The role of political partisanship during economic crises

Vincenzo Galasso

Abstract Major economic crises may promote structural reforms, by increasing the cost of the status quo, or hinder them, by inducing more demand for protection. The ideology and political partisanship of the ruling government may be crucial in determining the prevailing course of action. In good times, conservative parties are typically pro-reform. However, do these parties try to exploit periods of crisis to carry out their reforms? Do social-democratic parties support even greater social protection? To answer these questions, this paper uses indicators of structural reforms in the labor, product, and financial markets for 25 OECD countries over the 1975–2008 period. The empirical analysis confirms the ambiguous effect of crises: product markets are liberalized, but financial markets become more regulated. Partisan politics also matters, as right parties are associated with more pro-market reforms. Yet, crises modify partisan politics: right-wing parties refrain from promoting privatizations, and oppose the introduction of greater financial market regulations. By contrast, center parties liberalize and trim unemployment benefits generosity, while left parties privatize. Furthermore, weak, fractionalized governments, which are associated with more regulated product markets, are also more likely to liberalize during a crisis.

Keywords Structural reforms · Partisan politics · Economic crisis

JEL Classification D7 · H5

1 Introduction

Major economic crises require quick policy responses. As the recent financial (and economic) crisis has clearly shown, recessions spark expansionary fiscal and monetary policies, but also labor market reform measures aimed at increasing job security and providing active labor market policies to the unemployed. Structural reforms are often called for in a crisis.

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The economic rationale behind these pro-reform forces is that in countries with strong financial and labor market regulations, a crisis brings a sense of urgency by raising the cost of the status quo. Hence, policy-makers are forced to react and reform.

Major crises, however, increase uncertainty (and perhaps anxiety) among many individuals (entrepreneurs, workers, retirees), who will demand more safeguards, particularly in the labor and product markets. This may end up hindering structural reforms, which tend to generate heavy short-term costs, often concentrated onto a particular category of individuals (for example, public-sector workers in the case of a privatization), and only diffuse, long-term gains. Crises may thus lead to more government intervention in the economy.

Whether, in response to a crisis, pro-market structural reforms are adopted or the role of the state in the economy expands ultimately depend on political and electoral factors. Political partisanship, for instance, shapes a government's policies and its willingness to reform. In particular, conservative governments are more likely to eliminate existing anti-competitive measures, and hence to promote pro-market reforms. A government's strength in Parliament may also affect the ability to carry out reforms.

Does the role of political partisanship in promoting, or hindering, reforms change during a crisis? If we extend the claim made in the partisan politics literature (see Sect. 2) to times of economic crisis, we should expect conservative parties (more market-oriented for ideological and electoral reasons) to be keen to take advantage of periods of crisis to put forward their reform strategies. Social-democratic (left) parties, on the other hand, would be even less keen on reforms in troubled economic times, reluctant as they are to pile additional strains on their voters.

To test this claim, this paper presents a comprehensive analysis of the determinants of labor, product, and financial market reforms in 25 OECD countries over the 1975–2008 period. I use recent data on OECD indicators for labor and product markets. Product-market indicators measure the level of anti-competitive regulation and the degree of public ownership in seven non-manufacturing industries (electricity and gas supply, road freight, air passenger transport, rail transport, postal delivery and telecommunications). Labor-market indicators capture (1) the degree of employment protection legislation, which assesses the restrictions placed on the firing processes by labor legislation and collective bargaining agreements; and (2) the unemployment benefit replacement rate, a measure of welfare state generosity. Furthermore, for retirement policies, OECD data on the implicit tax on continuing to work for individuals aged between 60 and 64 year old are used. These taxes provide a measure of the individual cost of postponing retirement. The financial market liberalization indicator is provided by the IMF, and reports policy changes across seven different dimensions: credit controls and excessively high reserve requirements, interest rate controls, entry barriers, state ownership in the banking sector, policies respecting securities markets, prudential regulations and supervision of the banking sector, and restrictions on capital account.

The empirical analysis focuses on the role of major economic crises and of political partisanship in promoting, or perhaps hindering, reforms. But, special emphasis is placed on the politics of economic crises by examining how parties or governments of different political orientations or strengths react to them.

The empirical findings show that crises may both enhance and hinder reforms. Budget deficits, a common denominator in economic crises, promote liberalization in product markets, while severe economic recessions increase regulation in financial markets. The crucial role of partisan politics is confirmed in OECD countries, particularly for product and labor market reforms. Conservative governments appear to be associated with both liberalization and privatization in product markets, and with less generous welfare states. However, partisan politics vary during crises. In times of economic turmoil, right parties seem to adopt a

more moderate strategy: they refrain from promoting reforms, and oppose the introduction of greater financial market regulation. By contrast, center governments introduce liberalization measures and reduce unemployment benefits, while left-wing governments exploit crises by privatizing.

Empirical analysis confirms that other features of ruling governments also matter. Fractionalized governments—i.e., governments supported by a coalition of different parties—are associated with more product market regulations. Again, periods of crisis modify the politics of reform. Indeed, during an economic crisis, fractionalized governments become more inclined to liberalize product markets. Additional evidence shows that governments that have been in power for a long time, and may therefore be responsible for the status-quo policy, are less prone to liberalize product markets during crises.

These empirical results extend previous findings by Brooks and Kurtz (2007) on the influence of economic crises on different markets and countries, and evidence by Allan and Scruggs (2004) on political partisanship, to different markets and sectors. Perhaps surprisingly, economic crises emerge as unusual periods, during which political parties are willing to cross ideological lines, to contradict their traditional political creeds, and to act exceptionally. The fact that left-wing parties are willing to privatize, and center parties to liberalize and reduce welfare state generosity, suggests that, during a crisis, these parties may learn the true cost of these non-competitive regulations, and can credibly convey it to their electorate (see Cukierman and Tommasi 1998). On the contrary, conservative parties are less inclined to reform in tough economic times, possibly to avoid being blamed as ultra-liberal—and thus having to face an electoral backlash. Even so, they do oppose higher financial market regulations.

2 Related literature

There exists a large empirical literature on the policy response to economic crises. Looking back at the aftermath of the Great Depression, Shughart (2011) depicts the New Deal as a counterproductive policy response driven by electoral concerns. Similarly, Higgs (1987) identifies a ratchet effect in policy responses to major crises, such as the two World Wars and the Great Depression, that led to a huge increase in government intervention. Focusing on more recent events, Drazen and Easterly (2001) analyze inflation and black market premium to conclude that crises spur reforms. Duval and Elmeskov (2005) construct an aggregate indicator of labor-market reforms to show that crises (defined as a sharp rise in the output gap and higher unemployment rates) are associated with reforms. The empirical evidence in IMF (2004) suggests instead that an ongoing economic crisis may actually hinder labor market reforms, although the length of past economic crises may promote them. Using disaggregated indicators, Høj et al. (2006) provide evidence that the direction of reforms differs for insiders and outsiders: large increases in the long-term unemployment rate are associated with less employment protection legislation for temporary workers and with more generous unemployment benefits, but have no effect on employment protection legislation for permanent workers. Tompson (2009) analyzes 20 case studies of OECD countries to conclude that labor market reforms were not correlated with economic crises. Using financial market indicators, Abiad and Mody (2005) show that different economic crises lead to different outcomes: a balance of payment crisis spurs reforms, but a banking crisis stands in the way of liberalizations.

The interaction between politics and structural reforms has also been extensively analyzed. Allan and Scruggs (2004) concentrate on the welfare state—namely on the rates

of unemployment benefit replacement and sickness transfers—to show that, after the mid-1980s, political partisanship matters, since retrenchments have been more likely under right-wing governments. Murillo and Martinez-Gallardo (2007) and Murillo (2009) study market reforms in the Latin American public utilities sector, to conclude that ideological polarization and political competition have a bearing on reforms. Brooks and Kurtz (2007), for their part, examine capital account and trade liberalization in 19 Latin American countries. They find that crises do matter, but not always enough to promote liberalization. Capital account openings occur during good economic times, while trade liberalization occurs in positive trade-balance and/or hyperinflation contexts. Moreover, the former is more likely to occur with fractionalized governments, where blame can be shared.

An analysis of the politics of crisis and its impact on reforms was also the objective of Alesina et al. (2006). They study the stabilization of budget deficits and inflation rates to conclude that crises promote fiscal reforms and adjustments—hence, the politics of crisis matters. Furthermore, strong and new governments act faster. Pop-Eleches (2008) examines Latin American and Eastern European countries to suggest that an economic crisis carries substantial weight, but how much weight depends on the government's partisan color.

Finally, in two recent papers, Congleton (2009, 2012) first studies the political and economic determinants of the 2008 financial crisis, and then turns to the policy responses in order to evaluate the relevance of public choice in explaining the crisis management and to discuss the economics and politics of "crisis insurance" programs.

3 Reform patterns

At least until the 2008 financial and economic crisis, there seemed to be a growing consensus over the need for structural reforms in many countries—reforms designed to improve disappointing growth and to face emerging challenges, such as aging, new technologies, and globalization. Nevertheless, the implementation of structural reforms over the past few decades has varied considerably in pace and magnitude across countries, but also nation-wide, across markets.

OECD indicators on anti-competitive regulation in seven non-manufacturing sectors show that the timing and intensity of product market reforms have been very different across countries. Figure 1 suggests that product market liberalization (measured as a reduction in the anti-competitive regulation index) took off in the late 1980s and is still on-going. Yet, different trends have emerged. The United States already was implementing comprehensive reforms in 1975–1985, while the United Kingdom, New Zealand, Norway and, to a lesser extent, Canada, Finland and Austria followed in the early to mid-1980s. For most other European countries, product market liberalization was introduced in the 1990s under the influence of the EU's internal market program, as well as accession to the Euro zone (see Alesina et al. 2009). Across sectors, liberalizations started with road transport, later to spread to the air transport industry and, from the mid-1990s, to the electricity and telecommunications sectors (see Conway and Nicoletti 2006). Figure 2 shows noteworthy cross-country convergence in product market regulations, owing to the fact that countries with strong regulation in 1975, such as Italy, Portugal, France, Denmark, and Germany, have been more active in deregulating their product markets.

IMF indicators of financial sector policies show that financial market liberalizations also took place in many countries between 1973 and 2005. Again, the timing and magnitude of the reforms varied widely from one country to another, as well as across the different policy areas analyzed. Figure 3 suggests that financial market liberalizations (measured as an increase in the financial sector reform policy index) picked up speed in the

Fig. 1 Product Market
Regulation in OECD countries.
Note: Index of Product Market
Regulation ranges from 0 (min
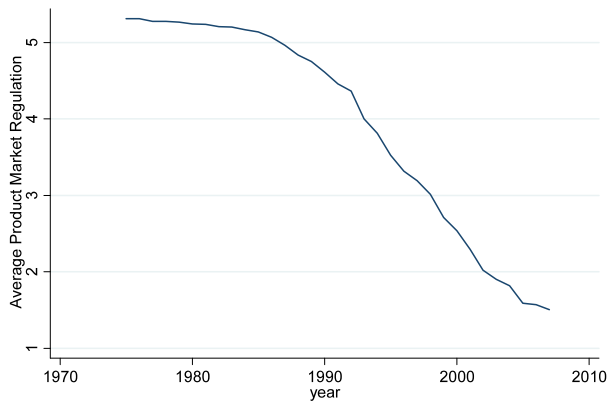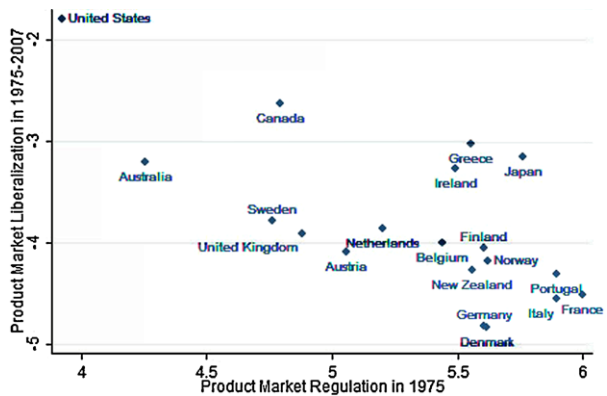regulation) to 6 (max regulation)

Fig. 2 Convergence in
Production Market Regulation.
Note: Index of Product Market
Regulation ranges from 0 (min
regulation) to 6 (max regulation).
A negative variation (on the
vertical axis) indicates a Product
Market Liberalization

early 1980s. Again, different trends emerged. While Germany, Canada, the United States, and the United Kingdom had already liberalized their financial sectors in the mid-1970s, other OECD countries began to catch up in the late 1970s; the process is continuing today. Policy reversals were also frequent, although more so in Latin America and East Asia, where reforms were also generally more extensive (see Abiad and Mody 2005; Abiad et al. 2008). Figure 4 shows considerable cross-country convergence in financial markets. The negative correlation between the initial level of financial regulation in 1973 and the subsequent deregulation is remarkably strong.

Labor market reforms in OECD countries have proved more difficult to implement. During the 1960s and 1970s, many European countries adopted employment protection legislation (EPL), which increased labor market's rigidity and hindered adjustments in job flows. Additionally, early-retirement provisions were introduced in many social security schemes, which created massive economic incentives to retire early. Since the late 1980s, however, there have been some moves to make overall labor market regulation more employment friendly, in particular with some easing of employment protection legislation (for a comprehensive analysis, see OECD 2006). This was mostly aimed at modifying the labor market prospects of *outsiders*, that is, workers with temporary contracts and unemployed who had few reemployment prospects, and was sometimes accompanied by targeted active labor market policies. However, virtually no reform measures were implemented to reduce EPL for regular workers on permanent contracts, with the notable exceptions of Spain, Portugal,

Fig. 3 Financial Market
Regulation in OECD countries.
Note: Index of Financial Market
Regulation ranges from 0 (max
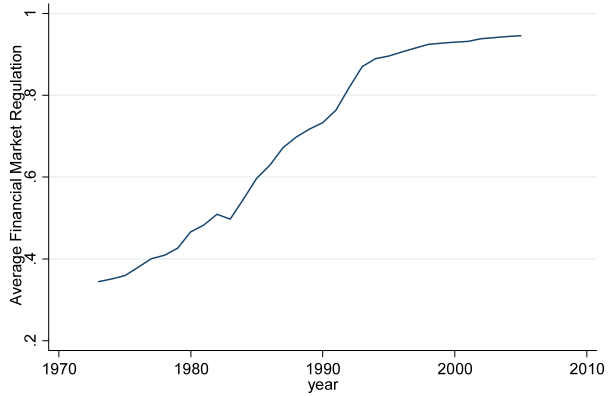regulation) to 1 (min regulation)

Fig. 4 Convergence in Financial
Market Regulation. *Note*: Index
of Financial Market Regulation
ranges from 0 (max regulation)
to 1 (min regulation). A positive
variation (on the vertical axis)
indicates a Financial Market
Deregulation
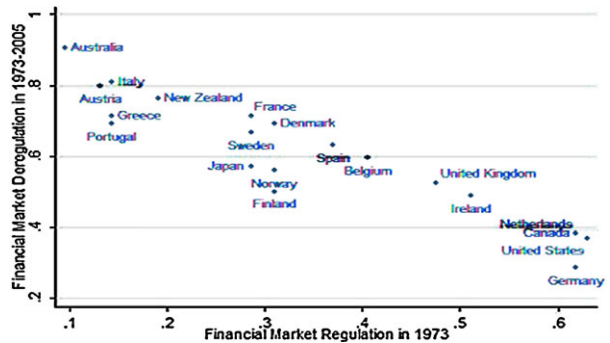
Fig. 5 Employment Protection
Legislation 1985–2008. *Note*:
Index of Employment Protection
Legislation (EPL) ranges from 0
(min protection) to 6 (max
protection)
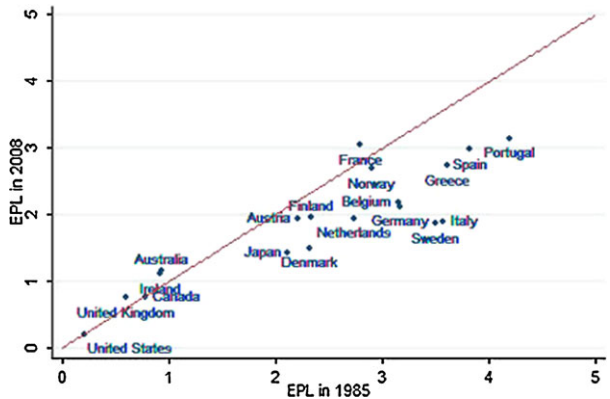
and, to a lesser extent, Finland. Figure 5 shows how the overall index of EPL, which com-
bines regular and temporary workers, changed between 1985 and 2008. Other labor market
reforms, which affected the generosity of unemployment benefit systems, differed widely
across countries. For instance, Portugal boosted the generosity of its unemployment benefit
schemes considerably, while the Netherlands, along with many other countries, become less
generous (see Fig. 6). Reforms aimed at postponing retirement age only came later, from

Fig. 6 Unemployment benefit
Generosity 1975–2007. *Note*:
The Unemployment Benefit
Replacement Rate is the ratio of
the unemployment benefit to the
worker's previous wage

Fig. 7 Retirement Incentives in
1985–2003. *Note*: The Implicit
Tax on continuing to work, for
individuals aged from 60 to 64, is
the ratio between the (possible)
reduction in the net social
security wealth induced by
working one additional year and
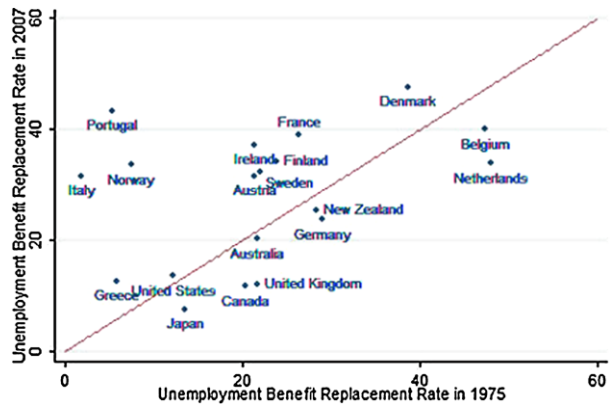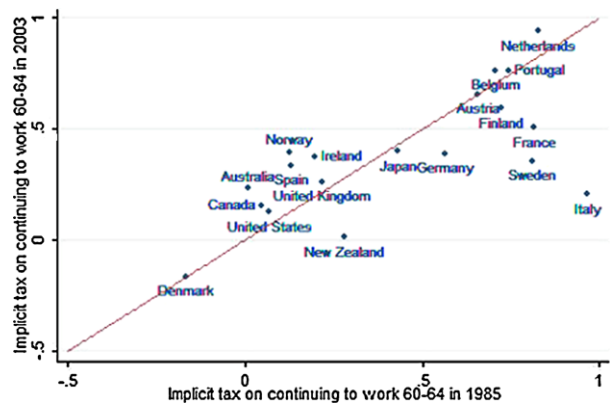the individual annual wage for
individuals aged from 60 to 64

the early 1990s; this was the case in Italy (1992, 1995 and 2004), Germany (1992, 1997 and 2003) and France (2003). Increases in the actual retirement age were pursued by legislating rises in the legal (statutory) retirement age, and by reducing the incentives to retire early. Figure 7 shows that Italy and Sweden, and to a lesser extent Belgium, France and Germany, were particularly effective in curbing the incentives to retire early, as measured by the implicit tax levied on workers aged 60 to 64 years who continued to hold jobs.

4 Economic and political determinants of reforms

4.1 Economic crises

The economic and political literature on structural policies has long suggested that economic crises may prompt the adoption of reform measures (see Haggard and Kaufman 1992; Drazen 2000). Deep economic crises call for quick reactions. Whether or not this actually translates into reform measures will depend on the perception of the sort of change needed. Macroeconomic stabilization following hyperinflation or a budget crisis may more readily be achieved (Rodrik 1996), either because it is easier to agree on the necessary policy—as in the case of trade opening after hyperinflation (Brooks and Kurtz 2007)—or because the crisis itself was the result of a *war of attrition* between socioeconomic groups,

where the losing side ends up bearing the costs of stabilization (Alesina and Drazen 1991; Drazen and Grilli 1993). Crises often induce expansionary policies and more government intervention in the economy (Perotti 1999; Shughart 2011).

An economic crisis may also promote structural reforms, if existing institutions or regulations are recognized to be, at least partially, responsible for the deterioration of the economic conditions. For instance, in countries with more stringent labor market regulations and more generous early-retirement provisions, reforms of pension schemes and labor market become much more urgent. Yet, generous programs are also known to induce a status-quo bias, by creating their own political constituencies made up of the beneficiaries of such programs and bureaucrats. By raising the cost of the status quo, crises may impose a sense of urgency to reform, if there is sufficient consensus that structural reforms may lead to recovery and boost potential output. In particular, worsening economic conditions, together with the release of relevant and reliable information on the cost of the status quo (Tompson 2009), may help to weaken the resistance of the pro-status-quo coalitions (Nelson 1990, 1994), and persuade risk-averse individuals, who are uncertain about the distribution of future benefits and costs deriving from reforms (Fernandez and Rodrik 1991; Laban and Sturzenegger 1994).

However, crises may also hamper pro-market reforms. In fact, during an economic crisis, individuals and socioeconomic groups will be less willing to lose their rents or benefits, unless alternative compensations are available. Furthermore, costly compensatory reform packages are more difficult to finance during economic crises—particularly when crises are associated with fiscal imbalances. So, while reforms aimed at a more efficient labor market may be badly needed when unemployment rates are high, the economic crisis itself may also delay reform measures. Indeed, more policy flexibility can be seen as imposing adjustment costs on (other) workers already suffering from adverse economic conditions (Bean 1998). Likewise, a debt crisis may lead to nationalization, additional regulation, and capital market closure (Edwards 1995) in order to limit episodes of capital flight (Brooks and Kurtz 2007), while major crises may trigger great reversals in financial liberalization (Rajan and Zingales 2003). Finally, the Great Depression led to more government intervention in the economy and to more public spending (Higgs 1987; Shughart 2011).

4.2 Political partisanship and electoral constraints

For reform attempts to succeed, governments need to use their political capital to overcome the resistance from within government itself, from opposition parties, and from crucial veto players in society, such as labor unions or employers' organizations (Tsebelis 2002). Several political and institutional features affect a government's incentives to reform, and ultimately its reform strategy. Besides economic crises, ideological and electoral motivations, too, may drive policy-makers to commit to a reform pattern.

The literature on political partisanship suggests that different political parties have divergent policy preferences, as each party tries to appeal to its own constituency. Hence, parties actively pursue different policies when in office (Boix 1998; Garrett 1998). Conservative governments are expected to adopt efficiency-enhancing policies to reduce the role of the public sector in the economy through welfare state retrenchments and privatizations; but also to liberalize financial and product markets (Abiad and Mody 2005; Brooks and Kurtz 2007). Left-wing governments emphasize instead equity and redistributive factors, and may therefore wish to expand the welfare state and social spending. Contrary to this view, however, a credibility argument has been put forward to explain why some governments have successfully promoted reforms in sharp contrast to the preferences of their core political constituencies as well as, often, with their own electoral platforms (Cukierman and Tommasi 1998). If voters are unable to verify whether a reform

policy is pursued for purely ideological reasons or because it is economically expedient, they will more readily believe that economic motivations prevail if, for instance, liberalizations are introduced by a left-wing government. While the expansion of the welfare state and the introduction of protective labor market institutions have often been associated with the rising power of left-wing parties and trade unions (Esping-Andersen 1990), the retrenchment phase that started in the 1990s has not been linked to partisan politics (Pierson 1994). Similarly, no partisan political preference has been identified as a main driver of market reforms in Latin America in the 1990s (Stokes 2001; Weyland 2002). However, this view has recently been challenged by Allan and Scruggs (2004), who detected a significant impact of right-wing governments on the welfare state retrenchment efforts that took place after 1980. It has also been challenged by Murillo and Martinez-Gallardo (2007), who emphasize the importance of political competition, and, to a lesser extent, the relevance of partisan preferences in the process of liberalization of public utilities in Latin America. Recent empirical contributions (Pettersson-Lidbom 2008) confirm the role of political partisanship in policy decisions.

Partisan politics may be particularly relevant during an economic crisis, when there is more need for—or at least more discussion about—reforming, and parties may differ in their degree of interventionism and/or reform proposals (Alesina et al. 2006). Indeed, Pop-Eleches (2008) suggests that even the very definition of crisis is—at least partially—subjective since different political parties may have a different reading of a crisis and its intensity, as well as of its root causes and possible solutions.

A different strand of literature has emphasized the role of the electorate in determining economic policies and regulatory measures. In this case, policy-makers are identified with opportunistic, non-partisan incumbent politicians, hoping to achieve re-election, or with the parties backing candidates for public office drafting political platforms. In both cases, politicians have personal interests in supporting economic policies that are supported by a majority of the voters, or by the voters who are more easily convinced by the policies—the *swing* voters (Stromberg 2008).

In this sense, a government's tenure in office and the expected time to the next election may affect the reform process. In the lead-up to a general election, a government may refrain from implementing reform policies with large short-term costs, but it may be more in favor of policies with short-term benefits—and vice-versa with newly elected governments. Well-functioning financial markets may, however, bring forward the long-term benefits of reforms, thereby helping reformist governments to pursue their strategies (Buti et al. 2008). A government's political strength may also affect its willingness and ability to reform. Weak, fragmented governments, which can count only on the support of a minority or a coalition in Parliament, are not well equipped to pursue reforms (Brooks and Kurtz 2007). Indeed, they may manage to implement policy changes, although their strategy will have to be founded on a broader base for reforms. Conversely, strong governments may rely on their supporting political majorities.

These considerations regarding the electoral costs and gains from reforming are remarkably appropriate for broad policy measures, such as retirement and labor market policies, which naturally affect many individuals, and may potentially have major electoral repercussions. Pension reforms are known to carry heavy political costs, since the elderly, who are to suffer a cut-back, are "single-minded" (Mulligan and Sala-i-Martin 1999; Profeta 2002) over social security benefits. In fact, while pension benefits comprise a large share of an elderly retiree's income, the interests of other (younger) individuals tend to be more diversified, as they depend on their family status, occupation, income, and so on.

Recent research has downplayed the role of the median voter in determining economic policy, and drawn attention to organized pressure groups and to partisan allies within the

party structure (Nielson 2003). This approach seems particularly well suited for addressing the liberalization of product and financial markets, which may drive up costs for those who stand to lose from the reform, and yield only small, diffuse benefits for the winners.

4.3 Macroeconomic policy and external constraints

Monetary policy may affect structural reforms. In particular, to adopt a fixed exchange rate regime, or a single currency (e.g., the case of the Euro), a country has to relinquish control of monetary policy, which then prevents from using this policy to accommodate negative shocks. This may create incentives to pursue structural reforms (such as liberalizations in the labor and product market) in order to stimulate market-based adjustments (Bean 1998; Duval and Elmeskov 2005; Obstfeld 1997). On the other hand, Saint-Paul and Bentolila (2000) argue that, under a currency union, such as the European Monetary System, the up-front cost of structural reforms may increase, since the use of expansionary aggregate demand policies to accompany structural reforms becomes more limited, owing to fiscal constraints and lack of monetary authority.

Openness to trade has also been recognized as an important determinant of liberalization (IMF 2004). This is because more globalized countries are open to competition, which creates demand for more flexibility, but also for more protection. Small countries, which rely heavily on foreign trade, tend to implement more reforms (Duval and Elmeskov 2005).

Reforms may be induced, not only by economic crises, but also by supranational constraints imposed by international agreements or treaties—the European Union (EU) is a case in point. These have been instrumental in strengthening domestic competition (especially in the service sector) or creating domestic institutions that stimulate reform (e.g., antitrust or sectoral regulatory authorities). The implementation of the EU's Single Market Program has pursued the removal of remaining barriers to trade and FDI (often resulting in the abolition or reduction of subsidies and protection).

5 Empirical analysis

5.1 Measuring reforms

I consider structural reforms in product, labor and financial markets in 25 OECD countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, the United Kingdom, and the United States.

To measure product market reforms, I use data on anti-competitive regulations for the period 1975–2007 collected by Conway and Nicoletti (2006), and described in detail in Nicoletti and Scarpetta (2005). These regulatory indicators measure restrictions on competition and private sector governance in seven non-manufacturing industries: electricity and gas supply, road freight, air passenger transport, rail transport, post and telecommunications (fixed and mobile)—on a scale from zero (the least restrictive) to six (the most restrictive). The overall index of regulation includes information on entry barriers, public ownership, market shares of the dominant player(s) (in the telephone, gas and railroad sectors), and price controls (in the road freight industry). In particular, entry barriers cover legal limitations on the number of companies in potentially competitive markets and rules on the vertical integration of network industries. Public ownership measures the share of equity

owned by central or municipal governments in firms of a given sector between two polar cases: no public ownership (indicator takes value zero) and full public ownership (value of six). In the benchmark regressions, I use two indices of overall regulation. A regulatory indicator, which does not include public ownership, is obtained by averaging, in each of the seven industries, the indicators of barriers to entry, market shares of new entrants, and price controls; whereas an indicator that includes only public ownership information is a simple average of public ownership over the seven industries.

Financial market reforms are measured using a recent IMF database that covers the period 1973–2005 (see Abiad et al. 2008, for a detailed description). Out of the 25 countries listed above, data for Iceland and Luxembourg are not available. The database records financial policy changes for seven different dimensions: credit controls and excessively high reserve requirements, interest rate controls, entry barriers, state ownership in the banking sector, policies on securities markets, prudential regulations and supervision of the banking sector, and restrictions on capital account. In the regression analysis, I use the overall index, which aggregates the liberalization scores for each category, and normalizes them between zero and one. Unlike in the previous case (with the OECD product market indicator), the IMF's financial market reforms indicator takes a value of zero for the highest degree of repression and of one for full liberalization.

To measure reform policies in the labor market, I consider two indicators of labor market policies: the degree of employment protection legislation (EPL) for the 1985–2008 period (data for Iceland and Luxembourg are not available), and the unemployment benefit replacement rate (UB) between 1975 and 2007. Both indicators are provided by the OECD, and described respectively in the OECD Employment Outlook (2004) and in the OECD Benefits and Wages (several issues). The indicator of employment protection ranges from zero to six (from least to most restrictive) and measures legislative restrictions imposed on the firing processes and collective bargaining agreements. It is provided separately for regular and temporary workers. For regular workers, the employment protection legislation indicator measures three aspects: (i) difficulty of dismissal, i.e., legislative provisions setting conditions under which a dismissal is "justified" or "fair"; (ii) procedural inconveniences that the employer may have to face when starting the dismissal procedure; and (iii) notice and severance pay provisions. The index also provides a measure of the regulation of fixed-term contracts and temporary-work agencies, which captures the restrictions on the use of temporary employees. The employment legislation for regular contracts constitutes the core component of the overall summary index of EPL strictness that we use. The indicator of the extent of insurance coverage provided in redundancy cases is based on the unemployment benefit replacement rate, namely, the ratio of the unemployment benefit to the last wage. In particular, I concentrate on the average of the unemployment benefit replacement rates of a worker with average labor income over a three-year unemployment spell.

Retirement policies are captured by OECD data on the implicit tax on continuing to work for individuals aged between 60 and 64, over the 1985–2003 period (data for Czech Republic, Hungary, Iceland, Luxembourg, and Poland are not available). Postponing retirement may involve a cost, if the present value of net social security wealth—given by the discounted difference between future benefits and contributions—decreases when an individual works one additional year. The implicit tax on continuing to work is calculated as the average of the ratio between this reduction in the net social security wealth and the individual annual wage for individuals aged from 60 to 64 (see Duval 2004, for a detailed description).

Data on political variables are from the World Bank's Database of Political Institutions (DPI), compiled by Beck et al. (2001) and updated in 2007. Political partisanship is mea-

Table 1 Years of crisis

Australia	1983
Austria	1984–1987
Belgium	1983–1987
Canada	1982–1983, 1992–1993, 1996
Denmark	1975, 1981, 1993
Finland	1977–1978, 1992–1996
Iceland	1992–1995
Ireland	1986–1987, 1993–1994, 2008
Japan	1984
Luxembourg	1982–1983, 1985, 1996–1997
Netherlands	1970, 1982–1983
New Zealand	1991–1992
Norway	1978–1984, 1989–1993
Portugal	1983–1987, 1994
Spain	1981–1986, 1994–1997
Sweden	1993–1994
United Kingdom	1981–1982, 1984
United States	1975, 1982–1983

sured by a dummy variable for right-wing governments. Electoral incentives (or, rather, constraints) are captured by the number of years to the next election. A measure of government strength is given by the number of years that a government (namely the chief executive) has been in office, both in current and previous administrations. A complementary index of the government's weakness is given by its degree of fractionalization, which measures the probability that two members of Parliament picked at random among the government's parties are from different parties.

To measure (major) crises, I consider situations in which the output gap, defined as the difference between actual output and potential output, is below the 90th percentile of the empirical density (which is equal -3.4 %). Data on output gap are from the OECD's Economic Outlook database. In our sample, this definition produces a total of 76 crises, as detailed in Table 1. In these country-year observations, the dummy variable (crisis) takes a value of one. EU membership is defined as a dummy variable set to one when a country is a member of the European Union (after 1999), while the EU's single market program dummy is set equal to one when a country is in the EU's Single Market Program (after 1993). Government fiscal position is measured by the share of government net lending relative to GDP. The degree of openness of a country, on the other hand, is given by the ratio between the sum of imports and exports to GDP. The degree of efficiency of the financial markets is measured by the stock market capitalization as a share of GDP, which is available only after 1988. These data are from the OECD Economic Outlook database.

Table 2 presents the summary statistics for these variables.

5.2 Empirical strategy

The dependent variables used in the econometric analysis correspond to the annual variations in the policy indicators described above for the product, labor and financial markets. The explanatory variables used in the empirical analysis were divided into three groups: eco-

Table 2 Summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Product Market Regulation	682	3.788	1.546	0.759	6
Public Ownership	682	4.039	1.332	0.827	6
Financial Market Regulation	576	0.755	0.229	0.095	1
EPL	487	2.071	1.024	0.208	4.188
Unemployment Benefit	623	28.275	13.199	0.347	64.944
Retirement Incentives	354	0.411	0.327	−0.164	1.051
Crisis	682	0.111	0.315	0	1
Right Government	682	0.452	0.498	0	1
Center Government	682	0.426	0.495	0	1
Left Government	682	0.122	0.327	0	1
Years to Election	682	1.647	1.273	0	4
Years in Office	682	3.789	2.821	1	16
Government Fractionalization	682	0.278	0.259	0	0.828
Openness	681	0.669	0.467	0.114	3.380
Government Net Lending	677	−0.027	0.044	−0.160	0.185
EMU	682	0.155	0.363	0	1
European Single Market	682	0.348	0.477	0	1

nomic factors (including a crisis dummy), political factors, and interactions between crisis and politics.

A preliminary issue in the empirical analysis of the political economy of structural reform is how to identify such reforms. Previous work (Duval and Elmeskov 2005; Pop-Eleches 2008; Abiad and Mody 2005) concentrated on radical reforms as characterized by sudden, broad changes in the policy indicators. The econometric analysis in this paper follows another strand of literature (Alesina et al. 2006; Allan and Scruggs 2004; Brooks and Kurtz 2007), and examines all reforms, as measured by any variation in the indicators of labor, financial and product market policies.

Some of these indicators are bounded (see Sect. 5.1) and display positive mass at one extreme of the distribution. In these cases, which correspond to Product Market Regulation, Public Ownership and Financial Market Regulation, I use a dynamic unobserved effect Tobit specification, which allows for the lagged level of the policy indicator to be among the explanatory variables in the regression equation. For the remaining three indicators, two variables (EPL and Unemployment Benefit) are also bounded but show no density mass at any extreme, while the last (Retirement Incentives) is not. For these three variables, I use a linear specification.

The Tobit and linear models relate the level of a policy indicator (Y) to the lagged level of the policy indicator and to a set of lagged explanatory variables (X), according to the following two equations:

$$Y_{i,t} = \text{Min}\left\{ \overline{Y}, \alpha Y_{i,t-1} + \sum_j \beta_j X_{j,i,t-1} + \upsilon_i + \eta_t + \varepsilon_{i,t} \right\},$$

$$Y_{i,t} = \alpha Y_{i,t-1} + \sum_j \beta_j X_{j,i,t-1} + \upsilon_i + \eta_t + \varepsilon_{i,t},$$

where $\overline{Y}$ is the upper bound of the distribution of the variable $Y_{i,t}$, i is a country index, t is a time index, υ_i is a fixed country effect, η_t is a fixed time effect and $\varepsilon_{i,t}$ is a random error. A value of parameter β_j below one hence identifies policy convergence towards some (possibly country-specific) level.

Regression analyses based on panel cross-country/time-series data are associated with well-known drawbacks (Beck and Katz 1995). The specifications used for this model try to address some of these issues. First, since the reform indicators are very persistent (particularly, the labor market regulation indicators), the above specification includes a lagged dependent variable. Second, all the economic and political explanatory variables are also lagged. This is explained by the need to deal, in part at least, with simultaneity bias problems; but also to account for the fact that it takes time for politicians to respond to shocks, and that there is an obvious lag between the beginning of the (political) reform process and its implementation. Third, country and time fixed effects are used in all regressions, to account for unobserved heterogeneity at country and year level. This allows one to filter out of the analysis country- or year-specific unobserved components, and thus to identify the effects of crises and political variables from within-country rather than from cross-countries variations. The inclusion of the lagged dependent variable and of country- and year-fixed effects clearly represents a conservative strategy.

Finally, in interpreting the empirical results, it is worth noticing that while the direct effect of political partisanship on reforms may suffer from an omitted variable problem, this limitation is less severe when the effect is analyzed during an economic crisis. For instance, a positive correlation between conservative governments and reform policies may be driven by an underlying economic, social or political process (such as a need to reduce the role of the state in the economy) that leads the voters to elect conservative governments precisely because they want reforms to be implemented. However, unless one believes that major economic crises are either easily predicted by the voters, or voluntarily generated by governments, the reaction of conservative governments to a major, unexpected crisis identifies the true effect of these government characteristics on policy reforms, at least during crises. This justifies the emphasis on the role of political partisanship in a crisis.

6 Results

The first objective of this empirical analysis was to assess the bearing of economic crises and political partisanship on structural reforms. All results are reported for six reform indicators: the overall product market regulation indicator (Product Market Regulation), the indicator of public ownership in the product market (Public Ownership), the financial market reform indicator (Financial Market Regulation), employment protection legislation (EPL) and the unemployment benefit replacement rate (Unemployment Benefits) for the labor market, and the implicit tax on continuing to work (Retirement Incentives) for the retirement policy. All of the tables below show the results of Tobit regressions for the first three variables and of OLS regressions for all others.

In Table 3, the results of the regression analysis for our six reform indicators concern the direct effects of a crisis and of the economic and political variables. The strong persistence in the regulation indicators is apparent from the coefficients of the lagged dependent variables being statistically highly significant and close to one. While major lagged economic crises are not associated directly with deregulation in the product market, budget deficits, which are common during economic crises, are correlated with liberalizations (column 1). On the other hand, crises hinder privatizations (column 2), and are associated with an increase in

Table 3 Crisis and political determinants of reforms

Variables	(1) Product Market Regulation	(2) Public Owner- ship	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.90***	0.91***	0.86***	0.91***	0.89***	0.937***
	(0.019)	(0.015)	(0.021)	(0.021)	(0.014)	(0.029)
Crisis	−0.03	0.04*	−0.01*	0.01	−0.04	−0.004
	(0.029)	(0.024)	(0.006)	(0.013)	(0.153)	(0.005)
Right Government	−0.04*	−0.05***	−0.00	−0.01	−0.22**	0.002
	(0.020)	(0.017)	(0.005)	(0.008)	(0.103)	(0.003)
Center Government	−0.03	−0.01	−0.01	0.00	−0.06	0.014
	(0.038)	(0.031)	(0.009)	(0.018)	(0.315)	(0.013)
Years to Election	0.01	−0.01	−0.00	−0.00	−0.01	−0.000
	(0.007)	(0.006)	(0.002)	(0.002)	(0.032)	(0.001)
Years in Office	−0.00	−0.00	0.00	−0.00	0.01	0.000
	(0.003)	(0.003)	(0.001)	(0.001)	(0.016)	(0.001)
Govt Fractionalization	0.12**	0.12***	−0.01	0.04	−0.18	0.002
	(0.054)	(0.045)	(0.012)	(0.031)	(0.289)	(0.010)
EMU	−0.10***	−0.04	0.00	−0.02	0.65***	−0.014*
	(0.037)	(0.031)	(0.009)	(0.015)	(0.227)	(0.007)
European Single Market	−0.09**	−0.12***	0.00	−0.01	0.08	0.006
	(0.038)	(0.031)	(0.009)	(0.014)	(0.160)	(0.006)
Government Net Lending	0.60*	0.01	0.11	−0.04	−1.19	0.019
	(0.314)	(0.260)	(0.074)	(0.136)	(1.541)	(0.057)
Openness	−0.07	0.00	0.01	0.07*	−0.49	0.005
	(0.084)	(0.070)	(0.025)	(0.035)	(0.585)	(0.030)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	569	467	612	335

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

financial market regulation (column 3). Major crises have no impact on employment protection legislation (column 4), generosity of unemployment benefits (column 5), and incentives to retire early (column 6).

Among all the political variables, political partisanship turns out to be particularly relevant. Right-wing parties are associated with liberalization and privatization in the product markets, and with less generous unemployment benefits. Weak governments, as measured by their degree of fractionalization, are associated with more regulation of product markets and fewer privatizations. Conversely, government tenure and time left before the next election, which may capture the government's electoral incentives, play no role in promoting or hindering reforms. Finally, countries belonging to the Euro zone are associated with greater liberalization of the product market and more generous unemployment benefit replacement rates, while access to the European Single Market leads to product market liberalizations and

Table 4 Crisis and political determinants of reforms II

Variables	(1) Product Market Regulation	(2) Public Owner-ship	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.47***	0.46***	0.26***	0.87***	0.89***	0.89***
	(0.027)	(0.044)	(0.019)	(0.026)	(0.025)	(0.035)
Crisis	0.04	0.20**	0.02**	0.02	−0.29	−0.00
	(0.078)	(0.086)	(0.012)	(0.018)	(0.283)	(0.009)
Right Government	−0.20***	−0.26***	0.02***	−0.02*	−0.15	0.01
	(0.035)	(0.039)	(0.006)	(0.009)	(0.122)	(0.004)
Center Government	0.10	−0.04	−0.01	0.01	−0.14	0.01
	(0.094)	(0.103)	(0.015)	(0.026)	(0.436)	(0.016)
Years to Election	−0.01	−0.04***	−0.00	−0.00	−0.03	−0.00
	(0.013)	(0.015)	(0.002)	(0.003)	(0.045)	(0.001)
Years in Office	−0.01	−0.01*	0.00	−0.00	0.05**	0.00
	(0.006)	(0.007)	(0.001)	(0.002)	(0.021)	(0.001)
Govt Fractionalization	0.17	0.19	−0.04*	0.04	−0.24	0.01
	(0.117)	(0.129)	(0.018)	(0.039)	(0.432)	(0.013)
EMU	−0.14**	0.14*	0.05***	−0.03	0.88***	−0.02***
	(0.069)	(0.076)	(0.011)	(0.021)	(0.298)	(0.009)
European Single Market	−0.11	−0.13	0.04***	−0.02	0.13	0.01
	(0.088)	(0.097)	(0.013)	(0.020)	(0.274)	(0.008)
Government Net Lending	3.55***	4.16***	0.51***	−0.06	−0.12	0.06
	(0.635)	(0.724)	(0.102)	(0.189)	(2.304)	(0.076)
Openness	−2.56***	−3.06***	−0.17***	0.04	−1.80	0.07
	(0.260)	(0.286)	(0.055)	(0.091)	(1.393)	(0.047)
Stock Market Capitalization	−0.52***	−0.86***	−0.07***	0.00	−0.20	−0.01
	(0.070)	(0.076)	(0.012)	(0.020)	(0.268)	(0.009)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	370	370	330	368	370	275

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

privatizations. Interestingly, the degree of trade openness is weakly associated with more rigid labor market, suggesting that more international competition may actually increase demand for protection. Table 4 shows that these results are robust to controlling for the degree of efficiency of the financial markets, although these data are available only after 1988.

To examine the relevance of partisan politics during economic crises, Table 5 presents the results of the regression analysis that include as explanatory variable the interaction between the (lagged) crisis indicator and—separately—the (lagged) right-wing and center government parties. An interesting pattern emerges. Parties mostly modify their reforming behavior during crisis. Despite being on average more active in reforming product and labor

Table 5 The effects of political partisanship during crises

Variables	(1) Product Market Regulation	(2) Public Ownership	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.90[***]	0.90[***]	0.85[***]	0.91[***]	0.90[***]	0.94[***]
	(0.019)	(0.015)	(0.021)	(0.021)	(0.015)	(0.029)
Crisis	−0.00	−0.02	−0.03[***]	0.02	0.08	−0.01
	(0.044)	(0.038)	(0.010)	(0.018)	(0.216)	(0.008)
Right Government	−0.04[*]	−0.06[***]	−0.01	−0.01	−0.22[**]	0.00
	(0.021)	(0.017)	(0.005)	(0.008)	(0.106)	(0.004)
Center Government	0.02	−0.01	−0.01	0.01	0.56	0.02
	(0.040)	(0.033)	(0.010)	(0.020)	(0.339)	(0.017)
Right Govt * Crisis	0.02	0.10[**]	0.03[**]	−0.01	0.02	0.01
	(0.056)	(0.047)	(0.012)	(0.024)	(0.283)	(0.010)
Center Govt * Crisis	−0.27[***]	0.05	0.01	−0.03	−2.01[***]	−0.02
	(0.081)	(0.068)	(0.020)	(0.034)	(0.565)	(0.022)
Years to Election	0.01[*]	−0.01	−0.00	−0.00	−0.01	0.00
	(0.007)	(0.006)	(0.002)	(0.002)	(0.033)	(0.001)
Years in Office	−0.00	−0.00	0.00	−0.00	0.01	−0.00
	(0.003)	(0.003)	(0.001)	(0.001)	(0.016)	(0.001)
Govt Fractionalization	0.11[**]	0.12[***]	−0.01	0.04	−0.19	0.00
	(0.054)	(0.045)	(0.012)	(0.031)	(0.289)	(0.010)
EMU	−0.12[***]	−0.04	0.00	−0.02	0.54[**]	−0.01[**]
	(0.037)	(0.031)	(0.009)	(0.016)	(0.229)	(0.007)
European Single Market	−0.08[**]	−0.12[***]	0.00	−0.01	0.15	0.01
	(0.038)	(0.031)	(0.009)	(0.015)	(0.163)	(0.006)
Government Net Lending	0.63[**]	−0.00	0.11	−0.05	−1.17	0.02
	(0.311)	(0.259)	(0.074)	(0.136)	(1.548)	(0.056)
Openness	−0.10	−0.00	0.01	0.06[*]	−0.50	0.00
	(0.084)	(0.069)	(0.025)	(0.034)	(0.583)	(0.030)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	569	467	612	335

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. [***] $p < 0.01$, [**] $p < 0.05$, [*] $p < 0.1$

markets, right-wing governments in fact refrain from taking policy steps during major economic crises. Indeed, they put a brake on increasing financial market regulations under crisis (column 3), the reverse of what left-wing governments would do. Product market liberalizations (column 1) and cutbacks in unemployment benefit generosity (column 5) are promoted by center governments, while left-wing governments are associated with more privatizations (column 2) during crises. Again, the inclusion of stock market capitalization does not modify the results (see Table 6).

Table 6 The effects of political partisanship during crises

Variables	(1) Product Market Regulation	(2) Public Owner-ship	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.50***	0.51***	0.26***	0.86***	0.89***	0.89***
	(0.026)	(0.043)	(0.019)	(0.026)	(0.025)	(0.035)
Crisis	0.08	0.19	0.02	0.02	−0.51	−0.02
	(0.105)	(0.123)	(0.017)	(0.026)	(0.410)	(0.014)
Right Government	−0.19***	−0.26***	0.02***	−0.02*	−0.18	0.00
	(0.034)	(0.039)	(0.006)	(0.010)	(0.122)	(0.004)
Center Government	0.25***	0.02	−0.02	0.02	0.06	0.01
	(0.092)	(0.107)	(0.017)	(0.029)	(0.461)	(0.020)
Right Govt ∗ Crisis	0.17	0.14	0.00	−0.00	0.68	0.02
	(0.136)	(0.158)	(0.022)	(0.033)	(0.533)	(0.017)
Center Govt ∗ Crisis	−0.95***	−0.35	0.02	−0.04	−0.71	0.01
	(0.190)	(0.222)	(0.031)	(0.049)	(0.802)	(0.031)
Years to Election	−0.01	−0.04***	−0.00	−0.00	−0.03	−0.00
	(0.012)	(0.014)	(0.002)	(0.003)	(0.045)	(0.001)
Years in Office	−0.01**	−0.02**	0.00	−0.00	0.05**	0.00
	(0.006)	(0.007)	(0.001)	(0.002)	(0.021)	(0.001)
Govt Fractionalization	0.09	0.13	−0.03*	0.04	−0.27	0.00
	(0.107)	(0.125)	(0.018)	(0.039)	(0.428)	(0.013)
EMU	−0.22***	0.10	0.05***	−0.04	0.78***	−0.02***
	(0.064)	(0.074)	(0.011)	(0.022)	(0.300)	(0.009)
European Single Market	−0.06	−0.09	0.04***	−0.02	0.18	0.01
	(0.081)	(0.094)	(0.013)	(0.021)	(0.276)	(0.009)
Government Net Lending	3.08***	3.82***	0.48***	−0.07	0.25	0.07
	(0.587)	(0.706)	(0.102)	(0.189)	(2.273)	(0.076)
Openness	−2.64***	−3.19***	−0.20***	0.03	−1.96	0.07
	(0.239)	(0.280)	(0.055)	(0.092)	(1.396)	(0.048)
Stock Market Capitalization	−0.55***	−0.87***	−0.07***	0.00	−0.24	−0.01
	(0.064)	(0.074)	(0.012)	(0.020)	(0.263)	(0.009)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	370	370	330	368	370	275

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Do other political factors become more or less relevant during an economic crisis? To address this question, Tables 7 and 8 show the results of the regression analyses that include as explanatory variable the interaction between the (lagged) crisis indicator and, respectively, the (lagged) numbers of years in office for the current government, and the (lagged) level of government fractionalization. In both cases, the importance of these political factors

Table 7 The effects of government tenure during crises

Variables	(1) Product Market Regulation	(2) Public Owner-ship	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.90***	0.91***	0.86***	0.91***	0.89***	0.94***
	(0.019)	(0.015)	(0.021)	(0.021)	(0.015)	(0.029)
Crisis	−0.10**	0.04	−0.01	0.01	−0.39	0.00
	(0.043)	(0.036)	(0.010)	(0.020)	(0.258)	(0.003)
Right Government	−0.04*	−0.05***	−0.00	−0.01	−0.23**	0.01
	(0.020)	(0.017)	(0.005)	(0.008)	(0.103)	(0.013)
Center Government	−0.03	−0.01	−0.01	0.00	−0.04	−0.00
	(0.038)	(0.031)	(0.009)	(0.018)	(0.313)	(0.001)
Years to Election	0.01*	−0.01	−0.00	−0.00	−0.01	0.00
	(0.007)	(0.006)	(0.002)	(0.003)	(0.032)	(0.001)
Years in Office	−0.00	−0.00	0.00	−0.00	0.00	−0.00
	(0.004)	(0.003)	(0.001)	(0.001)	(0.017)	(0.001)
Years in Office ∗ Crisis	0.02**	−0.00	−0.00	0.00	0.08	0.00
	(0.009)	(0.008)	(0.002)	(0.004)	(0.047)	(0.011)
Govt Fractionalization	0.12**	0.12***	−0.01	0.04	−0.17	−0.01*
	(0.054)	(0.045)	(0.012)	(0.031)	(0.290)	(0.007)
EMU	−0.10***	−0.04	0.00	−0.02	0.64***	0.01
	(0.037)	(0.031)	(0.009)	(0.016)	(0.226)	(0.006)
European Single Market	−0.09**	−0.12***	0.00	−0.01	0.11	0.02
	(0.038)	(0.031)	(0.009)	(0.014)	(0.161)	(0.057)
Government Net Lending	0.64**	0.01	0.11	−0.04	−1.09	0.00
	(0.314)	(0.260)	(0.074)	(0.137)	(1.548)	(0.030)
Openness	−0.08	0.00	0.01	0.07*	−0.57	0.00
	(0.084)	(0.070)	(0.025)	(0.035)	(0.588)	(0.003)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	569	467	612	335

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

increases during an economic crisis, but only for product market regulations. In particular, although they are associated with more regulated product markets, during a crisis fractionalized governments apparently become more keen to implementing reform measures. Conversely, governments that have been in power longer, and may thus be responsible for the status-quo policy, are less apt to liberalize product markets during economic crises.

All results are robust to dropping the top- and bottom-two ranked countries for each dependent variable.

Table 8 The effects of government fractionalization during crises

Variables	(1) Product Market Regulation	(2) Public Owner- ship	(3) Financial Market Regulation	(4) EPL	(5) Unemployment Benefit	(6) Retirement Incentives
Lagged dependent	0.90***	0.91***	0.86***	0.91***	0.89***	0.94***
	(0.019)	(0.015)	(0.021)	(0.021)	(0.014)	(0.029)
Crisis	0.03	0.02	−0.01	0.01	0.05	−0.00
	(0.040)	(0.034)	(0.009)	(0.016)	(0.195)	(0.007)
Right Government	−0.04*	−0.05***	−0.00	−0.01	−0.23**	0.00
	(0.020)	(0.017)	(0.005)	(0.008)	(0.104)	(0.004)
Center Government	−0.03	−0.01	−0.01	0.01	−0.04	0.01
	(0.038)	(0.031)	(0.009)	(0.018)	(0.313)	(0.014)
Years to Election	0.01*	−0.01	−0.00	−0.00	−0.01	−0.00
	(0.007)	(0.006)	(0.002)	(0.003)	(0.032)	(0.001)
Years in Office	−0.00	−0.00	0.00	−0.00	0.01	0.00
	(0.003)	(0.003)	(0.001)	(0.001)	(0.016)	(0.001)
Govt Fractionalization	0.13**	0.11**	−0.01	0.04	−0.15	0.00
	(0.055)	(0.046)	(0.012)	(0.031)	(0.291)	(0.011)
Govt Fractionalization * Crisis	−0.20**	0.08	0.00	−0.01	−0.41	−0.01
	(0.097)	(0.082)	(0.021)	(0.046)	(0.510)	(0.019)
EMU	−0.10***	−0.04	0.00	−0.02	0.64***	−0.01*
	(0.037)	(0.031)	(0.009)	(0.016)	(0.227)	(0.007)
European Single Market	−0.09**	−0.12***	0.00	−0.01	0.08	0.01
	(0.038)	(0.031)	(0.009)	(0.015)	(0.161)	(0.006)
Government Net Lending	0.54*	0.03	0.11	−0.04	−1.23	0.02
	(0.315)	(0.261)	(0.074)	(0.138)	(1.545)	(0.057)
Openness	−0.09	0.01	0.01	0.07*	−0.53	0.00
	(0.084)	(0.070)	(0.025)	(0.035)	(0.590)	(0.031)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	569	467	612	335

Columns 1–3, Tobit regressions; columns 4–6, OLS regressions. Standard errors in parentheses. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

7 Concluding remarks

Using a large dataset of structural reforms in the labor, product, and financial markets for 25 OECD countries over the 1975–2007 period, I find supporting evidence that economic crises matter for reforms. Do crises promote or hinder reform policies? In the theoretical literature, arguments have been provided to support both views. The empirical analysis carried out in this paper suggests that indeed both arguments apply. Budget deficits facilitate product market liberalizations, but major economic crises are associated with fewer privatizations and more financial market regulation. This last result goes a stage further than previous

findings by Brooks and Kurtz (2007), who use a sample of 19 Latin American countries to show that crises matter, but not always to promote financial liberalization.

Partisan politics also matters for reforms. Right-wing governments are associated with liberalization and privatization in product markets, and with a less generous welfare state. These findings confirm previous work by Allan and Scruggs (2004), who show that, since the mid-1980s, welfare state retrenchments typically have been associated with right-wing governments, and extend their results to the product market.

Perhaps more interestingly, the empirical analysis conducted in this paper has uncovered an additional effect of political partisanship on structural reforms. Political parties propose radically different responses to economic crises. Moreover, these responses also differs from their usual political orientations in good economic times. In particular, the empirical findings suggest that during crises, right-wing governments refrain from promoting reforms, but they also object to stepping up financial market regulations. During major economic crises, it is center and left-wing governments that contribute more substantially to reforms. The former liberalize product markets and retrench unemployment benefit generosity; the latter privatize. A clear case of commitment to reforming in times of crisis is illustrated by Spain's Socialist government led by Felipe Gonzales. During the 1994–96 economic crisis, Gonzales began to privatize major state-owned enterprises in the telecommunications and energy sectors, such as Endesa, Repsol, Telefonica; eventually, in 1995, he closed down the state-owned industrial holding company (Instituto Nacional de Industria).

These results seem to suggest that economic crises are unusual periods, during which reforms may be more necessary in order to boost economic efficiency, and yet less palatable to individuals (and firms) facing tough times. In these situations, parties ideologically less ready to reform (in good times) may accordingly be more credible in convincing stakeholders—i.e., workers, voters, and unions—of the costs involved in these noncompetitive regulations and of the need to reform.

The empirical analysis suggests the existence of additional elements in this "politics of crisis". Strong governments which have been in power for a long time are less prone to liberalize product markets, while weak—that is, fractionalized—governments liberalize more. We can also infer from these results that blame avoidance might be a viable strategy for introducing reforms. Fractionalized governments, which in good times find it difficult to converge on a reform package, during crises may exploit the fact that the blame is to be shared among all the parties supporting the governing coalition, and may thus be more effective in reforming.

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