Federal	Dummy: 1 federalist / quasi-federalist, 0 unitarist. <sup>14</sup>
Decentralised	Decentralisation index derived from five decentralisation measures.
FR	Dummy: 1 France, 0 Other.
DE	Dummy: 1 Germany, 0 Other.
GDP	Gross domestic product per inhabitant in purchasing power parity, average 2000–2016.
Balance	Budget balance of subnational level in per cent of GDP, average 2000–2016.
Capital expenditure	Net capital expenditure of subnational level in per cent of GDP, average 2000–2016.
Debt	Debt of subnational level in per cent of GDP, average 2013–2016.

Source: The backlog is based on data from the EIB study. All other indicators were calculated on the basis of Eurostat data.

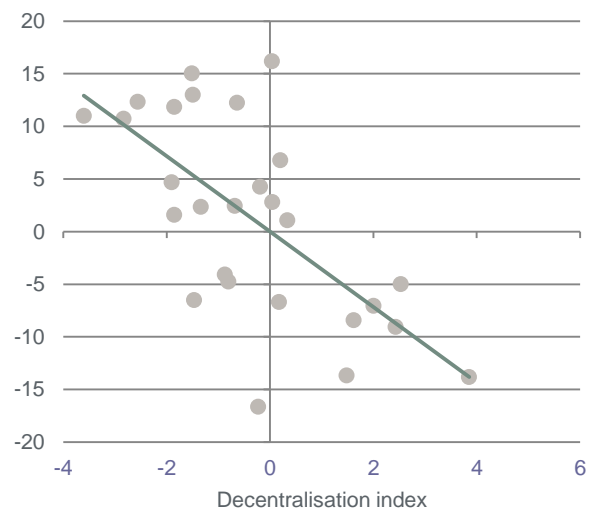
The analysis took into account institutional differences of federalism and decentralisation. It made a distinction whether a country was rather more federalist or unitarist (Indicator Federal). In order to be able to illustrate various facets of decentralisation, a decentralisation index was also formed and incorporated into the analysis (Indicator Decentralised).<sup>15</sup> Possible institutional specificities in France (Indicator FR) and Germany (Indicator DE) were also captured.

Besides institutional indicators, a number of possible economic factors also exist that influence municipal investment backlogs. The analysis takes into account the economic performance of the countries measured by gross domestic product (Indicator GDP), the average budget balance of the subnational levels (Indicator Balance), average net capital expenditure by the subnational levels (Indicator Capital expenditure) and average debt level of the subnational levels (Indicator Debt). In order to exclude any special annual effects, long-term averages were used for all indicators.<sup>16</sup>

Figure 3 illustrates the key finding<sup>17</sup>: For the investment backlogs identified in the EIB study and discussed here as well, the analysis revealed the expected overall link to decentralisation. The point cloud has a clearly negative trend, which means that more strongly decentralised countries tend to have a lower proportion of municipalities with investment backlogs.<sup>18</sup>

**Figure 3: Decentralised countries have fewer backlogs on average**

(Unexplained) percentage of municipalities with an investment backlog



Note: The graph shows the link between the investment backlog and the degree of decentralisation when the influence of the factors presented in the table has already been taken into account at the same time.

Source: own calculations.

What is remarkable, however, is that this finding does not appear to apply to Germany and France. If we take into account the differences in federalism, decentralisation and the economic environment shown by the indicators in the table, the share of German municipalities with an investment backlog is nearly 17 percentage points above the expected value, while the share of French municipalities is almost 14 percentage points below it.<sup>19</sup>

Why, therefore, are French municipalities doing better than expected? And why are German ones doing worse? Based on the findings of the analysis, centralism should not be the cause. Rather, the explanation must lie in the specific structure of the French and German systems (see info box).<sup>20</sup>

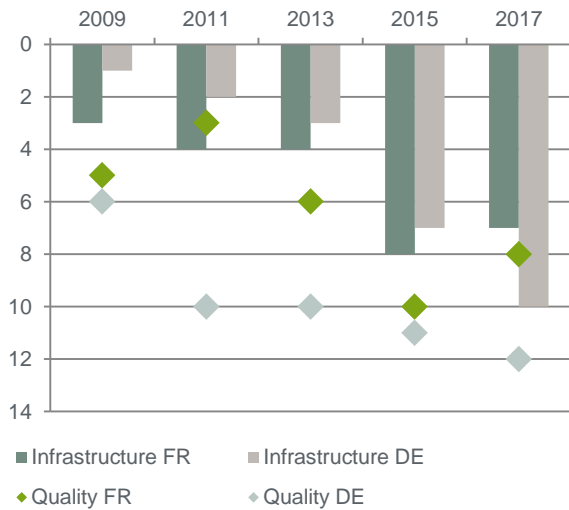
In the following we therefore debate three propositions that may explain the better performance of French municipalities: the quality of infrastructure, municipalities' investment activity and their investment capacities.

**Proposition 1: Lower backlogs owing to lower quality**

A possible explanation could be that French infrastructure is simply of a lower standard that is easier to maintain. An international comparison, however, refutes this hypothesis. First, the French municipalities in the EIB survey also rate the quality of their infrastructure better than average, and their assessment is even slightly better than that of the German municipalities.<sup>21</sup> Second, other international comparative studies also rate French infrastructure at least as good as or even better than German infrastructure (Figure 4).

**Figure 4: France’s infrastructure is of the same quality as Germany’s**

Rank in the WEF Global Competitiveness Report



Note: The figure shows the ranks of Germany and France in the annual competitiveness ranking of the World Economic Forum. Lower values on the y-axis (shorter bars, higher points) mean better rankings. The bars represent the overall competitiveness of infrastructure and the points stand for quality.

Source: World Economic Forum, own rendition.

If we look at the rank given in the Global Competitiveness Report, an annual competitiveness ranking published by the World Economic Forum, we can draw two key conclusions: Although the quality of French infrastructure overall has become less competitive, it has been consistently rated better than that of Germany for nearly ten years. Moreover, the competitiveness of French infrastructure improved last year for the first time since 2011 while Germany has fallen back continuously since 2009. The former front-runner is currently even at risk of falling out of the top ten countries with the most competitive infrastructure.

Poorer quality therefore cannot explain the findings of the EIB study. France’s municipalities are less likely to report an investment backlog, despite the generally very high quality of infrastructure.

**Proposition 2: Lower backlogs because of higher investment**

Another explanation for France’s good performance might lie in the different investment behaviour of recent years. French municipalities have indeed consistently undertaken positive net investment in the past 15 years; in other words, they have invested more than they have written off and hence expanded their capital stock (Figure 5). In previous years that rate was generally above the European average as well.

**The municipal level in Germany and France**

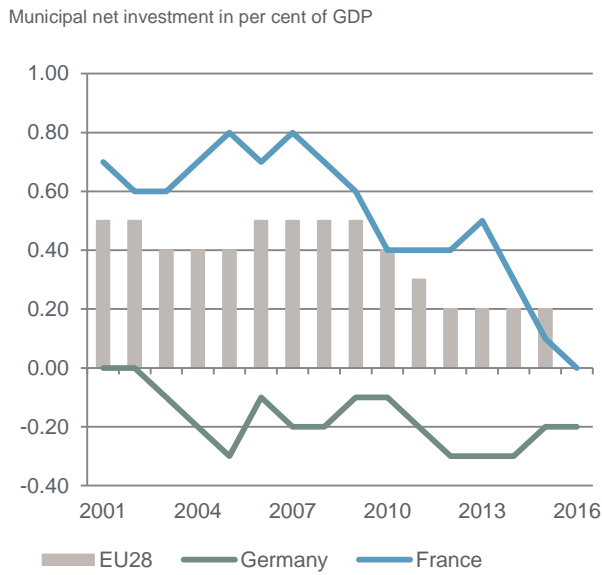
**Basic structure:** Germany is a federal republic. It has a supra-regional level of 16 federal states and a regional level of 294 districts, 107 district-free cities and 10,935 district towns and communities.<sup>22</sup> Under constitutional law, the municipalities are part of the federal states and therefore an administrative level and not a state level.<sup>23</sup> The relevant state law therefore determines how the municipal functions and finances are structured.

France is a unitarist country with three subnational levels<sup>24</sup>: 16 regions, 99 départements<sup>25</sup> and 36,658 municipalities.<sup>26</sup> Municipalities can also choose to form municipal associations, thus practically generating a fourth sub-national administrative level. The individual territorial authorities are autonomous both in their relationship with the state and from each other.<sup>27</sup> There is no hierarchical level between them.<sup>28</sup>

**Functions and powers:** German municipalities are generally fully responsible for all matters of the local community, although municipal autonomy is only possible within the confines of the law.<sup>29</sup> This effectively leads to a strong integration and division of tasks in the state structure.<sup>30</sup> The allocation of functions and financial resources is heavily determined by the states, which makes comparisons across state boundaries difficult. Differences within a state can also be determined not just by the local circumstances but also by the design of the compensation systems. Even if the municipalities are subject to supervision, they themselves are responsible for their budget management within this set framework.

In France, all territorial authorities have (largely) identical powers on their respective level. Thus, in any region of France an individual municipality has nearly the same rights and obligations as every other French municipality. The French state is aiming for more decentralisation and this is reflected not just in a growing range of powers for French municipalities but also in rising allocations of funding to them.<sup>31</sup> Besides, French municipalities have the power to levy their own taxes and fees, as well as receiving funding in addition. The municipalities decide independently how they spend their revenue.<sup>32</sup> However, they are not permitted to run deficits in their current budget. Funds can only be borrowed for investments. Therefore, municipalities must either raise taxes or cut spending to cover their expenditures.<sup>33</sup>

**Figure 5: German municipalities have invested less than French for years**



Note: Net investment is composed of gross investment by municipalities and local administrative units minus depreciations.

Source: Eurostat, own calculation.

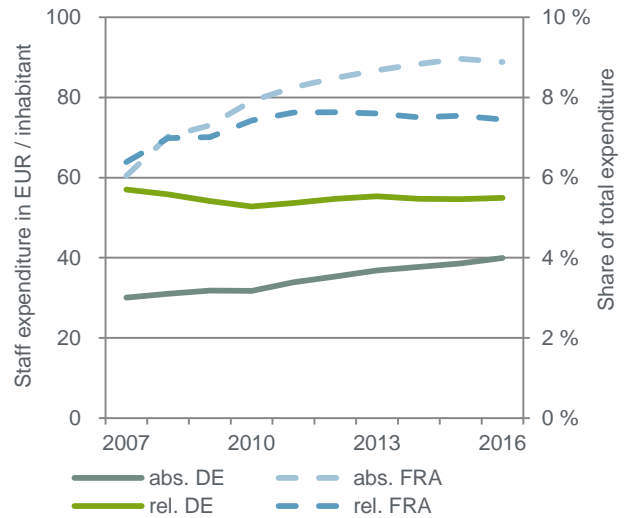
In German municipalities, the picture is quite different. There, the balance between investment and depreciation has been negative since 2003. In other words, Germany’s infrastructure has been deteriorating for around 15 years now while France’s infrastructure has even expanded further. This is true even for the past years in which low interest rates and a robust business cycle have opened up additional financial scope for German municipalities.

**Proposition 3: Lower backlogs are due to higher investment capacities**

One explanation for Germany’s low level of public investment could therefore lie in the capacity constraints currently being deplored by the municipalities.<sup>34</sup> Municipalities may want to invest but may not have enough planning or construction capacity to implement all desired projects in the short term. The latest results of the KfW Municipal Panel show that a considerable number of municipalities regard the current capacity bottlenecks as the main obstacle to increased investment: Insufficient planning and construction capacities were the most frequently mentioned reasons for the lack of investment in the in-depth interviews.

Indeed, municipalities in Germany have significantly reduced their planning staff in the past decades.<sup>35</sup> A general decline in planning capacity may be the consequence. If we now compare the staffing levels of German and French municipalities, it is evident that the French appear to simply spend more money on this as well (Figure 6). If we look at the housing sector and municipal facilities, the statistical area that is most likely to include the maintenance of municipal infrastructure<sup>36</sup>, it is evident that French municipalities spend significantly more on their staff.<sup>37</sup> This is true for absolute sums as well as for the proportion of total expenditure.

**Figure 6: French municipalities spend more on staff in planning departments**



Note: Expenditure on staff in the statistical area of housing and municipal facilities.

Source: Eurostat, own calculation.

What is more, capacity utilisation in the construction sector in France is nowhere near the level it has reached in Germany, also because France was hit much harder by the financial crisis than Germany. Price increases in the construction sector also illustrate this. While construction prices for residential buildings and house prices, for example, have been rising steadily in Germany for the past ten years, in France they have even fallen in the past years.<sup>38</sup>

In other words, the planning capacities of local governments in France could definitely be higher, which would enable French municipalities to invest more.

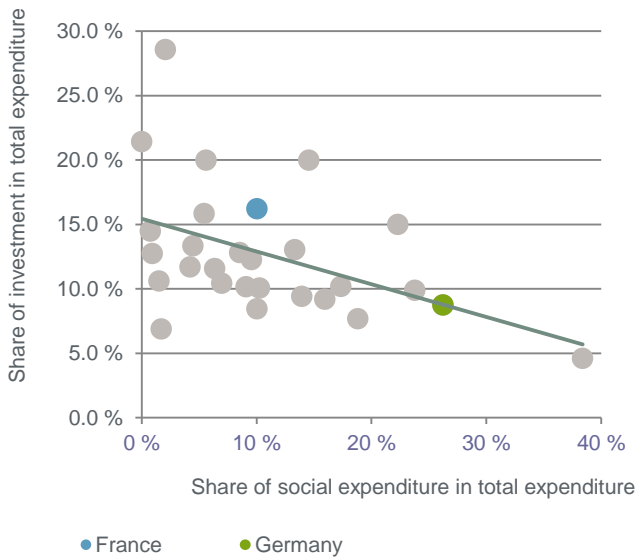
**Investment tends to be displaced by non-postponable expenditure**

The differences in investment capacity and investment activity thus provide a strong indication for the French municipalities’ higher score. The question now is why French municipalities have invested so much and German ones so little in the past years.

Since German municipalities have high backlogs, lack of demand does not appear to be the cause. Rather, one cannot help but assume that the municipalities are unable to invest in the desired volume. One reason for this may lie in the controllability of investments. Unlike legally or contractually determined expenditures such as staff or social expenditure, the investment volume can be chosen relatively freely. Conversely, however, that also means investments can be more easily postponed when the funds have already been used up by other expenditure.<sup>39</sup> Indeed, it has become evident that, for example, a high share of social expenditure in total expenditure tends to correlate with a lower share of investment (Figure 7).



**Figure 7: Higher social expenditure generally means lower investment**



Note: Five-year averages for 2012–2016 for the European Union and all 28 current member states.

Source: Eurostat, own calculation.

In German municipalities, social expenditure has had a high and steadily growing share, particularly in the past years. It ties up freely available funds that can no longer be used for investment. As the additional expenditure has not always been paired with an equivalent increase in revenue, this development is likely to have been a major factor for low investment expenditure.<sup>40</sup> The result is high investment backlogs and rising consequential costs.<sup>41</sup> French municipalities, by contrast, are under considerably less pressure from social expenditure but have a significantly higher share of investment.<sup>42</sup> Consequently, this is not a

result of France's centralist administrative organisation but the simple result of the respective allocation of functions and funding to the municipalities in the two countries.

**Conclusion**

German municipalities have above-average investment backlogs, also compared with other European countries. French municipalities, by contrast, perform significantly better. This result can neither be explained with centralism nor with a lower quality of French infrastructure. Rather, the result appears to be a consequence of French municipalities' significantly higher level of investment activity in the past 15 years. The causes for this higher investment cannot be conclusively established in this article. The aspects discussed here, however, indicate that French municipalities were able to invest more because they generally had more financial and human resources to perform the tasks allocated to them.

Centralism is therefore not the solution to Germany's municipal investment backlogs. The continuing crises in the centralist countries Greece and Italy are additional evidence of this. Instead, the existing system must be properly resourced, either by conferring tasks to other levels or by reprioritising funding allocations in line with the increased scope of municipal tasks. Indeed, the recent reforms in France, too, illustrate that municipalities invest less when they have fewer resources.<sup>43</sup>

The findings of international studies and this analysis indicate in principle that decentralisation tends to enable better investment decisions. The current trend in Germany to delegate powers and financial responsibility to the federation while focusing on one-off special programmes that do not produce structural changes should therefore be viewed critically.<sup>44</sup> ■

<sup>1</sup> Cf. Scheller, H. et al. (2018): KfW Municipal Panel 2018.

<sup>2</sup> Cf. EIB (2017): EIB Investment Survey – Municipal Infrastructure European Union Overview, European Investment Bank.

<sup>3</sup> Cf. e.g. Riker (1975): Federalism, in Greenstein, F. I. and Polsby, N. W.: Handbook of Political Science: Governmental Institutions and Processes, Addison-Wesley.

<sup>4</sup> Cf. e.g. Woldendorp et al. (2013), Party Government in 48 Democracies, Springer.

<sup>5</sup> Cf. e.g. Schneider, A. (2003): Decentralization: Conceptualization and measurement. Studies in Comparative International Development, 38(3), p. 32–56.

<sup>6</sup> Although most federal states have decentralised structures it is not possible to simply classify them just on the basis of their status as a federal state. Vgl. Blöchliger, H. and Kantorowicz, J. (2015), 'Fiscal constitutions: An empirical assessment', OECD Economics Department Working Papers, No. 1248, OECD Publishing.

<sup>7</sup> Cf. e.g. Woldendorp et al. (2013) a. a. O. and Keman (2000): Federalism and policy performance: a conceptual and empirical inquiry, published in Wachendorfer-Schmidt (2000): Federalism and Political Performance, Taylor & Francis.

<sup>8</sup> For Cyprus and Malta, however, that share is well below 5%. They can therefore be regarded as almost completely centralised states.

<sup>9</sup> For an overview of classic literature on fiscal federalism cf. e.g. Oates, W. E. (1999): An Essay on Fiscal Federalism, Journal of Economic Literature, 37(3), p. 1120–1149.

<sup>10</sup> These questions are dealt with by what is known as the second generation of fiscal federalism research. For an overview cf. e.g. Weingast, B. R. (2009): Second generation fiscal federalism: The implications of fiscal incentives. Journal of Urban Economics, 65(3), S. 279–293.

<sup>11</sup> Cf. Kappeler, A. and Väilä, T. (2008): Fiscal federalism and the composition of public investment in Europe, European Journal of Political Economy, 24(3), p. 562–570.

<sup>12</sup> For a discussion of the theoretical bases and an overview of current empirical research findings on the influence of decentralisation see e.g. Sacchi, A. et al. (2017): The impact of fiscal decentralization: A survey. Journal of Economic Surveys, 31(4), p. 1095–1129, and Baskaran, T. et al. (2016): Fiscal Federalism, Decentralization, and Economic Growth: A Meta-Analysis. Economic Inquiry, 54(3), p. 1445–1463.

<sup>13</sup> The percentage values reported in the study are used as variable to be explained for the shares of the municipalities. Where the study reported values for country groups only, all countries of the same group received the same value. The estimate was for a linear regression model with robust standard errors.

<sup>14</sup> Cf. Woldendorp et al. (2013), loc. cit.

<sup>15</sup> The indicators were condensed into an index through an analysis of the main components. The indicators used were: i) share of expenditure of the lower levels (less subsidies) in total public expenditure; ii) share of state subsidies in total revenues of the lower levels; iii) share of subsidies to other government levels in total expenditures of the lower levels; iv) share of tax revenues of the lower levels in total tax revenues; v) share of the lower levels in total payroll costs for the public service. The indicators were selected in accordance with the compilation by Blume & Voigt (2011): Federalism and decentralization – a critical survey of frequently used indicators, *Constitutional Political Economy*, 22(3), p. 238–264.

<sup>16</sup> For debt, only the values from 2013 were available for all countries.

<sup>17</sup> The federalism index also points to a positive influence on the investment backlog but is not statistically significant. Besides, it shows a positive correlation with economic performance and budget surpluses and a lower share of municipalities with investment backlogs. The effects for net investment and debt are statistically not significant.

<sup>18</sup> Owing to the limited size of the sample, however, the results should be regarded with caution and require further investigation.

<sup>19</sup> This is shown by the estimated coefficients for the indicators FR (-13.81) and DE (16.75). Both results are statistically significant at the 5% level.

<sup>20</sup> What needs to be considered first is that the findings of the EIB survey may also be distorted and, hence, not meaningful. But since the estimated coefficients from the above empirical analysis show the expected positive and negative values on the one hand, and also have high statistical significance given the small sample on the other hand, that assumption is unconvincing. We therefore presume in the following that the findings of the EIB survey permit qualitative conclusions about the differences in the investment backlogs.

<sup>21</sup> French municipalities rated the quality 3.4 on a scale from zero (totally obsolete) to five (state-of-the-art). German municipalities gave a score of 3.3; the European average is 3.2. Cf. EIB (2017), loc. cit.

<sup>22</sup> Cf. Federal and State Statistical Offices (2018): Verwaltungsgliederung in Deutschland am 31.08.2018 (*Administrative divisions in Germany on 31 August 2018* – in German). Other administrative levels such as Bezirke (*boroughs*) or special forms such as municipal associations are not included. For an overview of the various municipal structures in Europe see for example CEMR (2016): Local and Regional Governments in Europe Structures and Competences – 2016 Edition.

<sup>23</sup> The autonomy of local governments in Germany is guaranteed by Article 28 para 2 of the Basic Law. The guarantee of municipal autonomy comprises five core competences for German municipalities: personnel, organisational, legislative, planning and financial sovereignty. Outside the Basic Law, municipal law is regulated particularly in the municipal and district bylaws of the federal states. Cf. Research Services of the German Bundestag (2013): Die kommunale Selbstverwaltung in ausgewählten Mitgliedstaaten der Europäischen Union (*Municipal autonomy in selected member states of the European Union* – in German).

<sup>24</sup> Apart from the three types of territorial authorities mentioned here, there are also territories with special status (the three large cities of Paris, Lyon and Marseille) and overseas territories. These specific administrative features are not of importance for the present analysis and will therefore not be further discussed here.

<sup>25</sup> The départements for their part are subdivided into arrondissements and cantons. These substructures, however, have no functional autonomy but merely serve to simplify the organisation of the administration and elections. Vgl. Ter-Minassian et al. (2017) Fiscal Federalism and Governance in the European Union, Project on 21st Century City Governance, Brookings, September 2017.

<sup>26</sup> With an average population of only some 1,800 inhabitants per municipality, France has one of the most fragmented territorial divisions in international comparison as well. Vgl. OECD/UCLG (2016): Subnational Governments around the world: Structure and finance.

<sup>27</sup> Municipal autonomy is guaranteed in Article 72 of the French constitution. The article regulates the rights and obligations of the municipalities and has a subsidiarity principle as a particular feature. The detailed allocation of functions to the respective territorial authority, for its part, is regulated by a general code for subnational governments (Code général des collectivités territoriales). Cf. Research Services of the German Bundestag (2013): loc cit. Two current legislative initiatives have transferred some further powers and functions to the local governments, cf. Ter-Minassian et al. (2017): loc cit. For a detailed description of the most recent reforms see OECD (2017): Multi-level governance reforms: overview of OECD country experiences.

<sup>28</sup> Cf. Research Services of the German Bundestag (2013): loc cit. and the sources listed therein.

<sup>29</sup> Cf. Henneke, H. (2008): Die Kommunen in der Finanzverfassung des Bundes und der Länder (*The municipalities in the financial constitution of the federation and the states* – in German only).

<sup>30</sup> Cf. Bogumil, J. and Holtkamp, L. (2006): Kommunalpolitik und Kommunalverwaltung (*Municipal policy and municipal administration* – in German only).

<sup>31</sup> Cf. Research Services of the German Bundestag (2013): loc cit.

<sup>32</sup> Cf. Research Services of the German Bundestag (2013): loc cit.

<sup>33</sup> Cf. Ter-Minassian et al. (2017): loc cit.

<sup>34</sup> Cf. Brand, S. and Steinbrecher, J. (2016): [Erst mehr Geld und jetzt mehr Personal – was benötigen Kommunen für Investitionen?](#) (*First, more money and now, more staff – what do municipalities need in order to invest?* – in German only), Focus on Economics No. 151, KfW Research.

<sup>35</sup> Cf. Brand, S. and Steinbrecher, J. (2016) loc cit:

<sup>36</sup> The statistical definition permits only a relatively rough comparison. Nonetheless, this area comprises not just housing but primarily planning-intensive infrastructure areas such as municipal development or water supply. This does not apply equally to the other main statistical areas (general administration, defence, public safety, economic affairs, environmental protection, healthcare, culture and religion, education, social protection). What cannot be explored here, however, is the question whether the differences in staffing levels are caused by the different degrees of externalisation in Germany and France. As the municipalities in both countries have the necessary powers, however, different degrees of externalisation (and any effects they may have) can be interpreted as strategic decisions.

<sup>37</sup> For comparison, only staff expenditure can be used as estimates but not the number of positions.

<sup>38</sup> For an overview of the German and French construction sector, see the country profiles of the European Construction Sector Observatory of the European Commission, March 2017.

<sup>39</sup> See Brand, S. and Steinbrecher, J. (2017): [Rückgang des Investitionsrückstands – Trendwende oder nur Schönwetterlage?](#) (*Declining investment backlog – a trend reversal or just a temporary breather?*) Focus on Economics No. 195, KfW Research (in German only).

<sup>40</sup> Cf. Brand, S. and Steinbrecher, J. (2017) loc cit:

<sup>41</sup> Cf. Scheller et al. (2017): loc cit.

<sup>42</sup> The question that must remain unanswered here is to what extent social expenditure is commensurate with the respective needs and whether a higher share of social expenditure in the two countries is or would be more appropriate than a higher share of infrastructure investment.

<sup>43</sup> Cf. Ter-Minassian et al. (2017): loc cit.

<sup>44</sup> Cf. e.g. Henneke, H. (2017): Schleichende Zentralisierung und Verantwortungsverwischung – Warum die Neuordnung der Bund-Länder-Finanzbeziehungen aus kommunaler Sicht kritikwürdig ist (*Creeping centralisation and blurring of responsibilities – why the reorganisation of the financial relations between the federation and the states is worthy of criticism from the perspective of municipalities* – in German only). In: Publicus Ed. 2017-07.