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Internal devaluation and economic inequality in Portugal: challenges to industrial relations in times of crisis and recovery

Maria da Paz Campos Lima
Instituto Universitário de Lisboa (ISCTE-IUL), Centro de Estudos sobre a Mudança Socioeconómica e o Território, Lisbon, Portugal

Diogo Martins
CES – University of Coimbra and University of Massachusetts Amherst, USA

Ana Cristina Costa
Instituto Universitário de Lisboa (ISCTE-IUL), Centro de Estudos sobre a Mudança Socioeconómica e o Território, Lisbon, Portugal

António Velez
Instituto Universitário de Lisboa (ISCTE-IUL), Centro de Estudos sobre a Mudança Socioeconómica e o Território, Lisbon, Portugal

Summary

Internal devaluation policies imposed in southern European countries since 2010 have weakened labour market institutions and intensified wage inequality and the falling wage share. The debate in the wake of the financial and economic crisis raised concerns about slow wage growth and persistent economic inequality. This article attempts to shed light on this debate, scrutinising the case of Portugal in the period 2010–2017. Mapping the broad developments at the national level, the article examines four sectors, looking in particular at the impact of minimum wages and collective bargaining on wage trends vis-à-vis wage inequality and wage share trajectories. We conclude that both minimum wage increases and the slight recovery of collective bargaining had a positive effect on wage outcomes and were important in reducing wage inequality. The extent of this reduction was limited,
however, by uneven sectoral recovery dynamics and the persistent effects of precarious work, combined with critical liberalisation reforms.

**Keywords**

Internal devaluation, economic inequality, collective bargaining, minimum wage

**1. Introduction**

This article is a contribution to the debate on the persistence of slow wage growth and economic inequality (United Nations, 2015; OECD, 2018), looking at the role of the internal devaluation policies (Blanchard, 2007) implemented in southern European countries. These policies intensified liberalisation trajectories (Baccaro and Howell, 2017) and eroded the labour market and collective bargaining institutions that typically are involved in the determination of wage levels, wage distribution and wage share (Grimshaw et al., 2014; Cruces et al., 2015; Álvarez et al., 2018; Müller et al., 2019). We articulate this debate in terms of recent contributions that examined the scope of policy reversals in relation to internal devaluation measures and scrutinised the room to manoeuvre available to governments of peripheral countries under the EMU constraints (Branco et al., 2019; Bulfone and Tassinari, 2020). What policy shifts have been relevant (and to what extent) to strengthening labour market institutions and trade union bargaining power, with the potential to make a difference in tackling inequality? We also consider contributions that highlight the cumulative effects and variegated impacts of internal devaluation
policies on the reproduction and extension of low-wage and low-productivity sectors and on the trajectory of the falling wage share (Teles et al., 2020).

**Questions guiding our research**

How has the combination of austerity and internal devaluation policies, imposed since 2010 in southern European countries, under explicit or implicit conditionalities – which include deregulating labour market and collective bargaining institutions – accounted for wage trends and economic inequality during the crisis and beyond? To what extent have economic recovery dynamics, political changes and partial reversal of measures paved the way for reductions in economic inequality?

Have internal devaluation policies and policy reversals had a differentiated impact at sectoral level? How are they related to the characteristics of sectoral industrial relations in terms of coordination or centralisation of bargaining, bargaining coverage and trade union density, as well as to sectoral economic and labour market characteristics?

To explore these questions, we analyse the case of Portugal, the southern European country in which the fall in the wage share has been the most dramatic due to internal devaluation policies (Cruces et al., 2015; ILO, 2018, 2019), but also the one in which political shifts to the left and policy reversals as regards internal devaluation policies started earlier than elsewhere (in 2015) and had wider scope (Branco et al., 2019; Bulfone and Tassinari, 2020).

The analysis takes into consideration two contrasting periods: the period of economic crisis and Troika intervention (2011–2014), when in-
ternal devaluation policies were implemented by the centre-right coalition government PSD/CDS; and the post-Troika and recovery period that, since November 2015, has coincided with a left-wing political cycle under a government comprising the Socialist Party (PS), supported by three other left-wing parties: the Left Bloc (Bloco de Esquerda, BE), the Portuguese Communist Party (Partido Comunista Português, PCP) and the Ecologist and Green Party (Partido Ecologista os Verdes, PEV). This represents an unprecedented parliamentary alliance that has attempted to turn the page on austerity.

In empirical terms, this analysis maps internal devaluation policies and policy reversals, and identifies the impacts of minimum wage and collective bargaining developments on wage trends. In other words, it looks at the trajectories of wage inequality and wage share – the two types of economic inequality linked most directly with labour market institutions, particularly collective bargaining (Álvarez et al., 2018; Müller et al., 2019). It also analyses developments in four segments of the private sector: manufacturing; construction; accommodation and food services; and finance and insurance. We show the importance of sectoral analysis in identifying the heterogeneity of the impact of internal devaluation policies on wage inequality and wage share and its intersections with sectoral characteristics. These include: industrial relations (level of bargaining and coverage, coordination and centralisation, and trade union density); economic and labour market structures (for example, the share of SMEs, of temporary work and of workers earning the minimum wage), and trajectories of decline and recovery.
2. Internal devaluation, labour market institutions and economic inequality

The mainstream economic literature has explained inequalities mainly as the result of globalisation, education gaps and technological change. Authors from various disciplines and approaches, however, have pointed to the key role of labour market institutions and trade union bargaining power, highlighting that since the 1980s the neoliberal transformation – deregulating labour markets, facilitating dismissals and forms of precarious work, and eroding collective bargaining – have resulted in a continuous deterioration in wages, contributing to unprecedented levels of inequality (Schäfer and Streeck, 2013; Piketty, 2014; Alvaredo et al., 2017; Vaughan-Whitehead, 2017, 2018).

With productivity increasing much more rapidly than real wages, the decline of the labour share in the distribution of national income between capital and labour (functional income distribution) has tended to evolve in parallel with higher inequality in the personal distribution of income (measured by the Gini coefficient) (Piketty, 2014; OECD and ILO, 2015; Alvaréz et al., 2018). Although the relationship between labour share and income inequality is not straightforward (Therborn, 2013; OECD and ILO, 2015), recent research has called attention to the distributional role played by industrial relations and labour market institutions ‘placed where the distribution of productivity gains takes place’ (Álvarez et al., 2018: 8), and the interlinkages between wage share (income distribution between capital and labour) and wage inequality (within the working population).

The internal devaluation strategy (Blanchard, 2007) imposed by the European Commission since 2010, in the context of the eurozone
debt crisis – under implicit or explicit conditionalities, and in conjunction with the ECB or the IMF or both – has challenged industrial relations and labour market institutions in southern European countries. Given the anticipated disastrous macroeconomic consequences of not having access to finance if the conditions were rejected, governments in those countries did not have much of a choice other than to accept such reforms (Schafer and Streeck, 2013). This approach combined three main policies with potential impact on wage developments, wage share and income and wage inequality: (i) direct state intervention, cutting nominal wages in the public sector and freezing or cutting minimum wages; (ii) facilitating dismissals and widespread forms of temporary work and reducing unemployment protection; and (iii) reconfiguring collective bargaining institutions towards disorganised decentralisation (Marginson, 2014), in line with ‘downward wage flexibility’ (Schulten and Müller, 2013), while eroding their inclusiveness (Cruces et al., 2015; Koukiadaki et al., 2016; Leonardi and Pedersini, 2018). These measures signalled a movement towards labour market liberalisation, where liberalisation should be interpreted as ‘an expansion in employer discretion, as constraints on employers – in the form of labour law and collective regulation – diminish’ (Baccaro and Howell, 2017).

The immediate and long-term impact of an internal devaluation strategy on wage share and wage inequality operates through three different channels. The first is the unemployment created as a consequence of the fall in aggregate demand caused by public consumption cuts and decreasing wages. Unemployment is an essential component of workers’ bargaining power (Álvarez et al., 2018), and the literature has highlighted a negative relationship between wage share and unemployment (Boddy and Crotty, 1975; Barbosa-Filho and Tay-
lor, 2006). While the causal channel is primarily cyclical – employment recovery will put positive pressure on wages – the importance of this channel cannot be downplayed because high levels of unemployment may impact bargaining power at various points in the future because of persistence/hysteresis effects (Blanchard and Summers, 1986).

The second channel is changes in legislation regulating job protection and unemployment benefits, as they also affect labour bargaining power (Álvarez et al., 2018). The deregulation of employment protection legislation (such as cuts in the level of dismissal compensation) increases the probability of job losses. Cuts in the duration and amount of unemployment benefits negatively impact the position of workers. This channel differs from the first in that its impact is permanent, unless reforms are reversed. Other dimensions of the welfare state also play an important role. A welfare system which provides free and universal services also provides workers with a more robust fall-back position in the bargaining relationship.

The third channel comprises changes in collective bargaining and minimum wages. Unlike the other two, in this case wages are affected directly and, like the second channel, the effects are permanent unless reforms are revoked. Reductions in the coverage of bargaining and/or in the amount of negotiated wages have a direct impact on wage stagnation and thus on the probability of wages falling behind productivity. Recent research has called attention to the combined role of minimum wages and collective bargaining in tackling inequality, for example, the extent of low pay and the form and strength of ‘spillover effects’ through the wage structure (Grimshaw et al., 2014).
The post-crisis 2008 debate has foregrounded concerns about sluggish wage growth and persistent economic inequality, despite the recovery in recent years (United Nations, 2015; OECD, 2018). Given that in southern European countries these phenomena have been linked to the impacts (short-term and long-term) of austerity and internal devaluation, various authors have suggested the need to restore labour market and collective bargaining institutions that improve bargaining coverage and coordination, and strengthen trade union bargaining power, as necessary conditions for wage growth, wage share increase and reducing wage inequality (Schulten and Luebker, 2017; Álvarez et al., 2018; Müller et al., 2019).

A new wave of research scrutinising the conditions for policy change in southern European countries has highlighted that the end of conditionality was a necessary, but not sufficient condition for policy reversal. Reversals occurred only when governments’ ideological make-up changed, as in the cases of Portugal in 2015, and Spain and Italy in 2018 (Branco et al., 2019). It has been suggested, however, that while policy strategies have had an impact on reversing ‘corollary measures’, such as those on temporary employment, minimum wages and unemployment protection, they have not led to the reversing of ‘core measures’ of deregulation, aimed at shifting towards export-led growth, such as dismissal procedures and collective bargaining decentralisation (Bulfone and Tassinari, 2020). Nevertheless, it remains to be seen how a government strategy to reverse the core elements of deregulation would be compatible with EMU constraints, and how the limits on the scope of policy reversals (full or partial) influence collective bargaining dynamics and coverage, not to mention trade union bargaining power.
The effects of austerity policies and of internal devaluation on economic inequality have been examined mainly at national level (Álvarez et al., 2018; Müller et al., 2019). The variegated effects of internal devaluation policies and their uneven impacts at sectoral level are worth exploring, however (Koukiadaki et al., 2016; Grimshaw et al., 2014). This includes, in particular, taking sectoral differences into account in relation to collective bargaining institutions and union bargaining power, product and labour markets and exposure to international competition, as well as trajectories of economic crisis and recovery entailing shifts in employment. On the other hand, the cumulative effects of internal devaluation policies for the reproduction and extension of low-wage and low-productivity sectors, with a high incidence of precarious work, also need to be taken into consideration when analysing economic inequality trends at sectoral level (Müller et al., 2019; Teles et al., 2020).

In Portugal, the variation of employment across sectors during the period of economic crisis and austerity policies, and during the post-crisis recovery was indeed very uneven (Teles et al., 2020). But which sectors have suffered the heaviest net employment losses since 2008? Were the declining sectors more capital- or more labour-intensive? Did the increase in employment occur mainly in lower-paid, labour-intensive sectors? The variance of industrial relations regimes across sectors in Portugal is also very high (Bechter et al., 2011; Távora and González, 2016). We conjecture that the configuration of these characteristics, at sectoral level, may be instrumental in explaining the slow recovery of wages, even in a context benefiting from a new political consensus, aimed at reversing austerity measures and boosting income recovery.
In light of the reviewed literature and of the particular evolution of the Portuguese reform path and economic situation we can formulate some hypotheses concerning the effects of internal devaluation. First, we expect that during the years of austerity all channels (high unemployment, weakening of collective bargaining and unemployment benefits, and the freeze in minimum wages) negatively influenced wage outcomes and the wage share at national and sectoral level. In a second stage, we expect to see some reversal of these negative outcomes because of the gradual recovery of employment, the slow recovery in collective bargaining and the significant increase in the minimum wage. These positive effects can, however, be partially offset by the negative pressures created by the fact that some reforms – such as cuts in unemployment benefit or dismissal compensation – were not reversed. Finally, we can also expect distinct impacts on particular sectors, conditional on the number of workers receiving the minimum wage and collective agreement coverage in each sector. The positive effects on wage outcomes are more likely to emerge in sectors in which a higher number of workers receive the minimum wage and there is more extension of collective agreements.

3. Internal devaluation and policy shifts: exploring the case of Portugal

The memorandum of understanding with the Troika laid down requirements concerning fiscal austerity and internal devaluation. The centre-right coalition PSD/CDS, exploiting this ‘window of opportunity’ to resort to further austerity and neoliberal measures, implemented it from 2011 (Costa and Caldas, 2014; Campos Lima and Abrantes, 2016; Cardoso and Branco, 2017).
The centre-right coalition implemented a mix of measures that favoured the trajectory of wage decline. These included exceptional measures such as freezing and cutting public sector nominal wages and freezing the minimum wage; and structural reforms of collective bargaining, impacting the private sector (Cruces et al., 2015; Távora and Gonzaléz, 2016; Campos Lima, 2019). Additional measures eroded employment protection and the social protection of the unemployed (Campos Lima and Abrantes, 2016; Pereirinha and Murteira, 2016). These policy developments amplified the economic crisis and increased unemployment (Reis et al., 2013). All in all, falling wages, cuts in social protection and high unemployment combined to reduce the labour share and increase economic inequalities and the risk of poverty and social exclusion (ILO, 2018).

In the wake of the crisis, the Portuguese ‘miracle’ of economic growth and a sharp decrease in unemployment benefited from anti-austerity measures implemented by the left-wing government. This boosted income recovery and internal demand, but the persistence of high economic inequality and sluggish wage growth remained a challenge (Caldas, 2019; Teles et al., 2020). In particular, the reversal of nominal wage cuts in the public sector positively affected overall wage levels. The PS government, however, was concerned with containing public expenditure and bringing down the deficit, even below the EU target. This stymied wage bargaining upgrades in the public sector, which in turn did not encourage wage bargaining developments in the private sector (Campos Lima, 2020).

In the private sector (and state-owned companies), the policy reversals most relevant to inequality trends can be summarised as follows.
3.1 From freezing the minimum wage to a regular upward trajectory

The policy of the centre-right coalition, aligned with the requirements of the memorandum of understanding, was to freeze the mandatory minimum wage (between 2011 and 2014), notwithstanding increasing inflation. This was the 'functional equivalent' of a nominal wage cut. This policy might have contributed to increasing inequality through its negative incidence in the bottom half of the wage distribution (Grimshaw et al., 2014). The PS government’s 2015 programme, however, assigned a high priority to recovering the minimum wage’s trajectory. Despite initial concerns raising potential negative effects – notably expressed in ‘European Semester’ country reports (European Commission, 2016) – the increase in the minimum wage by around 19 per cent in four years was accompanied by a significant increase in employment, with the creation of around 400,000 jobs between the end of 2014 and the end of 2018 (GEP/MTSSS, 2018, 2019).

3.2 From deregulating collective bargaining to limited steps forward

The centre-right coalition substantially changed the legal framework of collective bargaining, with the goal of aligning wages with productivity at firm level. It introduced stricter criteria for the extension of collective agreements, based on the representativeness of employer organisations; it allowed opening clauses on a number of issues, particularly working time; it permitted the suspension of collective agreements in crisis situations, although with trade union agreement; and it shortened the validity of expired collective agreements (Távora and Gonzaléz, 2016; Campos Lima, 2019). During the left-wing peri-
od of government (2015–2019) all these structural changes remained basically in place, with one significant exception, namely the rules for extending collective agreements. In 2017, new rules came into force on extension at the signatory parties’ request, taking into account the impact of extension on promoting gender equality and inclusiveness in line with the constitutional principle ‘equal pay for equal work’ (Campos Lima, 2019). The 2017 tripartite agreement (CES, 2017) also committed trade unions and employers’ associations to suspend for 18 months any unilateral requests for the termination of collective agreements. The PS government rejected the more ambitious proposals of the left-wing parties (BE, PCP and PEV), however, which demanded the permanent reversal of rules allowing unilateral decisions on the expiry of collective agreements and demanding the full re-establishment of the favourability principle.

3.3 Continuities concerning the liberalisation of dismissals and slight adjustments concerning temporary work and protection of the unemployed

The policy of the centre-right coalition, aligned with the memorandum of understanding, contributed to limit trade union bargaining power by liberalising labour relations – cutting severance pay, extending the range of reasons for dismissal and adding exceptional rules facilitating temporary work – and reducing social protection by decreasing the level and duration of unemployment benefits. These measures were amplified in the context of high unemployment. In the new political cycle, the PS government did not prolong the exceptional measures facilitating temporary work, but opposed the attempts of left-wing parties (BE, PCP and PEV) to reverse the liberalisation mea-
sures on dismissals and severance pay (Campos Lima, 2020). Furthermore, the cuts of the Troika period in the amount and duration of unemployment benefit were not fully reversed (Pedroso, 2020).

4. The variegated impact of internal devaluation policies at sectoral level

While various studies point to the influence of internal devaluation policies on rising income inequality and a declining wage share during the crisis in Portugal (Cruces et al., 2015; ILO, 2018), their variegated impact at sectoral level did not receive the same attention. On the other hand, the policy shifts in conjunction with the recovery might have had some impact in reducing inequality and increasing the labour share, namely through the combined effect of minimum wage increases and a new dynamic of wage bargaining. We conjecture that internal devaluation policies and policy shifts have a variegated impact at sectoral level taking into account sectoral industrial relations and labour market characteristics and sector-specific trajectories of decline and recovery, implying shifts in employment levels. Four segments of the private sector are analysed: manufacturing; construction; accommodation and food services; and finance and insurance.

4.1 Sectoral industrial relations configurations and employment dynamics in crisis and recovery

The configurations of industrial relations and unions’ power resources (Lehndorff et al., 2017) differ in the four sectors in terms of collective bargaining centralisation/coordination, and coverage and trade union
density. In manufacturing, construction, and accommodation and food services coverage of collective agreements in force\(^1\) remains high, at 92.7 per cent, 94.8 per cent and 94.4 per cent, respectively, in 2017, while the industry-level agreements (CCT) encompass between 93 and 98 per cent of the workers. Sectors differ substantially in terms of coordination, however, given the number of agreements and actors involved in bargaining. Construction is the most centralised and less fragmented, with three branch agreements. Accommodation and food services, however, have 17 agreements, while manufacturing has around 220 subsectoral agreements.

The finance and insurance sector also has high collective agreement coverage, although it declined between 2010 (95.1 per cent) and 2017 (88.1 per cent). Industry-level agreements, which represented around 20 per cent of the workers covered in 2010, had fallen by half by 2017, while the weight of ACT (agreements signed by several firms, though not organised in an employer association) and AE (single employer agreements) increased by 10 and 19 percentage points, respectively. The dominance of the sector by large enterprises favours decentralisation, coordination and trade union density.

According to the most recent data, trade union density – averaging 11 per cent in the private sector overall – was well above average in banking and insurance (64 per cent) and slightly higher in manufacturing (12 per cent), and below average in accommodation and food services (8 per cent) and construction (3 per cent) (Portugal and Vilares, 2013).\(^2\) Banking and insurance is the sector least dependent on

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\(^1\) The notion of collective agreements in ‘force’ refers to the ‘stock’ of valid agreements covering a broad range of issues, not only wages. It includes not only new and renewed agreements but also agreements that remain valid but have not been updated. The coverage of valid agreements is the indicator normally used in international comparisons. ‘Wage bargaining coverage’, on the other hand, refers to the coverage of annual wage updates (ILO, 2018; Campos Lima, 2019).

\(^2\) Study based on the mandatory survey Relatório Único by the Ministry of Labour Solidarity and Social Security (MTSSS), concerning all private and state-owned companies.
administrative extension of collective agreements, given the high union density and the wide coverage of agreements negotiated directly with unions by large companies. In contrast, the other three sectors are very dependent on extension procedures, because of the low density rates and the prevalence of industry-level agreements, which makes them dependent on the representativeness of employers' associations. The sectoral characteristics in terms of the share of small and medium-sized enterprises (SMEs) might contribute to the differences observed in density rates, insofar as it is more difficult to organise workers in micro-companies. In addition, companies' affiliation to employers' associations is related to company size – larger companies are more likely to join than SMEs (Dray, 2016).

In 2017, SMEs accounted for around 90 per cent, 85 per cent and 74 per cent of employment, respectively, in the construction, accommodation and food services, and manufacturing sectors (GEP/MTSSS (2019b). In contrast, the finance and insurance sector is dominated by large enterprises, with more than 250 employees, accounting for over two-thirds (68.9 per cent) of employment. Also the share of temporary work across the four sectors reveals significant differences that might have influenced not only trade union bargaining power, but also wage gaps between permanent and temporary workers. In 2010, compared with the private sector average (20 per cent), the share of temporary work in finance and insurance was low (6 per cent), while in manufacturing it was around 15 per cent. In construction and in accommodation and food services, however, the levels are much higher, at 29 and 30.2 per cent, respectively (Table 1).
The huge job losses in the context of the crisis and the Troika’s austerity programme were very uneven across economic sectors (Table 1). Construction experienced the most dramatic downturn in employment during the crisis (35.8 per cent of jobs lost from 2010 to 2013). After 2013, construction exhibited a trajectory of economic stagnation with slight employment recovery (2.9 per cent job creation from 2013 to 2017) and a persistent decline in its contribution to gross value added. Similarly, finance and insurance exhibited a trajectory of persistent economic decline in employment and output. In contrast, accommodation and food services displayed an expansionary trajectory, with the strongest economic recovery and employment creation. Signs of recovery were also evident in manufacturing, with an employment increase of 11.8 per cent between 2013 and 2017 (in comparison with 7.5 per cent of jobs lost from 2010 to 2013) and, in the same period, an increase in gross value added of 14.3 per cent.

In line with our previous theoretical discussion, the recovery of employment and activity in accommodation and food services and in manufacturing should exert positive pressure on wages. Otherwise, the persistent trajectory of economic stagnation and even decline in, respectively, construction and in finance and insurance should have undermined workers’ bargaining power, with a long-lasting negative effect on wage outcomes and the wage share. The expansion of atypical contracts, however, may have partially offset the positive pressure on wages with the recovery of employment. An official report on 2016 indicates that the average nominal wages of temporary workers amounted to 72 per cent of those of permanent workers (MTSSS, 2018). The overall percentage of employees in temporary work in the Portuguese economy increased from 21.2 per cent in 2010 to 30.3
per cent in 2017, a pattern particularly evident in accommodation and food services, where the share of temporary contracts increased to 46.5 per cent in 2017.

4.2 Minimum wage policy and sector-level impacts

Average nominal and real wages reacted very slowly to the economic recovery that commenced in Portugal in 2014. From 2014 to 2018, national average nominal wages grew at only 1.44 per cent a year, while the national average real wage grew at 0.56 per cent a year. This lack of response on the part of wages may be explained by the joint action of two main factors: first, the long-term labour market effects of high unemployment and the recession; second, the weakening of workers’ bargaining power by legislative reforms, which created an unfavourable setting for wage growth also in the subsequent period of recovery.

The minimum wage remained fixed at €485 during the recession, from 2011 to September 2014. Subsequently, it was increased every year and in 2019 the minimum wage was set at €600, with a nominal annual increase of 5.5 per cent a year and a real increase of 4.2 per cent a year. Because this increase was considerably higher than the increase in the average wage, this led to a large increase in the share of workers receiving the minimum wage. From 2014 to 2019, the proportion of workers receiving the minimum wage increased by more than 10 percentage points, from 12 to 22.1 per cent.

That increase was initially seen as dangerous by some economic and political players, who claimed it could jeopardise employment recovery. That did not occur, however: unemployment steadily decreased from a peak of 16.2 per cent in 2013 to 6.5 per cent in 2019, while
employment increased by 11.3 per cent. Besides the fact that it did not have a negative impact on employment creation, we argue that rising minimum wages were crucial to avoid a recovery in which the wage growth indicators would have been even less responsive to the rising economic cycle (Martins, 2019).

In those sectors with a higher number of workers receiving the minimum wage – such as manufacturing, construction, and accommodation and food services (accounting for, respectively, 28.5, 32 and 42.4 per cent of workers covered by the national minimum wage in 2017) – the positive impact on wage outcomes of a regular increase in the minimum wage is more likely to increase. In contrast, the share of workers receiving the minimum wage in finance and insurance is only 2.2 per cent. Thus, it is not expected that minimum wage policy has a significant impact on this sector. This conjecture takes into account the results of previous research, which showed a positive association between sectors with a higher proportion of workers earning the minimum wage and the average increase in the average nominal wage in those sectors, during the initial years of the recovery. The association is particularly strong in sectors with a share of workers receiving the minimum wage of above 15 per cent (Martins, 2019).

4.3 Developments in collective bargaining at national and sectoral level

Portugal figures in the group of countries with negative wage drift dynamics, with wages falling strongly behind productivity growth. This is because collective bargaining has ‘not [been] strong or wide-ranging enough’ to pull real wages towards productivity increases (Eurofound, 2018: 9–11).
All sectors experienced a substantial decline in the evolution of nominal wages in the years of the crisis. With the exception of manufacturing, all sectors displayed negative annual variations of nominal wages in this period. Finance and insurance exhibited a trajectory of stagnation in the evolution of nominal wages, even during recovery. In the case of construction, the most significant nominal wage increase was achieved with an annual variation of 1.2 per cent in 2017. Accommodation and food services experienced the highest increase of wages with annual variations of 2.5 per cent and 3.3 per cent in 2016 and 2017, respectively. Manufacturing seems to be the most robust of the four sectors, exhibiting a sustained positive trajectory in the evolution of nominal wages from 2015.

Collectively agreed wages (nominal and deflated) in the market sector (private sector and publicly owned companies) fell progressively during the crisis, reaching their lowest levels in the austerity period and only starting to recover in 2017 and 2018. Moreover, wage bargaining coverage, referring to collective agreed wage increases – which declined dramatically in 2013 and 2014 to levels below 10 per cent – has improved only slightly in recent years, reaching around 26 per cent in 2018. This slight improvement was not sufficient to re-establish pre-crisis levels. In 2008 and previously, agreed annual wage updates tended to cover around 50 per cent of workers (GEP/MTSSS, 2019b; CRL/MTSSS, 2019) (Figure 1 and Figure 2).

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3 Refers to the coverage of collective agreement updates, a measure estimated annually by the Ministry of Labour (DGERT/MTSSS, 2019).
In the period 2010–2017, the four sectors showed contrasting trajectories in relation to annually agreed nominal wage increases and their coverage, and the evolution of average actual nominal wages (see Figure 3). The years of zero coverage correspond also to years without collective agreements on wage increases. They correspond to a critical economic period, with differentiated impacts at sectoral level, but also to a period in which employer associations were reluctant to sign agreements if they would not be extended (Campos Lima, 2019) and minimum wages were frozen.

At an aggregate level, the manufacturing sector – highly heterogeneous and comprising several subsectoral agreements – seems to be only sector with some bargaining dynamics during the crisis, although with a dramatic fall in 2012. It exhibited a range of wage bargaining coverage of between 20 and 60 per cent, with the exception of 2012, when this rate did not exceed 5 per cent. On the other hand, this sector recovered some bargaining dynamics earlier than the others. During the recession, the development of average nominal actual wages in the sector was consistently lower than the development of agreed increases because the few agreements signed applied only to a minority, while during the recovery the distance between growth rates diminished. The combined effect of the new rules on extension and the minimum wage increases in conjunction with the positive economic recovery and employment dynamics of the sector might have helped to improve bargaining dynamics.
Construction and accommodation and food services, the most centralised sectors, showed similar collective bargaining trends, with a total blockade between 2012 and 2015, when no wage agreements were signed (and therefore there was zero coverage of wage renewals). The later recovery of bargaining dynamics and coverage is clearly related to the impact of new rules on extension procedures. On the other hand, the increase in the minimum wage helped to unblock bargaining rounds, leading to upgrades across the wage structure. The contrasting employment development and gross added value trajectories of the two sectors may explain why in accommodation and food services the development of agreed wage rates was below that of actual nominal wages, while the opposite was observed in the construction sector.

The finance and insurance sector – characterised by high unionisation, decentralisation, high coverage of collective agreements in force and intermediate coordination – has not agreed any wage increases for five years, and had only very limited pay rises in 2016 and in 2017, with wage bargaining coverage of 24 and 2 per cent, respectively. The developments in actual nominal wages – with negative annual variation in 2013, 2014 and 2015 – to a certain extent mirror the absence of collective agreement updates. The most significant actual nominal wage increase – by 1 per cent in 2016 – coincides with the extremely low agreed increase of 0.1 per cent in 2016. The profound crisis in the sector from 2008 to 2014 substantially changed bargaining dynamics and trade union power in the context of continuous job losses.
5. Scrutinising patterns and trends of economic inequality at sectoral level

In Portugal, in 2009, income personal inequality measured by the S80/S20 ratio (EU-SILC and ECHP surveys)\(^4\) was around 6.2, but from 2011 it increased to reach its highest level in 2014 (6.6), declining to 5.9 in 2017. As this measure includes both unemployed and employed and different types of income, not only wages, the trends reflected the combined effects of employment recovery, social transfers and wage recovery. In contrast, the adjusted labour share dropped by 8.4 percentage points between 2008 and 2017. The downward trajectory in Portugal reached 55 per cent in 2015 and remained at this level over the next two years, far below the level of 2008 (63 per cent) (ILO, 2019).

5.1 Inequality of wage distribution and sectoral dynamics

In this section, we focus specifically on wage inequality, the type most directly influenced by minimum wage policy and collective bargaining. We examine wage distribution at national level and in the four sectors under analysis, in the period 2010–2017, based on Quadros de Pessoal/GEP/MTSS, an annual mandatory survey of all companies, covering the whole economy, with the exception of public administration (whose employees have the right to bargain, but not to conclude collective agreements on wages). The analysis considers the gross nominal monthly ‘wage gain’ (base wage plus regular bonuses and subsidies, and overtime payments) of employees working full-time.

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\(^4\) Ratio of total income received by the 20 per cent of the population with the highest income (top quintile) to that received by the 20 per cent of the population with the lowest income (lowest quintile). (EU-SILC and ECHP surveys).
and whose base remuneration corresponds to at least 80 per cent of the national minimum wage.\(^5\)

The examination of unequal distribution trends at national level – referring to the increase in the lower limit of each point/percentile in the periods 2010–2013 and 2013–2017 – gives some indication of the potential role of minimum wage policy changes and collective bargaining in the post-crisis period. In the austerity period the increase in the lower limit was more or less similar across the distribution, from the poorest (percentiles 1 to 5) to the richest (percentiles 95 to 99). The significant loss of jobs certainly had an effect here. In the post-crisis period, the poorest benefited from higher increases in the lower limits, with the five lower income percentiles mirroring the minimum wage increase trends (a growth of around 15 per cent in the period 2013–2017). Also, the curve shape of the increase suggests a spillover effect of minimum wages, probably made possible by collective bargaining in some sectors (Figure 4). On the other hand, sectoral employment shifts and occupational changes – indicating the reduction of the weight of high-wage jobs and the expansion of sectors with relatively low top wages, as we will see for the accommodation and food services sector – might explain why the lower limits of the highest percentiles experienced such low growth in the post-crisis period, lower than during the crisis.

[ Figure 4 about here ]

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\(^5\) Workers in traineeships and apprenticeships can be paid 20 per cent less than the mandatory minimum wage.
Inequality of wage distribution, measured by the ratios S80/S20 and P90/P10, shows a clear reduction in 2017. The relative wage position of low-paid workers in relation to the median improved slightly with the reduction of the ratio P50/10. The relative wage position of top-paid workers slightly deteriorated, as shown by the evolution of the ratio P90/P50. Therefore the inequality P90/P10 fell because of a slight improvement in low wages and a slight deterioration in top wages (Figure 5).

The share of the richest 10 per cent (S90) declined from 29.4 per cent in 2013 to 28.6 per cent in 2017. Despite this trend and the low growth of the lower limits of the highest percentiles, as we have already observed, the average wages of the 1 per cent richest increased discernibly in the period of recovery (2013–2017): the 1 per cent richest experienced a 2.6 per cent increase; the 0.1 per cent richest an increase of 10.6 per cent; and the richest of the richest, that is, the 0.01 per cent, gained 30.6 per cent.

Comparing wage inequality ratios and shares in the four sectors (Table 2) the most striking finding is that the financial sector, the most unequal, is also the only one in which inequality of distribution measured by P90/P10 and S80/S20 increased during the recovery period. The position of top wages (P90/P50) in relation to the median wages remained constant, as did their share measured by S90 (per cent).

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6 The measures of wage inequality used in this section are as follows. The S80/S20 is the ratio of the average wage of the 20 per cent richest and the 20 per cent poorest. P90/P10 is the ratio between the upper bound value of the ninth decile (the 10 per cent of people with highest wages) and that of the first decile (the 10 per cent of people with the lowest wages). P50/P10 is the ratio between median income and the upper bound value of the first decile (the 10 per cent poorest). P90/P50 is the ratio between the upper bound value of the ninth decile and the median income. S90 (%), S80 (%) and S20 (%) refer respectively to the shares of the 10 per cent richest, the 20 per cent richest, and of the 20 per cent poorest in relation to total wage earnings.
The position of low wages (P50/P10) deteriorated slightly, as did the share of the poorest 20 per cent. The decrease in inequality in the other three sectors seems related to the impact of the minimum wage increase in interaction with collective bargaining for the lower wage groups, which improved their position in terms of the P50/P10 ratio and the share of S20. Accommodation and food services emerges as the sector with the lowest top income share measured by S90.

[ Table 2 about here ]

The analysis of wage trends concerning the richest 1 per cent (Table 3) shows striking contrasts between the sectors. In the finance and insurance sector, top incomes, whose average wage stagnated in the crisis, gained considerably with the recovery, in particular for the 0.01 per cent richest, who saw an increase of 67.3 per cent. In the manufacturing sector, the 0.01 per cent richest experienced a decline of 4.8 per cent during the crisis, followed by an increase of 7.8 per cent in the recovery cycle. In radical contrast, accommodation and food services is the only sector that shows a counter-cyclical shift, with an increase in the average wage of the 0.01 per cent richest of 14.9 per cent during the crisis and a decrease of 17.2 per cent in the recovery period. The construction sector showed a decrease in the average wage of the 1 per cent richest of –6.6 per cent in the recovery period, consistent with the continued crisis in the sector and a reduction in employment. Nevertheless, the 0.01 per cent richest increased their average wage by 9 per cent.

[ Table 3 about here ]
5.2 Examining wage share trends at sectoral level

In this section, we explore the evolution of the wage share at sectoral level between 2010 and 2017, covering the period of recession and the subsequent period of recovery. We frame the analysis in both nominal and real terms. Variables in nominal terms can capture the changes in functional income distribution derived from sectoral bargaining over income shares. On the other hand, the use of variables in real terms allows a more accurate view of the evolution of real wages and real productivity.

**Manufacturing**

Between 2010 and 2012 the wage share increased slightly. But that increase was not driven by an increase in the purchasing power of wages. In fact, average real wages fell, while average real labour productivity remained stable. Although workers were able to improve their relative position by keeping their nominal wage almost constant during the period, while nominal productivity fell, that was not followed by an increase in their real wages. It was the change in the ratio of price indexes (CPI/GVA deflator) that pushed the increase of the wage share, assessing this evolution in real terms. Between 2012 and 2016, the opposite occurred: average real wages started to re-

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Our analysis disentangles the evolution of the wage share into the evolution of average real wages and average real productivity. Real productivity is more accurately deflated by the gross value-added deflator (GVA deflator) of each sector, capturing the idiosyncratic evolution of wages. On the other hand, wages are typically deflated by the consumer price index (CPI) to capture the evolution of their purchasing power. The wage share is given by:

\[
\text{wage share} = \frac{\frac{W_i}{c_i^*L_i} * c_i}{\frac{Y_i}{d_i^*L_i} * d_i}
\]

where \(W_i\) is total nominal wages paid in the sector; \(L_i\) is total employment in the sector; \(c_i\) is the consumer price index; and \(d_i\) is the GDP deflator.

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7 Our analysis disentangles the evolution of the wage share into the evolution of average real wages and average real productivity. Real productivity is more accurately deflated by the gross value-added deflator (GVA deflator) of each sector, capturing the idiosyncratic evolution of wages. On the other hand, wages are typically deflated by the consumer price index (CPI) to capture the evolution of their purchasing power. The wage share is given by:
cover, but the fall in the ratio CPI/GVA deflator was stronger. In terms of conflicts over income shares, this period was characterised by slow growth in nominal wages, along with a spike in average nominal productivity, causing a continuous fall in the wage share. Looking at the whole period, it is possible to verify a persistent reduction in average real wage and wage share. Note that in 2017 the average real wage was still below the 2010 level, while the wage share was close to 2 percentage points lower.

[ Figure 6 about here ]

Construction

Like manufacturing, the construction sector experienced a moderate increase in wage share in the first year of observation. That growth was followed by a steep decrease of more than 4 percentage points in just two years. Unlike manufacturing, the wage share started to recover after 2013. The recovery was slower than the previous fall, however. In 2017, the sector’s wage share was still around two percentage points below its value in 2010.

In the construction sector, average nominal wages and productivity were growing throughout the period, but during the austerity years average nominal productivity grew faster than the average nominal wage, whereas the opposite occurred in the period of expansion. The recovered bargaining position in the period of recovery, however, was not enough to offset the income share lost during austerity. The average real wage remained stable along the sample and the ratio of price indexes played a negligible role.
Accommodation and food services

Accommodation and food services are different from the other sectors because of the strong impact of the recession period on wages. From 2010 to 2013, average nominal wages fell by 8 percentage points, while average real wages fell by about 15 per cent. None of these variables had recovered their 2010 level by the end of the observation period, despite the above-average expansion of the sector during recovery. In 2017, the average real wage was still 10 per cent below that of 2010.

The sector presents a declining trend in its wage share from 2010 to 2014. The decline is particularly strong in the most severe years of austerity, between 2011 and 2014, with real wages and productivity moving in opposite directions. The wage share experienced a slow recovery between 2014 and 2016, but declined again in 2017. At the end of the observation window, the wage share was 5 percentage points lower than in 2010.

Finance and insurance

The evolution of the wage share in this sector differs from those of the other sectors under analysis. After a brief fall from 2010 to 2011, it began a steep increase of almost 15 percentage points until 2013. From then on, the wage share decreased until 2016, followed by an unimpressive recovery in 2017.
This unusual pattern can be explained by the strong shock that hit the sector during the crisis, especially in the Portuguese context, in which many banks had to apply for rescue funds from the state after experiencing a sharp downturn. This impact is clearly visible in productivity levels. In 2013, average nominal labour productivity was 15 per cent lower than in 2010, although subsequently it enjoyed a slow recovery. In real terms, the fall in average real labour productivity was almost continuous until the end of the observation period. In 2017, it was more than 15 per cent lower than at the beginning of the period.

Finally, it should be remarked that a growing wage share does not necessarily mean rising income for workers. This is particularly evident in a sector with a large fall in productivity. Note that while the wage share in financial services was close to 5 per cent higher in 2017 compared with 2010, the average real wage decreased by around 7 per cent during the same period.

[ Figure 9 about here ]

All sectors, apart from finance and insurance, experienced a substantial decrease in their wage shares. In manufacturing and in accommodation and food services – two of the most important sectors for Portuguese employment – that diminishing path continued during the period of recovery. In all sectors, real wages were lower in 2017 than at the beginning of the sample, seven years previously. Although no definitive answers can be given at this point, these descriptive results point to a negative effect of the deep recession, amplified by the institutional change that occurred in the labour market. These results are consistent with the reviewed literature and with the action of the three
channels of transmission from internal devaluation to functional income distribution.

6. Conclusion

Internal devaluation was extremely detrimental in limiting trade union bargaining power. Despite some recovery in wage bargaining dynamics and coverage, in the post-Troika period pre-(2008)crisis levels were not fully restored. The uneven reversal of austerity and internal devaluation policies, after the PS government assumed office, retained some devaluation mechanisms affecting work, in particular the liberalisation of dismissals and the low level of protection for the unemployed. On the other hand, despite the positive reversal of the limitations on the extension of collective agreements and the temporary measure to prevent their unilateral termination, existing structural reforms that have eroded collective bargaining institutions were kept in place. The full reversal of core internal devaluation policies demanded by left-wing parties were not supported by the PS government and firmly opposed by the employer confederations, anchored in the troika ‘acquis’. Furthermore, government concerns about containing public expenditure and bringing down the deficit even below the EU target, stymied wage bargaining in the public sector, thereby also sending a negative message to the private sector.

Successive rounds of liberalisation and, in particular, of austerity and internal devaluation policies, combined to produce a ‘layering’ process, with long-lasting negative effects on wage levels and wage inequality. Even in a context of economic recovery and policy reversals, the long-lasting effects of internal devaluation are revealed by the persistence of real wage devaluation in some sectors. Policy re-
versals in the post-Troika and recovery period were not complete; some market driven reforms, in line with wage devaluation, remained unchanged. Consequently, the persistence and expansion of precarious forms of work, and the increase in the proportion of temporary workers partially offset the positive pressure on wages exerted by employment recovery. Countervailing changes put in motion by anti-austerity measures, in particular, regular increases in the minimum wage, were not sufficient to reverse a downward wage trajectory because of internal devaluation. The positive impact of the regular minimum wage increases remained confined to lower pay sectors.

The rate of variation of employment and GDP in both the period of economic crisis and the Troika’s austerity programme and post-Troika intervention, and the period of economic recovery were very uneven across sectors. This heterogeneity combined with a high variance of industrial relations across sectors to produce different trajectories of wage inequality and wage share. The Portuguese ‘miracle’ of economic growth and growing employment originated partly in lower-wage service sectors. The expansionary trajectory of accommodation and food services is of paramount significance. In parallel with an expansion in activity and employment in this sector, the proportion of employees in temporary work increased. Per capita pay in this sector is the lowest in the economy and at the end of the period of analysis the average real wage and the wage share were still lower than in 2010, despite developments in nominal wages above agreed wage rates.

Given the relative performance of average wages in various sectors, we conclude that minimum wage policy was essential in promoting wage growth during the recovery, avoiding more harmful changes in labour relations and a more persistent effect of the recession on
wages. The impact of minimum wage policy on collective bargaining is important in all sectors under analysis, with the exception of finance and insurance. Clearly, the case of the financial sector corroborates the claim that in sectors characterised by high wages, wider variance in earnings and high-skilled activities, the redistributive impact of a minimum wage increase tends to be lower (Grimshaw et al., 2014). The redistributive impact of minimum wage increases is particularly high in sectors characterised by low-wage employment and it is positively correlated with falling wage inequality. The limited redistributive impact of this policy beyond the lower paid could be explained in terms of the limitation of trade union bargaining power, which in Portugal is very differentiated across sectors, and of the sectoral shifts in employment favouring the expansion of low-wage service sectors, such as accommodation and food services. Both processes have in common their anchoring in an internal devaluation strategy. Simultaneously, the very richest became richer in the post-crisis period and across the sectors analysed.

The long-lasting effects of internal devaluation are revealed by the persistence of real wage devaluation in some sectors, including manufacturing and accommodation and food services, despite the economic upturn. Even though the wage share recovered, for example, in construction, it remains below the pre-crisis level and is essentially the result of the ratio between the evolution of average real labour productivity and the changes in relative prices, as average real wages remained stable. Finally, we want to emphasise that the growing wage share in financial and insurance occurred alongside a decrease in average real wages because of a large drop in productivity in a sector characterised by persistent decline (in terms of both employment and gross value added).
Further research may explore the implications of the negative developments observed in the finance and insurance sector. Trade union bargaining power in this sector is clearly stronger than in the others we looked at, in terms of union density, company size and the low share of temporary work. On the other hand, collective bargaining is less centralised and less coordinated than in the other sectors. Notwithstanding the potential impact of technological change in this sector, it remains to be further explored how both (i) successive rounds of liberalisation and (ii) a trajectory of persistent decline in activity and employment, created a very hostile environment as regards wage outcomes and wage setting – the counterpart of the high unemployment in the sector – and undermined union bargaining power.

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8 The micro data series of Relatório Único/GEP/MTSSS used in this study are not available online. The micro data were provided to the REVAL project under an agreement between INE, FCT and GPEARI-MCTES (Office of Planning, Strategy, Assessment and International Relations of the Ministry of Science, Technology and Higher Education), signed on 23 December 2008.


Martins D (2019) Quando a decisão pública molda o mercado: a relevância do salário mínimo em tempos de estagnação salarial, Cadernos do Observatório # 14, October, Observatório sobre as Cri-


Table 1. Sectoral labour market and economic indicators.

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<th>Employment (% change)</th>
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<th>Construction</th>
<th>Accommodation and food services</th>
<th>Finance and insurance</th>
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Source: Authors’ calculations with basis on Portuguese National Accounts, Statistics Portugal (INE, 2019) and Relatório Único (GEP/MTSSS 2019c).
**Figure 1. Number of collective agreements and extensions published and coverage of agreed wages, 2008–2018 (%)**

Source: Authors’ calculations with basis on Variação Média Ponderada Intertabelas (DGERT/MTSSS, 2019b) and Séries Cronológicas Quadros de Pessoal 2010-2017 (GEP/MTSSS, 2019b).

**Figure 2. Collectively agreed nominal and real wages, 2008–2018.*

Source: Authors’ calculations with basis on Variação Média Ponderada Intertabelas (DGERT/MTSSS, 2019b).

* Average real agreed wage increase = average nominal wage agreed deflated by past inflation.
Figure 3. Development of nominal agreed and actual average wages (% on previous year) and wage bargaining coverage (%), 2010–2017.

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<th>C - Manufacturing</th>
<th>F - Construction</th>
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<td>K - Financial and Insurance Activities</td>
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Source: Authors’ calculations with basis on Variação Média Ponderada Intertabelas (DGERT/MTSSS, 2019b); and Séries Cronológicas Quadros de Pessoal 2010- 2017 (GEP/MTSSS, 2019b).
Figure 4. Change in lower limit of wages per percentile (%) – total economy except for public administration, 2010–2013 and 2013–2017.

Source: Authors’ calculations with basis on Relatório Único (GEP/MTSSS, 2019c).

Figure 5. Wage distribution inequality ratios – total economy except for public administration, 2010, 2013 and 2017.

Source: Authors’ calculations with basis on Relatório Único (GEP/MTSSS, 2019c).

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Source: Authors' calculations with basis on Relatório Único (GEP/MTSSS, 2019c).
<table>
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<td><strong>1% richest</strong></td>
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<td>Manufacturing</td>
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Source: Authors’ calculations with basis on Relatório Único (GEP/MTSSS, 2019c).

Source: Authors’ calculations with basis on Portuguese National Accounts, Statistics Portugal (INE, 2019).
Figure 7. Construction – wage share developments, 2010–2017.

Source: Authors’ calculations with basis on Portuguese National Accounts, Statistics Portugal (INE, 2019).
Figure 8. Accommodation and food services – wage share developments, 2010–2017.

Source: Authors’ calculations with basis on Portuguese National Accounts, Statistics Portugal (INE, 2019).

Source: Authors’ calculations with basis on Portuguese National Accounts, Statistics Portugal (INE, 2019).