

Final Report
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Immigration and Labour Market Flows

**The impact of labour market reforms on immigrants
following the sovereign debt crisis in Portugal.**

Analysis conducted by
Alberto Mazzola – 52237
Maria Francisca Pereira – 51913
Maria Vaz Pato – 42981

I. Introduction

It is a pronounced fact that the immigration in Portugal has been registering an expansion in the last few years. According to PORDATA, the foreign population resident in Portugal rose from nearly 400 000 in 2015 to approximately 800 000 in 2022, which constitutes a 100% increase in less than ten years. This implies that around eight in one hundred people in the country are immigrants. In this sense, it can be established that immigration is a focal point of study interest among labour dynamics in Portugal.

With the Sovereign Debt Crisis (2010-2015), Portugal requested a Bailout Programme adding concerns for structural reforms. Some of these reforms were imposed by the Memorandum of Understanding on Specific Economic Policy Conditionality (MoU), that was signed in May 2011 between the Portuguese authorities and the so-called “Troika”¹. This programme provided narrow targets regarding the labour market outlook. Although the labour legislation in Portugal was not static before the crisis, these specifications brought change into labour market dynamics in Portugal.

The *Troika* reforms were implemented for three years (2011-2014) and included diversified measures in the labour market. Namely, the program pursued a cut in the state workers wage by 3,5% to 10% (International Monetary Fund, IMF). Furthermore, the reforms had a strong effect in unemployment, increasing from 7,6% in 2008 to 16.2% in 2013 (*Gabinete de Estratégia e Planeamento do Ministério do Trabalho, Solidariedade e Segurança Social*, p.83). In response to

¹The Troika is a term used to refer to the single decision group created by three entities, the European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF). It was formed due to the European debt crisis as an ad hoc authority with a mandate to manage the bailouts of Cyprus, Greece, Ireland and Portugal, in the aftermath of their prospective insolvency caused by the world financial crisis of 2007–2008.

the situation, there was a following investment in unemployment benefits and minimum income programs.

With this in mind, we propose to study the labour market dynamics in Portugal, comparing immigrants and natives labour markets in Portugal after the Crisis, by answering the following research question: **How did *Troika* labour market reforms impacted immigrants compared to natives in Portugal?**

To provide a better understanding of the economic context regarding the period under analysis, we will first provide a description of the Portuguese economy as the sovereign debt crisis kicked in, then describe the set of policies aimed at restructuring the labour market agreed in the Memorandum of Understanding (MoU) and finally provide a description of the sample considered to understand how the size of the immigrant population has changed after the crisis and describe the industries in which there is a larger share of immigrants. With this in mind, we will then discuss the principal reforms implemented with the Troika agreement regarding labour market development and discuss the dynamics in immigrants' workflows to assess how they have evolved after the crisis.

Starting with labour market dynamics, unemployment peaked to 16.2% in 2013 from 7.6% in 2008, with broader definition of unemployment² reaching 25.4%, with a striking impact on youth unemployment and duration of unemployment. The former value climbing up to 40% and the latter showing a long-lasting impact, with 45.8% of unemployed workers staying unemployed for an average of 25-months.

² Including part-time workers who wish to work full-time as well as people discouraged from looking for work.

In turn, this triggered a departure of immigrants from Portugal – In 2012, the number of permanent immigrants fell from 18,820 to 14,886 and the share of foreign population in relation to the resident population decreased in 2013 to 3.8%, according to PORDATA.

Alongside them, many Portuguese left as well, as the difficulty in finding work led to the resumption of mass emigration. Estimates suggest that 586,000 people fled Portugal between 2011 and 2015 with a relatively low level of education (only 30% with higher education), marking a significant change in the direction of immigration (Glatzer 2018).

Regarding the measures implemented with the Memorandum of Understanding (MoU), the main objectives were to liberalize the labour market, decrease the dualism between permanent and fixed contracts and modify the bargaining process for unionized workers. The *Troika* significantly reduced dismissal cost on the idea that lower firing costs would have made the labour market more competitive through broader extension of fair dismissal and lower severance payments. Minimum wages were frozen and fixed term contracts were extended to 18 months and more, to allow for more flexibility in hiring procedures. The share of collectivized contracts dropped as a consequence of the measures from 1.9 million to 376.000.

Our group believes this study could be relevant in understanding how immigrants' and natives' labour dynamics differ after a shock. Furthermore, it could shed light on appropriate policy responses when it comes to the subject of the labour dynamics of immigrants in Portugal.

II. Literature Review

There is evidence of a degree of cyclicity associated with labor market flows, such that the separation rate is negatively correlated with alterations in labor productivity, whereas the job finding rate is positively correlated with productivity for the US (Fujita and Ramey 2009). This idea of the relevance of labor market inflows and outflows in explaining cyclical unemployment is further supported by research (Elsby, Michaels e Solon 2009), that contradicted the claim that inflows into unemployment had a small role in deciphering unemployment dynamics (Shimer 2012). The possibility of the presence of a certain degree of cyclical effect in the context of labor market flows could be considered in the scenery of the post-crisis period under study, although one should make a safeguard for the conception that the Portuguese labor market strongly differs from the US’.

In addition, comprehensive analysis of immigration trends and labour market responses show that each country has different levels of integration and employment for immigrants with some common features (Chassamboulli 2024). This difference in levels of integration across countries makes the analysis for the case of Portugal interesting. Additionally, the differences in transition rates between immigrants and non-immigrants are not equal across nationalities of immigrants within countries and are not explained by observable characteristics, as education, age, sector or occupation. Instead, human capital transferability, discrimination, type of migration and language proficiency could be more relevant in determining the labour market performance for immigrants. Also, Chassamboulli establishes that the inflow of non-native immigrants has a weak and non-significant impact on the job-finding and job-finding rate of native workers.

It can be established that immigrants, when compared to residents, suffer from labour market disadvantages. For example, in the Norwegian private sector, the probability of job loss for

immigrant workers is more than twice that of native workers (Bratsberg, et al. 2013) as well as male immigrants in Denmark face more likelihood of being unemployed, when compared to natives (Blume, et al. 2009), which supports the idea that immigrants are more prone to lose their jobs, when compared with natives. On the other hand, the conclusions regarding the job-finding probability seem to be less clear. For example, Chassamboulli finds smaller native-immigrant gaps in flows compared to those computed in Botrić (Botrić 2018). There is also research that studies the question of whether immigrants are more or less vulnerable to the economic cycle, for example Gálvez-Iniesta studied the case of Spain for the Great Recession (Gálvez-Iniesta e Ismael 2022).

When trying to get a better grasp on the immigrant-native labour market gaps in Portugal, it can be said that immigrants in Portugal are penalized in terms of wages when compared with natives with the same characteristics, mainly because of occupational downgrading and the absence of match-specific human capital (Carneiro, Fortuna e Varejao 2011). As we approach the topic to address the immigration trends and different labour market outcomes for non-natives from foreign countries either speaking or not speaking Portuguese, we will also build our analysis on Esteves' recent work on the resilience of immigrants in Portugal (Esteves, Fonseca e Malheiros 2017), who argues that despite the increased challenges brought by the crisis and the immobility of the labour market for non-natives, the immigration flow has been consistent and resilient in recent years.

As we investigate the interconnection between welfare and immigration to understand what made Portugal so resilient for immigrants and understand the impact of Troika policies on the flows, we look at how Portugal used the *Troika* “sentence” as an opportunity to strengthen its labour market sector and protect immigrants' healthcare (Padilla, Castellani e Rodrigues 2022).

Finally, considering the large migrant outflow from Portugal, that constituted one of the countries that experienced a new wave of emigration because of the effects of the Sovereign Debt Crisis,

coupled with the austerity measures implemented in response (Pereira e Azevedo 2019), we question the possible impact of these changes in the immigrant labour market flows.

III. Data

The analysed dataset is based on the *Quadros de Pessoal* (QP), an annual mandatory employment survey conducted by the Portuguese Ministry of Employment. The database includes firm's information such as the Classification of Economic Activity (CAE), location, legal status. QP data also covers the establishment information (such as location and employment). Employment outcomes including the number of third-party workers per CAE and monthly wage, for instance. The merged dataset is available between 1985 and 2021.

In the study, in order to avoid the biasing of results due to the start of the Sovereign Debt Crisis and the first introduction of *Troika* austerity measures the plan is to focus the analysis in two different periods. The first one prior to the reforms (2005, 2008 and 2011) and following the reforms (2014 and 2017). In order to guarantee a clean matching of employer employee some restrictions were implemented.

Since QP focuses on firm labour it is important to point out that it excludes Public Administration, self-employment, and family businesses without wage-earning employees.

In terms of variables the following report focuses on the Types of Contracts variable (*tipo_contr1*), described in **Figure 4** (Appendix), the Monthly Contracted Working Hours and the Overtime Working Hours.

Further from the database a string variable was created to work as an indicator for the immigrant status (*immig_status*), described in **Figure 5** (Appendix), allowing us to compare results between Portuguese, European, and Rest of the World workers. For the Working Sectors variable, a list with the full description of each sector is present in **Figure 6**.

IV. Methodology

Regarding the Research Question we are trying to understand how the different austerity measures implemented during the Troika period differently impacted natives and immigrant workers in Portugal in the aftermath of the policy implementation.

To perform this first analysis, the most suitable approach would be to perform a Staggered Difference in difference analysis including a dummy variable for being or not an immigrant and compare the coefficients of the regressions, considering as control group the period right before the implementation of the reforms. These steps would follow previous literature including (Eckstein and Weiss 2004), (Adsera e Chiswick 2007) and (Carneiro, Fortuna e Varejao 2011), however as a preliminary analysis on the topic in this paper we will limit to descriptive analysis of the changes in the variables considered.

For further examination, our plan is to perform sub-analysis of the dataset and understand the different impacts considering different fragments of the sample: impact comparing with different working sectors (constructed through the CAE number); different degrees of education; Portuguese knowledge (analysed from the country-of-origin official speaking language) and gender.

Considering the complexity of the database we are not able to provide an exhaustive description of the database used for the project.

V. Reforming the labour market

The MoU agreement signed with the *Troika* Institutions included a vast reform of the labour market aimed at restructuring the inefficiencies and enhancing the capabilities of the Portuguese labour market; in this section we will discuss what were the main pillars of the reform, how they were implemented and what have been the outcomes.

As a first stance, the program aimed at reducing the duality, enhancing incentives to work and realigning working arrangements and wages to specific firm conditions. The Portuguese labour market had been excessively regulated and protected, disproportionately favouring the use of temporary contracts and creating an unfavourable market for young workers, whose access to the market was severely hindered by the restrictions and wage setting rigidities. Moreover, the generous unemployment benefit system rather than promoting job search, actually turned out to discourage it and make unemployment long-lasting in the economy.

Second, a full review of the unemployment benefits system was agreed to increase the efforts in job-search and shorten unemployment spell. Both the maximum duration and the cap of net benefit were reduced. Moreover, the accessibility to the benefits system was changed to allow a significant share of young unemployed and self-employed workers to access it. Finally, the active labour market policies were redesigned to improve employability and reduce the skill mismatch that the labour market was experiencing.

Third, Portugal's Employment Protection Legislation (EPL) was among the most rigids and protecting across the EU; the MoU, entrenched the need of revising this structure to reduce the segmentation of the labour market and foster job creation, mainly by review the severance payment scheme, whose burden significantly hindered *job-to-job* mobility as the acquired

severance payments were not transferable to new job positions.

The reform of the severance system implied: (i) a realignment between open-ended contracts and fixed-term contracts regarding the severance payment regime; (ii) a convergence of the regime towards EU countries' levels; (iii) a change in the fair dismissal framework to make it less restrictive; (iv) a reform to transfer part of the accumulated severance payments towards a “single contract” system.

Fourth, another pillar regarded the working time arrangements as Portugal had among the highest costs of overtime in Europe, reducing firm competitiveness and reducing adjustments on the intensive margin. This issue exacerbated sectoral shocks and employment losses during the crisis as intensive margin costs were excessively high. The MoU aimed at adjusting the flexibility of working time and reducing the cost of overtime.

Finally, the government agreed to tackle low education attainment and improve the school system to create a stronger fit between curricula and skills required by the market.

The Reforms' implementation

In January 2012, the government signed with the social partners a pact closely resembling the reforms agreed with the Troika, namely the “Growth, Competitiveness and Employment Pact”³, with the measures discussed above and implemented them over several years and with some difficulties, as some of them were revoked by the constitutional court. The timeline of these measures has been really tight, with more than 450 measures implemented and the labour market undertook deep changes and evolved significantly.

³ “*Compromisso para o Crescimento, Competitividade e Emprego*”

EPL reforms

Over the reforms period, severance pay was reduced from 30 days per year to 12 days per year, the minimum of 3 months' severance pay was removed and a ceiling amount for severance to be paid was introduced for open-ended contracts; although to a lesser extent, some measures were taken also on temporary contract to reduce the amount of severance pay. The measures succeeded in decreasing the severance pay on permanent contracts below fixed term contracts to encourage hiring on permanent contracts, which is the right path to improve this labor market inefficiency although there still are other incentives for employer to hire on fixed term contracts and the dismissal costs are still different.

There is some early indication that the reforms for severance pay have had positive effect on hiring shares on permanent contracts, and has mitigated the impact of reform on job separation. Moreover, the severance pay system was reformed to account for liquidity issues in case of large dismissal obligations. Indeed, an insurance fund (*Fundo de Garantia de Compensação do Trabalho – FGCT*) was established to collect the severance payments and liquidate 50% of the severance pay in case of dismissal, both reducing the up-front cost and the liquidity risk of high severance payment obligations, without changing the overall cost of dismissal.

VI. Discussion on the impact of the reforms

The main idea is that in presence of lower EPL and more specifically of lower severance payments we would expect the following effects: on the one hand workers might be more inclined to change jobs and on the other hand employer would face lower hiring and firing costs; however, since the accumulated severance payments were preserved, hiring should prevail on firing especially in the short run. Secondly, as the reduction in severance pay was greater for permanent contracts compared to fixed term, we would expect the hiring rates to differ in the two contracts' categories.

Recent literature (OECD 2017) produced by the Portuguese government using our data (Portuguese *Quadros de Pessoal*) has shed some light on the impact of the reforms on on-the-job search and worker flows. The results of the two questions presented above confirm the economic intuition provided: the reforms effectively increased the on-job-search and increased hiring in the short run without noticing any significant flows into unemployment.

Our contribution to the research consists in comparing these effects across different immigrant groups to see if the reforms had a different impact base on immigrant status. In this preliminary work we didn't manage to address this research question through a differences-in-differences approach using the immigrant group as the treatment group and the rest of the Portuguese labour force as the control group in presence of the common shock brought by the reforms. As this was not feasible, we resorted to present comparative statistics in 3-5 different timeframes and left this more accurate approach to future research.

VII. Results

1. Working sectors

The purpose of this part is to understand how the composition of the working sectors differs, **Figure 6** (Appendix), from Portuguese to non-Portuguese workers. Moreover, it is interesting to understand how this composition changed after the implementation of the *Troika* measures. For EU Workers (**Figure 7**) it is possible to observe that they are mainly, respectively, Farmers and Skilled agriculture, Fishing and Forestry workers (FSFF); unskilled workers and plant, machine operators and assembly workers. Regarding the composition of the top working sectors for the European workers it kept relatively similar before and after the reforms. However, when observing the picture excluding the top 2 sector (**Figure 8**) we observe a sharp increase in the share of Administrative Staff and the stop of the previous steep decrease of the “Skilled Industrial, Construction and Craft workers” (SICC).

Furthermore, RoW Workers (**Figure 9**) are mainly unskilled, FSFF and Salespeople, Personal Service, Security, and Safety (PSSS) workers, respectively. In terms of flows the FSFF become even more relevant after 2014. For the second graph (**Figure 10**) it is possible to observe a decrease in the share of the PSSS workers and a similar case as the European with a stop in the SICC workers.

2. Contract types by immigrant status

The comparison of the different types of contracts depending on the native or immigrant status of the worker yields the following results.

For Portuguese workers (**Figure 1**) there has been an increase in open-ended contracts as aimed by the reform and a reduction in fixed-term contracts with a lag from the reforms after 2015.

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This is in line with the results presented by the Portuguese Government discussed above (OECD 2017).

According to literature (OECD 2017), immigrants have on average less secure contractual arrangements and are more often in temporary jobs, which are the first to be cut during an economic downturn. The difference in the risk of job loss between temporary and permanent workers is large, especially since employers often start to adjust their labor demand by not renewing temporary contracts during the initial phase of a recession. The opposite phenomenon can be identified during the initial phases of a recovery. In fact, in most OECD countries, immigrants are overrepresented in temporary jobs. This is the case in Portugal for the year of 2008, where the share of immigrants in temporary employment exceeded that of the native-born by at least 50% prior to the financial crisis.

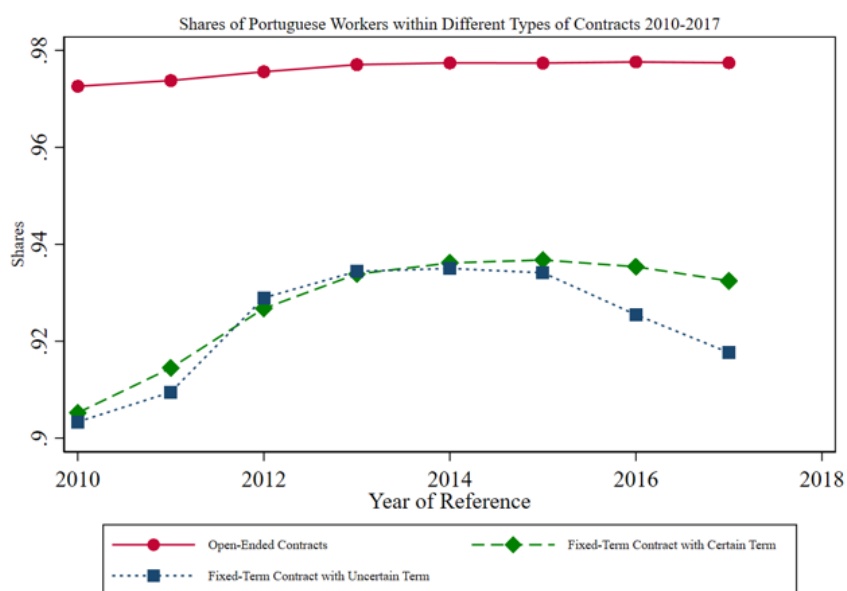


Figure 1 - Shares of Portuguese Workers within Different Types of Contracts between 2010 and 2017.

3. Working hours

In this section we define the monthly contracted working hours and overtime working hours.

Regarding the monthly contracted working hours (**Figure 2**) we don't see any significant change both between workers with Portuguese status and immigrants (169 vs 170 monthly hours), which resonates with literature findings (Mercan 2019), that claim that at least for the period until 2013, the native and immigrant workers in Portugal have similar working hours. Also, the plot of the contracted hours doesn't suggest that there has been any change before and after the implementation of the reforms as the increase in the contracted hours tends to be before the reforms during the period from 2006 to 2010 after which the increase flattened; this is only the visual interpretation of the graph, no inference can be made on this.

Regarding monthly overtime hours (**Figure 3**) we can see that European immigrants show a higher level of overtime hours (2.3 European vs 1.6 portuguese/RoW), we can see a decreasing trend in all categories from 2006 with RoW workers being the most affected category almost converging to the Portuguese level by 2012 our reference year for reforms. after 2012 we see how the number of overtime hours has been almost unchanged until 2014 after which we see a new increase in overtime hours, this could root back to the reforms slowly implemented after 2011 which aimed at increasing the flexibility of working hours and whose effect might start to be present in the medium run and should be monitored in the years after 2017 and whose robustness should be checked as well to assess causality of other reforms.

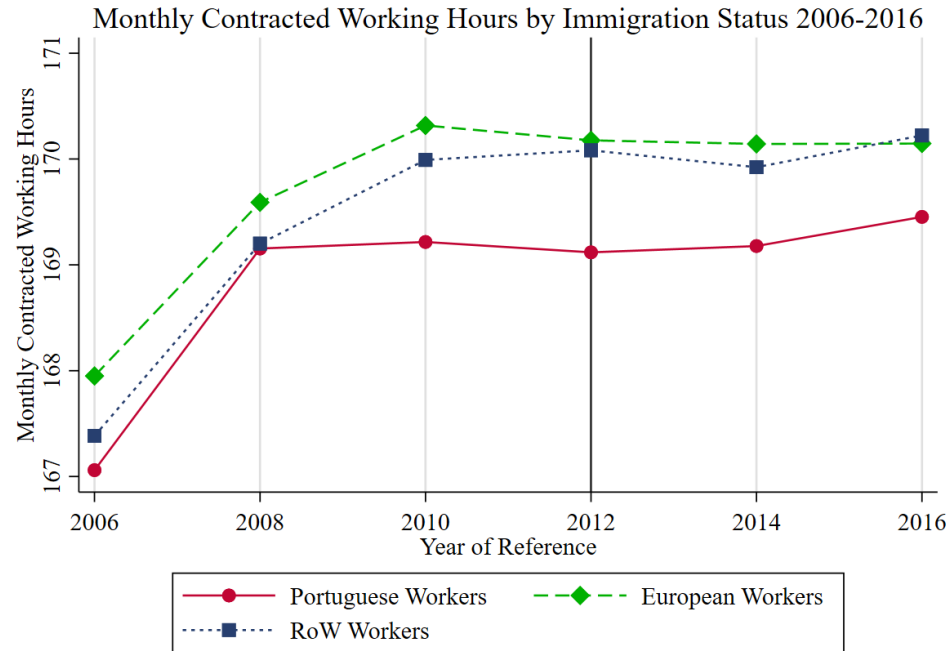


Figure 2 - Monthly Contracted Working Hours by Immigration Status between 2006 and 2016.

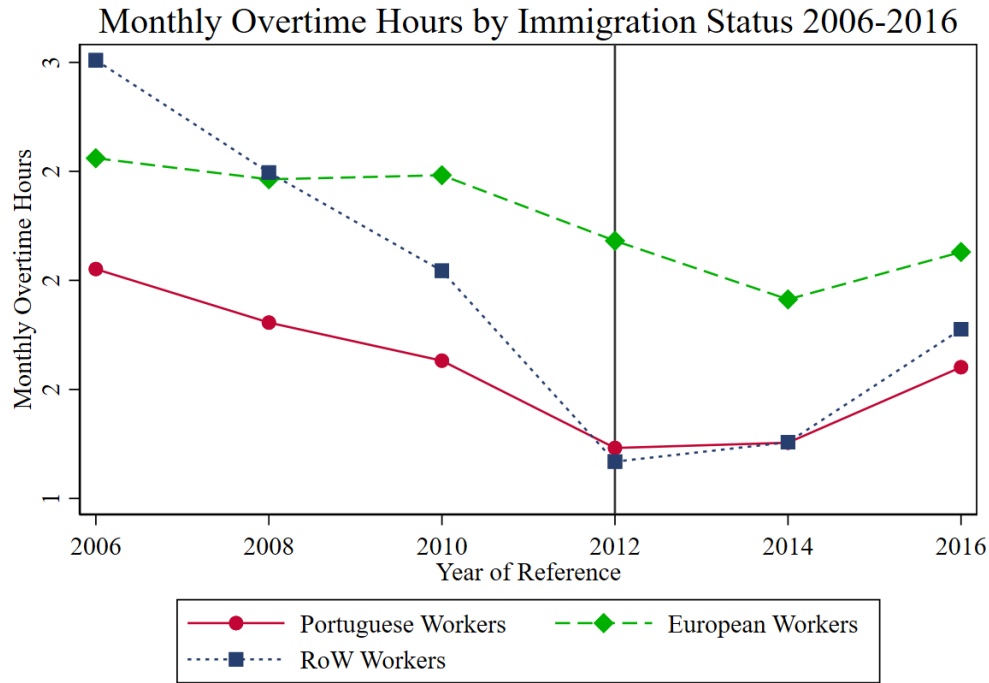


Figure 3 - Monthly Overtime Working Hours by Immigration Status between 2006 and 2016.

VIII. Conclusion

In conclusion, from our preliminary analysis of the database there is evidence of different response of workers to labour market reforms depending on their native or immigrant status. The robustness of this results and the causes are left for future research to understand the magnitude of the difference and the roots of this divergence, if found statistically significant. The richness of the dataset provides a valid starting point to proceed with this research in order to advice policymakers on the different impact of the Troika program on workers and align future policy accordingly.

References

- Adsera, Alicia, and Barry Chiswick. 2007. "Are there gender and country of origin differences in immigrant labor market outcomes across European destinations?" *Journal of Population Economics* 495-526.
- Blume, Kraen, Ejrnaes, Nielsen, and Wurtz. 2009. "Labor market transitions of immigrants with emphasis on marginalization and self-employment." *Journal of Population Economics* 881-908.
- Botrić, Valerija. 2018. "Labour market transition differences between natives and immigrants in EU economies." *Journal of Economic and Social Studies* 7 (2).
- Branco, Cardoso. 2017. "Labour market reforms and the crisis in Portugal: No change, u-turn or new departure?" *IPRI-NOVA Working Paper*.
- Bratsberg, Bernt, Raaum, and Røed. 2013. "Immigrant Labor Market Integration across Admission Classes." *Economica* 85 124-151.
- Carneiro, Anabela, Natércia Fortuna, and José Varejao. 2011. "Immigrants at new destinations: how they fare and why." *Journal of Population Economics* 1165-1185.
- Chaloff, Dumont, and Liebig. 2012. *The Impact of economic crisis on migration and labor market outcomes of immigrants in OECD countries*. CESifo DICE.
- Chassamboulli. 2024. "Immigration and labour market flows." *Labour Economics* 86c.
- Chiswick, and Adsera. 2007. "Are there gender and country of origin differences in immigrant labor market outcomes across European destinations?" *Journal of Population Economics* 495-526.
- Eckstein, Zvi, and Yoram Weiss. 2004. "On the Wage Growth of Immigrants: Israel, 1990–2000." *Journal of the European Economic Association* (Journal of the European Economic Association) 2: 665–695.
- Elsby, Michael, Ryan Michaels, and Gary Solon. 2009. "The Ins and Outs of Cyclical Unemployment." *American Economic Journal: Macroeconomics* 84-110.
- Esteves, Cruz dos Santos Fonseca, and Malheiros. 2017. *Journal of Ethnic and Migration Studies* 2375-2391.
- EU Commission. 2011. *The Economic Adjustment Programme for Portugal*. European Union.

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- Fujita, Shigeru, and Garey Ramey. 2009. "The Cyclicalities of Separation and Job Finding Rates." *International Economic Review* 50 (2) 415-430.
- Gálvez-Iniesta, and Ismael. 2022. "The Cyclicalities of Immigrant Wages and Labour Market Flows: Evidence from Spain." *Economics* 16 (1) 90-122.
- Glatzer. 2018. "Portugal's Social and Labour Market Policy: The Crisis, the Troika and Beyond." In *Portugal, Forty-Four Years after the Revolution*, 104-118. Modern Humanities Research Association.
- Mercan, M. A. 2019. "Do immigrants work longer hours than natives in Europe?" *Economic Research-Ekonomska Istraživanja*, 32(1) 1394-1406.
- OECD. 2017. *Labour Markets Reforms in Portugal 2011-2015*. OECD.
- Padilla, Castellani, and Rodrigues. 2022. *Who cares? Civil society organizations as healthcare life vest for migrants in post troika Portugal*. 20 December. <https://www.tandfonline.com/doi/full/10.1080/1369183X.2022.2157802>.
- Pereira, and Azevedo. 2019. "The Fourth Wave of Portuguese Emigration: Austerity Policies, European Peripheries and Postcolonial Continuities." In *New and Old Routes of Portuguese Emigration.*, by Pereira and Azevedo. Springer, Cham.
- Shimer, Robert. 2012. "Reassessing the ins and outs of unemployment." *Review of Economic Dynamics* 15 (2) 127-148.

Appendix

Type of Contract	Freq.	Percent
Open-Ended Contract	12,741,720	73.2
Fixed-Term Contract with Certain Term	3,679,179	21.14
Fixed-Term Contract with Uncertain Term	864,74	4.97
Other Situation	120,853	0.69
Total	17,406,492	100.00

Figure 4 - Type of Contract Variable Description

Immigrant Status	Freq.	Percent	Cum.
0 - Portuguese	30,300,872	96.52	96.52
1 - European	425,372	1.35	97.87
2 - Rest of the World	667,995	2.13	100.00
Total	31,394,239	100.00	

Figure 5 - Immigrant Status Variable Description

1	Representatives of the legislature and executive bodies, managers, directors and executive managers
2	Specialists in intellectual and scientific activities
3	Technicians and mid-level professions
4	Administrative staff
5	Personal service, security and safety workers, and salespeople
6	Farmers and skilled agriculture, fishing and forestry workers
7	Skilled industrial, construction and craft workers
8	Plant and machine operators and assembly workers
9	Unskilled workers
0	Professions of the armed forces

Figure 6 - Description of the Working Sector variable

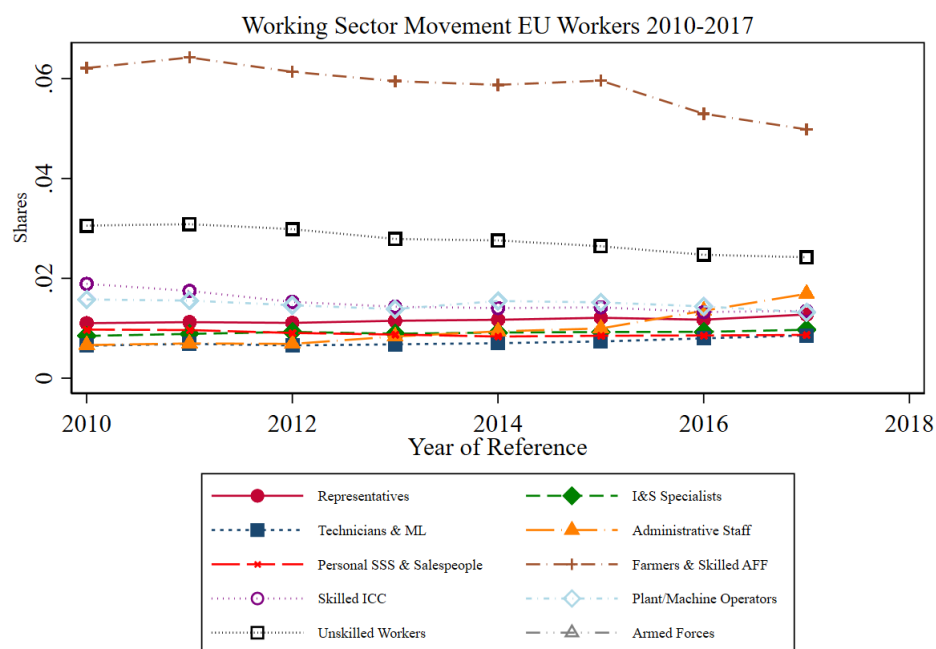


Figure 7 - Working Sector Movement European Workers between 2010 and 2017.

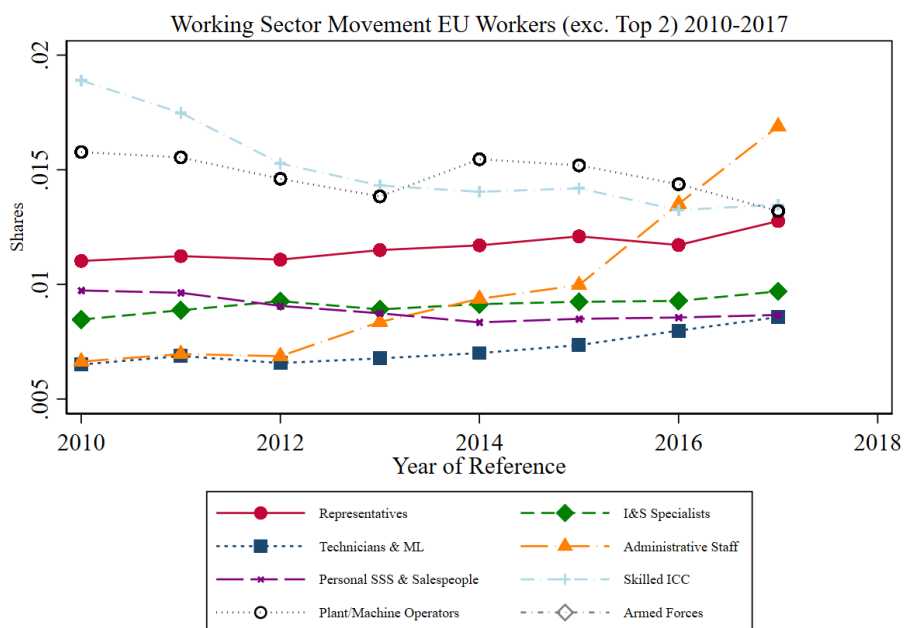


Figure 8 - Working Sector Movement of European Workers (excluding top 2 sectors) between 2010 and 2017.

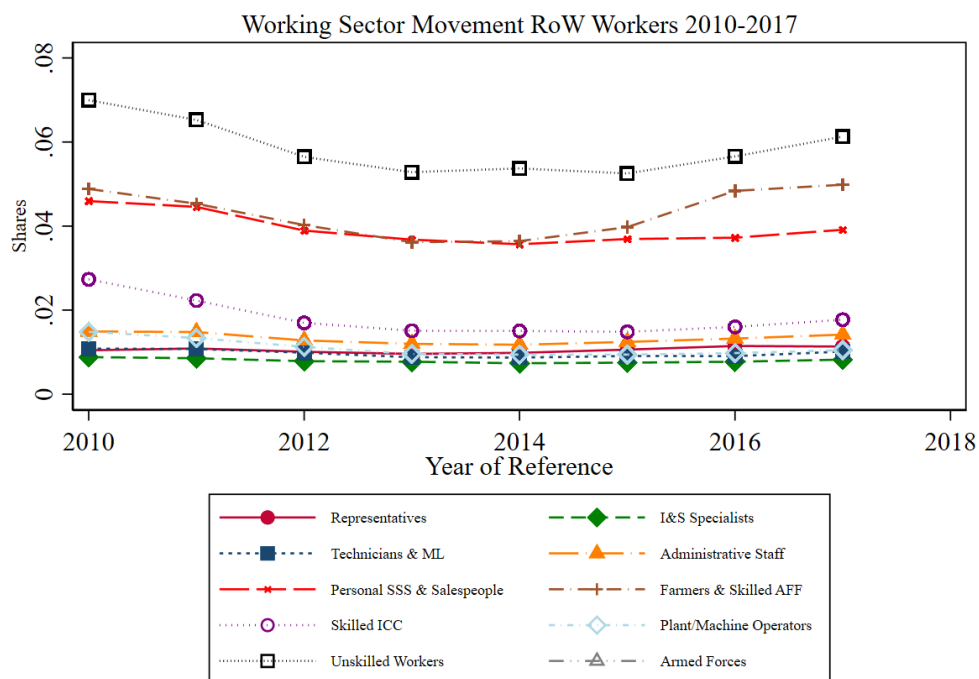


Figure 9 - Working Sector Movement of the Rest of the World Workers between 2010 and 2017.

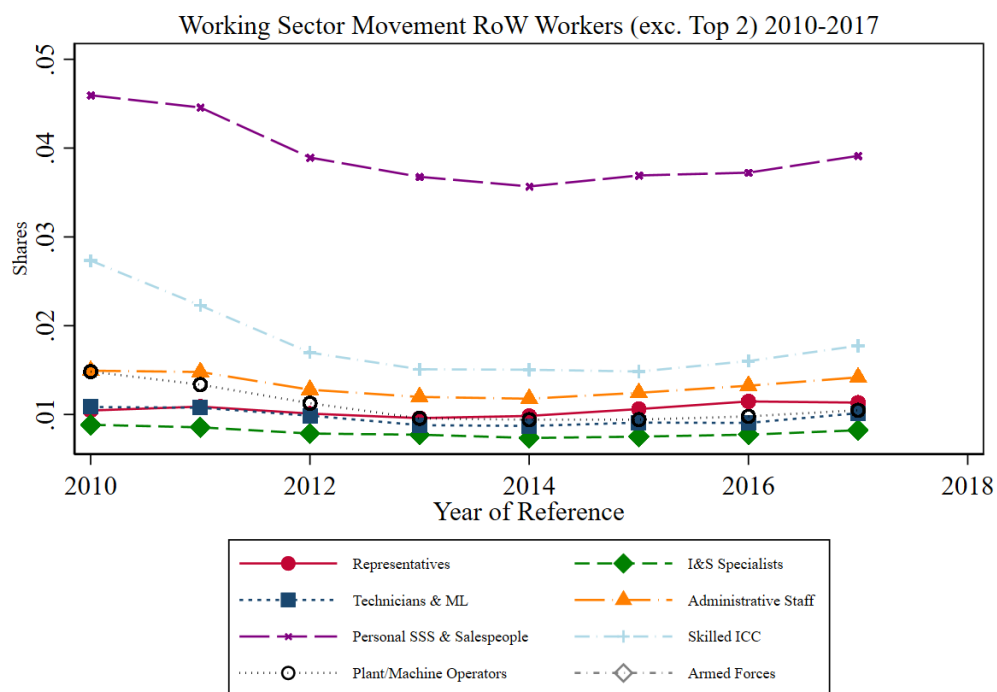


Figure 10 - Working Sector Movement of the Rest of the World Workers (excluding the top 2 sectors) between 2010 and 2017.

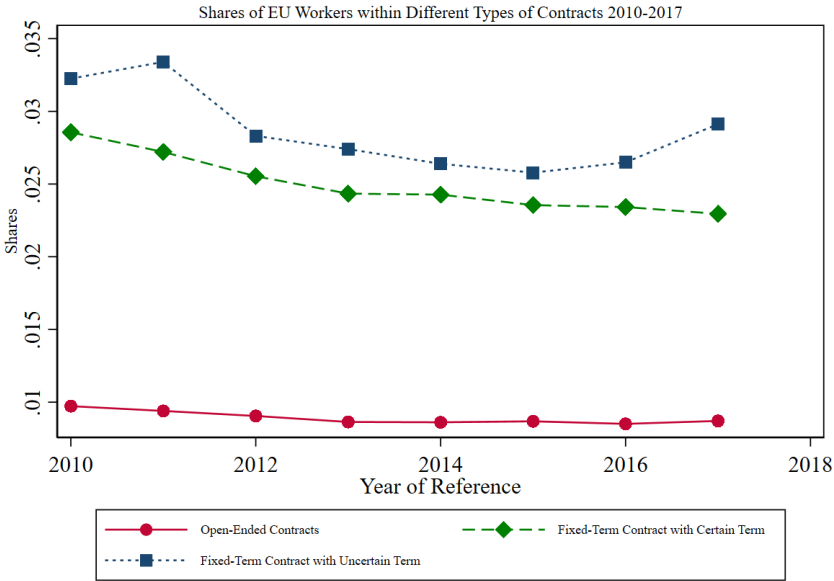


Figure 11 - Shares of European Union Workers within Different Types of Contracts between 2010 and 2017.

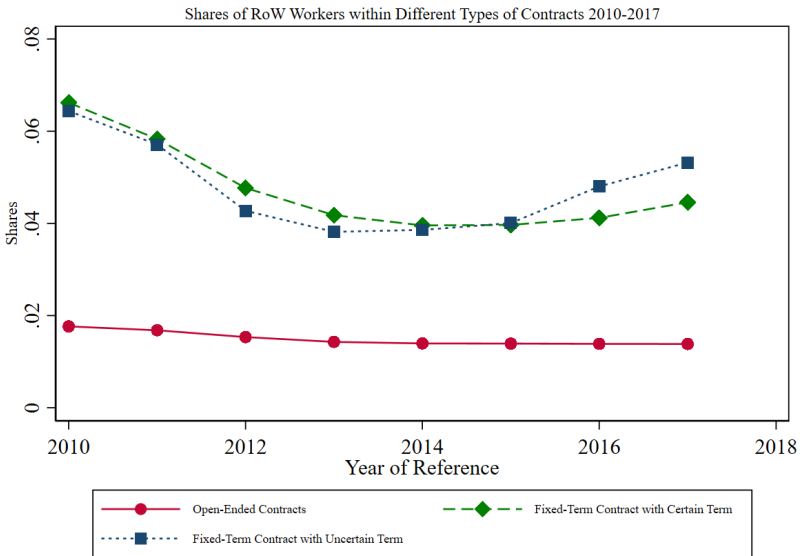


Figure 12 - Shares of Rest of the World Workers within Different Types of Contracts between 2010 and 2017.