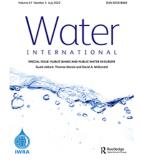


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The European Investment Bank and its role in financing public water

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ABSTRACT

The European Investment Bank (EIB) emerged as the world's largest multilateral public development bank from the 1990s. We explore the logic of EIB lending to the water sector in general, and to public water in particular. Water lending from the EIB's establishment until 1990 reflected its core mandates, then, from 1991 to 2021, slippage occurred, as a process of levelling up meant the EIB distributed water lending more evenly among member countries. We find EIB water lending went to both public and private water, illustrating this using the case of the UK, the leading recipient of lending throughout the period.

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European Investment Bank (EIB); European Union; public water; private water; water lending

Introduction

The European Investment Bank (EIB), established in 1958, constitutes one of the main institutional pillars upon which the European Union (EU) was built.¹ Commonly labelled the 'Bank of the European Union' (EIB, 2013, p. 5), the EIB is often described as a 'policy taker' (EIB, 2001; Lewenhak, 1982), since its constitutive mandates set out how lending mandates are designed to support EU policy objectives (EIB, 2020a). The EIB is a highly significant lender at the international level: from the 1990s onwards, the bank emerged as the world's largest multilateral public development bank in terms of its assets, equity and lending, overtaking the World Bank in lending volume. In 2021, the EIB had around \notin 450 billion in outstanding loans (Council of the EU, 2019).

Despite its importance, the institution has surprisingly attracted little research (Clifton et al., 2020; Coppolaro & Kavvadia, 2022; Liebe & Howarth, 2019; Robinson, 2009). This article, which forms part of larger research project investigating the role of public banking and its relationship with the financing of public water in this special issue (Marois & McDonald, 2022), is the first to explore the logic of EIB lending to the water sector. In addition to analysing the role of the EIB in lending to the water sector in general, it enquires specifically as to the relationship between lending by the EIB, as a public bank, and public water. The thinking behind this second line of analysis is inspired by multiple recent approaches, including Marois (2021, 2022), Mertens et al. (2021), Mazzucato and Ryan-Collins (2022) and Clifton and Díaz-Fuentes (2022), who, using different theoretical perspectives, coincide in arguing that public entities may be characterized by 'public

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missions', in contrast to private entities which typically focus on profit above all else. Following this logic, it could be argued that public entities, such as the EIB, may privilege lending to other public entities, including public water, in an attempt to fulfil a public mission. To better understand this dynamic, this paper focuses on the logic of EIB water lending within Europe, the region which has garnered the majority share of EIB global lending to water – some 94.3%.

Our analysis of the logic of EIB lending to the water sector in Europe, from its origins to the present, argues that this is best understood as comprising two overall phases. The first phase covers the period from the establishment of the EIB, in 1958, to 1990; and the second phase comprises the period from 1991 to 2021. This division of the EIB's lending activities is guided by an analysis of the extent to which the logic of its lending reflects the official mandates that the EIB works under. In theoretical terms, the principal-agent problem argues that an agent may act in a different direction to that set by the principal (see Sappington, 1999; and Miller, 2005, for the principal-agent problem; and Ben-Artzi, 2016; Clifton et al., 2021a; and Liebe & Howarth, 2019, for an application to regional development banks). One way to examine this is to assess the extent to which the logic of EIB lending matches or reflects its constitutive mandates. Where a gap emerges, it is argued 'slippage' has occurred, since the agent, the EIB, is not actually fulfilling the intentions of the principal, in this case, the EU member states.

Using this principal-agent perspective, the logic of EIB lending to the water sector in the first phase can be interpreted as strongly reflecting the bank's constitutive mandates, which we unpack in the next section, and which include development, investment and, particularly, integration (which incorporates the promotion of enlargement). For example, the bank's activities promoting integration and enlargement are strongly notable in its water lending when two new member states, the UK^2 and Ireland, which joined in 1973. However, between 1991 and 2021, EIB water lending is increasingly less influenced by the core EIB mandates. This indicates slippage as predicted by the principal-agent problem. Lending becomes increasingly more evenly distributed among country members. Rather than privileging its mandate, that is, EIB water lending reflects more and more member states' actual capital subscribed (i.e., their financial contributions to the EIB). Though in both phases the EIB responded to members' demands for water lending – since this is the sole mechanism by which member countries extract lending from the EIB – in the first phase lending reflected EIB mandates more clearly, while in the second phase evidence of the three mandates determining the EIB's lending logic becomes diluted. We refer to this dilution as 'levelling up', as a means of describing the logic of the second phase of water lending from the perspective of the bank. From the perspective of the individual member, one might describe it as 'you get what you give'.

The finding that EIB water lending more closely reflects its three mandates until 1990, after which slippage occurs, accompanied by a levelling-out process, corresponds to trends found in Clifton et al. (2014) on EIB lending to all infrastructure sectors. Slippage from its mandates has also been observed in other studies on EIB lending. For example, Griffith-Jones and Tyson (2013) critiqued the EIB for not prioritizing its development mandate by not financing sufficiently its least developed members. More recently, the CEE Bankwatch Network (2021) criticized the EIB for its lending outside the EU by arguing they have potentially damaging consequences for development in these countries.

Regarding the relationship between EIB lending and public water, we have cautionary findings. We argue that it is important to understand the overall direction of ongoing water reform in the country in question that is receiving the loans than just the ownership of the water entity receiving the lending at that moment in time. This is because what may *appear* to be lending to a public (or private) water entity may be deceptive with regard to the wider political economy of national water reform policy.

We illustrate this point by analysing the case of the UK. The UK received more EIB loans to the water sector than any other country across the entire period between 1958 and 2021 as an EU member, taking some 31% of total water lending. The second most important recipient of water lending was Italy (17.1%), and the third Germany (11%), across the whole period. Hence, the UK received more lending than Italy and Germany combined. During the 1970s, on the face of it, EIB lending to the UK appears to be supporting mostly public water. However, Ratnayaka et al. (2009) observed that the Conservative government in power at the time squeezed the public water sector financially by blocking national lending to the water entities in advance of their corporatization and eventual privatization. From this perspective, it could be argued that lending by the EIB was a good alternative for the water entities in lieu of constrained national lending options. Inadvertently, then, EIB water lending that appeared to be directed at public water entities, as registered in official EIB lending data, is better understood as lending to water entities that were being transitioned from public to private bodies by the ruling government. This raises further questions about public banks, public missions and public water provisioning, especially as societies seek to confront challenges of sustainability.

The remainder of the paper is structured as follows. The next section presents the EIB with a brief reference to its origins, the purpose of its establishment and its mandates, and it draws out what this might mean for its role as a lender to the water sector. The third section uses the EIB's database on its lending, combined with secondary literature and semi-structured interviews with EIB representatives and experts, to provide an overview of EIB lending to the water sector from 1958 to 2021. We examine trends in lending to assess the extent it reflects the bank's mandates following the principal-agent problem. On this basis, we present a more detailed analysis of the two main phases identified: from 1958 to 1990, and from 1991 to 2021. In both phases we illustrate the logic of lending to public water through the case of the UK, the country to receive most lending to the water sector. The final section offers overall conclusions.

A snapshot of the EIB's mandates

The EIB was established in 1958 with a view to attend to EU member states' collective – and individual – interests (Clifton et al., 2018, 2021b). It is fully owned by its member states and is commonly labelled the 'Bank of the European Union'. The EIB describes itself as a 'policy taker', since its lending should align well with EU policy objectives (EIB, 2020b). The EIB was established as a public, multilateral bank, with a view to achieve three major mandated objectives: investment, development and integration, including enlargement. This is explained by the historical moment in which the EIB was created: it was charged with promoting economic development and regional integration whilst contributing to meeting the pressing investment needs of a war-torn Europe. Whilst

other multilateral banks, such as the World Bank, established before the EIB, had mandates for investment and development, the EIB was the first multilateral bank to have a mandate that included regional integration (Clifton & Díaz-Fuentes, 2022; Clifton et al., 2018). The three core mandates of the EIB require some unpacking.

Regarding the investment objective, the EIB was established as a financial institution that would borrow on the international financial markets and manage common financial risks in the EU in order to facilitate long-term investment by offering more favourable financial conditions for EU member states than those available at the national level. Of particular importance here was lending to long-term infrastructure projects that required 'patient' finance, that is, appropriate long-term financing. Similar to many other multilateral banks, the EIB does not have 'specific water sector targets' (Fonseca et al., 2021, p. 50). However, EIB lending does support infrastructure, and its loans have been targeted across a range of different infrastructures, such as energy and transportation networks. Lending to the water sector, therefore, is a logical component of the EIB's activities. This has become even more the case since 1984, when lending to water was supported under the EIB's updated environment policy objective (EIB, 1984, p. 34).

The second major mandate objective of the EIB was development. The EIB was conceived as an investment bank that would support the development of the less-favoured countries and regions within the EU, with a view to improve or maintain cohesion across the EU territory. At the time of its establishment, economists feared that the creation of the EU would exacerbate the need for cross-border investment and cause richer regions to develop further at the expense of poorer ones. EIB loans, therefore, were to help prevent economic imbalances among members and encourage the economic growth of the least developed regions.

Finally, the third mandate objective was to promote integration and enlargement. In the first instance, integration was understood as helping existing member states become more integrated in the EU. However, later, it was also conceived as meaning a way of supporting enlargement to the EU. Lending could be used as a kind of 'reward' to newly acceded member states or EU candidates, as a way of welcoming them to the EU (the UK being a notable example).

To frame the EIB's lending activities conceptually, we employ the principal-agent problem approach. The principal-agent problem argues that an agent may act in a different direction to that set by the principal (Sappington, 1991; Miller, 2005). One way to examine this is to assess the extent to which the logic of EIB lending matches what would be expected according to the three EIB mandates – investment, development and integration (including enlargement). Where a gap emerges, or where actual lending is distanced from these three mandates, it could be argued that 'slippage' has occurred (Ben-Artzi, 2016). We explore the logic of EIB lending to the water sector over time and enquire as to the extent to which this lending can be explained by these mandates.

The EIB and its financing of the water sector

In this section we describe the EIB's lending activities to the water sector from 1958 to 1990 and then from 1991 to 2012. In addition to being characterized by a different lending behaviour on the part of the EIB, these two phases also coincide clearly with a change in the political economy of Europe. Between 1958, when the EIB was

established, and 1990, when the EU was focused on consolidating a common economic and political area in Western Europe, under the shadow of the Cold War. At this time the EU underwent three rounds of enlargement, from the original six member states to the EU-12. The first round included Denmark, Ireland and the UK. The second and third rounds included Greece, then Spain and Portugal.

In the second phase, between 1991 and 2021, the Cold War had come to an end and the Soviet Union was gradually dismantled. At this time the EU-12 expanded to the EU-15 and then eastwards to the EU-28. Brexit at the end of 2020 then led to the EU's first shrinkage, to the EU-27.

Our analysis of EIB lending first considers lending to all sectors, in order to later put into context the significance of its water lending. Between 1958 and 2021, nearly 95% of all EIB lending was directed to EU member states and EU neighbour countries. In this period, the EIB financed a total of 25,622 projects at €1838 billion in constant 2015 prices (EIB, 2022b). Regarding EIB loans to water by projects, of the total number of projects receiving EIB loans, some 6.6% (1682 projects) were destined to the water sector between 1958 and 2021 (EIB, 2022b). As regards the sectors and volume of lending measured in euros, the infrastructure sector in general attracted by far the majority of EIB lending. In order of importance, energy infrastructure led, followed by transportation and communications. The water sector was the fourth infrastructure sector in importance across the whole period. Overall, the water sector received €97.7 billion of loans from the EIB (constant 2015 prices), which amounted to some 5.3% of total EIB lending (Figures 1, 2). It has been argued that this percentage is on the low side for a public bank, since the involvement of public banks in the water sector tends to range from a minimum of 5% to a maximum of around 15% (Fonseca et al., 2021).

One of the reasons EIB lending to the water sector is on the low side may be explained by the perception EIB staff hold of the water sector itself. Anonymized interviews with EIB staff conducted for this article stated that water is seen as being 'high risk', whilst the EIB's lending strategy is to reduce risk in order to borrow money cheaply to lend cheaply.³ When EIB experts were asked to explain this perception of water being high risk, they stated this was due to the financial risks associated with low cashflows that complicate comfortable debt servicing. In addition, EIB experts cited the possibility of sewage leaks and other environmental accidents that could reflect badly on the EIB's reputation.⁴

Figure 1 shows that the majority share of EIB water lending was destined to the EU and Europe more generally. Some 87.3% of EIB lending to the water sector has been directed to EU member states. Lending to other European countries amounted to 0.9%, whilst 6.1% went to European neighbour countries in the Mediterranean region. Therefore, 94.3% of total loans to the water sector was directed to the European region. Loans to the water sector to the rest of the world (RoW; including Africa, Asia, Latin America and the Caribbean, and the Pacific), therefore, only made up 5.7% of total water lending. This rather low volume of lending to regions outside of Europe has placed the EIB in the spotlight, and it has been criticized as not doing enough for the RoW (Griffith-Jones et al., 2008). Perhaps in response to this criticism, EIB water lending directed to the RoW increased from 2018 to 2021 (Figure 1). In 2022, the EIB also launched a new development lending arm, EIB Global, to spearhead efforts abroad (EIB, 2022a).

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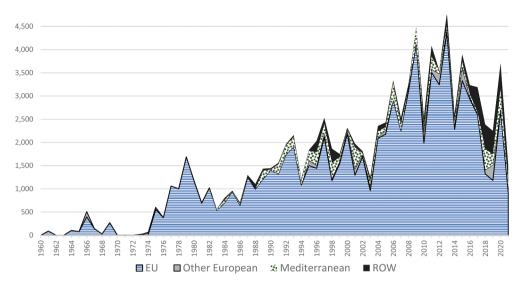


Figure 1. European Investment Bank (EIB) water lending in the European Union, other European, Mediterranean and rest of the world (RoW) (millions of euros, constant 2015 prices). Source: Based on data extracted from EIB (2022b).

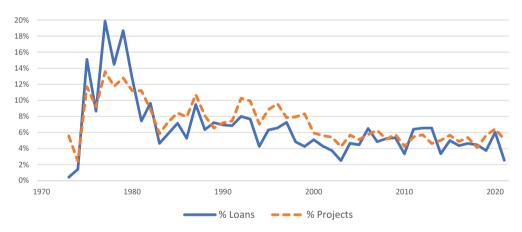


Figure 2. European Investment Bank (EIB) water lending (% of total lending and % of total projects per year). Source: Based on data extracted from EIB (2022b).

Although Figure 1 shows how EIB lending to the water sector gradually increased overall until 2013, when a decline is observed, when water lending is considered as a percentage of EIB total lending, a different trend emerges. Figure 2 shows the annual percentage of EIB loans destined to the water sector and the annual percentage of EIB projects in the water sector between 1970 and 2021. It can be observed that the percentage of lending and number of projects grew significantly during the 1970s. The percentage of EIB lending to water peaked around the end of the 1970s, reaching 20% of total lending. It then fell during the early 1980s to between 8%

and 10% of lending. Despite this fall, these percentages were relatively high in comparison with the average lending of public banks to water, thus clearly reflected the EIB's investment mandate.

We now examine EIB lending and projects to the water sector independent of overall lending and projects. Despite the fact that, as shown in Figure 2, lending and project numbers in the water sector declined from the 1980s as a percentage of total EIB lending and projects in all sectors, actual lending to water actually increased, overall, from the 1970s until around 2013 (Figure 3). In the initial years of the EIB's lending activities, from its establishment until the first enlargement in 1973, water lending was conducted on a rather irregular basis, and only 17 projects were financed in this period. Most of these projects were for relatively large sums of money and were destined to EU member states or EU candidates. As a proportion of total projects and lending during this period, the water sector made up 3.5% of projects and 5.3% of lending. It was the first enlargement of the EU in 1973, which included the new member states of Denmark, Ireland and the UK, which marked a turning point as regards EIB lending to the water sector. The number of water projects financed increased year by year, reaching a total of 60 projects in 1987. Despite the rise of water lending in real terms until 2013, as a share of total lending, the relative amount of lending to the water sector fell from 1987, when it consisted of 9% of all lending, to around 5.3% in 2021. We now turn to examine EIB lending to the water sector in the two phases: 1958-90 and 1991-2021.

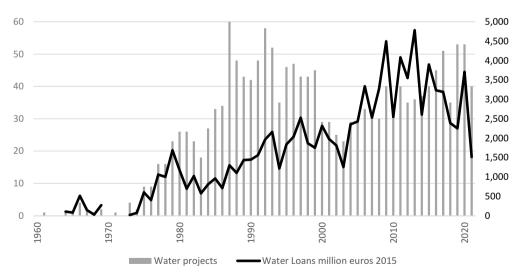


Figure 3. European Investment Bank (EIB) water lending, 1958–2021 (by number of projects and amount in millions of euros of 2005). Source: Based on data extracted from EIB (2022b).

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EIB lending to the water sector: 1958–90

EIB lending to the water sector was rather erratic until the first enlargement in 1973 (Figure 4). Before the first enlargement, Italy received the largest volume of lending, followed by France. Lending to Italy commenced with an intermediated loan of €-24 million in 1965 to the southern town of Metaponto through the Cassa per il Mezzogiorno. The Mezzogiorno region, in Southern Italy, was at this time the least developed region of the EU-6, with the lowest per capita gross domestic product (GDP) (Clifton et al., 2018). This lending clearly reflected the EIB development mandate, which sought to tackle potential disparities among territories that could be further exacerbated during the integration process. The main loans to France went to Compagnie Nationale d'Aménagement de la Région Bas-Rhône et Languedoc in 1961, which was a public authority, and to Canal de Provence in 1964 and 1969, which was a public corporation. This lending reflected the development mandate, as these works were necessary to develop the irrigation of, and water supply to, southern territories in France. Putting into practice the EIB objective to promote integration through enlargement, Greece received substantial water lending, in 1965, 1966 and 1967, despite its not being an EU member state at the time. Between 1970 and 1973, there was very little activity in the water sector.

Enlargement in 1973 marked the turning point as water lending started to grow significantly. Lending continued to Italy and, to a lesser extent, France, supporting the development mandate. At the same time, water lending became significant to a new member state: the UK.

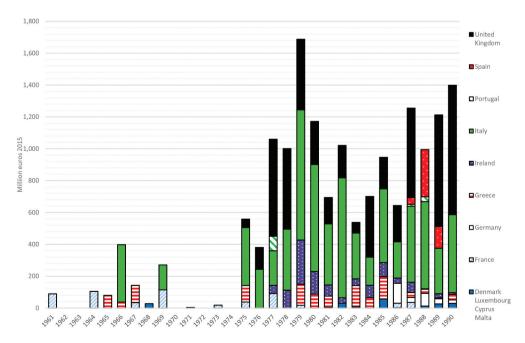


Figure 4. European Investment Bank (EIB) lending to the water sector by country, 1961–90. Source: Based on data extracted from EIB (2022b).

It is worth examining in more detail the reasons behind the significant role of the UK as a recipient of EIB water loans in this period. Water lending to the UK started two years after it joined the EU. Moreover, this lending to the UK continued and increased throughout the first phase: between 1975 and 1990, the UK received the majority share of water lending, over one third of the total water lending by the EIB. These loans to the UK can be interpreted as reflecting the EIB's integration/enlargement mandate, in particular, as a 'rewarding strategy' for new adherents. In other words, EIB lending would be generously provided to new members, when so requested. In a previous study of EIB lending to all infrastructure sectors, this rewarding strategy to new members was common in the initial years of lending (Clifton et al., 2018, 2021b).

Table 1 provides more detail about the destination of EIB lending made to the UK water sector between 1975 and 1987, which totalled around one third of all EIB water lending in this period, as shown on the last row. Given the significance of the UK as a recipient of water lending, it is also of interest to explore this case as regards to what can be learned about the relationship between EIB lending and public water in particular.

At first glance, it could appear that EIB lending was targeted to public entities in the UK water sector. However, a deeper analysis of ongoing water policy in the UK shows that this is misleading. In the same year the UK acceded to the EU, a major shift in water policy was occurring in the country. Under Edward Heath's Conservative government, the water sector was being subject to a deep reorganization (Hukka & Katko, 2003). The passing of the Water Act 1975 set out this reform, which essentially established 10 regional water authorities, in England and Wales (not Scotland or Northern Ireland). In so doing, the control of previously existing public water entities, responsible for water and sewerage services, was transferred away from the municipality-level towards the regional water authorities which would be nationally controlled. These regional water authorities, based on areas of rivers in the country, were then put under the control of

Nation and regional water authority	Projects	Current value	Constant 2015	
England	73	1,358,279,411	3,238,391,731	
AWA	5	167,259,710	319,209,618	
NWWA	17	271,646,687	754,734,177	
NWA	16	395,313,327	969,494,872	
STWA	2	61,770,688	115,831,473	
SWA	3	38,636,376	103,840,854	
SWWA	10	90,991,224	217,308,110	
TWA	0			
WWA	3	47,500,779	85,938,737	
YWA	17	285,160,620	672,033,889	
Wales	9	113,959,234	275,752,259	
WNWDA	9	113,959,234	275,752,259	
Scotland	7	107,157,272	301,196,379	
UK total	89	1,693,355,151	4,091,092,628	
UK % of EU projects and funding	26.3%	32.8%	30.7%	

Table 1. European Investment Bank (EIB) lending to the UK water sector, 1975–87 (number of projects and amount in current and constant euros).

Note: AWA, Anglian Water Authority; NWWA, North West Water Authority; NWA, Northumbrian Water Authority; STWA, Severn Trent Water Authority: SWA, Southern Water Authority; SWWA, South West Water Authority: TWA, Thames Water Authority; WWA, Wessex Water Authority; and YWA, Yorkshire Water Authority; WNWDA, Welsh National Water Development Authority.

Source: Based on data extracted from EIB (2022b).

directors who had been appointed by the central government. Nine regional water authorities were created in England, namely: the Anglian Water Authority (AWA); North West Water Authority (NWWA); Northumbrian Water Authority (NWA); Severn Trent Water Authority (STWA): Southern Water Authority (SWA); South West Water Authority (SWWA): Thames Water Authority (TWA); Wessex Water Authority (WWA); and Yorkshire Water Authority (YWA). In Wales, one sole regional water authority was created, the Welsh National Water Development Authority (WNWDA). Hukka and Katko (2003) argue that the conversion of water municipalities to regional water authorities was a first step towards their eventual privatization, which occurred from the end of the 1980s.

The explanation of the relationship between EIB lending and water reform in the UK becomes clearer since, from the outset, the regional water authorities found themselves hampered by chronic underfunding and a lack of investment from central government (Hukka & Katko, 2003). For this reason, upon joining the EU, the regional water authorities found in the EIB a suitable source of sorely needed loans. Moreover, when Margaret Thatcher's Conservative government came to power in 1979, Thatcher restricted the ability of regional water authorities to borrow money from national institutions that would be necessary for capital projects (Karen Bakker, 2005). It is in this context, then, that the UK emerged as the main recipient of water lending from the EIB. As seen in Table 1, all the regional water authorities borrowed heavily from the EIB. The TWA, which was the largest and most urban and affluent of all regional water authorities, providing water and sewerage services to around 12 million people living in London and the Thames Valley, was the one exception because it was subject to much less financial stress and greater self-finance at the time than those authorities in rural and more disadvantaged areas (Bakker, 2001).

Interestingly, the largest amount of lending was targeted to the North of England: specifically, to the NWA, NWWA and YWA. Reform of the regional water authorities, which had taken place in England and Wales, was not emulated in Scotland, where local authorities retained control over water. Scotland, however, also received loans from the EIB, which amounted to 7.8% of the total amount of EIB water lending to the UK between 1975 and 1987. In the Scottish case, EIB lending was used to improve water supply, distribution and wastewater treatment in the Lothian Region.

Hence, as we have seen, EIB lending to the UK water sector was mainly, but not exclusively, targeted to regional water authorities that were en route to an eventual privatization, pushed in this direction by the UK government. Yet EIB lending also was directed to Scotland, where water remained under public ownership. It appears that EIB lending following national water policy, therefore, rather than an informal or formal commitment to public or private ownership. We now turn to analyse the second phase of EIB lending to the water sector.

EIB finance to the water sector: 1991–2021

Between 1991 and 2021, whilst the volume of EIB lending to the water sector increased overall, its significance as a percentage of overall EIB lending dropped, as has been seen (Figure 2). EIB lending to the water sector by country during this period is shown in Figure 5, which indicates how a process of 'levelling up' occurred. In the first phase,

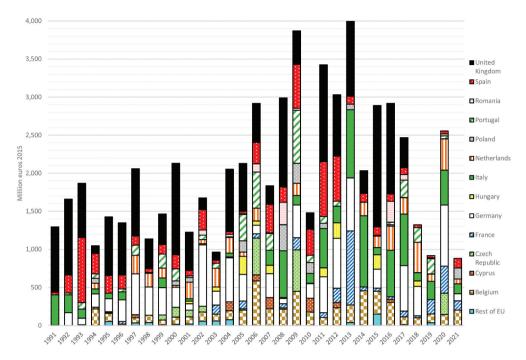


Figure 5. European Investment Bank (EIB) water lending by country, 1991–2021. Source: Based on data extracted from EIB (2022b).

before 1991, EIB lending to water was initially rather ad hoc, and then went on to focus on specific countries (Figure 4). On analysing the countries receiving EIB lending, this first phase lending logic was found to reflect the mandates of investment, development and integration/enlargement. In contrast, in this second phase, water lending became increasingly distributed more evenly across all country members, with the single, important exception of the UK. Put simply, this shift to levelling up could be described as one where 'you get what you give' from the perspective of the member states, meaning that the lending member states received more closely aligned with their financial contributions to the EIB.

The UK continued to dominate water lending from the EIB during the 1990s and throughout the 2000s until Brexit. From Brexit in 2017, no further lending was made to the UK by the EIB (in any sector). On average, however, the UK received 31% of EIB loans on water across this period (Figure 5). As an aside, the end of EIB lending to the UK was a major impetus for the creation of the new UK Infrastructure Bank in 2020–21.

In the same period, the rest of the EU member states received a proportion of lending that increasingly reflected their relative share in EIB subscribed capital ('levelling up'). This levelling up was not, by any means, uniform, and considerable diversity in water lending patterns remained. For example, Germany, the member state with the largest economy, received 13.5%, Italy 10.2%, Spain 10.4%, Portugal 5.1% and France 3.2%. Moreover, some of the founding member states that had scarcely borrowed during the period 1958–90 started to receive larger amounts of lending, such as Belgium, which received 7.6% and the Netherlands, which obtained 4.3%, of total EIB water lending.

At the same time, when the new member states from the East, after the collapse of the Soviet Union, joined the EU, their 'reward' for joining was not as remarkable as it had been in the case of the UK (and, to a lesser extent, Ireland). Rather, the new member states received lending which was broadly proportional to their relative share in EIB subscribed capital: the Czech Republic receiving 2.3%, Poland 2.1%, Hungary 1.7% and Romania 1.5% of overall lending. So, both for old and new EU member states, a levelling up of loans occurred. This levelling up was far from even, however: it marked a shift in the sense lending was much more evenly spread in the second than the first phase.

EIB lending to the water sector in the second phase can be compared with that of the first phase in order to reflect on the logic of this lending and the extent to which a principal-agent problem is apparent. As regards the EIB's investment mandate, in the first phase, lending to the water sector had hovered between 8% and 20% as a proportion of total lending to all other sectors. In contrast, between 1991 and 2021, water lending descended to between 4% and 10% of total lending. Hence, the overall investment operations in relations to the mandate of the EIB in water weakened in this second phase. This is despite the fact that the environment, and therefore, water investment, became an EIB policy central objective from 1984 (EIB, 2002).

Second, the fact that a levelling up occurred meant that the EIB's integration and development mandates were inevitably diluted. A strong integration mandate would be seen, for example, if new member states were 'rewarded' for their accession, as had occurred in the first phase. Similarly, a strong development mandate would be apparent if water projects in the least developed member countries were prioritized. However, the distribution of water lending amongst all member states showed a weakening of both these mandates. Hence, in this second phase, EIB water lending increasingly reflected the financial contribution made by each member state to the EIB itself through the shareholding arrangement, whilst its core mandates were increasingly diluted.

Despite this overall levelling up of EIB lending, the UK continued to remain the country receiving the largest volume of EIB water lending (Figure 6). As mentioned, during its period as an EU member between 1973 and 2017, the year after Brexit, the UK received 31% of all EIB lending to the water sector. And while the UK was one of the larger EU economies, its share of water lending was disproportionate.

This dominance of the UK as a recipient of EIB water lending can again be used to explore the relationship between EIB lending and the public water sector. As discussed, national water policy in the UK consisted of firstly corporatizing water entities. The policy of corporatization has an interesting debate around it, captured in (Andrews et al., 2022; Clifton & Díaz-Fuentes, 2018). Whilst most scholars coincide that corporatization renders an entity more autonomous from the government, a debate continues about the extent to which corporatized entities behave as private ones. Once UK water reform had established regional water authorities during the first phase (1974–87), the Conservative government went on, during the second phase (from 1988 onwards), to transform these regional water authorities into private corporations, namely, water and sewerage companies (see Hall & Lobina, 2007, for details on the privatization of water in the UK). Interestingly, the existing debts of the regional water authorities, which were estimated at around £5 billion, were assumed by the UK government. However, the new private water and sewerage companies were also granted extra (national) funds, the so-called 'green dowry', which amounted to £1.5 billion. The newly established English water and sewerage companies were: Anglian

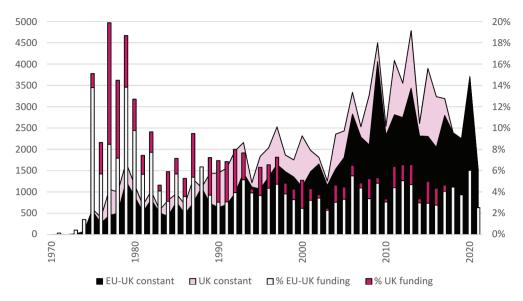


Figure 6. European Investment Bank (EIB) water lending to the UK and the rest of the European Union (millions of euros of 2015 on left; percentage on right). Source: Based on data extracted from EIB (2022b).

Water (AW) Ltd; North West Water (NWW) Ltd (from 1995 United Utilities Water plc); Northumbrian Water (NW) Ltd; Severn Trent Water (STW) Ltd; Southern Water (SW) Ltd; South West Water (SWW) Ltd; Thames Water (TW) Ltd; Wessex Water (WW) Ltd; and Yorkshire Water (YW) Ltd. Water and Sewerage plc from England received some 86.1% of the total EIB water loans to the UK between 1989 and 2017 (Table 2).

All the newly privatized water and sewerage companies received EIB lending, even TW, which had not received lending during the first phase. One explanation from the side of the private companies is that EIB lending was an attractive source of loans. At the same time, the EIB could well justify its lending to these companies under the rubric of its new environmental priorities from 1984, as well as new European water quality standards that had been introduced (Kallis & Butler, 2001; Karen Bakker, 2005). Interestingly, the largest EIB loan to the UK was destined to the construction of the Thames Tideway Tunnel. The tunnel was a huge sewerage infrastructure project to serve the most affluent urban area of the UK. TW Ltd refused to finance this project by itself, which had a final cost of around \in 5 million (£4.2 million). Hence, the sewerage infrastructure received loans from the UK government and the EIB, as well as an extra charge exercised onto TW customers (Chartered Institution of Water and Environmental Management (CIWEM), 2019) even before its completion (estimated in 2025).

Because EIB water lending was heavily focused on the UK, and UK water policy was largely moving towards privatization, it could be interpreted that EIB lending – at least inadvertently – prioritized private (or at least corporatized) over public water. To a great extent, this is accurate; however, there are important nuances to this overall trend. The majority share of EIB water lending was directed to

Country and water and sewage company/regional water authority	Projects	Current value	Constant 2015
England	111	15,678,407,684	18,587,613,696
New water Plc		14,603,625,828	17,408,387,581
AW Plc	11	1,156,792,026	1,352,443,819
NWW Plc	10	1,212,585,307	1,679,108,407
United Utilities Water	8	2,509,890,626	2,632,605,733
NW Plc	17	1,391,999,324	1,595,576,426
NWG subsidiaries		192,957,446	270,629,405
STW Plc	16	2,665,526,971	3,242,740,715
SW Plc	7	451,824,372	594,959,485
SWW Plc	10	964,187,067	1,139,841,283
TW Plc	14	2,001,454,867	2,414,571,924
WW Plc	10	1,107,199,886	1,324,086,597
YW Plc	8	949,207,936	1,161,823,787
Former RWAs	6	187,447,914	299,929,885
AWA	1	22,033,971	35,742,036
SWWA	1	20,423,168	31,418,246
WWA	1	55,819,392	90,546,488
YWA	3	89,171,383	142,223,115
Other	1	887,333,942	879,296,231
Thames Tideway Tunnel	1	887,333,942	879,296,231
Wales	11	1,342,856,741	1,516,448,102
Welsh Water Plc	11	317,666,099	446,148,529
Welsh Water CLG		1,025,190,642	1,070,299,572
Northern Ireland	1	84,669,229	95,440,312
Northern Ireland Water	1	84,669,229	95,440,311.99
UK total	123	17,105,933,654	20,199,502,110
EU % of projects and funding	11.0%	26.7%	27.5%

Table 2. European Investment Bank (EIB) lending to the UK water sector, 1989–2017 (number of projects and amount in current and constant values).

Note: AW, Anglian Water Ltd; NWW, North West Water Ltd (from 1995 United Utilities Water plc); NW, Northumbrian Water Ltd; STW, Severn Trent Water Ltd; SW, Southern Water Ltd; SWW, South West Water Ltd; TW, Thames Water Ltd; WW, Wessex Water Ltd; and YW, Yorkshire Water Ltd. See also Table 1.

Source: Based on data extracted from EIB (2022b).

corporatized and privatized water companies (Table 2). However, to suggest EIB loans systematically favoured private entities in the UK would be inaccurate since loans also were directed to Wales, which eventually took a different track to English water reform. In Wales, the new entity was Welsh Water plc which, from 2001, was transformed away from privatization and towards a not-for-profit company limited by guarantee (CLG) (Bakker, 2003). Welsh Water plc was reorganized with no shareholders and to be 'run solely for the benefit of customers' (Owen, 2013). Welsh Water plc, therefore, became a public, statutory company similar to Northern Ireland Water and Scottish Water. Welsh Water plc received 2.2% of EIB water lending between 1989 and 2001, whilst Welsh Water CLG received 5.3% of EIB water lending between 2001 and 2017. Clearly, the shift from a private company between 1989 and 2001, to a non-for-profit company, with no shareholders (from 2001 onwards) did not alter the logic of EIB lending. Scotland did not register EIB loans during the period 1989-2017; however, Northern Ireland Water, operating under a non-profit statutory company status, received lending in 2006 (Table 2). Though the majority of EIB lending to the UK water sector was destined to corporatized or privatized entities, therefore, this does not appear to be an ideological strategy of the EIB. Rather, it reflects EIB lending following the direction of ongoing water reform at the country level.

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Conclusions

The EIB emerged as the world's largest multilateral public development bank from the 1990s, yet there remains a lack of knowledge and research about its lending activities. This article is the first to analyse the logic of EIB water lending. It had two core research questions, following a larger research project on the relationship between public banks and public water. What is the logic of EIB lending to the water sector in general? What is the relationship between lending by the EIB, as a public bank, to public water? To examine these questions, we explored data on EIB lending from its establishment in 1958 until 2021, supplemented by an analysis of primary and secondary documentation, and the organization of select interviews with EIB staff who were experts in the water sector. The principal-agent problem was used as an organizational framework to analyse the extent to which a lending logic reflected the EIB mandates or otherwise.

We found that the logic of EIB lending to the water sector followed two phases, a conclusion that coincided with previous research on the logic of EIB lending to all sectors (Clifton et al., 2018, 2021b), with the important exception of the UK, which attracted the largest amount of EIB lending in both phases. Overall, across the first phase, from 1958 to 1990, we found the logic of EIB lending to the water sector reflected well the bank's mandates: development, investment and integration, including enlargement. The development mandate was reflected in EIB support, in particular, for the poorest areas of Italy and to develop water infrastructure in lessdeveloped regions of France. The investment mandate was seen in the relatively high proportion of water lending compared with total lending. The integration mandate was clearly observed in the support of the UK water sector, which was rewarded with large lending amounts as a new member state. The finding that EIB lending corresponded quite closely with its three mandates coincides with those of another study on the logic of EIB lending to infrastructure, which confirms a clear link between the patterns of lending and the three mandates (Clifton et al., 2014; Clifton & Díaz-Fuentes, 2018).

Given its relevance as a leading recipient of EIB water lending, the UK experience was analysed in order to assess the relationship between EIB lending and public water. Although, superficially, it would appear EIB lending was directed to publicly owned water during the 1970s and 1980s, this interpretation is misleading. In reality, English and Welsh regional water authorities called on EIB finance because they were underfunded and constrained as regards obtaining national lending in the run up to government plans to corporatize and then to privatize them from 1989. Inadvertently, then, EIB water lending helped water entities in the transition from public to private (although Wales would later turn away from water privatization).

In the second phase, between 1991 and 2021 – with the notable exception of the UK – a levelling up process occurred in EIB water lending. Gradually, those countries that had received greater sums of lending than their peers, such as Italy or France, fulfilling the development mandate, saw their overall water lending decrease, whilst countries that had not received significant lending volumes increased. At the same time, new member states, particularly those joining from the East in the aftermath of the collapse of the Soviet Union, were not significantly 'rewarded' on becoming members, as had occurred in the first phase, particularly as seen in the case of the UK. At the same time, though the overall

volume of lending to water increased, the percentage of EIB lending to water compared with total lending decreased. Hence, all three mandates – investment, development and integration, including enlargement – could be said to have been significantly diluted.

Instead, EIB water lending was more evenly distributed among member countries, whilst the relationship between the capital subscribed by each member state and the lending they received converged. From the perspective of the EIB, this was a 'levelling up'. From the perspective of the country, this approximated 'you get what you give'. This reflects a process of slippage as predicted by the principal-agent problem, and identified in this second phase of lending. At the same time in the second phase, the EIB's lending became more tightly aligned with the demands of the member states – in particular, with those of the UK – even if those demands were to support corporatization and privatization in the water sector.

To claim EIB lending is ideologically in support of private water, however, would be misleading. Whilst it is the case that the majority share of EIB lending to the UK was directed to support water entities in their transition from public to private, the case of Wales introduces a nuance to this argument. Here, UK water policy was reversed, and water was established as public, not-for-profit. Despite this, EIB lending to the now public Welsh entity was continued, a clear demonstration that EIB lending responded to the demands of its members.

Further research is required to explain why slippage has increased at the EIB in the water sector – as it did also in other infrastructure sectors. In addition, what are the main consequences of its move away from fulfilling its mandates towards a tighter alignment with member states? In the introduction to this article, the special importance of a public mission or set of public missions that public entities are often charged with was noted, in contrast to a private entity that must prioritize profit making above and beyond other aims. This concern can be translated into a specific question: what were the consequences of the EIB's provision of lending from the public purse to support the privatization of water? Finally, what consequences did EIB lending to public water entities have, in comparison with that made to their private counterparts? A comparative study of EIB water lending to Wales and England would be a first step towards answering this question. In the light of the increased importance of the fight against climate change and the heightened role of water as part of EU environmental policy, it is urgent to study in greater detail the consequences of EIB water lending to learn lessons from its past for the next few, critical years in Europe.

Notes

- 1. We use the term 'European Union' throughout for convenience, rather than also using the terms 'European Economic Community' and 'European Community'.
- 2. The UK is made up of England, Scotland, Wales and Northern Ireland.
- 3. Anonymized interview 1 with EIB Staff, conducted in Luxembourg in September 2021. Other contributions to this special issue likewise highlight how public banks can seek to minimize risks in general in order to borrow more cheaply (e.g., the Dutch Water Bank).
- 4. Anonymized interviews 2 and 3 with EIB Staff, Luxembourg, September 2021.

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