

Development, organized labor and welfare in Mexico, 1944-2000*

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Abstract

Few studies explain the development of social protection in Latin America. This article uses the case of Mexico to illustrate the role of economic development, economic institutions, and labor mobilization in shaping social protection in the region. The expansion of social insurance in Mexico prior to the 1980s debt crisis was a response of the ruling party to the mobilization and demands of organized labor in the context of ISI-driven economic development. The crisis and subsequent neoliberal economic reforms changed the dynamics of social insurance provision. Economic liberalization impacted social insurance indirectly through informalization of the domestic labor market and an erosion of the political influence of organized labor. Statistical analysis of social insurance coverage and qualitative comparative analysis of social insurance since the 1940s in Mexico support this explanation.

Biographical sketch

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In comparison to the breadth and depth of studies of welfare regimes in advanced industrialized democracies, only a handful of studies explain the political factors that led to the development of relatively extensive social protections before the 1980s debt crisis in Latin America.¹ Welfare regimes primarily consist of the five core forms of social security or social insurance: compensation for work-related accidents and illnesses, old-age and disability pensions, health insurance and benefits, unemployment insurance, and family allowances. Beginning as early as the 1920s, many Latin American countries adopted fairly significant and extensive social insurance protections for private and public sector workers, including worker's compensation, pensions, and health benefits. In most countries, social insurance expanded throughout the post-World War II era to cover not only the growing ranks of government and industrial workers but also rural wage laborers (Mesa-Lago 1978). This expansion of social insurance was reinforced by an inward-looking economic development model and the incorporation of organized workers into national politics. By the end of the 1970s, the most developed countries in the region provided extensive protections for formal sector workers, but underdeveloped and informal labor markets meant that social insurance was largely regressive.

Throughout most of Latin America, the 1980s ushered in a radical shift in economic policy, including trade liberalization, privatization of state-owned enterprises, and liberalization of labor markets. These economic policies eroded already limited formal labor markets and consequently the core constituency served by social insurance. Further, recent periods of economic growth or development in the liberalized economies of Latin America correspond with expanding informal, rather than formal, employment, so that growth no longer translates automatically into an expansion of social insurance. The economic reforms also undermined the political capacity and role of organized labor, especially in the tradable industries most impacted by trade liberalization (Kurtz 2004). Thus, the reforms undercut the ability of organized labor to stymie cutbacks in social insurance.

This article begins to fill the gap in our understanding of the political and economic determinants of social insurance provision in Latin America through statistical and comparative historical analyses of social security provision by the Mexican state since the 1940s. The Mexican case is useful in this regard for several reasons. The timing of adoption of its primary social insurance institutions place Mexico in an intermediate category within the region—it was neither a pioneer nor late-comer to social insurance (Mesa-Lago 1978). Further, typical characterizations of Mexican corporatism (e.g., Kaufman Purcell 1975; Collier and Collier 1991) would suggest that organized labor would play little role in the development and expansion of welfare, making it a least likely case for the proposed argument. Finally, the implementation of import-substitution industrialization (ISI) and then neoliberal economic reforms in Mexico are illustrative of these trends throughout the region.

In 1944, Mexico created the Mexican Institute of Social Insurance (IMSS), which provides worker's compensation for work-related accidents and illness, old-age and disability pensions, maternity and health benefits, for formal, private sector workers. Through both legislation and administrative decisions, IMSS coverage expanded to cover new regions and occupational groups through the end of the 1970s, when all formal, private sector workers were eligible for benefits. In

1959, the Institute for Social Security and Insurance for State Employees (ISSSTE) consolidated and expanded social insurance protections for central government employees, including public school teachers. The IMSS and the ISSSTE are the two main public institutions providing social insurance benefits to approximately half of the Mexican economically active population (EAP) and families.

This article argues that the expansion of social insurance prior to the 1980s debt crisis was a response of the ruling party (the Institutional Revolutionary Party, or PRI) to the mobilization and demands of organized labor in the context of ISI-driven economic development. The crisis and subsequent abandonment of ISI changed the dynamics of social insurance provision. Economic liberalization impacted social insurance indirectly through informalization of the domestic labor market and an erosion of the political influence of organized labor. Statistical analysis of social insurance coverage and qualitative comparative analysis of social insurance since the 1940s in Mexico support this explanation.

Explaining welfare in Latin America

The earliest welfare studies emphasized economic development as a precursor to the development and convergence of social insurance policies (Cutright 1965; Williamson and Flemming 1977). These studies often assumed social insurance would be a functional response to the dislocations and risks associated with industrialization and the development of wage-based formal labor markets. Though the development of social insurance was not as automatic as such functional arguments imply, employment-based social insurance does depend on formal labor markets and becomes more feasible as such markets expand. In this sense, economic development may be necessary but insufficient for the development of social insurance. Studies have found a positive relationship between development and social security provision in Mexico (Spalding 1980; Wahl 1994).

Research on welfare institutions in advanced industrialized democracies also suggests that “institutional complementarities” exist between economic institutions, or production regimes, and the development of social insurance institutions (Hall and Soskice 2001). Welfare institutions are embedded in production regimes, or “economies with specific patterns of relations between financial institutions, labor, and the government, and specific constellations of labor market and economic policies” (Huber and Stephens 2001, 23). In an analogous fashion, the economic institutions associated with the predominant development models in Latin America would share institutional complementarities with social protection institutions. For example, the ISI model dominant in Latin America prior to the 1980s debt crisis was based on economic institutions designed to protect and promote domestic industry, including tariffs, subsidies, and overvalued exchange rates. These economic institutions shared institutional complementarities with publicly mandated social insurance because social insurance smoothes the functioning of labor markets necessary for industrial development. ISI expanded formal sector industrial employment, thereby creating a constituency for social protection.

The exhaustion of ISI and subsequent 1980s debt crisis promptly constrained social insurance provision in the region. The crisis led to high unemployment, and inflation eroded social insurance reserves (Mesa-Lago 1989). Because few countries provide automatic unemployment insurance as part of their welfare regimes (Filgueira and Filgueira 2002), high unemployment meant

fewer workers were protected by employment-based social insurance. In Mexico, the economic crisis of the 1980s threatened to provoke a crisis of social insurance, which the government only avoided by allowing inflation to erode the real value of benefits. The debt crisis created a short-term decline in social insurance coverage due to high unemployment and marked increase in informal, and therefore unprotected, employment.

The debt crisis also had a lasting effect on social insurance through the fundamental restructuring of economic institutions in the region. In countries that adopted extensive economic reforms, like Mexico, the new neoliberal development model restructured the economy and labor market through widespread privatization and trade and labor market liberalization. Though organized labor in Mexico has blocked formal labor market reforms, successive governments informally liberalized the labor market by failing to enforce the labor code (Zapata 1995). The effect has been rapid growth of the informal sector and weakening of the political power of organized labor unions, the primary beneficiaries of social insurance (Zapata 1995; Burgess 2004). While the debt crisis created a temporary decline in social insurance coverage, economic liberalization and subsequent informalization of the labor market undercut the relationship between economic growth, formal sector employment, and the expansion of social insurance.

While economic development and economic institutions condition the development of welfare provision, political actors, often organized labor organizations, play a key role in the creation and maintenance of social insurance protections. The class power resource approach claims that the organization and mobilization of working class power explains the development of extensive welfare in Northern European countries (Stephens 1979; Korpi 1983). Despite its original focus on industrialized democracies, the approach offers analytical promise for understanding welfare in Latin America. Organized labor in the most advanced Latin American countries emerged in the early decades of the twentieth century, quickly transforming the political landscape (Collier and Collier 1991). However, labor incorporation into national politics was not uniform across the region, and corporatist institutions provided diverse inducements and constraints for organized labor (Collier and Collier 1979).

Though corporatist institutions provide the backdrop for the mobilization of labor power in twentieth century Latin America, corporatism did not preclude periodic mobilization of labor power to demand the expansion of welfare benefits for formal sector workers in Mexico. The power of organized labor in Mexico derived not from the market but its centrality to the cross-class coalition that maintained the ruling party in power for over seven decades. Organized labor was able to use its position in the ruling coalition to periodically pressure the state for the expansion of benefits for organized workers (cf. Dion 2002, Burgess 2004). Organized labor used occasional mobilization, including using the threat of strike and street protests, to pressure the ruling party into concessions for workers, including social insurance. As suggested above, the 1980s economic crisis and ensuing neoliberal economic reforms undercut the ability of organized labor to mobilize its power to protect social insurance from retrenchment pressures. This argument is consistent with cross-national evidence from the developing world that suggests potential labor power is positively associated with social security expenditures in closed economies but that labor influence on social security declines in open economies (Rudra 2002).

To summarize, where economic institutions and growth support the expansion of the formal labor market, necessary conditions exist for the development of social insurance. In such conditions,

the mobilization of organized labor can contribute to the expansion of social insurance. In contrast, where economic liberalization, including privatization, trade and labor market liberalization, erodes formal employment, social insurance protections are likely to be affected. Informalization of the labor market not only reduces coverage of contribution-based social insurance but weakens the organizational capacity of labor unions to demand and protect social insurance from retrenchment. This link between trade liberalization, the informalization of the labor market, and social insurance retrenchment helps explain the weak support for the “compensation” thesis in Latin America (Wibbels 2006; Kaufman and Segura 2001).²

The literature on welfare also suggests several important alternative or control variables. For instance, government capacity to provide social welfare may be constrained by high levels of foreign debt (Brown and Hunter 1999). In addition, centralization of state capacity may facilitate social insurance provision and expansion (Skocpol 1992). Also, the centralization of political decision-making has been associated with the expansion of social insurance in advanced industrialized democracies because political centralization minimizes the ability of veto players to block welfare expansion (Huber, Ragin and Stephens 1993). The statistical analyses that follow include measures to control for each of these effects, though in the cases of centralization of state capacity and decision-making there is very little variation in the series. The following statistical analysis tests this theoretical explanation of welfare provision in Mexico. It is followed by a comparative historical analysis to illustrate the results of the statistical model and provide further evidence in support of the above argument.

Statistical analysis of social insurance in Mexico, 1944-2000

This section elaborates a statistical model to test the argument that economic development and labor mobilization in the context of ISI development policy explain the expansion of social insurance and that after the debt crisis neoliberalism weakened the link between economic development, the formal labor market, and the ability of organized labor to protect social insurance from retrenchment pressures.

Public expenditure data are poor estimates of the degree to which citizens have access to social protection because the data are not adjusted for worker and employer contributions and do not reflect the distribution of benefits. Indeed, Latin American social insurance systems are known for their inequitable and poor distribution of benefits, including expensive systems for a narrow segment of government employees. Social insurance coverage better captures the extent of social protection provision because it captures the extent to which welfare institutions and benefits reach potential beneficiaries. The measure of social insurance provision used here is the percentage of the population protected by the two main public, mandatory social protection institutions in Mexico: IMSS and ISSSTE.³ See Figure 1. The figure illustrates not only the contraction in coverage during periods of economic crisis or stagnant growth, but also the slower rate of growth in coverage since the 1980s. IMSS and the ISSSTE use generous definitions of dependent family members in order to expand beneficiary coverage to include not only spouses and children, but also dependent parents and extended family members.⁴

<Figure 1>

Time series data, such as those used in this paper, often have properties that violate the assumptions of ordinary least squares regression. In the present case, the dependent variable and many of the independent variables have recognizable trends.⁵ Though the differenced coverage data are stationary, other types of problems can plague time series data. In particular, autocorrelation is common, requiring attention to the error structure. The differenced coverage data exhibits a first-order autoregressive pattern, and the results for the first order autoregressive model are presented in Table 1.⁶ However, the errors for this model are heteroscedastic, with greater variance later in the series. The test for autocorrelation in the error variance was also statistically significant ($p < .01$), so an autoregressive conditional heteroscedasticity (ARCH) model is used. This model improves efficiency by correcting for the heteroscedasticity and autocorrelation of the errors. The results for this model are also presented in Table 1.⁷ These results reflect the path dependency in coverage and the structural differences in the post-debt crisis data.

<Table 1>

In addition, the effects of the debt crisis should also be modeled. The debt crisis had a visible effect on the percentage of the population with public social insurance coverage (see Figure 1), but it is not clear that the debt crisis resulted in a permanent change in the growth of coverage. In order to assess its impact, the debt crisis is modeled as a pulse intervention, or single event, that affected insurance coverage in 1982. The results for this model, in Table 2, support the hypothesis that the 1982 debt crisis adversely affected coverage.⁸ Because temporary or pulse interventions will have a permanent effect of the level of the dependent variable if it is difference-stationary, the coefficient for the debt crisis intervention should be interpreted as the permanent change in the mean level of observed social insurance coverage after the debt crisis. Therefore, the debt crisis had the cumulative effect of reducing the average level of social insurance coverage by 3.6% than it would have otherwise been without the crisis.

<Table 2>

Since the debt crisis coincided with a paradigm shift in the development model from ISI to neoliberalism, the full models of social insurance coverage model allow the coefficients for the independent variables to vary between the two periods, by including an interaction between the independent variables and a dummy for the post-1982 periods. The models also include the temporary intervention variable for the debt crisis.⁹ In the results that follow, the coefficients are those for each independent variable prior to and after 1982 (calculated from the regression results) and their respective statistical significance.¹⁰

Economic development should contribute to the expansion of social insurance prior to the debt crisis because development leads to an expansion of formal sector employment. However, after the 1982 debt crisis and subsequent liberalization of the economy, economic development and growth are not expected to necessarily result in the growth of formal sector employment providing social insurance protections. In Mexico, during periods of economic contraction, informal employment grows, resulting in lower levels of social insurance coverage (Hernández Licona 2001, 20-21).¹¹ Economic development is measured by GDP per capita in thousands of 1978 constant pesos.¹²

Labor mobilization is measured by the number of strike petitions (1000s) filed by unions.¹³ Strike petitions best represent the level of labor mobilization in Mexico because unions routinely coordinate their petitions as a means of protest.¹⁴ According to Mexican labor legislation, unions must file strike petitions with their employer and the Secretary of Labor, announcing their intention to strike in six days.¹⁵ Often, unions file strike petitions without a legal basis to strike as a means of registering labor protest of government policies. See Figure 2 for a graph of strike petitions and legal strikes.¹⁶ Increases in the number of strike petitions are hypothesized to precede and cause increases in social insurance coverage, signaling that the state is responding to labor mobilization by increasing its provision of social insurance.¹⁷ Before the debt crisis when the Mexican state was pursuing ISI development and organized labor provided key support for the regime, labor mobilization should have a stronger and significant effect on social insurance coverage because expansion to new regions and occupations required administrative or legal changes. After the debt crisis, however, labor protest is not likely to be associated with social insurance coverage, due to changes in the labor market and resulting decline organized labor's political capacity.

<Figure 2>

Several control variables are included in the statistical analysis to control for alternative explanations. First, trade openness is measured as imports and exports as a percentage of GDP.¹⁸ It is not expected that trade openness will have a direct effect on social insurance coverage, but when it does influence coverage it is expected to depress coverage. Second, the state's dependence on foreign debt, which may constrain the state's ability to expand social insurance coverage, is measured by the net amount of foreign debt held by the central government as a percentage of GDP.¹⁹ Third, the centralization of state capacity should facilitate the expansion of social insurance coverage. State centralization is measured as the central government revenues as a percentage of the total amount of revenue collected by all levels of government.²⁰

The results for the full model of social insurance provision are presented in Table 4.²¹ Overall, the full model predicts the level of coverage with a fair amount of accuracy, though the predictions are less accurate later in the series (see Figure 3). Even when controlling for the effects of other variables, the temporary intervention of the debt crisis had a significant negative impact upon the level of social insurance coverage, meaning that the debt crisis had a cumulative and negative impact on the ensuing overall level of coverage.²²

<Table 4>

<Figure 3>

The results of the full model indicate that prior to the debt crisis, economic development contributed to the expansion of social insurance coverage. After the debt crisis, however, increases in economic development have not led to increases in social insurance coverage. The results suggest that economic development prior to the 1980s led to an expansion of the formal labor market while recent economic growth has not. Instead, the expansion of the urban informal sector and small and micro-sized enterprises associated with neoliberal reforms over the last two decades coincides with slower expansion of social insurance coverage.

The results also support the argument that the state expanded social insurance coverage in *response* to labor mobilization prior to the debt crisis, rather than as a pre-emptive move by elites to prevent mobilization. Further, strike petitions Granger-cause changes in health insurance coverage, while health insurance coverage does not Granger-cause strike petitions. The effect of strike petitions upon health insurance coverage is unidirectional.²³ In the full models, increases in strike petitions by organized labor before the debt crisis resulted in increases in social insurance coverage, and after the debt crisis, the relationship is either negative (Table 4) or non-existent (Appendix 2). That the Mexican state responded to protest from organized labor by increasing social insurance coverage highlights two characteristics of the PRI regime. First, the results demonstrate that the PRI regime was dependent upon the support of organized labor to the extent that the regime felt it necessary to respond to labor mobilization and demands for social protections. Second, the regime used social insurance as compensation to respond to labor discontent, and as a means of solidifying organized labor's support. Following the debt crisis, however, the ability of organized labor to influence policy through protest has declined. Strike petitions have had no appreciable effect upon changes in social insurance coverage. This outcome is not surprising given that neoliberal reforms and informal liberalization of the labor market during the 1980s and 1990s have weakened the bargaining position of labor vis-à-vis both employers and the state. Furthermore, the shift in emphasis to electoral politics is also likely to have made the PRI regime less beholden to the demands of organized labor, and may have led to the regime to seek a new basis for its popular support. To test the effect of decentralization of regime power due to political liberalization on social insurance coverage, the same model was estimated using a measure of political centralization instead of fiscal centralization.²⁴ The measure was not statistically significant, though centralization before the debt crisis was associated with social insurance growth and retrenchment after the debt crisis. The effects of other variables were the same, though in many cases their effect was amplified when political centralization was included.

In the full model, though there is a statistically significant difference between the effects of trade openness before and after the debt crisis, the effect of trade openness on levels of coverage is not statistically significant.²⁵ This supports the argument that trade liberalization does not directly lead to changes in social insurance coverage. The state's dependence of foreign capital has had no significant effect on social insurance coverage in Mexico, both before and after the debt crisis, despite theoretical reasons to expect a strong relationship. Centralization of state fiscal capacity played a significant role in the development of social insurance in Mexico according to the results of the statistical model, but in the opposite manner than that which was originally hypothesized. Before the debt crisis, fiscal centralization was associated with lower levels of coverage, and the decentralization of fiscal capacity before the debt crisis actually led to increases in social insurance coverage. In contrast, increased fiscal centralization after the debt crisis appears to be associated with increases in social insurance coverage, and recent efforts to decentralize the Mexican state may actually hinder social insurance coverage.

Overall, the results of the full model demonstrate that the factors that contribute to social insurance provision differ markedly under different economic development models. During the period of ISI development prior to the debt crisis, economic growth and labor mobilization led to state expansion of public social insurance. In contrast, after the debt crisis, economic neoliberalism has eroded the influence of organized labor and the link between economic development and social insurance. The next section provides a brief qualitative comparison of the politics of social insurance before and after the debt crisis to illustrate the pattern of the statistical results.

Comparative historical analysis of Mexico's welfare regime

The creation and expansion of the two main social insurance institutions—IMSS and ISSSTE—illustrate the role of economic development and labor mobilization in shaping Mexican social insurance. Since the 1920s, organized labor in Mexico had articulated demands for social insurance protections, but not until the late 1930s and early 1940s did the labor movement gain sufficient momentum and political influence to place social insurance on the national political agenda. The creation of the IMSS in 1943 was a response of the Mexican government to labor demands and labor's withdrawal of support from the ruling party's candidate in the 1940 presidential election. Eventually, the party convinced workers to support its candidate in the elections, and as a result the candidate promised to adopt social insurance legislation within the first year of his administration (Dion 2005). Due to the concentration of economic development, and particularly industrialization, in the largest cities, coverage was initially restricted to municipalities where the concentration of workers and wages that could support social insurance. Throughout the 1950s through 1970s, the organized labor movement affiliated with the ruling party used its position on the IMSS Technical Council and periodic mobilization to demand improvements in benefits and the expansion of geographic coverage, not just for industrial workers, but also for peasants and unorganized workers, from the ruling party (CTM 1968, 31; CTM 1970, 35, see also Dion 2002). Subsequent legislation extended coverage to new categories of workers over the next five decades. In 1954, benefits were extended to rural workers, which had been demanded by some peasant organizations affiliated with organized labor unions.²⁶ In 1973 in response to a CTM petition and full proposal submitted to the PRI, new legislation expanded voluntary coverage, added several new benefits, and improved existing benefit amounts (CTM 1969, CTM 1971, and Archivo Histórico del IMSS 102/1-6-40/ 6976). By the end of the 1970s, all formal, private sector workers throughout the country were eligible for IMSS social insurance protections.

The creation of the ISSSTE in 1960 reflects a similar political logic. Before 1960, a limited number of government employees enjoyed generous pension benefits through their labor contracts but lacked systematic health insurance and related benefits for themselves and their dependents. In 1960, the ISSSTE consolidated piecemeal coverage enjoyed by workers of certain ministries and extended generous and standardized pension, health care, and other benefits to all federal government employees. The creation of the ISSSTE was the result of a political process very similar to that which produced the IMSS. Before his election as President in 1958, Lopez Mateos had been a leader in the largest government employees' union, the powerful National Teacher's Union (SNTE). The labor Federation representing all federal government employees (the Federation of Unions of State Employees, or FSTSE), including teachers, became increasingly mobilized for improvements in salaries and pension and health care benefits during the 1950s (Reyna and Trejo Delarbre 1981, 49-50; Lomelí Vanega 2000, 250-251). This mobilization culminated in 1958 in a widespread teacher's strike, among the demands of which were improved social insurance benefits (Pozas and Loya 1986, 602; Zapata 1995).

Again, this mobilization of organized labor (which included organizations that were formally affiliated with the ruling party and those that were not) coincided with a presidential election season. During his presidential campaign, which was enthusiastically supported by government employees, Lopez Mateos promised an ISSSTE-type policy (i.e., health care benefits and other social protections) for government workers (Lopez Mateos 1959, 8). Once elected, President Lopez Mateos (1958-1964) responded to the demands and mobilization of government

employees and used the creation of the ISSSTE in 1959 to consolidate the support of organized government workers for the ruling party.

This explanation of social policy making in Mexico is not obvious given the tendency to emphasize the subordination of Mexican labor to the state. Even if labor demands and protest played a role in the creation of these policies in the early 1940s when it exhibited more political independence, it would not be obvious that organized labor continued to influence policy in subsequent decades. Given the authoritarian nature of the Mexican regime, it is not surprising that most policies that benefit subordinate groups have been characterized as attempts by the regime to co-opt and control those groups (Kaufman Purcell 1975). Though previous analyses of the creation and expansion of the IMSS in Mexico emphasize the role of economic development and elite decisions to expand coverage (Spalding 1980 and 1981), the statistical analysis and comparison of the creation of the IMSS and the ISSSTE suggest that labor demands and mobilization contributed to the expansion of social insurance.

The 1982 debt crisis brought Mexico's state-led economic development to an abrupt halt, leading to a drastic reduction in the state's direct intervention in and regulation of the economy. Trade liberalization weakened the organizational strength of organized labor through its effect on the domestic labor market. The economic crisis also eroded popular support for the PRI regime, which had relied upon economic development and "progress" to sustain its legitimacy. The political crisis of the late 1980s eventually turned into the beginning of a prolonged transition to democracy that ended with the election of an opposition party presidential candidate in 2000. In the process of political liberalization during the 1980s and 1990s, organized labor witnessed the decline of its insider influence as the ruling party sought new, more dynamic sources of political support and winning electoral coalitions. As a consequence, the ruling party used targeted social assistance, including PRONASOL and Progresa, to build support not among organized workers but among the rural and urban poor adversely affected by economic reforms (Green 2005; Molinar Horcasitas and Weldon 1994).

In the early 1990s, the ruling party also enacted a series of social insurance reforms that found significant support from business and employer interests, as well as the international financial community. Labor organizations opposed privatization proposals for both pensions and health care in 1992 and 1995 but were only able to partially stop or delay such reforms. Opposition from labor delayed a complete pension privatization in 1991 and 1992, when President Salinas (1988-1994) needed labor support for his free trade agreement with the United States and Canada. The Zedillo administration (1995-2000) proposed additional privatization measures, not only of pensions, but also the social insurance health services of both IMSS and ISSSTE. In 1995, IMSS pensions were privatized (with full implementation in 1997), despite the opposition of major labor unions in tradable sectors (Madrid 2003). In contrast, opposition of state employees labor unions (including the powerful teachers union) and of the IMSS employee union blocked the privatization of both health care provided by IMSS system and any overhaul of ISSSTE. Thus, retrenchment was possible only in those areas of social insurance where unions in tradable sectors hurt by economic liberalization were unable to block reforms. Retrenchment efforts in health services and pensions for public sector workers were blocked by organized labor in these non-traded industries that maintained their organizational capacity despite economic liberalization. These retrenchment efforts reflect a general tendency to abandon or actively cutback social insurance protections for formal sector workers.

In addition to its retrenchment efforts, the state has largely abandoned its goal of universalizing social insurance. Though the 1995 IMSS reform included provisions for informal sector and self-employed workers to voluntarily contribute for IMSS benefits, less than one percent of those eligible have done so. Instead, the government has expanded the use of means-tested, non-contributory social assistance or conditional cash transfer programs, including Progresá and Oportunidades, to meet the needs of the growing informal sector and rural poor. However, social assistance programs, with their conditionality and meager benefits, fail to sufficiently replace the safety net provided by traditional social insurance and should instead be treated as supplements to, not replacements for, social insurance.

This brief comparison of the role of organized labor in the politics of social insurance under ISI and neoliberalism serves to highlight the ways in which economic development policies shape the context in which organized labor is able to mobilize and demand social insurance or protect against retrenchment. The qualitative evidence is consistent with the results of the time series analysis. Economic policy and openness affects social insurance provision indirectly through its effects on labor markets and the ability of organized labor to effectively influence policy outcomes.

Discussion and conclusions

The preceding analysis both challenges common conceptions of policy-making under the ruling PRI regime in Mexico (e.g., Kaufman Purcell 1975; Spalding 1980 and 1981), and confirms recent observations that organized labor in Mexico has recently lost some of its political influence (Zapata 1995). Shortly after the Mexican Revolution, political leaders consolidated control of the Mexican state and enjoyed political hegemony for over seven decades. Most have attributed the political stability of the regime to top-down control of the popular classes by the ruling party (e.g., Collier and Collier 1991). This analysis suggests instead that the ruling party has had to constantly renegotiate the terms of popular support provided by organized labor, often responding to withdrawals of labor support with the expansion of social insurance benefits and coverage for workers and their families. This interpretation is consistent with recent characterizations of Mexican corporatism (Burgess 2004).

The debt crisis and the economic reforms that followed in the wake of the debt crisis led to important changes in support of the authoritarian regime. The crisis created a short-term decline in formal employment and economic liberalization reinforced these changes in the labor market and further weakened the organizational capacity of organized labor and its ability to provide crucial electoral support for ruling party candidates in increasingly contested national elections. In this new economic and political context, organized labor's support for the ruling party was no longer indispensable, and social insurance benefits were no longer a useful tool for securing popular support for the ruling party. This finding is consistent with cross-national research which suggests that trade liberalization leads to reductions in social insurance expenditures in Latin America (Wibbels 2006; Kaufman and Segura-Ubierno 2001). These findings are also consistent with others that find that economic liberalization reduces the effect of labor power to protect social security expenditures in the developing world (Rudra 2002). Overall, greater attention should be given to the ways in which welfare institutions are embedded in particular arrangements of economic institutions because economic openness has different implications for welfare depending on the dominant development model.

Table 1: Social insurance coverage in Mexico, 1945-1999

	ARIMA (1,1,0)	ARIMA (1,1,0) ARCH (1)
AR1	0.503*** (0.114)	0.716*** (0.128)
ARCH1		-0.131*** (0.022)
Constant		2.800*** (0.529)
Log likelihood	-100.422	-93.242

Standard errors in parentheses. * p < .1 ** p < .01 *** p < .001

Figure 1: Public social insurance coverage in Mexico, 1944-1999

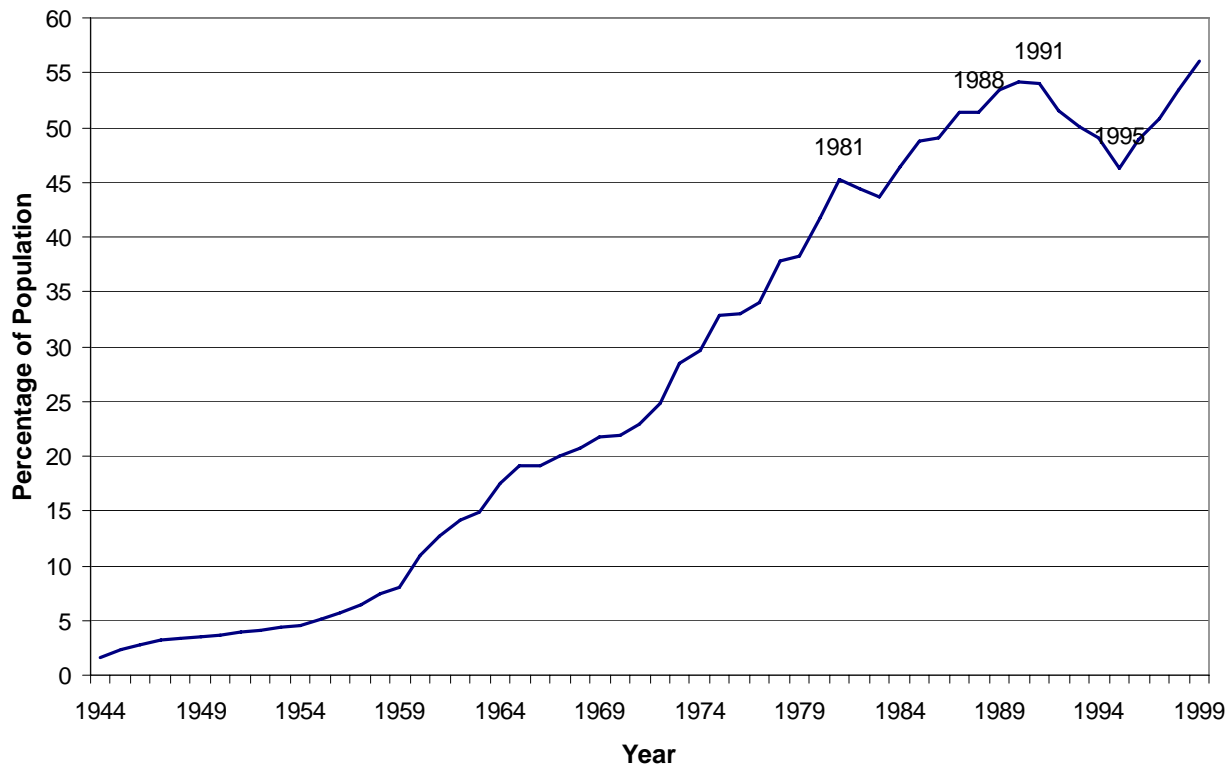


Table 2: Model of public social insurance coverage with temporary 1982 debt crisis intervention

	Coefficient (s.e.)	Test Statistic
Health Insurance Coverage (lagged difference)	0.864*** (0.096)	9.028
1982 Debt crisis intervention	-3.577 (25.479)	-0.140
AR (1)	-0.501** (0.156)	-3.205
ARCH (1)	0.159 (0.234)	0.679
Constant	1.605*** (.403)	3.986
Log likelihood	-93.364	

Standard errors in parentheses. * $p < .1$ ** $p < .01$ *** $p < .001$

Figure 2: Strike petitions and strikes in Mexico, 1940-1999

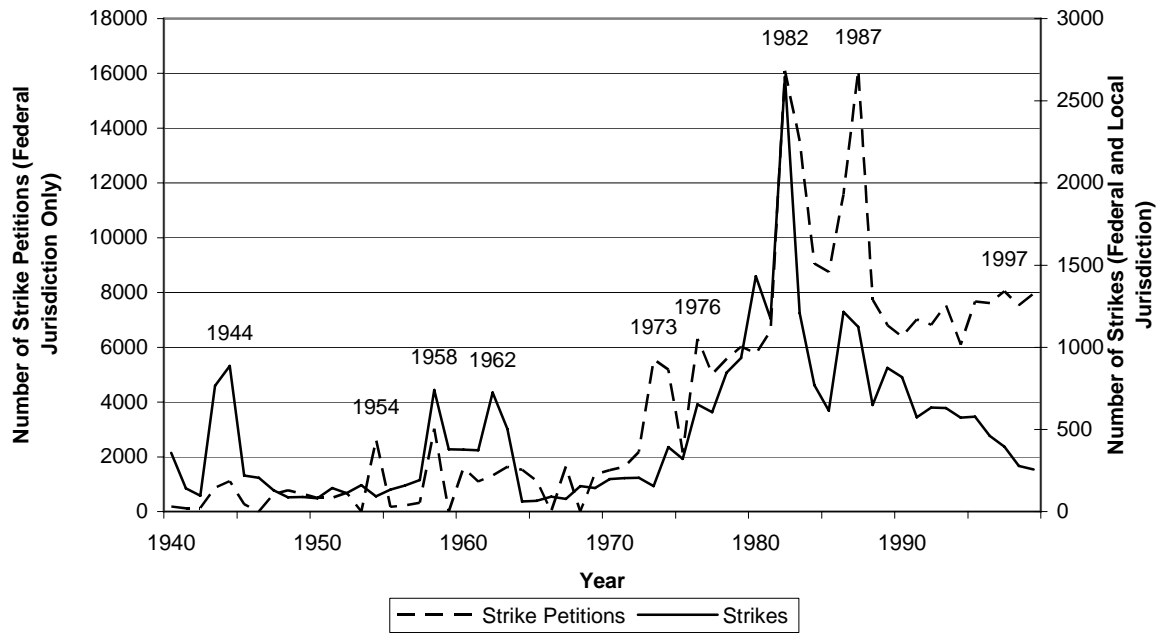
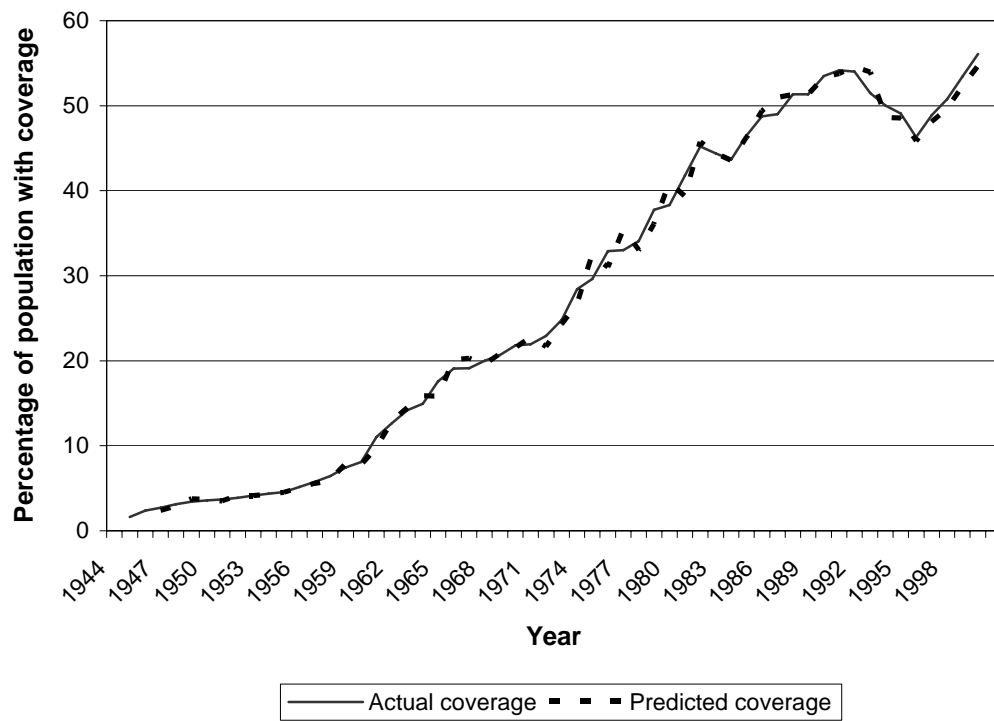


Table 4: Changes in public social insurance coverage, 1946-1999 (AR-1 and ARCH-1)

	Coefficient	T statistic	P value
Debt Crisis	-3.515	-6.134	0.000
1946-1981			
Δ Strike petitions _{t-1}	0.058	1.192	0.233
Δ Strike petitions _{t-2}	0.190	4.086	0.000
Δ GDP per capita _{t-1}	0.123	2.582	0.010
Δ Trade openness _{t-1}	-0.018	-0.631	0.528
Δ Federal government debt _{t-1}	-0.031	-0.314	0.754
Δ Fiscal centralization _{t-1}	-0.031	-5.251	0.000
1982-1999			
Δ Strike petitions _{t-1}	-0.105	-0.940	0.348
Δ Strike petitions _{t-2}	-2.882	-31.312	0.000
Δ GDP per capita _{t-1}	-0.432	-4.614	0.000
Δ Trade openness _{t-1}	0.014	0.216	0.829
Δ Federal government debt _{t-1}	0.000	0.000	1.000
Δ Fiscal centralization _{t-1}	0.237	3.932	0.000
AR1	1.012	14.49	0.000
ARCH1	3.083	3.64	0.000
ARCH constant	0.001	0.04	0.970
Log likelihood	-63.38631		

Bold coefficients indicate that the coefficient for the variable during the debt crisis is statistically different from the coefficient before the debt crisis ($p < .05$); in other words, the effect of the variable is different (to a statistically significant degree) in the second period. Coefficients for 1982-1999 are the sum of the coefficient prior to the debt crisis and the coefficient from the interaction of a post-debt crisis dummy (1982-1999) and the variable of interest. The standard errors for these computed coefficients are the square root of the sum of the variances of both coefficients minus twice the covariance between them. T values are for the null hypothesis that the coefficient is zero.

Figure 3: Predicted and actual levels of coverage in Mexico, 1944-1999



Appendix 1

Social insurance coverage and strike petitions and strikes, 1946-1999

	AR(1) ARCH(1)	AR(1)ARCH(1)
Debt Crisis	-3.688*** (-5.39)	-4.982*** (-10.26)
<i>1945-1981</i>		
Strike petitions _{t-1}	0.079** (2.985)	
Strike petitions _{t-2}	0.309*** (5.232)	
Legal strikes _{t-1}		-1.475*** (-4.483)
Legal strikes _{t-2}		0.661* (1.882)
<i>1982-1999</i>		
Strike petitions _{t-1}	-0.185*** (-3.498)	
Strike petitions _{t-2}	0.132* (1.891)	
Legal strikes _{t-1}		-1.680* (-2.557)
Legal strikes _{t-2}		-0.237 (-0.517)
AR1	0.866*** (61.84)	1.056*** (20.88)
ARCH1	3.311*** (4.52)	2.033*** (3.75)
ARCH constant	0.005 (0.33)	0.029 (1.10)
Log likelihood	-77.314	-82.635

Coefficients for after the debt crisis are the sum of the coefficient prior to the debt crisis and the coefficient from the interaction of a post-debt crisis dummy (1982-1999) and the variable of interest. The standard errors for these computed coefficients are the square root of the sum of the variances of both coefficients minus twice the covariance between them. T values for hypothesis that coefficient is zero are presented in parentheses. * p < .1 ** p < .01 *** p < .001

Social insurance coverage and economic development and trade, 1946-1999

	AR(1) ARCH(1)	AR(1)ARCH(1)
Debt Crisis	-3.523 (-0.66)	-3.166 (-.293)
<i>1945-1981</i>		
GDP per capita _{t-1}	-0.247** (-2.708)	
Trade openness _{t-1}		.162** (2.665)
<i>1982-1999</i>		
GDP per capita _{t-1}	-0.324** (-2.705)	
Trade openness _{t-1}		0.041 (0.392)
AR1	0.825*** (6.62)	.765*** (5.365)
ARCH1	0.374 (1.30)	.343 (1.039)
ARCH constant	1.082*** (3.76)	1.270*** (3.579)
Log likelihood	-89.510	-93.664

Coefficients for after the debt crisis are the sum of the coefficient prior to the debt crisis and the coefficient from the interaction of a post-debt crisis dummy (1982-1999) and the variable of interest. The standard errors for these computed coefficients are the square root of the sum of the variances of both coefficients minus twice the covariance between them. T values for hypothesis that coefficient is zero are presented in parentheses. * $p < .1$ ** $p < .01$ *** $p < .001$

Social insurance coverage and government debt and fiscal centralization, 1946-1999

	AR(1) ARCH(1)	AR(1) ARCH(1)	AR(1) ARCH (1)
Debt Crisis	-0.105* (-2.54)	-3.734*** (-.518)	-2.808*** (.799)
<i>1945-1981</i>			
Government debt _{t-1}	0.041 (0.857)		
Fiscal centralization _{t-1}		-.034*** (-8.219)	
Centralization of decision-making _{t-1}			-0.362 (8.871)
<i>1982-1999</i>			
Government debt _{t-1}	-0.064 (-0.722)		
Fiscal centralization _{t-1}		-0.078*** (-11.386)	
Centralization of decision-making _{t-1}			-7.396 (8.851)
AR1	0.937*** (28.65)	0.964*** (21.799)	0.768*** (0.106)
ARCH1	2.818*** (4.06)	2.208*** (3.531)	0.674* (.385)
ARCH constant	0.102* (2.26)	0.099 (1.019)	0.983*** (.254)
Log likelihood	-88.588	-86.255	-94.09574

Coefficients for after the debt crisis are the sum of the coefficient prior to the debt crisis and the coefficient from the interaction of a post-debt crisis dummy (1982-1999) and the variable of interest. The standard errors for these computed coefficients are the square root of the sum of the variances of both coefficients minus twice the covariance between them. T values for hypothesis that coefficient is zero are presented in parentheses. * p < .1 ** p < .01 *** p < .001

Appendix 2

Stationarity tests for variables included in the full model

Variables	AFC zero at lag number	Augmented Dickey-Fuller Test (Phillips-Perron Test)		
		No constant & no trend	Constant only	Constant & trend
Δ Health care coverage	1	-4.029 (-4.077)	-5.398 (-5.504)	-5.363 (-5.475)
Δ Strike petitions	1	-8.644 (-9.904)	-8.595 (-9.915)	-8.513 (-9.791)
Δ GDP per capita	1	-6.826 (-6.858)	-7.453 (-7.453)	-7.377 (-7.377)
Δ Trade openness	3	-10.513 (-10.141)	-10.999 (-10.676)	-11.518 (-11.320)
Δ Federal government debt	1	-5.827 (-5.664)	-5.778 (-5.604)	-5.763 (-5.584)
Δ Fiscal centralization	1	-9.814 (-9.882)	-9.757 (-9.837)	-9.921 10.123)
Critical values for 95% confidence		-1.950	-2.927	-3.496

99% confidence interval for AFC not different from zero.

Appendix 3

Social insurance coverage, 1946-1999 (OLS—lagged dependent variable)

	Coefficient	T statistic	P value
Percent w/insurance coverage _{t-1}	0.768	10.215	0.000
<i>1946-1981</i>			
Strike petitions _{t-1}	0.237	1.441	0.150
Strike petitions _{t-2}	0.340	2.364	0.018
GDP per capita _{t-1}	0.336	3.228	0.001
Trade openness _{t-1}	-0.072	-1.706	0.088
Federal government debt _{t-1}	0.019	0.270	0.787
Fiscal centralization _{t-1}	-0.059	-1.804	0.072
Constant	2.054	0.696	0.486
<i>1982-1999</i>			
Strike petitions _{t-1}	-0.140	-0.393	0.694
Strike petitions _{t-2}	0.264	0.991	0.322
GDP per capita _{t-1}	-0.019	-0.088	0.930
Trade openness _{t-1}	0.154	1.622	0.105
Federal government debt _{t-1}	0.045	0.309	0.757
Fiscal centralization _{t-1}	0.094	1.145	0.253
Constant	-2.580	-0.742	0.458
Adjusted r ²	.9974		
Durbin-Watson d	1.9889		
	(k = 15, n = 55)		

Coefficients in bold indicate that the coefficient for the variable during the debt crisis is statistically different from the coefficient before the debt crisis ($p < .05$); in other words, the effect of the variable is different (to a statistically significant degree) in the second period. Coefficients for after the debt crisis are the sum of the coefficient prior to the debt crisis and the coefficient from the interaction of a post-debt crisis dummy (1982-1999) and the variable of interest. The standard errors for these computed coefficients are the square root of the sum of the variances of both coefficients minus twice the covariance between them. T values for hypothesis that coefficient is zero are presented in parentheses.

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Endnotes

¹ For exceptions, see Malloy (1979), Mesa-Lago (1978, 1989), Spalding (1980, 1981), and Borzutsky (2002).

² Recent research has also examined the impact of financial liberalization on social spending (Garrett 2001; Kaufman and Segura-Ubiergo 2001; Mosley 2003). In Mexico, no significant financial liberalization of foreign capital controls occurred before the early to mid-1990s (cf. index by Morley, Machado, and Pettinato 1999).

³ Coverage data come from IMSS (2001); INEGI, *Anuario Estadístico*, (various years); Zedillo (1999); and INEGI (2001a), which all receive data directly from the social security institutes. Population data for 1943-1994 are from the United Nations, *Demographic Yearbook* (various years) and for 2000 from INEGI (2001b). Data for 1995, 1996, 1998, and 1999 were linearly interpolated from existing data. The percentage of the population with social security coverage is used instead of the percentage of the economically active population contributing to IMSS or ISSSTE because the rules regarding benefits for dependents are intentionally generous to provide the broadest coverage possible. The correlation between the dependent variable and the percentage of the economically active population (EAP) enrolled in the IMSS is 0.9836.

⁴ Coverage data published by the IMSS and ISSSTE may overestimate the level of coverage, though it is not likely to be severe. According to a 1997 household survey, 42.5% percent of the population had access to either IMSS or ISSSTE health care, compared to an estimated 50.75% using the official IMSS and ISSSTE data. Since household surveys are not available to construct detailed time series, IMSS and ISSSTE data are the best available to measure social protection coverage.

⁵ Though the variables are all first-order integrated, they are not cointegrated. Extensive tests and cointegrating regressions were run for the dependent variable and each independent variable both separately and as a group, according to the procedures outlined in Enders (1995: 363-378) and Durr (1992). In no case were the residuals from such cointegrating regressions stationary; the variables are not cointegrated. In the event of cointegration, error correction models are appropriate. Error correction models were also estimated in various forms, and in no instance were the error component parameters significant. Additionally, tests carried out following Gujarati (1995: 723) and Enders (1995: 178-180) indicated that the trends in the dependent and independent variables are stochastic and not deterministic. As such, the variables are difference-stationary, as opposed to trend-stationary. The first-differenced variables should be modeled using traditional time-series techniques with no trend variable.

⁶ The autocorrelation of the first lag is statistically significant ($t = 2.01$), and the Box-Ljung Q statistic is also significant ($Q = 4.024$, $p = .045$).

⁷ The errors for the two models presented in Table 1 are stationary. The errors for the ARCH model had a constant variance, as well.

⁸ The December 1994 peso crisis was not modeled since so few time periods were available following the crisis.

⁹ Before elaborating the full model of public health insurance coverage, restricted models were used to determine the appropriate model and lag structure for each of the independent variables. Cross-correlations were used to determine the number of lags to be included in the models. Changing lags and comparing the models using likelihood ratio tests verified the optimum number of lags for each model. Such diagnostics are recommended by De Boef and Keele (2006). The results appear in Appendix 1. The data exhibit stochastic trend, and the differenced series are stationary. Results of augmented Dickey-Fuller and Phillips-Perron tests for unit roots and stationarity are presented in Appendix 2.

¹⁰ This departs from standard presentation. Since interest is in the real effects of the variables both before and after the debt crisis (rather than the size of the difference in effect), the results are presented to facilitate this interpretation.

¹¹ Data on the informal sector are not available. Further, analysts and government agencies use the inverse of social insurance coverage to proxy for informal sector size in Mexico.

¹² Data for 1940-1993 come from Mitchell (1998: 764, 771); data for 1994-1999 come from INEGI *Anuario Estadístico* (1999 and 2000). INEGI sources do not provide a full time series for the entire period of study.

¹³ The number of federal jurisdiction strike petitions comes from Middlebrook (1995) with additional information from the Secretaría del Trabajo y Previsión Social, *Memoria* and *Informe de Labores* (various years). Missing data for 1946, 1953, 1959, 1966, and 1968 were linearly interpolated from the existing data. Estimating the full equations with missing data reduces the number of cases from 54 to 40. When the two full models are estimated with the data missing, the results are essentially the same: labor unrest is still the best and most consistent explanation of social insurance development.

¹⁴ Strike petitions is also a better measure of *actual* labor militancy or efforts to destabilize the Mexican ruling regime than other potential measures (e.g., potential labor power or union density rates) because rather than measure the possibility of union mobilization, it measures actual efforts by unions to register their political dissatisfaction.

¹⁵ Once filed, the union may withdraw a petition or fail to strike if the employer meets worker demands. If the union intends to strike and negotiations with the employer fail, the Secretary of Labor determines whether there exists a legal basis for a strike. The Secretary of Labor may deny the right to legally strike if there is insufficient cause in the petition.

¹⁶ During the late 1980s and the 1990s, the number of strikes seems to have declined, which might reflect labor acquiescence. The number of strike petitions, however, suggests a different scenario; the number of strike petitions increased slightly. The divergence between the number of petitions filed and the number of legal strikes in the 1980s and 1990s suggests that either unions were using strike petitions increasingly as a means of political protest or that employers and unions reached agreements after the filing of the petition but before the deadline for a strike. Evidence supports the former interpretation. For instance, in October 1982 many unions coordinated their strike petitions to protest the government's handling of the crisis.

¹⁷ Appendix 1 presents the bivariate relationships between both labor measures and social insurance coverage.

¹⁸ Trade openness data for 1940 through 1949 come from UN Secretariat (1951: 369) and Mitchell (1998: 764). Data for 1950-1959 come from the Penn World Tables, and data from 1960-1996 are from the World Bank (1998). Later data come from INEGI *Anuario Estadístico* (1999). INEGI sources do not provide comparable historical series for this variable.

¹⁹ Federal foreign debt data for 1940 through 1954 come from INEGI (1994: 778-779) and for 1955-2000 from unpublished data from the Mexican Secretary of the Treasury and Public Credit (SHCP). Thanks to Reyna Gutierrez Solis and Flavio Torres of the SHCP for providing the data. INEGI sources do not provide a complete historical series for this variable.

²⁰ Central government revenue data for 1940-1989 come from INEGI (1994) and for 1990-1998 from INEGI *Anuario Estadístico* (1999). State and local government revenue data for 1943-1969 come from INEGI, *Anuario Estadístico* (various years) and for 1970-1999 from INEGI, *Finanzas Públicas, Estatales y Municipales de México* (various years). Missing local revenue data for 1949 and 1950 were linearly interpolated from the existing data.

²¹ Appendix 3 presents for comparison only results for the first full model estimated using ordinary least squares with a lagged dependent variable. The results are essentially the same as those for the ARCH model, with the exception of the effects of trade openness. Even with the lagged dependent variable, the OLS model suffers from autocorrelation (Durbin Watson d statistic). The temporary intervention of the debt crisis is not included in this model, but the average levels of social insurance coverage before and after the debt crisis are included. The intercepts before and after the debt crisis were not statistically significantly.

²² Temporary interventions in differenced time series should be interpreted as changes in the levels of the original series.

²³ Granger causality tests were conducted with both the bivariate (with one, two, and four lags) and the full model. In both cases, strike petitions granger-caused health insurance coverage, but not the contrary.

²⁴ The measure, which was constant for most of the series, was an index that combined the inverse of the effective number of parties in the Chamber of Deputies, and the proportion of the governors and mayors from the PRI. Measures of political democracy, such as Polity or Freedom House scores have little or no variation.

²⁵ The decision to use levels or first differences is driven by the characteristics of the data (i.e., whether the data are difference stationary or not). The alternative approach, an error correction model, is appropriate when two or more time series variables are assumed to move in tandem, or are co-integrated of the same order. Extensive testing revealed that

none of the variables were co-integrated, despite being first-order integrated. Unit root tests, such as the Dickey-Fuller, are biased toward finding unit roots. Given the likelihood of a structural break in the series (in 1982 due to the debt crisis), the Perron procedure for testing for unit roots in the presence of a structural break was used, as outlined in Enders (1995, 247). All the variables in the equations, aside from strike petitions, have unit roots both before and after 1982. Strike petitions, however, has a unit root (i.e., is not stationary) before 1982 and does not have a unit root (i.e., is stationary) after 1982. A structural break in the strike petition series was confirmed with another Perron test. Error correction models were estimated for the full model and pairs of variables, but none of the error component variables were significant. According to these tests, the variables were not co-integrated and have stochastic (not deterministic) trend, and the recommended analytic strategy calls for making the variables stationary (through differencing, turning them into change values) and using normal Box-Jenkins techniques.

²⁶ The Revolution Federation of Peasants in Orizaba, Veracruz sent a request to the President Ruiz Cortinez via their affiliation with the Revolutionary Confederation of Workers and Peasants (CROC, see Archivo General de la Nación, Fondo ARC 873/545.3/6).