

Political shocks, share prices and business investment: regression discontinuity evidence from OECD elections

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Abstract

The idea that business investment can be sensitive to political shocks has long been discussed, yet existing empirical works have focused on political uncertainty, rather than political partisanship. In this paper we estimate the ‘average treatment effect’ of left-wing electoral victories on aggregate business investment, using a sample of 215 elections in 14 OECD countries in the period 1960-2013. We focus on a subsample of 107 elections in which the Left’s proposed economic policy was relatively more radical in terms of State intervention in the economy. The remaining subsample, in which the Left is more centrist, is used as a sort of control group. We employ a Regression Discontinuity design in order to avoid selection bias arising from the influence of macroeconomic conditions on electoral results, thus focusing on close elections. We find that left-wing electoral victories tend to cause a significant and economically relevant decrease in business investment growth in the two years following the election. This negative impact on investment is not matched by any significant impact on GDP growth, real interest rates and the share of capital; however it is preceded by a large and statistically significant negative effect on stock market valuations.

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1 Introduction

In 1981, the year in which François Mitterrand was elected as the 21st President and a Left coalition gained an outright majority in the *Assemblée Nationale*, business investment fell sharply in France (Figure 1). Many observers argued that the left-wing political platform of the winning coalition – including widespread nationalizations, higher minimum wage, wealth taxes and substantial expansion of workers’ rights – had prompted a crisis of business’ confidence, halting capital accumulation.¹ As a matter of fact, business investment recovered only in 1983-1984, after Mitterrand made his famous U-turn, completely reversing his initial economic policy.

France’s 1981 election was not a completely isolated case. In several other instances capitalists were suspected of reacting adversely to a government they did not like. Allende’s cabinet in Chile is another classical example – and a dramatic one – of a left-wing government which faced a strong negative reaction in terms of capital flights and falling private investment (Alaluf, 1971). But even in the US, where arguably no major political party is historically hostile to capital, Roosevelt’s attorney general Robert Jackson went as far as to denounce that the 1937 investment slump was the result of an intentional ‘capital strike’ against the New Deal, in his words “*a strike against the government - a strike to coerce political action*” (Jackson, 1938).

The hypothesis that entrepreneurs would tend to reduce investment when faced with institutional changes that reduce their social and economic power and their control over the workforce has long been on the table (Bowles and Gintis, 1986, pp. 88-89; Przeworski and Wallerstein, 1988), however no systematic empirical work has been presented, besides anecdotal evidence from single episodes.

In this paper we look at the behavior of business investment and other macroeconomic variables in the aftermath of 215 general elections in 14 OECD countries in the period 1960-2013. Specifically, our main outcome variable of interest is business investment growth in the eight quarters following an election. We employ state-of-the-art estimates of parties’ policy positions, as provided by Lowe et al. (2011), to identify a subsample of 107 elections in which the Left’s proposed economic policy was relatively more radical in terms of state intervention in the economy. We use the remaining 108

¹See for example Lewis (1983), Benedetti (1982) and Sachs and Wyplosz (1986). The latter note that the 1981-1982 fall in business investment is difficult to explain on the basis of traditional investment models and thus wonder whether “[...] the mere election of a Socialist government, committed to sweeping social changes and income redistribution, prompted a crisis of business confidence among investors”(ibid., p. 277). Interestingly, this interpretation was apparently endorsed by the then French Finance Minister, Jacques Delors, who later argued that “[...] business leaders did not like this change of government. And when there is no confidence, there is no investment”(Halimi, 2007, my translation).

elections, in which the main left party was more ‘neoliberal’, as a sort of control group.

In order to address the simultaneity bias arising from the influence of macroeconomic factors on electoral outcomes, we employ a Regression Discontinuity (RD) design (Hahn, Todd, and Van Der Klaauw, 2001; Imbens and Lemieux, 2008). We exploit the fact that when a political side controls the Parliament, by holding a majority of parliamentary seats, its political power is substantially higher. In parliamentary systems, 13 out of 14 countries in our sample, a (center-)left parliamentary majority sharply increases the chances that a left-wing government, as opposed to a conservative one, is formed after the election – as we will verify empirically. But also in the US, the only presidential system in our sample, holding a parliamentary majority sharply increases the influence of a political side over the policy-making process. We thus look at whether the expected value of investment, conditional on the share of seats won by (center-)left parties, also tends to display a discontinuity at this 50% threshold. Identification of the economic impact of electoral outcomes is thus based on a ‘smoothness’ assumption, meaning that elections won by a close margin should tend to be quite similar in all respects, except for the color of the winning coalition.

Across several different specifications, we find a significant and economically relevant negative effect of left-wing electoral victories on business investment. This effect is large and significant in the ‘interventionist Left’ subsample, but totally absent in the ‘neoliberal Left’ subsample. In the former, year-on-year investment growth tends to be lower by one half of a standard deviation (around 5 percentage points of investment) in the two years following a left-wing electoral victory. If this effect was entirely due to an increase in the probability of formation of a Left government, the treatment effect of a left-wing cabinet on private investment would be quantifiable in around 0.7 standard deviations (little less than 8% of investment). This relevant negative effect on investment is not matched by any significant effect on GDP growth. As a result, left-wing victories tend to cause, on average, a decrease in the share of business investment in GDP.

This effect does not appear to be driven by any confounding political-stability effect. Using the same RD estimation strategy, we show that electoral victories of incumbent political sides do not cause an higher rate of investment with respect to cases in which the color of the political majority changes. In fact, the positive correlation between incumbents’ electoral victories and investment seems to be entirely driven by the influence of macroeconomic factors on electoral outcomes. Importantly, we also show that at the 50% threshold there is no discontinuity in pre-election macroeconomic conditions, consistently with our identifying assumption of ‘smoothness’.

We then explore potential channels of transmission through which political shocks

could influence investment. We find no significant impact of left-wing electoral victories on the real interest rate and the profit share, however we do observe a strong negative impact on stock market valuations. In the three months around the election, a Left victory tends to decrease the growth rate of domestic share prices by around 1.1 standard deviations on average (which amounts to a decrease in their year-on-year growth rate by as much as around 25%). We find this effect to be partly anticipated, notwithstanding our implicit focus on close elections. It is however strongest in the month of the election. Also this negative impact on share prices appears to be absent in the subsample of elections in which the Left is more centrist.

Overall our results suggest that political shocks influence business investment through expectations and business confidence, rather than actual changes in macroeconomic conditions, at least in the short-run.

Structure of the paper We proceed in the following steps. The relevant theoretical arguments are summarized briefly in Section 2. Section 3 relates the present work to the existing empirical literature on the determinants of aggregate business investment and on the economic consequences of political factors. Section 4 discusses identification issues and introduces the regression discontinuity (RD) design that we employ to identify the macroeconomic impact of electoral outcomes. The data employed and the selection of the sample of elections are described in Section 5, which also presents descriptive evidence on investment around elections. Section 6 reports our RD estimates of the effect of electoral outcomes on business investment, GDP growth and the investment share, along with robustness and covariate balance tests. In Section 7 we look at possible channels through which political shocks may impact business investment, namely real interest rates, the capital share of income and stock market valuations. In 7.2 we track the time pattern of the estimated impact on business investment and share prices, by means of a ‘moving-average regression discontinuity’. Section 8 concludes.

2 Arguments on political shocks and business investment

Theoretically, the idea that entrepreneurs would tend to reduce investment when faced with institutional changes that reduce their social and economic power and their control over the workforce has long been suggested (e.g. Bowles and Gintis, 1986, pp. 88-89; Przeworski and Wallerstein, 1988). In this section we review briefly some possible theoretical foundations of this idea.

It is generally acknowledged, and appears rather uncontroversial, that private investment would be discouraged by (the expectation of) policy measures that drastically weaken private property rights. Przeworski argues that

“increased government intervention means precisely that non-market rationality is imposed upon the process of accumulation, that is, that capitalists are forced to make allocations which are suboptimal with regard to profit. Measures of nationalization, distribution of land, and monopolization of credit and foreign exchange by the state threaten the very institution of private profit. Under such circumstances, rational private capitalists will not invest.” (Przeworski, 1985, p. 45).

The point made by Przeworski appears rather uncontroversial: entrepreneurs will not invest if they don't expect to be able to earn a rate of return on invested capital at least equal to the (risk-adjusted) interest rate. This alone does not necessarily imply, however, that investment is a monotonic function of the share of capital,² nor that all kinds of policies that favor labor are always bound to hurt investment.³ Abstracting from the limit case of a government that is committed to undermine ‘the very institution of private profit’, further arguments are therefore needed to justify a sensitivity of investment to political factors. Overall, these arguments can follow three main lines.

First, political shocks may alter some of the relevant data in the profit-maximization problem faced by rational firms. A stylized model that exemplifies this hypothesis is provided by Przeworski and Wallerstein (1988). They analyze the internal consistency of the proposition according to which, given capitalists' profit-maximizing behavior, any attempt to redistribute income away from the owners of capital would produce a fall in private investment. According to their stylized model, the theory is not necessarily true in a static sense: there can be pro-labour policies that, once in place, do not reduce private investment; nevertheless, even in these cases, investment would be reduced during the period in which these policies are anticipated but not yet implemented. While Przeworski and Wallerstein (*ibid.*) focus on direct redistribution policies, evaluations of the potential effect of labor laws on business investment can be found in the industrial relations literature. In particular Budd and Wang (1999, 2004) propose a simple strategic bargaining model, which implies that legislative measures favoring organized labor

²See Pariboni (2015, pp. 22-28) for a critical discussion of the idea that investment is a positive function of the profit rate or of the profit share.

³Some contributions to the recent debate on the costs of income inequality, for instance, suggest that in principle well-designed State intervention could redistribute income in favor of labor without necessarily hurting (or even enhancing) macroeconomic performance. A recent contribution bringing forward this argument is Stiglitz (2016).

can reduce the profit-maximizing level of investment of a representative firm.⁴

Second, political shocks could affect what Keynes famously called ‘animal spirits’— autonomous and self-sustaining waves of optimism or pessimism.⁵ Keynes himself pointed to political events as a major influence on the psychological determinants of business confidence:

“individual initiative will only be adequate when reasonable calculation is supplemented and supported by animal spirits (...). This means, unfortunately, not only that slumps and depressions are exaggerated in degree, but that economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man. If the fear of a Labour government or a New Deal depresses enterprise, this need not be the result either of a reasonable calculation or of a plot with political intent; – it is the mere consequence of upsetting the delicate balance of spontaneous optimism” (Keynes, 1936, Ch.12).

Electoral outcomes may thus influence investment, according to this explanation, through their impact on business confidence.

Third, it is sometimes suggested that capitalists may somehow manage to act collectively, coordinating on reducing investment in order to weaken a government that they see as not acting in their interest, with the aim of undermining its popularity or inducing it to change policy orientation. (This is the hypothesis of a ‘plot with political intent’ that Keynes refers to in the above quote.) It is fair to note that this hypothesis has been debated more often in the popular press than in academic work.⁶ We are aware of no theoretical discussion aimed at evaluating under what conditions, if any, such an agreement could be organized and enforced.

⁴A critical discussion of these theoretical models is beyond the scope of this paper. It is however fair to note that both models rely on potentially controversial assumptions. Przeworski and Wallerstein (1988), by their own admission (*ibid.*, p.27, note 6), confine their analysis to an ‘ultra-neoclassical’ model of the economy, that rules out by assumption an effect of income on investment. The sensitivity of investment to income growth is however considered overwhelming by both the empirical (as noted in Chirinko, 1993) and part of the theoretical literature (for example Romer, 2012, p. 419)). The model proposed by Budd and Wang (1999), instead, appears to rely crucially on the arguably counter-intuitive assumption that each single firm disposes of a fixed quantity of labour, to be combined with a varying (at least ex-ante) quantity of capital. This amounts to assuming decreasing returns to scale, and thus allows the optimal capital stock to be defined univocally by the rate of return on capital, and to bear a monotonic positive relation to the former.

⁵See e.g. Akerlof and Shiller (2009) for a recent contribution supporting the idea that psychological forces can influence macroeconomic outcomes. Farmer (2008) provides a concise review of how animal spirits can drive macroeconomic fluctuations even in general-equilibrium models with rational expectations, because of the possibility of multiple equilibria.

⁶Some old and new examples are Ickes (1938), Frank (2011) and Shlaes (2009).

A further remark is in order, before concluding this concise review of the relevant theoretical arguments. Potential sensitivity of investment to the institutional-political framework is a necessary but not sufficient condition for electoral shocks to be able to influence investment. It is also necessary that different political coalitions propose distinct policy platforms instead of converging, under competitive pressure, to the same position dictated by the preferences of the median voter, as the well-known Downsian ‘policy convergence theorem’ (Downs, 1957) would predict. There is however a vast literature showing that the Downsian prediction of complete convergence relies crucially on strong assumptions, unlikely to hold in actual political systems, and empirical work has generally found a significant degree of policy differentiation (a recent influential contribution is Lee, Moretti, and Butler, 2004).

3 Related empirical literature

This paper can be interpreted as intersecting two strands of empirical literature: that on the determinants of aggregate investment⁷ and that on the impact of political factors on economic variables.⁸

The empirical literature on investment is huge. In a sense, however, its focus has been rather narrow. Most studies have focused on the role of price and quantity variables in influencing the gross investment level of a firm. Mainly, they have been guided by the neoclassical theory of investment. As a consequence, attention was mostly devoted to the quantification of the impact of the cost of capital (which is a combination of the relative price of capital goods, the corporate tax rate and the interest rate) and of Tobin’s q (the ratio between the stock market valuation of a firm and its replacement cost), with mixed results.⁹ Influential deviations from this general trend have been provided by papers studying the effect of financial constraints (following a seminal contribution by Fazzari, Hubbard, and Petersen, 1988) or introducing uncertainty (Pindyck and Solimano, 1993), while some recent studies focus on the implications of non-convex adjustment costs (Caballero and Engel, 1999).

Symmetrically, the literature on the economic impact of political changes has so far paid little attention to investment dynamics. A vast wealth of studies has tested the so-called ‘opportunistic political business cycle’ (incumbent governments would foster

⁷Major recent surveys, reviewing both theoretical and empirical contributions, are Baddeley (2003), Caballero (1999), Chirinko (1993), and Jorgenson (1971).

⁸See for example Alesina and Roubini, 1992; Nordhaus, 1975; Persson and Tabellini, 1990.

⁹See for example Bernanke, 1988; Blanchard, Rhee, and Summers, 1993; Chirinko, Fazzari, and Meyer, 1999; Cummins, Hassett, and Hubbard, 1994; Schaller, 2007

economic expansion before elections) and ‘partisan business cycle’ (after the election of a leftist government both inflation and employment would be higher) theories¹⁰. A more recent strand of literature, focusing on US financial markets, has shown that the election of a Republican President tends to cause significant increases in stock market valuations (Snowberg, Wolfers, and Zitzewitz, 2006).

Relatively less attention has been devoted to the implications of political shocks for investment. Gordon, Weisskopf, and Bowles (1998) offer a theoretical and empirical explanation of US business investment dynamics based on institutional and political factors. Several studies, mainly at the firm-level, have attempted to estimate the impact of unionization on investment, generally finding a negative association (Denny and Nickell, 1992; Fallick and Hassett, 1999; Odges and Betts, 1997). Budd and Wang (2004) focus instead on labor policies. Estimating a fixed-effects model in a panel of Canadian provinces, they find investment to be negatively related to the presence of laws that reduce the ability of firms to break strikes.

More directly related to this paper are the few studies concerned with the impact of electoral outcomes on investment. Most of them, however, have focused on political uncertainty, rather than partisanship. In particular Canes-Wrone and Park (2012) and Julio and Yook (2012) show that pre-electoral uncertainty is associated with lower business investment. An exception is represented by Aubin and Goyeau (1986). Concerned with the French case, they found that in the period 1972-1984 the prospect of an electoral victory of the Left (measured through support for the Left in opinion pools multiplied by the proportion of the electoral term that has elapsed) is associated with a significant decrease in business investment in France, in a time-series regression controlling for output growth and the interest rate. Reverse causality is an obvious potential problem afflicting Aubin and Goyeau’s paper: the association that they find between support for the Left and weak investment could be due to the fact that when the economy weakens the electorate moves leftward, especially if the Left tends to be at the opposition, as in the period they study. Another exception is Pinto and Pinto (2008), which shows that, contrary to received wisdom, more foreign direct investment (FDI) tends to flow in countries ruled by left-wing governments. Their suggested interpretation is that left-wing governments tend to substitute domestic capital with foreign capital. However they correctly warn that their results reveal a correlation, not necessarily a true causal effect.

¹⁰See Nordhaus, 1975, Persson and Tabellini, 1990 and Alesina and Roubini, 1992 regarding the former and Alesina, Londregan, and Rosenthal, 1993 regarding the latter

4 Identification problems and research design

Endogeneity Our aim is to assess whether business investment dynamics are influenced by political shocks using panel data on 14 OECD countries. Such an analysis faces a major identification problem: electoral outcomes are not exogenous to economic factors. There is ample evidence that macroeconomic conditions affect the probability of an incumbent to be re-elected (see for example the literature survey in Lewis-Beck and Stegmaier, 2000). Moreover, the state of the economy could influence relative support for left-wing versus conservative parties.¹¹ Pre-election economic conditions (including unobservable expectations on future growth and employment) influence both electoral outcomes and post-election investment dynamics.

Figure 2 displays, as an example, investment dynamics around the elections that brought to the formation of the first Thatcher and Reagan governments. Clearly, these elections happened in a context of deteriorating macroeconomic conditions, translating in a falling rate of investment; and it is widely acknowledged that bad economic conditions played a role in allowing Thatcher and Reagan to win office, beating the incumbent parties.¹² Not taking into account the fact that these electoral outcomes were partly determined by economic conditions would probably result in severely biased estimates of their effect on investment (in these two examples probably an underestimation).

RD design Our strategy for tackling endogeneity is based on a Regression Discontinuity design (Hahn, Todd, and Van Der Klaauw, 2001; Imbens and Lemieux, 2008; Lee, 2008). Assume that after each election a treatment is administered to the economy, with a potential impact on macroeconomic outcomes. Treatment can be of two possible types, L (left-wing) or C (conservative). We represent it through a dummy variable $[D]$ that takes value 1 if L treatment is administered and 0 otherwise. Treatment effects are potentially heterogeneous across countries and periods, depending on variation in economic policy within each political side and different economic conditions. However we are interested in the average treatment effect

$$ATE = E[I(1)_{i,e} - I(0)_{i,e}] \quad (1)$$

¹¹For example Pacek and Radcliff (1995) argue that better macroeconomic conditions could increase participation rates, which in turn have been shown to positively affect vote for the Left.

¹²The well-know 1979 campaign poster of the UK Conservative Party, displaying a long snaking queue at an unemployment office accompanied by the slogan ‘Labour isn’t working’ is considered one of the most successful political advertising campaign of all times (Gibson, 1999), an example of how bad macroeconomic conditions can play against the incumbent government.

where $I(1)_{i,e}$ is the investment that would be realized in country i after election e if L won, and $I(0)_{i,e}$ is the investment that would be realized if C won.

Obviously, however, we cannot observe both outcomes for the same unit simultaneously, but only the realized one. Formally, for each election $\{i, e\}$ we observe

$$I_{i,e} = (1 - D) \cdot I_{i,e}(0) + D \cdot I_{i,e}(1) = \begin{cases} I_{i,e}(0) & \text{if } D_{i,e} = 0 \\ I_{i,e}(1) & \text{if } D_{i,e} = 1 \end{cases} \quad (2)$$

In order to estimate our causal effect of interest $[ATE]$ a simple comparison of average outcomes conditional on treatment status would not work. As discussed above, pre-determined macroeconomic factors may influence both the probability of receiving treatment and the after-election investment rate, introducing selection bias.¹³

For each election, however, we also observe the scalar $[X_{i,e}]$, the share of parliamentary seats won by center-left parties. The probability that treatment L is administered to the economy depends (imperfectly) on whether center-left parties win a majority of parliamentary seats, i.e., whether X_i crosses the 50% threshold. The probability of observing $[D = 1]$, therefore, jumps discontinuously at the threshold:

$$\lim_{x \downarrow 0.5} Pr(D_i = 1 | X_i = x) \neq \lim_{x \uparrow 0.5} Pr(D_i = 1 | X_i = x) \quad (3)$$

Our crucial identifying assumption is smoothness or, more precisely, continuity of the conditional regression function at the threshold:

$$E[I(0)|X = x] \text{ and } E[I(1)|X = x] \text{ are continuous in } x \text{ at } x_0 = 0.5 \quad (4)$$

Under this ‘smoothness’ assumption, the rule in eq.3 implies that the average treatment effect at the threshold can be expressed as the jump in the conditional expectation of the outcome, divided by the jump in the conditional expectations of treatment:

$$ATE_{rd} = E[I(1)_{i,e} - I(0)_{i,e} | X = x_0 = 0.5] = \frac{\lim_{x \downarrow 0.5} E[I | X = x] - \lim_{x \uparrow 0.5} E[I | X = x]}{\lim_{x \downarrow 0.5} E[D | X = x] - \lim_{x \uparrow 0.5} E[D | X = x]} \quad (5)$$

¹³In other words,, economies that received treatment L may be systematically different with respect to those that received treatment C . This selection bias can be written as $E[I_{i,e}(0) | D_{i,e} = 1] \neq E[I_{i,e}(0) | D_{i,e} = 0]$. So a simple comparison of mean observed investment $E[I_{i,e} | D_{i,e} = 1] - E[I_{i,e} | D_{i,e} = 0]$ would yield the sum of two effects: the portion of the difference between treated with C and treated with L that is due to treatment (i.e., our effect of interest, ATE), plus the portion due to pre-determined factors which render economies picking L systematically different from economies picking C (i.e., the selection bias).

Where ATE_{rd} is the average causal effect of the treatment at the discontinuity point.¹⁴

The two conditional expectation functions forming the ratio in the right side of eq.5 can be approximated by appropriate regression functions. In particular, eq.5 can be calculated empirically as the jump in a regression of $I_{i,e}$ on $X_{i,e}$ at $x_0 = 0.5$, divided by the jump in a regression of D on X at the same threshold value. This is equivalent to using the indicator variable [$Z = I(X \geq 0.5)$] as an instrumental variable for D .

A natural interpretation of D is that it represents an indicator for whether a left-wing government is formed after the election. Indeed, under the assumption that the only relevant effect of a center-left (conservative) parliamentary majority is to greatly increase the probability that a left-wing (conservative) government is formed, we could observe D by looking at the color of the government that is formed after the election, and thus estimate the ratio in eq.5.

However this assumption (this exclusion restriction, according to the instrumental-variables interpretation of eq.5) does not appear to be fully satisfied in our sample. Even when left and center-left parties do not manage to form a government, the fact that they have a majority of seats in Parliament can have relevant implications, as the role of Parliaments is obviously not limited to electing Prime Ministers. Indeed our sample includes one presidential system – the US – where control of the House gives relevant political power to a Party, even if it does not imply control of the White House.

For these reasons, we will focus mainly on estimating the numerator of eq.5 – the effect of a center-left parliamentary majority on investment – which in the light of eq.5 might represent a conservative estimate of the average treatment effect of the Left being in power. We will present also estimates of the first stage (the denominator of eq.5), that is, the effect of a center-left majority on the probability that a left-wing government is formed, and of the ATE of left-wing governments. However we don't emphasize this latter measure too much, as the exclusion restriction – the assumption that a center-left parliamentary majority affects the economy only by facilitating the formation of a Left-led government – certainly does not hold for all observations.

Defining political change A further potential problem is related to the identification of relevant political variation. We are interested here in the effect of left-wing pro-labour parties, as opposed to pro-business conservative ones, being in power. This could influ-

¹⁴As pointed out by Lee (2008), being x a continuous variable, $x = x_0$ is actually a measure-zero event, so it is somehow misleading to define ATE_{rd} as the average treatment effect for units with $x = x_0$. More appropriately, ATE_{rd} can be seen as a weighted average treatment effect for the entire population, with weights equal to the probability of picking a value near to x_0 (ibid., p. 680).

ence investment, as discussed in Section 2, because of possible consequences on property rights, capital taxation, labor laws and business confidence. It is dubious that we can identify this kind of political variation just by looking at whether a party is traditionally labeled as (center-)left or conservative, mainly because of the ideological shift that most major western left parties have undertaken in recent decades (Mudge, 2011; Scanlon, 2001; Schmidtke, 2002). Consider, as an example, the UK Labour Party. From the columns of the *New Left Review*, in November 1965, Robert Rowthorn argued that “when the Labour Party came to power last year, it was widely believed in the Labour movement that this was the beginning of a long period of socialist construction”. Obviously such a statement could never have been referred to the post-1994 ‘New’ Labour.¹⁵

To address this problem we identify, in our sample of elections, a subset of episodes in which the electoral platform of the major left party was relatively more radical in terms of property rights, market regulation and State intervention in the economy, employing to this end the estimates of policy positions proposed by Lowe et al. (2011). In this way we will attempt to distinguish the left-wing ‘old’ Labour from the centrist New Labour, and in general socialist and social-democratic parties from centrist ‘third way’ left parties.

5 Data, selection of electoral events and estimation method

5.1 Data and sources

Macroeconomic variables As an indicator of business investment dynamics – our main outcome variable of interest – we employ the percent change in private non-housing investment over the same quarter of the previous year (i.e., the year-on-year quarterly growth rate). Private non-residential investment data for 14 OECD countries for the period 1960-2013 are taken from the OECD Economic Outlook.¹⁶ In the case of the US, comparable data from the Bureau of Economic Analysis (BEA) allow us to expand the series backwards to cover the period 1919-2013.

Data on quarterly real GDP growth and monthly domestic stock market indexes

¹⁵For example Eric Hobsbawm is quoted in Hall (1998, p. 11) as arguing that “New Labour is not a centre-left government in any traditional sense”.

¹⁶Of the countries for which the OECD EO provides aggregate business investment data, we exclude only South Korea, due to its particular political structure and lack of any major left-wing party, potentially able to win an election, in the period considered. In a previous preliminary draft of this work (still available at <https://www.umass.edu/economics/sites/default/files/Girardi.pdf>) we included South Korea, with no changes in the sign and significance of the main results.

are taken from the OECD online database¹⁷; the share price index is deflated using the Consumer Price Index (including all items) provided by the OECD. The source of (annual) profit share data is the AMECO database.¹⁸ The real interest rate is proxied by the annual yield on 10-year government bonds, net of the rate of inflation (as measured by the y-o-y percent change in the Consumer Price Index); both variables come from the OECD and were retrieved from the Federal Reserve Economic Data (FRED)¹⁹. Series on GDP, share prices and real interest rates for the US are extended backwards, to match the time extension of the investment series, using the historical data provided by Balke and Gordon (1986).

Election data We consider the 227 general elections that occurred during our investment sample period. The estimates of policy positions provided by Lowe et al. (2011), available for 215 of these elections, are used to distinguish traditional left parties from ‘third way’ centrist left parties.²⁰ Specifically, we select those elections in which the indicator ‘state intervention in the economy’ for the main (center-)left party is above its median value.²¹ The resulting ‘interventionist Left’ sub-sample comprises 107 general elections.²²

To calculate the share of seats won by left and center-left parties, we use the Manifesto Project database (Lehmann et al., 2015).²³ We include in the calculation the major left party plus, when present, other left and center-left parties. In cases in which there is a stable center-left electoral alliance (e.g. the *Union de la gauche* – Left Union

¹⁷Available at <http://stats.oecd.org/>

¹⁸Available at http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm. In particular, we calculate the profit share as the ratio of Adjusted Net Operating Surplus to nominal GDP.

¹⁹Available at <https://research.stlouisfed.org/fred2/>. In cases in which 10-year government bond yields data were not available from the OECD, we employ those provided by the IMF Financial Statistics (retrieved from FRED). In country-quarters in which also the latter are unavailable, we interpolate them on the basis of the Central Bank target rates (provided by the OECD and retrieved from FRED) using linear regression.

²⁰Lowe et al. (2011) build their measures of parties’ positions using Manifesto Project (MP) data (Lehmann et al., 2015). Specifically, they use a ‘logit scale’, which they show to be superior to other existing methods for scaling continuous policy positions from coded political text. The dataset was retrieved from <http://hdl.handle.net/1902.1/17073>

²¹This index aggregates several policy dimensions related to economic policy, as corporate taxes, private property, market regulation and state intervention in general. Actually, this indicator assigns lower values to parties that propose higher State intervention. So we actually select episodes in which the value of this indicator is below its median value according to their database.

²²Of course this is an arbitrary choice and it does not ensure that all left parties in the ‘interventionist Left’ subsample are characterized by interventionist policies, but it should ensure that they are on average to the Left of those in the ‘neoliberal Left’ subsample.

²³Specifically the version contained in Lowe et al. (2011), retrieved from the url indicated in note 20.

– in France), we take the parliamentary seats won by this coalition. In other cases, we include all centre-left and left parties, also if not bound by an electoral pact. Table A2 indicates which party we have considered, in each country, as the main left party and which parties were included in the calculation of the (center-)left share of parliamentary seats.

The World Bank’s Database of Political Institutions (DPI) is used to classify governments as either Left-led or Conservative-led. The DPI classification is based on the affiliation of the head of government²⁴. The World Bank DPI covers the period 1975-2012. We extend the series to the 1960-2013 period by collecting information from different sources.²⁵

In three cases in our sample (Netherlands 1977; Norway 1985; Belgium 2010) elections gave rise to extraordinary long stalemates, leaving the country without an elected government for long periods (208 days in Netherlands in 1977; 240 days in Norway in 1985-86; 541 days in Belgium in 2010-2011 – this latter is a World record). The presence of these three cases in the sample may raise concerns, given that they represent extreme cases of political uncertainty that could distort estimates. We try three options: dropping them from the sample; including them and leaving the date of the political shock equal to the date of the election; including them but postponing the date of the political shock to the date in which a government was finally formed. Reassuringly, all our results turn out to be insensitive to this choice. Our preferred option is to exclude these three elections, and we do so in the estimations presented in the remainder of this paper.

Table A1 provides a list of all elections in our sample, together with: the value of the ‘state involvement in the economy’ index for the main left party; the share of seats won by center-left parties; the election result based on the color of the government that was formed after the election.

5.2 Descriptive statistics and evidence of reverse causality

Table 1 reports the distribution of elections in our sample by country and by outcome, while Table 2 presents descriptive statistics on our variables of interest.

To provide a preliminary overview of the data, Figures 3 display event-study graphs, plotting average investment dynamics around elections. We consider separately all possible combinations of two outcome categories (Left/Conservative; Continuation/Change).

²⁴While the DPI classifies the US Democratic Party as Center, we classify it as Left, because it occupies the left of the US political spectrum.

²⁵Specifically, we extract the information necessary to extend the DPI series from Swank (1950-2011), and apply the same criteria employed by the DPI. For years in which neither the DPI nor Swank provide the data, we use Wikipedia.

Not surprisingly, clear pre-election trends are apparent, suggesting that electoral outcomes are endogenous to economic conditions. In particular, left-wing continuations tend to be preceded by above-average and increasing investment growth; conservative changes, to the contrary, tend to be preceded by below-average and decreasing investment. These trends appear consistent with a positive effect of macroeconomic conditions on both government continuations and Left victories.

5.3 Estimation method

We estimate the following reduced form relation between election results and macroeconomic outcomes

$$I_{i,e,q} = \alpha + \gamma Z_{i,e} + f(x_{i,e}, m_{i,e,q}) + \epsilon_{i,e,q} \quad \text{for } 1 \leq q \leq 8 \quad (6)$$

where $I_{i,e,q}$ is the realization of the outcome variable q quarters after election e in country i ; x is the left share of parliamentary seats; Z is an indicator equal to 1 if $x \geq 0.5$ and 0 otherwise; m is a vector of additional control variables; $f()$ is a potentially non-linear function that we approximate through kernel-weighted local linear regression.²⁶

Under the assumption of ‘smoothness’ (eq.4), γ is an unbiased estimate of the local average treatment effect of a left parliamentary majority on investment.

We also estimate the first stage relation

$$D_{i,e} = \lambda + \beta Z_{i,e} + g(x_{i,e}, m_{i,e}) + \eta_{i,e} \quad \text{for } 1 \leq q \leq 8 \quad (7)$$

where $D_{i,e}$ is a dummy equal to 1 if a left-lead government is formed after election e . Two-stage Least Squares (2SLS) estimation of 7 and 6 would allow us to recover the local ATE of left-wing governments (equal to $\frac{\gamma}{\beta}$). The exclusion restriction that must be imposed to identify the latter, however, is unlikely to completely hold in our sample, as discussed in Section 4 above. So we focus mainly on the reduced form relation in eq.6 and present the 2SLS estimation of the ATE of Left governments only as a potentially useful, although possibly upward-biased, indication.

²⁶Specifically, we employ a triangular kernel. Results are however robust to using a rectangular kernel.

6 Effect on business investment

6.1 Baseline results

Results on the impact of electoral outcomes on subsequent business investment growth are displayed in Table 3. Columns 1 to 4 include the whole sample of elections. Columns 5 to 8 focus on our sub-sample of interest, the elections in which the Left’s proposed economic policy was relatively more radical (the ‘interventionist Left’ subsample). Estimations in columns 9 to 12 are performed on the elections in which the main left party was more centrist (the ‘neoliberal Left’ subsample).

In each subsample, we try four different specifications: employing the optimal bandwidth, defined as in Imbens and Kalyanaraman (2012), without including control variables (columns 1, 5 and 9);²⁷ reducing the bandwidth by one half with respect to the optimal one (columns 2, 6 and 10); using the optimal bandwidth and controlling for decade fixed effects (columns 3, 7 and 11); using the optimal bandwidth and controlling for decade fixed effects and for the average growth rate of business investment in the year preceding the election (columns 4, 8 and 12).²⁸

Standard errors are clustered by country. The small number of clusters, which may result in underestimated standard errors (Cameron and Miller, 2015, p. 341), is an obvious concern.²⁹ We address it by reporting, for each specification, the p-value for the reduced form effect estimated through the wild cluster bootstrap procedure (Cameron, Gelbach, and Miller, 2008)

In the whole sample of elections, the effect of a center-left parliamentary majority on business investment is negative in all specifications (with a point estimate that varies between -0.12 and -0.50) but far from statistical significance. In the ‘interventionist Left’ subsample, however, the estimated effect is stronger (point estimates between -0.44 and -0.77) and statistically significant. In our preferred specification, which controls for decade effects and pre-election investment growth, the presence of a left parliamentary majority causes a decrease by 0.48 standard deviations in business investment growth, with a wild-bootstrap p-value of 0.005. The estimated effect is similar in the specifi-

²⁷Note that the inclusion of control variables is *not* necessary to obtain unbiased estimates of the local effect of interest in a RD design. However it may improve precision. (Lee, 2008, p. 682)

²⁸Country fixed effects are likely to be very relevant in explaining the *level* of investment. However country fixed effects in levels are already controlled for by taking growth rates. That is why we don’t include them as additional regressors.

²⁹Elections from 14 countries are included in the analysis. However, estimation of local linear regressions – thus focusing only on close elections – implies that not all elections (and thus countries) are included in all specifications. Tables 3 to 8, which report results, indicate the number of elections and countries that fall within the chosen bandwidth in each local regression.

cation without controls (-0.44), while it is higher when including only decade effects (-0.71) and when reducing the bandwidth by one half (-0.77). In the latter case, as expected, it is also less precisely estimated. In the 'neoliberal Left' subsample we find no negative effect of Center-Left electoral victories on investment: point estimates are slightly positive and completely insignificant (with a wild bootstrap p-value that varies between 0.56 to 0.83 across specifications).

The first stage relation is strong and significant in all sub-samples. Point estimates suggest that when the (center-)left share of parliamentary seats crosses the 50% threshold, the probability that a Left-led government is formed jumps by between 47% and 68%. Under the (debatable) assumption that the treatment only works through an higher probability of a left-wing government, we can scale the reduced form effect by the first stage. The implied average treatment effect of left-wing governments is -0.74 standard deviations in our preferred specification (column 8) and varies between -0.66 and -1.61 in the other specifications.

The effect of a center-left parliamentary majority on the probability of formation of a Left-led government in the whole sample is displayed graphically in Figure 4 panel (a), while the effect on business investment is displayed separately for the two sub-samples in Figures 5. The depicted regression lines are estimated using kernel-weighted local linear regression with the optimal bandwidth. In Figures 5 business investment is residualized on decade effects and pre-election investment growth, in analogy with our preferred specification.

6.2 Robustness

Figures 6 display graphically the robustness of the main result— the effect of electoral outcomes on investment in the 'interventionist Left' sub-sample – to different specifications. For greater transparency, these graphs show the discontinuity in the raw data (i.e., without residualizing on control variables). In panel (a) kernel-weighted regression lines employ the optimal bandwidth; in (b) the bandwidth is reduced by one half; (c) increases the bandwidth by one third; in panel (d) the expected value of investment growth is modeled through a simple linear trend, instead of the flexible kernel-weighted local regressions used in the baseline; (e) depicts a quadratic trend instead; (f) employs again kernel-weighted regression with optimal bandwidth, but excludes all observations in which the outcome variable deviates by more than 3 standard deviations from the sample mean; column (g) excludes the US from the sample, given its difference in terms of both electoral system (presidential rather than parliamentary) and policy positions

with respect to the other countries in the sample; in (h) we instead exclude Swedish elections, that are characterized – as we will see below – by an high number of close left victories in our sample period. Clearly, the negative discontinuity in business investment growth survives all these specification changes.

6.3 Covariate balance and density of the forcing variable

Covariate balance The identification assumption of smoothness implicit in our RD design (eq.4) can to some extent be tested by assessing the presence of discontinuities in pre-determined relevant factors at the threshold. In other words, we can test whether close elections were actually similar in terms of the state of the economy before the election. Symmetrically with what we did in the main regression, we look at macroeconomic variables in the 8 quarters *before* elections. We are thus estimating eq.6, but this time for $-1 \geq q \geq -8$. We estimate the same four specifications employed in the baseline regressions (even though obviously the fourth one, controlling for pre-election investment growth, makes little economic sense).

In Table 4, columns 1 to 4, we test for a discontinuity in pre-election income growth – the single most important determinant of investment according to a large empirical literature. Coefficients are small (with point estimates between -0.04 and 0.22) and far from statistical significance. T-statistics based on cluster-robust standard errors vary between 0.12 and 0.88 across specifications; wild bootstrap p-values between 0.26 and 0.97.

In columns 5 to 8 we test for a discontinuity in pre-election investment growth, as empirically estimated investment functions usually display strong autocorrelation.³⁰ In this case the estimated discontinuity is consistently positive (point estimates between 0.06 and 0.32) but never statistically significant. T-statistics vary between 0.5 and 1.47 across specifications; wild bootstrap p-values lie between 0.15 and 0.58.

Columns 9 to 12 focus on the real interest rate. Point estimates are small and negative (between -0.30 and -0.21 in the different specifications) and also in this case never statistically significant. T-statistics are between -1.37 and -0.61; bootstrap p-values are between 0.33 and 0.64.

To sum up, throughout different specifications we don't find any statistically significant discontinuity in relevant pre-determined macroeconomic variables. Consistently with our identification assumption, close elections appear to be similar in terms of pre-election GDP growth, investment growth and interest rate.

³⁰In our case autocorrelation is partly induced by having taken year-on-year growth rates.

Density of the forcing variable Another assessment of the validity of the RD design consists in testing for a discontinuity in the distribution of the forcing variable (the share of parliamentary seats won by center-left parties) at the threshold. Such a discontinuity, if significant, may signal the possibility of systematic manipulation of electoral results, in a way that may undermine the RD identifying assumption. We thus perform the formal test proposed by McCrary (2008) for a discontinuity in the density of the forcing variable at the threshold.

The point estimate for the discontinuity is 0.49 with a standard error of 0.34. Although this is *not* statistically significant at any conventional level (the resulting t-stat is 1.4), the magnitude of the discontinuity, depicted in panel (a) of Figure 7, may still raise concerns. As can be inferred from Table A1, however, the high number of very close Left electoral victories (as compared to very close conservative victories) that generates this discontinuity is due to one single country, Sweden. Indeed, when dropping Swedish elections from the sample, as done in panel (b) of Figure 7, the estimated discontinuity sharply decreases to 0.18, with a standard error of 0.38 (t-stat 0.47). We found no evidence, in the literature, of electoral manipulation in general elections in Sweden in our sample period. In fact, in the Quality of Elections Database (QED), built by Kelley (2014) on the basis of international election monitoring reports, all Swedish elections are coded as good quality, and no manipulation problems are signaled in any of them.³¹ Moreover, as shown in panel h of Figure 6, our baseline result is robust to excluding Swedish elections from the sample.

6.4 Effect on GDP growth and investment share

We have found that left-wing electoral victories tend to cause a significant and economically relevant decrease in business investment growth in the two years after the election. It is natural to ask if there is also some systematic effect on GDP growth.

Columns 1 to 4 of Table 5 report estimates of equations 6 and 7 with quarterly GDP growth in the two years following election as the outcome variable, focusing on the sub-sample of interest. We try the same four alternative specifications employed in estimating the effect on investment. The effect on GDP growth is negative in size, with point estimates between -0.32 and -0.49 (standard deviations), but not statistically significant. T-statistics vary between -0.86 and -1.77 across specifications, while boot-

³¹In particular, we look at the variables *a1* ('overall election quality') and *a2* ('extent of the problems') in the QED. Eight Swedish general elections are covered by the QED database (from 1979 to 2002) and they all score 0 (the best possible value, meaning that the election 'represents the will of the people' and 'the assessment does not note any problems') on both variables.

strap p-values vary between 0.18 and 0.69.

In columns 5-8 we look instead at the effect on the share of business investment in GDP. In particular, we employ the year-on-year change in the investment share as the outcome variable. Consistently with a statistically insignificant negative effect on GDP, smaller than the effect on investment, we find that Left electoral victories are associated with a sizable but not statistically significant decrease in the investment share, with point estimates between -0.22 and -0.57.

These results are displayed graphically in Figures 8. Panel (a) depicts the discontinuity in GDP growth at the threshold. As suggested by the results reported in Table 5, it is not very clear whether there is actually a true discontinuity. The discontinuity in the investment share, depicted in panel (b) of Figure 8, appears larger and more clear, however as we have seen local regression results suggest that it is not significant.

Overall these results seem to suggest that the effect of left-wing electoral victories on subsequent GDP growth displays high variance. This is consistent with the hypothesis that the negative effect on business investment growth does not necessarily result in a decrease in GDP growth, but often only a reduction in the investment share.

6.5 Test for a confounding political-stability effect

Figures 3 would suggest that investment is stronger after government continuations. As already mentioned (Section 4), this effect is likely to be driven by selection bias: a better state of the economy helps the incumbent political side to win re-election. Still, another mechanism could simultaneously be at work. The re-election of an incumbent government, whatever its color, could encourage private investment, relative to a government change – for example because of lower policy uncertainty and/or established connections. Indeed it is widely held that political stability can be beneficial to investment, even though this argument probably applies more cogently to unstable developing countries than to advanced economies.

We test this hypothesis for two reasons. First, if supported by evidence, it could potentially provide new valuable insights on the influence of political factors on investment. Second, in our sample the share of government continuations is higher among conservative victories than among (centre-)left victories, even if not dramatically: 71% against 62% across all elections; 72% against 68% in the ‘interventionist Left’ sub-sample. If we found a significant and positive government-continuation effect, and if this effect was much stronger than the political effect that we have estimated, the estimated political effect could actually be driven by the stability effect. We thus employ our regression-

discontinuity strategy to test this hypothesis.

Results for the whole sample and for both sub-samples are reported in Table 6. When the share of seats won by the incumbent political side reaches the 50% threshold, the probability of a government continuation jumps relevantly. Across different specifications and sub-samples, this first stage effect lies between +0.55% and +0.90% and is generally highly significant. This large positive discontinuity is shown graphically in panel (b) of Figure 4. There is however no sign of any effect on the rate of growth of business investment after the election. Point estimates for the effect of an incumbent parliamentary majority on business investment growth lie between -0.08 and $+0.14$ standard deviations and never reach statistical significance at any conventional level (wild bootstrap p-values vary between 0.47 and 0.99 across specifications). Graphical evidence, displayed separately for the two sub-samples in Figures 9, strongly supports this finding of a null effect.

7 Mechanisms

What does the Left do to hurt business investment? In Section 6.4 we have found the effect of left-wing electoral victories on subsequent income growth – the single most important determinant of aggregate business investment according to a vast empirical literature – not to be statistically significant. This suggests that the negative effect of left-wing electoral victories on investment is not due to lower economic growth. Here we focus on other potential mechanisms. Specifically, we provide regression-discontinuity estimates of the effect of electoral outcomes on the share of capital, the real interest rate and stock market dynamics.

A lower profit share may hamper firms' investment by decreasing the availability of internal funds, thus exacerbating credit constraints. According to neoclassical models, an higher interest rate would depress investment by discouraging mechanization, although, even accepting the theory, this would appear unlikely to be an important factor in the short-run. But an higher interest rate could also depress investment by reducing aggregate demand through a decrease in credit growth. Finally, we look at stock market dynamics as an indicator of profitability expectations and business confidence ('animal spirits', in Keynesian terms).

7.1 Effect on potential mechanisms: capital share of income, interest rate and share prices

Table 7 reports results from the estimation of equations 6 and 7 with these potential mechanisms as the outcome variables.

Real interest rate Columns 1 to 4 focus on the real interest rate. Point estimates are negative across all specifications, varying between -0.38 and -1.25 standard deviations, but the null of a zero effect cannot be rejected at any conventional level in any specification (wild bootstrap p-values lie between 0.20 and 0.47 in the four alternative specifications). A negative (or possibly null) effect on the interest rate cannot plausibly be suspected of causing a reduction in business investment, and appears more likely to signal that in some cases monetary authorities may try to compensate lower investment by reducing the reference rate.

Figures 10 display graphically the discontinuity in the post-election real interest rate at the threshold. In panel (a), without control variables, the discontinuity is steep but appears to be largely driven by few outliers near the threshold, while the overall distribution of the variable does not seem to shift. Increasing precision by controlling for decade fixed effects and for the pre-election level of the outcome partly neutralizes these outliers, resulting in a very small (but still negative) discontinuity, as shown in panel (b) of Figure 10.

Capital share of income Columns 5 to 8 of Table 7 present RD estimates of the effect of Left electoral victories on the change in the capital share in the two years following the election. The reduced form effect of a left parliamentary majority is negative but far from statistical significance across the four specifications. Moreover it is near zero in our preferred specification, which includes decade effects and the pre-election value of the outcome as additional regressors.

Figures 11 display graphically the reduced form relation between left seats and the share of capital. The negative discontinuity appears small and possibly driven by outliers in the raw data (panel a) and reduces to virtually zero when improving precision by residualizing on decade effects and the pre-election value of the outcome (panel b).

Share prices When measuring the effect on stock market growth in the two years following election, the same time horizon adopted for all other variables, we find a sizable negative and marginally significant effect. However, share prices are likely to react faster than macroeconomic variables to political shocks – with efficient markets the effect

should in theory be discounted immediately after the news is known, although this may happen less smoothly for a variety of reasons (see for example Shleifer, 2000 or Barberis and Thaler, 2003). It is also much more likely that part of the effect be anticipated, notwithstanding our focus on close elections. For these reasons, we try to estimate the effect in the 3 months around election. In this time horizon we find a stronger and more significant average effect. We report here – in columns 9 to 12 of Table 7 – this latter result.

The reduced form effect of a left parliamentary majority on stock market growth is rather large and negative across all four specifications. Point estimates vary between -0.59 and -1.96 (standard deviations). This negative effect is highly significant when employing the optimal bandwidth, both with and without controlling for decade fixed effects, with a wild bootstrap p-value of 0.005 in both cases (columns 9 and 11). It becomes less precisely estimated (as expected) when reducing the optimal bandwidth by one half, as done in columns 10 and 12.³² Note that in this latter cases the bandwidth is as small as 2.8%, moreover data on share price indexes don't cover the whole subsample, therefore the number of observations available for estimating the discontinuity becomes very small in these two specifications with an half-of-optimal bandwidth.

The reduced form relation between Left parliamentary seats and stock market growth is displayed graphically in Figures 12. Panel (a) looks at the raw data, while panel (b) controls for decade effects. In both cases the negative discontinuity appears rather large, consistently with the estimates presented.

If we are willing to scale this reduced form effect on share prices by the first-stage effect on the probability of formation of a Left government, the implied average treatment effect of Left governments on stock market growth remains very close to the reduced form effect. This happens because in the subset of elections for which we have data on domestic share price indexes, the relation between center-left parliamentary majority and Left-led governments is around one.³³

Having found a negative effect of left-wing victories on share prices in the 'interventionist Left' subsample, it becomes interesting to assess whether there is any such effect

³²In this case, of course, it would made no sense to control for pre-election dynamics, as we are trying to capture also part of the anticipated effect, so we have dropped the specification that controls for the pre-election value of the outcome, and substitute it with one that employs the half-of-optimal bandwidth and includes control variables.

³³When taking one half of the optimal bandwidth, estimates of the increase in the probability of a Left government actually rise substantially above one. This paradoxical result is due to employing a linear probability model. As a consequence, the scaled (2SLS) estimate of the effect of Left governments is lower than the first stage effect of a left majority. This is of course unreasonable, given that the true first stage effect cannot possibly exceed one. We don't comment on this lower 2SLS estimates in the main text, as they are merely the result of the drawbacks of a linear probability model.

in the sub-sample of elections in which the Left’s proposed economic policy is more centrist (the ‘neoliberal Left’ subsample). Note that we have found a negative effect on business investment only in the ‘interventionist Left’ subsample. Therefore under the hypothesis that a lower growth in share prices contributes to lower investment, we should find the effect on stock market growth to be weaker (or null) in the ‘neoliberal Left’ subsample. Results are reported in Table 8 and clearly point to a null effect: point estimates change sign depending on the bandwidth employed and lie in the $-0.07/+0.54$ range; wild bootstrap p-values vary between 0.76 and 0.99 across specifications.

7.2 Dynamics of the estimated effects

All the regression-discontinuity estimates presented up to this point are somehow static, in the sense that they focus on the average effect on the outcomes of interest in the two years following the election. We now attempt to assess the dynamics of the significant impacts, namely the effects on business investment and share prices. To do so, we estimate a series of ‘moving average regression discontinuities’. Setting the election period at $t = 0$ and using the same notation as in eq.6, for each time period t around elections we estimate the following equation

$$I_{i,e,q} = \alpha_t + \gamma_t Z_{i,e} + f_t(x_{i,e}, m_{i,e,q}) + \epsilon_{i,e,q} \quad \text{for } t - 7 \geq q \geq t \quad (8)$$

We then plot γ_t and its lower and upper bounds (based on cluster-robust standard errors) against t , to assess the dynamics of the impact of Left electoral victories on the outcome I .

Figures 13 display results. Panel (a) reports the dynamic impact on business investment growth (taken in standard deviations from the sample mean). The impact seems to be concentrated in the first six quarters after the election, after which it starts to fade out.

Panel (b) reports the dynamics of the impact on domestic share prices (namely on the standardized growth rate of a domestic share price index). In this case the impact is concentrated in the months just around the election (note that in this case t represents months, not quarters, around elections), and starts to fade out immediately after. Notwithstanding the implicit focus on close elections that the regression-discontinuity design imposes, there is clear evidence of anticipation. Stock market growth begins to be significantly lower, with respect to what happens around conservative victories, already 7/8 months before the election. The effect seems to become stronger as the election approaches (and probably more information about the likely result comes out) and to

start to fade out after the election. There is some sign of a partial rebound of stock market valuations between two and three years after the election.

A possible concern with these ‘moving average’ estimates is that they may be affected by some form of attrition bias. In particular, the probability of an early election may be a negative function of macroeconomic conditions. This may in principle lead to an overestimation of the recovery (or return to normal) of share prices and investment growth after the effect has peaked. The potential relevance of this possible source of attrition can be roughly evaluated by noting that almost 31% of the elections in the ‘interventionist Left’ subsample have no data for quarter +12 (or month +48) relative to election, because a new election has occurred before. However a much lower number of elections-series, 18.3% of the total, is discontinued because of an early election before quarter +10 (or month +40).

8 Concluding remarks

We have used a regression discontinuity (RD) design to assess whether business investment dynamics are influenced by electoral shocks in a sample of 14 OECD countries. Our main outcome variable of interest is the growth rate of business investment in the eight quarters following an election. Our RD approach exploits the fact that when (center-)left parties gain control of the Parliament, by winning more than 50% of parliamentary seats, their political power ‘jumps’ substantially. In parliamentary systems (13 out of 14 countries in our sample) this leads to a higher probability that a Left-led government is formed, as we show empirically, but in all cases it is likely to increase the Left’s influence over policy. We have thus looked at whether the expected value of investment conditional on the (Center-)Left share of parliamentary seats exhibits some jump at the 50% threshold.

In elections in which the Left’s proposed economic policy (as assessed by available estimates of policy positions) is relatively more interventionist, we have found a significant and economically relevant negative effect of left-wing electoral victories on business investment. In our preferred specification, y-o-y business investment growth tends to be lower by one half of a standard deviation (around 5 percentage points of investment) in the two years following a left-wing electoral victory. We find no effect at all, instead, in the subsample in which the Left is more centrist.

The average effect of left-wing electoral victories on GDP growth is also negative, but much lower in absolute value and not statistically significant at any conventional level and in any specification. The effect on the investment share is negative and more

relevant, but also imprecisely estimated. This appears consistent with the hypothesis that the negative effect of left-wing victories on business investment growth does not necessarily result in a decrease in GDP growth, but often only in a reduction in the business investment share of GDP.

We have assessed covariate balance by testing for discontinuities in pre-election macroeconomic conditions (specifically GDP growth, investment growth and real interest rate) at the 50% threshold. Reassuringly, we have found none. The McCrary (2008) test points to a statistically insignificant but sizable positive discontinuity in the density of the forcing variable. However we have shown that this (not statistically significant) discontinuity is largely driven by one single country, Sweden, which elections have not been subject to manipulation according to available measures, and thus appears unlikely, in our view, to signal manipulation of the running variable. In addition to this, our baseline result is robust to excluding Swedish elections from the sample.

We have also verified that our main result is not driven by any positive effect of incumbent victories on subsequent investment growth. To the contrary, we find that incumbents' victories exert no impact on business investment, suggesting that the positive relation between investment and government continuations is entirely driven by endogeneity.

The negative effect of left-wing electoral victories on business investment does not appear to be caused by lower growth, higher interest rates nor a lower capital share in income. In fact, we have found no effect on these variables. The negative impact on business investment is however preceded by a large negative effect on share price indexes. This effect is partly anticipated but mostly felt in the three months around an election, when a Left victory tends to decrease the growth rate of domestic share prices by around 1.1 standard deviations on average (which amounts to a decrease in their year-on-year growth rate by as much as around 25%). We interpret these findings as suggesting that in our sample left-wing electoral victories have influenced business investment through expectations and business confidence, rather than actual changes in macroeconomic conditions.

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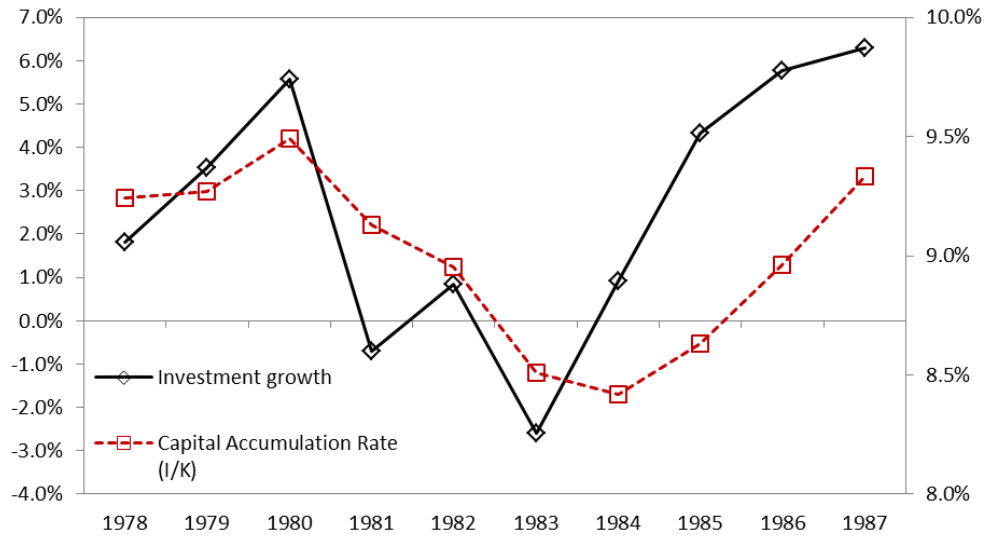
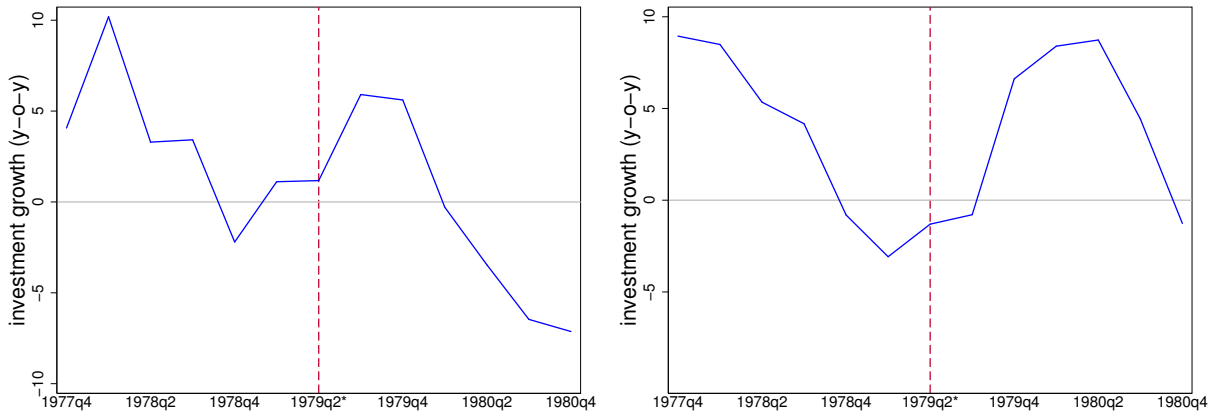


Figure 1: Private non residential investment in France, 1978-1987

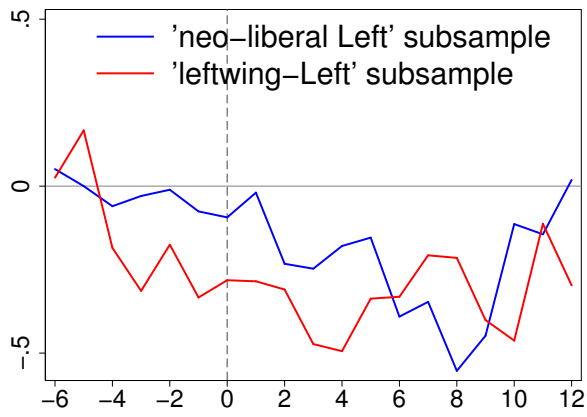
Source: own calculations on OECD data. Investment growth on left axis; accumulation rate on right axis



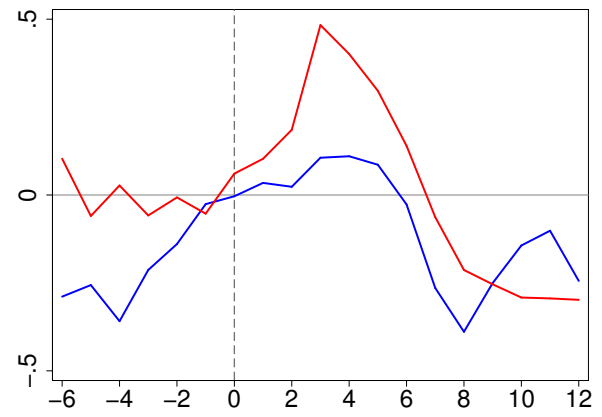
(a) UK, May 1979 general election

(b) US, Nov. 1980 presidential election

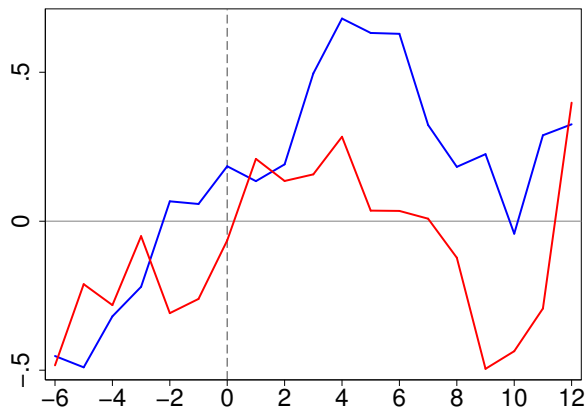
Figure 2: Business investment around the victories of Thatcher and Reagan



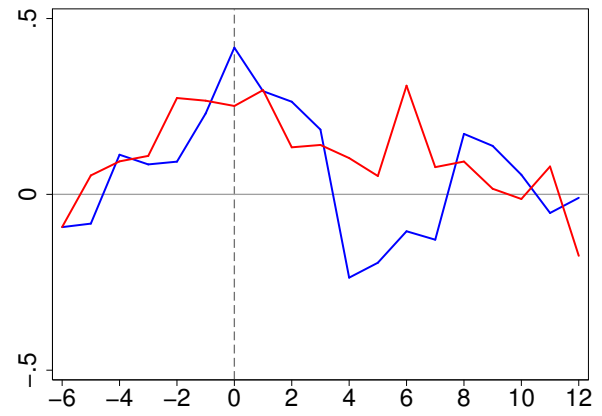
(a) Conservative changes



(b) Conservative continuations



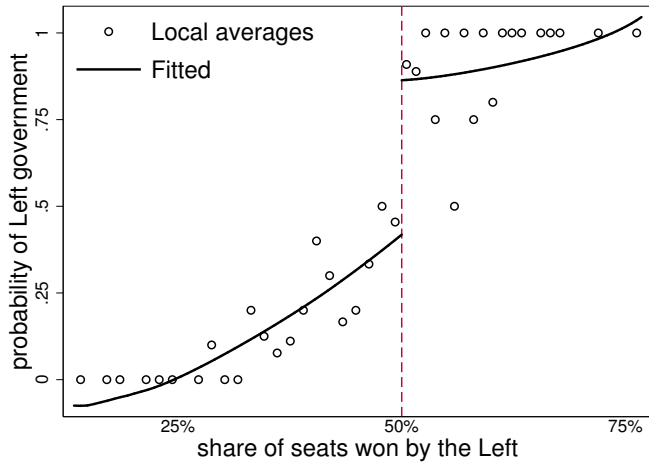
(c) Leftwing changes



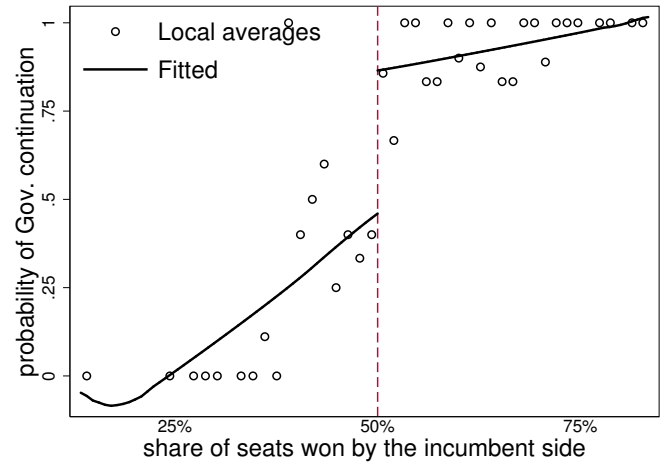
(d) Leftwing continuations

Figure 3: Average business investment growth around elections and 90% c.i.

Notes: Investment growth taken in standard deviations from the country average. Sources indicated in the text.

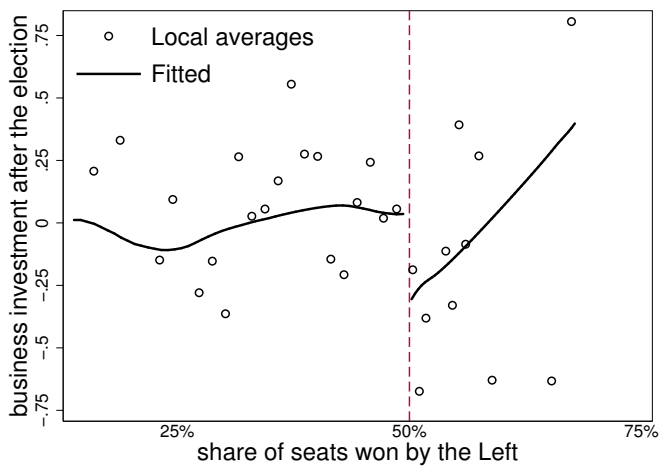


(a) Left government

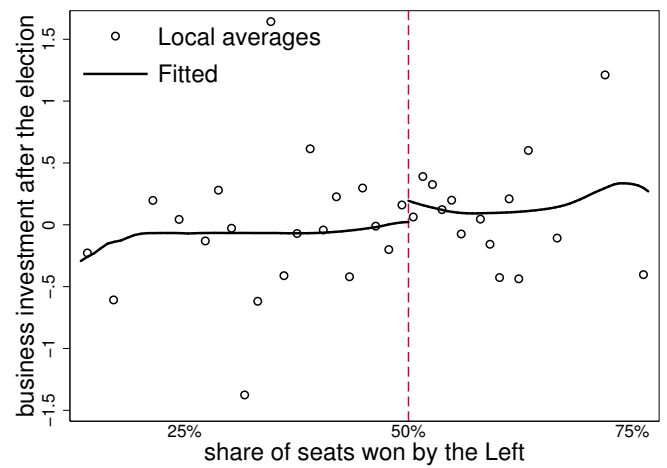


(b) Government continuation

Figure 4: First Stage - % of parliamentary seats and probability of forming a government
Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012).

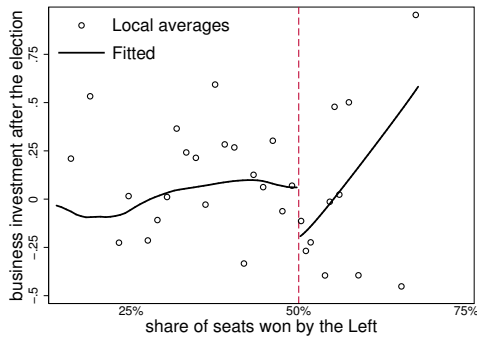


(a) 'Interventionist Left' subsample

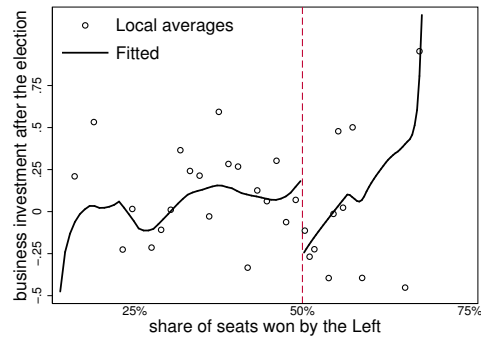


(b) 'Neo-liberal Left' subsample

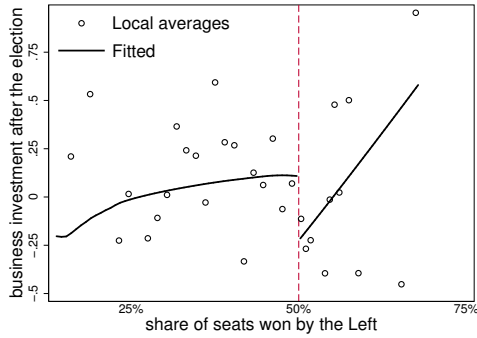
Figure 5: RD - Left parliamentary seats and business investment after the election
Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012).
Investment growth standardized and residualized on decade dummies and pre-election investment growth.



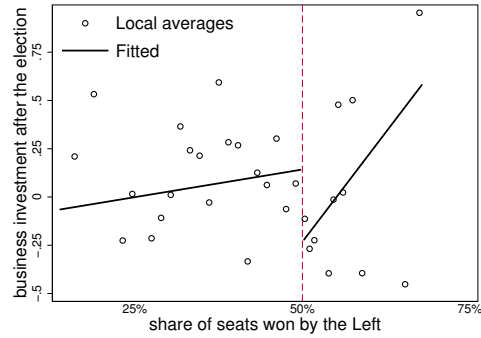
(a) Bdw. 7.9% (optimal)



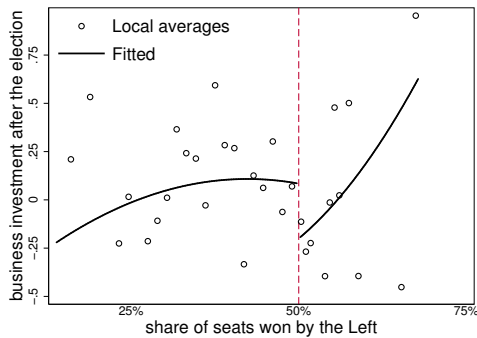
(b) Bdw. 3.9% (50% of optimal one)



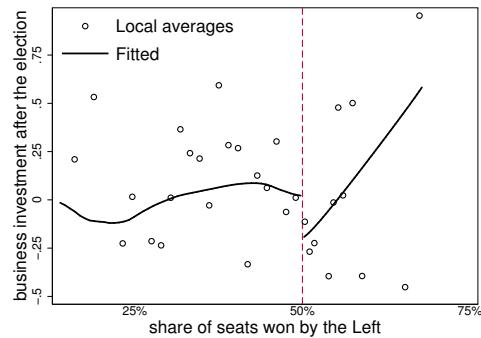
(c) Bdw. 11.8% (150% of optimal one)



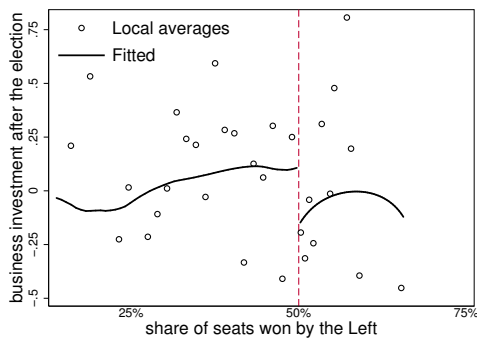
(d) Linear trend



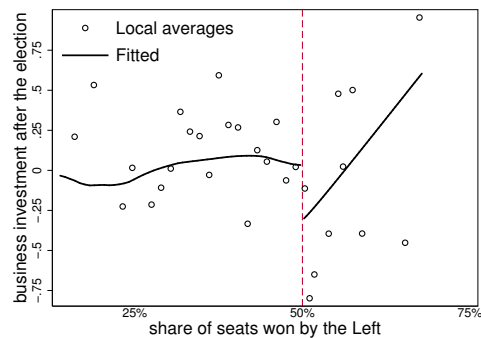
(e) Quadratic trend



(f) Excluding outliers



(g) Excluding the US



(h) Excluding Sweden

Figure 6: RD - Left parliamentary seats and business investment after the election ('interventionist Left' subsample)

Note: Investment growth standardized

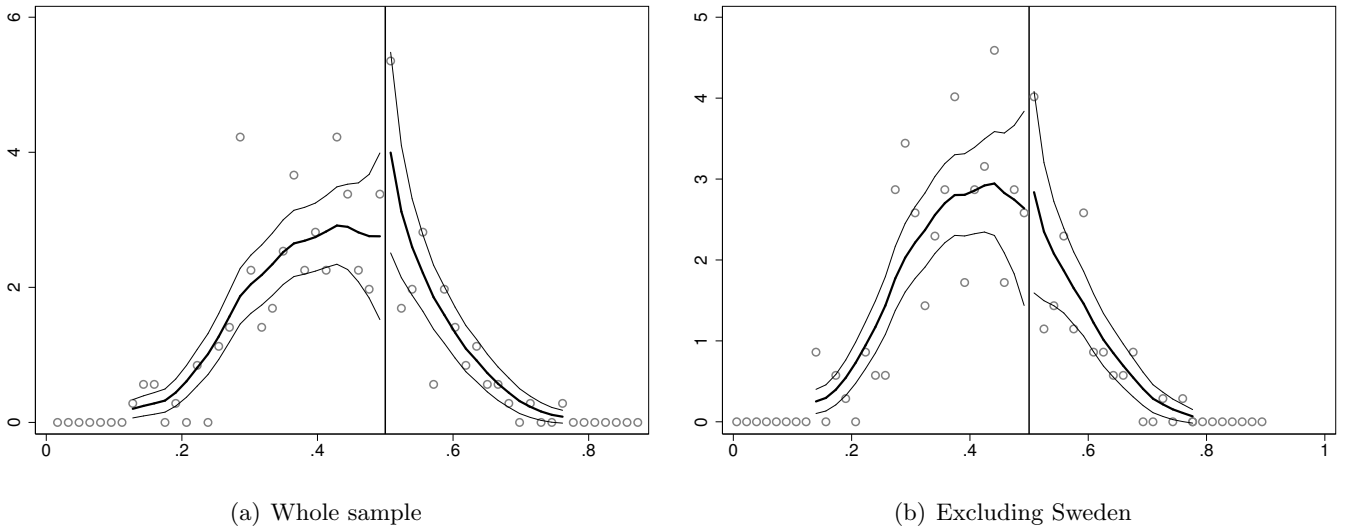


Figure 7: Density of the forcing variable (Left share of parliamentary seats) and 95% c.i.

Notes: Confidence intervals based on McCrary (2008)

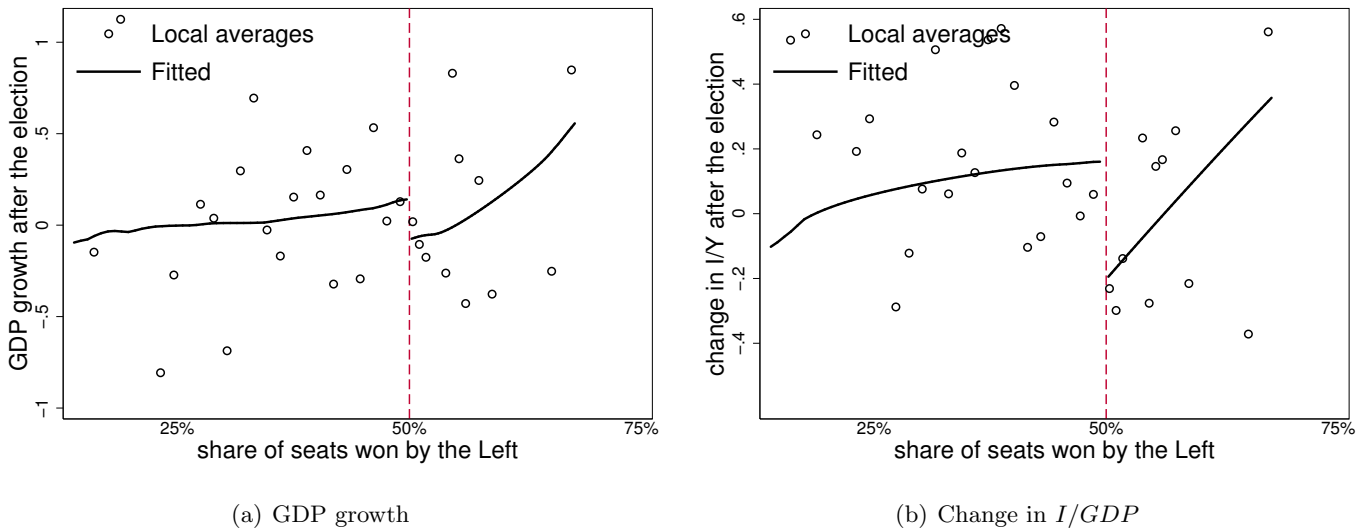
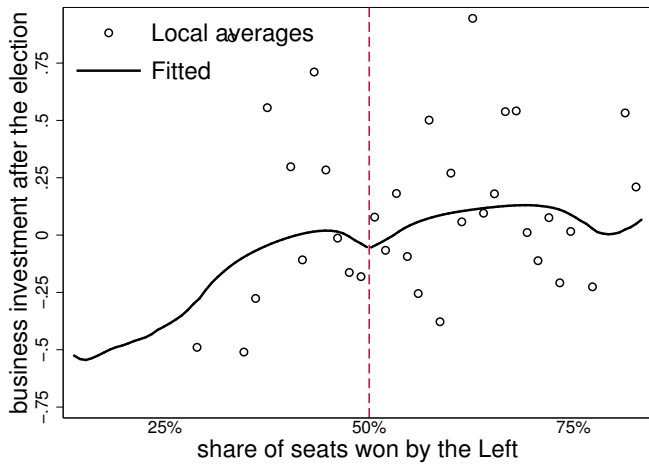


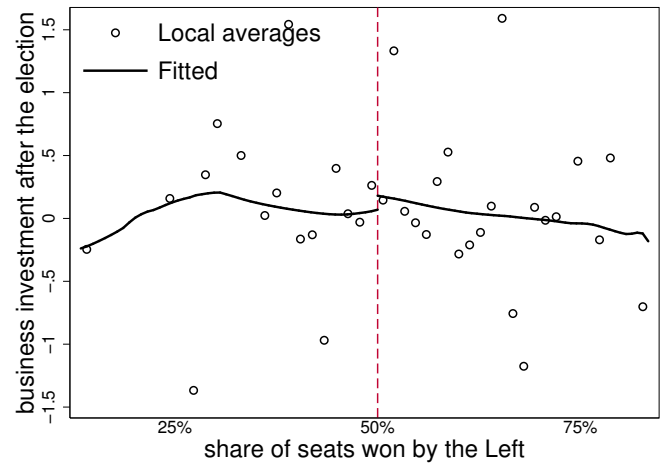
Figure 8: RD - Left parliamentary seats and other outcome variables after the election ('Interventionist Left' subsample)

Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012).

GDP growth and change in investment share are both standardized.

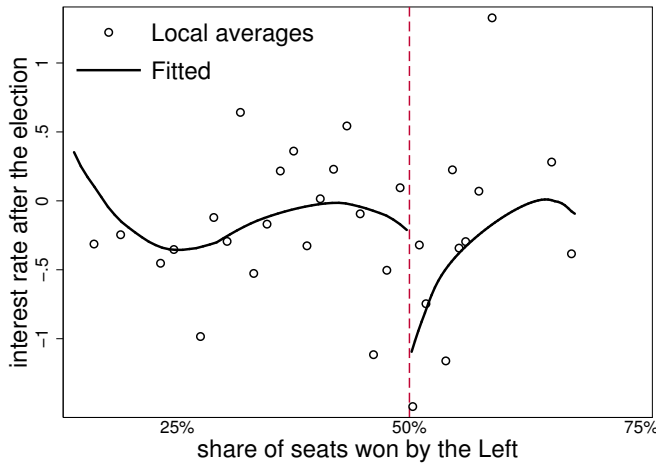


(a) 'Interventionist Left' subsample

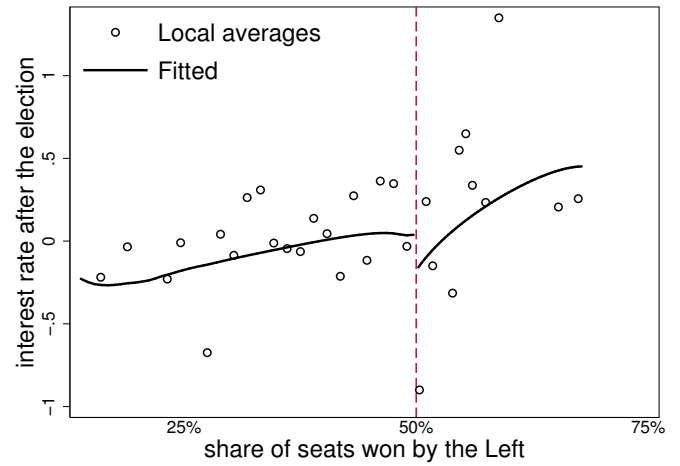


(b) 'Neo-liberal Left' subsample

Figure 9: RD - Incumbents' parliamentary seats and private investment after the election
Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012).
Investment growth standardized.

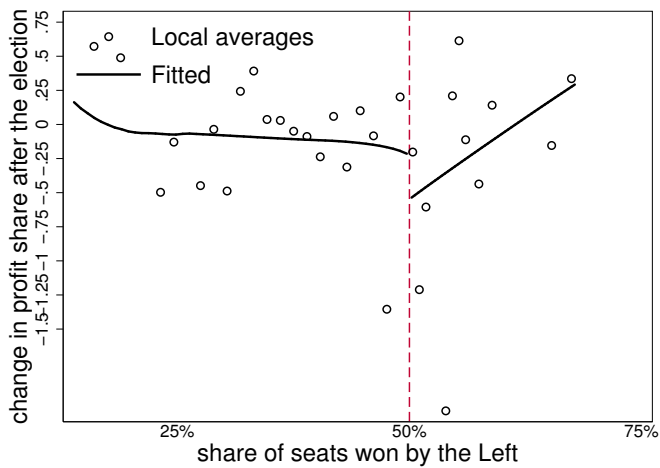


(a) Raw data

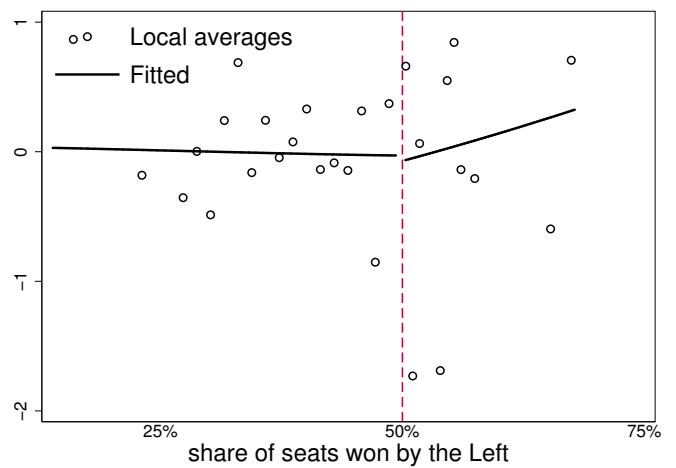


(b) Residualized on decade f.e. and pre-election value

Figure 10: RD - Left parliamentary seats and real interest rate after the election
('Interventionist Left' subsample)
Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012).
Real interest rate standardized.



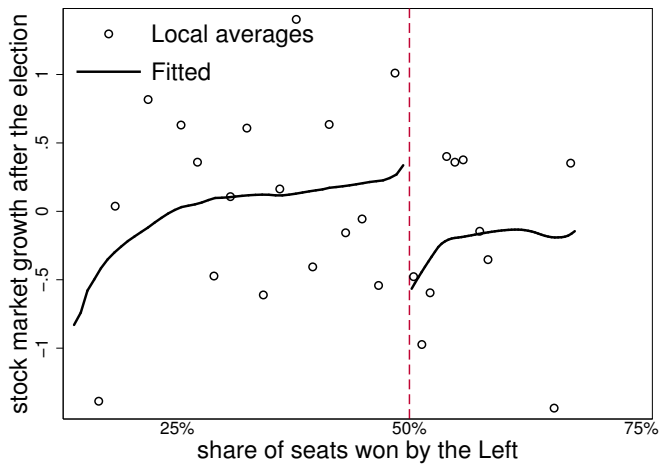
(a) Raw data



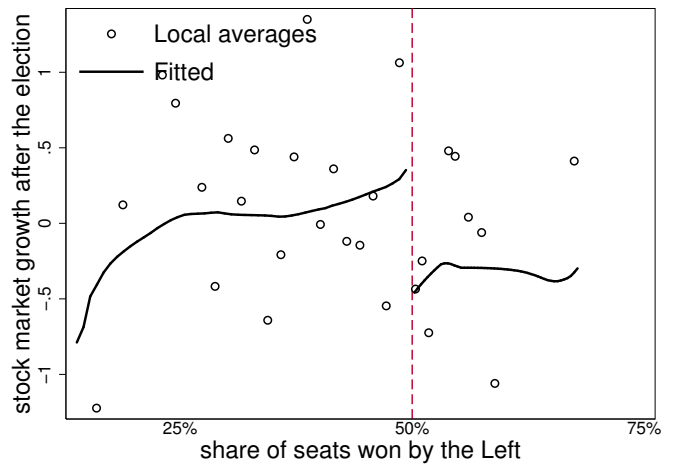
(b) Residualized on decade f.e. and pre-election value

Figure 11: RD - Left parliamentary seats and change in the profit share after the election ('Interventionist Left' subsample)

Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012). Yearly change profit share are standardized.



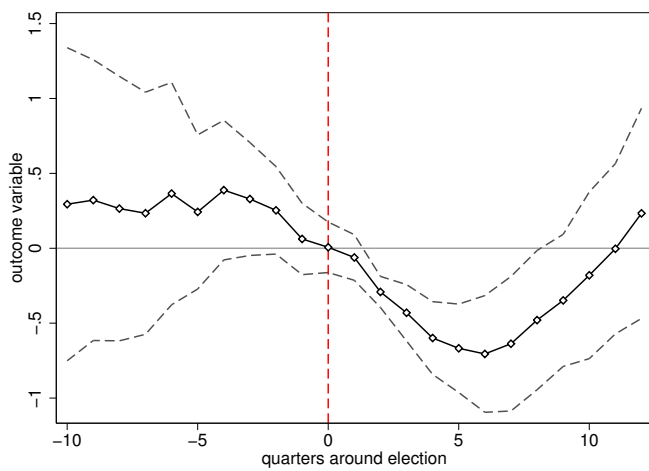
(a) Raw data



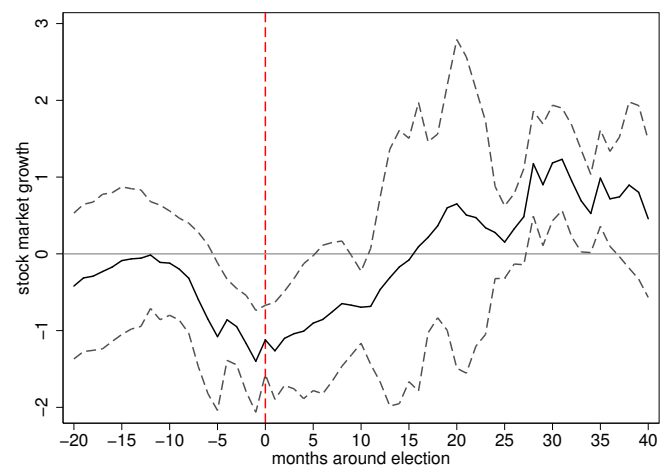
(b) Residualized on decade f.e.

Figure 12: RD - Left parliamentary seats and stock market growth around election ('Interventionist Left' subsample)

Fitted = kernel-weighted local linear regression (optimal bandwidth as in Imbens and Kalyanaraman, 2012). Standardized year-on-year change in domestic share price index.



(a) Business investment growth



(b) Stock market growth

Figure 13: Moving average RD - Dynamic of the effect of a Left parliamentary majority on business investment growth and stock market dynamics ('Interventionist Left' subsample)

Each point t represents the regression-discontinuity estimate of the average effect of a left parliamentary majority on the outcome variable in the 8 periods up to period t (details in the text). Both stock market growth and business investment growth are standardized and residualized on decade fixed effects and (in the case of investment) pre-election average investment.

Table 1: Elections in the sample by country and outcome

	‘Interventionist Left’ subsample					‘Neo-liberal Left’ subsample				
	L_{ch}	L_{co}	R_{co}	R_{ch}	Tot.	L_{ch}	L_{co}	R_{co}	R_{ch}	Tot.
Australia	1	1	1	4	7	2	4	1	5	12
Belgium	1	0	0	11	12	0	0	0	4	4
Canada	0	1	0	0	1	3	6	3	3	15
Denmark	3	4	1	5	13	1	3	2	1	7
Finland	1	3	3	2	9	1	2	0	2	5
France	1	0	3	6	10	2	0	0	0	2
Germany	0	0	1	2	3	1	1	1	0	3
Japan	0	0	0	6	6	0	0	1	9	10
Netherlands	1	1	1	3	6	1	0	2	6	9
New Zealand	0	3	1	3	7	3	0	2	5	10
Norway	1	5	3	2	11	0	0	1	0	1
Sweden	0	4	1	1	6	2	5	2	1	10
UK	2	2	1	3	8	1	2	2	0	5
USA	1	2	3	2	8	4	4	2	5	15
Total	12	26	19	50	107	21	27	19	41	108

Notes: Election outcomes are classified as follows: L_{ch} = left-wing changes; L_{co} = left-wing continuations; R_{ch} = conservative changes; R_{co} = conservative continuations

Table 2: Descriptive statistics

	Obs.	Mean	Std.Dev.	Min	Max
Investment growth (q)	2,984	4.16	10.36	-49.56	74.30
GDP growth (q)	3,012	2.92	3.41	-19.91	22.94
Investment share (q)	2,860	10.8	2.75	3.94	20.8
Real interest rate (q)	3,071	2.78	3.11	-16.7	19.7
Stock market growth (m)	8,775	4.59	23.09	-63.5	162.7
Profit share (y)	698	14.81	4.81	2.08	33.19
Left victory	227	0.40	0.49	0	1
Continuation	227	0.66	0.47	0	1
Left_Stateeconomy	215	-1.76	1.10	-4.76	1.63
Incumbent seats (%)	227	0.54	0.13	0.13	0.83
Left seats (%)	227	0.43	0.12	0.13	0.77

Notes: Investment growth is the year-on-year quarterly growth rate of real business fixed investment. GDP growth is the year-on-year quarterly growth rate of real Gross Domestic Product. Stock market growth is the year-on-year monthly growth rate of an index of real domestic share prices. Profit share is net operating surplus (adjusted for imputed compensation of self-employed) as a share of GDP. For each election in the sample, Left victory is an indicator variable equal to 1 if a Left-led government is formed after the election; Continuation is equal to 1 if the incumbent political part is confirmed; Left_Stateeconomy is the index ‘state involvement in the economy’ for the major left-wing party of the country (extracted from Lowe et al., 2011); Incumbent Seats is the share of parliamentary seats won by the incumbent coalition; Left Seats is the share of parliamentary seats won by the Left (or Center-Left) parties or coalition.

Table 3: Effect of a Left parliamentary majority on private non-housing investment growth (RD Estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Reduced form	-0.17 (0.21)	-0.50 (0.43)	-0.19 (0.23)	-0.12 (0.27)	-0.44 (0.22)	-0.77 (0.35)	-0.71 (0.26)	-0.48 (0.24)	0.18 (0.39)	0.19 (0.15)	0.16 (0.43)	0.16 (0.37)
First stage	0.55 (0.26)	0.60 (0.39)	0.55 (0.26)	0.55 (0.26)	0.67 (0.26)	0.47 (0.39)	0.67 (0.26)	0.67 (0.26)	0.68 (0.28)	0.62 (0.36)	0.68 (0.28)	0.68 (0.28)
2SLS (Effect of Left Gov.)	-0.30 (0.46)	-0.83 (0.85)	-0.38 (0.53)	-0.22 (0.52)	-0.66 (0.53)	-1.61 (1.54)	-1.22 (0.60)	-0.74 (0.57)	0.26 (0.48)	0.30 (0.21)	0.25 (0.59)	0.26 (0.52)
Decade FE			✓	✓			✓	✓			✓	✓
Pre-election investment				✓			✓	✓				✓
Bandwidth	0.062*	0.031	0.062*	0.062*	0.079*	0.039	0.079*	0.079*	0.090*	0.045	0.090*	0.090*
Wild bootstrap p-value	0.41	0.43	0.30	0.27	0.04	0.33	0.005	0.005	0.56	0.75	0.62	0.83
Observations	579	319	579	564	348	199	348	333	372	185	372	364
Elections	79	43	79	79	46	27	46	46	50	25	50	50
Countries	11	11	11	11	10	8	10	10	12	9	12	12
Sample	All Elections						Interventionist Left			Neoliberal Left		

Results from kernel-weighted local linear regressions (triangular kernel). Reduced form is the RD estimate of the average effect of a Left Parliamentary majority on (standardized) business investment growth in the two years after the election. First stage is the RD estimate of the effect of a Left Parliamentary majority on the probability of formation of a Left Government. 2SLS is the implied effect of a Left Government on (standardized) business investment growth. Decade fixed effects and pre-election investment growth indicate whether these variables are included as regressors. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth.

Table 4: Covariate balance tests - Left parliamentary majority and pre-determined covariates (RD estimates, ‘interventionist Left’ subsample)

Outcome variable	Pre-election GDP growth			Pre-election investment growth			Pre-election interest rate					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Reduced form	0.22 (0.25)	0.04 (0.34)	0.09 (0.25)	-0.04 (0.25)	0.28 (0.19)	0.32 (0.29)	0.30 (0.18)	0.06 (0.12)	-0.29 (0.33)	-0.30 (0.49)	-0.26 (0.19)	-0.21 (0.21)
First stage	0.63 (0.16)	0.72 (0.25)	0.53 (0.19)	0.53 (0.19)	0.64 (0.16)	0.72 (0.28)	0.54 (0.19)	0.54 (0.20)	0.53 (0.15)	0.70 (0.21)	0.49 (0.16)	0.48 (0.15)
2SLS (Effect of Left Gov.)	0.33 (0.34)	0.05 (0.41)	0.17 (0.41)	-0.07 (0.45)	0.41 (0.29)	0.40 (0.38)	0.53 (0.33)	0.12 (0.23)	-0.70 (0.79)	-0.48 (0.83)	-0.77 (0.47)	-0.59 (0.48)
Decade FE			✓	✓			✓	✓			✓	✓
Pre-election investment				✓				✓				✓
Bandwidth	0.12*	0.06	0.12*	0.12*	0.11*	0.06	0.11*	0.11*	0.18*	0.09	0.18*	0.18*
Wild bootstrap p-value	0.26	0.97	0.41	0.78	0.15	0.50	0.16	0.58	0.33	0.64	0.33	0.52
Observations	445	263	445	445	421	247	421	421	533	318	533	516
Elections	62	37	62	62	59	35	59	59	78	50	78	78
Countries	13	9	13	13	12	9	12	12	14	11	14	14

Results from kernel-weighted local linear regressions (triangular kernel). Reduced form is the RD estimate of the average effect of a Left Parliamentary majority on (standardized) business investment growth in the two years before the election. First stage is the RD estimate of the effect of a Left Parliamentary majority on the probability of formation of a Left Government. 2SLS is the implied effect of a Left Government on (standardized) business investment growth. Controls include decade fixed effects and pre-election investment growth. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth

Table 5: Effect of Left parliamentary majority on GDP growth and investment share
(RD estimates, ‘interventionist Left’ subsample)

Outcome variable	GDP growth				Change in I/GDP			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Reduced form	-0.32 (0.36)	-0.49 (0.57)	-0.46 (0.26)	-0.36 (0.23)	-0.34 (0.27)	-0.57 (0.36)	-0.47 (0.52)	-0.22 (0.27)
First stage	0.66 (0.28)	0.46 (0.45)	0.57 (0.29)	0.74 (0.28)	0.58 (0.17)	0.67 (0.27)	0.55 (0.19)	0.80 (0.12)
2SLS (Effect of Left Gov.)	-0.48 (0.69)	-1.07 (1.99)	-0.80 (0.76)	-0.48 (0.43)	-0.46 (0.34)	-0.63 (0.42)	-0.59 (0.58)	-0.28 (0.33)
Decade FE			✓	✓			✓	✓
Pre-election GDP growth				✓				
Pre-election $\Delta(I/GDP)$								✓
Bandwidth	0.068*	0.034	0.068*	0.068*	0.144*	0.072	0.144*	0.144*
Wild bootstrap p-value	0.53	0.69	0.21	0.18	0.52	0.32	0.53	0.40
Observations	316	178	316	301	467	283	467	433
Elections	42	24	42	42	67	42	67	67
Countries	9	7	9	9	14	9	14	13

Results from kernel-weighted local linear regressions (triangular kernel). Both GDP growth and the year-on-year change in the investment share are standardized. Reduced form is the RD estimate of the average effect of a Left Parliamentary majority on the outcome variables in the two years following election. First stage is the RD estimate of the effect of a Left Parliamentary majority on the probability of formation of a Left Government. 2SLS is the implied effect of a Left Government on the outcome variables. Decade fixed effects, pre-election investment growth and pre-election change in investment share indicate whether these variables are included as additional regressors. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth

Table 6: Effect of a confirmation of an incumbent Parliamentary majority on private non-housing investment growth (RD Estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)						
Reduced form	0.08 (0.21)	-0.08 (0.20)	0.05 (0.25)	0.05 (0.25)	0.22 (0.32)	-0.14 (0.37)	0.14 (0.40)	0.14 (0.40)	0.07 (0.26)	0.09 (0.49)	0.13 (0.34)	0.13 (0.34)						
First stage	0.64 (0.24)	0.61 (0.34)	0.67 (0.25)	0.67 (0.25)	0.67 (0.27)	0.55 (0.40)	0.82 (0.33)	0.82 (0.33)	0.77 (0.19)	0.90 (0.14)	0.83 (0.15)	0.83 (0.15)						
2SLS (Effect of Left Gov.)	0.13 (0.30)	-0.14 (0.36)	0.07 (0.34)	0.11 (0.33)	0.32 (0.38)	-0.26 (0.74)	0.17 (0.41)	0.17 (0.36)	0.09 (0.33)	0.10 (0.50)	0.16 (0.40)	0.14 (0.36)						
Decade FE			✓	✓			✓	✓			✓	✓						
Pre-election investment				✓				✓				✓						
Bandwidth	0.096*	0.048	0.096*	0.048*	0.086*	0.043	0.086*	0.043*	0.077*	0.039	0.077*	0.077*						
Wild bootstrap p-value	0.77	0.89	0.99	0.99	0.47	0.99	0.97	0.71	0.88	0.52	0.89	0.85						
Observations	843	434	843	843	364	207	364	364	340	161	340	340						
Elections	113	59	113	113	48	28	48	48	46	22	46	46						
Countries	12	11	12	12	10	8	10	10	12	8	12	12						
Sample	All Elections						Interventionist Left						Neoliberal Left					

Results from kernel-weighted local linear regressions (triangular kernel). Reduced form is the RD estimate of the average effect of the confirmation of an incumbent Parliamentary majority on (standardized) business investment growth in the two years after the election. First stage is the RD estimate of the effect of the confirmation of an incumbent Parliamentary majority on the probability that the incumbent Government is confirmed. 2SLS is the implied effect of an incumbent Government on (standardized) business investment growth. Decade fixed effects and pre-election investment growth indicate whether these variables are included as regressors. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth.

Table 7: Effect of Left parliamentary majority on real interest rate, profit share and share prices
(RD estimates, 'interventionist Left' subsample)

Outcome variable	Real interest rate			Change in profit share			Stock market growth					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Reduced form	-1.01 (0.52)	-1.25 (0.96)	-0.39 (0.41)	-0.38 (0.29)	-0.44 (0.31)	-0.37 (0.57)	-0.38 (0.45)	-0.05 (0.54)	-1.96 (0.62)	-0.59 (1.72)	-1.07 (0.38)	-1.59 (0.60)
First stage	0.67 (0.28)	0.46 (0.45)	0.57 (0.29)	0.47 (0.21)	0.58 (0.24)	0.53 (0.39)	0.53 (0.25)	0.69 (0.23)	1.01 (0.17)	1.54 (0.13)	0.91 (0.15)	1.24 (0.15)
2SLS (Effect of Left Gov.)	-1.65 (1.21)	-4.24 (6.57)	-0.87 (1.01)	-0.81 (0.56)	-0.82 (0.39)	-0.91 (0.72)	-0.71 (0.59)	-0.08 (0.69)	-1.94 (0.79)	-0.38 (0.98)	-1.19 (0.52)	-1.28 (0.41)
Decade FE			✓	✓		✓	✓	✓			✓	✓
Pre-election interest rate				✓								
Pre-election $\Delta(\Pi/GDP)$								✓				
Bandwidth	0.068*	0.034	0.068*	0.068*	0.092*	0.042	0.092*	0.092*	0.056*	0.028	0.056*	0.028
Wild bootstrap p-value	0.20	0.42	0.47	0.35	0.32	0.46	0.57	0.99	0.005	0.27	0.005	0.25
Observations	272	142	272	261	101	51	101	88	90	54	90	54
Elections	42	24	42	42	54	29	54	54	31	19	31	19
Countries	9	7	9	9	12	7	12	8	8	6	8	6
Observation period	8 after-election quarters			2 after-election years			3 months around election					

Results from kernel-weighted local linear regressions (triangular kernel). All variables standardized. Reduced form is the RD estimate of the average effect of a Left Parliamentary majority on (standardized) the outcome variable. First stage is the RD estimate of the effect of a Left Parliamentary majority on the probability of formation of a Left Government. 2SLS is the implied effect of a Left Government on the outcome. Decade fixed effects, pre-election interest rate and pre-election change in profit share indicate whether these variables are included as additional regressors. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth

Table 8: Effect of Left parliamentary majority on stock market dynamics in the ‘neoliberal Left’ subsample (RD Estimates)

Outcome variable	Stock market growth			
	(1)	(2)	(3)	(4)
Reduced form	-0.07 (0.41)	0.09 (0.39)	-0.05 (0.43)	0.54 (0.33)
First stage	0.81 (0.23)	0.67 (0.32)	0.69 (0.14)	0.44 (0.35)
2SLS (Effect of Left Gov.)	-0.09 (0.50)	0.13 (0.51)	-0.07 (.)	1.22 (1.19)
Decade FE			✓	✓
Bandwidth	0.103*	0.052	0.103*	0.052*
Wild bootstrap p-value	0.84	0.76	0.91	0.99
Observations	168	84	168	84
Elections	56	28	56	28
Countries	12	8	12	8

Results from kernel-weighted local linear regressions (triangular kernel). Stock market growth is the standardized y-o-y growth rate of the OECD domestic share prices’ index. Reduced form is the RD estimate of the average effect of a Left Parliamentary majority on stock market growth in the three months surrounding the election. First stage is the RD estimate of the effect of a Left Parliamentary majority on the probability of formation of a Left Government. 2SLS is the implied effect of a Left Government on stock market growth. Decade fixed effects indicate whether these are included as additional regressors. Standard errors (robust and clustered by country) in parenthesis; Wild cluster bootstrap p-value for the reduced form effect estimated through local linear regression (400 iterations); * denotes the optimal bandwidth

A Elections and parties in our sample

Table A1: List of elections in the sample (1/4)

Ctry	Date	Sign	Type	Stateg.	S_L	Ctry	Date	Sign	Type	Stateg.	S_L
AUS	1961q4	rightwing	confirm	0.26	0.49	BEL	2003q2	rightwing	confirm	-2.12	0.17
AUS	1963q4	rightwing	confirm	-1.67	0.41	BEL	2007q2	rightwing	confirm	-4.01	0.23
AUS	1966q4	rightwing	confirm	-2.49	0.33	CAN	1962q2	rightwing	confirm	-0.27	0.45
AUS	1969q4	rightwing	confirm	-2.50	0.47	CAN	1963q2	leftwing	change	-0.74	0.55
AUS	1972q4	leftwing	change	-2.33	0.54	CAN	1965q4	leftwing	confirm	-1.89	0.57
AUS	1974q2	leftwing	confirm	-3.16	0.52	CAN	1968q2	leftwing	confirm	-0.31	0.67
AUS	1975q4	rightwing	change	-4.44	0.28	CAN	1972q4	leftwing	confirm	-1.21	0.53
AUS	1977q4	rightwing	confirm	-1.17	0.31	CAN	1974q3	leftwing	confirm	0.07	0.59
AUS	1980q4	rightwing	confirm	-1.21	0.41	CAN	1979q2	rightwing	change	-0.56	0.52
AUS	1983q1	leftwing	change	-0.57	0.60	CAN	1980q1	leftwing	change	0.02	0.63
AUS	1984q4	leftwing	confirm	-0.33	0.55	CAN	1984q3	rightwing	change	-1.09	0.25
AUS	1987q3	leftwing	confirm	-0.57	0.58	CAN	1988q4	rightwing	confirm	-1.36	0.43
AUS	1990q1	leftwing	confirm	-0.83	0.53	CAN	1993q4	leftwing	change	0.13	0.63
AUS	1993q1	leftwing	confirm	-0.06	0.54	CAN	1997q2	leftwing	confirm	-0.24	0.58
AUS	1996q1	rightwing	change	-0.90	0.33	CAN	2000q4	leftwing	confirm	-1.22	0.61
AUS	1998q4	rightwing	confirm	-1.58	0.45	CAN	2004q2	leftwing	confirm	-1.23	0.50
AUS	2001q4	rightwing	confirm	-1.39	0.43	CAN	2006q1	rightwing	change	-0.93	0.43
AUS	2004q4	rightwing	confirm	-1.78	0.40	CAN	2008q4	rightwing	confirm	-0.62	0.37
AUS	2007q4	leftwing	change	-1.38	0.55	CAN	2011q2	rightwing	confirm	-	0.44
AUS	2010q3	leftwing	confirm	-	0.48	DNK	1960q4	leftwing	confirm	-3.39	0.50
AUS	2013q3	rightwing	change	-	0.37	DNK	1964q3	leftwing	confirm	-2.44	0.49
BEL	1961q1	rightwing	confirm	-3.85	0.40	DNK	1966q4	leftwing	confirm	-1.40	0.47
BEL	1965q2	rightwing	confirm	-4.22	0.30	DNK	1968q1	rightwing	change	-1.11	0.51
BEL	1968q1	rightwing	confirm	-2.37	0.28	DNK	1971q3	leftwing	change	-3.14	0.55
BEL	1971q4	rightwing	confirm	-2.38	0.29	DNK	1973q4	rightwing	change	0.51	0.38
BEL	1974q1	rightwing	confirm	-2.68	0.28	DNK	1975q1	leftwing	change	-1.27	0.38
BEL	1977q2	rightwing	confirm	-1.51	0.29	DNK	1977q1	leftwing	confirm	-2.71	0.41
BEL	1978q4	rightwing	confirm	-1.06	0.27	DNK	1979q4	leftwing	confirm	-3.62	0.45
BEL	1981q4	rightwing	confirm	-1.88	0.29	DNK	1981q4	leftwing	confirm	-0.45	0.39
BEL	1985q4	rightwing	confirm	-2.64	0.32	DNK	1984q1	rightwing	confirm	-2.68	0.38
BEL	1987q4	rightwing	confirm	-1.70	0.34	DNK	1987q3	rightwing	confirm	-1.90	0.37
BEL	1991q4	rightwing	confirm	-1.38	0.30	DNK	1988q2	rightwing	confirm	-1.52	0.37
BEL	1995q2	rightwing	confirm	-1.93	0.27	DNK	1990q4	rightwing	confirm	-2.87	0.43
BEL	1999q2	rightwing	confirm	-1.62	0.22	DNK	1994q3	leftwing	change	-3.61	0.40

List of elections in the sample (continued - 2/4)

Ctry	Date	Sign	Type	Stateg.	S_L	Ctry	Date	Sign	Type	Stateg.	S_L
DNK	1998q1	leftwing	confirm	-1.16	0.40	DEU	1998q3	leftwing	change	-0.51	0.52
DNK	2001q4	rightwing	change	-2.22	0.35	DEU	2002q3	leftwing	confirm	-1.01	0.51
DNK	2005q1	rightwing	confirm	-2.35	0.37	DEU	2005q3	rightwing	change	-1.05	0.44
DNK	2007q4	rightwing	confirm	-2.00	0.31	DEU	2009q3	rightwing	confirm	-2.48	0.34
DNK	2011q3	leftwing	change	-1.65	0.35	DEU	2013q3	rightwing	confirm	-	0.31
FIN	1962q1	rightwing	confirm	-3.14	0.44	JPN	1960q4	rightwing	confirm	-0.98	0.35
FIN	1966q1	leftwing	change	-2.40	0.52	JPN	1963q4	rightwing	confirm	-1.40	0.36
FIN	1970q1	leftwing	confirm	-3.28	0.44	JPN	1967q1	rightwing	confirm	-1.32	0.35
FIN	1972q1	leftwing	confirm	-3.89	0.46	JPN	1969q4	rightwing	confirm	-0.77	0.25
FIN	1975q3	rightwing	change	-3.56	0.47	JPN	1972q4	rightwing	confirm	-1.90	0.28
FIN	1979q1	leftwing	confirm	-4.76	0.44	JPN	1976q4	rightwing	confirm	-0.01	0.30
FIN	1983q1	leftwing	confirm	-1.10	0.42	JPN	1979q4	rightwing	confirm	-3.49	0.28
FIN	1987q1	rightwing	change	-4.26	0.38	JPN	1980q2	rightwing	confirm	-1.88	0.27
FIN	1991q1	rightwing	confirm	-1.24	0.34	JPN	1983q4	rightwing	confirm	-1.24	0.29
FIN	1995q1	leftwing	change	-1.10	0.43	JPN	1986q3	rightwing	confirm	-0.78	0.22
FIN	1999q1	leftwing	confirm	-1.15	0.36	JPN	1990q1	rightwing	confirm	-2.83	0.29
FIN	2003q1	rightwing	change	-1.92	0.36	JPN	1993q3	rightwing	confirm	0.00	0.17
FIN	2007q1	rightwing	confirm	-2.89	0.31	JPN	1996q4	rightwing	change	-0.25	0.13
FIN	2011q2	rightwing	confirm	-0.57	0.28	JPN	2000q2	rightwing	confirm	-0.45	0.30
FRA	1962q4	rightwing	confirm	-4.44	0.31	JPN	2003q4	rightwing	confirm	-2.72	0.38
FRA	1967q1	rightwing	confirm	-2.77	0.40	JPN	2005q3	rightwing	confirm	-1.94	0.25
FRA	1968q2	rightwing	confirm	-2.64	0.19	JPN	2009q3	leftwing	change	-	0.66
FRA	1973q1	rightwing	confirm	-3.09	0.34	JPN	2012q4	rightwing	change	-	0.14
FRA	1978q1	rightwing	confirm	-3.73	0.40	NLD	1963q2	rightwing	confirm	-2.42	0.29
FRA	1981q2	leftwing	change	-2.68	0.66	NLD	1967q1	rightwing	change	-1.32	0.25
FRA	1986q1	rightwing	change	-2.01	0.41	NLD	1971q1	rightwing	confirm	-2.51	0.27
FRA	1988q2	leftwing	change	-1.16	0.51	NLD	1972q4	leftwing	change	-2.73	0.33
FRA	1993q1	rightwing	change	-1.71	0.14	NLD	1981q2	rightwing	confirm	-1.60	0.31
FRA	1997q2	leftwing	change	-1.05	0.50	NLD	1982q3	rightwing	confirm	-0.18	0.33
FRA	2002q2	rightwing	change	-2.61	0.29	NLD	1986q2	rightwing	confirm	-1.14	0.36
FRA	2007q2	rightwing	confirm	-2.31	0.36	NLD	1989q3	rightwing	confirm	-1.92	0.37
FRA	2012q2	leftwing	change	-	0.54	NLD	1994q2	leftwing	change	-0.63	0.29
DEU	1990q4	rightwing	change	-2.10	0.36	NLD	1998q2	leftwing	confirm	-2.10	0.41
DEU	1994q4	rightwing	confirm	-1.83	0.45	NLD	2002q2	rightwing	change	-1.33	0.28

List of elections in the sample (continued - 3/4)

Ctry	Date	Sign	Type	Stateg.	S	Ctry	Date	Sign	Type	Stateg.	S
NLD	2003q1	rightwing	confirm	-1.24	0.39	NOR	2013q3	rightwing	change	-	0.43
NLD	2006q4	rightwing	confirm	-1.50	0.43	SWE	1960q3	leftwing	confirm	-3.96	0.51
NLD	2010q2	rightwing	confirm	-1.02	0.37	SWE	1964q3	leftwing	confirm	-3.46	0.52
NLD	2012q3	rightwing	confirm	-	0.38	SWE	1968q3	leftwing	confirm	-3.61	0.55
NZL	1960q4	rightwing	confirm	-1.40	0.43	SWE	1970q3	leftwing	confirm	-2.24	0.51
NZL	1963q4	rightwing	confirm	-1.72	0.44	SWE	1973q3	leftwing	confirm	-1.11	0.50
NZL	1966q4	rightwing	confirm	-1.41	0.44	SWE	1976q3	rightwing	change	0.19	0.48
NZL	1969q4	rightwing	confirm	-2.04	0.46	SWE	1979q3	rightwing	confirm	-0.74	0.50
NZL	1972q4	leftwing	change	-1.21	0.63	SWE	1982q3	leftwing	change	-0.96	0.53
NZL	1975q4	rightwing	change	-1.59	0.37	SWE	1985q3	leftwing	confirm	-0.61	0.51
NZL	1978q4	rightwing	confirm	-0.84	0.43	SWE	1988q3	leftwing	confirm	-1.37	0.51
NZL	1981q4	rightwing	confirm	-0.29	0.47	SWE	1991q3	rightwing	change	-0.42	0.44
NZL	1984q3	leftwing	change	-0.71	0.60	SWE	1994q3	leftwing	change	1.63	0.52
NZL	1987q3	leftwing	confirm	-2.23	0.59	SWE	1998q3	leftwing	confirm	-0.39	0.54
NZL	1990q4	rightwing	change	-1.65	0.29	SWE	2002q3	leftwing	confirm	-1.44	0.55
NZL	1993q4	rightwing	confirm	-1.40	0.47	SWE	2006q3	rightwing	change	-2.53	0.49
NZL	1996q4	rightwing	confirm	-2.54	0.42	SWE	2010q3	rightwing	confirm	-2.57	0.45
NZL	1999q4	leftwing	change	-1.33	0.49	GBR	1964q4	leftwing	change	-2.76	0.50
NZL	2002q3	leftwing	confirm	-1.63	0.45	GBR	1966q1	leftwing	confirm	-1.76	0.58
NZL	2005q3	leftwing	confirm	-1.80	0.42	GBR	1970q2	rightwing	change	-1.00	0.46
NZL	2008q4	rightwing	change	-0.85	0.36	GBR	1974q1	leftwing	change	-4.10	0.47
NZL	2011q4	rightwing	confirm	-	0.39	GBR	1974q4	leftwing	confirm	-2.35	0.50
NOR	1961q3	leftwing	confirm	-3.26	0.51	GBR	1979q2	rightwing	change	-1.80	0.42
NOR	1965q3	rightwing	change	-3.05	0.47	GBR	1983q2	rightwing	confirm	-3.28	0.32
NOR	1969q3	rightwing	confirm	-3.45	0.49	GBR	1987q2	rightwing	confirm	-1.78	0.35
NOR	1973q3	leftwing	confirm	-3.71	0.50	GBR	1992q2	rightwing	confirm	-2.37	0.42
NOR	1977q3	leftwing	confirm	-3.17	0.50	GBR	1997q2	leftwing	change	-1.28	0.64
NOR	1981q3	rightwing	change	-2.46	0.45	GBR	2001q2	leftwing	confirm	-1.55	0.63
NOR	1989q3	rightwing	change	-2.84	0.48	GBR	2005q2	leftwing	confirm	-1.63	0.55
NOR	1993q3	leftwing	confirm	-1.80	0.48	GBR	2010q2	rightwing	change	-0.99	0.40
NOR	1997q3	rightwing	change	-1.57	0.45	USA	1920q4	rightwing	change	-0.32	0.30
NOR	2001q3	rightwing	confirm	-3.43	0.40	USA	1924q4	rightwing	confirm	-0.41	0.42
NOR	2005q4	leftwing	change	-	0.51	USA	1928q4	rightwing	confirm	-0.54	0.38
NOR	2009q3	leftwing	confirm	-2.52	0.51	USA	1932q4	leftwing	change	-0.22	0.72

List of elections in the sample (continued - 4/4)

Ctry	Date	Sign	Type	Stateg.	S
USA	1936q4	leftwing	confirm	-0.85	0.77
USA	1940q4	leftwing	confirm	-1.32	0.62
USA	1944q4	leftwing	confirm	-0.51	0.56
USA	1948q4	leftwing	confirm	-1.48	0.60
USA	1952q4	rightwing	change	-1.66	0.49
USA	1956q4	rightwing	confirm	-2.11	0.54
USA	1960q4	leftwing	change	-1.54	0.60
USA	1964q4	leftwing	confirm	-1.72	0.68
USA	1968q4	rightwing	change	-0.95	0.56
USA	1972q4	rightwing	confirm	-2.68	0.56
USA	1976q4	leftwing	change	-2.39	0.67
USA	1980q4	rightwing	change	-2.53	0.56
USA	1984q4	rightwing	confirm	-0.70	0.58
USA	1988q4	rightwing	confirm	-0.87	0.60
USA	1992q4	leftwing	change	-0.95	0.59
USA	1996q4	leftwing	confirm	-1.68	0.48
USA	2000q4	rightwing	change	-1.92	0.49
USA	2004q4	rightwing	confirm	-1.62	0.47
USA	2008q4	leftwing	change	-0.98	0.59
USA	2012q4	leftwing	confirm	-	0.46

Notes: Countries are denoted by their ISO country codes; Stateg. is the index 'State involvement in the economy' (*Stategonomy*) for the major Left party, as calculated by Lowe et al. (2011) on the basis of Manifesto Project data. Lower values are associated with more interventionist platforms. Elections for which *stategonomy* is below its sample median (-1.625) are included in the 'Interventionist Left' subsample, while others are included in the 'Neoliberal Left' subsample. S_L is the share of seats won by the Left party/coalition in the relevant Chamber of the Parliament.

Table A2: Parties included in the calculation of Left Stateconomy and of (Center-)Left share of parliamentary seats

Ctry	Main (Center-)Left Party [for calculation of <i>left_stateconomy</i>]	Parties included in the calculation of the (Center-)Left share of seats
AUS	Australian Labor Party (ALP)	Australian Labor Party (ALP)
BEL	1960-1977: Belgian Socialist Party (BSP); 1977-2013: Flemish Socialist Party/Francophone Socialist Party [avg.]	1960-1977: Belgian Socialist Party (BSP) ; 1977-2013: Flemish Socialist Party + Francophone Socialist Party
CAN	Liberal Party of Canada (LP)	New Democratic Party (NDP) + Liberal Party of Canada (LP)
DNK	Danish Social Democrats (SD)	Danish Social Democrats (SD) + Radical Left (RV)
FIN	Social Democratic Party	Social Democratic Party + Social Democratic Union of Workers and Smallholders (TPSL, 1960-1973) + Democratic League(SKDL, 1960-1990) + Democratic Alternative (DEVA, 1986-1990) + Left Alliance(VAS, 1990-2013)
FRA	1960-1966: Communist Party (PCF); 1966-1980: Communist Party(PCF)/Socialist Party (SIFO/PS) [avg.]; 1980-2013: Socialist Party (PS);	Socialist Party (SIFO/PS) + Communist Party (PFC) + Radical Party of the Left (PRG) + Greens (LV)
DEU	Social Democratic Party (SPD)	Social Democratic Party (SPD) + Greens
JPN	1960-1993: Social democratic party 1996-2013: Democratic Party of Japan	Japan Socialist Party (SDP/J/DSP) + Democratic Socialist Party + Democratic Party of Japan (DPJ)
NLD	PvdA Labour Party	PvdA Labour Party + Green Left + Socialist Party (SP) + Radical Political Party (PPR, until 1991)
NZL	Labour Party (LP)	Labour Party (LP) + Alliance (since 1993) + Progressives (since 2002)
NOR	Labour Party (DNA)	Labour Party (DNA) + Socialist Party + (since 2004) Centre Party (SP)
SWE	Social Democratic Labour Party (SAP)	Social Democratic Labour Party (SAP) + Communist Party (SKP/VK, 1960-1990) + Left Party (VP, since 1990) + Green Ecology Party (since 1998)
GBR	Labour Party	Labour Party
USA	Democratic Party	Democratic Party

Notes: Countries are denoted by their ISO country codes; When a party is not included in all sample elections (because it was not present), the time period in which this party was included is specified in parenthesis.