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Financialisation and neoliberalism:

The case of water provision in Portugal

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Abstract: The study analyses the evolution of water provision in Portugal. It argues that the Portuguese water system of provision is deeply marked by the process of financialisation of the Portuguese economy, leading to high levels of private indebtedness that sustained a neoliberal agenda until the crisis of 2008-09. The history of the neoliberal transformation of water provision in Portugal is examined, paying particular attention to the progress achieved and the transformations occurring in its business model and finances, including the role of different agents in these processes. The neoliberal transformation of the Portuguese system of water provision is then set against the effects of the recent economic crisis. It concludes that the recent progress in the water SoP has been interrupted through a halt in investment and pressure for higher tariffs which, in a context of declining disposable income, intensifies social vulnerability.

Key words: Financialisation, Water provision, Portugal

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1. Introduction

After almost a decade of economic stagnation, Portugal was severely hit by the 2008-09 international financial crisis. In 2011, Portugal was forced to request official financial assistance from a troika made up of the European Central Bank, the European Commission and the International Monetary Fund to refinance its public debt, which has never ceased to expand, reaching 131% of GDP in 2013 (Abreu *et al.*, 2013). The programme of financial assistance imposed strict fiscal austerity measures and 'structural reforms' aimed at labour market liberalisation and privatisation of state-owned companies in many sectors such as energy, the postal service and naval construction. These policies have resulted in a general fall in disposable income, the collapse of aggregate demand, economic contraction and record levels of unemployment, currently at 13% of the active population¹.

The causes and mechanisms leading to the economic crisis in the Southern European countries have been identified, and they generally pertain to the political economy of the Eurozone and its financialised configuration (Lapavitsas *et al.*, 2012; Rodrigues and Reis, 2012). The ease of access to international financial markets, fostering domestic processes of financialisation, was critical in the configuration of neoliberalism in Portugal, as it has been elsewhere (Peck and Tickell, 2002). The financialisation process, here understood as the expansion of financial markets, agents and motives (Epstein, 2005) was actively promoted by European integration and, especially, by the creation of the European Monetary Union (EMU). Countries on the European periphery had unprecedented access to external funding, resulting in the exponential rise of both private and public debt. The creation of a European single currency, the euro, eliminated the risk associated with the fluctuation of national currencies, and the free movement of capital allowed the flow of excess funds accumulated in the core European countries (most notably in Germany and the Netherlands) to the periphery of the Eurozone facing loss of competitiveness and rising external deficits (particularly in Greece, Portugal and Spain).

The market-driven reforms enhanced by the EMU, while favouring domestic and foreign capital, were matched by significant progress in important elements of physical





infrastructure and social conditions. Thus, and in contrast to other neoliberal experiences, the Portuguese water SoP did not follow what Fine (2014) dubs by the initial stage of neoliberalism where "shock therapy" reforms were pursued without regard to their social consequences. Benefiting from cheap funding available to the Portuguese economy during the nineties, reforms have been by and large compatible with economic growth and even declining inequality (Santos and Teles, 2014). The regressive effects of these reforms have, however, been exposed with the external shock on the Portuguese economy resulting from the international crisis.

In this paper, we show how the neoliberal evolution of the Portuguese water system of provision over the past two decades, has benefitted, in a first stage, most domestic agents involved. Based on the systems of provision (SoP) approach, it pays special attention to the way in which relevant agents relate to each other grounded on "the premise that outcomes emerge from settlements between agents which are themselves embedded in historically evolved social and economic structures and processes", thus departing from approaches that take water provision merely as a potential market that may need correction (Bayliss *et al.*, 2013: 2).

The application of the SoP approach to the Portuguese water sector departs from extant academic work, which has thus far focused on the pricing mechanisms of water consumption, thereby neglecting the broader socioeconomic context and relevant interactions and interdependences among various sectors. In contrast to previous analyses of the Portuguese water sector (e.g. Monteiro and Roseta Palma, 2001; Martins and Fortunato, 2007; Martins and Sá, 2011), the present study aims at identifying the role different agents play in shaping the system of water provision, the interests that are favoured and hindered, and the impact of recent reconfigurations on various socioeconomic groups. It devotes special attention to finance since "[t]he presence or intervention of finance shapes processes of provision and the behaviour of other agents", considering, in particular, that "financial agencies are often proactive in trying to shape SoPs in favourable directions" (Bayliss *et al.*, 2013: 11). The study also takes into account the more recent





macroeconomic processes leading to the current crisis and its consequences for the sector, which bring to the fore the contingent and contested nature of recent reforms. To this end, the study relies on available secondary data obtained from official datasets, publicly available sector reports, and information gathered through semi-structured interviews with relevant actors.

The paper is organized as follows. In the second section we begin by presenting the consequences of the insertion of the Portuguese economy in the European Economic and Monetary Union (EMU), with its benefiting from access to cheap foreign capital while at the same time being constrained by deteriorating external competitiveness, leading to high levels of private indebtedness. These are the defining vectors of the process of financialisation of the Portuguese economy that sustained the specificities of the Portuguese neoliberal agenda until the crisis of 2008-09, and that are reflected in the Portuguese water SoP. In the third section we present the history of the neoliberal transformation of water provision in Portugal, paying particular attention to the progress achieved and the transformations occurring in its business model and finances. The role of different agents is then scrutinized paying particular attention to finance. In the fourth section, the neoliberal transformation of the Portuguese system of water provision is set against the effects of the recent economic crisis. We argue that the recent progress in the water SoP has been has been interrupted through a halt in investment and pressure for higher tariffs which, in a context of declining disposable income, intensifies social vulnerability. Finally, the fifth section concludes and synthesises the main arguments.

2. Financialisation and neoliberalism in Portugal

Although processes of financial liberalisation, deregulation and privatisation have occurred across the globe since the 1980s, in Portugal the political drive is ineluctably associated with European economic integration, beginning with the preparation of the country's accession to the European Economic Community (EEC) in 1986. European integration has recognisably accelerated the rolling back of the control the state had over the financial sector since the inauguration of democracy in 1974 (Pinho, 1997).





Initiated in 1984, with the opening of the Portuguese market to new private banks, and actively promoted since 1989, after the revision of the Portuguese Constitution allowing the privatisation of important economic sectors, the privatisation of the banking sector and liberalisation of financial markets were of paramount importance to the development of a strong private domestic financial sector. Between 1990 and 1996, the market share of public banks remarkably reduced from 74% to 24% (Antão *et. al.*, 2009). The creation of a robust private banking sector in turn stimulated the development of capital markets, which subsequently organized the wave of privatisations across the economy, including telecommunications and energy (Reis *et al.*, 2014).

The building of the Economic and Monetary Union (EMU) – initiated with the signature of the Maastricht Treaty by the Member States in 1992 – played a critical role in the consolidation of the Portuguese financial sector, namely through the criteria the Treaty defined for Member States to become eligible to enter the EMU, thereby imposing control over inflation, public debt and the public deficit, exchange rate stability and the convergence of interest rates. The political decision to enter the EMU, entailing the adoption of the so-called 'nominal convergence' criteria, allowed the Portuguese economy to benefit from a new and unconstrained access to capital at historically low interest rates in international (European) markets. Financial inflows increased dramatically, resulting in a significant increase in the weight of financial assets, agents and markets in the economy. While below the relative importance they had acquired in some European countries, financial assets grew 255 percentage points relative to GDP between 1995 and 2013, with the banking sector holding around 50% of all financial assets.²

Portuguese financialisation thus seems to have followed the path Becker *et al.* (2010) dubbed peripheral financialisation, to describe the trajectories of Brazil, Serbia, Slovakia and Chile. In these countries, financialisation and the expansion of credit were also introduced mainly via foreign capital mobilized by banks (rather than securitised capital markets as was the case in the UK and USA). However, in these countries domestic financial expansion was limited by high real exchange and interest rates and required the





accumulation of foreign exchange reserves (Painceira, 2009). The loss of external competitiveness resulting from high exchange rates, together with credit-fuelled domestic demand, eventually led to external deficits, capital outflows and a balance of payments crisis.

Portugal shares with such countries the progressive loss of external competitiveness since the stability of the national currency implied an overvaluation of the Escudo, when it was indexed to the German "Deutsche Mark" in the preparatory stage for joining the EMU, and, subsequently, with the adoption of the European single currency, the euro. The result was the growth of the domestic non-tradable sectors relative to the rest of the economy and escalating levels of external debt (Reis *et al.*, 2014). However, unlike the above mentioned countries, Portugal's participation in the EMU gave it unconstrained access to international financial markets, knowing almost no quantity or price limits, and thus it did not need to accumulate foreign reserves nor pay high interest rates to access external funding.

The extraordinary progress of water supply and water waste provision over the past 20 years by and large resulted from these structural transformations of the Portuguese economy. Significant investments have been made in the sector through recourse to external funding, while at the same time opening new areas for market expansion in related sectors such as construction (Santos *et al.*, 2015), as investment in these non-tradable sectors was particularly attractive in an economic context of increased international competition. Thus, the water supply sector too has been a relevant domain for the neoliberal agenda, though in not so obvious ways given the very nature of this good and the international position of the Portuguese economy. As will be argued, water provision is unique in revealing the extraordinary plasticity of the neoliberal agenda and its adaptive capacity to circumstances.

The neoliberal transformation of the Portuguese water system of provision has not entailed a strict replacement of the state by the market. Reforms, while aiming at market mimicry and providing new areas for finance expansion, were accompanied by the direct intervention of the state – particularly at the local level – that attempted to counteract their





deleterious social effects. Public policy nonetheless took new forms, especially with regard to public sector management through the creation of new public corporations. Public provision "ceases to be a service, supplied at subsidized rates to citizens as a right, and is increasingly viewed as a commodity, sold to consumers on a profit making basis of willingness to pay" (Bakker, 2003: 39).

The influx of private capital in the Portuguese water SoP, allowing governments to invest in the modernisation of the sector, has contributed to an effective progress in terms of coverage and water quality, which have benefited particular markets in water provision and connected areas. Thus, rising levels of debt are what have ensured the compatibility between social progress and the advance of neoliberalism, at least until the euro crisis. The sector's high level of indebtedness would, however, magnify the impact of the crisis through rising costs of external (re)finance, which was used to rationalise the subsequent enforcement of a neoliberal "shock therapy". In addition, the corporatisation and regulatory powers that embodied the new forms of public management turned policy making into a technocratic process, putatively devoid of any political content, and subject to financial constraints and management alone.

3. The neoliberalisation of the water sector

Portugal entered its democratic period in 1974 with considerable deficiencies in its water supply and, most notably, its waste water system.³ In 1972 only 40% of the population had access to water supply, with water waste coverage reaching only 17% of the Portuguese population. Recurrent outbreaks of diseases related to poor sanitation such as cholera lasted until 1974. Subsequent progress has been substantial. The majority of the population is now covered by water supply systems (97%) and water waste services (80%) (Pato, 2011). This quantitative and qualitative improvement cannot be dissociated from the new democratic popular demands and the associated political priority given to the sector, assisted since the 1970s by international structural funds and loans.⁴ However, two periods can be clearly distinguished over the last forty years: the period before and the period after 1993, when the sector was reconfigured.





Building on an institutional framework dating back to the nineteenth century (Pato, 2011), water provision was the exclusive responsibility of local municipalities until 1993. Lisbon was the only exception where water provision was secured by the state-owned public enterprise (SOE) *Empresa Pública de Águas de Lisboa* (EPAL).⁵ The institutional configuration of the sector acquired new meaning after the 1974 revolution and democratisation of the country. Municipalities, now being elected, gained renewed legitimacy and autonomy in their relationship with central government and prioritised water and water waste services as urgent problems that needed to be addressed. Yet, the fragmentation and heterogeneity of the 300 municipalities, in terms of population and territory, posed complex technical and political problems. The first two decades of democracy were therefore characterized by permanent tension between municipalities and the central state as regards the scale of intervention, where municipalities resisted first attempts at the creation of intermediary public structures between the local and the central levels (Pato, 2011).

Eventually, and notwithstanding institutional fragmentation, investment took off through various public entities, including the central state via the Direção Geral do Saneamento Básico (DGSB), which funded local investment through a number of regional programmes and bilateral contracts with municipalities and the state-owned enterprise EPAL. Funding came from three different sources: the central government budget, local authorities through their own budgets and privileged access to loans at reduced interest rates from the public bank Caixa Geral de Depósitos, and foreign funding (Table 1). At the time, foreign capital came mainly from the US Government and, in the case of EPAL, from the European Bank of Reconstruction and Development that attenuated the foreign exchange constraints the country faced at the time.





Table 1. Investment in water and waste water supply (thousands of escudos)

	DGSB	Municipalities	EPAL	Others	TOTAL
1975	7 400	1 161 400	270 900	40 000	1 479 700
1976	113 600	1 204 400	335 900	150 000	1 803 900
1977	441 000	1 322 600	535 000	150 000	2 448 600
1978	210 700	2 231 600	674 600	150 000	3 266 900
1979	945 000	750 600	700 000	100 000	2 495 600

Source: Pato (2011)

In 1981, the first national plan for water supply and water waste was published — "Plano Director de Saneamento Básico" — setting the ambitious goal of reaching the whole population living in towns with more than 2000 inhabitants by the end of that decade. The plan was intended to be implemented at the municipal level with the support of the central administration with investment totalling 40 million euros (current prices) between 1981 and 1990. Even though coverage and water quality improved greatly during this period, these ambitious goals were not reached. In 1990, 77% of the population had access to water supply (compared with 40% in 1972), and water waste reached 34.4% of the population (compared with 17% in 1972), (Pato, 2011).

Even though the sector progressed considerably, there were still numerous deficiencies, particularly in access to water waste and treatment. Their resolution was constrained by the fragmentation of water provision by municipal authorities, whose interventions did not follow careful planning and were dependent on the political favours of central government (Pato, 2011). The situation of EPAL was different, benefitting from its closer relationship to the central government and having sufficient scale to access official lending from foreign institutions. Nevertheless, there was a need for further investment and the Portuguese accession to the EEC eventually led to an opportunity for the neoliberal transformation of the sector in the 1990s.





The neoliberal turn

In 1993, the sector was reorganized along the principles of private management. As stated in Decree-law no 372/93, which opened up participation of private capital in the sector in the form of concessions, "[t]he need to promote a real industry in water sanitation and waste treatment presupposes the definition of a rigorous strategy that (...) enables the growth of the corporatisation of the sector, including private capital, and allows speeding up the pace of investment".7 Two main axes of intervention were then identified: 1) corporatisation of the sector, and 2) the possible entry of private capital in municipal concession. Although the property of the sector would remain in public hands, the expectation was that the introduction of principles of private management and private capital would bring more investment (taking advantage of the newly available EU funding) and improve efficiency, and thus speed up the relative lag in coverage and treatment of water and water waste in Portugal when compared to other EU members. The Portuguese accession to the European Economic Community in 1986 implied the reinforcement of European law and its transposition to national legislation. Of particular importance to the water sector was the integration of this public policy domain in the new environment ministry and introduction of the polluter-payer principle in environmental policy, of which the "user-payer" principle in water provision would later become an extension (Pato, 2011).

Corporatisation

Even though the state retained ownership of the water sector, the new corporate concessionaires assumed control rights over businesses, enjoying a high degree of institutional and budgetary independence. The expectation was that private management, supposedly independent from political pressures, as opposed to public management directly subjected to political power, would enhance efficiency. However following general international trends, in the Portuguese case this process was also motivated by converging to European standards to meet the conditions set for accessing funding from the then European Economic Community (EEC) (Pato, 2011).





The corporatisation of the sector involved the division between (capital-intensive) bulk services and retail services of water supply and water waste management — a process known as "deverticalisation" of the sector — where bulk services in water supply would comprise water abstraction, treatment, elevation and adduction, and retail services would comprise storage and final distribution to end consumers (including tariff setting and collection). In the case of water waste services, bulk services cover the elevation, transport, treatment and rejection of water waste, while retail services comprise drainage and retention (ERSAR, 2012).

Inspired by the experience of EPAL, perceived as a flagship of efficiency and quality, and taken as the model for the reconfiguration of public water provision, multi-municipal management forms were finally introduced in new corporate entities becoming responsible for bulk water supply and water waste management for various municipalities. Most bulk multi-municipal companies were then integrated into the new SOE holding "Aguas de Portugal" (AdP) that acted as the controlling shareholder of capital (51%) for each company with the different municipalities holding large, but residual, the minority share (49%). This model was first introduced in densely populated areas along the coast (Lisbon, Porto, Algarve), and after 1999 in the interior of Portugal (AR, 2012). With private water companies having had total control of the whole water and waste water provision, this meant that those municipalities involved had voluntarily been deprived of control over the bulk water sector, handing it to the new multi-municipal corporate entities controlled by the central state through state-owned AdP, even if retaining a minority stake in the new multimunicipal bulk companies. In return for waiving their bulk services to the new corporations, municipalities were assured of needed investments, without the need to incur debt that would burden their budgets.8 However, municipalities retained control over the retail sector and thereby the prerogative to define and charge tariffs. In 2014, there were sixteen corporate entities responsible for the bulk systems in water supply and nineteen corporate entities responsible for water waste divided regionally, all part of the AdP group (Figure 1). They cover around 7.1 million people in water supply and 6.7 million in waste water management, i.e. around 71% and 67% of the Portuguese population, respectively. The rest





of the population is covered by municipalities that refused the integration of their bulk services into the multi-municipal companies. AdP, benefitting from its corporate structure, financial sophistication and state backing, became the largest provider in the Portuguese water sector.

UAS ... PAIV MDOULC SIMTEJO ORTE ALENTEJANO CENTRO ALENTEJO SIMARSUL AGUAS :: SANTO ANDRE Water Supply System Water Supply and Wastewater Sanitation System.

Figure 1. Águas de Portugal group and its geographic coverage (in shaded area)

Source: AdP





Private capital entry

Corporatisation also permeated municipalities in the retail sector, a number of municipal companies being created to manage the provision of water and waste water. Yet, the main change in the retail sector pertains to the opening up to private capital through municipal concessions since 1993. With the central state investment effort concentrated in the bulk sector, the entry of private capital in municipal corporate concessionaires was instrumental in the upgrading of some retail systems. Again, this helped municipalities avoid recourse to debt, since the new private corporations had the financial autonomy to raise finance independently. However, the concessionaires benefitted from contracts with municipalities that minimized risk and explicitly guaranteed future returns.

In several municipal companies, private capital holds only minority stakes in corporate concessionaires, jointly owned with the municipalities that retain corporate control. This is intended to leverage municipalities' investment capacity without jeopardizing their overall control. These concessionaire contracts were celebrated as public-private partnerships (PPP) between municipalities and private companies. Today there are twenty nine retail concessions out of three hundred and eighty managing entities and two bulk level private concessions at the municipal level out of sixteen managing entities. Despite their relatively small number, they cover over 13% of the population in the retail sector, being mostly located in densely populated areas (ERSAR, 2012).

Three major private companies dominate the sector: Aquapor, Indaqua, and AGS.9 Aquapor is the major private capital company in the provision of water, water waste and waste management in Portugal. It holds numerous municipal and multi-municipal concessions across the country as well as minority stakes in some municipal companies. The company was initially part of the AdP group, providing technical assistance, but it started to bid for municipal retail concessions and to organize the internationalization of AdP from the end of the 1990s. It was privatized in 2008 and is now owned by the construction firms, DBB, AGS and Bragaparques. Indaqua is also controlled by the major construction firms: Mota-Engil, Soares da Costa and Hidratante. Finally, AGS is controlled by another major





construction firm, Somague.¹² The entry of private capital and its intertwining with the domestic construction sector is apparent. According to the DST CEO (a private company of the sector), these investments correspond to a change of business focus: "we understood that the future was 'sustainability' and that we had to enter this chain of value that is not as dependent on public works" (interview in DN, 10-12-2013). This change in strategy may well relate to stagnation in the construction market over the last 15 years (Santos *et al.*, 2015), turning utilities such as water provision into a new area of capital expansion and diversification.

These private concessions, modelled as public-private partnerships, have proven costly for the municipalities involved. According to a recent Audit Report, 13 contracts have poor risksharing between private companies and municipalities, with the latter bearing most of the burden, namely resulting from demand and financial risks (e.g. the costs of changes in the reference "Euribor" interest rate). The deficient technical ability to negotiate contracts and the absence of monitoring units to supervise contract implementation are among the causes identified for the uneven distribution of responsibilities. In 95% of the PPPs, retail concessions to private companies were not grounded on studies of financial viability, and all contracts had to be revised with most of the amendments referring to adjustments of expected demand. Indeed, initial contracts overestimated demand for water and water waste services, with very poor predictions for the evolution of the population covered and consumption (deviations from the base scenario ranged from 10% to 30%), resulting in oversized investments, to the benefit of construction companies. In most cases, the amendments to the contract consisted of the extension of the concession period, in many instances exceeding the thirty-year benchmark, and the rise of tariffs to end consumers since concessionaires charge their consumers well above the national average tariff. For example, "Águas do Planalto" charges tariffs that are at least 50% higher than those charged by municipalities located in the same region where the retail sector remains under the control of municipalities.





In some cases, municipalities have acted to revoke previously agreed contracts, challenging them in court, particularly those burdened by the investment costs in infrastructures too large for actual demand. This was the situation of the municipality of Barcelos in which the private concession contract (controlled by AGS) was based on a minimum monthly consumption that would increase annually, and planned to reach 160 litres per capita in 2008. But current consumption has never exceeded 80 litres, leading to the annual charge of 6 million litres for water not actually consumed and thus doubling the cost of consumed water (Lusa, 28 Fev. 2014).

Apart from these concessions, there are 13 municipal companies where the private sector, usually construction companies, holds a minority stake and directly benefits from such a position with the contracts awarded (ERSAR, 2012). For example, in Braga, the fourth largest Portuguese city, retail water, waste water and waste management services are contracted to a corporation (Agere) in which the municipality has the majority stake (51%). The remaining 49% belongs to a private company (Geswater) controlled in equal shares by three construction firms. According to a recent investigation by the newspaper "Diario de Noticias", around 72% of construction contracts, with a value of 22 million euro, have been won by these shareholders, raising serious doubts about the transparency and public interest of these contracts.

The entry of private capital in the water sector ultimately benefited private construction companies, allowing them to place themselves in a privileged position to obtain large, overly generous but risk-free contracts. While ensuring that important and needed investments were made, municipalities ended up paying the bill to increasingly powerful construction firms.

Market building: the role of regulatory powers

The structural transformations introduced in the water sector in 1993 with the publication of Decree-Law no 379/93 promoting the entry of corporate entities (public and private), created the need for a regulatory agency for this natural monopoly. The first agency, the





Supervisory Commission for Concessions (*Comissão de Acompanhamento de Concessões*), established in 1995, had the responsibility of overseeing the bulk multi-municipal corporate concessionaires, having its powers limited to providing advice on investment and tariff plans. In 1997, the Institute for the Regulation of Water and Solid Waste (IRAR) was created. The powers of this agency, initially limited to overseeing concessionaires, have expanded over the years, taking on (in 2004) the role of national authority for drinking water quality. In 2009, Decree-Law n° 277/2009 replaced IRAR by the Water and Waste Services Regulation Authority (ERSAR), now the regulation authority for the entire water and waste sector, with the aim of reinforcing the regulation of the sector, widening the scope of regulatory intervention to all operators and standardizing all procedures involving ERSAR and the operators (ERSAR, 2012).

The mandate of IRAR/ERSAR was underpinned by the strategic public plans for water supply, water waste and waste, PEASAAR I (2000-2006) and PEAASAR II (2007-2013). Complying with the European Water Framework Directive (article 9, Directive 2000/60/EC 2000), transposed to national legislation by Decree-law n° 58/2005, the Portuguese regulator gradually adhered to so-called principles of efficient use, redefining tariff formation to ensure the total cost recovery of investments (deducted from public subsidies) and targeting low tariffs still charged by many municipalities, perceived as "unacceptable" by the government (MAOTRD, 2007).

However, in the strategic plan PEAASAR II it is explicitly stated that the total cost recovery principle should be "weighted by social sustainability imperatives", safeguarding the right of all to access water while taking into account the regional asymmetries within the country (MAOTRD, 2007: 88). The obvious tension between the two goals – the need to raise prices in order to recover costs and the need to guarantee water to all – is not addressed in the document. On the contrary, pressure for raising tariffs is clearly the principle that is underlined. The right to water is merely presented as a contingency in the total cost recovery pricing of water, and to be resolved by the introduction of social tariffs either publicly subsidized or paid for by better off consumers (MAOTRD, 2007).





ERSAR thus holds a role of paramount importance in the construction of market forms in this sector. Although its mandate rests on the principle that a natural monopoly ought to be regulated to protect consumers, the emphasis on market efficiency, via correction of the pricing mechanism, is clearly paramount. While "it aims to ensure adequate protection of consumers (...) by promoting the quality of the service provided by the operators and guaranteeing socially acceptable pricing", it also postulates the need of safeguarding "the financial viability and best interests of the operators, irrespective of their status" (ERSAR, 2012: 17). Hence, prices in water and water waste services, embodied in the total cost recovery principle, do not limit themselves to operational and financial costs but incorporate whatever is perceived to be a desirable return of capital on these investments. In fact, ERSAR Reports thoroughly analyse the financial situation of companies and have recommended targets for their return on capital (e.g. 5-10%), legally established since the mid-nineties and calculated using the 10-year government bond market rate to which is added a "risk premium" of 3% (Silva, 2010).14

The enhanced powers of ERSAR and the introduction of the total cost recovery principle have faced strong resistance from municipalities that have retained their tariff setting powers. Burdened by excessive new infrastructure expenditure in the bulk system relative to actual demand and facing political pressure from citizens not to raise tariffs, 15 municipalities have often refused to adopt the arbitrary total cost recovery principle. This has resulted either in the subsidisation of water provision to the population or in the accumulation of debt to the AdP group, estimated to be over 400 million euro (AdP, 2013). However, ERSAR does not seem to be responsive to municipal complaints. The surplus of investments over actual water demand – benefitting construction companies as mentioned above – is adjudged to be due to previous recurrent technical mistakes that should not be allowed to prejudice the whole philosophy of total cost recovery. 16 Further, the current crisis, placing the public sector under austerity and permanent financial stress, has created a more favourable climate for the imposition of the full cost-recovery principle. Indeed, Decree-law no 10/2014 has recently granted new powers to ERSAR, now able to impose tariffs on municipalities. Municipalities have, in turn, complained that the new law





is not constitutionally legitimate since it takes from them the legal prerogative of tariff fixing (i, 5/02/2014).

The role of the EU

As argued, European integration is critical for understanding the neoliberal transformations of the Portuguese economy and society. As regards the water SoP in particular, the role of the EU in market-driven reforms can be related to three legislative moments (Hall and Lobina, 2007). The first pertains to environmental legislation for water source protection, whose scope in the organization of the sector is, however, relatively limited. The second channel of pressure on national policies refers to the objectives for quality and access to urban water supply and water waste as laid out in the water directive 91/271/EEC, which required huge investments in infrastructure in the sector across the member states, "arguably the largest common infrastructure project undertaken by the EU in its history" (Hall and Lobina, 2007: 65). The third moment pertains to the already mentioned water framework directive 2000/60/EC, which pressured for the implementation of the principle of total cost recovery in investments and the user-payer principle, thus trying to introduce a market-mimetic pricing logic, with inevitable discretionary criteria as with the calculation of the return on capital mentioned above.

Notwithstanding the recognition of the importance of large investments, their implementation clashed with the strict EMU Maastricht fiscal criteria, namely the limit of a budget deficit of 3% of GDP which created enormous difficulties for public investment. Indeed, direct public investment in water after 1993 was almost non-existent (Pato, 2011). Transfers from the EU in the form of subsidies were of paramount importance to the execution of investments in this sector. For example, between 1993 and 2012, 28% of investment by Águas de Portugal was funded by direct fiscal transfers from the EU (AdP, 2013). Nonetheless, the conflict remained between the necessity of realising huge investments in the water sector and the fiscal limits imposed by the EU in that European funding was not sufficient to cover the whole investment. This favoured a new funding model in the sector based on alternative sources for public expenditure, namely private





capital with the emergence of public-private partnerships in municipal concessions and credit that had become available with the boom in the financial sector. An additional source of funding came from loans from the European Investment Bank (EIB) with long maturities and low interest rates. Thus, both the opportunities offered, and the constraints imposed by, the EU contributed to the neoliberalisation of the Portuguese water SoP via the creation of a new funding model that favoured the participation of new agents, particularly the foreign and the domestic financial sectors.

As mentioned above, Portuguese participation in the EMU also favoured the new funding model insofar as Portuguese banks and other economic agents had easier access to cheap foreign capital. Moreover, the progressive loss of external competitiveness with the adoption of the European single currency, bringing together under the same currency economies with very different productivity levels, favoured the channelling of the newly available capital to non-tradable sectors protected from foreign competition. Water provision, a quasi-monopoly with no foreign competition, and benefiting from the implicit backing by the state, constituted an obvious sphere of expansion for private capital.

To summarise, the neoliberal transformation of the Portuguese water sector materialised in the corporatisation of the sector's organisation, the entry of private capital, and the adoption of new pricing models. These reforms were by and large the outcome of a set of external constraints and opportunities, including the EU legal framework, fiscal constraints and external funding made available with the construction of the EMU. But the transformation of the water sector is not merely the result of external constraints and opportunities. The succession of market disciplinary reforms has been promoted by domestic agents and favoured particular domestic interests, mostly those of the financial and construction sectors.

4. Investment and financialisation in the water sector

The neoliberalisation of the Portuguese water SoP had a big boost in the 2000s. The strategic plan for the sector PEAASAR I, for the period 2000-06, estimated a need for huge

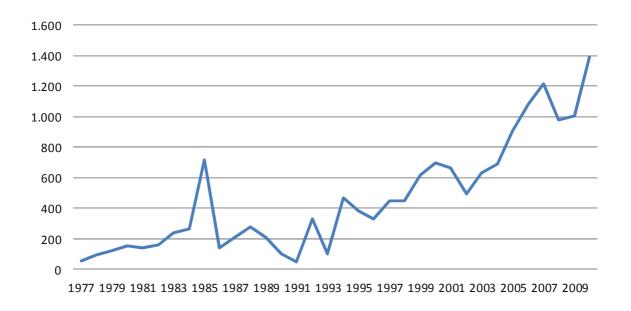




investments in the water sector with the assistance of the 3rd European Framework Programme. The plan stated the objective of having 95% of the population served by water supply and 90% with water waste services by 2006, with a total expected investment of 4230 million euros over the whole period, most of which was to be concentrated in bulk multimunicipal corporate entities (MAOTDR, 2007). Having failed to meet them, the same objectives were targeted in the subsequent strategic plan PEAASAR II for the period 2007-13.

However, annual investment in the sector grew extensively in the 2000s (Figure 2), from 618 million euros in 1999 to almost 1400 million euros in 2009. The funding sources were varied, comprising European subsidies, EIB loans, commercial bank loans and, more marginally, international bond issuance. Coverage of water supply and water waste improved, particularly treated water waste, with coverage rising from 25% in the midnineties to 75% at the end of the 2000s (Figure 3). Besides household services, there was also significant progress in the treatment of river basins and coastal waters.

Figure 2. Total Annual Investment (Public and Private) in Water Supply and
Water Waste Sector (million euros, current prices)



Source: Pordata





100
90
80
70
60
50
40
30
20
10
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Public water supply Waste water Waste water treatment

Figure 3. Coverage of Water Supply and Waste Water (percentage)

Source: INF

Investment in the bulk sector

Most investments were concentrated in the bulk sector of water supply and water waste treatment. Total annual investment in bulk water, water waste and waste management surged from 817 million in 2004 to a peak of 1187 million euros in 2007, when European subsidies totalled 35% of total investment (ERSAR, 2012). Today, the bulk water sector possesses the majority of the assets of the water and waste sector (56% of all assets). Multiplying by almost three, increasing from 2 240 million euros in 2002 to 6 313 million euros in 2012. This illustrates the magnitude of progress in water provision infra-structure, with most of these assets belonging to different multi-municipal corporate concessionaires (most of which are integrated into the AdP group, 19 out of a total of 23).





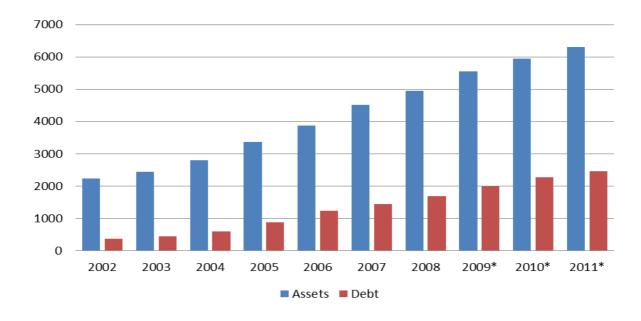


Figure 4. Assets and debt by bulk water concessionaires*

Source: ERSAR

*Since 2009, bulk water concessionaires include non-corporate management entities, but this inclusion has negligible aggregate accounting impacts.

This progress resulted in increased indebtedness of bulk providers – from 366 million euros in 2002 to 2412 million euros in 2011, being unevenly distributed since, concentrated in the Greater Lisbon Area and the Algarve, which are highly populated regions, and in the Alentejo and Northeast Portugal, whose population density is very low (ERSAR, 2012). The relative weight of debt is thus higher in the latter cases where *per capita* costs are higher and investment is more recent. For example, the debt of Águas do Centro Alentejano, covering a very sparsely populated area, corresponds to 85% of all its assets (Figure 6).

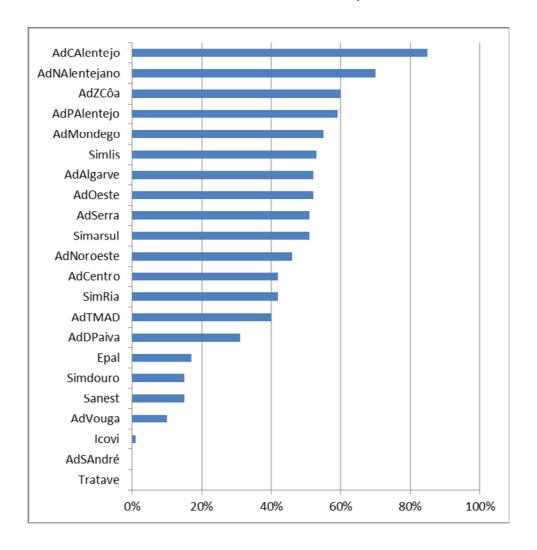
The charged tariffs in bulk services to municipalities are affected by the burden of debt. The weighted mean of tariffs charged in bulk services has followed the growing trajectory of investment and indebtedness since the beginning of the 2000s: water provision nominal tariff rose from 0.34€/m^3 in 2002 to 0.46€/m^3 in 2011; waste water tariff increased from 0.26€/m^3 in 2002 to 0.5€/m^3 in 2011. This has been accompanied by most indebted bulk





concessionaires have charged the highest tariffs. AdZCôa, AdNAlentejo and AdCAlentejo are the bulk concessionaires with the most expensive tariffs for water supply $(0.7 \mbox{\cite{loop}/m}^3; 0.62 \mbox{\cite{loop}/m}^3; 0.63 \mbox{\cite{loop}/m}^3, respectively) only surpassed by two also indebted companies for the interior north of Portugal AdTMAD <math>(0.72 \mbox{\cite{loop}/m}^3)$ and AdSerra $(0.76 \mbox{\cite{loop}/m})$, (ERSAR, 2012).

Figure 5. Debt-to-Assets ratio for bulk multimunicipal concessionaires in 2012



Source: ERSAR

Águas de Portugal (AdP)

AdP is of pivotal importance, channelling most external funding to the multi-municipal concessionaires that it controls operating in bulk water supply and water waste sectors. The scale of AdP enabled it to acquire financial know-how in domestic and foreign financial





markets, having had access to three different funding sources: European transfers, long-term debt (mainly coming from the EIB and bond issuance); and short-term loans from the banking sector.

Debt grew from 744 million euros in 2003 to 3 000 million euros in 2013 in nominal terms (Figure 7). About 60% of this debt consists of loans from the EIB, which have long maturities and preferential interest rates, and whose relative importance as a funding source has been rising. Private banking debt, accounting for about 20% of total debt in 2013, refers to loans from major foreign banks, such as Deutsche Bank and DEXIA, and domestic ones, such as BPI (AdP, 2013). AdP also had recourse to bond markets, issuing bonds of around 600 million euros to a very small number of foreign investors during the 2000s to match their long-term investment with better long-term debt.¹⁷ The success of these bond market operations, also attested by the low interest rates charged (1,8% of interest rate costs in 2013), shows both the scale achieved by AdP as a company and its deep involvement with finance that extended beyond the domestic banking sector.

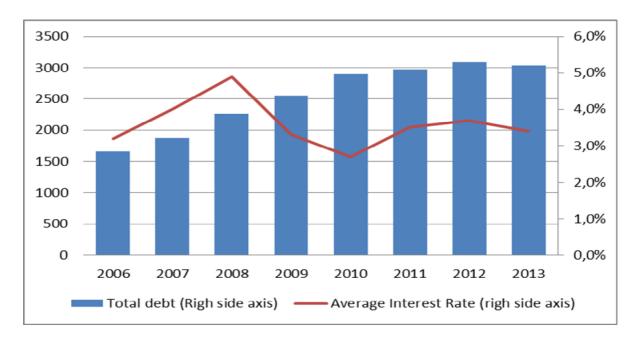


Figure 6. AdP debt and average interest rate

Source: AdP





The high level of indebtedness, with a bank debt/equity ratio of 2,4, has rendered AdP vulnerable to fluctuations in interest rates, particularly to the evolution of refinancing interest rates from the ECB. The cost of debt increased from 2006 to 2008 due to the rise in the reference ECB interest rates, which also influences the benchmark European interbank rate EURIBOR. With the drop in ECB interest rates in late 2008 and 2009, the average interest rate dropped to the record low of 2.7% in 2010. However, in 2011, in the midst of the Portuguese sovereign debt crisis, the decoupling of domestic interest rates from the rest of the Eurozone is discernible. Interest rates rose from 2.7% in 2010 to 3.7% in 2012 (Figure 7).

Finally, the growing financial sophistication of the company and its financialised profile is also clearly discernible in a number of interest rate and exchange rate SWAP derivatives, most of which aimed to protect against the variability of interest rates. Most of these derivatives were contracted with international banks (e.g. Citigroup, BBVA) since the domestic banking sector apparently lacked the necessary know-how. Use of these financial products has been in the public spotlight due to the losses many SOEs incurred. AdP, one of the least affected Portuguese SOEs, has nonetheless suffered notional losses of 25 million euros in 2011 and of 14 million euros in 2012.

The retail sector in water supply and water waste

As noted, public investment prioritised the bulk sector over the retail sector. Even though PEAASAR I (2000-2006) estimated a total investment requirement of 1900 million euros in the water and waste water sector (bulk and retail), the investment realized did not surpass 900 million, 53% of which was funded by the EU (MAOTDR, 2007).²⁰

According to ERSAR (2012), between 2002 and 2011 annual investment in the retail water and waste water sector rose from 171 to 952 million euros, nonetheless representing a considerable investment effort. And as was the case with the bulk sector, investment was accompanied by rising debt. Debt of corporate municipal concessionaires in the retail sector of water, waste water and waste rose from 104 million euro in 2001 to 512 million in

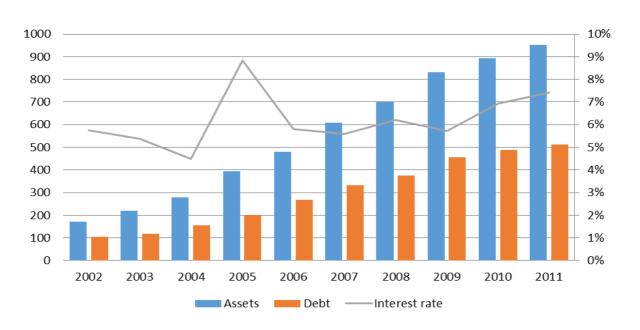




2011. However, and in contrast to the bulk sector, interest rates have been considerably higher in the retail sector, rising from 5.4% in 2001 to 7.4% in 2011 (Figure 8). Their smaller dimension did not allow the facilitated access, and in more favourable terms, to national and international funding, such as the EIB, from which the bulk sector benefited.

The retail sector has therefore been more vulnerable to the evolution of financial markets, being more severely affected by the financial crisis and the deterioration of domestic financial conditions. Within this sector, private concessionaires were particularly affected insofar as they had higher indebtedness rates, as measured by the ratio of debt to assets (ERSAR, 2012). Even so, net results for the sector as a whole have been positive in financial terms, and the operating margin was still around 21.7% in 2011, within the regulatory threshold (15%-30%), with private concessionaires, such as AdPlanalto, AGSPFerreira and AdPFigueira enjoying operating margins of 60.4%, 55.9% and 50.5%, respectively, well above the recommended threshold (ERSAR, 2012).²¹

Figure 7. Debt, assets and average interest rates in retail corporate concessions in water supply, waste water and waste sector (million euro)



Source: ERSAR





The winners from neoliberal provision

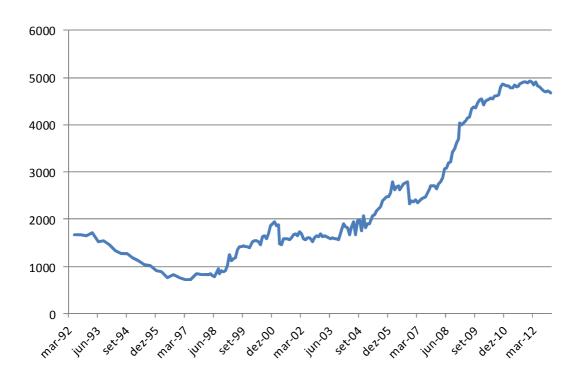
As seen, the new model of water provision, assisted by European subsidies and international official funding, led to an investment boom in the water SoP, especially in the bulk sector. This led to rising levels of debt resulting from loans from both foreign and domestic banks, which have become more accessible with the integration of the Portuguese economy in the European financial architecture. But the loss of competitiveness of the Portuguese economy, due to the appreciation of the real exchange rate with the adoption of the euro (Reis *et al.*, 2014), has made non-tradable sectors particularly attractive for capital accumulation. Water and water waste systems had added appeal as they are essential services and are highly protected by the public powers.

The scale and pace of investments in the sector favoured finance, which has been one of the biggest winners from the remarkable progress of water provision in Portugal. This can be ascertained by the influx of capital into the utilities sector (comprising electricity, gas, water, and waste management), showing the importance of private credit in the overall investment in this sector, especially from the mid-nineties onwards (Figure 8). While foreign capital influxes, either directly or mediated by domestic banks, were crucial for the investment effort, they also enhanced the sector's vulnerability to international financial conditions, especially after the crisis with credit more difficult to obtain and at higher interest rates.





Figure 8. Domestic Bank loans to electricity, gas, water, sewerage, waste management corporations (million euro, current prices)



Source: Bank of Portugal

The benefits for the financial sector are not limited to bank loans. The corporatisation of water provision introduced corporate accountability in management practices, further promoting the embroilment of finance in the sector. This is most clearly the case in the use of derivatives and the issuance of bonds by AdP, aligning corporate practices with finance interests. Moreover, and more importantly, the adoption of the new pricing model for water tariffs, aiming at total-cost recovery, gradually transferred the financial burden from corporate providers to consumers and local authorities guaranteeing secure cash-flows to the financial sector.

But the ties between finance and the water SoP are very uneven across the various agents. First, there is a clear distinction between the bulk and the retail segments. Major transformations referred to above – eased access to various sources of credit and the





adoption of the corporate model – occurred in the bulk sector, most notably through AdP, which had preferential and more diversified access to various sources of finance, contrasting with small, mostly municipal, concessionaires in retail. Thus, whereas the bulk systems have modernised and are well-integrated into the international financial sphere, retail systems are fragmented, diverse and more vulnerable to external pressure. Indeed, there is at present a renewed pressure for the integration of municipality-controlled retail services into AdP.²²

Another major winner of the recent transformations of water provision is the (mainly domestic) construction sector. This is clearly the case insofar as the investments made in the water sector involved the construction of huge infrastructure from scratch, including treatment plants, undersea outfalls, overflow discharges, pumping stations and collectors. With the crisis in housing construction since 2001 (Santos et al., 2015), the growth of investment in the water and waste sectors offered a timely and profitable escape for major Portuguese construction companies. This provides yet another example of the intertwined relation between the domestic banking sector and construction, where the former funds both constructers and their customers.²³

Less expectedly, however, was the entry of construction firms in the water SoP through their participation in the private concessionaires of the retail sector. Indeed, most operators in these concessions are now owned by stock-listed construction companies, such as Mota-Engil and Somague, which use the acquired know-how in Portugal to expand water provision operations to Portuguese-speaking African markets. The water sector has thus provided both a diversification opportunity for the construction sector and a valuable contribution to the internationalisation of the major companies that managed to partially escape the sovereign-debt domestic crisis of 2011.²⁴

5. Neoliberalism under austerity

The investment in water supply and waste water treatment has brought real progress in the coverage and quality of the services offered to the population. Access to water and water





waste services has increased vastly during the last twenty years. As mentioned above, in 2011, 95% of households had access to water supply (where water was considered secure in 98% of the cases analysed), 81% of the population was covered by waste water systems, and 78% of the population was covered by treated waste water systems (ERSAR, 2012). Moreover, rural populations located in more remote areas of Portugal were the socioeconomic group that relatively benefited most from investment in the sector. And even though evolution in the sector has led to a growing commodification of water provision, its social impact on the population has been buffered by the gap between the rise of tariffs and the growth of costs, resulting is mounting debt of municipalities.

Two main factors help explain the social compromise achieved in the recent evolution of the water sector. First, access to diverse sources of funding, including, as we have seen, European funds and cheap domestic and international loans was critical to the progress in the sector. Second, municipalities' control of the retail services allowed them to restrain the rise of tariffs despite central government pressure otherwise. In many municipalities water waste services are not charged or, more commonly, are charged below costs. This situation has led to mounting debts owed to bulk concessionaires (e.g. AdP), which have escalated as a result of the rising bulk tariffs and the deterioration of municipalities' budgets with the new financial rules imposed by the "troika" memorandum. From 2007 to 2011, their debt almost doubled, reaching 400 million euros in 2011. Today, municipalities are the agents most resistant to neoliberalisation of water provision, particularly through the National Association of Portuguese Municipalities (ANMP), which has contested the growing power of ERSAR in setting tariffs, the privatization of the waste services companies. It also supports the ongoing legal battle between some municipalities and private concessionaires in retail systems.²⁵

A new phase of neoliberalism in water provision

The financialisation model that underpinned the impressive investment made in the water sector fell into crisis with the current economic downturn. Private credit became rationed and prices (interest rates) rose accordingly, which increased pressure on cost-recovery





tariffs. The 2011 financial bail-out from the official "troika" lenders (IMF, European Commission and ECB) and the associated measures expressed in the "memorandum" of agreement with the Portuguese state imposed debt brakes on public companies. Portugal now seems to be under what Fine (2014) has identified as the initial stage of neoliberalism, when reforms are put in place in a context of externally imposed "shock therapy" with few, if any, consideration for their social impact. This therapy is facilitated by the shutdown of international financial markets, with very limited access to new loans. Investment, which is still needed in the water waste sector, has been postponed. In the present crisis, the combination of growing corporatisation and indebtedness of the water sector is creating further pressure on tariff setting, where the tension among municipalities, corporations and the regulatory agency ERSAR is most evident.

Rising costs...

Between 2002 and 2011, overall annual costs have significantly increased in bulk sector concessionaires, from 258 to 565 million euros. Financial costs play a non-negligible part, having grown as a result of both rising debt levels and the recent rise in interest rates, as seen in the previous section. However, the growth of financial costs has been counterbalanced by the decline in labour costs due to cuts in wages and benefits in the public sector –imposed by government in accordance with the financial "bail-out" conditionality – declining on average per concessionaire from 28 900 euros in 2007 to 25 100 euros in wages per worker in 2011 (ERSAR, 2012). The combination of higher tariffs and decreasing labour costs has thus resulted in higher operating margins – growing from 30% to 51% in that period, well above the reference upper limit of 30% established by ERSAR. This has meant higher profits for the sector as a whole. Indeed, net results of bulk concessionaires have multiplied by 5, reaching 67.5 million euros in 2011, 63% of which is accounted for by EPAL. However, some concessionaires located in the most remote and sparsely populated regions and with more recent investments, have registered losses (4 out of a total of 22), due to both high operating and financial costs (ERSAR, 2012).





Costs have also risen in the retail sector (including the waste system), especially since the start of the crisis.²⁷ This evolution is also due to the rising cost of debt, given that average interest rates rose from 5.6% in 2007 to 7.4% in 2011. But in contrast to the bulk sector, the fall in labour costs – from an average per concessionaire of 19 300 to 18 300 euros in wages per worker – did not compensate for the rise in financial costs (ERSAR, 2012). Nonetheless, and after a period of intermittent small profits and losses, since 2009 net results for the sector have been positive resulting in an operating margin of 21.7% in 2011 (well within the 15%-30% regulatory threshold). Again, these margins vary across concessionaires, with many private concessionaires passing the 30% limit. For example, the private multimunicipal concessionaire Águas do Planalto, where bulk and retail sectors are integrated, presents a 69% operating margin (ERSAR, 2012). Overall, the rise in interest rates as a result of the financial crisis has been compensated by the nominal and real decline of workers' wages in the water sector.

... higher tariffs

However, labour is but one adjustment variable. As mentioned above, the sector has been a battlefield between municipalities and the central state, mediated by AdP and ERSAR, regarding the definition of water tariffs. Pressure has escalated as rising costs (operational and financial) have widened the gap between tariffs charged and costs per consumer, resulting in highly indebted municipalities. Tariffs have consistently grown since 2005, particularly waste water tariffs, which have been significantly lower than water supply tariffs, thus allowing a faster rise as its impact on the overall bill is lower. Nonetheless, both tariffs have been increasing at a consistently higher rate than inflation and despite the negative evolution of disposable income in the past few austerity years (Figure 9). Given the continuing fall in disposable income of the vast majority of Portuguese households since 2010, the relative weight of water expenses relative to disposable income is expected to continue to grow in the future.

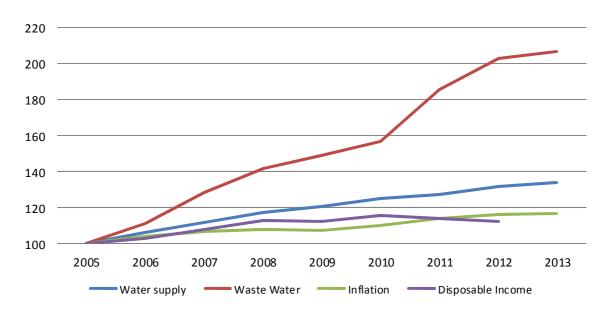
Even though the percentage of household expenses devoted to water supply and water waste represents 1% of the total (0.9% water supply and 0.1% water waste), which is below





the OECD threshold of 3% (ERSAR, 2012), the social impact of the rising trend of tariffs cannot be overlooked. Moreover, national averages disguise differences in water prices charged by municipalities, where the lowest and the highest prices can reach a 1/31 ratio (AR, 2012). They conceal income inequality in one of the most unequal countries of Western Europe. The water bill represents 1.5% of the income of the bottom income quintile, but only 0.8% of the income of the top quintile.²⁸

Figure 9. Water provision prices, inflation and disposable income evolution (2005=100)



Source: INE

Having been granted the prerogative of tariff setting, ERSAR now has the capacity to enforce the principle of total cost recovery. However, this is set to be accomplished in a progressive manner in order to avoid sudden price hikes.²⁹ There remains a great deal of discretion in the operationalization of the total cost recovery principle considering that the calculation of these costs depend on various variables. The duration of concessions is particularly relevant as the annual costs can be substantially reduced by simply extending the envisaged "life expectancy" of invested capital, allowing capital depreciation over a longer period. While apparently innocuous in its outcomes, the extension of these contracts results in a longer period of revenue and cash flows for the companies. Thus, the stretching





of private property rights over collective resources ultimately result in rising costs to be borne by the consumer. The outcome is an ever greater transfer of income from the general population to private capital, through reduced wages, higher water bills and less control over collective resources.

However, grassroots resistance to the neoliberalisation of water provision and the rise in tariffs is weak, almost non-existent. The few organised movements around what is perceived as the privatisation of water – "Água é de Todos" (Water is For Everyone) and "Associação Água Pública" (Association of Public Water) – are led by the Portuguese confederation of unions CGTP, benefiting from the activism of local unions. But their impact is feeble in terms of popular mobilisation and public debate, concentrating in municipalities that have Communist Party mayors.³⁰ Other grassroots movements have occurred in municipalities and regions where the presence of private concessionaires is more relevant and tariffs are higher (e.g. Comissão de Utentes das Águas do Planalto).³¹

Privatisation?

The rise in costs in a number of municipalities, particularly those in the interior of Portugal where investments were more recent and costly, has pressured for the restructuring of AdP. There is a plan to integrate 19 corporate bulk entities in just four regional companies: North, Centre, Lisbon and South. The aim is to reduce the gap between the tariffs of the coastal (urban) regions, where costs are lower, and the interior of the country, where tariffs are higher. This would allow a slower growth rate of tariffs, implying that consumers in more densely populated coastal areas would be subsidizing those living in the interior.³² Moreover, the intended process of integration is to be pursued both at the horizontal and the vertical levels, aiming at better integrating the retail and bulk segments as well, implying the gradual retreat of municipalities from retail services, which is ever more likely given the financial stress they are under.³³ In the new context where the regulator ERSAR has acquired new responsibilities, the proposed reorganisation of the sector points to the growing role of Águas de Portugal in water provision, further removing the water SoP from democratic deliberation and closer to corporate interests.





Although "Aguas de Portugal" was not part of the privatization programme imposed by the troika of official lenders, its reorganisation and the "implementation of measures needed to open this sector to the private sector" was part of the programme of the Portuguese Government (Gov., 2011: 56). However, plans for privatisation were suspended. Nonetheless, there have already been some experiences of privatisation such as, for example, the privatisation of the retail operator "Aquapor" in 2008 (see above), and the privatisation of the waste management segment. In this sector, a sub-holding company of Águas de Portugal, Empresa Geral do Fomento, supervises the operation of multimunicipal companies serving 60% of the population. But in stark contrast to the water segment, all regional corporations belonging to EGF are financially viable. Plans to privatise EGF faced strong resistance from some municipalities, issuing court orders against it, but failed to do so. EGF was privatized in 2014, being in the end bought by the Portuguese construction company Mota-Engil. In face of this experience, the privatisation of the public holding company, AdP seems to be just a matter of time, depending on the reorganisation of multimunicipal bulk water companies held by AdP.

6. Closing remarks

This study aimed at bringing to the fore the neoliberal elements in the Portuguese water system of provision, highlighting both the considerable progress made and the constraints the sector has faced. The financialisation of the Portuguese economy and its international insertion in the EMU facilitated the neoliberalisation of water through eased access to foreign credit. Newly created corporations, with the participation of private capital, have thus been able to put relevant investments in place in the sector, improving the coverage and the quality of the service provided. This initial symbiotic relation between finance and social progress contributed to the gradual neoliberal reform of the Portuguese water SoP. The role of the European regulatory framework in this process has also enhanced these reforms towards the corporatisation of the sector and the adoption of arrangements that try to mimic market mechanisms such as the user-payer and total cost recovery principles.





Finance has thus been one of the main beneficiaries of the recent evolution of the water SoP, through both the loans given to, and the securitisation of, the sector. Construction was the other winner. Having already benefited from the expansion of mortgage markets in Portugal, construction found in the water SoP a new field for capital accumulation through the building of infrastructure and its direct participation in concessionaires as a stakeholder.

The current crisis has put an end to the symbiotic relation between market expansion and social progress. The financial fragility that many Portuguese municipalities now endure represents one more pressure for extending the lifespan of concessions and raising water tariffs, in addition to the new powers given to ERSAR. There is thus a new "push" to further reforms of the sector, further extending the scope of the market, with the entry of private corporations and the more widespread use of market-mimetic mechanisms. The planned restructuring of Águas de Portugal is expected to launch a new wave of privatisations and new market forms of reorganisation. As the domestic private sector can no longer access cheap loans, future restructuring of the sector will rely on foreign capital that will find in the Portuguese SoP an opportunity to access desirable assets at fire-sale prices.

¹ Data retrieved from the National Statistics Institute, INE (http://www.ine.pt/)

 $^{^2\,\}underline{\text{http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do}}.$

³ In this paper, the water sector refers both to water and waste water except where the distinction is made.

⁴ Interview with João Bau, former CEO of EPAL.

⁵ For Lisbon and neighboring municipalities, water provision was the responsibility of the (EPAL), nationalized during the revolutionary period 1974-75 and constituted as a State-Owned Enterprise directly dependent on central government. The corporate model of EPAL later served as a template for the corporisation of the whole sector.

⁶ Interview with João Bau, former CEO of EPAL.

⁷ Diário da Républica, 254/93 SÉRIE I-A.





- 8 Interview with João Bau, former CEO of EPAL.
- ⁹ There are two smaller companies controlled by foreign capital: Aqualia (Spanish capital) and Beijing Water Systems (previously Veolia, purchased in 2013), the latter being the pioneer of private concessions in the municipality of Mafra.
- ¹⁰ Information retrieved from the company website at: www.aguapor.pt.
- ¹¹ Information retrieved from the company website at: www.indaqua.pt.
- ¹² Information retrieved from the company website at: www.ags.pt.
- 13 http://www.tcontas.pt/pt/actos/rel auditoria/2014/2s/audit-dgtc-rel003-2014-2s.shtm
- ¹⁴ It should be noted that companies exceeding such thresholds are not understood as a problem within ERSAR's latest report (ERSAR, 2012).
- ¹⁵ The problem of excessive investments was pointed out in a parliamentary report (Parliament, 2012). For example, in the municipality of Campo Maior the contract with the bulk company reached a level of consumption of 520m³, 30% above the actual consumption level (DN, 09/12/2013).
- ¹⁶ Interview with David Alves, head of the Studies and Planning Department at ERSAR.
- ¹⁷ Interview with AdP CFO Goncalo Martins Barata.
- ¹⁸ Interview with AdP CFO Gonçalo Martins Barata.
- ¹⁹ With mounting losses in complex SWAP derivatives in a number of public enterprises, a new law now imposes stricter rules in contracting of derivatives, making them subject to Treasury approval.
- ²⁰ These values are somewhat underestimated due to the fragmentation of the retail sector, which comprise 34 management entities, of which only 58 of a (public and private) corporate nature. Many municipalities still manage these services directly, funding investment and maintenance from municipal budgets. Such amounts are not here accounted for.
- ²¹ ERSAR defines reference financial indicators and limits for: operating margins (15%-30%), long-term capital coverage (5%-10%), and equity to assets (10%-20%).
- ²² Interview with AdP CFO Gonçalo Martins Barata.
- ²³ For a similar relation in the housing sector see Santos et al. (2014).





- ²⁴ For example, Indaqua, part of Mota-Engil, operates in Angola and Aquapor, part of AGS, operates in Mozambique. AdP, given its size, was the first Portuguese company to internationalize, particularly in Mozambique and East Timor. However, that strategy failed to produce profitable outcomes and was later reversed.
- ²⁵ See newspaper *Diário de Noticias* (12/12/2013).
- ²⁶ However, unitary costs have not increased, maintaining the 2011 level at 0.53 euros per m³ of water.
- ²⁷ Unitary costs per m³ of water have risen from 1.06 euros in 2007 to 1.26 euros in 2011.
- ²⁸ Calculated from data retrieved from the National Statistics Institute, INE (http://www.ine.pt/).
- ²⁹ Interview with David Alves, Director of the Strategic Projects Department (DEP) at ERSAR.
- ³⁰ Água é de todos (http://www.aguadetodos.com/); Água Pública (http://aguapublica.no.sapo.pt/).
- 31 http://muapaguasplanalto.blogspot.pt/
- ³² Interview with David Alves, Director of the Strategic Projects Department (DEP) at ERSAR.
- ³³ Until now, there has only been one case of verticalisation of provision in the coastal region of Aveiro.





References

Abreu, A., H. Mendes, J. Rodrigues, J. Guilherme Gusmão, N. Serra, N. Teles e R. Paes Mamede (2013), *A Crise, a Troika e as Alternativas Urgentes*, Lisboa: Tinta-da-china.

Águas de Portugal [AdP] (2010, 2011, 2012, 2013), *Relatório e Contas*, Available at: http://www.adp.pt/content/index.php?action=detailfo&rec=2615

Antão, P., Boucinha, M., Farinha, L., Lacerda, A., Leal, C., and Ribeiro, N. (2009), "Integração Financeira, estruturas financeiras e as decisões das famílias e das empresas", in Banco de Portugal, *A Economia Portuguesa no contexto da Integração Económica, Financeira e Monetária*, Lisboa: Departamento de Estudos Económicos, pp. 423-561.

Assembleia da República [AR] (2012), *Relatório de Qualidade e Sustentabilidade de serviços de abastecimentos de água e saneamento.* Available at: http://www.cienciaviva.pt/img/upload/Relat%C3%B3rio-das-audi%C3%A7%C3%B5es-%C3%81GUA-final.pdf

Bakker, K. (2003), "A political ecology of water privatization", *Studies in Political Economy* 70: 35-58.

Bayliss, K, B. Fine, and M. Robertson (2013), "From Financialisation to Consumption: the System of Provision Approach Applied to Housing and Water", *FESSUD Working Paper Series*, No 2.

Becker, J., J. Jaeger, B. Leublot, and R. Weissenbacher (2010), "Peripheral Financialization and Vulnerability to Crisis: A Regulationist Perspective", *Competition and* Change, 14: 3/4, 225-47.

Entidade Reguladora dos Serviços de Águas e Resíduos [ERSAR] (2012), *Relatório anual do sector de águas e resíduos em Portugal.* Available at www.ersar.pt

Epstein, G.A. (2005), Financialization and the World Economy, Aldershot: Edward Elgar.





Fine, B. (2014), *The Continuing Enigmas of Social Policy*. Prepared for the UNRISD project on "Towards Universal Social Security in Emerging Economies". Working Paper 2014-10.

Hall D. and Lobina E. (2007), "International actors and multinational water company strategies in Europe, 1990–2003. *Utilities Policy*, Vol 15(2): 64-77.

Lapavitsas, C., A. Kaltenbrunner, G. Lambrinidis, D. Lindo, J. Meadway, J. Michell, Painceira, J. Powell, E. Pires, A. Stenfors, N. Teles, e L. Vatikiotis (2012), *Crisis in the Eurozone*, Londres: Verso.

Martins, R. and Fortunato, A. (2007), "Residential Water Demand under Block Rates - a Portuguese Case Study", *Water Policy*, 9: 217-230.

Martins, R. and Sá, P.M. (2011), "Promoting sustainable residential water use: a Portuguese Case Study *in* ownership *and* regulation", *Policy Studies* 32(3): 291 - 301.

Ministério do Ambiente e do Ordenamento do Território [MAOTRD] (2007), "Plano Estratégico de Água e Saneamento de Águas Residuais", Available at: http://www.maotdr.gov.pt/Admin/Files/Documents/PEAASAR.pdf

Monteiro, H. and Roseta-Palma, C. (2001), "Pricing for scarcity? An efficiency analysis of increasing block tariffs", *Water Resources Research*, 47, W06510.

Painceira, J. (2009), "Developing Countries in the Era of Financialisation: From Deficit Accumulation to Reserve Accumulation", *RMF Discussion Paper*, n°4. Available at: www.researchonmoneyandfinance.org

Pato, J. (2011), História das políticas públicas de abastecimento e saneamento de águas em Portugal. Lisboa: ERSAR / ICS.

Peck, J. and Tickell, A. (2002), 'Neoliberalizing space', Antipode, 34: 380–404.





Pinho, P. (1997), "The Impact of the Single Market Programme and the Preparations in Portuguese Banking", *Working Paper Series: Faculdade de Economia da Universidade Nova de Lisboa*, nº 312, disponível em http://fesrvsd.fe.unl.pt/WPFEUNL/WP1997/wp312.pdf.

Reis, J; Rodrigues, J., Santos, A.C. and Teles, N. (2014), "Compreender a crise: A economia portuguesa num quadro europeu desfavorável" in José Reis (ed.) *A Economia Política do Retrocesso: Crise, Causas e Objectivos*, Almedina: Coimbra.

Rodrigues, J. and Reis J. (2012), "The Asymmetries of European Integration and the Crisis of Capitalism in Portugal" *Competition and Change*, Vol. 16 No. 3: 188-205.

Santos, A.C. and Teles, N. (2014), "Recent Trends in Household Financial Behaviour" in A.C. Santos and B. Fine (eds), FESSUD REPORT Empirical report on cross-national comparative analysis of household financial behaviour – recent trends.

Santos, A.C.; Serra, N. and Teles, N. (2015) "Case Study: Finance and Housing Provision in Portugal", mimeo.

Silva, J. (2010), "Modelo de Cáculo de Ganhos de Produtividade no Sector de Águas e Resíduos em Portugal", *Master Thesis, Instituto de Ciências do Trabalho e da Empresa.*Available at:

 $\underline{http://www.ersar.pt/website/ViewContent.aspx?FinalPath=Not\%C3\%ADcias\&Section=News}\\ \underline{\&FolderPath=\&Name=Modelodec\%C3\%A1lculodeganhosdeprodutividadenosectorde\%C3\%}\\ \underline{A1g\&SubFolderPath=}$





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THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation?; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'





THE PARTNERS IN THE CONSORTIUM ARE:

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2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
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