

Lucifora, Claudio; Moriconi, Simone

Working Paper

Policy Myopia and Labour Market Institutions

Working Paper, No. 13

Provided in Cooperation with:

Università Cattolica del Sacro Cuore, Dipartimento di Economia e Finanza (DISCE)

Suggested Citation: Lucifora, Claudio; Moriconi, Simone (2014) : Policy Myopia and Labour Market Institutions, Working Paper, No. 13, Università Cattolica del Sacro Cuore, Dipartimento di Economia e Finanza (DISCE), Milano

This Version is available at:

<https://hdl.handle.net/10419/170610>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

UNIVERSITÀ CATTOLICA DEL SACRO CUORE
Dipartimento di Economia e Finanza

Working Paper Series

**Policy Myopia and Labour Market
Institutions**

*Claudio Lucifora
Simone Moriconi*

Working Paper n. 13

June 2014



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

Policy Myopia and Labour Market Institutions

Claudio Lucifora

Università Cattolica del Sacro Cuore

Simone Moriconi

Università Cattolica del Sacro Cuore

Working Paper n. 13
June 2014

Dipartimento di Economia e Finanza
Università Cattolica del Sacro Cuore
Largo Gemelli 1 - 20123 Milano – Italy
tel: +39.02.7234.2976 - fax: +39.02.7234.2781
e-mail: dip.economiaefinanza@unicatt.it

The Working Paper Series promotes the circulation of research results produced by the members and affiliates of the Dipartimento di Economia e Finanza, with the aim of encouraging their dissemination and discussion. Results may be in a preliminary or advanced stage. The Dipartimento di Economia e Finanza is part of the Dipartimenti e Istituti di Scienze Economiche (DISCE) of the Università Cattolica del Sacro Cuore.

Policy Myopia and Labour Market Institutions*

Claudio Lucifora[†] and Simone Moriconi[‡]

June 3, 2014

Abstract

In the public debate, poor employment performance has often been associated with the existence of extensive labour market regulations and a lack of commitment to far-sighted public policies. This paper investigates the relation between policy myopia and labour market institutions. We develop a theoretical model in which policy myopia leads an incumbent government to choose institutions that allow the creation of rents in the labour market and reduce resources available to public goods provision and social expenditure. We test these predictions empirically using panel data for 21 OECD countries for the period 1985–2006. We show that policy myopia is associated with more regulated labour markets, lower unemployment benefit replacement rates, and smaller tax wedges on labour.

Keywords: Policy myopia, public good provision, labour market institutions

JEL codes: J64, J88, H11

*We received useful comments and suggestions from Andrea Bassanini, Kristian Behrens, Michel Beine, Georges Bressons, Eve Caroli, Quentin David, Domenico Delli Gatti, Damien Gaumont, Etienne Lehmann, Michele Longo, Marco Lossani, Maurizio Motolese, Yasusada Murata, Yasuhiro Sato, Bruno van der Linden, David Wildasin and Skerdilajda Zana. A previous version of this paper was presented at various international conferences: ‘Economic Integration, Trade, and Spatial Structure’ (Nagoya University, Japan), 8th Journées Louis-André Gérard-Varet (Marseille, France), 2009 Annual Conference of the European Association of Labour Economists (Tallin, Estonia), REPLHA International Conference (Catholic University of Milano, Italy) and in seminars at Kyoto University, Università Cattolica, Université de Paris 2, Université du Luxembourg and Université de Paris X. We are grateful to Andrea Bassanini and Romain Duval for providing the ‘OECD Labour Market Institutions Data’. Access to World Bank political indicators data is also gratefully acknowledged. Part of this paper was completed when Claudio Lucifora was visiting the School of Economics at UNSW and when Simone Moriconi was visiting the University of California Davis.

[†]Università Cattolica and IZA. Email: claudio.lucifora@unicatt.it;

[‡]corresponding author: Università Cattolica di Milano and CREA, Université du Luxembourg. Email: simone.moriconi@unicatt.it;

1 Introduction

The recent financial crisis has brought employment and growth back to the top of the policy agenda of most industrialised countries. In the public debate, slower growth and poor employment performance have often been associated with the existence of extensive labour market regulations and a lack of commitment to public policies that are oriented to the long term. Also, policy makers often report a growing concern that frictions in the political process, by favouring short-term and myopic policy making, may harm economic growth and hinder a country's resilience to negative shocks (OECD [36]; EC [26]).¹

The relation between political power and labour market regulation has been extensively investigated in the economic literature. A number of contributions have focussed on the complex interactions between political power and the vested interests of workers as the main determinants of labour market institutions (Botero et al. [16]). A different strand of the literature has focussed, instead, on the existence of frictions in the political process to explain why myopic policy making may arise. These frictions have been shown to be associated with a number of inefficient outcomes, such as under-investment in public goods and the creation of economic rents (Barro [10], Alesina and Perotti [6], Svensson [47], Azzimonti [9], Aidt and Dutta [3], Aidt et al. [4], Acemoglu [2]).

This paper combines the literature on workers' political power with that of myopic policy making to explain the existence of labour market institutions. The main idea is that workers' political power induces the government to enact labour market regulations that allow the creation of wage rents. Besides, the government sets public policy to benefit its political stakeholders. Workers retain their political power regardless of the government in charge (e.g. through wage bargaining), while political stakeholders are only powerful when their party is in office, becoming irrelevant otherwise (see Persson and Tabellini [42]). The asymmetric distribution of political power between workers and political stakeholders encourages a policy myopia. This also explains why governments favour institutions that allow the creation of rents in the labour market, reducing the resources available to public goods and social expenditure.

The arguments above are developed both theoretically and empirically. In the first part of this paper, we present a theoretical model where the government sets labour market policy, fiscal policy, and public policy. Labour market policy is the choice of labour regulations that

¹Aidt and Dutta [3] report a persistent negative correlation between the ratio of long- to short-term public spending and the GDP per capita in OECD countries. Recognition of the role of political myopia in determining market regulations and institutions lies behind many attempts on the part of international organisations, such as the *OECD Job Strategy*, the *EU Lisbon agenda*, the World Bank's report *Understanding Regulation*, and the more recent *EU2020 Strategy*, urging governments to reform labour markets.

influence workers' bargaining power, and unemployment insurance. Fiscal policy sets labour taxes to finance public goods provision. Finally, public policy consists in the allocation of public expenditures between two alternative public goods. In this setting, policy myopia is due to a government's inability to benefit from the long-term effects of public goods provision (Alesina and Tabellini [7]).² The model shows that when governments are myopic, labour market regulation is a second-best policy for maximising social welfare: that is, for governments, it is optimal to favour the creation of wage rents while reducing the resources available to public goods and social expenditure.

In the second part of this paper, we test these predictions using panel data for 21 OECD countries over the period 1985–2006. We specify and estimate an empirical model to analyse whether policy myopia can explain the observed differences in labour market institutions, such as labour regulations, unemployment benefits, and labour taxes, across OECD countries. We proxy policy myopia using relevant features of the political setting, as described in Persson and Tabellini [42]. We show that policy myopia is associated with more regulated labour markets, lower unemployment benefit replacement rates, and lower tax wedges on labour. The above results are shown to be robust to a number of extensions, such as the inclusion of alternative political variables, systems of different legal origins, and predetermined indicators of policy myopia.

Our paper contributes to the existing literature in the following ways. First, it contributes to the debate on the political determinants of labour market institutions. We investigate the effects of policy myopia on the choice of labour market institutions taking as given the political process. Existing papers (see e.g. Wright [51], Saint-Paul [45], Pagano and Volpin [37] and Boeri et al. [15]) have instead focussed on political economy issues, showing that the level and mix of institutions depend on the characteristics of the median voter. Second, it contributes to the large literature that looks at the economic effects of policy myopia. We show that policy myopia induces governments to regulate the labour market in a way that favours the creation of wage rents and diverts resources away from the provision of public goods and social expenditure. Existing studies (see e.g. Alesina and Tabellini [7], Persson and Svensson [40], Besley and Persson [13], Gersbach [29], Aidt and Dutta [3]) have analysed how factors determining short-term decision making in public policy affect tax capacity as well as the level and composition of public goods. Finally, this paper is also related to the literature that investigates the impact of labour market institutions on equilibrium

²Policy myopia can also arise from different factors than those considered in the present paper. For example, it can derive from contractual imperfections that prevent current majorities from writing contracts with future ones (e.g. Leblanc et al. [33]). It can also be due to rational voters' or politicians' bias for short- rather than long-term public investments (e.g. Aidt and Dutta [3], Gersbach [29]).

unemployment. We show how labour market institutions arise from an endogenous process related to the existence of frictions in policy making, while the unemployment literature generally regards institutions as exogenous (see Bassanini and Duval [11] and Arpaia and Mourre [8] for reviews).

This paper is organised as follows. Section 2 presents the theoretical model. Section 3 describes the data and the empirical strategy. Section 4 presents and discusses the main results, alternative specifications, and a set of robustness checks. Section 5 provides some concluding remarks.

2 A model of myopic public policy and labour market policy

In this section we introduce a simple static partial equilibrium model where a government has three policy instruments: labour market policy, fiscal policy, and public policy. Labour market policy consists in choosing labour regulations, fiscal policy sets labour taxes to finance public expenditure, and public policy allocates expenditures between alternative public goods.

Government policy action spans two periods, 0 and 1. We posit that the government is characterised by policy myopia, which we model using the political instability approach *à la* Alesina and Tabellini [7]. Labour market policy is designed in period 0 and implemented in period 1, while fiscal and public policy (i.e. the choice of the level and composition of public goods) are designed and implemented in period 1.³ We assume there are two parties in the political arena, denoted by a and b . Party a and party b are equally representative of workers' interests but have different preferences for public policy.⁴

We assume the following timing: (i) party a is in office in period 0, and is expected to remain in office until the end of period 1, allowing time to design and implement the entire set of policies; (ii) in period 0, the incumbent government a sets the labour market policy,

³The longer time span in the implementation of labour market policy conveys the idea that labour regulations often face strong opposition from social partners and lengthy social concertation. This is supported by evidence from several EU countries. For example, in Germany, France and Italy, the implementation of laws introducing more flexibility in employment contracts has often been delayed by strong opposition and lengthy concertation with the social partners (see European Commission [25]).

⁴The two parties can be considered to be representative of different parts of society, characterised by different preferences for public goods but the same preferences for labour income. An underlying assumption is that in industrialised economies, the median voter is likely to be an employed worker and represented by any majority coalition, irrespective of ideological preferences. This assumption recalls political power theories of labour market regulation. These hold that labour regulations respond to the pressures from trade unions and should therefore be more extensive when the unions are powerful, regardless of which government is in charge (see Botero et al. [16], Saint-Paul [45]).

which will be implemented in period 1; (iii) between period 0 and period 1, a political shock may occur, which replaces the incumbent government a with its competitor, party b ; (iv) in period 1, the party in office (either party a or party b , depending on the occurrence of the political shock) sets and implements fiscal and public policy, and implements the labour market policy set by the government in office in period 0. Finally, wage and employment levels are determined in the private sector.

The timing sketched above gives rise to policy myopia as in Persson and Svensson [40] and Alesina and Tabellini [7]. In particular, the probability of a political shock's occurring between period 0 and period 1 reduces the government's expected utility from providing public goods and induces a policy myopia. Since this form of myopia raises the opportunity cost of labour income, the government in period 0 diverts resources from the provision of public goods, allowing wage rents to be created.

In the next section we describe the theoretical setting, we then solve the model by backward induction.

2.1 The Economy

We describe a small open economy where a mass of homogeneous workers inelastically supplies one unit of labour. We assume that the labour market is imperfectly competitive due to the presence of unemployment benefits (v) and labour market regulations (μ). The formation of wages is described as follows:⁵

$$w = W(\mu, v) \text{ s.t. } W(0, \bar{v}) = \bar{v}, \quad W'_j > 0, \quad v \geq \bar{v}, \text{ where } j = \mu, v. \quad (1)$$

In a perfectly competitive labour market (i.e. when $\mu = 0$ and $v = \bar{v}$), all workers earn the reservation wage. In an imperfectly competitive labour market, unemployment benefits and labour market regulations increase W . In (1), $v \geq \bar{v}$ guarantees that unemployment benefits never fall below the workers' reservation wage \bar{v} .

We assume each worker faces an aggregate labour demand function:⁶

$$l(c) \in [0, 1], \quad l(\bar{v}) = 1, \quad l'_c < 0, \quad l''_{cc} < 0, \text{ and } c = w + \tau \quad (2)$$

The aggregate labour demand specified in (2) is consistent with profit maximising be-

⁵This can be interpreted as a reduced form Nash bargaining outcome in an equilibrium gross job flow model (Mortensen and Pissarides [34]. See Saint-Paul [45] and Boeri et al. [15] for similar approaches).

⁶Since workers are homogeneous, they all face the same aggregate demand, and $l(c)$ can also be interpreted as the probability of the representative worker's being employed for a given level of labour costs. We relax the assumption of homogeneous workers in Section 2.4.

haviour by firms with perfect competition. Firms' labour costs (c) include the workers' product wages (w) and the labour tax levied on each unit of labour employed (τ). From (2), when workers receive their reservation wage and labour is not taxed, there is full employment, while any increase in wages or labour taxes induces unemployment in the economy.⁷

The workers' expected income is

$$E[I] = wl + v(1 - l) \equiv v + (w - v)l. \quad (3)$$

Equation (3) describes the effects of μ , v and τ on workers' expected income. Unemployment benefits increase the workers' outside option.⁸ Labour market regulation and unemployment benefits increase wage rents. Finally, policies increasing labour costs have a negative impact on workers' expected income, as they increase the workers' probability of being unemployed.

The welfare of political parties a and b is defined over two periods. The welfare in period 0 is given, determined by past policy decisions, and identical for both parties. The welfare in period 1 is additively separable into workers' income and the utility from public goods. The total expected welfare is the sum of the welfare in period 0 and the expected welfare in period 1, which is discounted at a rate η :

$$E[V^i] = \bar{V}_0 + \eta E[V_1^i] \quad \text{where} \quad E[V_1^i] = E[I] + \delta E[G^i] \quad \text{and} \quad i = a, b, \quad (4)$$

where the marginal utility from public goods is higher than the marginal utility from income, i.e. $\delta > 1$. Equation (4) shows that parties a and b differ in their expected utilities G^i , $i = a, b$ from public goods. We specify G^a and G^b as follows (Svensson [47]):⁹

$$G^a = \left(\frac{1}{\gamma(1 - \gamma)} \right) g^a \quad \text{where} \quad g^a = \min[\gamma h, (1 - \gamma)f], \quad (5)$$

$$G^b = \left(\frac{1}{\gamma(1 - \gamma)} \right) g^b \quad \text{where} \quad g^b = \min[(1 - \gamma)h, \gamma f], \quad (6)$$

Here, G^a and G^b denote, respectively, the utilities of parties a and b from g^a and g^b , their

⁷The assumption of concavity $l''_{cc} < 0$ ensures that the elasticity of labour demand is increasing with labour costs, i.e. $\epsilon'_c > 0$, which is a sufficient condition for the concavity of the government's welfare function. This assumption is common in oligopoly models and in the tax incidence literature (e.g. Stern [46]). It encompasses the idea that policies that increase the cost of labour have complementary effects on unemployment (Coe and Snower [20]), e.g. via adjustments at the intensive (i.e. via firms' optimal hiring policies) and the extensive (i.e. via the number of firms operating in the market) margins.

⁸Later, we discuss the government's choice of the level of unemployment insurance and specify the level of unemployment benefits as a function of the government's choice of the replacement rate ρ .

⁹One can think of h and f as the objects of interest to the party's stakeholders, e.g. lobbyists, politicians, bureaucrats.

desired compositions of public goods. We describe the polarisation of the parties' preferences by a parameter $\gamma \in [1/2, 1]$, which models the idea that party a has a relative preference for f , while party b has a relative preference for h .

On the basis of (5) and (6), the incumbent government in period 1 chooses the actual provision of public goods f and h so that

$$g_A = g^a = \min[\gamma h, (1 - \gamma)f], \quad (7)$$

$$g_B = g^b = \min[(1 - \gamma)h, \gamma f]. \quad (8)$$

Thus, the composition of g_A has more of public good f relative to h , while the opposite is true for g_B . Total public expenditure, which includes spending on public goods ($z = h + f$) and unemployment benefits, is financed from labour taxes. The government's budget constraint is

$$z + v(1 - l) = \tau l. \quad (9)$$

We solve the model by backward induction and start from the public policy and the fiscal policy in period 1. We then move to the labour market policy in period 0.

2.2 Public and fiscal policy

Assume without loss of generality that party a is in office in period 1. Given its preferences (5), it chooses the combination of public goods g_A^* that maximises (7):

$$g_A^* \equiv (f^a, h^a) = (\gamma z, (1 - \gamma)z). \quad (10)$$

If we substitute (10) into (5), we obtain party a 's utility G_A^a when party a can enjoy its preferred composition:

$$G_A^a(f^a, h^a) = z. \quad (11)$$

We now turn to the choice of fiscal policy. When setting the optimal level of labour taxes in period 1, party a 's welfare function V_1^a internalises its preferred combination of public goods:

$$V_1^a = E[I] + \delta z, \quad (12)$$

where the workers' expected income is given by (3). Party a chooses the level of τ that maximises (12), subject to the budget constraint (9) and aggregate labour demand (2). The first order condition is

$$\delta l = -[w - v + \delta(\tau + v)] l'_c. \quad (13)$$

Equation (13) defines the optimal fiscal policy. The incumbent government in period 1 sets the labour tax at the level where the marginal benefit of the tax (in terms of higher utility from public goods, on the left hand side of the equation) equals its marginal cost (in terms of foregone employment).

The first period equilibrium labour tax is an implicit function of the labour market policy, that is, $T(\mu, v)$. We have (the proof is in Appendix A.1):

Proposition 1: *An equilibrium level of the labour tax exists $\tau^* = T(\mu, v)$ such that*

- (i) $T(0, \bar{v}) = \tau^{max}$;
- (ii) *there exists a pair $\tilde{\mu} > 0$ and $\tilde{v} > \bar{v}$ s.t. $T(\mu, v) < \tau^{max}$, for any $\mu > \tilde{\mu}$ and $v > \tilde{v}$;*
- (iii) *if $T(\mu, v) < \tau^{max}$, then $T'_j < 0$ with $j = \mu, v$.*

The optimal tax rule (13) implies that when $\mu = 0$ and $v = \bar{v}$, the government sets the highest possible labour tax τ^{max} , as in (i) above.¹⁰ However, when $\mu > 0$ and $v > \bar{v}$, the employment penalty of the labour tax increases, and induces the government to set $\tau^* < \tau^{max}$, as in (ii) above. Finally, any increase in μ and v induces the government to cut the labour tax, as in (iii) above.¹¹ In other words, Proposition 1 suggests that labour market regulations and unemployment benefits reduce the government's ability to levy taxes. This 'tax moderation' effect alleviates unemployment and increases the share of workers that benefit from wage rents.

2.3 Policy myopia and labour market regulation

In period 0, the incumbent government sets labour market policy. Under the assumption of policy myopia, in period 0, the incumbent party has an exogenous probability p of facing

¹⁰The generality of our approach does not exclude a priori the possibility that the government's optimal choice is to impose a labour subsidy, i.e. a negative labour tax. However, when $\delta > 0$, the government's optimal choice of τ^{max} is positive. Since the labour tax creates unemployment, a part of the tax revenues is used to finance unemployment benefits.

¹¹In fact, under the assumption $l''_{cc} < 0$, a labour market policy $j = \mu, v$ increases the elasticity of the demand for labour with respect to labour costs, and thus the size of the employment penalty of the labour tax.

a political shock and being replaced in office by its competitor in period 1 (Alesina and Tabellini [7]).

Assume without loss of generality that party a is in office in period 0. If party a remains in office in period 1, it will set its preferred public policy (10) and enjoy utility G_A^a given by (11). However, if party a is replaced in office, party b in period 1 will set its preferred public policy g_B^* . In this case, party a will only get utility $G_B^a < G_A^a$ (see Appendix A.2, for details). The expected utility from the provision of public goods for party a in period 0 is then given by the weighting G_A^a and G_B^a by their probabilities $(1 - p)$ and p , respectively:

$$E[G^a] = (1 - p)G_A^a + pG_B^a = \phi(p, \gamma)z \quad \text{with} \quad \phi(p, \gamma) = 1 - \frac{p}{\gamma}(2\gamma - 1), \quad (14)$$

where $0 < \phi(p, \gamma) < 1$ denotes the degree of enforceability of party a 's public policy. This is also an inverse measure of policy myopia.¹² It follows that

$$\begin{aligned} (i) \quad & \lim_{p \rightarrow 0} \phi(p, \gamma) = \lim_{\gamma \rightarrow \frac{1}{2}} \phi(p, \gamma) = 1; \\ (ii) \quad & \phi'_p < 0; \quad \phi'_\gamma < 0; \\ (iii) \quad & \lim_{\substack{\gamma \rightarrow 1 \\ p \rightarrow 1}} \phi(p, \gamma) = 0. \end{aligned} \quad (15)$$

Condition (i) states that when $p = 0$ (independently of γ) or $\gamma = 1/2$ (independently of p), party a 's preferred public policy is fully enforceable (as $\phi(0, \gamma) = \phi(p, 1/2) = 1$) and party a is not myopic. Condition (ii) suggests that an increase in p and γ reduces the enforceability of party a 's preferred public policy, and induces policy myopia. Moreover, from (14), we see that the negative impact of p on ϕ is larger when γ is high, and vice versa. In the limit, as in (iii) above, $p = 1$ and $\gamma = 1$ implies that party a cannot benefit from its preferred public policy (i.e. $\phi(1, 1) = 0$). Hence, it is fully myopic.

We derive the impact of policy myopia on the optimal labour market policy by plugging (3) and (14) into (4) and obtaining the expected welfare of party a in period 0:

$$E[V^a] = \bar{V}_0 + \eta[v + (w - v)l + \omega(\delta, p, \gamma)z] \quad \text{with} \quad \omega(\delta, p, \gamma) = \delta\phi(p, \gamma), \quad (16)$$

where $\omega(\delta, p, \gamma)$ denotes the expected marginal utility for party a from the provision of public goods. This depends on both δ and ϕ .

If $v = \bar{v}$ (we relax this assumption in the next section), party a chooses μ to maximise

¹²Persson and Svensson [40] interpret $\phi(p, \gamma)$ as a measure of the time inconsistency of public policy, meaning that the incumbent government in period 0 (i.e. party a) cannot commit to its announced policy due to an exogenous probability of being replaced by a government that will implement a different policy.

(16) subject to the incentive compatibility constraint (13). The first order condition is (see Appendix A.3 for details)

$$V'_\mu = \underbrace{\frac{(w - \bar{v})(\delta - 1)l'_c}{\delta}}_{\text{wage rents } (<0)} + \underbrace{[1 - \phi(p, \gamma)] \frac{(w - \bar{v})}{w'_\mu} T'_\mu l'_c}_{\text{tax moderation } (>0 \text{ if } \phi < 1)} + \underbrace{[\omega(\phi, p, \gamma) - 1](\tau^* + \bar{v})l'_c}_{\text{social expenditure } (>0 \text{ if } \omega < 1)}, \quad (17)$$

which shows that labour market regulations produce three different effects on social welfare. The first is an effect on wage rents, due to a reduction in employment. The second is a tax moderation effect, as the government is induced to cut the labour tax in order to alleviate unemployment. The third is a social expenditure effect, due to the increase in the number of recipients of unemployment benefits. While the welfare effect of wage rents is always negative, the welfare effects of tax moderation and social expenditure are a priori ambiguous.

Equation (17) describes the optimal design of the labour market regulations (μ), which depends on the degree of policy myopia (ϕ). When $\phi = 1$ (i.e. no policy myopia), the government optimally chooses the corner solution $\mu^* = 0$. In this case, there is no tax moderation effect as the government has no incentive to cut labour taxes. The social expenditure effect on welfare is negative, since expenditure on unemployment benefits reduces the resources available for public goods (as in (9)). When $\phi < 1$ (i.e. policy myopia), an interior solution exists if $\omega < 1$, i.e. the expected marginal utility from public goods is lower than the marginal utility of income. At this interior solution, μ^* can be expressed as an implicit function of the policy myopia. We have the following (the formal derivation and proof are in Appendix A.3):¹³

Proposition 2: *An equilibrium level of labour market regulation exists $\mu^* = M(p, \gamma)$ such that*

- (i) $M(0, \gamma) = M(p, 1/2) = 0$;
- (ii) *there exists a pair $\bar{p} < 1$ and $\bar{\gamma} < 1$ s.t. $M(p, \gamma) > 0$ for any $p > \bar{p}$ and $\gamma > \bar{\gamma}$;*
- (iii) *if $M(p, \gamma) > 0$, then $M'_k > 0$ with $k = p, \gamma$.*

¹³The tax moderation and social expenditure effects are positive because the government optimally chooses to divert resources from public expenditures to labour income (i.e. in the form of wage rents and unemployment benefits). At equilibrium, the positive tax moderation effect and the social expenditure effects balance the negative effect of wage rents. Note that $\omega < 1$ implies that $V'_\mu = 0$. We assume also that the second order conditions are satisfied, which requires some assumptions about the third order derivatives of $l(c)$, as is generally the case in optimal taxation problems.

With $\phi = 1$, a first-best equilibrium is reached where the government does not regulate the labour market (i.e. $\mu^* = 0$), as in (i) above. At this equilibrium, the government sets $\tau = \tau^{max}$ (from Proposition 1), and allocates benefits to the unemployed. However, when $\phi < 1/\delta$, the government regulates the labour market (i.e. $\mu^* = M(.) > 0$) as in (ii) above. This is a second-best equilibrium with higher unemployment and wage rents (as $w - \bar{v} > 0$) and a lower labour tax (since $\tau < \tau^{max}$). An increase in policy myopia induces the government to regulate the labour market more, as in (iii) above, and to lower taxes on labour (since $T'_k = T'_\mu M'_k < 0$). In other words, Proposition 2 suggests that policy myopia induces the government to set labour market regulations that create wage rents and reduce the resources available for public goods¹⁴

2.4 Unemployment insurance

The analysis so far has assumed that workers are homogeneous and unemployment benefits are exogenously set at the workers' reservation wage. In this section, we present an extension of the baseline model where the incumbent government in period 0 (i.e. party a) cares about insiders, as in Blanchard and Summers [14], and also chooses the unemployment benefit replacement rate ($\rho = v/w$). We plug $v = \rho w$ into the wage formation function (1), and rewrite it as follows:¹⁵

$$w = \Psi(\mu, \rho) \text{ s.t. } \rho w \geq \bar{v}, \quad \text{and } \Psi'_j > 0, \text{ where } j = \mu, \rho. \quad (18)$$

Party a 's employment objective is a weighted average of the insiders' employment probability, π_0 , and the aggregate employment probability (i.e. the labour demand function), l . The weight that the government attributes to insiders is given by $\alpha(p, \gamma)$, which depends on the enforceability of its preferred public policy:

$$E(l) = \alpha(p, \gamma)\pi_0 + [1 - \alpha(p, \gamma)]l, \quad \text{where } 0 < \alpha(p, \gamma) < 1. \quad (19)$$

The relation between party a 's preferences for insiders and the enforceability of its preferred

¹⁴This result recalls Besley and Persson [13], who find that short horizons in a government's policy reduce a country's fiscal capacity.

¹⁵Equation (18) is the exact counterpart of $w - W(\mu, \rho w) = 0$, which is obtained by plugging $v = \rho w$ into (1). Note that since unemployment benefits are now fully indexed to wages, we need to take into account the indirect impact of ρ and μ on v . Thus, in moving from (1) to (18), we impose $W'_v < 1/\rho$, which guarantees $\Psi'_\mu > 0$ and $\Psi'_\rho > 0$.

public policy is described as follows:

$$\begin{aligned}
(i) \quad & \lim_{p \rightarrow 0} \alpha(p, \gamma) = \lim_{\gamma \rightarrow \frac{1}{2}} \alpha(p, \gamma) = 0; \\
(ii) \quad & \alpha'_p > 0; \quad \alpha'_\gamma > 0; \\
(iii) \quad & \lim_{\substack{\gamma \rightarrow 1 \\ p \rightarrow 1}} \alpha(p, \gamma) = 1.
\end{aligned} \tag{20}$$

Equations (19) and (20) convey the idea that when the enforceability of its preferred public policy decreases, party a 's preferences towards insiders increase. When $p = 0$ or $\gamma = 1/2$, party a 's preferred public policy is fully enforceable (as $\phi(0, \gamma) = \phi(p, 1/2) = 1$), and insiders are not valued, as in (i) above. In this case, from Equation (19), party a 's employment objective is $E(l) = l$, as in our baseline model. Conversely, when $p = 1$ and $\gamma = 1$, party a cannot benefit from its preferred public policy, and only cares about insiders, as in (iii) above. In this case, as shown in Equation (19), the government totally neglects the effects of labour market policy on aggregate employment, i.e. $E(l) = \pi_0$. Condition (ii) above shows that any increase of p and γ reduces the enforceability of party a 's preferred public policy, and raises its concern for insiders. Whenever party a 's preferred public policy is not fully enforceable, party a values both insiders and aggregate employment as in Equation (19).

Substitute $E(l)$ and $v = \rho w$ in (16) to obtain the welfare function of government in period 0:

$$E[V_I^a] = \bar{V}_0 + \eta [\rho w + (w - \rho w)E(l) + \omega(\delta, p, \gamma)z]. \tag{21}$$

The equilibrium in period 0 is that combination of μ and ρ which maximises (21) subject to the incentive compatibility constraint given by the optimal tax rule τ^* implicitly defined in (13). Note that since the incumbent government in period 1 is not concerned about the labour market policy, it does not consider insiders in its objective function. When there is policy myopia, i.e. $\phi < 1$ and the government is unable to implement its preferred public policy, μ influences the workers' expected income only through wages, and ρ affects the expected income both through wages and the degree of social insurance. Hence, the government uses μ to target wages and sets ρ based solely on insurance considerations. At the equilibrium level of labour market regulation μ^* , the impact of ρ on welfare is described by (see Appendix A.4 for details)

$$V'_\rho|_{\mu^*} = \underbrace{-\frac{\alpha(\pi_o - l^*)}{1 - \rho}}_{\text{insiders' rents } (<0 \text{ if } \pi_o > l^*)} + \underbrace{[1 - \phi(p, \gamma) - \alpha(p, \gamma)]\hat{T}'_\rho l'_c}_{\text{tax moderation } (>0 \text{ if } 1 - \alpha > \phi)} - \underbrace{(\omega(\phi, p, \gamma) - 1)\frac{(1 - l^*)}{1 - \rho}}_{\text{social expenditure } (>0 \text{ if } \omega < 1)}. \quad (22)$$

Equation (22) shows that the unemployment benefit replacement rate has three effects on social welfare. The first effect has a direct impact on insiders' rents, which is negative when insiders at equilibrium have a higher employment probability than the average worker, i.e. $\pi_o > l^*$.¹⁶ The second is a tax moderation effect, which is positive when the government's preferences for aggregate employment exceed the enforceability of its preferred public policy, i.e. $1 - \alpha > \phi$. The third is the effect on social expenditures, which is positive when $\omega < 1$.

When $0 < \phi < 1 - \alpha$ and $\omega < 1$, the first order condition $V'_\rho|_{\mu^*} = 0$ admits an interior solution such that the government optimally chooses ρ^* , which is an implicit function of policy myopia and preferences for insiders.¹⁷ We have the following proposition (the formal derivation and proof are presented in Appendix A.4):

Proposition 3: *In the presence of policy myopia, an equilibrium level of the unemployment benefits replacement rate exists $\rho^* = \Upsilon(p, \gamma)$ such that $\Upsilon'_k \leq 0$, where $k = p, \gamma$. In particular, $\Upsilon'_k \leq 0$ if $\alpha'_k \geq \Theta \phi'_k$ with $\Theta < 0$.*

A lower unemployment benefits replacement rate generates welfare gains, due to the greater rents accruing to insiders, and welfare losses, due to the lower labour taxes and social expenditures. When the impact of policy myopia is proportionally bigger on α than on ϕ , the welfare gains exceed the losses, and the government chooses a lower unemployment benefits replacement rate at equilibrium. In other words, Proposition 3 states that policy myopia induces the government to reduce the unemployment benefits replacement rate, when it raises its concern for insiders relative to the provision of public goods.

¹⁶This is in the spirit of the one period model by Blanchard and Summers [14], where initial membership in the group is exogenous and the insiders' employment probability depends on a comparison between the size of the group and aggregate employment.

¹⁷Also in this case we assume that the second order conditions of government's maximisation problem are satisfied.

3 Data and empirical strategy

We test the main predictions of the theoretical model using a unique dataset that combines information on political systems and labour market institutions for 21 OECD countries over the period 1985–2006 (see Appendix B for details on the data sources).

We adopt the following specifications.

$$\mu_{it} = a_1 H_{it} + \mathbf{X}'_{it} \mathbf{l} + \alpha_i + \lambda_t + \epsilon_{it}, \quad (23)$$

$$\tau_{it} = a_2 H_{it} + \mathbf{X}'_{it} \mathbf{m} + \alpha_i + \lambda_t + \chi_{it}, \quad (24)$$

$$\rho_{it} = a_3 H_{it} + \mathbf{X}'_{it} \mathbf{n} + \alpha_i + \lambda_t + \nu_{it}, \quad (25)$$

Here, the degree of labour market regulation μ , the labour tax τ , and the unemployment benefits replacement rate ρ depend on the degree of public policy myopia H in country i at time t . We also include a vector of control variables \mathbf{X} , country fixed effects α , and time fixed effects λ , to take into account time invariant country specific features and common time shocks.

We measure μ with a composite indicator that combines union density, an inverse measure of the corporatism of collective bargaining, and an index of employment protection legislation.¹⁸ We define τ as the average effective tax rate on labour (Carey and Rabesona [17]). Finally, we compute ρ as the average gross replacement rates across various earnings levels, family situations, and durations of unemployment. From our theoretical model, we expect an estimated $a_1 > 0$, $a_2 < 0$ in Equation (24), while the sign of a_3 depends on whether policy myopia increases or reduces the government’s concern for insiders, thus it is ambiguous a priori.

Public policy myopia is defined, as in the theoretical model, as $H = 1 - \phi(p, \gamma)$, which we measure using features that have been identified in the political economy literature as the main determinants of policy turnover and polarisation of political preferences (see, e.g. Persson and Tabellini [42], Persson and Tabellini [43]). In the empirical analysis, we specify H as a linear combination of p and γ and estimate separate coefficients in Equations (23)–(25). This also derives from our theoretical analysis. In fact, from Equation (15), we have that $\phi = 1 - \frac{p}{\gamma} (2\gamma - 1)$, which implies $H = 2p - 1/\gamma$.

Policy turnover p is constructed using a principal component analysis on a set of variables, capturing its main constitutional and political determinants. First, a dummy for the lack of any plurality rule in a country’s electoral system ($Nowtal = 1$), a dummy for a mixed

¹⁸Our aggregation recalls Griffith et al. [31]. The composite indicator is obtained by standardising the individual measures to have zero mean and unit standard deviation and summing them (Duval [23]).

proportional-plurality rule ($PrPlu = 1$), and a dummy for a pure proportional electoral rule ($Pr = 1$). These three rules favour more frequent changes of government, and a higher policy turnover than with a pure plurality system (Persson and Tabellini [42]). Second, a dummy for the adoption of closed party lists ($CL = 1$). Systems with closed lists produce higher policy turnover than systems without lists or with open lists, because they disconnect the re-election prospects of politicians from their efforts in office (Persson and Tabellini [41]). Third, we use the inverse margin of majority of the executive over the opposition in parliament ($Invmaj$). The formation of a minimally-winning (or, even worse, minority) government indicates a poor functioning of a parliamentary democracy, thus leading to greater policy turnover than for a large majority (Persson, Roland and Tabellini [38], [39]). Finally, the number of veto players who drop from the government in a given year is denoted by *Stabs*. A high incidence of veto players indicates policy turnover, since veto players ‘lock in’ public policy and prevent the government from making far-sighted policy decisions (see Tsebelis [49] for a comprehensive review of the role of veto players in modern political systems.)

The variable measuring the polarisation of political preferences, γ , is also constructed by carrying out a principal component analysis on its main constitutional and political determinants. First is a dummy measuring the maximum ideological distance between the executive and the four main parties in the legislature $Maxpolar = 1$ which measures the polarisation of the preferences of the government coalition in parliament (Azzimonti [9]). Second, two indicators of government and opposition fractionalisation (*Govfrac* and *Oppfrac*, respectively) measure the effective number of the parties in a coalition. Third, two indicators of the dispersion *Govdisp* of the government and of the opposition *Oppdisp* measure the share of seats among parties within the same coalition. Party fractionalisation and dispersion in parliament are complementary measures of parliamentary fragmentation (Beck et al. [12]) and give a voice to minority ideological and possibly extremist positions, increasing the polarisation of political preferences (Tsebelis [48], Tsebelis and Chang [50]. See Carmignani [18] for a review of the literature on the impact of political fragmentation on public policy).

The vector \mathbf{X}_{it} includes additional control variables: two dummies for membership in the European Union *EU* and the European Monetary Union *Euro*, as well as an indicator *Crisis* for the occurrence of an economic crisis. (See Appendix B for more details on the definition of the variables used in the empirical analysis.)

We check the robustness of our main set of results by running a number of additional sensitivity analyses. First, we allow for potentially confounding features of the political setting, which, if omitted, may bias the estimated impact of policy myopia on labour market

institutions. In particular, we augment our baseline specification by including the political orientation of the government, the phase of the legislature, a measure of party strength, and an indicator of the youth of the democratic institutions. Political orientation may affect a government’s stake in terms of the equity *versus* efficiency trade-off, as well as a government’s attitude to labour income and redistribution (see Høj et al. [32]). The phase of the legislature may influence the government’s incentives to make policy decisions involving long-term deferred benefits and short-term costs (see Høj et al. [32], Dal Bo and Rossi [21]). Party strength captures the idea that stronger parties are more representative of stakeholders’ interests, regardless of policy myopia (see Enikolopov and Zhuravskaya [24]). Finally, the youth of democratic institutions controls for any direct effect of the enforcement of democracy on labour market institutions (Alesina and Perotti [6]). Second, we investigate whether the impact of policy myopia on labour market institutions is shaped by the legal tradition, and interact our indicators of policy myopia with a country’s legal origins (Glaeser and Shleifer [30], Botero et al. [16]). Third, we address the problem of simultaneity which arises when the government jointly chooses both labour market institutions and the political setting. Fourth, we consider the contribution of the single indicators we used to construct the aggregate measure of policy myopia. Finally, we carried out a set of further robustness checks to control for unobserved country-specific shocks and economic and political cycles.

3.1 Descriptive statistics

The dataset used in the empirical analysis combines information on political systems, labour market institutions, and economic performance drawn from various sources, for 21 OECD countries for the period 1985–2006.¹⁹

Figure 1 plots the mean values of policy turnover and polarisation of political preferences by country, highlighting cross-country differences along the two dimensions of policy myopia. The sample means (dashed horizontal and vertical lines) partition the graph into four quadrants, which indicate alternative policy settings. Countries are mainly distributed in the bottom-left (low policy myopia) and upper-right (high policy myopia) quadrants, suggesting that the two indicators of policy myopia are positively correlated.

[Figure 1 here]

In the bottom-left quadrant we find mainly Anglo-Saxon countries and Japan. These are characterised by a low probability of policy turnover, due to plurality electoral systems

¹⁹The countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, The Netherlands, Norway, New Zealand, Portugal, Spain, Sweden, Switzerland, The United Kingdom, and the United States. Note that the time series stop in 2006, to avoid the social and political turmoil caused by the economic crisis.

and a low incidence of veto players; and low polarisation of political preferences, due to the presence of few parties in parliament. In the upper-right quadrant we find Continental European and Nordic countries. These combine high levels of policy turnover, due to pure or mixed proportional electoral systems and a high incidence of veto players; and a high polarisation of political preferences, due to the prevalence of multi-partyism.²⁰ Mediterranean European countries, in the bottom-right quadrant, show low polarisation of political preferences and high policy turnover. Compared to other European countries, France and Switzerland present a lower policy turnover, due to a presidential constitutional system in France, and a majority electoral rule in Switzerland.

[Figure 2 here]

Figure 2 shows the relation between labour market institutions and a synthetic indicator of policy myopia.²¹ For each variable, we report the difference between its 2004–2006 average and its 1985–1987 average to allow for heterogeneity in (time invariant) unobserved factors. Changes in policy myopia appear to be positively correlated with changes in labour market regulation, and negatively correlated with both changes in labour taxation and changes in the unemployment benefits replacement rate. This suggests that policy myopia is associated with higher rents in the labour market, reducing the resources available for public goods and social expenditures.

This descriptive evidence provides some additional insight into the predictions of the theoretical model. Also, the experiences of New Zealand and Portugal can prove useful to illustrate our arguments. While the two countries have roughly similar per capita incomes, they differ considerably in terms of both policy setting and labour market institutions (Botero et al. [16]). In the 1980s, New Zealand was a parliamentary democracy based on a pure winner-takes-all voting system, with low employment protection and a highly corporatist system, which was effective at moderating wage externalities of collective bargaining. In contrast, Portugal was a young parliamentary democracy, with strictly regulated (by constitutional rights) employment protection and collective relations laws. These two countries experienced different political developments over the next three decades. In New Zealand, the 1993 referendum paved the way to a switch from a plurality to a proportional electoral system, which increased the representation of smaller parties in Parliament. This reform reduced the enforceability of shared policy platforms, thus increasing policy myopia. On the side of labour

²⁰Note that we check the robustness of our results to the exclusion of the Nordic countries, where policy turnover may not indicate myopia but accountability, due to the high levels of civiness and trust in the political institutions.

²¹The synthetic indicator of policy myopia is obtained by summing up the two standardised measures of p and γ (see Appendix B for details about the PCA and standardisation).

market policy, starting in the early 1990s, successive New Zealand governments passed regulations that increased insiders' bargaining power, favoured wage externalities of collective bargaining,²² and reduced both labour taxes and unemployment benefits replacement rates (Freeman [28]). In Portugal, a series of constitutional reforms favoured the election of stable centre-left, progressive governments, which implemented far-sighted public policies. This process both eroded the constitutional rights guaranteed to insiders and increased economic support for social expenditures (Abreu and David [1]).

While New Zealand and Portugal can be considered extreme cases, the experience of the UK, France, Italy, Germany, the Netherlands, Denmark and Spain, provide comparable evidence of countries that during the sample period experienced decreasing policy myopia and reduced wage rents, while increasing social expenditures. This was not the case in countries such as Belgium, Norway, Canada and Australia, in which policy myopia increased.

4 Results

Table 1 presents the estimates of Equations (23)–(25) by ordinary least square (OLS). In columns [1]–[3] we regress the aggregate indicator of policy myopia on labour market regulation μ , the labour tax τ , and the unemployment benefits replacement rate ρ , respectively. In column [1], one unit increase in policy myopia is associated with a 0.33 unit increase in μ , suggesting that policy myopia leads a government to regulate the labour market thus increasing wage rents. In column [2], an increase by one unit in policy myopia leads to a decrease by 0.92 percentage points in τ , which is in accordance with a tax moderation effect. While our theoretical prior regarding the relation between policy myopia and the unemployment benefits replacement rate are ambiguous, the results in column [3] indicate that an increase by one unit in policy myopia is associated with a decrease by 3.95 percentage points in ρ .

The specification in columns [1]–[3], however, does not allow for separating the effects of the determinants of policy myopia (e.g. policy turnover and polarisation of political preferences) as highlighted in the theoretical model (see conditions (15)). This is done in columns [4]–[6], where we enter the two factors contributing to policy myopia separately.²³ The results show that policy turnover has a larger effect on labour market institutions than

²²In particular, there was a move towards a fully decentralised and uncoordinated system of collective bargaining. Labour protection was also increased along with a role for state arbitration courts in setting wages. See Castels and Mitchell [19] for details.

²³Note that since policy turnover and preference polarisation are standardised, the size of their coefficients is directly comparable. This is not possible with the aggregate indicator of policy myopia, as it is not standardised.

does the polarisation of preferences. An increase by one standard deviation in policy turnover leads to an increase in μ by +0.87 percentage points, a decrease in τ by 1.48 percentage points, and a decrease in ρ by 7.13 percentage points. An increase by one standard deviation in the polarisation of preferences is associated with an increase in μ by +0.12 percentage points, a decrease in τ by 0.71 percentage points, and a decrease in ρ by 2.72 percentage points.

In columns [7]–[9], we test whether the impact of policy turnover is larger when preference polarisation is high and vice versa, as implied by Equation (14), adding an interaction term to the previous specification. The overall effect of policy myopia on labour market institutions is magnified by the interaction term, supporting the view that policy turnover (preference polarisation) has a larger effect when preference polarisation (policy turnover) is above the OECD average.

To get a better idea of the economic magnitudes implied by the above results, we build on the policy developments in New Zealand and Portugal, previously discussed, and compute the overall predicted impact of a change in policy turnover and preference polarisation on labour market institutions. Our estimates indicate that a reduction in policy myopia such as the one induced by the Portuguese process of political stabilisation determined a 0.22 decrease in the indicator of labour market regulation (which is about 20% of the total variation in the average OECD country),²⁴ an increase in labour taxes by +0.79 percentage points, and an increase in the unemployment benefits replacement rate by +2.39 percentage points. As a polar case, a rise in policy myopia such as the one determined by the electoral reforms implemented in New Zealand, implied a +0.63 increase in the indicator of labour market regulation, a decrease in labour taxation by 1.29 percentage points, and a decrease in the unemployment benefits replacement rate by 6.54 percentage points.

[Table 2 here]

In order to check that our estimates are not driven by omitted variables, in Table 2 we present a set of alternative specifications where we control for political factors that have been shown to be important features of government’s choices of labour market institutions (see Høj et al. [32] and Enikolopov and Zhuravskaya [24]). Columns [1]–[3] add a dummy capturing a left-wing government political orientation (*Left* = 1). Columns [4]–[6] include two variables characterising the phase of the political cycle, i.e. a dummy for less than two

²⁴Computed at the Portuguese averages (1.02 for policy turnover and -0.48 for preference polarisation) and standard deviations (0.09 for policy turnover and 0.40 for preference polarisation), the estimated coefficients in Table 1 (columns [7] to [9]) suggest an effect on labour market regulation of about $-0.22 = 1.03 * (-0.09) + 0.14 * (-0.40) + 0.20 * [(1.02 * (-0.40)) + (-0.48 * (-0.09))]$. Similar calculations apply to labour taxation and the unemployment benefits replacement rate. See Table B-1 for country averages and standard deviations.

years left to the end of the legislature ($Yrcurrt \leq 2 = 1$) and a dummy for less than two years of office by the current government ($Yroffc \leq 2 = 1$). Columns [7]–[9] control for a measure of party strength, i.e. the average age of the main parties in parliament ($Prtyage$). Finally, columns [10]–[12] control for the youth of democracy, proxying for the quality of democratic institutions ($Ydem$).

The magnitude and significance of the indicators of policy myopia are not altered by the additional set of controls. In particular, having a left-wing government, or being at the start of the legislature, shows no statistically significant effect on labour market institutions, although approaching the end of the political cycle is marginally significant. Consistent with the idea that party systems in modern democracies protect the interests of insiders, we find that, beside policy myopia, the average age of the main parties in parliament has an additional (weakly significant) positive association with labour market regulation, and a negative effect on the unemployment benefits replacement rate. Finally, the youth of democracy in a country suggests that a low quality of democratic institutions has an additional effect, which goes in the same direction as policy myopia (see Aidt et al. [4]).

[Table 3 here]

We also check for heterogeneous effects of policy myopia with respect to a country’s legal origins. In Table 3 we interact our policy myopia indicators with *Civil Law* and *Common Law* dummies. The results show a statistically significant larger association of policy myopia with labour market institutions in civil law relative to common law countries.²⁵ This is in line with the idea that common law countries rely more on the functioning of markets, while civil law countries rely more on market regulations (see Glaeser and Shleifer [30], Botero et al. [16]).

While it is often assumed that the political process is exogenous with respect to the determination of labour market institutions (see, e.g. Nunziata [35]), it may be argued that governments jointly choose both labour market institutions and the political setting, so that the same factors that affect policy myopia are also correlated with the design and implementation of labour market policy. In Table 4, we address the simultaneity problem by replacing the current values of our indicators of policy myopia by their predetermined values: i.e. we use five year lags in columns [1]–[3] and ten year lags in columns [4]–[6].²⁶ The results show that the predetermined values of policy myopia affect labour market institutions,

²⁵Note that the effect of policy turnover on the tax wedge is not statistically different between common and civil law countries. Similarly, the effect of preference polarisation on the unemployment benefits replacement rate is not statistically significant between the two law regimes.

²⁶Note that the use of lagged indicators also mitigates any problem of reverse causality, which may run from labour market institutions to policy myopia.

though the statistical power of the lagged indicators is somewhat weaker (in one case, the ten years' lagged preference polarisation indicator has the wrong sign).

[Table 4 here]

We further check the robustness of our results by running a number of additional sensitivity analyses. In Table 5, we enter separately each single indicator we used to construct the aggregate measure of policy myopia. In particular, in columns [1]–[3] we focus on the determinants of policy turnover, in columns [4]–[6] we turn to preference polarisation, while in columns [7]–[9], both sets of indicators are included. Note that some caution is needed when interpreting these results since single indicators are likely to be collinear.²⁷ Also, note that the use of closed list and the degree of party fractionalisation in terms of policy myopia can only be interpreted within a proportional electoral system (see, e.g. Alesina and Glaeser [5], Persson and Tabellini [42]). Conditional on the above, and in line with results from Aidt et al. [4] and Persson et al. [38], we find that the most relevant contribution to policy myopia comes from the adoption of a proportional electoral system, the lack of a winner-take-all rule, as well as measures of the dispersion of the government and the opposition in parliament.

[Table 6 here]

Finally, in Table 6 we report alternative specifications and estimation methods to control for unobserved country specific shocks and omitted variable bias related to unobservables in the economic and political cycles. In particular, in column [1] we add country specific time trends, in column [2] we implement the Correlated Common Effect Pooled (CCEP) estimator (Pesaran [44]), which takes into account the possible presence of cross-sectional correlated error terms. Lastly, in column [3] we replace the economic crisis dummy with other business cycle variables such as the output gap and the real exchange rate. The overall results support the previous findings, suggesting that our estimates are not distorted by unobserved shocks or omitted cyclical factors. In columns [4] and [5] we add the lagged unemployment rate and the lagged government deficit to control for the effect of labour market performance and government expenditures on labour market institutions. The inclusion of these (potentially omitted) variables does not change the effect of the policy myopia indicators. In columns [6]–[8], we check the robustness of the results against the exclusion of selected countries (e.g. New Zealand, Italy and Portugal), which had significant changes in policy myopia over the period considered. In column [9], we exclude the Nordic countries whose political setting may not be characterised by such high policy myopia as the indicators may indicate. Finally,

²⁷For this reason we used a principal component analysis to extract the maximum variance out of the pool of indicators.

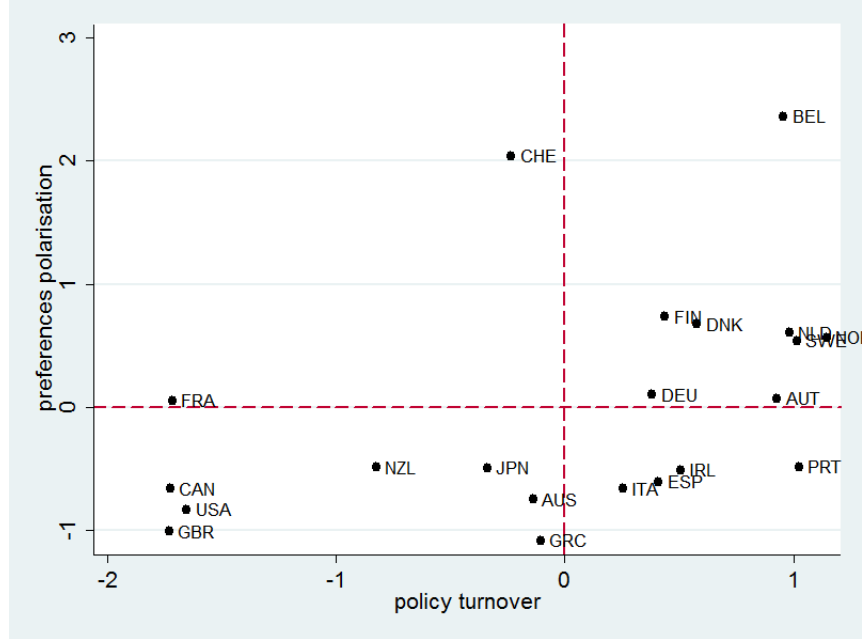
in column [10], in order to investigate the medium-run properties of the estimates, we run our regressions using three-year averages.

5 Concluding remarks

There is an emerging consensus in the public debate that the lack of commitment to far-sighted public policy is partly responsible for the low resilience to negative economic shocks and poor labour market performance of the OECD countries. In this paper we analysed the relation between policy myopia and labour market institutions. We developed a theoretical model where myopia induces a government to choose institutions that allow the creation of rents in the labour market, reducing the resources available for public goods and social expenditure. We empirically evaluated these predictions using panel data for 21 OECD countries. Our results suggest that the long-run efficiency losses due to more labour market regulations and less resources available for public goods and social expenditures, produced by policy myopia, may be substantial. For the average OECD country, an increase by one standard deviation in (the indicator of) policy myopia (comparable in magnitude to New Zealand’s 1993–1996 electoral reform) implies an increase of +1.2 points in the indicator of labour market regulation (which is about 90% of the total variation occurring over the whole period in the OECD countries), a decrease in labour taxation by three percentage points, and a decrease by 11 percentage points in the unemployment benefits replacement rate. These findings have been shown to be robust to a number of sensitivity analyses.

The conclusion that myopic policy making influences the choices of a government in terms of labour market institutions casts some doubts on the view that these are exogenous determinants of a country’s labour market performance. Our findings suggest that unemployment patterns can partly be explained by the political process and policy myopia. This suggests that attempts made by international organisations to urge governments to reform their labour market institutions to alleviate long-term unemployment should take into account their political systems. More myopic policy settings are likely to experience greater resistance to reforming their labour market institutions. This explains why reforms that minimise the opposition from social groups with vested interests, such as two-tier reforms, tend to be more successful.

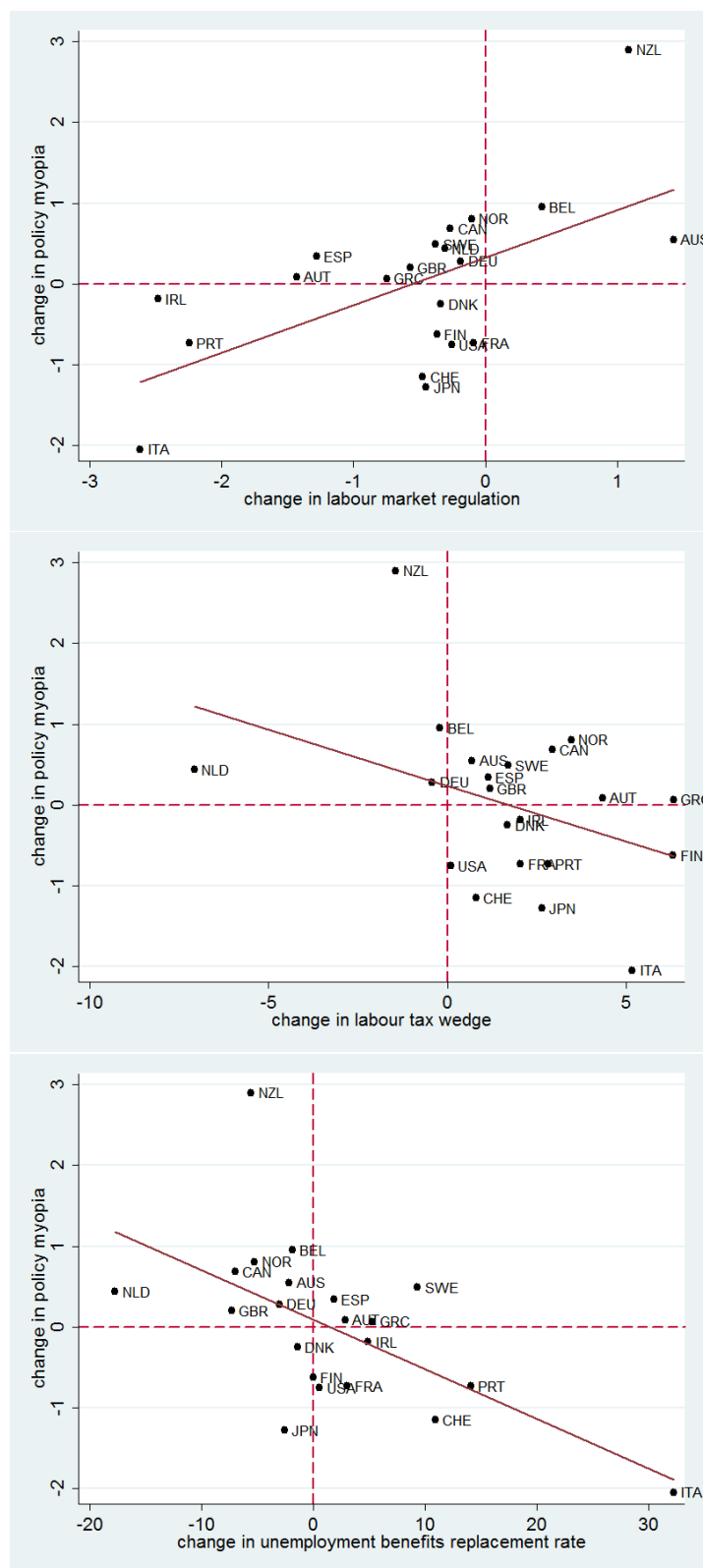
Figure 1: Patterns of policy turnover and polarisation of political preferences



Sources: World Bank DPI.

Notes: Country averages 1985–2006.

Figure 2: Policy myopia and labour market institutions



Notes: Differences between the averages for 2004–06 and for 1985–87

Table 1: Policy myopia and labour market institutions: Main specification

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	μ	τ	ρ	μ	τ	ρ	μ	τ	ρ
Policy Myopia (H)	0.33*** (0.05)	-0.92*** (0.12)	-3.95*** (0.44)						
Policy Turnover (p)				0.87*** (0.12)	-1.48*** (0.32)	-7.13*** (1.39)	1.03*** (0.12)	-2.09*** (0.34)	-8.22*** (1.41)
Preference Polarisation (γ)				0.12*** (0.04)	-0.71*** (0.17)	-2.72*** (0.37)	0.14*** (0.04)	-0.80*** (0.17)	-2.88*** (0.37)
Turnover*Polarisation ($p * \gamma$)							0.20*** (0.04)	-0.78*** (0.16)	-1.38*** (0.39)
R sq.	0.92	0.95	0.93	0.93	0.95	0.93	0.93	0.95	0.93
N	456	456	456	456	456	456	456	456	456

Notes: μ , τ and ρ stand for labour market regulation, the labour tax, and the unemployment benefits replacement rate, respectively. Policy myopia is obtained as the sum of policy turnover and preference polarisation as these are standardised measures with mean 0 and standard deviation 1. OLS estimates with robust standard errors in parentheses. All specifications include dummies EU, Euro and Crisis plus country and time fixed effects. Significance levels: * : 10% ** : 5% *** : 1%.

Table 2: Policy myopia and labour market institutions: Additional political controls

	Political orientation			Phase of the legislature			Party strength			Young democracy		
	[1] μ	[2] τ	[3] ρ	[4] μ	[5] τ	[6] ρ	[7] μ	[8] τ	[9] ρ	[10] μ	[11] τ	[12] ρ
p	1.03*** (0.13)	-2.08*** (0.34)	-8.27*** (1.41)	1.04*** (0.12)	-2.08*** (0.34)	-8.20*** (1.40)	0.96*** (0.12)	-2.05*** (0.39)	-6.50*** (1.08)	1.01*** (0.12)	-2.03*** (0.34)	-8.14*** (1.42)
γ	0.14*** (0.04)	-0.81*** (0.17)	-2.83*** (0.37)	0.14*** (0.04)	-0.79*** (0.17)	-2.82*** (0.37)	0.14*** (0.04)	-0.80*** (0.17)	-2.76*** (0.36)	0.12*** (0.03)	-0.73*** (0.16)	-2.79*** (0.38)
$p * \gamma$	0.20*** (0.04)	-0.78*** (0.16)	-1.37*** (0.39)	0.21*** (0.04)	-0.76*** (0.16)	-1.29*** (0.39)	0.19*** (0.03)	-0.77*** (0.16)	-1.10*** (0.33)	0.19*** (0.03)	-0.75*** (0.16)	-1.34*** (0.39)
$Left$	-0.00 (0.05)	0.08 (0.17)	-0.36 (0.39)									
$Yrcurnt \leq 2$				0.06* (0.03)	0.00 (0.17)	-0.34 (0.41)						
$Yrsoffc \leq 2$				-0.01 (0.04)	-0.12 (0.16)	-0.66 (0.44)						
$Prtgage$							0.10* (0.05)	-0.06 (0.23)	-2.47*** (0.61)			
$Ydem$										0.44*** (0.08)	-1.59*** (0.33)	-1.92*** (0.83)
R sq.	0.93	0.95	0.93	0.93	0.95	0.93	0.93	0.95	0.93	0.94	0.96	0.93
N	456	456	456	456	456	456	456	456	456	456	456	456

Notes: μ , τ and ρ stand for labour market regulation, the labour tax, and the unemployment benefits replacement rate, respectively. Policy Turnover and Preference Polarisation are standardised measures with mean 0 and standard deviation 1. OLS estimates with robust standard errors in parentheses. All specifications also include controls as in Table 1 plus country and time fixed effects. Significance levels: * : 10% ** : 5% *** : 1%.

Table 3: Heterogeneity: Policy myopia, labour market institutions, and legal origins

	[1]	[2]	[3]
	μ	τ	ρ
p^* Civil Law	1.16*** (0.18)	-1.56*** (0.43)	-13.50*** (1.82)
p^* Common Law	0.59*** (0.19)	-2.05*** (0.67)	-0.54 (0.93)
γ^* Civil Law	0.13*** (0.04)	-0.86*** (0.19)	-2.88*** (0.42)
γ^* Common Law	0.11 (0.13)	0.21 (0.52)	-3.08*** (0.85)
R sq.	0.93	0.95	0.94
N	456	456	456

Notes: OLS estimates with robust standard errors in parentheses. All specifications also include controls as in Table 1 plus country and time fixed effects. Significance levels: * : 10% ** : 5% *** : 1%.

Table 4: Predetermined levels of policy myopia and labour market institutions

	5 years lag			10 years lag		
	[1] μ	[2] τ	[3] ρ	[4] μ	[5] τ	[6] ρ
p_{-5}	0.58*** (0.14)	-1.90*** (0.32)	-8.35*** (1.47)			
γ_{-5}	-0.01 (0.05)	0.07 (0.17)	-1.44*** (0.43)			
$p_{-5} * \gamma_{-5}$	-0.02 (0.04)	-0.06 (0.14)	-1.01*** (0.35)			
p_{-10}				0.80*** (0.14)	-1.77*** (0.38)	-6.89*** (1.73)
γ_{-10}				-0.17*** (0.06)	0.33* (0.19)	0.40 (0.61)
$p_{-10} * \gamma_{-10}$				-0.01 (0.05)	0.06 (0.15)	-0.96* (0.52)
R sq.	0.91	0.95	0.92	0.92	0.95	0.90
N	454	454	454	451	451	451

Notes: Robust standard errors in parentheses. All specifications include controls as in Table 1 plus country and time fixed effects. Significance levels: * : 10% ** : 5% *** : 1%.

Table 5: Policy myopia and labour market institutions: Single indicators

	Policy Turnover			Preference Polarisation			Turnover and Polarisation		
	[1] μ	[2] τ	[3] ρ	[4] μ	[5] τ	[6] ρ	[7] μ	[8] τ	[9] ρ
Stabs (p)	-0.01 (0.07)	-0.02 (0.26)	-0.97 (0.66)				-0.00 (0.07)	0.06 (0.26)	-0.92 (0.65)
Invmaj (p)	-0.05 (0.06)	-0.04 (0.28)	-0.66 (0.61)				-0.05 (0.06)	-0.08 (0.28)	-0.70 (0.65)
CL (p)	-0.24 (0.26)	9.61*** (0.69)	1.80 (1.40)				-0.25 (0.24)	10.72*** (0.76)	2.69* (1.43)
Pr (p)	1.21*** (0.34)	-12.26*** (1.00)	-5.90*** (1.62)				1.31*** (0.32)	-12.61*** (1.04)	-6.34*** (1.60)
PrPlu (p)	0.10 (0.08)	0.15 (0.51)	5.14** (2.19)				0.02 (0.09)	-0.02 (0.44)	5.36** (2.12)
Nowtal (p)	1.79*** (0.25)	-3.29*** (0.46)	-27.44*** (2.10)				1.92*** (0.26)	-1.69*** (0.58)	-25.85*** (2.30)
Govdisp (γ)				0.05 (0.08)	-0.47 (0.32)	-1.72* (0.93)	0.16*** (0.06)	-0.62** (0.31)	-2.66*** (0.79)
Oppdisp (γ)				0.07* (0.03)	-0.06 (0.08)	-1.52*** (0.18)	0.10*** (0.03)	-0.11 (0.08)	-1.80*** (0.15)
Oppfrac (γ)				0.21 (0.30)	-2.06*** (0.60)	-2.36 (1.84)	-0.61** (0.28)	-0.93 (0.70)	4.36*** (1.41)
Govfrac (γ)				0.76** (0.30)	-2.03** (0.90)	-7.55** (3.11)	-0.33 (0.21)	-0.93 (0.96)	2.74 (2.60)
Maxpolar (γ)				0.06 (0.08)	-0.15 (0.20)	0.55 (0.46)	0.02 (0.07)	0.03 (0.22)	0.58 (0.45)
R sq.	0.94	0.95	0.94	0.92	0.95	0.92	0.94	0.95	0.95
N	456	456	456	456	456	456	456	456	456

Notes: Robust standard errors in parentheses. All specifications include controls as in Table 1 plus country and time fixed effects. Significance levels: * : 10% ** : 5% *** : 1%.

Table 6: Policy myopia and labour market institutions: Sensitivity analysis

	[1] country spec. time trends	[2] CCEP estimator	[3] economic cycle	[4] unemployment	[5] government deficit	[6] NZL excl.	[7] ITA excl.	[8] PRT excl.	[9] Nordic excl.	[10] 3 years average
Panel A – labour market regulation (μ)										
p	0.60*** (0.19)	1.01*** (0.12)	1.03*** (0.14)	0.97*** (0.14)	0.95*** (0.15)	1.18*** (0.18)	0.64*** (0.14)	1.03*** (0.13)	1.09*** (0.12)	1.11*** (0.16)
γ	0.02 (0.04)	0.14*** (0.04)	0.15*** (0.04)	0.18*** (0.04)	0.16*** (0.04)	0.16*** (0.04)	0.14*** (0.04)	0.14*** (0.04)	0.14*** (0.04)	0.19** (0.07)
$p * \gamma$	0.07** (0.03)	0.20*** (0.04)	0.22*** (0.04)	0.22*** (0.04)	0.22*** (0.04)	0.17*** (0.04)	0.13*** (0.03)	0.20*** (0.04)	0.21*** (0.04)	0.25*** (0.07)
Panel B – labour tax (τ)										
p	-0.78* (0.47)	-1.96*** (0.32)	-2.26*** (0.34)	-2.30*** (0.33)	-1.81*** (0.31)	-1.81*** (0.43)	-2.17*** (0.47)	-2.26*** (0.35)	-2.22*** (0.34)	-2.41*** (0.51)
γ	-0.62*** (0.15)	-0.80*** (0.17)	-0.75*** (0.17)	-0.69*** (0.16)	-0.82*** (0.18)	-0.74*** (0.17)	-0.74*** (0.16)	-0.95*** (0.19)	-0.85*** (0.18)	-0.82*** (0.32)
$p * \gamma$	-0.40*** (0.12)	-0.81*** (0.17)	-0.75*** (0.17)	-0.79*** (0.16)	-0.71*** (0.16)	-0.89*** (0.17)	-0.77*** (0.16)	-0.93*** (0.18)	-0.92*** (0.18)	-0.88*** (0.33)
Panel C – unemployment benefits replacement rate (ρ)										
p	-2.36** (1.01)	-8.08*** (1.48)	-8.28*** (1.40)	-8.48*** (1.42)	-8.35*** (1.47)	-13.20*** (1.79)	-1.01 (0.74)	-8.56*** (1.47)	-8.49*** (1.44)	-9.03*** (2.50)
γ	-0.74** (0.33)	-2.88*** (0.37)	-2.89*** (0.37)	-2.73*** (0.36)	-2.92*** (0.37)	-3.09*** (0.40)	-2.68*** (0.35)	-3.09*** (0.38)	-3.04*** (0.39)	-3.53*** (0.68)
$p * \gamma$	0.25 (0.30)	-1.37*** (0.40)	-1.38*** (0.39)	-1.50*** (0.39)	-1.26*** (0.38)	-0.21 (0.37)	-0.03 (0.30)	-1.63*** (0.44)	-1.68*** (0.43)	-1.97** (0.81)

Notes: All specifications include controls as in Table 1 plus country and time fixed effects. In columns [4] and [5] the unemployment rate and government deficit are lagged by one year. OLS estimates with robust standard errors in parentheses. Significance levels: * : 10% ** : 5% *** : 1%

References

- [1] Abreu, R., and F. David (2010) “Socially responsible behaviour: Labour market in Portugal”, *Polytechnical Studies Review*, Vol. 8 (13), 103–127.
- [2] Acemoglu, D. (2006) “A Simple Model of Inefficient Institutions ”, *Scandinavian Journal of Economics*, Vol. 108 (4), 515–546.
- [3] Aidt, T.S., and J. Dutta (2007) “Policy myopia and economic growth ”, *European Journal of Political Economy* 23, 734–753.
- [4] Aidt, T.S., Dutta, J., and E. Loukoianova (2006) “Democracy comes to Europe: Franchise extension and fiscal outcomes 1830–1938 ”, *European Economic Review* 50, 249–283.
- [5] Alesina, A., and E. Glaeser (2004), *Fighting Poverty in the U.S. and Europe: A World of Difference* Oxford: Oxford University Press.
- [6] Alesina A., and R. Perotti (1993), “Income distribution, political instability and investments”, *European Economic Review* 40(6), 1203-1228.
- [7] Alesina A., and G. Tabellini (1990) “Voting on the budget deficit”, *American Economic Review* 80, 37–49.
- [8] Arpaia A., and G. Mourre (2010), “Institutions and performance in European labour markets: Taking a fresh look at evidence”, *Journal of Economic Surveys* vol. 26 (1), 2–48.
- [9] Azzimonti, M., (2011) “Barriers to Investment in Polarized Societies”, *American Economic Review* 101, 2182–2204.
- [10] Barro, R.J., (1991) “Economic Growth in a Cross Section of Countries”, *Quarterly Journal of Economics* 106 (2), 407–443.
- [11] Bassanini A., and R. Duval (2009), “Unemployment, institutions and reform complementarities: Re-assessing the aggregate evidence for OECD countries”, *Oxford Review of Economic Policy* 25 (1), 40–59.
- [12] Beck, T., G. Clarke, A. Groff, P. Keefer, and P. Walsh (2001) “New Tools in comparative political economy: The Database of Political Institutions”, *World Bank Economic Review* 15, 165–176.

- [13] Besley T., and T. Persson (2009) “The Origins of State Capacity: Property Rights, Taxation, and Politics”, *American Economic Review* 99(4), 1218–1244.
- [14] Blanchard, O., and L. Summers (1986) “Hysteresis and the European Unemployment Problem”, *NBER Working Paper* No. 1950.
- [15] Boeri, T., J.I. Conde-Ruiz, and V. Galasso (2012) “The political economy of flexicurity”, *Journal of the European Economic Association* 10(4), 684–715.
- [16] Botero J., S. Djankov, R. La Porta, F. Lopez de Silanes, and A. Shleifer (2004) “The Regulation of Labor”, *Quarterly Journal of Economics* 119(4), 1339–1382.
- [17] Carey, D., and J. Rabesona (2002), “Tax ratios on labour and capital income and on consumption”, *OECD Economic Studies* No. 35, 2002/2.
- [18] Carmignani, F., (2003) “Political instability, uncertainty and economics”, *Journal of Economic Surveys* 17, 1–54.
- [19] Castles, F.G., and D. Mitchell (1993) “Worlds of welfare and families of nations”, in F.G. Castles (Ed.), *Families of Nations: Patterns of Public Policy in Western Democracies*, Aldershot: Dartmouth.
- [20] Coe, D.T., and D.J. Snower (1997) “Policy Complementarities: The Case for Fundamental labour Market Reform”, *IMF Staff Papers* 44 (1), 1–35.
- [21] Dal Bó, E., and M. Rossi (2011) “Term Length and the Effort of Politicians”, *Review of Economic Studies* 78 (4), 1237–1263.
- [22] Devereux, M., and J.F. Wen (1998) “Political instability, capital taxation and growth”, *European Economic Review* 42, 1635–1651.
- [23] Duval, R., (2008) “Is there a role for macroeconomic policy in fostering structural reforms? Panel evidence from OECD countries over the past two decades”, *European Journal of Political Economy* 24, 491–502.
- [24] Enikolopov, R., and E. Zhuravskaya (2007) “Decentralization and political institutions”, *Journal of Public Economics* 91, 2261–2290.
- [25] Deroose, S., E. Flores, and A. Turrini (Eds) (2006) *Proceedings from the ECFIN Workshop ‘The budgetary implications of structural reforms’*, European Economy—European Commission Directorate-General for Economic and Financial Affairs Publications.

- [26] European Commission (2013) *Annual Growth Survey 2013: Charting the course to recovery*.
- [27] Fabrizio, S., and A. Mody (2006) “Can budget institutions counteract political indiscipline?”, *Economic Policy* 21 (48), 689–739.
- [28] Freeman, R.B., (2008) “Labor Market Institutions Around the World”, *LSE-CEP Discussion Paper No. 844*.
- [29] Gersbach, H., (2004) “Competition of politicians for incentive contracts and elections”, *Public Choice* 121, 157–177.
- [30] Glaeser, E., and A. Shleifer (2002) “Legal Origins”, *Quarterly Journal of Economics* 117, 1193–1230.
- [31] Griffith, R., R. Harrison, and G. Macartney (2007) “Product market reforms, labour market institutions and unemployment”, *The Economic Journal* 117, C142–C166.
- [32] Høj, J., V. Galasso, G. Nicoletti, and T. Dang (2006) “The Political Economy of Structural Reforms: Empirical Evidence from OECD countries”, *OECD Economics Department Working Paper*, No. 501.
- [33] Leblanc, W., J.M. Snyder, and M. Tripathi (2000) “Majority-rule bargaining and the under provision of public investment goods”, *Journal of Public Economics* 75, 21–47.
- [34] Mortensen, D., and C. Pissarides (2001) “Unemployment Responses to ‘Skill-Biased’ Shocks: The Role of Labor Market Policy”. *Economic Journal* 109, 242–265.
- [35] Nunziata, L., (2005) Institutions and Wage Determination: A Multi-country Approach, *Oxford Bulletin Of Economics And Statistics* 67, 435–466.
- [36] OECD (2012) *OECD Employment Outlook 2012*, OECD Publishing. [http : //dx.doi.org/10.1787/empl_outlook – 2012 – en](http://dx.doi.org/10.1787/empl_outlook-2012-en).
- [37] Pagano, M., and P. Volpin (2006) “The Political Economy of Corporate Governance”, *American Economic Review* 95(4), 1005–1030.
- [38] Persson, T., G. Roland, and G. Tabellini, (1997) “Separation of Powers and Political Accountability ”, *Quarterly Journal of Economics* 112(4), 1163–202.
- [39] Persson, T., G. Roland, and G. Tabellini, (2000) “Comparative Politics and Public Finance ”, *Journal of Political Economy* 108(6), 1121–161.

- [40] Persson, T., and L.E.O. Svensson (1989) “Why a Stubborn Conservative would Run a Deficit: Policy with Time-Inconsistent Preferences”, *Quarterly Journal of Economics* 104 (2), 325–345.
- [41] Persson, T., and G. Tabellini (2000) *Political Economics: Explaining Economic Policy*, Cambridge, Mass.: MIT Press.
- [42] Persson, T., and G. Tabellini (2004) “Constitutions and Economic Policy ”, *Journal of Economic Perspectives* 18(1), 75–98.
- [43] Persson, T., and G. Tabellini (2006) “Electoral Systems and Economic Policy ”, in: B.R. Weingast and D.A. Wittman, eds, *Oxford Handbook of Political Economy*, Oxford University Press.
- [44] Pesaran, M.H., (2006) “Estimation and Inference in large heterogeneous panels with a multi-factor error structure”, *Econometrica* 74 (1), 967–1012.
- [45] Saint-Paul, G., (1996) “Exploring the political economy of labour market institutions”, *Economic Policy* 23, 265–315.
- [46] Stern, N., (1987) “The Effects of Taxation, Price Control and Government Contracts in Oligopoly and Monopolistic Competition”, *Journal of Public Economics* 32, 133–158.
- [47] Svensson, L.E.O., (1998) “Investment, property rights and political instability: Theory and evidence”, *European Economic Review* 42, 1317–1341.
- [48] Tsebelis, G., (1995) “Decision-Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartyism”, *British Journal of Political Science* 25, 289–36.
- [49] Tsebelis, G., (2002), *Veto Players: How Political Institutions Work*. Princeton, N.J.: Princeton University Press.
- [50] Tsebelis, G., and E. Chang (2004), “Veto Players and the Structure of Budgets in Advanced Industrialized Countries”, *European Journal of Political Research* 43(3), 449–476.
- [51] Wright, R., (1986) “The redistributive roles of unemployment insurance and the dynamics of voting ”, *Journal of Public Economics* 31, 377–399.

Appendix A Theoretical model

Appendix A.1 Proof of Proposition 1

The second order condition for the concavity of the welfare function is²⁸

$$V''_{\tau\tau} = 2\delta l'_c + [w - v + \delta(\tau + v)] l''_{cc} < 0. \quad (\text{A-1})$$

The negativity of the second order derivative confirms that V is strictly concave in the labour tax, thus V'_τ is invertible. Let $T := (V'_\tau)^{-1}$ be defined in a contour of $\tilde{\mu} > 0$ and $\tilde{v} > \bar{v}$ such that $V'_\tau = 0$, i.e. the maximisation problem (12) admits an interior solution $\tau^* = T(\mu, v)$ for any $\mu > \tilde{\mu}$ and $v > \tilde{v}$ as stated by Proposition 1. When $\mu = 0$ and $v = \bar{v}$, from the first order condition (13) there follows

$$\delta l + \delta(\tau + \bar{v}) l'_c = 0, \quad (\text{A-2})$$

which implicitly defines τ^{max} as in statement (i) of Proposition 1. From (A-2), $\epsilon_{lc}^{\tau^{max}} = -l'_c(\tau + \bar{v})/l = 1$ implies that any tax increase evaluated at $l(\tau^{max} + \bar{v})$ is revenue neutral. From (13), when $\mu > 0$ and $v > \bar{v}$, $\epsilon_{lc}^{\tau^*} = -l'_c(\tau^* + w)/l = 1 - (\delta - 1)(w - v)l'_c > \epsilon_{lc}^{\tau^{max}}$ implies that $\tau^* < \tau^{max}$, as in statement (ii) of Proposition 1. We finally apply the implicit function theorem:

$$\begin{aligned} T'_\mu &= -\frac{\partial V''_{\tau\mu}}{\partial V''_{\tau\tau}} = -W'_\mu \frac{(\delta + 1)l'_c + [w - v + \delta(\tau + v)] l''_{cc}}{2\delta l'_c + [w - v + \delta(\tau + v)] l''_{cc}} = \frac{-W'_\mu[(\delta + 1) + \Omega]}{2\delta + \Omega} < 0, \\ T'_v &= -\frac{\partial V''_{\tau v}}{\partial V''_{\tau\tau}} = -\frac{W'_v[(\delta + 1)l'_c + (w - v + \delta(\tau + v)) l''_{cc}] - (\delta - 1)l'_c}{2\delta l'_c + [w - v + \delta(\tau + v)] l''_{cc}} = \frac{W'_v}{W'_\mu} T'_\mu - \frac{\delta - 1}{2\delta + \Omega} < 0, \end{aligned} \quad (\text{A-3})$$

where $\Omega = [w - v + \delta(\tau + v)] \frac{l''_{cc}}{l'_c} > 0$, which proves statement (iii) of Proposition 1.

Appendix A.2 Expected utility from public goods

Assume party b is in office in period 1. Given its preferences (6), it chooses the combination of public goods g_B^* that maximises (8):

$$g_B^* \equiv (f^b, h^b) = ((1 - \gamma)z, \gamma z). \quad (\text{A-4})$$

²⁸For notational simplicity, in the welfare analysis below we omit the subscript 1 and denote welfare in period 1 simply by V .

If we substitute (A-4) into (5), we obtain party a 's utility from the provision of g_B^* :

$$G_B^a = \left(\frac{1}{\gamma(1-\gamma)} \right) \min[\gamma^2 z \cdot (1-\gamma)^2 z] = \frac{\gamma}{1-\gamma} z. \quad (\text{A-5})$$

It readily follows that $G_B^a < G_A^a$ because $\gamma \in [1/2, 1]$.

Appendix A.3 Proof of Proposition 2

When $v = \bar{v}$, party a 's maximisation problem is

$$\max_{\mu} E[V] \equiv \bar{V}_0 + \eta[\bar{v} + (w - \bar{v})L(\mu, \bar{v}) + \omega(\delta, p, \gamma)Z(\mu, \bar{v})] \quad (\text{A-6})$$

where

$$\begin{aligned} L(\mu, \bar{v}) &= l(w + T(\mu, \bar{v})) \\ Z(\mu, \bar{v}) &= T(\mu, \bar{v})L(\mu, \bar{v}) - [1 - L(\mu, \bar{v})]\bar{v}. \end{aligned} \quad (\text{A-7})$$

The first derivative of (A-6) is

$$V'_\mu = W'_\mu L + (w - \bar{v})L'_\mu + \omega(\delta, p, \gamma)Z'_\mu. \quad (\text{A-8})$$

From (A-7) and (A-3), the derivatives with respect to μ of the left hand sides of the two equations in (A-7) are

$$\begin{aligned} L'_\mu &= l'_c [W'_\mu + T'_\mu] < 0, \\ Z'_\mu &= T'_\mu L(\mu, v) + [T(\mu, v) + v]L'_\mu < 0. \end{aligned} \quad (\text{A-9})$$

Pluggin (A-9) and (A-3) into (A-8) and evaluating this at the optimal tax rule (13) yields, after some simplifications, (17). When $\phi(p, \gamma) = 1$, Equation (13) becomes

$$V'_\mu = \frac{(w - \bar{v})(\delta - 1)l'_c}{\delta} + (\delta - 1)(\tau^* + \bar{v})l'_c < 0; \quad (\text{A-10})$$

that is, labour market regulation has a negative impact on welfare, thus the government chooses the corner solution $\mu^* = 0$, which proves statement (i) in Proposition 2. When $\phi(p, \gamma) < 1$, then, provided that $V''_{\mu\mu} < 0$, the function V'_μ is invertible, and there exists a function $M := (V'_\mu)^{-1}$ in a contour of $\bar{p} < 1$, $\bar{\gamma} < 1$ such that $V'_\mu = 0$. Then the maximisation problem (A-6) admits an interior solution $\mu^* = M(p, \gamma) > 0$ for any $p > \bar{p}$ and $\gamma > \bar{\gamma}$, which

proves statement (ii). Finally, applying the implicit function theorem yields

$$M'_k = -\frac{V''_{\mu j}}{V''_{\mu\mu}} = -\frac{\left[\omega'_j(\tau^* + \bar{v}) - \phi'_j \frac{(w-\bar{v})T'_\mu}{w'_\mu}\right] l'_c}{V''_{\mu\mu}} > 0, \quad k = p, \gamma, \quad (\text{A-11})$$

which proves statement (iii) of Proposition 2.

Appendix A.4 Proof of Proposition 3

Rewrite the optimal tax rule (13) when $v = \rho w$:

$$\delta l = -[w(1 - \rho) + \delta(\tau + \rho w)] l'_c,$$

which defines the equilibrium labour tax $T(\mu, \rho)$. Applying the implicit function theorem yields

$$\begin{aligned} T'_\mu &= \frac{-\Psi'_\mu[(\delta + 1) + \rho(\delta - 1)\Omega]}{2\delta + \Omega} < 0, \\ T'_\rho &= \frac{\Psi'_\rho}{\Psi'_\mu} T'_\mu - \frac{w(\delta - 1)}{2\delta + \Omega} < 0. \end{aligned}$$

The government in period 0 chooses μ and ρ to maximise (21) subject to its budget constraint and the optimal tax rule in period 1. After some simplifications,

$$\begin{aligned} V'_{I\mu} &= \frac{(1 - \omega)\rho}{1 - \rho} + \alpha\pi_0 + (1 - \alpha - \rho\phi)wl'_c - \frac{(1 - \alpha)(1 - \rho)wl'_c}{\delta} + \\ &\quad - (1 - \alpha - \omega)(\tau^* + \rho w)l'_c + (1 - \alpha - \phi)\frac{wT'_\mu l'_c}{\Psi'_\mu}; \end{aligned} \quad (\text{A-12})$$

$$V'_{I\rho} = \Psi'_\rho V'_{I\mu} - \frac{(\omega - 1)(1 - L)w}{1 - \rho} + (1 - \alpha - \phi)w\hat{T}'_\rho l'_c - \frac{\alpha w(\pi_0 - l^*)}{1 - \rho}. \quad (\text{A-13})$$

where $\hat{T}'_\rho = T'_\rho - \frac{\Psi'_\rho}{\Psi'_\mu} T'_\mu = -\frac{w(\delta - 1)}{2\delta + \Omega}$. Provided that the second order conditions are satisfied, when $\phi(p, \gamma) < 1$, the first order condition $V'_{I\mu} = 0$ identifies an interior solution, the first term in (A-13) disappears, and we obtain (22) in the main text. As $V''_{\rho\rho} < 0$, it follows that V'_ρ is invertible and there exists a function $\Upsilon := (V'_\rho)^{-1}$ a contour of $\bar{p} < 1$, $\bar{\gamma} < 1$ such that $V'_\rho|_{\mu^*} = 0$. Applying the implicit function theorem yields

$$\Upsilon'_k = -\frac{V''_{\rho k}}{V''_{\rho\rho}} = -\frac{w}{V''_{\rho\rho}} \left\{ \phi'_k \left[-\frac{\delta(1 - l^*)}{1 - \rho} + \frac{w(\delta - 1)l'_c}{2\delta + \Omega} \right] + \alpha'_k \left[\frac{w(\delta - 1)l'_c}{2\delta + \Omega} - \frac{(\pi_0 - l^*)}{1 - \rho} \right] \right\}, \quad k = p, \gamma.$$

It readily follows that

$$\Upsilon'_k < 0 \text{ if } \alpha'_k > \phi'_k \Theta \text{ where } \Theta = \frac{-\delta(1-l^*)(2\delta + \Omega) + (1-\rho)w(\delta-1)l'_c}{-(\pi_0 - l^*)(2\delta + \Omega) + (1-\rho)w(\delta-1)l'_c} < 0,$$

which proves Proposition 3.

Appendix B Data Appendix

The following variables are drawn from the World Bank DPI (capital letters denote the original variables in the DPI. See Beck et al. [12] for more details).

Pr=1: if a system of proportional representation is adopted ($HOUSESYS = 0$).

ProPlu=1: if a mixed plurality and proportional system is adopted but the majority of seats in the House and the Senate are proportional ($HOUSESYS = 0$ and $SENSYS = 0$).

CL=1: if closed lists are used.

Nowtal=1: if a winner-takes-all system is not adopted ($PLURALITY = 0$).

Invmaj: inverse margin of majority of the executive over the opposition in parliament ($1/MAJ$).

Stabs: percentage of veto players who drop from the government in a given year.

Applying a principal component analysis to these variables, we extract the eigenvector associated with the first eigenvalue (43% of the total variance is explained by the first component), to obtain the following index of policy turnover:

$$0.55 * Pr + 0.54 * PrPlu + 0.39 * CL + 0.48 * Nowtal + 0.12 * Invmaj + 0.04 * Stabs. \quad (B-14)$$

As for preference polarisation, the variables used in the principal component analysis are the following.

Maxpolar=1: if there is a maximum ideological distance between the executive party and the four main parties in the legislature ($POLARIZ = 2$).

Govdisp, Oppdisp: reciprocal of the Herfindal index of the government, respectively, the opposition; that is, the inverse of the sum of the squares of the shares of the seats of each governing, respectively, opposition, party ($1/HERFGOV$, $1/HERFOPP$).

Govfrac, Oppfrac: probability that two deputies picked at random from among the parties in parliament will be from different parties in the government, respectively, the opposition. The score drawn out of the first component (i.e. accounting for 57% of the total variance)

leads to the following index of preference polarisation:

$$0.22*Maxpolar+0.52*Govdisp+0.46*Oppdisp+0.51*Govfrac+0.45*Oppfrac. \quad (B-15)$$

Both variables were rescaled to have zero mean and unit standard deviation as follows: $X_{std} = \frac{X-\bar{X}}{\sigma_X}$ where \bar{X} and σ_X are, respectively, the average and standard deviation of $X = p, \gamma$ over the sample including the 21 OECD countries for the period 1975–2006. Note that the length of the sample period used for the normalisation is motivated by the use of lagged variables throughout the analysis and ensures that the unit of measure used for the political variables is fully consistent with the institutional variables (see below).

Ydem: categorical variable for the youth of the democratic institutions. Equal to 3 if the democracy has been in place for less than 20 years ($TENSYS < 20$); equal to 2 if the democracy has been in place for 20–40 years ($20 \leq TENSYS < 40$); equal to 1 if the democracy has been in place for more than 40 years ($TENSYS \geq 40$).

Prtyage: categorical variable for the age of the parties in parliament. Equal to 1 if $PARTYAGE < 20$; equal to 2 if $20 \leq PARTYAGE < 40$; equal to 3 if $PARTYAGE \geq 40$.

Yrcurnt, Yrsoffc: respectively years remaining of the current legislature and years of office of the current government.

Civil, Common: dummy variable that takes the value 1 if the origin of the legal system is civil law and 0 otherwise, and a dummy variable that takes the value 1 if the origin of the legal system is common law and 0 otherwise. The definitions are based on Botero et al. [16]. The information on labour market institutions is drawn from the OECD *Labour Market Institutions Database* (LMID, see Bassanini and Duval [11]). Since the relevant time series stop in 2003, we updated them to 2006 using original OECD data sources. The synthetic indicator of labour market regulation is derived from the following indicators for regulation in the area of employment and collective relations law:

Eplr: 1–5 summary indicator of the stringency of employment protection legislation of regular workers (Sources: LMID; *OECD Employment Outlook*, 2004 and 2009).

LackCorp: indicator for lack of corporatism in the wage bargaining process, which takes the value 1 for high levels of corporatism, 2 for intermediate levels, and 3 for a low level of corporatism (LMID, *OECD Employment Outlook*, 2004 and 2009).

Undens: Trade union density rate, that is, the percentage share of workers affiliated with a trade union (Sources: LMID; *OECD Employment Outlook*, 2004 and 2009).

These three indicators are standardised to have zero mean and unit standard deviation and summed to obtain the aggregate indicator of labour market regulation.

Ltax: marginal effective tax rate on labour, Carey and Rabesona [17] (Sources: LMID; OECD National Accounts and the OECD Revenue Statistics).

Arr: average unemployment benefits replacement rate, which describes the replacement rate during the first year of unemployment, and the duration of the monetary transfers aggregated over family types (Sources: LMID; OECD Benefits and Wages Database, 2007).

EU, **Euro**: dummies equal to 1 if a country is a member of the European Union and the European Monetary Union, respectively.

Crisis=1: if effective output falls 4 standard deviations below its potential level.

Additional controls used in the analysis include **standardised unemployment rate** (number of unemployed persons as a percentage of the civilian labour force for all countries except Austria, where we use the commonly used definition; Sources: LMID; OECD Main Economic Indicators); the **current deficit** (cyclically adjusted current disbursement - cyclically adjusted current receipts of the general government; sources: LMID; OECD National Accounts 2010); the **output gap** (percentage deviation of effective output from its potential level; sources: LMID; *OECD Economic Outlook, 2009*); the **real effective exchange rate** (Source: OECD, Main Economic Indicators) and **economic shocks** to total factor productivity, terms of trade, real interest rate, and labour demand (Source: LMID).

Table B-1: Means and standard deviations of policy myopia indicators by country: OECD, 1985–2006.

Country	p	γ	H
Australia	-0.14 (0.02)	-0.75 (0.30)	-0.89 (0.30)
Austria	0.93 (0.05)	0.07 (0.24)	1.00 (0.21)
Belgium	0.96 (0.03)	2.36 (0.55)	3.32 (0.53)
Canada	-1.72 (0.05)	-0.66 (0.25)	-2.38 (0.29)
Switzerland	-0.23 (0.02)	2.04 (0.96)	1.81 (0.96)
Germany	0.38 (0.03)	0.10 (0.15)	0.49 (0.15)
Denmark	0.58 (0.06)	0.67 (0.12)	1.25 (0.10)
Spain	0.41 (0.05)	-0.60 (0.27)	-0.19 (0.29)
Finland	0.44 (0.04)	0.74 (0.33)	1.18 (0.30)
France	-1.72 (0.07)	0.05 (0.60)	-1.66 (0.61)
UK	-1.73 (0.04)	-1.01 (0.11)	-2.74 (0.10)
Greece	-0.10 (0.05)	-1.08 (0.15)	-1.18 (0.16)
Ireland	0.51 (0.04)	-0.51 (0.36)	-0.01 (0.36)
Italy	0.26 (0.64)	-0.66 (0.45)	-0.41 (1.05)
Japan	-0.34 (0.05)	-0.49 (0.43)	-0.83 (0.44)
The Netherlands	0.98 (0.05)	0.61 (0.40)	1.59 (0.40)
Norway	1.15 (0.13)	0.57 (0.32)	1.71 (0.40)
New Zealand	-0.82 (0.69)	-0.49 (0.71)	-1.31 (1.33)
Portugal	1.02 (0.09)	-0.48 (0.40)	0.54 (0.46)
Sweden	1.02 (0.04)	0.54 (0.21)	1.56 (0.20)
US	-1.65 (0.06)	-0.83 (0.31)	-2.48 (0.36)
Total	0.00 1.00	0.00 1.00	0.00 1.69

Notes: Standard deviations in parentheses.

1. L. Colombo, H. Dawid, *Strategic Location Choice under Dynamic Oligopolistic Competition and Spillovers*, Novembre 2013.
2. M. Bordignon, M. Gamalerio, G. Turati, *Decentralization, Vertical Fiscal Imbalance, and Political Selection*, Novembre 2013.
3. M. Guerini, *Is the Friedman Rule Stabilizing? Some Unpleasant Results in a Heterogeneous Expectations Framework*, Novembre 2013.
4. E. Brenna, C. Di Novi, *Is caring for elderly parents detrimental to women's mental health? The influence of the European North-South gradient*, Novembre 2013.
5. F. Sobbrío, *Citizen-Editors' Endogenous Information Acquisition and News Accuracy*, Novembre 2013.
6. P. Bingley, L. Cappellari, *Correlation of Brothers Earnings and Intergenerational Transmission*, Novembre 2013.
7. T. Assenza, W. A. Brock, C. H. Hommes, *Animal Spirits, Heterogeneous Expectations and the Emergence of Booms and Busts*, Dicembre 2013.
8. D. Parisi, *Is There Room for 'Fear' as a Human Passion in the Work by Adam Smith?*, Gennaio 2014.
9. E. Brenna, F. Spandonaro, *Does federalism induce patients' mobility across regions? Evidence from the Italian experience*, Febbraio 2014.
10. A. Monticini, F. Ravazzolo, *Forecasting the intraday market price of money*, Febbraio 2014.
11. Tiziana Assenza, Jakob Grazzini, Cars Hommes, Domenico Massaro, *PQ Strategies in Monopolistic Competition: Some Insights from the Lab*, Marzo 2014.
12. R. Davidson, A. Monticini, *Heteroskedasticity-and-Autocorrelation-Consistent Bootstrapping*, Marzo 2014.
13. C. Lucifora, S. Moriconi, *Policy Myopia and Labour Market Institutions*, Giugno 2014.