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Population ageing and the labour market during the recent crisis in Portugal

ABSTRACT

The recent debt crisis has affected southern European countries particularly severely. One of its most negative effects has been the high level of unemployment. The ageing of populations complicates the functioning of social security systems, particularly owing to an increase in financial commitments to pay pensions. This creates pressure for larger budget deficits that, in turn, increase public debt, thus worsening the crisis and also the unemployment rate. Nevertheless, population ageing can also operate favourably in reducing the unemployment rate. Here we discuss the effects of ageing on the aggregate measures of labour market performance and call attention to the frequently forgotten positive direct effect of a change in the age structure of a population. We exemplify this with data from the period when Portugal was in crisis, Portugal being one of the countries that was not only affected by the severe debt crisis but also has a high proportion of elderly individuals in the population. In addition, we research the relative performance of the different age groups in terms of their labour market experiences.

KEYWORDS

population ageing
unemployment
inactivity
crisis
labour market
Portugal

INTRODUCTION

Financial crises produce heightened uncertainty, with a reduction in investment and output, and also an increase in unemployment (Queraltó 2013). Such crises may trigger recessions, and recessions associated with financial crises tend to be more acute than other cyclical downturns (Claessens and Kose 2013; BIS 2014). Several factors contribute towards a crisis having a higher or a lower impact on the performance of the labour market, including labour market institutions and flexibility (Cazes et al. 2013; Brada and Signorelli 2012; Bernal-Verdugo et al. 2012; Blanchard 2006; Eichhorst et al. 2009), labour policies (Bernal-Verdugo et al. 2012; Destefanis and Mastromatteo 2010), financial liberalization (Hoeven and Lübker 2006; Hoeven 2010), reliance on international trade (Jansen and Uexküll 2010) and the sectoral structure of the economy (Destefanis and Mastromatteo 2010; Marelli et al. 2012). Another factor is the age structure of the population.

The effects of population ageing on the economy and on society can be observed almost everywhere. Indeed, population ageing is seen as one of the main challenges for public finances and, combined with a weak economic performance, it can create conditions that lead to a crisis. Ageing places pressure on budgets, which, in turn, may lead to more public debt, worsening a sovereign debt crisis through output and employment costs. Nevertheless, population ageing has a frequently overlooked positive effect (Shimer 1999; Barwell 2000), which is that it operates in favour of a reduction in the unemployment rate. It is precisely this effect that we wish to emphasize in this article. We exemplify this effect by using data for Portugal, focusing on the recent evolution of the country's labour market, which is appropriate, as Portugal is a country that has been affected by an acute debt crisis and also has an aged population.[1]

After presenting the data, the article is divided into three parts. In the first part, we analyse the recent evolution of the unemployment rate in Portugal, which can only be correctly interpreted by looking simultaneously at the evolution of employment, unemployment and inactivity over time and across worker groups (gender, education and age). Next, we inspect labour market transitions by age in order to gain an insight into the driving forces of the changes in the labour market. In the second part, we calculate the direct effect of population ageing on the evolution of labour market outcomes. Finally, we discuss our results in the wider context of the implications of population ageing for the labour market during the crisis and from a longer-term perspective.

DATA

This article uses data from the Portuguese Labour Force Survey (LFS), which is a quarterly household survey that interviews individuals in 22,554 households each quarter, up until the Second quarter of 2013. The sampling size has been progressively increased, comprising 22,572 homes by the last quarter of 2014. Households remain in the sample for six consecutive quarters before being replaced by an identical number of households from the same geographical area (Eurostat 2014). Due to the adoption of a new methodology during the first quarter of 2011 (1Q2011), which consequently led to a break in the series, we use data for the period from 1Q2011 to 2Q2014, which represent the latest information available when this research was carried out.

1. An 'aged' society is frequently defined as being one in which people aged 65 years or older make up at least 14 per cent of the population. In 2014, this group represented almost 20 per cent of the population in Portugal (Eurostat), which is close to a 'super-aged society' (Kim 2009; Miskolczi and Langhamrová 2011).

THE EVOLUTION OF EMPLOYMENT, UNEMPLOYMENT AND INACTIVITY

The high level of unemployment is one of the most negative effects of the current crisis in Portugal. However, statistics show that the unemployment rate has been declining since its peak during the first quarter of 2013, at a 17.8 per cent level (Eurostat). As from the second quarter of 2014, the unemployment rate has remained at 14.1 per cent (Eurostat), which is still high, although it is improving.

The unemployment rate decreases when the number of unemployed decreases in proportion to the labour force. The number of unemployed individuals decreases more due to a decrease in people not finding a job but also because more people leave the labour force. At its limit, if the entire decline in unemployment was as result of those who left the labour market, then there would still be a decrease in the unemployment rate. Nevertheless, this would reflect a much weaker labour market compared to a similar decrease in the unemployment rate resulting from job creation. Therefore, we analyse separately the evolution of unemployment, employment and the out-of-labour force population.

During periods of crises, employment is expected to decrease and unemployment rises. The effect on labour market participation is twofold: more individuals become discouraged and stop looking for a job or leave the workforce (discouragement effect), and yet more individuals who were out of the labour force try to find a job to compensate for the job loss of someone else in the same household (the added worker effect) (Cain 1967).

In Tables 1 to 3, we look at the evolution of unemployment, employment and the out-of-labour force population between the first quarter of 2011 (1Q2011) and the first quarter of 2014 (1Q2014). We also calculate the employment to population ratio, which is an indicator of the performance of the labour market that is not influenced by the way in which the non-working population is divided between the unemployed and the inactive.

In Table 1, we depict the evolution of the patterns by gender. Although both genders became less employed and more unemployed, men were slightly more penalized than women. In addition, inactivity increased mostly among men.

	1Q2011	1Q2014	Absolute change	Per cent change	1Q 2011 (ratio to same sex population)	1Q2014 (ratio to same sex population)
Employment	4,775,039	4,426,861	–348,178	–7.3%		
Men	2,508,170	2,273,433	–234,737	–9.4%	59.3%	56.5%
Women	2,266,869	2,153,428	–113,441	–5.0%	47.8%	46.5%
Unemployment	673,195	788,094	114,899	17.1%		
Men	340,059	402,936	62,877	18.5%	8.0%	9.7%
Women	333,136	385,158	52,022	15.6%	7.0%	8.2%
Inactivity	3,521,207	3,675,638	154,431	4.4%		
Men	1,381,838	1,486,818	104,980	7.6%	32.7%	33.9%
Women	2,139,369	2,159,828	20,459	1.0%	45.1%	45.3%

Note: Author's calculations based on Portuguese LFS data. Weighted data. Individuals considered are 15 years of age or older.

Table 1: Evolution of employment, unemployment and inactivity – by gender.

	1Q2011 (nr. persons)	1Q2014 (nr. persons)	Absolute change	Per cent change	1Q2011 (ratio to same education level population)	1Q2014 (ratio to same education level population)
Employment						
Lower than 9th grade	1,970,667	1,416,840	–553,827	–28%	43.1%	35.8%
Complete 9th grade	1,018,570	935,002	–83,568	–8%	56.0%	50.5%
Complete 12th grade	872,076	1,024,842	152,766	18%	62.8%	62.8%
Higher than 12th grade	913,739	1,050,174	136,435	15%	77.0%	72.4%
Unemployment						
Lower than 9th grade	268,003	246,486	–21,517	–8%	5.9%	6.2%
Complete 9th grade	188,747	203,620	14,873	8%	10.4%	11.0%
Complete 12th grade	131,401	203,278	71,877	55%	9.5%	12.5%
Higher than 12th grade	85,045	134,709	49,664	58%	7.2%	9.3%
Inactivity						
Lower than 9th grade	2,335,532	2,294,379	–41,153	–2%	51.1%	58.0%
Complete 9th grade	612,834	711,607	98,773	16%	33.7%	38.5%
Complete 12th grade	384,382	403,413	19,031	5%	27.7%	24.7%
Higher than 12th grade	188,449	266,264	77,815	41%	15.9%	18.3%
Total population						
Lower than 9th grade	4,574,202	3,957,705	–616,497	–13%		
Complete 9th grade	1,820,151	1,850,229	30,078	2%		
Complete 12th grade	1,387,859	1,631,533	243,674	18%		
Higher than 12th grade	1,187,233	1,451,147	263,914	22%		

Note: Author's calculations based on Portuguese LFS data. Weighted data. Individuals considered are 15 years of age or older. The education levels considered here would correspond to the ISCED categories: 0–1; 2; 3; 4–8.

Table 2: Evolution of employment, unemployment and inactivity – by level of education.

In Table 2, we show the evolution of the patterns by education level. There was a clearly positive evolution in the education levels of the Portuguese population. The proportion of individuals with less than ninth grade education as a proportion of the total population decreased, but employment of this category decreased by much more, whereas the inactive individuals with less than ninth grade education decreased by much less. The number of unemployed individuals increased disproportionally among the more educated, even after taking into account the fact that these were the categories that increased more in the population. Most of the population became less employed, more unemployed and more inactive. The decrease in the number of employed individuals and also in the number of inactive individuals was particularly expressive for those with less than ninth grade education. Only the population who had completed twelfth grade education maintained the same proportion of employed, becoming more unemployed and less inactive.

	1Q2011 (nr. persons)	1Q2014 (nr. persons)	Absolute change	Per cent change	1Q2011 (ratio to same age population)	1Q2014 (ratio to same age popula-tion)
Employment						
15–29	795,365	638,398	–156,967	–19.7%	44.0%	37.9%
30–39	1,313,361	1,184,089	–129,272	–9.8%	81.9%	79.4%
40–49	1,221,670	1 203 035	–18,635	–1.5%	78.5%	77.3%
50–59	917,931	930,261	12,330	1.3%	65.5%	64.6%
60–69	356,153	347,689	–8,464	–2.4%	30.7%	28.4%
70+	170,559	123,389	–47,170	–27.7%	11.8%	8.2%
Unemployment						
15–29	219,988	242,351	22,363	10.2%	12.2%	14.4%
30–39	167,283	188,629	21,346	12.8%	10.4%	12.7%
40–49	149,705	178,453	28,748	19.2%	9.6%	11.5%
50–59	114,589	143,248	28,659	25.0%	8.2%	9.9%
60–69	21,382	34,355	12,973	60.7%	1.8%	2.8%
70+	248	1,058	810	326.6%	0.0%	0.1%
Inactivity						
15–29	791,332	802,789	11,457	1.4%	43.8%	47.7%
30–39	123,002	118,083	–4,919	–4.0%	7.7%	7.9%
40–49	184,792	175,301	–9,491	–5.1%	11.9%	11.3%
50–59	369,257	367,476	–1,781	–0.5%	26.3%	25.5%
60–69	783,906	840,540	56,634	7.2%	67.5%	68.8%
70+	1,268,918	1,371,449	102,531	8.1%	88.1%	91.7%
Total population						
15–29	1,806,685	1,683,538	–123,147	–6.8%		
30–39	1,603,646	1,490,801	–112,845	–7.0%		
40–49	1,556,167	1,556,789	622	0.0%		
50–59	1,401,777	1,440,985	39,208	2.8%		
60–69	1,161,441	1,222,584	61,143	5.3%		
70+	1,439,725	1,495,896	56,171	3.9%		

Note: Author's calculations based on Portuguese LFS data. Weighted data.

Table 3: Evolution of employment, unemployment and inactivity – by age.

In Table 3, we show the evolution of unemployment, employment and inactivity by age category. All age categories became less employed; however, the most affected were those 29 years old and younger. The impressive increase in the number of unemployed individuals aged 60 years of age or older was, for a large part, the result of an increase in the proportion of this age group for the total population.

The groups that were slightly more protected during this crisis were middle-aged individuals (40–59) and those who had completed twelfth grade education. Unlike the rest of the population, the percentage of these individuals out of the labour force decreased. In addition, those who had completed twelfth grade education were the only group that was spared from a decrease in the employment-to-population ratio, and the age group of middle-aged individuals (40–59 years) had the smallest decrease for this ratio.

Note: Author's calculations, based on Portuguese LFS data.

Figure 1: Evolution of work hours for the week of reference.

Confronted with a reduction in demand, firms may cut working hours – evolution of the labour market at the intensive margin – before reducing employment – evolution at the extensive margin (Blundell et al. 2013; Cazes et al. 2013). This type of adjustment is known to have been important during the recent evolution of the labour markets of countries such as Germany and Finland (Cazes et al. 2013). We calculated the average of the actual work hours of all the individuals for whom information was available for the variable that is measured for a specific week using weighted data. In Figure 1, we can see that the periods with higher unemployment are precisely the periods with lower average work hours for those in work, despite the fact that in 2012, an amendment to the Labour Code (Law 23/2012 of 25 June) reduced additional pay for overtime by 50 per cent. The reduction would possibly have been higher in the absence of this measure. Part of the increase in the average number of hours worked in the first quarter of 2014 may possibly be explained by the extension of the normal working week in the public sector from 35 to 40 hours (Law nr 68/2013, 29 August 2013).

Therefore, even if the reduction in average work hours is not very high, the effects at the intensive and at the extensive margins compound to become forms of adjustment to the crisis. The workforce that remains employed is used somewhat less intensely.

LABOUR MARKET FLOWS OF DIFFERENT AGE GROUPS

The evolution of aggregate labour market measures results from individuals' transitions between employment, unemployment and out-of-the labour force. This section analyses labour market transitions in order to highlight whether the evolution of the unemployment rate resulted more from a change in unemployment persistence, a change in transitions from employment to unemployment or a change in transitions from inactivity to unemployment, whilst also analysing the relative performance of older and younger individuals. We focus on some of the core transitions that can be experienced by people in the labour market, namely, a) out of employment and b) out of unemployment. For each status, we identify five possible destinations: employment, unemployment, education, retirement, and other inactivity (which includes domestic status). Retirement is one possible form of inactivity. People may also transit to inactivity because they go back to school or because they become

discouraged from looking for a job. The economic crisis is expected to have increased transitions to inactivity, although policy measures aimed at delaying the time of retirement may have operated in the opposite way.

Using the LFS, it is possible to follow the same individual for a period of six quarters. For a given Quarter, the sample consists of those individuals who are present during that year and also the next one. The assessment of labour market status is based on the subjective assessment of the respondent, reported at the time of the survey. Some issues may be raised when subjective classifications are used: it is possible that potential movements across labour market statuses are sometimes identified as actual moves (Brandolini et al. 2006; Ward-Warmedinger and Macchiarelli 2013), or that when the respondent is going through a transition at the time of the survey, the answer does not accurately correspond to the status in the reference week; it is difficult to identify the current labour status if different states are combined at the same time, for instance, when transitions between labour status are not a single step (Müller and Gangl 2000).

We use unweighted data to calculate the transition rates because individuals could have different cross-sectional weights in different quarters. For each quarter t, the transition probability between state i and state j (P_{ij}^{t}) is calculated as being the number of individuals who passed from state i in t-1, to state j in t, divided by the number of individuals who were in state i in t-1 and who are also present in the sample in t.

Ward-Warmedinger and Macchiarelli (2013) present values of transition probabilities between three labour statuses for the total population for periods before the crisis, which is interesting for comparison with ours (Table 4). There was a methodology break in the LFS between the period covered by these authors – from 1998 to 2008 – and the period analysed by us – 2011 to 2014. Furthermore, Ward-Warmedinger and Macchiarelli calculate the average of annual transitions, whereas we calculate the average of quarterly transitions. These two factors do not enable a strict comparison of the transition flows for the population total. Nevertheless, we believe that it is safe to conclude that the main differences between the two periods reside in the

1998–2008[1]		**Destination**	
Origin	Employment	Unemployment	Inactivity
Employment	93.37%	3.71%	3.02%
Unemployment	39.37%	53.58%	7.61%

2011–14[2]		**Destination**	
Origin	Employment	Unemployment	Inactivity
Employment	91.65%	2.85%	5.5%
Unemployment	18.02%	65.37%	16.61%

Notes: (1) Ward-Warmedinger and Macchiarelli (2013: 27); (2) Author's calculations. Both are based on Portuguese LFS data.

Table 4: Transition probabilities between labour status – for the total population.

	Destination					
Origin	**Employment**	**Unemployment**	**Education**	**Retirement**	**Other inactivity**	
Employment						
15–19	67.70%	10.23%	18.64%	0.00%	3.43%	100%
20–24	86.92%	7.84%	3.21%	0.00%	2.03%	100%
25–29	92.88%	4.92%	0.82%	0.00%	1.38%	100%
30–34	94.73%	3.86%	0.22%	0.00%	1.20%	100%
35–39	95.82%	2.94%	0.13%	0.00%	1.11%	100%
40–44	95.94%	2.46%	0.09%	0.01%	1.50%	100%
45–49	95.40%	2.63%	0.08%	0.04%	1.86%	100%
50–54	94.74%	2.26%	0.12%	0.17%	2.71%	100%
55–59	91.82%	2.23%	0.16%	1.81%	3.98%	100%
60–64	86.22%	1.43%	0.21%	5.82%	6.32%	100%
65–69	75.79%	0.30%	0.25%	18.84%	4.82%	100%
70–74	72.16%	0.05%	0.16%	22.79%	4.84%	100%
75–79	69.78%	0.00%	0.28%	24.45%	5.49%	100%
80+	61.02%	0.00%	0.15%	33.10%	5.72%	100%
TOTAL	**91.65%**	**2.85%**	**0.48%**	**2.47%**	**2.55%**	**100%**
Unemployment						
15–19	14.31%	54.38%	21.78%	0.00%	9.53%	100%
20–24	21.11%	60.89%	9.72%	0.00%	8.28%	100%
25–29	23.68%	63.93%	4.77%	0.00%	7.62%	100%
30–34	19.83%	67.65%	3.13%	0.00%	9.40%	100%
35–39	19.11%	68.90%	2.04%	0.00%	9.95%	100%
40–44	17.11%	69.55%	2.52%	0.00%	10.82%	100%
45–49	17.59%	68.00%	1.64%	0.09%	12.67%	100%
50–54	15.34%	68.78%	1.74%	0.12%	14.03%	100%
55–59	13.69%	66.09%	1.84%	2.77%	15.61%	100%
60–64	10.46%	60.13%	1.92%	7.22%	20.26%	100%
65+	14.93%	30.58%	2.06%	36.09%	16.34%	100%
TOTAL	**18.02%**	**65.37%**	**4.59%**	**0.81%**	**11.21%**	**100%**

Note: Author's calculations based on Portuguese LFS data. Unweighted data.

Table 5: Matrix of transitions between labour market status – by age categories.

Age-groups with the highest probability of:	
remaining in employment	Prime-age workers (25–59), particularly those from 30 to 54 years old.
remaining in unemployment	Prime-age workers (30–59).
going out of employment	The youngest to unemployment and to education. Up to 25 the difference is enormous. Those above 60 to retirement and to other inactivity.
going out of unemployment	From 20 to 39 to employment. Up to 30 to education. From 55, and more so from 60, to retirement. From 45 to other inactivity.

Table 6: Summary of results by age.

outflows from unemployment, much more than in the outflows from employment. The probability of leaving unemployment and entering employment is much lower during the period of the crisis and the probability of remaining in unemployment or of passing from unemployment to inactivity is much higher. The differences in the outflows from employment during the two periods are not so expressive.

Labour market dynamics are quite different for various age groups (Table 5). The probability of job loss decreases with age and the probability of retirement obviously increases with age. Prime-age workers show the highest attachment to employment. The youngest groups are those with the highest probability of becoming unemployed, but also with the lowest probability of remaining unemployed. These young workers also exhibited a much higher probability of resuming their studies if they are unemployed, rather than the rest of the population. Table 6 summarizes the results.

THE ROLE OF POPULATION AGEING IN AGGREGATE MEASURES OF LABOUR MARKET PERFORMANCE

Portugal has experienced an intense ageing process, resulting from the combination of declining birth rates with increased life expectancy. Considering the three decades before 2014 (from 1984 to 2014), the fertility rate decreased from 1.9 to 1.23 children per women, the birth rate decreased from 14.3 to 7.9 births per 1000 persons and the rate of natural change of the population[2] decreased from 4.6 to – 2.2 per 1000 persons. During the same period, the Portuguese life expectancy at birth increased by 8.6 years – with a slightly larger gain for men than for women. As a result, the median age increased by 11.9 years and the proportion of people aged 65+ years increased from 11.7 to 19.9. If we compare the evolution of these indicators between 2011 and 2014, the period that we study in this article, they are naturally less impressive, but they are part of the same trend.

Why should population ageing matter for the evolution of the aggregate unemployment rate and other aggregate measures of labour market

2. The crude rate of natural change of the population is the difference between live births and deaths divided by the average population multiplied by 1000. A positive number reflects births outnumbering deaths whereas a negative number reflects the opposite.

performance? The most important indirect general equilibrium effects of ageing on the labour market are those that work through variables such as savings, demand, growth and budgetary pressure (Denton and Spencer 2003; Keuschnigg and Keuschnigg 2004; Börsch-Supan 2003; Macunovich 2012). It is usually these that have an adverse influence. However, in our article we focus on the direct, compositional effect of ageing, whilst looking for a positive perspective on ageing.

The ageing of a population directly affects the levels of employment, unemployment and labour force participation. The main reason for this is that some age groups tend to have higher employment rates, unemployment rates or participation rates than others. With population ageing, these different age groups change their relative weights in the population and this will have implications for both the size and the composition of the labour force. Naturally, the longer the period of time considered, the stronger this demographic effect will be. Nevertheless, although the period range considered in this article is small, and accordingly we do not expect a prominent effect, we sought to determine in which direction the pressure of population ageing in Portugal is exerted on the labour market aggregates, and which part of the recent evolution of the aggregate unemployment rate can be attributed to population ageing.

The effect can be assessed using a decomposition that measures the contribution to net employment growth of observed changes in the age composition of the population, whilst maintaining the employment-to-population ratio of each sex-age group constant.[3] Population ageing alone would have decreased the number of employed individuals by 2.4%, although, in fact, the number of employed individuals decreased by 7.3%. Population ageing alone would have decreased the number of employed men (women) by 2.9% (1.9%), although the number of employed men (women) decreased, in fact, by 9.4% (5.0%). Therefore, approximately a third of the reduction in the number of employed individuals was due to demographics.

Repeating the exercise with the unemployed, and maintaining the unemployment-to-population ratio constant for each sex-age group, the change in the age composition would have led to a reduction in the number of unemployed men (women) by 4.0% (3.3%). Inversely, the unemployment-to-population ratio increased by 18.5% (15.6%). Therefore, demographics attenuated the effect of the crisis on unemployment.

Finally, the number of inactive men (women) would have increased by 1.4% (2%), whilst they increased by 7.6% (1%). It is notable that the participation rate of women in the labour market remained basically stable when demographics would have justified some increase in inactivity. On the contrary, the exit of men from the labour force suggests that discouragement in searching for jobs must have played quite an important role in this phenomenon.

Therefore, population ageing would justify a decrease in the active population, coupled with a decrease in the unemployed, with the second decrease being proportionately larger than the first: population ageing would be sufficient to justify a decrease in the unemployment rate, from the first quarter of 2011, to the first quarter of 2014. The dimension of this reduction would have been just over one decimal point due to the short period that we are considering; nevertheless, the crisis would have had an even greater negative impact on the unemployment rate if demographics were not exerting this downward pressure.

We acknowledge that this is a very partial view of the effect of population ageing, and yet it demonstrates the pure age effect of ageing. Age-specific

3. Similar methodologies are used in articles such as those of Flaim (1979), Shimer (1999) or Hotchkiss (2009).

participation, employment and unemployment rates change as mechanisms such as wages, education, productivity, labour market policies and attitudes start to exert their influences. Several studies analyse the effect of population ageing on unemployment, mainly focusing on what is in fact a cohort effect, that is, the relative size of the cohort (Duggan 1984; Korenman and Neumark 2000; Garloff et al. 2013). Nevertheless, it is important to recognize that population ageing not only places negative pressures on the crisis through its indirect effects on growth prospects and budgetary burden, but that it also has a direct positive effect in decreasing unemployment, albeit a small one.

DISCUSSION AND CONCLUSIONS

The recent crisis generated an increase in unemployment, inactivity and also a decrease in both employment and the average hours worked. The crisis adversely affected all categories of workers in the labour market, albeit in different proportions, and as in most other European countries, men and the younger workers were generally more penalized in terms of jobs. Seniority worked in favour, resulting in a lower probability of losing one's job and of becoming unemployed. The higher chance of leaving a job after reaching the age of 60 years corresponded to retirement, much more than to unemployment. The very young (20 years old and younger), and also those aged 55 years or older had the lowest probability of finding a job once they became unemployed. Most of the age categories became more inactive, with the exception of the age group of 40–59 years. For this group, the added-worker effect, associated with income and wealth effects, dominated the discouraged worker effect. The adjustment in the quantity of labour during the period under analysis also reduced the average number of hours worked to some extent.

During the period under analysis, the European Central Bank, the European Commission and the International Monetary Fund – the so-called 'Troika' – prescribed an adjustment policy strategy that emphasized the need to increase the flexibility of the labour market as the right response to the crisis. The labour market policies that took place, in an effort to reduce the impact of the crisis and to boost growth and competitiveness, have assuredly influenced the dynamics of the Portuguese labour market. The strategy combined actions with several aims:[4]

- One aim was to reduce the cost of hiring using permanent contracts, simultaneously reducing the segmentation of the market. The measures applied were a freeze in the minimum wage since 2011, a change in rules of collective bargaining creating a shift towards firms-level collective bargaining and a reduction in the cost of severance payments for new hires in 2012. This may have been responsible for higher transition rates into employment than if it had not taken place. Since the rules of entitlement to severance payments did not change for existing workers, it is not expectable that the transitions out-of-employment have suffered any influence.
- Another intention was to raise the incentive to search for a job (with the benefit of limiting the public expenditure), through the reduction in the amount and in the duration of unemployment benefits, also in 2012. There was some care with situations where both members of a couple were unemployed or where the unemployed person was a single

4. For detailed explanations of the labour market policies that were implemented in Portugal during the Great Recession, see OECD (2017), Moreira et al. (2015), Hespanha and Caleiras (2017), Cardoso and Branco (2017) or Martins and Costa (2014).

parent: in such cases the benefits received were 10 per cent higher. Unemployment protection was also extended to self-employed persons under certain conditions and there was a reduction in the minimum contributory period necessary to become eligible to receive the unemployment benefits. Despite the undetermined a priori impact on the overall level of unemployment protection, the numbers show that along with the increase in the official number of unemployed persons, there was a reduction in the payment of unemployment benefits (Hespanha and Caleiras 2017). If anything, this type of intervention has increased the transition flows out-of-unemployment.

- Active labour market programmes were designed with a focus on adjustment of the labour force to the needs of the firms, for example, providing short-term training and subsidizing internships and hiring. This may have been responsible for an increase in the transitions out-of-unemployment particularly of youth, low-skilled individuals and long-term unemployed because they increase their probabilities of finding a job. The fact that they reduce the official numbers of unemployment because, while people are enrolled in these programmes, they are not considered to be unemployed is not so important in this study as the labour market status is derived from the individual answers to the LFS.
- There were measures aimed at improving the sustainability of the pension system and increase the participation of older individuals in the workforce that have certainly influenced the transition rates to inactivity/retirement: the suspension of early retirements in the private sector in 2012 (except for the long-term unemployed and for certain professional groups) and the raising of the normal retirement age in 2014 from 65 to 66 years old. In the absence of these measures the transition rates from employment to inactivity should have been higher.

Labour market downturns affect different age groups to a differing degree, and such downturns are themselves affected by the age structure of the population. While population ageing is frequently pointed out as being a source of economic strain and lower growth, less has been written about its smoothing effect on the response of unemployment to the economic crisis. This effect will be accumulating over the long term, and therefore it will be operative during the recovery. The other side of the coin is the pressure of population ageing in reducing labour market participation as older individuals are less likely to re-enter the labour market when the economy recovers.

An interesting and natural follow-up to the present study is the analysis of the relative performance of the different socio-demographic groups during the aftermath of the crisis and the comparison between results obtained in this work and new ones calculated for the following period.

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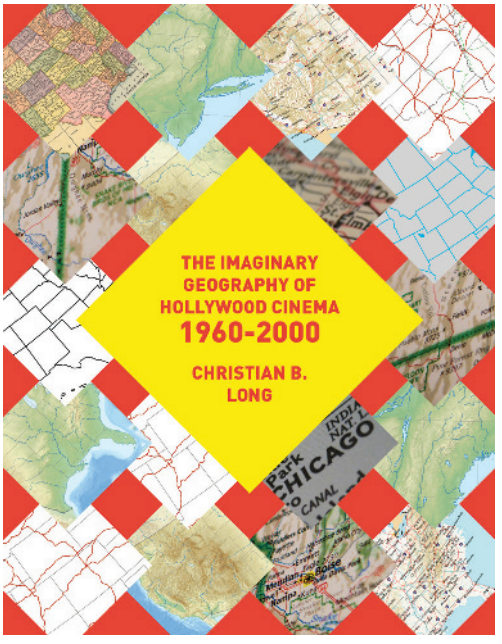
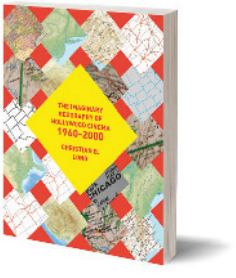


The Imaginary Geography of Hollywood Cinema 1960–2000

By Christian B. Long



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The Imaginary Geography of Hollywood Cinema 1960–2000 combines digital cartography with close readings of representative films from 1960-2000. **Christian B. Long** offers an unusual history of twentieth-century Hollywood narrative cinema, one that is focused on the intersection of the geographies of narrative location, production, consumption and taste in the era before the rise of digital cinema. Long redraws the boundaries of film history, both literally and figuratively, by cataloguing films' narrative locations on digital maps in order to illustrate where Hollywood actually locates its narratives over time.