
Economic Insecurity and Social Policy Expansion: Evidence from Interwar Europe

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Abstract What is the impact of economic insecurity on the development of institutions of social insurance? Existing studies have examined this question by exploring the impact of various measures of economic volatility on aggregate government expenditures or revenues. These aggregate data are, however, an imperfect proxy of the character of institutions of social protection. To overcome the limitations of earlier studies, this article explores the conditions under which economic insecurity leads to the extension of the level of social insurance coverage. I argue that economic insecurity sharpens a sectoral cleavage between coalitions in “high-risk” and “low-risk” sectors. Workers (and some employers) in high-risk sectors will favor the introduction of social insurance institutions characterized by broad levels of coverage and a high redistribution of costs across occupations. In contrast, a cross-class alliance in low-risk sectors will oppose proposals aiming at the introduction of redistributive social policies, fearing that these policies will turn them into subsidizers of high-risk industries. A redistributive social insurance policy will be introduced only if the “high-risk” coalition is larger. The article tests both the micro- and macro-level implications of this theory, by examining the development of unemployment insurance policies in interwar Europe.

The study of the relationship between economic insecurity and the size of the public economy is a dynamic, rapidly growing area of current research. A large number of studies have explored this relationship from both micro- and macro-level angles. Public opinion scholars have examined the impact of economic insecurity on individual demands for various forms of policy protection.¹ Macro-level studies have examined the role of economic insecurity in explaining cross-national differences in the size of the public sector. An important subset of this literature has used either economic openness or the volatility in the terms of trade as a proxy for the level of economic insecurity and has identified a positive relationship

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1. See Scheve and Slaughter 2003; Baker 2003; and Mayda and Rodrik 2001.

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between these variables and the size of the welfare state.² In recent research, Rodrik has demonstrated that the positive relationship between economic openness, external risk, and the size of the welfare state is not a finding that is idiosyncratic for the small open European economies alone, but that the result is robust and holds for a sample of more than 100 countries.³ Thus, micro- and macro-level approaches point to the existence of a positive relationship between economic insecurity and the level of social protection.

Critics have identified two limitations of existing research linking economic insecurity and larger welfare states. One important shortcoming of these studies is that the political mechanism linking economic insecurity and larger public economies is still insufficiently developed.⁴ Nearly all explanations focus primarily on the political demands of sectors that gain from the introduction of more extensive social policies of social protection and fail to discuss the preferences and strategies of groups that oppose the introduction of redistributive social policies. Political responses to higher insecurity also depend on the structural attributes of states, in other words, on their capability to enforce legislation that has been enacted and to collect social insurance contributions and distribute benefits. In the presence of weak, inefficient, or corrupt states, groups that might benefit from the introduction of redistributive social policies are likely to favor more private-type institutions of social protection.⁵ A second important limitation of macro-level studies linking economic insecurity and larger welfare states is that these studies rely on highly aggregated measures of total government expenditures as measures of the level of social protection. But aggregated data that is used in current studies—such as total government consumption or total receipts of the central government—is only loosely related to the questions of policy design that are politically salient. The policy issues that are distributionally divisive are questions about the level of social insurance coverage, the level of benefits, and the eligibility conditions for various social policy entitlements.

In this article, I address the shortcomings of existing studies linking economic insecurity and larger welfare states. First, I develop a political analysis that specifies the impact of economic insecurity on the social policy demands of different sectors and on the political coalitions formed in support of or opposition to redistributive social policies. The analysis highlights the importance of a distributive conflict between political coalitions in high-risk and low-risk sectors. Secondly, I develop a number of propositions about the conditions under which changes in the level of economic insecurity lead to the introduction of policies characterized by different levels of coverage, hence to different types of welfare states. In the empirical analysis, I move beyond an emphasis on social policy expenditures and

2. See Cameron 1978; Garrett 1998; Burgoon 2001; and Adsera and Boix 2002.

3. Rodrik 1997, 1998.

4. For a formulation of this criticism, see Huber and Stephens 2001, 48; and Adsera and Boix 2002.

5. For a formulation of this argument, see Mares 2002.

examine the impact of economic insecurity on institutional differences among welfare states. Thus, the article provides an explanation of the conditions under which economic insecurity leads to the introduction of more redistributive social policies and not only to larger public sectors.

The central proposition of the article is that economic insecurity deepens a sectoral cleavage over the scope and design of institutions of social insurance. Workers in sectors experiencing a high volatility in income will demand the introduction of social insurance institutions that provide income support during moments of employment loss. In contrast to these “high-risk” sectors of the economy, workers in “low-risk sectors” will oppose social policy proposals aiming at the broadening of social insurance coverage, fearing that these policies will turn them into subsidizers of high-risk industries. Thus, workers in low-risk sectors of the economy will favor social policies characterized by occupational fragmentation and a low level of redistribution of costs across industries.

As recent “revisionist” accounts of the development of modern institutions of social protection have pointed out, some employers in “high-risk” sectors can also support redistributive social insurance policies.⁶ Some firms facing high levels of volatility in the demand for their products may support the introduction of these social policies for two reasons. First, these firms might have an interest in providing some guarantees to their high-skilled workers that their investment in skills will not be undermined during moments of employment loss, and thus these firms support policies of social protection that raise the reservation wage of high-skilled workers relative to low-skilled workers. Second, socialized insurance can be more “cost-effective” than private-type social policies for these employers. These cross-class alliances in “high-risk sectors” of the economy will support the introduction of social policies characterized by a wide level of coverage, which redistribute the costs of insurance across wide segments of the population. In contrast, some employers in low-risk sectors will join workers in these sectors, in supporting private-type social policies or social insurance policies characterized by high occupational fragmentation. A new social policy will be introduced only if the cross-class alliance comprising workers and firms in high-risk sectors is larger. Under these conditions, one should see the policy change in the direction of social policies characterized by broad levels of coverage. By contrast, if the cross-class alliance comprising low-risk sectors is larger, it will be able to block policy proposals calling for the broadening of social insurance coverage. In this case, the resulting policy outcome will be a social policy characterized by limited coverage, institutional fragmentation, and a low redistribution of costs across occupations.

Economic insecurity can affect this political dynamic via two related mechanisms. On the one hand, exogenous shocks (such as fluctuations in the demand for the products of an industry or changes in the volatility in the terms of trade) increase the demand for social insurance coverage of workers in the high-risk sector. On

6. See Swenson 1997, 2002; and Mares 2001, 2003a, 2003b.

the other hand, an increase in the volatility of the level of employment can bring about a reordering of the social policy preferences of workers and employers in these sectors. Thus, as a result of an increase in the volatility of employment, some groups might abandon earlier demands for occupational-based social policy and demand the introduction of policies characterized by a broad level of coverage and a high reallocation of costs across occupations. This suggests that an increase in the level of economic insecurity can increase the size of the political coalition favoring redistributive social policies.

I test the theoretical model by examining policy developments in interwar Europe. This is an important test case for the theories positing a causal link between economic insecurity and larger welfare states. The interwar period was a period of significant welfare state expansion. Policy change occurred in every single European state—either as a result of the expansion of the generosity of existing programs or as a result of the introduction of new social policies.⁷ The econometric analysis allows me to examine the relative importance of economic insecurity relative to other political and economic variables in explaining cross-national differences in the level of social insurance coverage chosen by various countries. The interwar period is also an interesting test case for theories that have used various measures of “external openness” as proxies for economic insecurity (and that have hypothesized that external openness plays an important role in explaining cross-national variation among welfare states). While the levels of “openness”—measured as exports plus imports as a percentage of gross domestic product (GDP)—declined in most European countries during this period of “implosion into autarchy,”⁸ the level of “external risk”—measured as the volatility in the terms of trade—was comparable to and sometimes surpassed the levels of external risk experienced by these economies during the postwar years. Thus, by focusing on this historical period, one can disentangle the effects of these two variables that have been used interchangeably as proxies for economic insecurity.

To develop these arguments, the article will proceed as follows. The following section lays out the basic theoretical framework that explores the impact of economic insecurity on the social policy preferences of workers and producers in different sectors. I test the empirical implications of the theory in two stages. I begin by testing the micro-level predictions of the theory and by examining the social policy demands of workers and firms in sectors facing different levels of economic insecurity. I focus on policy developments in France and Germany, two countries that have responded in divergent ways to the growing economic insecurity and the rise of unemployment of the period. While German policymakers expanded the level of social protection, by introducing a contributory unemployment insurance in 1927, the efforts of French policymakers to introduce similar policies were defeated politically by the strong opposition of the sectors facing

7. Flora and Heidenheimer 1982, 59.

8. The formulation belongs to Jeffrey Williamson. See Aghion and Williamson 1998, 106.

lower levels of unemployment. Next, I test the macro-level implications of the model in a statistical analysis of the impact of various measures of external insecurity on the level of unemployment insurance coverage in thirteen European economies. The concluding section of the article analyzes the implications of these findings for the literature linking economic insecurity and social protection.

Economic Insecurity and Social Insurance

Among macro-level studies examining the impact of economic insecurity on social protection, the largest number of studies has proxied economic insecurity by using various measures of openness, such as the total trade flows of an economy or the volatility in the terms of trade. Critics of this literature assert that these studies fail to specify a political logic by which higher levels of economic insecurity lead to larger welfare states. As Huber and Stephens express this objection, “we are skeptical about the openness argument, both with regard to its presumed direct effect on welfare state expansion and its indirect effect via corporatism, because decisions about welfare state expansion are politically mediated rather than automatic reactions to needs for social protection.”⁹ This point is often overstated. Up to now, the literature has presented two competing political logics linking external insecurity and larger welfare states. A first logic has been advanced by Cameron in his influential 1978 article.¹⁰ Building on earlier arguments of Ingham, Cameron hypothesizes that the openness of the economy leads to high levels of industrial concentration, that is “an unusually large share of production and employment in a few large firms.”¹¹ This, in turn, is hypothesized to facilitate the formation of “employers’ confederations which include a relatively large portion of all firms and employees”¹² and to “widen the scope of collective bargaining”¹³ and the negotiation of economy-wide agreements among labor and employers’ associations. Jointly, these factors contribute to an increase in trade union strength, which contributes to “an unusually large increase in publicly funded income supplements,” thus an expansion of public expenditures. Hence, in the logic advanced by Cameron higher levels of openness lead to larger welfare states through the intervening role played by strong union associations. The hypotheses are confirmed by an analysis of Organization for Economic Cooperation and Development (OECD) economies during the postwar period, where higher levels of openness are strongly correlated with high levels of union density.

9. Huber and Stephens 2001, 48; see also Adsera and Boix 2002.

10. Cameron 1978.

11. *Ibid.*, 1256. See also Ingham 1974, 40–41.

12. Cameron 1978, 1257.

13. *Ibid.*

Rodrik has advanced a second competing logic¹⁴ that can be characterized as a portfolio diversification logic. The critical theoretical assumption made by these studies is that the tradable sector is characterized by higher volatility in employment than a private nontradable or the government sector. Rodrik presents some empirical evidence suggesting that higher volatility in trade is associated with a higher volatility in employment. To insure against potential loss of income resulting from downturns in the “risky,” export sector, the representative household in the economy chooses an optimal portfolio of income streams that redistributes work effort among the risky and risk-less sectors. In this framework, the government acts as the agent of this “representative” household and chooses a level of government consumption to mitigate the exposure of this household to external risk. As Rodrik expresses the underlying logic of this framework, “standard portfolio arguments suggest that an increase in the riskiness of exports calls for a reallocation of the economy’s resources towards the safe activity (government), even when the return to government activities lies below the (mean) return to other activities. In a model in which export supply is variable and exports compete for resources with the government sector, the risk-reducing effect of government consumption would be even more direct and immediate.”¹⁵

What is common to both logics is that they focus exclusively on the policy preferences of groups that have an interest in some kind of public spending: trade union associations, in Cameron’s case, and a hypothetical household with a very volatile income stream, in Rodrik’s case. None of the studies examines the policy preferences of groups that oppose the expansion of the public economy. Neither Rodrik nor Cameron attempt to specify the conditions under which proposals to expand social provision actually fail. Hence, both accounts underestimate the intense political conflict that is usually associated with the introduction of a new social policy. The analyses are thus at odds with most qualitative studies of welfare state development that emphasize intense distributional conflicts over a new social policy. Thus, existing models fail to provide a theoretical link between external insecurity and domestic political conflicts over the institutional design of a new social policy.

A second important limitation of these political analyses is the poorly specified notion of welfare state. Cameron focuses on the “extractive” capacity of governments, Rodrik on the aggregate levels of government consumption. These are not simply decisions about operationalization but conceptual decisions being closely tied to the theoretical approach advanced by these authors. In defense of his measure that focuses on government consumption, Rodrik admits that these expenditures are “obviously not targeted on dislocations arising specifically from trade,”¹⁶

14. Rodrik 1997, 1998. Rodrik’s argument builds on a pioneering paper by Bates, Brock, and Tiefenthaler 1991.

15. Rodrik 1998, 1014.

16. Rodrik 1997, 58.

but he argues that government consumption plays “some insurance function” (especially in developing countries).¹⁷ This conceptualization of the welfare effort of an economy is, however, problematic. First, these measures are too aggregated and do not capture the specific expenditures that actually mitigate the economic dislocations resulting from changes in the terms of trade. Rodrik’s argument that military expenditures, for instance, or government procurement of capital goods play an important role in insuring against external risk is tenuous and begs the political question of why some governments choose these particular expenditures rather than, say, social insurance programs to protect workers in exposed sectors against external risk. Finally, expenditure-based measures do not capture questions of policy design that are politically salient and distributionally divisive. As Esping-Andersen expressed this objection to the use of these measures in many quantitative studies of the welfare state, “expenditures are epiphenomenal to the theoretical substance of the welfare state. . . . It is difficult to imagine that anyone struggled for spending *per se*.”¹⁸

This article seeks to overcome these limitations of existing studies linking economic insecurity and the demands for social spending. It extends existing studies in three ways. First, I bring distributional conflict over the design of a new social policy to the center of the analysis. The analysis stands in contrast to the existing work of Cameron and Rodrik. Their studies focus only on the preferences of political actors that favor the introduction of a new social policy and that omit sectors that oppose the introduction of a new social policy. Secondly, I develop propositions specifying the impact of economic insecurity on the types of institutions of social protection favored by different actors. Finally, in contrast to existing studies, I link economic insecurity to actual policy decisions, such as the level of social insurance coverage. Thus, this study overcomes the exclusive reliance on social policy expenditures of earlier studies.

To examine these questions, I begin by considering the questions of policy design that are distributionally most divisive during the introduction of a new social policy. These questions concern the scope of social insurance coverage and the reallocation of costs among different sectors. What groups and occupations should participate in the financing of existing social policies? What should be their insurance contributions and benefits? Existing systems of social protection vary widely in the political resolution of these questions. At one extreme, one finds social policies characterized by narrow levels of coverage and no reallocation of costs across occupations. In these cases, the social insurance contributions of various occupations are tied to the incidence of a risk of a group. At the other extreme, one finds social policies characterized by broad and extensive coverage. In this case, all occupations pay the same level of insurance contributions.

17. Ibid.

18. Esping-Andersen 1990, 19–21.

As a vast literature on the development of systems of social protection has demonstrated, the level of economic insecurity (or risk) facing a group is a key variable predicting the political cleavage over the introduction of a new social policy. Consider first the social policy demands of workers in sectors facing a high volatility in the demands for their products and thus a high volatility of employment. These workers will have a higher demand for social insurance than workers in “low-risk” occupations. Workers in high-risk sectors are likely to support social policies with two policy characteristics. First, they will favor the broadening of social insurance coverage and the inclusion of a large number of occupations within social insurance. Second, they will favor social policies in which the level of insurance contributions is separated from the incidence of a risk. Both choices of policy design advantage workers in high-risk sectors, by lowering their social insurance contributions. But these choices of policy design are not distributionally neutral: they favor high-risk workers and disadvantage workers in low-risk sectors.

Workers facing a lower volatility in their employment level are expected to have different social policy preferences. On the one hand, their overall demand for social insurance is lower, given the lower levels of risk. But one expects these workers to favor social policies with different characteristics. First, workers in low-risk sectors are expected to oppose the proposals aiming at broadening the scope of social insurance advocated by high-risk sectors. Second, these sectors are expected to demand the decoupling of the level of insurance contributions from the incidence of a risk. In contrast to high-risk sectors, low-risk sectors are net contributors to social policies characterized by a high redistribution of risks across occupations, and, thus, become “subsidizers” of high-risk industries. Hence, one expects workers in low-risk sectors either to oppose the introduction of a new social policy or to favor occupational-based social policies that involve no redistribution of costs across occupations.

Recent accounts of the role played by employers in the development of modern institutions of social insurance have pointed out that employers have not regarded the introduction of a new social policy with undifferentiated hostility and opposition.¹⁹ These studies have demonstrated that, under some conditions, employers have supported social policies out of self-interest, not altruism. As several scholars have argued, the main reason accounting for business support for the development of institutions of social insurance is the desire of firms to mitigate the reluctance of workers to invest in skills. Because high-skilled workers face higher income losses than low-skilled workers during periods of employment loss, high-skilled workers will demand some income protection during periods of employment loss to mitigate their initial reluctance to invest in skills. Hence, it is rational for employers who rely on high-skilled workers to support social policies that protect a significant part of the income loss by high-skilled workers during periods of loss of work. Clearly, as these studies have shown, additional factors such as the

19. See Swenson 1997, 2002; and Mares 2001, 2003a, 2003b.

skill composition of the workforce or firm size affect the social policy preferences of firms. The level in the volatility of demand is an important factor affecting the social policy preference of employers. One can find a political cleavage among high-risk and low-risk producers that parallels the cleavage among workers. If firms have an interest in the provision of some social policy benefits for their workers, firms in sectors facing a high volatility in the demand for their products will favor social policies characterized by broad levels of insurance coverage and a high level of redistribution of costs across occupations. In contrast, firms in low-risk sectors that have an interest in the provision of social insurance for their workers will favor occupational-based or private type-social policies. Thus, external factors—such as the volatility in the terms of employment—are likely to accentuate a political cleavage among employers. As recent studies have pointed out, risk interacts with other variables, such as skill level and firm size, in predicting the social policy preferences of employers.²⁰

How does external risk affect these political cleavages between high-risk and low-risk sectors? An increase in the volatility in the terms of trade increases the economic insecurity of export sectors. This heightened economic insecurity can have two political consequences. First, it will increase demand for social insurance of workers and employers in the high-risk sectors. Workers in these sectors will demand more redistributive social policies. Second, heightened economic insecurity might bring about a change of workers' and employers' preference orderings of some sectors. Consider, for example, a case in which some sectors that favor, say, occupational-based social policies over social policies that mandate uniform levels of insurance contributions from all sectors. An increase in the level of external insecurity can bring about a reversal in the preference orderings of these sectors. A redistributive social policy will now be much more attractive than an occupational-based social policy to these sectors. This suggests that an increase in the volatility in the terms of trade will increase the size of the coalition that favors the introduction of a redistributive social policy. If the high-risk coalition is larger, higher volatility in the terms of trade will lead to the introduction of more redistributive social policy.

Figure 1 summarizes the above discussion about the predicted effect of economic insecurity. The implication of the above analysis is that an increase in the level of economic insecurity will sharpen a sectoral cleavage over the design of institutions of social insurance. Workers in high-risk sectors will push for social policies characterized by a broad level of reallocation of costs across occupations. Some firms in high-risk sectors that have an interest in the provision of social policy benefits to their workers will also support proposals for the introduction of a new social policy. In contrast, workers in sectors characterized by a low volatility in the level of employment will oppose social policies characterized by a high level of redistribution of costs across occupations. Firms in low-risk sectors who

20. Mares 2003a, 2003b.

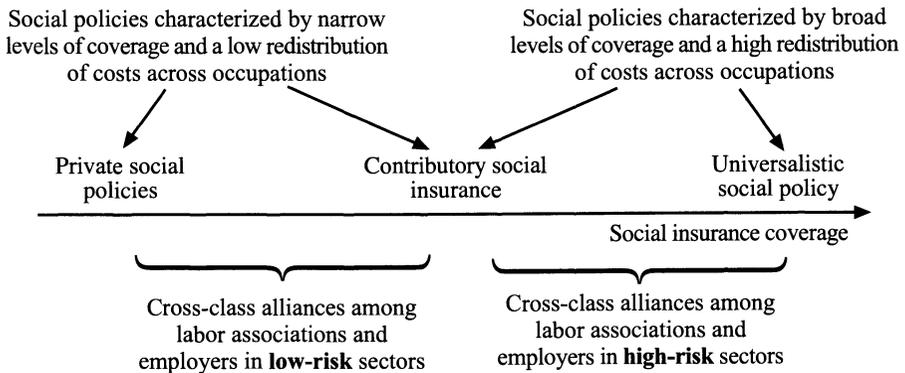


FIGURE 1. *Hypothesized preferences toward the design of social insurance policies and potential cross-class alliances.*

are interested in providing social protection to their workers will also favor social policies characterized by narrower coverage. The resolution of this conflict between high-risk and low-risk sectors depends on the relative size and political influence of the cross-class alliance comprising high-risk or low-risk sectors. If the cross-class alliance comprising high-risk sectors is larger or benefits from a closer access to the decision-making process, the state will introduce a new social policy characterized by broad levels of coverage. If the low-risk alliance is politically more influential, one should see social policies characterized by high levels of occupational fragmentation or no policy change.

The above analysis has both micro-level and macro-level implications. At the micro-level, the analysis allows one to derive predictions linking various levels of economic insecurity to demands for different institutions of social insurance. The macro-level predictions of the theory allow one to examine the impact of economic insecurity on the level of social insurance coverage. The remaining part of the article tests both sets of predictions, by focusing on social policy developments in interwar Europe. I begin by examining the impact of two measures of economic insecurity—the volatility in the level of unemployment and the volatility in the terms of trade—on the social policy demand of different sectors. Next, I test the macro-level implications of the model in a statistical analysis of the development of unemployment insurance in interwar Europe.

Policy Developments in Germany

Germany's economic development during the interwar years was characterized by a steady rise in the level of unemployment. This heightened economic insecurity was an important factor contributing to the political instability of the Weimar period.

Unemployment figures rose steadily during the period, from 1.7 percent of the total labor force in 1920 to 13.9 percent in 1931 and 17.2 percent in 1932.²¹

The level of economic insecurity varied dramatically across sectors. Consider two indicators for this economic insecurity. The first are sectoral unemployment rates. According to data collected by the German Labor Ministry in 1926, one year prior to the introduction of the compulsory unemployment insurance legislation, unemployment rates reached 10.7 percent in metalworking, 9.08 percent in the wood-processing industry, and 8.17 percent in mining. In contrast, sectors experiencing low levels of unemployment were agriculture (0.3 percent), the paper industry (1.75 percent), and the food-processing industry (1.42 percent).²² A second variable proxying the level of economic insecurity experienced by different sectors is the volatility in the terms of trade. The standard deviation in the rate of change of the terms of trade was 9.43 percent for the metalworking sector, 9.78 for machine tools, 12.49 percent for textiles, 7.45 for chemicals, and 11.93 for the woodworking sector. In contrast, agricultural products experienced a much lower volatility in the terms of trade. The volatility in the percentage changes of the terms of trade was 2.59 for wheat producers, 1.66 for corn, and 0.895 for beef production.²³ These indicators point to the existence of a strong difference in economic insecurity between manufacturing and agriculture. Employees in the manufacturing sector experienced a much higher volatility in employment. For Germany's export sectors, external volatility was clearly a factor accounting for this insecurity.

This article has hypothesized that a new social policy is the result of a negotiation between a coalition comprising workers and some employers in the high-risk sector and a coalition comprising workers and employers in the low-risk sectors. The relative size of these sectors serves as a proxy for the relative influence of these two coalitions. By the end of World War I, Germany had achieved a high level of industrialization. According to data reported in Mitchell, in 1925, 42.15 percent of the German labor force was employed in manufacturing.²⁴ Metalworking was the largest industry, employing 38.5 percent of manufacturing employees.²⁵ In contrast, only 23.34 percent of the workforce was employed in agriculture.²⁶ This one indicator suggests that high-risk sectors were numerically dominant. Other qualitative indicators support this view. Several studies of the policymaking process during the Weimar period suggest that the most important policy initiatives of the period were introduced after a process of consultation between the relevant ministries and the peak associations representing manufacturing or agricultural

21. Maddison 1991, 262–65; and Giersch 1996, 155.

22. Deutscher Reichstag 1927.

23. Hoffmann 1965.

24. Mitchell 1998, 150.

25. Data are based on Hoffmann 1965, 198; and Mitchell 1998, 198.

26. Mitchell 1998, 18.

employees. Consultation with groups representing agricultural producers was only weakly institutionalized.

The question about the development of a policy of unemployment insurance was on the agenda of reform of German policymakers beginning with the first years of the Weimar period. During fall 1918, amidst efforts of demobilization, a coalition government that included representatives of the Social Democratic Party and of the Catholic *Zentrum* Party introduced a policy of unemployment assistance (*Erwerbslosenfürsorge*).²⁷ This policy provided means-tested unemployment benefits, which were financed by the central government (*Reich*), states (*Länder*), and communes and which were distributed by local authorities.²⁸ Both German politicians and policymakers—such as bureaucrats in the influential Imperial Employment Office (*Reichsarbeitsamt*)—were, however, determined to replace the policy of unemployment assistance by a policy of unemployment insurance. Rudolf Hilferding, finance minister of the Grand Coalition that took office in 1920, called the introduction of unemployment insurance “an essential political requirement, given the catastrophic financial situation of the *Reich*.”²⁹ The first draft bill of unemployment insurance legislation was published during the spring of 1920.³⁰

An analysis of the policy preferences of various associations representing both employers and trade unions supports the crucial hypotheses formulated in the previous section. Both employers and employees in Germany’s “high-risk sectors”—such as metalworking, machine-tools, or textiles—supported the introduction of a compulsory unemployment insurance. In a number of policy documents submitted to the Ministry of Labor and Social Affairs, the two important peak associations representing large manufacturing producers, the Association of German Industry (*Reichsverband der Deutschen Industrie*) and the Association of German Employers’ Federation (*Centralverband der Deutschen Arbeitgeberverbände*) supported the introduction of a policy of unemployment insurance. In 1920, the Association of German Industry recommended to the Imperial Employment Office: “The means-tested unemployment assistance has to be replaced immediately by an unemployment insurance.”³¹ The central publication of German manufacturing employers, *Die Deutsche Arbeitgeberzeitung*, also voiced the support of this association for a contributory unemployment insurance. “We demand the introduction of unemployment insurance. Such an insurance is possible and has already been introduced in several countries.”³²

An important policy demand formulated by German manufacturing employers was the demand to extend unemployment insurance to a large number of sectors.

27. On the introduction of this policy, see Lewek 1992; and Wermel and Urban 1949, 24–30.

28. Wermel and Urban 1949, 29.

29. Erdmann and Vogt 1978, 274.

30. Reichsarbeitsblatt 1920.

31. Reichsverband der Deutschen Industrie 1920.

32. Vereinigung der Deutschen Arbeitgeberverbände 1920b.

This policy measure had the obvious advantage of lowering the social insurance charges of high-risk occupations. In 1922, the Association of German Employers' Federations demanded the "expansion of the scope of the unemployment insurance legislation" and the "inclusion of good risks (*günstige Risiken*) within unemployment insurance, in other words, of occupations in which the danger of future unemployment is lower."³³ Moreover, these employers opposed the introduction of separate social insurance contributions for different sectors that were proportional to the level of unemployment facing the industry and rejected "the creation of occupational risk pools (*Gefahrenklassen*) within unemployment insurance."³⁴ In a writing addressed to the Imperial Labor Office in 1920, this association argued that it was impossible for employers in industries facing high and recurring levels of unemployment to pay higher unemployment insurance contributions, because "the financial existence of these firms is endangered, both as a result of uncertainty in their labor relations and as a result of uncertainty in demand. An additional financial burden that would result from the doubling of insurance contributions should not be attempted."³⁵ During the following year, the Social Policy Committee of the Association of German Employers' Federation reiterated its demands for a "wide redistribution of risks" (*ein möglichst großer Gefahrengleich*).³⁶

The Federation of German Trade Unions (*Allgemeiner Deutscher Gewerkschaftsbund*, ADGB), an association dominated by unions of the metal-working sectors, supported a redistributive policy of unemployment insurance. In 1918, the ADGB issued a ten-point program that formulated the economic and social policy demands of the labor movement.³⁷ In this document, unions called for the introduction of a compulsory unemployment insurance covering all white- and blue-collar employees. Abandoning earlier demands for union-administered institutions of social support,³⁸ unions argued that "the wartime and transition economy have brought about a far-reaching transformation of the economic structure and unemployment of such a magnitude, making it impossible for trade unions to take upon themselves the resulting burden."³⁹ The ADGB found itself in "unanimous agreement" with the association of employers in recommending the introduction of a redistributive social policy.⁴⁰ The ADGB considered an unemployment insurance policy mandating the same contributions from all occupations as the only viable policy alternative and opposed the creation of "occupational risk pools" within social insurance. As the

33. Ibid.

34. Vereinigung der Deutschen Arbeitgeberverbände 1923, 35.

35. Vereinigung der Deutschen Arbeitgeberverbände 1920a, 475.

36. Vereinigung der Deutschen Arbeitgeberverbände 1921, 27.

37. Allgemeiner Deutscher Gewerkschaftsbund 1918, 6.

38. On this change in demands of the German labor movement, see Bieber 1981, 360–415; and Pothoff 1979, 194.

39. Allgemeiner Deutscher Gewerkschaftsbund 1920.

40. Spliedt 1924, 257.

main publication of the German trade union movement wrote, “We have to reject the creation of different occupational risk pools, especially in industrial sectors. This division into occupational categories would create many unnecessary differences within occupations and within the same enterprise, raising ultimately the level of contributions and the cost of unemployment insurance. Our trade unions but also the large associations of employers have always responded to the variation in the incidence of the risk of unemployment in a solidaristic way, through unitary contributions and unitary levels of benefits.”⁴¹

In contrast to employers and unions in occupations facing a high volatility in the demands for their products and a high incidence of the risk of unemployment, low-risk sectors opposed a highly redistributive policy of unemployment insurance. The two most important associations representing agricultural producers, the Association of Employers’ Organizations in Agriculture and Forestry (*Reichsverband der land- und forstwirtschaftlichen Arbeitgeberbewegungen*) together with an association of agricultural employers (*Reichslandbund*) opposed the proposals of lawmakers to extend unemployment insurance coverage to agriculture. Invoking the relatively low levels of unemployment in agriculture, these employers argued that “the labor market contract of agricultural employers is the best insurance against the risk of unemployment.”⁴² Commenting on the unemployment insurance draft bill formulated in 1923 by German policymakers, these producers argued that the bill “encumbered agriculture with costs with which it had nothing to do.”⁴³ “The new, unbearable burden will strengthen the opposition to expensive social insurance.”⁴⁴ In protest against the proposals to extend social insurance to agriculture, these producers recommended member firms not to pay insurance contributions. This threat remained relatively effective. In February 1924, the Ministry of Labor and Social Affairs reported of “a strike movement in the country-side against the payment of social insurance contributions.”⁴⁵

Associations representing agricultural employees also worried that the introduction of compulsory unemployment insurance redistributed costs in favor of manufacturing employees and disadvantaged agriculture. The Central Association of Agricultural Employees (*Zentralverband der Landarbeiter*) demanded the differentiation of social insurance contributions and benefits among agriculture and industry. As this association argued, “one cannot ask agricultural workers to raise important means to support idleness in the cities.”⁴⁶ These associations of agricultural employees proposed to collect the insurance contributions as part of a sepa-

41. Allgemeiner Deutscher Gewerkschaftsbund 1922, 521.

42. Führer 1990, 323. Führer refers to a statement of the president of the peak association of agricultural employers (*Reichsverband der landwirtschaftlichen Arbeitgebervereinigungen*).

43. Führer 1990, 326.

44. Deutscher Reichslandbund 1923.

45. Führer 1990, 327.

46. *Ibid.*, 324. Führer refers to a policy document of Franz Behrens, the president of the Central Association of agricultural employees (*Zentralverband der Landarbeiter*).

rate insurance fund and to use these funds for productivity improvements in agriculture.⁴⁷

The analysis suggests that the main axis of political contestation surrounding the design of the policy of unemployment compensation was the cleavage among high- and low-risk sectors. The policy demands defended by these actors during the political bargaining had important consequences and influenced the shape and policy design of the final unemployment insurance bill. In line with a more general pattern of policymaking characteristic of the Weimar period, the decisions about the design of unemployment insurance law were taken during deliberations between the representatives of the Imperial Employment Office and the relevant interest groups.⁴⁸ The final unemployment insurance law incorporated a number of provisions that accommodated the policy preferences of the various sectors of the German economy. On the one hand, the law required uniform insurance contributions from all occupations, separating thus the insurance contributions from the incidence of a risk. The preamble (*Begründung*) to the law justified this decision by arguing that “due to the social character of unemployment insurance, it is just that the occupations facing a lower risk of unemployment take up a part of danger of the higher risk of the occupation.”⁴⁹ As a historian of this episode pointed out, “since the major associations representing employers and employees supported this policy principle, there were no problems associated with its implementation.”⁵⁰ On the contested question of unemployment insurance provision for agriculture, the final compromise solution recommended the introduction of voluntary insurance for agricultural workers.⁵¹ Thus, agricultural employees had the right to unemployment compensation, provided they paid contributions “after the termination of the employment relationship.”⁵² While the coalition comprising high-risk sectors remained unsuccessful in introducing a policy of unemployment insurance covering the population, the coalition nevertheless succeeded in introducing a policy characterized by a high redistribution of costs across occupations. The policy solution adopted in Germany incorporated important concessions to low-risk, agricultural producers.

Political Developments in France

Similarly to German policymakers, French reformers began to pursue policy proposals aimed at the introduction of compulsory social insurance in the aftermath of World War I. A number of political factors accounted for the impetus with which

47. *Ibid.*, 325.

48. Witt 1983, 139. As Witt argues, if we exclude the emergency legislation, “the overwhelming number of all successive legislative initiatives originated in the bureaucracy.”

49. Deutscher Reichstag 1927.

50. See Wermel and Urban 1949, 68; and Führer 1990, 320.

51. On the negotiation of this solution, see Lewek 1992, 339, and Führer 1990, 323–39.

52. Führer 1990, 338.

policymakers of the Third Republic approached the question of social policy reform. The first cause was the political failure of previous social insurance legislation, such as the 1905 reform that had established a Ghent policy of unemployment assistance and the 1910 law that had introduced old-age insurance (for a limited segment of the French workforce).⁵³ The second factor contributing to the impetus for reform during this period was the reannexation by France of Alsace and Lorraine, two provinces that had experienced German institutions of social insurance. In an effort to regain the loyalty of the citizens of these provinces, French policymakers recommended the upward harmonization of social policy benefits.⁵⁴ In 1920, the president of the Council of Ministers, Alexandre Millerand “signaled that social insurance was to be a priority of his administration, by appointing an Alsatian, Jourdain as Minister of Labor and authorizing Jourdain to prepare a legislative proposal for a social insurance legislation.”⁵⁵ The reform moved forward at great speed. As early as 1921, French policymakers submitted a first social insurance draft bill to the Chamber of Deputies (*Chambre des Députés*).⁵⁶ This bill—known also as the Vincent Report—recommended the introduction of compulsory old-age and sickness insurance financed by equal contributions of employers and employees. As Immergut characterized this proposal, “this proposal was more universalistic in outlook . . . than comparable legislation in Germany, England, or Scandinavia.”⁵⁷ In 1926, policymakers of the Senate recommended the inclusion of compulsory unemployment insurance alongside insurance covering all other social risks.⁵⁸

One finds a strong variation in the level of economic insecurity experienced by various sectors during this period. Woodworking and the metal industry were among the “high-risk” sectors of the French economy. The unemployment rates experienced by these sectors (8.2 percent in woodworking and 7.2 percent in metalworking) were twice as high as the average unemployment rate for the French economy.⁵⁹ Other manufacturing sectors, such as chemicals or mining, experienced unemployment rates that were lower than the economy-wide average. (Unemployment rates were 0.9 percent for chemicals and 1.3 percent for mining). In contrast to manufacturing, agriculture experienced significantly lower levels of economic insecurity during this period. As census data show, in agriculture, the level of unemployment never exceeded 1 percent of the active population.⁶⁰ Related measures of economic insecurity—the volatility in the terms of trade—reveal a similar picture. The volatility in the terms of trade for some of the most important

53. On the failure of these laws, see Hatzfeld 1971.

54. See Hatzfeld 1971, 143–44.

55. Immergut 1992, 90.

56. *Journal Officiel* 1921.

57. Immergut 1992, 91.

58. *Journal Officiel* 1926.

59. Salais 1988, 254.

60. *Statistique Générale de la France* 1927, 191; see also Salais 1988, 254.

agricultural products in France—silk, wine, and wheat—was almost half the level of external volatility experienced by the metalworking sector.⁶¹

The economic structure of the French economy differed fundamentally from the structure of Germany. The percentage of the population employed in agriculture was significantly higher than the share of the population employed in manufacturing. In 1921, 41.5 percent of the workforce were employed in agriculture, with 26.45 percent in manufacturing, and the remaining 32.05 percent employed in services.⁶² The percentage of the population employed in agriculture experienced a slight decline during the interwar period. In 1936, 36.23 percent of the French labor force was employed in agriculture and 26.10 percent was employed in manufacturing. Thus, in contrast to Germany, the political coalition of sectors facing lower levels of economic insecurity (the “low-risk” coalition) was larger than the coalition facing high levels of risk.

The two main associations representing agricultural producers, the Society of French Farmers (*Société des Agriculteurs de France*) and the National Confederation of Agricultural Associations (*Confédération Nationale des Associations Agricoles*) strongly opposed the plans of French lawmakers to extend social insurance to agricultural producers.⁶³ Invoking the existence of strong differences in the character of the employment relationship among agriculture and industry, such as the reliance of agricultural employers on members of their extended family during periods of inactivity, these associations waged a fierce political campaign against the extension of the provisions of the social insurance legislation to agriculture. These associations signaled to French policymakers that they preferred an outcome relying on voluntary private institutions of social insurance, such as mutual aid societies (*sociétés de secours mutuels*) and agricultural mutual insurance companies (*mutuelles agricoles*), but they rejected any proposals that attempted to socialize risks.

In addition to lobbying against the extension of policies of social insurance to agriculture, agricultural employers made use of another important veto threat: they refused to enroll in the institutions of social insurance and refused to pay mandatory insurance contributions. The likelihood of tax evasion of agricultural employers was high, because of the weak administrative capabilities of the French social insurance administration. One of the primary causes accounting for the failure of previous social policies (such as the 1910 pension law) had been the refusal of agricultural employers to pay insurance contributions. On repeated occasions during policy deliberations, French policymakers worried “that we would encounter the most severe difficulties in the application of compulsory insurance in the rural world, where the spirit of individualism is so developed and modes in which labor

61. The standard deviation of the percentage change in the terms of trade during 1920–28 was 52.57 for metalworking, 31.45 for silk, 26.59 for wine, and 17.22 for wheat. *Statistique Générale de la France 1920–1928*.

62. Mitchell 1998, 149.

63. Augé-Laribé 1950, 109–17.

is remunerated are so diverse. As has been already the case with the application of certain fiscal laws and the application of the pension law of 1910, the resistance in certain regions or in certain environments will be very strong. The consequence will be that the law will not be applied everywhere to all those that should be subjected to the law, leading to a great material and moral disorder.”⁶⁴

The *Confédération Générale du Travail* (CGT) was one of the most active groups militating in favor of the introduction of compulsory social insurance.⁶⁵ Beginning with the trade union congress of 1921, the CGT demanded the introduction of “a general system of social insurance covering all the risks faced by the employees: accidents, sickness, unemployment, invalidity, and old-age.”⁶⁶ A 1923 report of the Administrative Commission of the CGT reiterated similar demands and demanded the immediate creation of unemployment insurance. “We believe that social insurance which does not insure against the risk of unemployment is incomplete. It leaves in suspension, above the head of the worker, a risk . . . which is an evil that hits the worker blindly and sometimes in a rapid and unexpected manner.”⁶⁷

The main association representing manufacturing employers—the Union of Metallurgical and Mining Industries (*Union des Industries Métallurgiques et Minières*)—recommended important modifications to the social insurance bill that was on the agenda of French policymakers. These employers expressed a moderate degree of support toward the creation of social insurance policies, provided that the administration of these institutions remained in the hands of employers and not in the hands of state bureaucrats. According to these employers, “the fundamental error of the project consists in neglecting existing institutions of social insurance.” As these employers argued, “the firm shapes the existence of the worker in crucial ways, by determining the level of wages, the kinds of risks to which the worker is exposed, by establishing the strongest bonds of solidarity among workers. Enterprises also facilitate the creation of large autonomous and homogenous insurance funds for the provision of old-age benefits.”⁶⁸ This suggests that French high-risk producers manifested a much lower level of support toward redistributive social insurance policies as compared to German high-risk producers.

As in the German case, sectors facing a different incidence of risks favored institutions of social insurance characterized by different levels of coverage. Both unions and employers in low-risk sectors—such as agriculture—opposed the introduction of new social policies. Unions in high-risk manufacturing supported some proposals for the introduction of social insurance. Manufacturing employers in high-risk sectors supported the introduction of some social insurance but disagreed with French policymakers about the policy design of these institutions. In the French case, the political coalition opposing the social insurance project was

64. Ministère du Travail 1922, 4.

65. Hatzfeld 1971, 251.

66. Confédération Générale du Travail 1921, 19.

67. Confédération Générale du Travail 1923, 134.

68. Union des Industries Métallurgiques et Minières 1922, 13.

much stronger than the coalition supporting it. Faced with the vocal opposition of agriculture toward the extension of social insurance, French policymakers retreated from their initial policy proposals. The second draft bill of the social insurance legislation that came out of the deliberations of the Chamber of Deputies in 1924 continued to recommend the introduction of compulsory social insurance for all employees whose income was lower than 10,000 F. However, this draft bill proposed the financial and administrative separation of social insurance for agricultural employees.⁶⁹ Lawmakers were ready to admit that this significant policy change was a concession to the “big agricultural associations, such as the Society of French Farmers (*Société des Agriculteurs de France*) and the National Confederation of Agricultural Associations (*Confédération Nationale des Associations Agricoles*).”⁷⁰ The consequence of this special insurance fund was that contributions were now “in a direct relationship to the risks that are specific to the occupation.”⁷¹ The report also recommended the design of institutions of social insurance that relied on and integrated preexisting institutions of social assistance specific to agriculture—such as the mutual aid societies (*sociétés de secours mutuels*) and agricultural mutual insurance companies (*mutuelles agricoles*). The compromise solution that accommodated the demands of agricultural employers and employees recommended the creation of a special insurance fund (*régime special*) for agriculture. More significantly, however, French policymakers abandoned policy proposals aiming at the introduction of compulsory unemployment insurance.

The comparative analysis of these two cases has allowed me to trace the impact of external insecurity on the social policy preferences of different sectors. Economic insecurity was an important variable accounting for the policy disagreement among high-risk and low-risk sectors over the design of institutions of social insurance. In both countries, workers in high-risk sectors supported the introduction of a policy of unemployment compensation characterized by broad levels of insurance coverage. German employers in high-risk sectors also favored the introduction of a policy of unemployment compensation characterized by a high redistribution of costs across occupations. In contrast, French employers favored a more gradual extension of insurance coverage. In both countries, workers and employers in low-risk industries opposed the introduction of redistributive social policies. The divergence in the relative size of the high-risk versus low-risk coalition explains the divergence in the policy outcomes among France and Germany. Germany, which had an economy in which the high-risk coalition was politically more influential, introduced a policy of unemployment insurance. In contrast, the low-risk coalition in France was politically more influential and defeated the policy proposal aiming at the introduction of compulsory unemployment insurance.

69. Journal Officiel 1923, 53–54.

70. *Ibid.*, 53.

71. *Ibid.*, 54.

A Quantitative Analysis of the Relationship Between Economic Insecurity and the Development of Unemployment Insurance

I now test the macro-level implications of this theory. What is the impact of economic insecurity on the provision of unemployment insurance? I have argued that an increase in the level of economic insecurity will lead to the introduction of a social policy characterized by broader levels of coverage only if the coalition comprising unions and employers in the “high-risk” sectors is larger. By contrast, if the “low-risk” political coalition is more influential, it will be able to block proposals aiming at the introduction of a redistributive social policy. Secondly, I have advanced the proposition that higher levels of external insecurity will deepen the preexisting cleavage between “high-risk” and “low-risk” coalitions. Higher levels of external risk can increase the intensity in the demands for social insurance of the high-risk sector and can also increase the size of the “high-risk” coalition. This section tests these propositions, by examining the policy experience of thirteen European economies during the period between 1920 and 1938.⁷² The selection of cases was limited by data availability for both terms of trade and unemployment insurance coverage.

Most econometric studies of the relationship between economic openness and the development of institutions of social protection rely on highly aggregated measures of government expenditures or government receipts. These broad measures are, however, problematic because they discard important information about the distributional aspects of many welfare states. What matters for workers who have lost their jobs as a result of economic downturns is not the statistical artifact known as “per capita social policy expenditures,” but the actual conditions of their social policy coverage, the level and duration of social insurance benefits, the level of insurance contributions, and so on. To overcome problems associated with the use of highly aggregated measures of social policy expenditures, this article uses measures of the level of unemployment insurance coverage. As qualitative studies of the development of many social policies have pointed out, the level of social insurance coverage is the question of policy design that is distributionally most divisive during the formulation of a new social policy. I restrict the analysis to the unemployment subsystem of the welfare state, because this policy mediates most directly the economic consequences of external insecurity.

The dependent variable—the level of unemployment insurance coverage—is computed as share of the population (above age fifteen) that has access to unemployment insurance benefits.⁷³ During the interwar period, a number of European countries expanded significantly the level of unemployment insurance coverage. After

72. The countries included in the analysis are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland, and the United Kingdom.

73. See Flora et al. 1983.

the pioneering reforms of 1911 and 1920, Britain is the European state with the most extensive system of unemployment compensation. In 1936, British policy-makers further expanded the level of unemployment insurance and offered unemployment compensation to agricultural employees. Germany introduced a compulsory unemployment insurance in 1927 that covered about 34 percent of the working-age population. In contrast, France, Sweden, or Finland are countries with voluntary institutions of unemployment compensation and are characterized by a very limited level of unemployment insurance coverage.⁷⁴ According to Flora's estimates, the average level of unemployment insurance coverage in these countries is about 2 percent of the working-age population.

What is the role of economic insecurity in explaining these differences in the level of social protection? To examine these questions, I use two different measures of economic insecurity. The first of these measures—UNEMPLOYMENT VOLATILITY—is computed as the standard deviation in the level of unemployment. The second measure—EXTERNAL RISK—provides a baseline measure of external insecurity that is comparable across countries. Following Rodrik, the level of external risk is computed as the standard deviation in first logarithmic differences in the terms of trade.⁷⁵ This article has hypothesized that higher economic insecurity will lead to an increase in the level of social protection only if the “high-risk” sector is politically more influential. To test this hypothesis, I have interacted both variables (UNEMPLOYMENT VOLATILITY and EXTERNAL RISK) with a measure of the percentage of the labor force employed in industry (UNEMPLOYMENT VOLATILITY*INDUSTRIAL EMPLOYMENT or EXTERNAL RISK*INDUSTRIAL EMPLOYMENT). The source for the variable measuring industrial employment is Flora's *State, Economy, and Society in Western Europe*. The theoretical prediction of the model is that this interactive term should have a positive sign.

In addition to these variables that test for the impact of economic insecurity, I have included additional political and economic variables to various specifications of the model. To test for the hypothesis put forward by modernization scholars that wealthier countries have more redistributive welfare states, I have included the standard measure of economic development, real GDP per capita (ECONOMIC DEVELOPMENT).⁷⁶ An additional economic control variable is the level of unemployment. Two additional variables test for the impact of political partisanship on the level of social insurance coverage. The first of these variables (LEFT PARTICIPATION IN PARLIAMENT) measures the percentage of seats of socialist parties in parliament (based on data collected by Mackie and Rose).⁷⁷ This variable takes values

74. These countries had a Ghent policy of unemployment insurance. Finland introduced this policy in 1917, France in 1905, and Sweden in 1934.

75. Rodrik 1998, 56. To compute the terms of trade data for European economies during the interwar period, I have relied on Kindleberger 1956. I am grateful to Mike Tomz and John Fitzgerald for providing additional data.

76. See Maddison 1991.

77. Mackie and Rose 1974.

ranging from 2.4 percent in Italy (between 1920 and 1922) to 50.9 percent in Sweden (between 1936 and 1938). On average, Austria (47.52 percent) and Sweden (45.55 percent) have the highest mean value of left participation in parliament, while Italy and Ireland have the lowest mean value of this variable. The second partisanship variable (CHRISTIAN DEMOCRATIC PARTICIPATION IN PARLIAMENT) measures the political strength of Christian Democratic Parties.⁷⁸ An additional measure of labor strength, TRADE UNION DENSITY measures the percentage of workers that are union members. The data is based on Visser,⁷⁹ Bain and Price,⁸⁰ as well as additional data provided by Bartolini.⁸¹ Austria and Denmark are the countries with the highest trade union density in the sample, averaging 42.23 and 39.13 percent, respectively. The countries with the lowest unionization rates are Finland (6.1 percent) and Italy (10.73 percent).

An additional political control variable is a measure of the degree of concentration of the political system. The variable POLITICAL CONCENTRATION is computed as $\sum s_i^2$, where s_i is the share of parliamentary seats held by party i .⁸² In the limit case in which one single party controls all the seats in parliament, the variable takes on the value of 10,000. In contrast, the value of this measure converges to 0, as the degree of dispersion of the party system increases. Thus, this variable operationalizes the effective number of parties. One expects that coalitions in support of social policy change are more likely to occur in countries with a more concentrated party system. Thus one expects to find a positive relationship between this variable and the change in the level of unemployment insurance coverage.

Following the standard approach to the analysis of panel data advocated by Beck and Katz, I estimate the model using ordinary least squares with a lagged dependent variable and panel-corrected standard errors to correct for autocorrelation and heteroskedastic disturbances between panels.⁸³ The generalized model for testing for the impact of external risk on the development of unemployment insurance coverage can be written as

$$\begin{aligned} & \text{UNEMPLOYMENT INSURANCE}_{it} \\ &= \alpha_{it} + \beta \text{UNEMPLOYMENT INSURANCE}_{it-1} + \sum \gamma_{Kit} X_{Kit} + \varepsilon_{it} \end{aligned}$$

where i 's and t 's represent observations on countries and time points respectively, α represents the equation intercepts, β represents the slope of the independent variable, γ_K represents a vector of coefficients for the matrix of exogenous vari-

78. Ibid.

79. Visser 1989.

80. Bain and Price 1980.

81. Bartolini n.d.

82. The measure can be regarded as the political equivalent of a Herfindahl-Hirschman Index. See Carlton and Perloff 1994, 344.

83. Beck and Katz 1995.

ables X_K , and $\varepsilon_{i,t}$ is the error term. I used various empirical specifications of the model and thus checked for the robustness of the relationship between economic insecurity and social protection, by successively adding political control variables to the analysis.

I begin by analyzing the relationship between economic insecurity—measured as the standard deviation in the level of unemployment—and unemployment compensation. Table 1 presents the results. Model 1 presents a baseline model that includes an interaction term between unemployment volatility and industrial employment, the constituent terms, and two economic controls, the level of economic development and the level of unemployment. The interaction term between unemployment volatility and industrial employment has the predicted sign and is significant at the 95 percent level. Model 2 adds a variable controlling for the impact of left-wing participation in government to the baseline economic model. The variable has the predicted positive sign but remains statistically insignificant. Model 3 adds an additional control variable for the level of trade union density to Model 2. The variable is not statistically significant and its sign is opposite to the

TABLE 1. *The determinants of unemployment insurance in Europe during the interwar period (1920–38)*

	Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6 ^a
<i>Economic volatility</i>	EXTERNAL RISK					1.420***	1.06***
	*INDUSTRIAL EMPLOYMENT ^b					(0.409)	(0.318)
	UNEMPLOYMENT VOLATILITY	0.021**	0.025**	0.025*	0.02*		
	*INDUSTRIAL EMPLOYMENT	(0.012)	(0.012)	(0.014)	(0.013)		
	UNEMPLOYMENT VOLATILITY	-0.77***	-0.70**	-0.69	-0.112	-0.037	0.85
		(0.33)	(0.33)	(0.42)	(0.39)	(0.111)	(0.58)
<i>Economic controls</i>	EXTERNAL RISK					-23.8***	-18.5***
						(8.72)	(6.37)
	INDUSTRIAL EMPLOYMENT	0.03	0.047	0.048	0.018	0.11***	0.09
		(0.047)	(0.560)	(0.05)	(0.05)	(0.042)	(0.09)
	UNEMPLOYMENT	0.006	0.008	0.008	-0.007	0.05	0.107
		(0.045)	(0.046)	(0.046)	(0.06)	(0.05)	(0.07)
<i>Political controls</i>	ECONOMIC DEVELOPMENT	-0.003	-0.04	-0.04	0.39	-0.20	1.11**
		(0.31)	(0.34)	(0.36)	(0.23)	(0.33)	(0.02)
	LEFT PARTICIPATION IN PARLIAMENT		0.08	0.008			
			(0.011)	(0.017)			
	TRADE UNION DENSITY			-0.00			
				(0.022)			
	CHRISTIAN DEMOCRATIC PARTICIPATION IN PARLIAMENT				-0.03**	(0.01)	
	UNEMPLOYMENT INSURANCE COVERAGE (t-1)	0.97***	0.97***	0.97***	0.96***	0.96***	0.80***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)
	Model chi square	136448	169476	173128	93346	72475	2246
	Probability > chi square	0.00	0.00	0.00	0.00	0.00	0.00
	R ²	0.95	0.95	0.95	0.95	0.95	0.96
	N	165	165	165	165	136	136

Note: Model is estimated using ordinary least squares with lagged dependent variable and panel-corrected standard errors, correcting for autocorrelation and for heteroskedastic disturbances between panels. To economize on space, values of intercept and lagged dependent variable are not presented. Standard errors are in parentheses.

^aModel 6 includes country fixed-effects.

^bEXTERNAL RISK is the standard deviation of first logarithmic difference in the terms of trade.

*** $p < 0.01$.

** $p < 0.05$.

* $p < 0.10$.

predicted sign of the coefficient. Model 4 adds a variable measuring Christian Democratic political strength to the model. The variable is statistically significant but also has a negative sign, suggesting that parliamentary strength of Christian Democratic Parties was not associated with the introduction of encompassing policies of unemployment compensation during this period. Models 5 and 6 examine whether external insecurity has an additional independent effect on the development of policies of unemployment compensation, after controlling for the impact of employment volatility, by introducing an interactive term between external insecurity and industrial employment to the model. (The main difference in these models is that Model 6 includes country-fixed effects.) The interactive term EXTERNAL RISK*INDUSTRIAL EMPLOYMENT has a positive sign and is statistically significant, suggesting that external volatility played some role in the development of a policy of unemployment compensation.

The results presented in Table 2 examine additional aspects of the relationship between external insecurity and unemployment compensation. Models 1 and 2 estimate a simple model that includes the interaction term between external risk and

TABLE 2. *The determinants of unemployment insurance in Europe during the interwar period (1920–38)*

Variable		Model 1	Model 2 ^a	Model 3	Model 4	Model 5	Model 6
External volatility	EXTERNAL RISK	1.4203*** (0.41)	1.0695*** (0.318)	1.4155*** (0.41)	1.4020*** (0.398)	1.3935*** (0.400)	1.4202*** (0.407)
	*INDUSTRIAL EMPLOYMENT ^b						
	EXTERNAL RISK	-23.84*** (8.77)	-18.53*** (6.37)	-23.36*** (8.75)	-23.01*** (8.36)	-22.82*** (8.37)	-23.86*** (8.72)
	INDUSTRIAL EMPLOYMENT	0.10*** (0.03)	0.09 (0.09)	0.10*** (0.03)	0.116*** (0.029)	0.115*** (0.029)	0.111*** (0.039)
Economic controls	ECONOMIC DEVELOPMENT	-0.188 (0.329)	1.11** (0.49)	-0.178 (0.319)	-0.144 (0.355)	-0.12 (0.337)	-0.14 (0.302)
	UNEMPLOYMENT	0.055 (0.056)	0.107 (0.072)	0.05 (0.05)	0.061 (0.05)	0.06 (0.05)	0.041 (0.05)
Political controls	LEFT PARTICIPATION IN PARLIAMENT			-0.01 (0.01)	-0.002 (0.01)	0.000 (0.02)	
	CHRISTIAN DEMOCRATIC PARTICIPATION IN PARLIAMENT						-0.008 (0.006)
	TRADE UNION DENSITY				-0.01 (0.02)	-0.012 (0.021)	
	POLITICAL CONCENTRATION ^c					-0.00 (0.000)	
	UNEMPLOYMENT INSURANCE COVERAGE (t-1)	0.96*** (0.013)	0.804*** (0.045)	0.96*** (0.014)	0.96*** (0.013)	0.96*** (0.016)	0.967*** (0.013)
Model chi square	66361	2246	67028	69205	90321	69806	
Probability > chi square	0.00	0.00	0.00	0.00	0.00	0.00	
R ²	0.95	0.95	0.95	0.95	0.95	0.95	
N	136	136	136	136	136	136	

Note: Model is estimated using ordinary least squares with lagged dependent variable and panel-corrected standard errors, correcting for autocorrelation and for heteroskedastic disturbances between panels. To economize on space, values of intercept and lagged dependent variable are not presented. Standard errors are in parentheses.

^aModel 2 includes country fixed-effects.

^bEXTERNAL RISK is the standard deviation of first logarithmic difference in the terms of trade.

^cPOLITICAL CONCENTRATION is $\sum s_i^2$, where s_i is the share of parliamentary seats of party i .

*** $p < 0.01$.

** $p < 0.05$.

* $p < 0.10$.

the percentage of workforce employed in industry along with the two constituent variables and two economic controls (the level of unemployment and economic development). (Model 2 reestimates Model 1 and introduces country fixed-effects). The interaction term between external risk and industrial employment has the predicted sign and is significant at the 99 percent level. Models 3 to 6 examine the impact of additional political variables. Models 3, 4, and 5 test the hypothesis that stronger parliamentary participation of left-wing parties leads to the introduction of unemployment insurance policies characterized by broader levels of coverage. The coefficient of the left partisanship variable is not statistically significant, and its sign varies across these different specifications of the model. The variable measuring trade union strength (introduced in Model 4) has a negative sign and its effect is not statistically significant. Model 5 adds the variable measuring the number of parliamentary veto players. While the variable has the predicted sign (countries with fewer parliamentary veto players have social policies characterized by broader levels of coverage), the effect of the variable is not statistically distinguishable from 0. Model 6 tests for the impact of Christian Democratic Parties. The sign of the variable is negative and not statistically significant. A stronger presence of Christian Democratic Parties in parliament is not associated with an increase in the level of unemployment insurance coverage. Two conclusions follow from this analysis. First, both measures of economic insecurity (volatility in the terms of trade or the volatility in unemployment) in interaction with the size of the industrial sector have a significant effect that is robust across various specifications. Secondly, none of the political variables has a strong effect that is robust across different specifications.

The results reported in Table 3 examine the substantive impact of the explanatory variables on the level of unemployment insurance coverage. The entries in the cells provide “counterfactual” estimates of the level of unemployment insurance coverage, given different levels of external insecurity and different levels of

TABLE 3. *Simulated levels of unemployment insurance coverage*

		<i>Industrial employment</i>		
		<i>Low (20th percentile)</i>	<i>Mean</i>	<i>High (80th percentile)</i>
EXTERNAL RISK	<i>Low (20th percentile)</i>	17.03	17.16	17.42
	<i>Mean</i>	17.37	17.97	18.73
	<i>High (80th percentile)</i>	17.66	18.43	19.87

Note: Each entry cell represents the expected level of unemployment insurance coverage for given configurations of external insecurity and industrial employment, with the other variables held constant at their means. (Simulations are based on Model 1 in Table 2.) The level of coverage is computed as the share of the population (above age fifteen) that has access to unemployment insurance benefits.

industrial employment. I present simulated values for low and high values of these variables, corresponding to the 20th and 80th percentiles in the data set respectively with all other variables set at their means. Simulations are based on Model 1 in Table 2 and are computed using the *Clarify* program.⁸⁴ The results suggest that the level of unemployment insurance coverage is lowest when both industrial employment and the level of external risk are low, and highest when both variables take high values. At low values of industrial employment, external risk has only a low effect on the level of unemployment insurance coverage (leading to an increase in the level of coverage of only 0.63 percent). The effect is more pronounced if industrial employment takes high values. In this case, an increase in the level of external risk leads to an increase in the level of unemployment insurance coverage of 2.45 percent.

This statistical analysis provides additional support for the argument developed in this article linking economic insecurity to the development of policies of unemployment compensation. As hypothesized in the article, the impact of economic insecurity on the development of policies of unemployment compensation is conditional on the sectoral composition of the economy. Economies characterized by high levels of volatility and in which the manufacturing sector is larger have expanded the level of unemployment insurance coverage. Economic insecurity has an impact on the development of policies of unemployment compensation, even after controlling for political variables such as the strength of left-wing or Christian Democratic Parties, the trade union density, the number of parliamentary veto players, or the level of economic development.

Conclusions

This article contributes to the rapidly growing literature that examines the relationship between economic insecurity and the size of the public sector. I develop and test a political explanation of the relationship between economic insecurity and social protection that explores the implications of a sectoral conflict over the design of institutions of social protection. In this account, economic insecurity—measured as an increase in the volatility in the terms of trade or as an increase in the volatility of unemployment—amplifies a sectoral conflict between coalitions of high-risk and low-risk sectors over the design of institutions of social protection. Workers in sectors experiencing a high volatility in the demand for their product will favor the introduction of institutions of social insurance characterized by high levels of insurance coverage and a high reallocation of costs across occupations. Some employers in high-risk sectors will also favor these redistributive social policies over possible alternatives (such as private-type institutions of social protection or no social policies), in an effort to lower the costs of social insurance. In

84. King, Tomz, and Wittenberg 2000.

contrast, workers in sectors characterized by a low volatility in demand will favor social policies characterized by narrower coverage and lower redistribution of costs across occupations. A social policy characterized by broad levels of insurance coverage will be introduced only if the coalition comprising workers and some employers of the high-risk sectors is larger.

The explanation developed in this article accounts for the divergent policies of unemployment compensation introduced by European economies during the interwar period. The historical analysis supports the micro-level predictions of the theory for the social policy preferences of different sectors facing different levels of economic risk. The study of the social policy preferences expressed by various sectors in France and Germany demonstrates the existence of a sectoral cleavage among “high-risk” and “low-risk” sectors. The quantitative analysis provides additional support for the hypothesis that higher levels of economic insecurity lead to an increase in the level of social protection, if the high-risk sector is politically more influential. Thus, the findings have broader theoretical and empirical implications for the study of comparative study of systems of social protection. The findings suggest that existing studies of the relationship between external risk and social insurance have paid insufficient attention to the domestic political conflict surrounding the introduction of a new social policy. Focusing on the demands of groups that have an interest in the provision of social insurance—trade unions or workers in the risky sectors—is insufficient. The introduction of a new social policy generates winners and losers. Groups that are potential “losers” from the introduction of a new social policy can often block policy proposals with broad redistributive goals. These findings open up new avenues for future research linking economic insecurity to cross-national differences in the character of institutions of social protection. Future research could examine whether the findings of this article are robust across space and time.

Appendix

TABLE A1. *Descriptive statistics*

<i>Variable</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
EXTERNAL RISK	0.007	0.075	-0.20	0.34
INDUSTRIAL EMPLOYMENT	24.92	7.35	10.8	36.05
ECONOMIC DEVELOPMENT	3.86	1.15	1.45	6.33
UNEMPLOYMENT	6.09	4.06	0.3	17.2
LEFT PARTICIPATION IN PARLIAMENT	30.08	14.76	0	58.6
CHRISTIAN DEMOCRATIC PARTICIPATION IN PARLIAMENT	12.41	19.35	0	59
TRADE UNION DENSITY	22.89	14.48	0	58.5
POLITICAL CONCENTRATION	2507.63	1228.15	0	6037.75
UNEMPLOYMENT INSURANCE COVERAGE	17.47	16.71	0	69

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