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Flexible employment in an international perspective: An empirical analysis and some country- specific case studies

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1 Introduction

Flexible employment constitutes a relatively large and increasing share of the labour market in many countries. In this study, we analyse the extent to which the growth in flexible employment can be related to global economic trends and country-specific institutions. One of the advantages of flexible employment is that it allows firms to react more easily to demand shocks. Another advantage lies in the added flexibility it provides to workers to determine their own working hours. The presence of a significant share of flexible employment does, however, present several policy questions, particularly as it may lead to segmentation and inequality in the labour market, because workers with flexible contracts generally enjoy lower job and income security. When developing effective labour market policy in this context, it is thus crucial to understand the role of labour market and social security institutions such as employment protection and employer obligations in a globalising world characterised by rapid technological progress. This is particularly important for a country such as the Netherlands where the share of flexible employment has increased strongly over the past 15 years (Statistics Netherlands).

In this study, we apply a quantitative and a qualitative methodology to address the research question on the reasons behind the growth of flexible employment. The quantitative method makes use of panel data models developed in the economic literature to address questions on economic growth, employment and the role of institutions (see OECD publications on these issues in particular). Although we may learn from the empirical results, these models cannot fully address country-specific circumstances and path dependence. For this reason, we also apply country-specific case studies to discuss different forms of flexible employment, labour market outcomes and institutions for six countries: Germany, France, Denmark, Sweden, Spain and the United States.

In the quantitative part of the study, we use OECD data for 19 European countries over the period 1997–2014. We define flexible employment as temporary employment and self-employment. While we present results for the self-employed without employees population (i.e., own account workers), we mostly focus on all types of self-employment because of the availability of internationally comparable data.¹ Furthermore, flexible employment may include other types of workers in particular countries, such as part-time workers, depending on the institutional set-up and we discuss examples in the country-specific case studies.

The Netherlands is an outlier in terms of flexible employment, as temporary employment and self-employment have both increased substantially over recent decades. In most other countries where the share of flexible employment has increased, either temporary employment or self-employment has contributed most to that. The share of temporary

¹ The OECD defines a job as temporary if it is understood by the employer and employee that the termination of the job is determined by objective conditions such as reaching a certain date, completion of an assignment or return of another employee who has been temporarily replaced. The OECD defines self-employment as the employment of employers, workers who work for themselves, members of producers' co-operatives and unpaid family workers. Own accounts workers are self-employed without personnel, in the Dutch context so-called *zelfstandigen zonder personeel*.

employment has been rising substantially in Portugal as well, while Spain still has the highest share. Self-employment is declining in many countries, but not in the Netherlands, Czech Republic and Slovakia. The rises in these countries cannot be explained by our quantitative method, as our panel data model shows hardly any statistically significant results. The only clear finding is that the decline in self-employment in many countries is explained by a decline in the share of agriculture in the economy. Our statistically insignificant results for institutions are therefore in line with Eichhorst et al. (2016) and contrary to the finding of OECD (2004), which finds a significant relation between employment protection reform and the change in the incidence of temporary work for 11 countries over the period 1990–2003.

In contrast to our quantitative method, our country-specific case studies do suggest that institutions such as the protection of permanent jobs, rules on the use of temporary jobs and social security coverage of flexible workers are important. This is in line with empirical evidence at a more disaggregated level (OECD, 2013).² Labour market institutions differ between countries, and they lead to segmentation and inequality in the labour market in many countries, as flexible workers face more uncertainty and are not or less well covered by social security (OECD, 2014). Further, although clearly not a new result, Scandinavian countries turn out to have institutions that mitigate segmentation and inequality in the labour market.

The remainder of the paper is organised as follows. In Chapter 2, we present country-specific developments in temporary employment and self-employment. Chapter 3 discusses potential explanations for these developments and tests them in a quantitative analysis. In Chapter 4, we present case studies for six countries.

2 Flexible employment in Europe

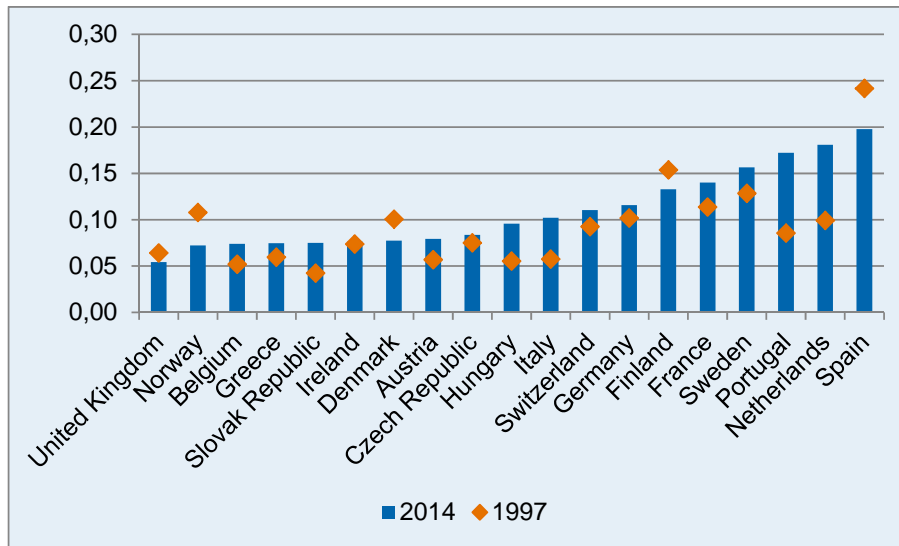
The shares and growth rates of flexible employment vary substantially between European countries. About two-thirds of countries experienced a rise in temporary employment over the period 1997–2014, while about one-quarter experienced a decline. On the other hand, the shares of self-employment declined in two-thirds of the observed countries. In this chapter, we describe the data and highlight specific countries.

The share of temporary employment has increased in many countries since 1997 (see Figure 2.1). This increase has been particularly profound in Portugal and the Netherlands, where the share increased by 9 and 8 percentage points, respectively. In Spain and Norway, the share of temporary employment decreased the most (4 percentage points), while Denmark, Finland and the United Kingdom also experienced a decline. Spain still had the highest level

² OECD (2013) reports a significant relation between employment protection and self-employment on the basis of studies using individual-level data from the European Community Household Panel 1996–2001 (Kahn, 2010), sectoral-level data for 24 countries over the period 1995–2007 (Bassanini and Garnero, 2013) and firm-level data for Italy over the period 2001–2009 (Hijzen et al., 2013). The publication does not contain evidence on the basis of country-level data.

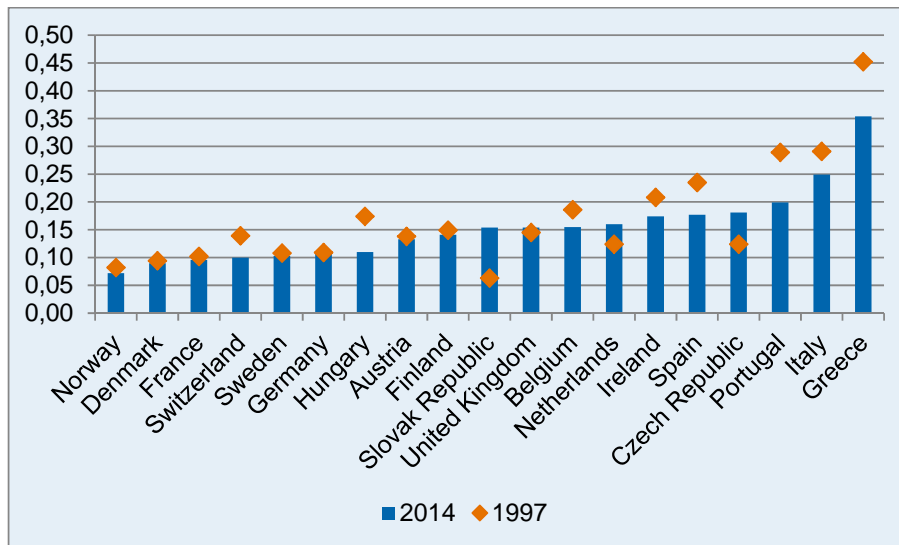
of temporary employment in 2014, however (20%), followed by the Netherlands (18%) and Portugal (17%).

Figure 2.1 Temporary employment in Europe, 1997–2014



Source: own calculations based on OECD. Data for Switzerland start in 1998.

Figure 2.2 Self-employment in Europe, 1997–2014



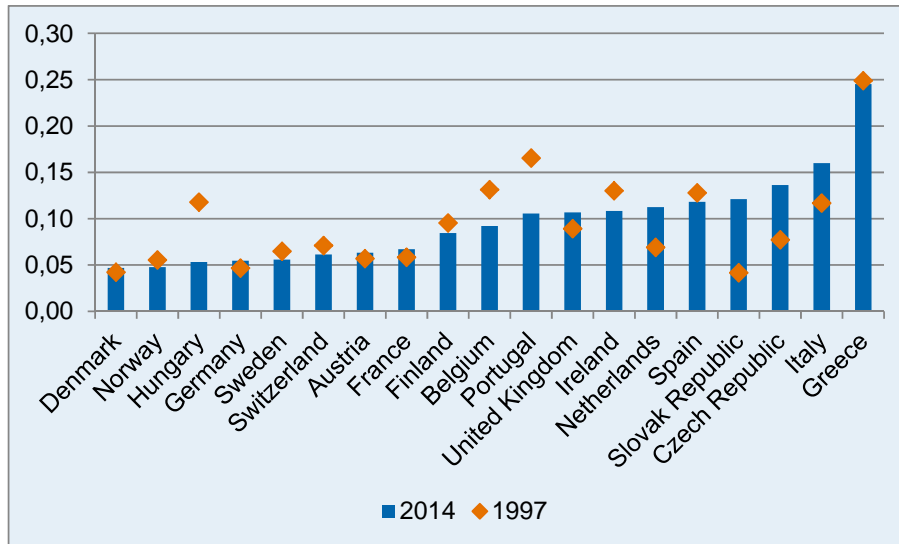
Source: OECD. The share of self-employment includes agricultural self-employment.

The share of self-employment has decreased in 13 out of our 19 observed countries since 1997 (see Figure 2.2). The decline has been largest in Greece and Portugal, by 10 and 9 percentage points, respectively. The decline in the share of agriculture in the economies in these countries is likely to be an important explanation. However, together with Italy, these two countries still had the highest level of self-employment in 2014. The share of self-

employment has increased in Slovakia (9 percentage points), Czech Republic (6 percentage points) and the Netherlands (4 percentage points).

The overall decline in self-employment is less apparent for self-employed workers without employees (see Figure 2.3). In contrast to the total share of self-employed, the share of self-employed without employees declined in fewer than half of the countries. The decline has been largest in Hungary and Portugal (6 percentage points). The largest increases are still found in Slovakia (8 percentage points) and Czech Republic (6 percentage points); however, the increases in Italy and the Netherlands (4 percentage points) are substantial as well.

Figure 2.3 Self-employment without employees (own account workers) in Europe, 1997–2014



Source: OECD. Data for France start in 2003, Hungary in 1999, Italy in 1998, Portugal in 1998, Slovak Republic in 1998, Spain in 1999, Switzerland in 2005 and the United Kingdom in 2000.

Figure 2.4 Change in flexible employment in Europe, 1997–2014



Many countries can be characterised by a growth in the use of temporary contracts in combination with a decrease in the use of self-employment (see Figure 2.4). The Netherlands is an outlier, as both temporary employment and self-employment have increased for both total self-employed and self-employment without employees. In the Netherlands, the

combined share of temporary employment and self-employment increased by 12 percentage points. Slovakia experienced a similar growth; however, the level of flexible employment remains much higher in the Netherlands (34% versus 23% in Slovakia in 2014). Temporary employment has grown exceptionally in Portugal, while in Slovakia and Czech Republic self-employment has increased substantially as well. The development of the share of self-employed without employees is largely in line with the share of self-employment, with Greece and Italy as exceptions. In Greece, the share of self-employment decreased by 10 percentage points, while the share of own account workers remained unchanged. In Italy, the share of self-employment declined, while the share of own account workers increased.

3 Impact of economic and institutional factors

In many countries, firms may need to become more flexible because of larger and more frequent economic shocks. Several countries such as Italy, France, Greece, Spain and Portugal have undergone institutional reforms, partly caused by the economic crisis. Reforms often imply a welfare state retrenchment, which makes workers more exposed to economic shocks. Furthermore, globalisation and technological progress are ongoing trends that demand a response from employers and employees. Firms may choose to hire more flexible labour to absorb demand shocks. Institutions such as employment protection and rules on hiring flexible workers play an important role as they influence the possibilities for firms to hire such workers. We first discuss how economic trends and institutions may impact the share of flexible employment. Second, we present the results of a multivariate analysis in the form of country-specific panel data models.

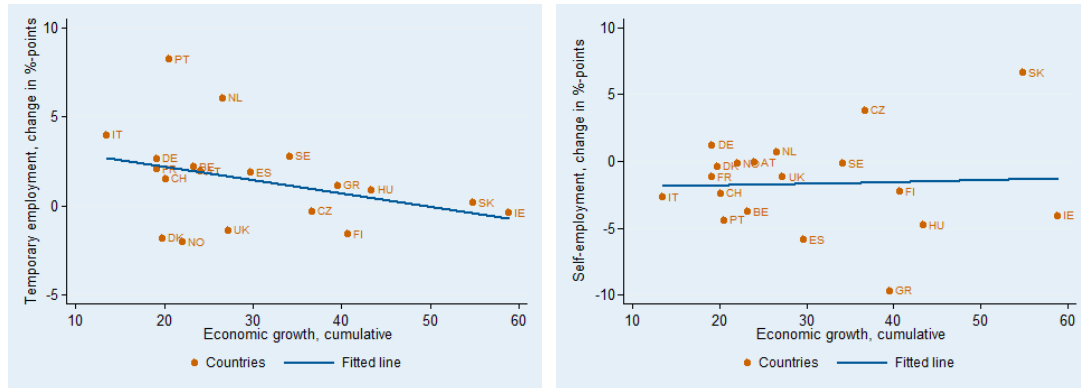
3.1 Descriptive analysis

The share of flexible employment in a country may depend on the business cycle, economic trends such as globalisation and technological progress and institutions (e.g., employment protection legislation). Here, we discuss some potentially important mechanisms and present descriptive (bivariate) empirical evidence in the form of scatterplots.

The overall impact of the business cycle on flexible employment is unclear as different mechanisms may have opposite effects. Temporary work is an instrument for employers to adjust the size of their workforce to fluctuations in demand. Employees on temporary contracts and self-employed workers such as own account workers are usually the first people to be out of work during an economic downturn, while during an upturn firms turn to temporary contracts first to fill immediate demand for workers (Holmlund and Storrie, 2002; De Graaf-Zijl, 2005; De Graaf-Zijl and Berkhout, 2007). This finding suggests a positive relation between economic growth and flexible employment. However, high economic growth also improves the negotiation position of workers, possibly leading to more permanent and less flexible contracts. In addition, high economic growth may induce people

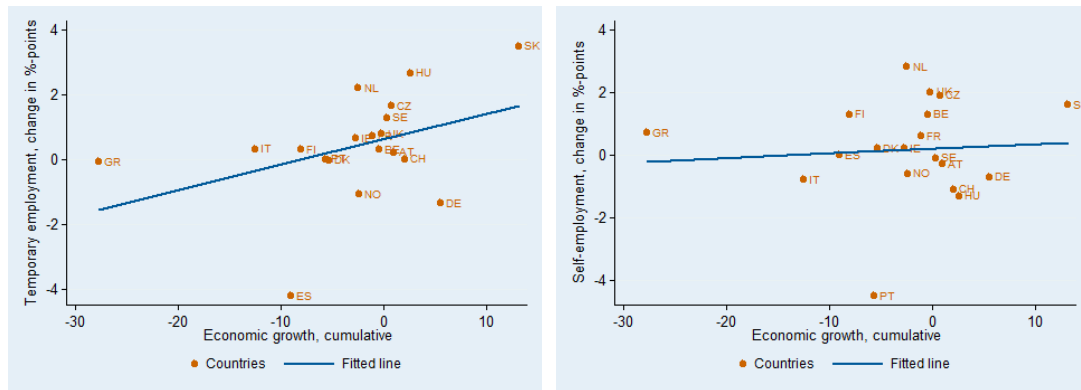
to become self-employed to take advantage of good business opportunities, whereas during low economic growth, becoming self-employed may be a means to escape unemployment.

Figure 3.1 Economic growth and the change in flexible employment, 1997–2007



Note: cumulated economic growth over the period 1997–2007. We cumulate these years as most countries experienced economic growth over this period. The scatterplots illustrate the business cycle effect of an upturn. The correlation is significant for temporary employment and insignificant for self-employment at the 5% significance level. The figure for own account workers is not included in the publication because of the lower number of observations, but it shows an insignificant relation as well.

Figure 3.2 Economic decline and the change in flexible employment, 2008–2014



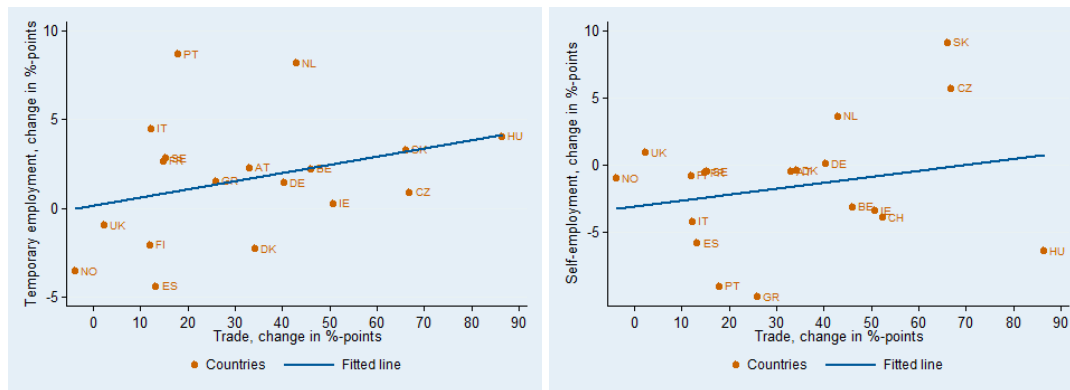
Note: cumulated economic growth over the period 2008–2014. We cumulate these years as most countries experienced economic decline or low economic growth over this period. The scatterplots illustrate the business cycle effect of a downturn. The correlations are statistically insignificant at the 5% significance level. The figure for own account workers is not included in the publication because of the lower number of observations, but it shows an insignificant relation as well.

The descriptive analysis shows that the impact of economic growth on share of temporary employment differs over the business cycle. During a period in which most countries experienced an economic upturn (see Figure 3.1), relatively high economic growth seems to be related to a decline in temporary employment. This result suggests that in such a period the negotiation position of workers is dominant. During a period in which most countries experienced a substantial economic downturn, relatively low economic growth seems to be related to an increase in the share of temporary employment. But the correlation is not significantly different from zero. Note that the results do not imply a steady decline in temporary employment over the business cycle, as economic growth in the scatterplots is measured relative to other countries. Although Greece, for example, experienced a strong economic decline, this has not resulted in a substantial change in the share of temporary

employment. Spain, on the other hand, also experienced an economic decline; however, its already high share of temporary employment dropped substantially. Hence, the statistics do not seem to indicate a relation between economic growth and the growth rate of self-employment (with and without employees).

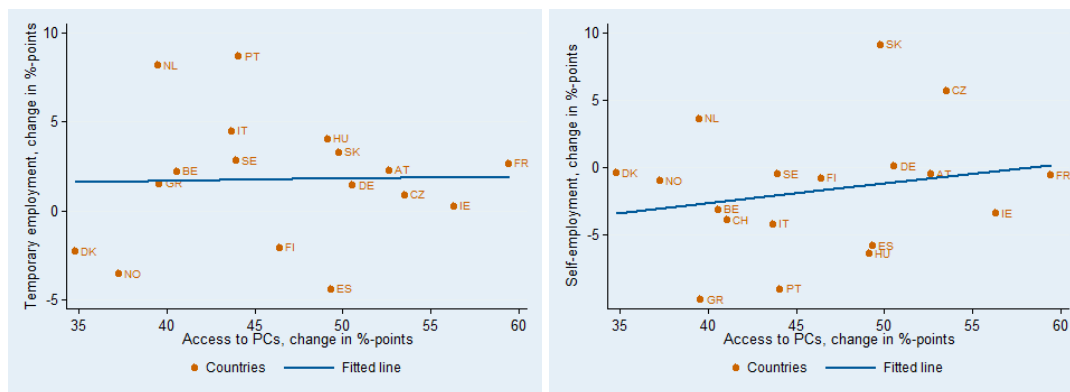
Globalisation and technological change have had a substantial impact on labour markets over the past few decades. These two trends have strengthened each other as technological progress has made it easier to reach the global marketplace, while the increased competition from international trade may have forced firms to further invest in cost-saving technology. Another channel through which international trade has impacted the labour market is increased specialisation for countries that have a comparative advantage. On the one hand, globalisation and technological change may have increased firms' need for labour flexibility. On the other hand, technological change and globalisation may have increased the need for specific knowledge, which may lead to more permanent employment (Ter Weel et al., 2010).

Figure 3.3 Globalisation and the change in flexible employment, 1997–2014



Note: globalisation is operationalised by the change in the share of exports and imports in GDP. The correlations are not significant for temporary employment and self-employment at the 5% significance level. The figure for own account workers is not included in the publication because of the lower number of observations, but it shows an insignificant relation as well.

Figure 3.4 Technological change and the change in flexible employment, 1997–2014

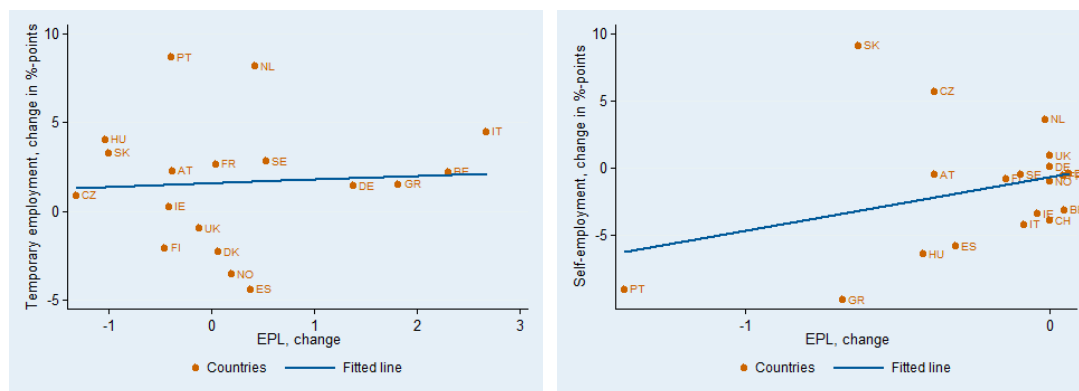


Note: technological change is operationalised by the change in the share of households with access to a computer at home. The correlations are statistically insignificant at the 5% significance level. The figure for own account workers is not included in the publication because of the lower number of observations, but it shows an insignificant relation as well. Alternative measures for technological change such as ICT capital growth and ICT capital deepening show similar results.

On average, countries that experience a stronger increase in international trade see a stronger increase in flexible employment (see Figure 3.3). However, this impact is not significant. The Netherlands, for example, experienced a relatively strong increase in globalisation with a rise in the share of exports and imports in GDP of about 40 percentage points and an increase in flexible employment. By contrast, Eastern European countries such as Hungary, Czech Republic and Slovakia experienced a much stronger increase in exports and imports than the Netherlands, but temporary employment did not increase strongly in these countries. Further, although self-employment increased in Czech Republic and Slovakia, this did not happen in Hungary. Hence, while globalisation may play a role in the increase in flexible employment, it does not by itself explain why the rise is exceptionally strong in the Netherlands.

We find no evidence for a relation between flexible employment and technological progress in the form of home access to PCs (see Figure 3.4). While the measure we use is not perfect, measures such as ICT capital growth and ICT capital deepening show similar results.³ With respect to the Netherlands, technological progress does not explain the strong increase in flexible employment, as other countries have experienced strong technological progress as well. Moreover, for our observation period, the Netherlands seems to have started from a high level of technological progress, while countries such as France and Ireland are catching up to this level. These countries did not experience a strong increase in flexible employment.

Figure 3.5 Reforms in employment protection and change in flexible employment, 1997–2014



Note: employment protection legislation is operationalised by the change in the difference in the OECD EPL indicator for permanent and temporary jobs in the left-hand figure and by the change in the OECD EPL indicator for permanent jobs only in the right-hand figure. The correlations are statistically insignificant at the 5% significance level. The figure for own account workers is not included in the publication because of the lower number of observations, but it shows an insignificant relation as well.

The way in which firms fulfil their need for employee flexibility is likely to depend on country-specific institutions (OECD, 2013, 2014). In some countries, the size of the flexible workforce may not be an issue, as permanent workers can be laid off relatively easily. In countries where this is not the case (i.e., where workers enjoy a high degree of protection), laying off workers may be relatively costly. Hence, firms may hire temporary and self-employed workers to ensure flexibility. Furthermore, flexible employment may also be cheaper than permanent contracts because of employer obligations.

³ See Van den Berge and Ter Weel (2015) for a similar application..

For an institutional characteristic such as employment protection legislation, we find no empirical evidence of a relation with temporary employment (see Figure 3.5). This is in contrast to OECD (2004), which reports a significant relation between employment protection reform and flexible employment for 11 countries over the period 1990–2003. For self-employment, we consider the level of the protection of permanent jobs instead of the difference between protection for permanent and temporary employment. The results are statistically insignificant as well.

Our focus on an institutional characteristic such as employment protection legislation is driven by the availability of internationally comparable data. Preferably, we would have used information on other institutional characteristics as well, such as social security coverage rules and tax incentives for flexible workers. The availability of such information is, however, limited and collection of such information is time consuming.

3.2 Multivariate analysis

In the previous section, we investigated whether flexible employment is related to the business cycle, globalisation, technological progress and institutions. In this section, we apply multivariate analysis to disentangle the effect of these possible explanations by estimating a fixed effects model for temporary employment and self-employment. The fixed effects model delivers consistent parameter estimates for the true causal effect in the case of a correlation between the control variables and country-specific effects. This is particularly important for policy variables, as policy is likely to be affected by unobserved country characteristics. Therefore, identification is based on changes in the control variables over time, which is a dominant research strategy in the literature (e.g., Bassanini and Garnero, 2013).⁴ The control variables include a demographic variable, namely the age composition of the population and the sectoral structure of the economy. The other independent variables are measures of globalisation, technological progress and institutions, as discussed in the previous section.⁵

The model for temporary employment does not present any statistically significant results. Although the scatterplots show some relation for economic growth, these results do not carry over in the multivariate analysis. The insignificance of age composition seems surprising as temporary jobs may be used to screen young workers. A potential explanation may be that these contracts are also used to screen middle-aged workers in the case of job-to-job mobility, while older workers are close to retirement may not mind temporary jobs.

The model for self-employment does present statistically significant results for age composition and agriculture. An age between 50 and 65 years old seems to be related to being self-employed. Older workers usually have more experience, human capital, financial means and networking opportunities to start a business for themselves. Hence, an ageing

⁴ Variation over time is important for identification. Section 3.1 shows a substantial variation over time in the economic and institutional variables except for employment protection for permanent jobs (right-hand panel of Figure 3.5).

⁵ As additional independent variables, we tried the female participation rate and unemployment rate; however, both variables were highly insignificant.

population may lead to a larger share of people working for themselves. Furthermore, self-employment is related to the share of agriculture in GDP. A declining share of agriculture seems to contribute to a declining share of self-employment. The definition of self-employment includes unpaid family workers, which are particularly important in farming. The results for total self-employed do not apply for self-employed without employees. We find no statistically significant results for this model.

Table 3.1 Fixed effects model for the share of flexible employment, 19 countries, 1997–2014

	Temporary employment	Self-employment	Self-employment without employees
Age 15–24	-0.10 (-0.35)	0.10 (0.46)	-0.22 (-0.89)
Age 50–64	-0.10 (-0.31)	0.80** (2.33)	0.30 (0.93)
Age 65+	0.53 (1.24)	0.05 (0.20)	0.28 (1.03)
Agricultural output	0.49 (1.26)	1.13** (2.65)	0.85 (1.44)
Services output	0.05 (0.39)	-0.09 (-0.91)	-0.13 (-1.24)
GDP growth 1997–2007	-0.08 (-0.87)	0.02 (0.22)	0.10 (1.13)
GDP growth 2008–2014	-0.08 (1.51)	0.04 (0.40)	-0.09 (-1.08)
Globalisation	0.02 (1.04)	0.03 (1.27)	0.02 (0.54)
Technological progress	-0.01 (-0.16)	0.03 (0.91)	0.02 (0.40)
Employment protection Perm. vs. temp. contract	-0.00 (-0.19)		
Employment protection Perm. contract		0.01 (0.45)	0.01 (0.39)
Year dummies	yes	yes	yes
N	341	342	318
Adj. R ²	0.24	0.44	0.22

Note: *t* statistic in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Demographic variables such as age 15–24 give the share of this group in the population, with age 25–49 as the reference category; Sectoral output such as agricultural output gives the share of this sector in total output, with industry as the reference category; Globalisation is operationalised by the change in the share of exports and imports in GDP, while technological change is operationalised by the change in the share of households with access to a computer at home. Employment protection legislation is operationalised by the difference in the OECD EPL indicator for permanent and temporary jobs for temporary employment and by the OECD EPL indicator for permanent jobs for self-employment.

3.3 Conclusion

Overall, we find little empirical evidence for the impact of economic and institutional factors. We find some evidence that the decline in agricultural output and age composition matter for the share of self-employment. We find no evidence for an impact of globalisation, technological progress and institutions; the empirical results are highly insignificant in all specifications. Globalisation and technological progress are correlated with a correlation coefficient of 0.2. Including only one of these variables does not lead to significant results. This does not mean that these factors are not important. The measure for globalisation is common in the economic literature; however, technological progress is hard to measure,

while institutions are notoriously difficult to compare between countries and they tend to show little variation over time. Furthermore, country-specific circumstances and path dependence may play an important role, and these are hard to capture in a statistical analysis. For this reason, we delve further into the issue of institutions in a number of country-specific case studies in the next chapter.

4 Country-specific case studies

Countries differ in terms of economic development, labour market institutions and labour market outcomes. In this chapter, we choose six countries to describe developments in flexible employment and the role of policy. We select Germany, France, Denmark, Sweden, Spain and the United States on the basis of their relevance for the Netherlands, their labour market attributes and the availability of international economics research on these issues. The country-specific case studies are by no means comprehensive, as the number of relevant aspects per country is exhaustive. OECD (2013, 2014) provides a more comprehensive overview from the aspect of employment protection, but not at the country level. Our country-specific studies nonetheless give an impression of the complicated interactions between labour market institutions and labour market outcomes.

4.1 Germany

The share of temporary employment in Germany slightly increased from 10% of total employment in 1997 to 12% in 2014 (OECD, calculations CPB). Meanwhile, the share of self-employment remained steady at around 11% of total employment (OECD). The share of own account workers (self-employed without employees) remained steady at around 5% (OECD, calculations CPB), which is lower than the levels in most other EU countries. In Germany, self-employed are not covered by social security (Eurofound, 2009).

The rules on flexible employment were relaxed substantially in the period 2003–2005 by the so-called Hartz reforms. These reforms fundamentally changed the role of public and private employment services as well as the rights and duties of the unemployed. To stimulate labour demand, restrictions on the use of temporary contracts, temporary agency work and so-called ‘mini-jobs’ were relaxed. Furthermore, start-up subsidies for self-employment were introduced to activate the unemployed.

The reforms were followed by a decrease in unemployment: from a relatively high 11% in 2005 to 5% in 2014.⁶ A first important aspect is the reform of public services (Jacobi and Kluge, 2006). Klinger and Rothe (2011) conclude that the reforms increased the matching efficiency of both short-term and long-term unemployed, while Schmid and Modrack (2008) state that the position of hard-to-place people has not improved in the new system.

⁶ OECD harmonized unemployment rate, <https://data.oecd.org/unemp/harmonised-unemployment-rate-hur.htm>.

A second important aspect of the success of German labour market reform is the decrease in unit labour costs. Part of this decline is explained by the moderation of wage growth, while another part is explained by internal labour hoarding due to working time accounts and temporary reductions in working time in the case of a demand shock (so-called *Kurzarbeit*). Flexible forms of labour such temporary agency work and mini-jobs also play an important role (Rinne and Zimmermann, 2013).

The five million mini-jobs (*geringfügige Beschäftigung*) created are a unique element of the German labour market. A mini-job is a job with a wage below €450 per month and no social security coverage, implying that such workers are less well insured. Since 2015, Germany has agreed a minimum hourly wage of €8.50; hence, the monthly hours worked in a mini-job cannot be more than 53 hours. The number of mini-jobs has risen steadily since 2006 because more employees with a regular job also have a mini-job. The number of workers relying on mini-jobs only has remained rather stable. As total employment increased, the share of workers relying on mini-jobs only decreased from 17% in 2006 to 14% in 2015. Workers overrepresented in mini-jobs only are women, young people, the retired, unskilled workers and (skilled) support workers.

4.2 France

The share of temporary employment in total employment increased from 11% in 1997 to 14% in 2014 (OECD, calculations CPB). The share of self-employment was stable over this period at about 10% of employment, while the share of self-employed without employees increased slightly from 6% in 1997 to 7% in 2014 (OECD, 2016).

In France, temporary contracts can be used to reduce administrative and legal processes that are a consequence of the high employment protection in permanent contracts (Blanchard and Landier, 2002). The use of temporary contracts is subject to rules. First, the duration is limited to a maximum of 24 months and cannot be renewed. Second, temporary contracts can only be applied in one of the following situations: i) to replace an employee on leave, ii) in the case of a temporary increase in activity, iii) for seasonal activity or iv) to facilitate employment for targeted groups such as young people or the long-term unemployed. The list of targeted groups has increased over time as each government has aimed to increase employment for other groups, often in combination with subsidies and training. Among employees aged 15 to 24, the proportion with a temporary contract is more than half, well above the European average. By contrast, for other age groups, France's proportion of temporary contracts is about equal to the European average (Eurofound, 2014).

Self-employment is partly considered to be an outside option for employers to avoid the stringent rules related to hiring permanent workers. So-called 'umbrella companies' act as a payroll service for freelancers and other self-employed. The number of these companies has increased and their workers are de facto considered to be employees (Eurofound, 2009). Self-employed do not enjoy mandatory social security such as collective unemployment insurance, sickness benefits, paid leave or paid overtime and have lower healthcare and pensions benefits. In the case of an umbrella contract, a self-employed worker negotiates a

service provision with a business customer and then signs an employment contract with an umbrella company. The umbrella company is paid a fee by the customer and in turn pays the employee after deducting administrative fees and social security contributions. So although umbrella workers are generally covered by social security, they do not have the same level of protection as permanent workers.

The French labour market is considered to be rigid, leading to a low level of investment and a high unemployment rate. The youth unemployment rate is high, and when young people are employed, it is mostly on temporary contracts. Currently, France is going through labour market reform.

4.3 Denmark

Temporary employment decreased from 10% in 1997 to an internationally low share of 8% in 2014. The share of self-employment and of self-employed without employees is relatively stable and low at 9% and 5%, respectively (OECD, 2016).

In the international policy literature, the country is presented as a major example of the 'flexicurity' model. The Danish model is often represented as a triangle with low employment protection for permanent workers, a high level of social security and active labour market policy (Andersen, 2012). For firms, it is relatively easy to shed employees: notice periods, severance payments and procedural inconveniences are limited. The underlying reason for this low employment protection can be found in the economic structure, as there are many small firms for which it is burdensome and costly to have strict employment protection. The safety net consists of unemployment insurance and social assistance. Unemployment insurance is voluntary and half of Danish workers participate in one of these insurance funds. Unemployment insurance funds are subsidised by the national government, and this subsidy increases in the case of high unemployment. The unemployment benefit seems generous, namely 90% of the previous wage; however, there is a relatively low cap of about €22,000 annually. A high level of activation is essential to combat moral hazard and maintain search incentives. The activation itself can be offered in many forms from short counselling and assessment programmes to job training and wage-subsidised jobs.

Temporary workers are covered by the same legislation and collective agreements as permanent workers. Despite the relatively low and stable share, some segmentation seems to take place, as low educated and female workers have such contracts. About one-third of workers with a temporary contract choose this form of employment as they cannot find a permanent job (Bredgaard et al., 2009). This is a relatively low number compared with the Netherlands, where many flexible workers prefer a permanent job (Donker van Heel et al., 2013; CBS, 2016).

Self-employment is mostly a voluntary choice made by educated men. It is most widespread in agriculture, fishing, construction and services, which have a tradition for skilled workers moving into self-employment as part of their career. They are eligible for the same types of social security (unemployment benefits, sickness benefits and leave benefits) as regular

workers. In some cases, special rules may apply due to the particular character of the status of self-employed. This is true for unemployment benefits, where self-employed can voluntarily join an unemployment insurance fund (and two special funds for self-employed) and receive unemployment benefits in case they have to close down their business. Self-employed are eligible for public sickness benefits (including maternity and paternity benefits) after two weeks of sickness, and they may take out an additional insurance fund that allows them to draw sickness benefits from the first or the third day of illness/leave.

Denmark is a prototype of a universal welfare state in which self-employed workers have access to social security. Employers have little reason to search for alternatives to permanent contracts as the level of protection is low anyway and the costs of social security cannot be avoided by hiring self-employed. Part of the success of the Danish model seems to be the relatively low share of involuntary temporary workers, which hints at a relatively low level of segmentation in the labour market.

4.4 Sweden

The share of temporary employment increased from 13% in 1997 to 16% in 2014. Meanwhile, the share of self-employment was stable over this period at about 10% of employment. The share of self-employed without employees fell from 6.5% in 1997 to 5.5% in 2014 (OECD, 2016).

Temporary employment became legal at the beginning of the 1990s and has increased since. Young people, women and non-western migrants are more likely to work under temporary contracts (Andersson and Wadensjö, 2004). Temporary contracts are permitted in a number of well-defined cases only, but there is no limit to the number of successive contracts. As in the Netherlands, Sweden has a high level of protection of permanent contracts and a relatively low level of protection of temporary contracts (European Commission, 2015; IMF, 2015). Sweden has a system of decentralised collective labour agreements, which apply to both permanent and temporary contracts (Andersson and Wadensjö, 2004). Because of the relatively high transition rate of temporary to permanent employment and low long-term unemployment rates, the segmentation of the labour market does not pose a real concern (IMF, 2015). Still, unemployment rates are higher for young people, the low-skilled and immigrants (European Commission, 2015; IMF, 2015).

Self-employed are more often men, older and non-western migrants (Andersson and Wadensjö, 2004; Eurofound, 2009). The dual Swedish tax system distinguishes between income from employment and earned income from self-employment in an unincorporated business. Both employees and self-employed pay income tax and payroll taxes (social security contributions for insurance for pensions, parental leave, unemployment and sickness). Payroll taxes from business are slightly lower. Incorporated businesses pay capital income taxation on dividends. Tax evasion behaviour is prevented because dividends above a certain level are taxed as income (Stenkula, 2009). Overall, the tax system does not seem to be an important push or pull factor into/from self-employment.

In Sweden, self-employed are (partly) covered by social security. They receive sick benefits after a waiting period of 1, 3 or 30 days. The benefit is based on their net revenue, but may not exceed the benefit of regular employees with the same kind of work assignment (Eurofound, 2009). With respect to unemployment benefits, self-employed are covered by a mandatory basic insurance and they can choose to voluntarily join the earnings-related insurance fund (Eurofound, 2014).

Sweden is an example of a welfare state with a universal arrangement, as self-employed are (partly) covered by social security. At the same time, disadvantaged groups such as the young, women and migrants are confronted with the lower protection of temporary jobs. This hints, on the one hand, to some segmentation of the labour market; on the other hand, segmentation also seems limited because of the relatively high transition rate from temporary to permanent employment.

4.5 Spain

The share of temporary employment decreased from a high level of 24% of total employment in 1997 to a still comparatively high level of 20% in 2014 (OECD, calculations CPB). Meanwhile, the share of self-employment decreased from 24% to 18% of total employment (OECD). The share of own account workers (self-employed without employees) fell from 13% in 1999 to 10% in 2010, but this has risen slightly in recent years (OECD, calculations CPB).

During the 1980s, labour market flexibility was achieved by liberalising the rules on temporary employment, which led to a highly segmented labour market. Compared with permanent jobs, which have traditionally been highly protected, temporary jobs became extremely vulnerable. This has not always been the case. Historically, the Spanish labour market has been characterised by a rigid system of collective bargaining. The first major reform was implemented in 1984, aiming to stimulate the use of temporary contracts (which were heavily regulated at that time) while maintaining high protection for permanent contracts.⁷ As a result, the use of temporary contracts more than doubled between 1987 and 1992. This effect was far more than intended; hence, in the 1990s, reversed policies were undertaken. The dismissal of permanent contracts was relaxed and a more flexible type of permanent contract (with lower firing costs and lower social security contributions) was allowed for 'weaker' groups.⁸ The latter policy was not very successful, however; therefore, the country remained an extreme case where until 2006 temporary contracts were at least twice as common as in other European countries.⁹

Spain experienced another important shift following the economic crises from 2007 onwards. The share of temporary contracts decreased, but not because of the better

⁷ The positive employment growth from this two-tier type of labour reform is characterized by Boeri and Garibaldi (2007) as a 'honeymoon effect': positive, but not forever lasting.

⁸ This type of contract was allowed for young people (aged 18–29), elderly unemployed (age 45+), the disabled, long-term unemployed (>12 months) and workers on a temporary contract before.

⁹ Except for Poland and to some extent Portugal.

functioning of the labour market. Because of the segmentation between insiders (permanent contracts with high protection) and outsiders (fixed-term contracts with low protection), the effects of the crisis hit particular groups disproportionately. Not renewing fixed-term contracts resulted in extremely high unemployment. During the crisis years, over two million temporary jobs were lost (40% of all temporary jobs) compared with one million permanent jobs (9%). Many young people became outsiders by default: youth unemployment reached 55% in 2013, with overall unemployment at 26%. Half of the unemployed were below the age of 25, while another quarter were between 25 and 34 years old.

According to Jansen et al. (2016), recent policy is characterised by the quest for balanced 'intermediate' types of contracts. The aim is to raise internal instead of external flexibility, improving the process of wage adjustments and thus competitiveness. Therefore, the 2012 policy reform tried to liberalise collective bargaining: firm-level agreements have become the priority over sector-level agreements and the temporary opt-out of collective agreements has become possible. Small and medium-sized firms are allowed (and fiscally stimulated) to use a more flexible type of permanent contract with a probation period. For standard permanent contracts, firing costs are now maximised at 24 months of wages. So far, the results are not clearly visible, probably because labour court rulings have interfered and partly undone the impact of the reforms (Jansen, 2015).

The role of self-employment seems to be limited in Spain; however, the 2 percentage point rise in own account workers between 2011 and 2013 may reflect a changing pattern. Employers can achieve flexibility in their workforce by using temporary contracts and intermediate contract types for special groups. Furthermore, self-employed workers are partly covered by social security as they have a special sickness scheme and voluntary unemployment insurance (Eurofound, 2009).

Outside options for labour market flexibilisation in Spain during the period 1997–2015 included involuntary part-time workers and migrants. Compared with other EU countries, Spain has seen a sharp increase in involuntary part-time workers¹⁰ and a spectacular increase in the number of foreign workers.¹¹

In summary, the Spanish example shows that the liberalisation of temporary contracts has led to a strongly segmented labour market, which in particular can lead to extreme employment effects during a crisis. Once in place, it is then hard to introduce effective policy to reduce this strong segmentation.

¹⁰ From 1.6% of all part-time workers in 2001 to 10.3% in 2014 (OECD).

¹¹ In 2008, no less than 14% of the Spanish workforce consisted of foreigners. Post-crisis, this rate has dropped to 11%, in the same order as the United Kingdom and Germany (Eurostat, ifsa_egan).

4.6 United States

Temporary and self-employment have been rather stable over recent decades. Temporary employment remained at about 4% in the period 1997–2005, while self-employment decreased slightly from 7.4% in 2000 to 6.5% in 2014.¹² Employers generally do not need to avoid permanent contracts as the level of protection and labour costs due to collective social insurance are relatively low. Still, even in such a liberal labour market, segmentation plays a role. The economic literature and popular press discuss atypical jobs and the working poor.

Employers have relatively few obligations. The level of employment protection in the United States is one of the lowest among developed countries. Hence, hiring a worker does not imply a lot of risk as the employer can fire a worker at will in the case of low productivity or a decline in product demand. This is probably a major explanation for the low level of temporary employment. Nevertheless, there is a market for temporary working agencies, and employers hire on a temporary basis as well (Autor and Houseman, 2010). Moreover, employers have some obligations in the liberal US labour market. Experience rating implies that employers pay higher premiums in the case they cause many workers to join the unemployment compensation scheme. Hence, employers have some financial responsibility for the employment prospects of their workers. While the experience rating is imperfect, it does affect employers' behaviour in the sense that they fire fewer of their workers (Feldstein, 1976, Anderson and Meyer, 2000). The experience rating, however, does not seem to lead to an economically significant level of avoidance behaviour among employers. The level of self-employment is low; in particular, native-born whites of all levels of educational attainment are self-employed.

The liberal US labour market clearly does not prevent segmentation. Differences between jobs occur due to voluntary provisions by employers. Permanent full-time jobs generally include health insurance and pension benefits.¹³ Nonstandard jobs including on-call work, temporary work agency jobs, independent contracting and even part-time work in conventional jobs rarely offer such provisions, while wages are generally low. The share of atypical jobs in total employment seems stable over time as the rates of temporary and part-time employment are steady (Kalleberg et al., 2000). Furthermore, about 6% of the workforce was classified as 'working poor' in 2014 and these people mostly have an atypical job (US Bureau of Labor Statistics, 2016b). Both atypical jobs and the working poor are concentrated among the low educated, non-whites, non-native born and women.

¹² Including incorporated self-employed leads to figures that are about 50% higher, but also including this group gives a slight decline in the self-employment rate over time (US Bureau of Labor Statistics, 2016a).

¹³ The uninsured rate was stable until 2013 at about 14% and declined to about 11% in 2014 (US Census Bureau, 2015).

4.7 Lessons from these six countries

A first major lesson from the case studies is that institutions matter. Increasing flexibility in a labour market with stringent employment protection for permanent jobs by liberalising rules on flexible employment leads to more such employment, which happened, for example, in Spain. This in turn increases segmentation and inequality in the labour market, as flexible workers face more uncertainty and they are often less well insured as their careers are disrupted. The share dropped again during the crisis, when temporary labour relations were especially heavily affected. Although not described in our case studies, countries such as Italy and Portugal show similar (but less extreme) developments, leading to similar policy discussions. Germany allows jobs with a wage of less than €450 per month to be exempted from social security, and these jobs have also gained popularity.

A second lesson is that a liberal labour market, with a low level of protection for permanent workers, is no guarantee against segmentation and inequality. In a country such as the United States, employers do not need to be hesitant to hire workers at the lower end of the labour market on the basis of a permanent contract as they have few obligations and it is relatively easy to fire unproductive workers. Further, although there is little inequality in the sense that many low educated individuals are employed, they still have less access to employer-provided insurance and provisions such as health insurance and pension plans.

A third lesson is that Scandinavian countries, in particular, seem to succeed in reducing segmentation and inequality in the labour market. Sweden and Denmark have rather similar universal social security institutions with a high level of insurance and the inclusion of self-employed. In terms of employment protection, the countries are, however, remarkably different, as permanent workers in Sweden experience a high level of protection, whereas those in Denmark experience little protection. According to the empirical literature, there seems to be more segmentation and inequality in the Swedish labour market than in Denmark (although still less than in other countries); however, it is hard to relate this to one institutional factor such as employment protection legislation.

This chapter shows that country-specific contextual circumstances matter for the impact of institutions on the functioning of the labour market. This also implies that copying a successful policy in one country is no guarantee of success in another. Therefore, although countries may learn from each other, every country will have to find its own direction for policy reform on labour market opportunities, flexible employment and segmentation and inequality in the labour market.

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