

ECONOMIC GLOBALIZATION, DOMESTIC POLITICS, AND INCOME INEQUALITY IN THE DEVELOPED COUNTRIES

A Cross-National Study

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This article assesses the impact of economic globalization and domestic political factors on income inequality and state redistribution in the developed countries over the past two decades, using household-level data from the Luxembourg Income Study that are more detailed, accurate, and cross-nationally comparable than those used in previous empirical work. It examines three major modes of international integration—trade, direct foreign investment, and international financial flows—as well as four domestic political variables—the partisan balance of national cabinets, electoral turnout, union density, and the centralization of wage-setting institutions. The study finds only scattered relationships between global integration and income distribution or redistribution but reasonably strong positive relationships between several domestic political variables and an egalitarian distribution of income and/or extensive state redistribution. These findings are consistent with a growing number of studies that emphasize the resilience of domestic political factors in the face of economic globalization.

Keywords: economic globalization; income inequality; developed countries; cross-national analysis; state redistribution

During the past decade, few issues have generated as much debate among scholars, policy makers, and political activists as the relationship between economic globalization, domestic politics, and income inequality in the developed world. The central aim of this article is to offer an empirical assessment of the relative impact of international and domestic fac-

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tors on the distribution of income generated by the market and the ability and willingness of states to redistribute it. Two basic analyses are conducted. The first and most extensive is an unbalanced, pooled, cross-sectional time-series (CSTS) analysis covering the period between the early 1980s and the early 2000s. This analysis uses measures of pregovernment earnings, post-government disposable income, and fiscal redistribution that have been calculated from 59 household-level income surveys available from the Luxembourg Income Study (LIS), which provides by far the most comprehensive, detailed, and accurate cross-national data on income inequality currently available.¹ A second, more limited, analysis offers a full-scale, pooled, CSTS analysis of less complete and comparable annual data from non-LIS sources on pregovernment wage dispersion between the early 1970s and the early 1990s.

Among the questions addressed in this article are the following: Is integration into the world economy systematically related to domestic income inequality across countries or over time? Can any economic dislocation resulting from globalization be ameliorated by the redistributive activities of the state? Are there differences in the impact of the three main modes of international integration (trade, direct foreign investment, and global financial flows)? To what extent is inequality the product of domestic variables, such as electoral participation, partisanship, or the nature of labor relations? If domestic factors are important, which matter the most?

INTERNATIONAL AND DOMESTIC SOURCES OF INCOME INEQUALITY AND REDISTRIBUTION

ECONOMIC GLOBALIZATION

As might be imagined, the relationship between global economic integration, income inequality, and public social benefit provision has been the subject of widely varying interpretations in the scholarly literature. On one hand,

1. The Luxembourg Income Study is a cooperative research project among the national statistical agencies of over 25 countries. For detailed descriptions, see Atkinson, Rainwater, and Smeeding (1995); Gottschalk and Smeeding (1997); and the Luxembourg Income Study's (2003) Web site.

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many commentators have argued that there is a clear positive relationship between economic globalization and market income inequality (see, e.g., Hurrell & Woods, 1995; Reich, 1992; Tonelson, 2000). In this view, the rapidly growing movement of goods and capital throughout the world has driven a wedge into domestic economies, separating those who are well positioned to gain from globalization from those whose status is increasingly undermined by it. High-income groups, for their part, have reaped important new benefits from the enhanced opportunities associated with operations on a global scale. Low-income groups, on the other hand, have found themselves subject to increasingly ruthless and unforgiving international competition that has seriously jeopardized their wages, benefits, and job security.

From this critical perspective, economic globalization has had much the same pernicious effect on income received from the public sector as on market income. Governments, in this view, have found themselves in cutthroat competition to limit the costs of public benefits in an effort to retain their positions in export and capital markets, resulting in a "race to the bottom" that has "hollowed out" long-standing systems of social protection (Mishra, 1999; Page, 1997). Moreover, it is argued, the growing mobility of capital has made it increasingly possible for corporations to escape taxation, forcing labor to bear more of the burden of supporting the social programs that remain (Rodrik, 1997, pp. 54-55). In the view of critics, this downward pressure on social benefits compounds the income effects described earlier. The ironic result is that globalization, in the words of Rodrik, "results in increased demands on the state to provide social insurance while reducing the ability of the state to perform that role effectively" (p. 53).

As would be expected, a substantial body of opinion does not accept the scenario portrayed above. Supporters of global liberalism have been skeptical of critics' claim that international economic integration has encouraged internal inequality in the developed world. On the contrary, they argue, global integration serves as a powerful engine of economic growth, to the benefit of all income groups (Burtless, Lawrence, Litan, & Shapiro, 1998; Lawrence, 1996). Moreover, the lower prices encouraged by international competition are seen as particularly advantageous to low-income groups, which tend to consume a greater proportion of their income than their higher income counterparts (Bhagwati, 1997, p. 39). Without the stimulation provided by globalization, economic liberals conclude, national economies would stagnate, resulting in a rigidity of barriers to class mobility that leads to more, not less, inequality.

With respect to the relationship between economic globalization and public-sector redistribution, matters are not as straightforward. On one hand, some economic liberals are skeptical of public social benefit programs

because the efficiency costs they impose are thought to be unsustainable in an increasingly competitive world economy. On the other hand, many liberals, although accepting that global integration is on balance desirable for participating nations, nevertheless take seriously the possibility that it will produce losers as well as winners and argue that it is entirely compatible with liberal principles for the former to be compensated by the latter. Whether this will in fact happen depends on essentially domestic political factors such as the partisan orientation of governments, the level of participation in national elections, and the nature of labor relations. In this view, domestic politics, far from being rendered increasingly irrelevant, has remained a central factor in determining the extent of public-sector redistribution. In the words of Garrett (1998a), "the coupling of openness with domestic compensation remains a robust and desirable solution to the problem of reaping the efficiency benefits of capitalism while mitigating its costs in terms of social dislocations and inequality" (p. 824; see also Burtless et al., 1998; Evans, 1997; Garrett, 1998b; Kapstein, 1996).

MODES OF GLOBALIZATION: TRADE, INVESTMENT, AND FINANCIAL FLOWS

In much of the popular literature on the distributive effects of economic globalization, international ties have been portrayed as constituting a single undifferentiated whole. Increasingly, however, scholars have distinguished among the three most important vehicles of globalization: international trade, direct foreign investment, and global financial flows.

By far the largest literature depicts the relationship between trade and inequality, particularly the way in which trade with low-wage countries has purportedly undermined the wages of workers in the developed world (Tonelson, 2000; Wood, 1994). For over half a century, the prevailing approach among economists has been the Stolper Samuelson theorem and the closely related factor price equalization hypothesis. The Stolper Samuelson theorem, first articulated in 1941, observes that groups controlling relatively abundant factors of production will benefit from free trade, whereas those holding relatively scarce factors will suffer from it. Because skilled labor is abundant and unskilled labor is scarce in the developed countries compared with the rest of the world, the implication is that a growing premium will be placed on workplace skill (Rogowski, 1989, pp. 177-178). A further elaboration of the Stolper Samuelson theorem, the factor price equalization hypothesis (Samuelson, 1948, 1949; see also Cline, 1997), posits that trade will cause the relative prices of factors of production to equalize

globally, causing the wages of workers at various levels of skill to converge, to the obvious detriment of low-skilled workers in the developed world.

The most common response to the Stolper Samuelson and factor price equalization approaches by supporters of global liberalism is that the assumptions that underlie them are, in the words Bhagwati and Dehejia (1994), so "extraordinarily demanding" that they "cannot be taken seriously" (pp. 39, 42). Critics note that these approaches fail to account for gains from economies of scale, diversification, and technological innovation resulting from globalization, which arguably serve as powerful engines of productivity growth, to the benefit of all income groups (Burtless, 1995, p. 809). Moreover, they argue, imports from low-wage countries constitute too small a share of the developed countries' economies to have had much impact on inequality across entire societies and, in any case, seldom undercut the prices of comparable products produced in developed countries (Galbraith, 1998, pp. 273-277).

Of course, there is nothing in the Stolper Samuelson or factor price equalization approach that prevents the redistribution of any unequal benefits from trade by the public sector, in the manner envisioned by Garrett (1998a, 1998b) and others. Indeed, Stolper and Samuelson (1941) themselves observed that "it is always possible to bribe [a] suffering factor by subsidy or other redistributive devices so as to leave all factors better off as a result of trade" (p. 73). A long tradition in the literature of political science has explored how trade-reliant states have accomplished this through a system of "domestic compensation" overseen by an active state and reinforced by supportive political actors (Cameron, 1978; Katzenstein, 1985).

Although both critics and supporters of globalization consider direct foreign investment to be as important as trade, economic theory in this area is less developed. A summary is offered by Caves (1996, pp. 110-132). Most immediately, the effects of investment are seen as a manifestation of the standard Heckscher Ohlin model of international trade, according to which outbound investment harms domestic workers by removing capital from the local economy and by replacing exports with goods produced by foreign affiliates of local firms, whereas inbound investment benefits domestic workers for the opposite reason. However, economists have disagreed about the magnitude of these effects and whether they might be mediated by the nature of firms' labor relations. With respect to labor relations, it is possible that multinational firms will use threats to relocate as a bargaining tools in negotiating with their workers, thus bidding down wages (p. 125). On the other hand, it is also possible that firms will be required to share profits from their expanded operations with their workers, along the domestic compensation

lines described earlier. Which of these very different scenarios applies in the real world is uncertain. As Caves concludes, "The distributional consequences of foreign investment in the long run remain a strictly unsettled issue" (p. 115).

Finally, it is often claimed that the liberalization of global financial markets contributes to income inequality. For example, it is frequently noted that the benefits of a wider range of investment opportunities tend to accrue to high-income groups, which are most likely to have significant investable assets. Moreover, private businesses, even those not directly affected by trade or investment, may find it increasingly necessary to trim workers' pay or benefits in an effort to retain access to highly competitive global financial markets. Third, it is often argued that cross-border financial flows limit the flexibility of domestic political leaders to use traditional stimulative macroeconomic policy mechanisms to combat unemployment, negatively affecting vulnerable low-income groups (Galbraith, 1998, pp. 171-182; Huber & Stephens, 2001, pp. 224-230). Finally, financial openness has arguably made it easier for firms to avoid taxes, undercutting the ability of governments to finance public benefits and placing more of the burden of supporting the programs that remain on low-income groups, whose ability to creatively avoid taxes is more limited (Garrett, 1996, p. 88; Swank, 1998, p. 675).

DOMESTIC EXPLANATIONS: POLITICS AND LABOR MARKET INSTITUTIONS

As has been suggested, a large literature has explored domestic political sources of both the distribution of market income and the redistributive effect of social benefit packages. The two areas that have attracted the most attention are political participation and the nature of labor relations.

With respect to political participation, one of the most persistent questions has been whether an egalitarian distribution of income and redistributive policies are associated with the political ascendancy of leftist political parties, particularly in a country's governing coalition (Huber & Stephens, 2001; Swank, 2002). One's initial expectation is that this would indeed be the case, because leftist parties typically place distributive issues high on their agendas. However, it is also possible that any such effects will occur, if at all, at the margins: In recent years, most social programs have been simultaneously immune from wholesale dismantling and subject to relentless smaller scale pressure to cut costs, regardless of the party in power.

Another domestic political factor that is widely believed to affect distribution is participation in national elections (see, e.g., Lijphart, 1997; Mahler,

2002). It has often been observed that low electoral turnout tends to be especially characteristic of social groups that have little stake in the political system and are thus difficult to mobilize, among which low-income households are disproportionately represented. Without the political mobilization represented by voting, it is claimed, these groups are less likely than more active groups to benefit from social transfers, tax allowances, and favorable regulatory and economic development policies, which will in turn be reflected in a less egalitarian distribution of income. As Lijphart concludes, on the basis of an extensive survey of the empirical literature on the topic, "low voter turnout means unequal and socio-economically biased turnout. . . . Who votes, and who doesn't, has important consequences for who gets elected and for the content of public policies" (pp. 2-3, 5).²

A second broad class of explanations for cross-national variance in income inequality and redistribution has looked to domestic labor market institutions. One variable that has long been a focus of attention is the share of the labor force that is unionized (see, e.g., Freeman, 1993), which of course varies greatly across the developed countries. Unions, it is argued, not only seek to raise the market income of their members but also favor social expenditures that benefit low-income groups as a whole by providing public medical, disability, unemployment, and pension benefits.

In the past few years, another aspect of domestic labor markets, the degree of coordination of wage-setting institutions, has attracted growing attention (Kenworthy, 2001; Moen & Wallerstein, 2001; Pontusson, Rueda, & Way; 2002; Rueda & Pontusson, 2000; Wallerstein, 1999). The basic claim is that the more centralized and coordinated the process of wage bargaining in a country is, the more egalitarian its distribution of income will be. As elaborated by Wallerstein (pp. 673-676), there are three basic reasons for this: Centralized wage bargaining is said to be more efficient economically than decentralized bargaining, providing more total resources to be distributed; centralized bargaining, in which workers cannot as easily be played off against one another, is said to improve the political position of workers vis-à-vis employers; and centralized bargaining is said to contribute to a broadening of norms of distributive justice across society, again to the benefit of low-income groups.³

2. Low electoral participation and inequality are clearly mutually reinforcing: Low turnout leads to limited or skewed redistributive policies, which fail to reduce market inequality, leading to disaffection on the part of low-income groups, discouraging turnout, and so on.

3. None of this is to say that international integration and domestic politics are the only important variables in explaining income distribution. For example, technological change is often claimed to result in a downward shift in demand for low-skilled workers. Another commonly invoked factor is family structure, particularly the simultaneous growth in the number of single-parent households and two-earner households. Finally, many scholars have pointed to

VARIABLES

DEPENDENT VARIABLES

Income distribution and redistribution. Because this study proposes to examine many of the same variables that have been explored in the large body of work surveyed above, it is fair to ask what is offered here to move the literature forward. The short answer is that this study's primary contribution is in the area of measurement. The main focus of attention is not the independent variables, measuring economic globalization, political behavior, and labor market institutions, which have received by far the most attention in the studies cited above.⁴ Instead, the primary focus is on reexamining much-debated questions with reference to data on inequality and redistribution, from the LIS, that are substantially more detailed, comparable, reliable, and recent than those used in previous work on the topic.

The analysis focuses on three separate variables. The first is earnings inequality, a measure of which has been used in most previous empirical studies of income inequality.⁵ In nearly all cross-national work to date, the source of earnings data has been two special issues of the Organisation for Economic Co-operation and Development's (OECD; 1993, 1996) *Employment Outlook*; this is, for example, the ultimate source of the data used in influential recent studies by Wallerstein (1999), Rueda and Pontusson (2000), Moen and Wallerstein (2001), and Pontusson et al. (2002). Although these data are useful as far as they go, there are some limitations compared with the LIS measure that is used here. For one thing, OECD data measure the hourly or weekly wages of full-time workers; as a result, short-term lay-offs of workers at the low end of the earnings distribution actually contribute to a decrease in measured wage inequality (Organisation for Economic Co-operation and Development, 1996, p. 63). LIS figures, in contrast, generally measure annual income, rendering such effects less serious. Second, LIS data offer a more comprehensive measure of earnings than OECD figures in that they incorporate not only wages but also self-employment income, whose importance varies considerably among the developed countries. Finally, LIS data make it possible to use demographic information available in income surveys to limit coverage to those workers who are most likely to be fully

immigration, which is said to introduce a reservoir of workers willing to accept low wages, to the detriment of local workers. The examination of these variables, each of which is associated with a huge literature, is for obvious reasons beyond the scope of this article.

4. Every effort is of course made to use the best available data for the independent variables, and considerable effort has been devoted to updating several of them through the late 1990s.

5. Data on earnings are missing for Austria.

engaged in the workforce and dependent on income from employment. In this study, coverage will be limited to households headed by persons between the ages of 25 and 55 years, whose income is less likely than that of younger or older household heads to be affected by continuing education or retirement (Atkinson et al., 1995, p. 81).⁶

A second major theme in the literature has been to explore the international and domestic sources of cross-country and over-time variance in public social benefit provision. Nearly all previous cross-national empirical work on this topic has focused on “welfare effort,” measured as the ratio of public social benefit expenditures to gross domestic product (GDP), a major advantage of which is that consistent and reliable time series spanning some 40 years are available for all major developed countries. This is, for example, a key dependent variable in such major recent studies as those of Hicks (1999), Huber and Stephens (2001), and Swank (2002).⁷ In addition, a few studies (Garrett & Mitchell, 2001; Swank, 1998) have examined the proportion of direct taxes raised from corporations as opposed to individual households as a rough measure of tax progressiveness. Although both of these approaches are valuable, there are also some limitations in using them. The first measure, for example, does not capture redistribution across households as a result of public benefits, the extent of which varies considerably across

6. Organisation for Economic Co-operation and Development figures are expressed as 90:50 and 50:10 percentile ratios, from which many researchers have calculated 90:10 percentile ratios. An advantage of the Gini measure used here is that it incorporates all income groups, not just those at the very top and bottom of the income scale. The former measure (for which data are also available from the Luxembourg Income Study) is sometimes justified because it is immune to top-coding problems associated with the practice of many national statistical agencies, for confidentiality reasons, to code the very highest incomes at some maximum value. However, the Gini indexes reported here impose common standards for top (and also bottom) coding. Another issue is that in contrast to Organisation for Economic Co-operation and Development data on the wages of individual workers, the Luxembourg Income Study figures reported here reflect household earnings adjusted for household size. An advantage of the latter approach is that it measures earnings on the same basis as disposable and market income. Moreover, a household-level measure, in pooling the incomes of multiple earners in a household, better reflects the way in which income is actually allocated. There are of course also some advantages to measuring income at the level of individual earners. As it happens, figures on the gross earnings of individual household members are available from the Luxembourg Income Study, although there are a good number of missing data for this variable. The equations reported below have been rerun with these figures. The results are not greatly different from those reported here.

7. The ratio of benefits to gross domestic product is also a focus of Garrett and Mitchell (2001); Crepaz (1998); Huber, Ragin, and Stephens (1993); and Hicks and Swank (1992). Several recent studies have focused on individual programs; see, for example, Moen and Wallerstein (2001), who examine programs that provide insurance against loss of earnings, and Burgoon (2001), who examines several individual benefit modes. Even these studies, however, focus on the relative sizes of expenditures rather than their redistributive effects.

the developed countries. This distinction is particularly pertinent in that in many countries, the largest social programs are not especially redistributive across income (although not necessarily age) groups, making the sheer size of a program a very imperfect indicator of its redistributive effect. Similarly, the second measure fails to capture redistribution by means of income taxes and social insurance contributions; it reflects the magnitude but not the internal progressiveness of taxes.

A more direct way of measuring state redistribution is to focus on the difference between pre- and posttax and transfer income.⁸ Just such a measure can be constructed from LIS household-level micro-data. Specifically, this article uses a measure of what I call fiscal redistribution.⁹ This variable is constructed by first calculating the distribution of "market income," which includes all income accruing to all households from earnings, interest, rents, property, occupational pensions, and other private-sector sources. One then adds any income from a wide array of public benefit programs, including those that offer sick pay; disability pay; accident pay; social retirement benefits; child or family allowances; unemployment compensation; maternity pay; military, veterans', and war benefits; and means-tested cash and near-cash benefits.¹⁰ Finally, one subtracts direct taxes and social insurance contributions to arrive at the distribution of postgovernment income. To cite an example, the Gini index of the distribution of pregovernment market income in Sweden in 1995 was .466. After accounting for the redistributive effect of taxes and transfers, the Swedish Gini index had fallen to .221, for a fiscal redistribution value of 52.6% $([.466 - .221] / .466)$.

Finally, and surprisingly, very few empirical studies on the sources of cross-national variance in income inequality have measured the final postgovernment distribution of income.¹¹ The neglect of this variable is damag-

8. Such a measure does not, of course, capture the entire distributive effect of the public sector. It does not, for example, include many in-kind benefits and does not adjust for indirect taxes, whose incidence is very difficult to measure. Moreover, regulatory policies, even if not explicitly intended to redistribute income, may nonetheless have a (very complex) redistributive effect that is necessarily reflected in "pregovernment" income. Finally, it is conceivable that transfers will discourage recipients from participating in the private sector, affecting their market income. Although these indirect effects are not captured in the fiscal redistribution variable, they are reflected in the disposable income variable that is introduced shortly. For a discussion of indirect effects, see Pedersen (1994).

9. Because data for market income are unavailable, fiscal redistribution cannot be calculated for Austria, Belgium in 1985 and 1988, and Italy.

10. Near-cash benefits are in-kind benefits whose market value is easy to determine, such as those offered by the U.S. Food Stamp Program.

11. A partial exception is Alderson and Nielsen's (2002) major study, which uses data from Deininger and Squire's (1996) "high-quality" data set for as many as 192 observations for 16 Organisation for Economic Co-operation and Development countries between 1967 and 1992.

ing, not only because the final “take-home” distribution of income is of obvious interest in and of itself but also because this is the only measure that captures the combined effect of the private and public sectors on income inequality. This consideration is particularly important in constructing cross-national comparisons: Although some government efforts to reduce wage dispersion use taxes and transfers, in other cases, the identical goal is achieved by policies affecting earnings, such as minimum wages or inflation adjustments, whose effects are manifested in market income.

In measuring the final distribution of income, I focus on disposable income, which includes all income from all sources received by all households in a country, net of direct taxes and social insurance contributions.¹² This is the broadest measure of income inequality in that it reflects market income, direct redistribution by the state, and any indirect redistribution arising from government regulations or policies. Why has so obviously important a variable been neglected in the work cited above? The main reason is that data on income inequality prior to the efforts of the LIS were plagued by inconsistencies and problems of comparison that were far more serious than those involved in measuring individual workers’ earnings or social benefit expenditures. For example, LIS data allow consistent adjustments for household size, something that was rarely the case in earlier estimates.¹³ Moreover, as has been indicated, LIS figures are much more comprehensive and consistent in measuring market income than those previously available, offering data not only on wages and salaries but also on income from a number of other sources.¹⁴

(These data have since been incorporated into the World Income Inequality Database of the United Nations University, World Institute for Development Economics Research, 2001.) Atkinson and Brandolini (2001), however, have noted a number of measurement and comparability problems that render the use of these data in analyses of the developed countries, for which better data are available, problematic.

12. Data on the distribution of disposable income are from the “key figures” reported on the Luxembourg Income Study’s (2003) Web site. Distributions of market income and earnings have been calculated by adapting the Stata program used to produce Luxembourg Income Study key figures to these income concepts.

13. Households are defined as economic units whose members live together and pool their incomes. They can consist of a single member. As is common in the literature, household income is divided by the square root of household size, which reflects economies of scale in supporting progressively larger households, and the resultant value is weighted by the number of persons in the household. In the small number of cases in which households report zero disposable income, observations are considered missing, on the assumption that such households must receive at least some (presumably unreported) income. The same adjustments for household size used for disposable income are used for earnings and market income.

14. Figures for disposable income for Austria do not include self-employment income.

More broadly, although most previous studies are interested in several different aspects of inequality and redistribution, most have used only a single indicator, generally focusing on either pregovernment earnings or welfare effort. This narrow focus can result in a somewhat one-dimensional conception of inequality and/or redistribution. In examining the familiar domestic compensation hypothesis, for example, welfare effort will offer only a very general sense of the state-directed income redistribution that is at the core of the concept. Moreover, welfare effort does not capture the effect of indirect redistribution, in which the public sector affects income inequality by means of consumption expenditures or regulations rather than direct transfers, the effect of which will, however, be reflected in disposable income. By examining several measures of inequality and redistribution, it is possible to conduct a more nuanced assessment of this and similar hypotheses than, as has typically been the case, examining one or another variable in isolation.¹⁵

Beyond this, most previous studies have necessarily used data that covered periods through, at best, the early 1990s. For a number of countries, LIS surveys are available through the late 1990s and early 2000s, allowing one to explore a greater portion of the period of growing inequality that began in much of the developed world in the early 1980s.

Measuring inequality over time. The LIS, then, offers much better data on income inequality and redistribution than the sources used in previous cross-national work. The one major drawback of LIS data is that surveys are available for scattered years over a period that extends back, for most countries, only to the early 1980s. Specifically, the LIS offers data for five “waves” centering on 1980, 1985, 1990, 1995, and (now under way) 2000. The analysis reported here focuses on 59 surveys from the following 14 countries: Australia (1981, 1985, 1989, 1994), Austria (1987, 1994, 1995, 1997), Belgium (1985, 1988, 1992, 1997), Canada (1981, 1987, 1991, 1994, 1997, 1998), Denmark (1987, 1992, 1995, 1997), Finland (1987, 1991, 1995, 2000), France (1984, 1989, 1994), Germany (1981, 1983, 1984, 1989, 1994), Italy (1986, 1991, 1995), the Netherlands (1983, 1987, 1991, 1994), Norway (1986, 1991, 1995), Sweden (1981, 1987, 1992, 1995, 2000), the United Kingdom (1986, 1991, 1994, 1995, 1999), and the United States (1986, 1991, 1994, 1997, 2000).¹⁶

15. It might seem that earnings and disposable income would be so strongly correlated that one's choice of indicator would make little difference. In fact, however, the R^2 value of a pooled regression linking these variables is only .60.

16. The French survey for 1981 is not fully compatible with subsequent surveys and is thus not used in this analysis. Of the two 1984 French surveys, this study uses the one designated France 1984b because it is more consistent with surveys that follow.

Clearly, a cross-sectionally dominant pooled analysis of this sort is likely to be somewhat more effective in capturing cross-national than over-time relationships. This in itself is not problematic, because income inequality and state redistribution tend to vary more across the developed countries than over time. Still, it is obviously desirable also to focus on annual trends over a longer and earlier period than that covered by the LIS. Although the full richness of the LIS data set cannot be called on, it is possible to offer an analysis of more limited annual data assembled by Galbraith (1998, p. 252) that measure trends in wage inequality in 12 countries between the early 1970s and the early 1990s. Galbraith's starting point is data on industrial earnings from the OECD's Structural Analysis database, which covers about 40 job categories. Although these figures represent wage dispersion across industries rather than households, they do, Galbraith says, correlate reasonably well with LIS figures in years for which LIS surveys are available. Obviously, the precision and accuracy of these data are limited by the fact that they do not derive directly from household-level surveys. Still, they should offer at least a general sense of trends in wage inequality since the early 1970s.

INDEPENDENT VARIABLES

Economic globalization. The most traditional vehicle of economic openness cited by globalization critics is international trade, particularly from less developed countries (LDCs). The first independent variable, which I call LDC trade, measures the share in GDP of imports from LDCs. Data on imports by origin are from the United Nations Conference on Trade and Development (2003, Table 3.1), and data on trade and GDP are from the World Bank (2002).

A second independent variable taps direct foreign investment, the defining characteristic of which is some element of managerial control on the part of investors. In accordance with both economic theory and popular perceptions, the focus is on outbound investment, which is said by critics to constitute an especially pernicious vehicle whereby local workers are displaced as firms divert resources from domestic to foreign operations (Page, 1997). Outbound investment flows are expressed as a proportion of GDP (United Nations Conference on Trade and Development, 2003, Table 6.2).¹⁷

Finally, as has been indicated, it is often argued that the economic effects of globalization are associated with the openness of national economies to global financial flows. The most common approach has been to assess the

17. Investment and trade figures for Belgium necessarily cover Belgium and Luxembourg. They are divided by the combined gross domestic product of those countries (World Bank, 2002).

restrictiveness of government-imposed limitations on current and capital account payments and receipts, on the assumption that vulnerability to global financial flows can be experienced even if capital does not actually cross national boundaries. The measure used is a widely used 14-point scale of financial openness developed by Quinn and Inclán (1997; updated by the authors through 1997).¹⁸

Domestic factors. Finally, I consider several domestic political variables that are said to offer a more powerful explanation than economic globalization for cross-national variance in income inequality and redistribution. In assessing the partisan cabinet balance, I use a measure of the ideological balance of a country's cabinet according to a five-category scale that is coded 1 for the hegemony of right-wing parties, 2 for the dominance of right-wing and centrist parties, 3 for parity between left- and right-wing parties, 4 for the dominance of social democratic and other left-wing parties, and 5 for the hegemony of social democratic and other left-wing parties. The party classification scheme applied is that developed by Schmidt (1996), updated by and available from Armingeon, Beyeler, and Menegale (2000).

Electoral turnout is measured as the share of the voting-age population that voted in the most recent national election. Turnout figures are for the most recent election to the lower house of a country's legislature, except for the United States, for which they reflect the most recent presidential election. The source is the International Institute for Democracy and Electoral Assistance (2002).

Union density is measured as the proportion of the labor force that is unionized. The main source of data is Golden, Lange, and Wallerstein (2002; original source Ebbinghaus & Visser, 2000). Data for missing country-years (the Netherlands, 1994; the United Kingdom, 1994, 1999; and the United States, 1991, 1994, 1997) are from the International Labor Organization (2003). In a few cases, figures are for a year slightly different than that of the corresponding LIS survey; these include Belgium, 1997 (1995); Canada, 1994 (1993); France, 1994 (1995); Germany, 1994 (1995); and Sweden, 2000 (1997).

Finally, wage coordination is indicated by a country's value on a summary variable developed by Kenworthy (2001), which measures the level and extent of wage coordination. Kenworthy's scale ranges from 1 (fragmented wage bargaining confined to individual firms and plants) to 5 (centralized bargaining across the entire economy by peak federations or the equivalent).

18. Values for 1998 through 2000 are coded at their 1997 levels.

ANALYSIS

METHODS

As has been indicated, this article offers two basic empirical analyses. The first and most extensive is an unbalanced, pooled, CSTS analysis of the 59 cases listed earlier. In examining a complete n by t pool that includes all observations, there are a variety of available methods, each of which seeks to account for the complex pattern of heteroskedasticity and autocorrelation that is characteristic of pooled data. However, none of these standard methods is appropriate for a data set in which time points are unevenly spaced and the number of units at any point in time varies. In an unbalanced, pooled situation such as this, following Bradley, Huber, Moller, Nielsen, and Stephens (2001), I have used an estimation approach that uses a Huber-White “sandwich” robust estimator that clusters observations by country. Specifically, the analyses were run using the Stata statistical program’s ordinary least squares regression module with robust standard errors and a clustering procedure that groups observations by country, producing estimates that are unaffected by deviations from the normal CSTS patterns of heteroskedasticity and autocorrelation that would cause other methods to give incorrect estimates (StataCorp LP, 2001).¹⁹

As has been indicated, a second analysis examines the international and domestic sources of intraindustry wage dispersion in 12 countries between 1971 and 1992. In contrast to the unbalanced pool described earlier, this is a classic n by t pool, with data for all countries and years. In analyzing this data set, I use the method recommended by Beck (2001), which calculates panel-corrected standard errors and includes a lagged value of the dependent variable on the right side of the equation. By focusing on change, this analysis nicely complements the cross-sectionally dominant unbalanced, pooled analysis: Not only does it cover a longer period, but by including a lagged dependent variable, it allows one to concentrate mainly on year-to-year change, factoring out “national starting points.” There has been a recent debate in the literature concerning the practicality, at least for cross-national analysis, of Beck’s long-standing recommendation that a lagged dependent

19. Because the number of cases in this analysis is small, it is possible that results will be dominated by one or more influential cases. In an effort to explore this possibility, Cook’s distance, which assesses the impact of individual cases on regression statistics, has been calculated for an ordinary least squares regression of all countries and all time points. In no instance does a Cook’s distance exceed .40, well below commonly used criteria (Cook & Weisberg, 1995, p. 358). Similarly, the independent variables clearly covary to some extent, raising the possibility of collinearity. Variance inflation factor values have thus been calculated. For none of the independent variables do these exceed 3.0, again well below conventional criteria.

variable be included to properly specify CSTS regressions (see, e.g., Achen, 2000; Huber & Stephens, 2001, pp. 57-64). In deference to these arguments, the pooled analysis is also conducted without the lagged term in a model that uses robust standard errors to account for heteroskedasticity across national units and a “common ρ ” AR1 method to account for autocorrelation within units.²⁰

RESULTS

Unbalanced pooled analysis. First, I explore the international and domestic sources of earnings inequality. As can be seen in Table 1, section A, one of the three indicators of economic globalization is significantly related to income inequality: the measure of financial openness is positively related, at the $p = .050$ level, to earnings inequality. The indication is that earnings are in fact more unequally distributed in countries with few controls on capital flows than in those with more extensive controls. This is consistent with a growing body of empirical work that finds that the traditional mechanisms of international economic interaction, trade and investment, are less important than exposure to international finance. Huber and Stephens (2001, p. 305), for example, suggest that the deregulation of financial markets was “the factor that was most responsible for constraining the range of macroeconomic policy alternatives [such as] deficit spending and interest rate cuts,” mechanisms that have traditionally been used by governments to stimulate the economy and boost employment and wages. As detailed by Swank (2002, pp. 21-26), there is also a political logic underlying the relationship between financial openness and state redistribution. Capital mobility is said to skew the politics of state redistribution, in part because holders of mobile assets possess an “exit option” that enhances their position in domestic political bargaining and in part because it reinforces an ideology of “neoliberal economic orthodoxy” linking national competitiveness with welfare retrenchment. To the extent that governments face budget deficits, their maneuvering power is further restricted, because the sizes of deficits are linked to the costs of financing them, costs that are increasingly determined on global, not domestic, capital markets (Huber & Stephens, 2001, p. 230).

With respect to the political variables, two statistically significant relationships are in evidence. The first is a negative relationship, significant at the $p = .001$ level, between earnings inequality and the wage coordination variable. This confirms the findings of Wallerstein (1999), who concludes that

20. These analyses were conducted using StataCorp's xtglm module.

the data strongly indicate that the more wages are determined in a centralized fashion . . . the more equal the distribution of earnings. Conversely, the more wages are set in decentralized bargaining between unions and firms at the plant level or between individual workers and their employers, the more unequal the wage distribution. (p. 650)

A second relationship, significant at the $p = .011$ level, links earnings inequality and electoral turnout. As has been indicated, a large body of literature (summarized in Lijphart, 1997) leads one to expect that as a larger share of the electorate participates in national elections, the preferences of low-income groups will be better reflected in public policies affecting earnings, ranging from minimum wage and worker protection legislation to subsidies for depressed industries or regions.

As important as the relationships that are in evidence are those that are not. For one thing, the relative magnitude of countries' trade with LDCs is not significantly related, in either direction, to earnings inequality. Although this is at odds with popular perceptions, it is consistent with a good deal of empirical evidence that although North-South trade undoubtedly undermines some industries in the developed world, it has no overall negative effect on earnings distributions. Rueda and Pontusson (2000), for example, in their empirical study of 16 OECD countries, found "no support whatever . . . for the contention that trade with low-wage countries is a source of wage inequality" (p. 378). Nor is outbound investment significantly related in either direction to earnings inequality. This is consistent with Moran's (1999) failure to find a strong or systematic relationship between investment and wage inequality in his summary of a wide range of empirical work on the topic (see also Mahler, Jesuit, & Roscoe, 1999).

As for domestic variables, it is notable that the partisan orientation of a country's ruling cabinet is not related, in either direction, to earnings inequality: Partisan factors do not appear to play a major role, at least over the short term, in explaining cross-national or over-time variance in pregovernment earnings inequality. Similarly, union density is not significantly related to earnings inequality. Although this would seem surprising on the surface, it is consistent with a good deal of empirical work that finds that the degree of coordination of organized labor and the level at which wage bargains are struck are more important in explaining cross-national variance in income inequality than is union density per se (see, e.g., Wallerstein, 1999).

Next, I examine the fiscal redistribution variable. As can be seen in Table 1, section B, none of the three indicators of economic globalization is significantly related, in either direction, to the measure of state redistribution. On one hand, this finding offers no support for the commonly expressed race-

Table 1
Unbalanced Pooled Analysis

Independent Variable	Coefficient	Robust SE	<i>t</i>	<i>p</i>	β Weight
A. Dependent variable: Gini index of earnings inequality ^a					
LDC imports	-.102	.275	0.370	.718	.039
Outbound investment	.034	.076	0.441	.667	.029
Financial openness	.005	.002	2.184	.050	.193
Cabinet balance	.003	.003	1.246	.237	.137
Electoral turnout	-.128	.042	-3.007	.011	-.379
Union density	.011	.019	0.557	.588	.072
Wage coordination	-.015	.004	-4.363	.001	-.576
B. Dependent variable: fiscal redistribution ^b					
LDC imports	-.425	.715	-0.595	.564	-.078
Outbound investment	.022	.235	-0.095	.926	-.010
Financial openness	.008	.009	0.952	.361	.151
Cabinet balance	-.001	.007	-0.219	.830	-.028
Electoral turnout	.181	.154	1.176	.264	.243
Union density	.064	.092	0.692	.503	.216
Wage coordination	.026	.008	3.368	.006	.449
C. Dependent variable: Gini index of disposable income inequality ^c					
LDC imports	.235	.325	0.723	.482	.080
Outbound investment	-.062	.118	-0.527	.607	-.047
Financial openness	.004	.003	1.498	.158	.139
Cabinet balance	.002	.003	0.643	.532	.067
Electoral turnout	.042	.078	0.541	.598	.111
Union density	-.067	.022	-3.055	.009	-.401
Wage coordination	-.017	.004	-4.086	.001	-.580

Note: LDC = less developed country.

a. $n = 55$, $F_{7, 12} = 11.48$ ($p < .0002$), $R^2 = .73$, root $MSE = 0.02$.

b. $n = 50$, $F_{7, 11} = 18.63$ ($p < .0001$), $R^2 = .60$, root $MSE = 0.06$.

c. $n = 59$, $F_{7, 13} = 11.40$ ($p = .0001$), $R^2 = .66$, root $MSE = 0.03$.

to-the-bottom hypothesis that the exigencies of globalization will squeeze out state spending. On the other hand, neither is there support for the domestic-compensation hypothesis suggesting that extensive trade, investment, and financial openness will lead inevitably to adjustment mechanisms whereby the state systematically redistributes income to groups whose positions have been undermined by global competition.

As for the political variables, wage coordination is strongly positively related to the relative extent of fiscal redistribution across the countries examined ($p = .006$). This is consistent with the similarly strong negative relation-

ship between this variable and earnings inequality. On the other hand, as was the case for earnings, neither the cabinet balance nor the union density variable is significantly related in either direction to fiscal redistribution. Nor is the relationship between electoral turnout and earnings inequality repeated for this variable.

Finally, the results of the analysis exploring the sources of variance in the distribution of disposable income, the broadest measure of inequality, are described. I begin with the three modes of economic globalization introduced earlier. As can be seen in Table 1, section C, the results are similar to those for the fiscal redistribution variable: None of the measures of economic globalization is significantly related, in either direction, to the distribution of postgovernment income.

What of the relationship between the political variables and the distribution of disposable income? Here, two of the four variables are significantly related to income inequality. The strongest relationship, significant at the $p = .001$ level, links the wage coordination variable to household income inequality in such a way that the higher the level of wage bargaining in a country, the less the inequality. This is consistent with the findings for both earnings inequality and fiscal redistribution. A second relationship (significant at the $p = .009$ level) indicates that a higher level of union density in a country is associated with a lower level of household income inequality. This finding offers confirmation of the view that unions offer support for programs that improve the standing of the low-income population as a whole.

In reflecting on these findings, several questions arise. One somewhat surprising finding is the lack of significant relationships between the cabinet balance variable and any of the three indicators of income inequality or redistribution.²¹ One explanation for the lack of partisan effects is that income inequality is more closely related to electoral participation and the organization of the workplace than to the partisan composition of a country's government. More mundanely, most developed countries have experienced both leftist and conservative party control during the 1980s and 1990s, the period covered in this study, without immediate effects on income inequality. (Certainly, governments have less freedom of maneuver to either drastically cut or drastically increase funding for social transfers at the end of the 20th century than they did in the 1960s or 1970s.)

21. Several recent studies have produced mixed findings on this relationship. Hicks (1999, p. 179), for example, found "scant evidence for direct welfarist effects of partisan government"; Swank (2002, p. 118) found partisan effects on two of his four major measures of social policy; and Huber and Stephens (2001, pp. 66-71) found a fairly strong relationship for left-wing parties, but only in interaction with a variable measuring female labor force participation.

In exploring this issue further, several supplementary analyses were conducted. First, it might be claimed that partisan effects operate over a longer period than that covered by this study. In an effort to assess this possibility, the figures for cabinet balance were replaced with figures for cumulative left-wing party participation in national cabinets, measured as the summation of annual scores of the percentage of all cabinet portfolios held by left-wing parties from 1946 to the year of observation (from Huber, Ragin, & Stephens, 1997). Second, it could be argued that the partisan variable, by focusing only on left-wing (chiefly social democratic) parties, fails to assess the role of centrist Christian Democratic parties, which, although conservative on some issues, are often deeply committed to social protection. In exploring this, the figures for cabinet balance were replaced by a variable measuring centrist Christian Democratic portfolios as a share of all cabinet portfolios (from Swank, 2003). Neither of these alternative variables was significantly related to the measures of income inequality or redistribution. None of this is to say that partisan orientation has no effect whatsoever on inequality or redistribution. It is, for example, possible that relationships would be in evidence at different levels of aggregation than the nation-state or that partisan orientation works in conjunction with other variables. The analysis does, however, call into question the straightforward relationship between partisan outcomes and inequality that is often assumed.

Another finding that appears mildly surprising, at least on the surface, is that the negative relationship between electoral turnout and the inequality of earnings does not carry over to fiscal redistribution or disposable income. To some extent, this may reflect the impact of electoral participation on minimum wages, mandated employment benefits, or development aid targeted at depressed regions and industries rather than on direct transfers to households, many of which are entitlements that are difficult to expand or contract. Also mildly surprising is the fact that the union density variable is significantly related to an egalitarian distribution of postgovernment disposable income but not to pregovernment earnings. As it happens, a generally negative relationship between union density and earnings inequality is weakened by three Scandinavian countries, Sweden, Finland, and Denmark, all of which have high levels of unionization but levels of pregovernment earnings inequality that are average or above average in comparison with other OECD countries. (The much-noted egalitarian distribution of postgovernment income in these countries, which is clearly evident in LIS surveys, is a product not of an especially egalitarian distribution of pregovernment income but rather of high levels of fiscal redistribution.)

On the other hand, it is not at all surprising, given recent empirical work, that the wage coordination variable is consistently related to an egalitarian

distribution of income and extensive fiscal redistribution. Wage coordination is closely linked to the intimate and highly centralized interaction between employers, labor, and the state that is the hallmark of “neocorporatist” institutions in a number of European countries. In such systems, representatives of low-wage workers have a “seat at the table” in wage bargaining, interacting on relatively equal terms with representatives of business and government, in sharp contrast to more conventionally liberal systems, in which they must rely on their (very limited) market power (Hicks, 1999; Huber & Stephens, 2001, p. 16; Swank, 2002, pp. 34-44).

To summarize, the analysis described above offers little evidence of a systematic relationship between the three modes of economic globalization and earnings, fiscal redistribution, or disposable income. The one exception is the relationship between the financial openness variable and earnings inequality, which, as has been shown, confirms previous empirical work on the domestic effects of international finance.

With respect to the political variables, the analysis offers consistent confirmation of the increasingly voiced claim that domestic political factors continue to matter in an era of economic globalization. This is particularly true of the wage coordination variable, but also extends in the case of earnings inequality to electoral turnout and in the case of disposable income to union density. Among the political variables, only cabinet balance is not significantly related to income distribution or redistribution in any equation.

Comparison with earlier empirical work. As has been noted, a major advantage of this study is that it uses data on income distribution and redistribution that are more detailed and precise than those used in previous empirical work. In an effort to explore the practical effect of this, the following section reports the results of a supplementary analysis in which the LIS-derived measures of inequality and redistribution used in this study have been replaced with measures that have been used in previous studies.

The most complete comparison can be conducted for the fiscal redistribution variable. As has been noted, in the absence of a measure of household-level redistribution, researchers have often treated welfare effort as more or less a proxy for redistribution. Swank (2001), for example, notes that the relative size of social expenditures is of interest not so much for its own sake as because it is “highly correlated with more theoretically and substantively important outcomes such as income redistribution” (p. 72).²² In a reanalysis, I

22. The ratio of social benefits to gross domestic product and fiscal redistribution are indeed positively correlated, but not as strongly as one might expect: the R^2 value of a bivariate, unbalanced, pooled regression relating fiscal redistribution to Organisation for Economic Co-operation and Development data on the ratio of social benefits to gross domestic product is only .61.

have substituted for the LIS-derived variable fiscal redistribution a measure of welfare effort, defined as the ratio of social benefit expenditures to GDP (from Organisation for Economic Co-operation and Development, 2001). When this is done, not a single regression coefficient is statistically significant.

A similar reanalysis can be conducted for the earnings variable. As has been indicated, nearly all previous empirical work has used data from two OECD (1993, 1996) studies of gross earnings. As it happens, coverage in these studies ends in the early 1990s, so I cannot substitute OECD earnings figures for every country-year in the analysis. Moreover, OECD figures are expressed as percentile ratios rather than Gini indexes. Still, it is possible to make a rough comparison of the effect of one's choice of earnings measure on findings. I have accordingly repeated the earlier analysis replacing the LIS-derived earnings variable with the corresponding OECD 90:10 percentile ratio. No significant findings are in evidence.

In sum, repeating the analyses reported above using the data on income distribution and redistribution that have been used in previous empirical work demonstrates that the use of LIS data does indeed affect findings. Using better data does not, of course, produce radically different results; one would be very suspicious if it did. It is true, however, that using more precise and detailed LIS data allows one to detect several interesting relationships that are not in evidence when one uses earlier, less precise, measures of inequality and redistribution.

Full CSTS analysis of wage inequality. As has been suggested, it is possible to further explore the dynamics of income inequality by using a variable developed by Galbraith (1998, pp. 248-255) that provides data on inter-industry wage inequality. Although Galbraith's data are not nearly as precise, complete, or cross-nationally comparable as data derived from household-level LIS surveys, he does offer annual figures for most of the countries examined above over a 22-year period that begins a decade earlier than my LIS analysis. It is thus useful to compare findings based on Galbraith's data with those reported earlier for the earnings variable. If the results are broadly similar, confidence in the earlier analysis will be reinforced.

Section A of Table 2 offers the results of a pooled CSTS equation that includes the three indicators of economic globalization.²³ The equation also includes the four domestic political variables, as well as the lagged value of Galbraith's index of wage inequality. As would be expected, Galbraith's indi-

23. Galbraith's (1998) countries include those in the unbalanced, pooled analysis less Australia and Sweden. Data for Denmark in 1992 are missing and were replaced with 1991 figures.

Table 2
Pooled Cross-Sectional Time-Series Analysis (dependent variable: Galbraith's [1998] Gini index of wage inequality)

Independent Variable	Coefficient	SE	<i>z</i>	<i>p</i>
A. Lagged dependent variable ^a				
LDC imports	.005	.049	0.099	.921
Outbound investment	.001	.001	0.713	.476
Financial openness	.000	.001	0.321	.748
Cabinet balance	-.001	.001	-0.941	.347
Electoral turnout	-.000	.000	-2.202	.028
Union density	-.003	.009	-0.306	.760
Wage coordination	-.001	.001	-0.847	.397
Lagged wage inequality	.877	.025	35.402	<.001
B. ARI common ρ correction ^b				
LDC imports	-.008	.048	-0.172	.863
Outbound investment	.002	.002	1.443	.149
Financial openness	-.001	.001	-0.591	.554
Cabinet balance	-.000	.001	-0.217	.828
Electoral turnout	-.001	.000	-3.067	.002
Union density	-.078	.032	-2.390	.017
Wage coordination	.001	.001	0.768	.443

Note: LDC = less developed country.

a. $n = 264$, Wald $\chi^2 = 1,719.81$ ($p < .001$), log likelihood = 686.32. Standard errors are panel corrected.

b. $n = 264$, Wald $\chi^2 = 25.49$ ($p < .001$), log likelihood = 693.159.

icator is very strongly related to its own value at time $t - 1$, with a t ratio of nearly 35.00. With respect to the variables of substantive interest, none of the three indicators of economic globalization is significantly related in either direction to wage inequality in this model, echoing the general paucity of relationships supporting globalization critics' claims in the cross-sectionally dominant unbalanced, pooled analysis. More specifically, because most cross-sectional variance has been attributed to the lagged dependent variable, the indication is that year-to-year changes in international ties are, on average, unrelated to year-to-year changes in wage inequality. (Interestingly, this is true even of the financial openness variable, suggesting that the effect of this variable operates more across countries than over time.) On the other hand, there is a fairly strong negative relationship between Galbraith's measure of wage inequality and electoral turnout ($p = .028$), confirming the earlier finding for that variable.

As has been suggested, a number of cross-national researchers have expressed concern that the inclusion of a lagged dependent variable in pooled models, by attributing most cross-sectional variance to a difficult-to-

interpret lagged term, limits the ability to explore variables that range as widely across countries as does income inequality. For purposes of the present analysis, this is actually desirable in that it nicely complements the cross-sectionally dominant unbalanced, pooled analysis. Nonetheless, it is useful to explore whether the results differ when using an alternative method that does not include the lagged term but instead uses feasible generalized least squares with robust standard errors to account for cross-sectional heteroskedasticity and a common ρ AR1 correction to account for autocorrelation within national units. As can be seen in Table 2, section B, the findings of the earlier analysis are largely confirmed. Once again, none of the three indicators of economic globalization is significantly related, in either direction, to earnings inequality. Similarly, electoral turnout is again significantly negatively related to wage inequality ($p = .002$), as is an additional domestic political variable, union density ($p = .017$): When turnout is higher and a larger share of the labor force is unionized, wage inequality is, on average, lower. As it happens, the wage coordination variable is not significantly related to wage inequality, a nonfinding that is no doubt explained by the fact that this variable varies more across countries than over time.

In sum, the findings for 12 countries over the period from 1971 to 1992, using two alternative methods of CSTS analysis, are consistent with the unbalanced, pooled findings in indicating a general lack of significant relationships between economic globalization and wage inequality. They are also broadly consistent with respect to the political variables, demonstrating relationships similar to those in the earlier analysis.

CONCLUSION

A first conclusion of this article is that there is little evidence of a systematic relationship between economic globalization and the distribution of household earnings, fiscal redistribution by the public sector, or the distribution of disposable income. Of 15 possible relationships between modes of economic globalization and income inequality or redistribution, only 1 was in the direction predicted by globalization critics, a finding that is hard to reconcile with the more vigorous and wide-ranging critiques of globalization. The one exception is the relationship between a country's openness to international finance and earnings inequality, which seems to support the growing evidence that financial openness works to constrain governments' use of macroeconomic tools to stimulate the economy, affecting earnings distributions in the process.

With respect to the political variables, eight statistically significant relationships across five equations operate in the expected direction and none in the unexpected direction. One conclusion that can be drawn is that domestic political factors continue to play an important role in determining distributive outcomes in the developed world, which is consistent with the findings of a number of recent empirical studies. Most of these studies, however, have used somewhat limited and imprecise measures of wage inequality or have focused on the size, rather than the redistributive nature, of social benefits, and almost none have used fully comparable measures of postgovernment income. This study, in contrast, uses measures of inequality that are derived from large household surveys that have been carefully harmonized to ensure cross-national comparability of both earnings and disposable income and that permit one to focus directly on state redistribution, confirming earlier findings with reference to more detailed and accurate data than has heretofore been used.²⁴

More broadly, the growing consensus in the empirical literature that domestic politics continues to matter, even in an era of economic globalization, would lead one simultaneously to reject the claim of antiglobalization leftists that economic liberalism must be sharply curtailed if domestic inequality is to be ameliorated, as well as the claim of proglobalization rightists that the exigencies of international competition call into question any and all state efforts to address distributive concerns. Between these positions, there would appear to be a middle ground that combines a broad commitment to global liberalism with a recognition that economic globalization is compatible with a wide variety of political dynamics that can in turn lead to a wide range of distributive outcomes.

REFERENCES

- Achen, Christopher H. (2000, July). *Why lagged dependent variables can suppress the explanatory power of other independent variables*. Paper presented at the annual meeting of the Political Methodology Section of the American Political Science Association, Los Angeles.
- Alderson, Arthur S., & Nielsen, Francois. (2002). Globalization and the great u-turn: Income inequality trends in 16 OECD countries. *American Journal of Sociology*, 107, 1244-1299.
- Armingeon, Klaus, Beyeler, Michelle, & Menegale, Sarah. (2000). *Comparative political data set, 1960-1998*. Retrieved from <http://www.ipw.unibe.ch/mitarbeiter/armingeon>

24. This study is hardly the last word on the complex relationship between economic globalization, domestic politics, and income inequality. However, it is hoped that the findings reported here will serve as a starting point for a broader research effort that is more attentive to the measurement of inequality and redistribution than has typically been the case, making full use of the opportunities for measuring inequality and redistribution afforded by LIS micro-data.

- Atkinson, Anthony B., Rainwater, Lee, & Smeeding, Timothy M. (1995). *Income distribution in OECD countries: Evidence from the Luxembourg Income Study*. Paris: Organisation for Economic Co-operation and Development.
- Atkinson, Anthony B., & Brandolini, Andrea. (2001). Promise and pitfalls in the use of "secondary" data-sets: Income inequality in OECD countries as a case study. *Journal of Economic Literature*, 39, 771-799.
- Beck, Nathaniel. (2001). Time-series-cross-sectional data: What have we learned in the past few years. *Annual Review of Political Science*, 4, 271-293.
- Bhagwati, Jagdish. (1997, May 19). Fear not: The global economy and American wages. *The New Republic*, 216, 36-41.
- Bhagwati, Jagdish, & Dehejia, Vivek H. (1994). Freer trade and wages of the unskilled: Is Marx striking again? In Jagdish Bhagwati & Marvin H. Koster (Eds.), *Trade and wages: Leveling down?* (pp. 36-75). Washington, DC: AEI Press.
- Bradley, David, Huber, Evelyne, Moller, Stephanie, Nielsen, Francois, & Stephens, John. (2001, June). *Distribution and redistribution in post-industrial democracies*. Paper presented at the Inequality Summer Institute, Harvard University, Cambridge, MA.
- Burgoon, Brian. (2001). Globalization and welfare compensation: Disentangling the ties that bind. *International Organization*, 55, 509-551.
- Burtless, Gary. (1995). International trade and the rise of earnings inequality. *Journal of Economic Literature*, 33, 800-816.
- Burtless, Gary, Lawrence, Robert Z., Litan, Robert E., & Shapiro, Robert J. (1998). *Globophobia: Confronting fears about open trade*. Washington, DC: Brookings Institution.
- Cameron, David R. (1978). The growth of the public economy: A comparative analysis. *American Political Science Review*, 72, 1243-1261.
- Caves, Richard E. (1996). *Multinational enterprise and economic analysis* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Cline, William R. (1997). *Trade and income distribution*. Washington, DC: Institute for International Economics.
- Cook, R. Dennis, & Weisberg, Sanford. (1999). *Applied regression including computing and graphics*. New York: John Wiley.
- Crepaz, Markus M. L. (1998). Inclusion versus exclusion: Political institutions and welfare expansion. *Comparative Politics*, 31, 61-80.
- Deininger, Klaus, & Squire, Lyn. (1996). A new data set measuring income inequality. *World Bank Economic Review*, 10, 565-591.
- Ebbinghaus, Bernhard, & Visser, Jelle. (2000). *The societies of Europe: Trade unions in Western Europe since 1945*. London: Macmillan.
- Evans, Peter. (1997). The eclipse of the state? Reflections on stateness in an era of globalization. *World Politics*, 50, 62-87.
- Freeman, Richard B. (1993). How much has de-unionization contributed to the rise in male earnings inequality? In Sheldon Danziger & Peter Gottschalk (Eds.), *Uneven tides: Rising inequality in America* (pp. 133-163). New York: Russell Sage.
- Galbraith, James K. (1998). *Created unequal: The crisis in American pay*. New York: Free Press.
- Garrett, Geoffrey. (1996). Capital mobility, trade and the domestic politics of economic policy. In Robert O. Keohane & Helen Milner (Eds.), *Internationalization and domestic politics* (pp. 79-107). New York: Cambridge University Press.
- Garrett, Geoffrey. (1998a). Global markets and national politics: Collision course or virtuous circle? *International Organization*, 52, 787-824.
- Garrett, Geoffrey. (1998b). *Partisan politics in the global economy*. New York: Cambridge University Press.

- Garrett, Geoffrey, & Mitchell, Deborah. (2001). Globalization, government spending and taxation in the OECD. *European Journal of Political Research*, 39, 145-177.
- Golden, Miriam, Lange, Peter, & Wallerstein, Michael. (2002, September). *Union centralization among advanced industrial societies: An empirical study*. Retrieved from <http://shelley.sscnet.polisci.ucla.edu/data>
- Gottschalk, Peter, & Smeeding, Timothy M. (1997). Cross-national comparisons of earnings and income inequality. *Journal of Economic Literature*, 35, 633-687.
- Hicks, Alexander. (1999). *Social democracy and welfare capitalism*. Ithaca, NY: Cornell University Press.
- Hicks, Alexander, & Swank, Duane. (1992). Politics, institutions and welfare spending in industrialized democracies, 1960-1982. *American Political Science Review*, 86, 658-674.
- Huber, Evelynne, Ragin, Charles, & Stephens, John D. (1993). Social democracy, Christian democracy, constitutional structure and the welfare state. *American Journal of Sociology*, 99, 711-749.
- Huber, Evelynne, Ragin, Charles, & Stephens, John D. (1997). *Comparative welfare states data set*. Available at <http://www.lisproject.org>
- Huber, Evelynne, & Stephens, John D. (2001). *Development and the crisis of the welfare state: Parties and policies in global markets*. Chicago: University of Chicago Press.
- Hurrell, Andrew, & Woods, Ngaire. (1995). Globalisation and inequality. *Millennium: Journal of International Studies*, 24, 447-470.
- International Institute for Democracy and Electoral Assistance. (2002). *Voter turnout: A global survey*. Retrieved from http://www.idea.int/voter_turnout
- International Labor Organization. (2003). *Statistics of trade union membership: Data for 45 countries taken mainly from national statistical publications* [Unpublished data]. Geneva: International Labor Organization, Bureau of Statistics.
- Kapstein, Ethan B. (1996). Workers and the world economy. *Foreign Affairs*, 75, 16-37.
- Katzenstein, Peter. (1985). *Small states in world markets: Industrial policy in Europe*. Ithaca, NY: Cornell University Press.
- Kenworthy, Lane. (2001). Wage-setting measures: A survey and assessment. *World Politics*, 54, 57-98.
- Lawrence, Robert Z. (1996). *Single world, divided nations? International trade and OECD labor markets*. Washington, DC: Brookings Institution.
- Lijphart, Arend. (1997). Unequal participation: Democracy's unsolved dilemma. *American Political Science Review*, 91, 1-14.
- Luxembourg Income Study. (2003). *Home page*. Available at <http://www.lisproject.org/>
- Mahler, Vincent A. (2002). Exploring the subnational dimension of income inequality: An analysis of the relationship between inequality and electoral turnout in the developed countries. *International Studies Quarterly*, 46, 117-142.
- Mahler, Vincent A., Jesuit, David K., & Roscoe, Douglas D. (1999). Exploring the impact of trade and investment on income inequality: A cross-national sectoral analysis of the developed countries. *Comparative Political Studies*, 32, 363-395.
- Mishra, Ramesh (1999). *Globalization and the welfare state*. Northampton, MA: Edward Elgar.
- Moén, Karl Ove, & Wallerstein, Michael. (2001). Inequality, social insurance and redistribution. *American Political Science Review*, 95, 859-874.
- Moran, Theodore H. (1999). Foreign direct investment and good jobs/bad jobs: The impact of outward investment and inward investment on jobs and wages. In Albert Fishlow & Karen Parker (Eds.), *Growing apart: The causes and consequences of global wage inequality* (pp. 95-117). New York: Council of Foreign Relations Press.

- Organisation for Economic Co-operation and Development. (1993, July). *Employment outlook*. Paris: Author.
- Organisation for Economic Co-operation and Development. (1996, July). *Employment outlook*. Paris: Author.
- Organisation for Economic Co-operation and Development. (2001) *1980-1998: 20 years of social expenditure: The OECD database*. Available at <http://www.oecd.org>
- Page, Benjamin I. (1997). *Trouble for workers and the poor: Economic globalization and the reshaping of American politics* (Working Paper 99-06). Evanston, IL: Institute for Policy Research, Northwestern University.
- Pedersen, Axel West. (1994). *The welfare state and inequality: Still no answer to the big questions* (Working Paper 109). Luxembourg City: Luxembourg Income Study.
- Pontusson, Jonas, Rueda, David, & Way, Christopher R. (2002). Comparative political economy of wage distribution: The role of partisanship and labour market institutions. *British Journal of Political Science*, 32, 281-308.
- Quinn, Dennis, & Inclán, Carla. (1997). The origins of financial openness: A study of current and capital account liberalization. *American Journal of Political Science*, 41, 771-814.
- Reich, Robert B. (1992). *The work of nations: Preparing ourselves for 21st century capitalism*. New York: Vintage.
- Rodrik, Dani. (1997). *Has globalization gone too far?* Washington, DC: Institute for International Economics.
- Rogowski, Ronald. (1989). *Commerce and coalitions: How trade affects domestic political alignments*. Princeton, NJ: Princeton University Press.
- Rueda, David, & Pontusson, Jonas. (2000). Wage inequality and varieties of capitalism. *World Politics*, 52, 350-383.
- Samuelson, Paul A. (1948). International trade and the equalization of factor prices. *Economic Journal*, 58, 163-184.
- Samuelson, Paul A. (1949). International factor-price equalization once again. *Economic Journal*, 59, 181-197.
- Schmidt, Manfred G. (1996). When parties matter: A review of the possibilities and limits of partisan influence on public policy. *European Journal of Political Research*, 30, 155-183.
- StataCorp LP. (2001). *How does xtglm differ from regression clustered with robust standard errors?* Retrieved from http://www.stata.com/support/faqs/stat/xtglm_rob.html
- Stolper, Wolfgang F., & Samuelson, Paul A. (1941). Protection and real wages. *Review of Economic Studies*, 9, 58-73.
- Swank, Duane. (1998). Funding the welfare state: Globalization and the taxation of business in advanced market economies. *Political Studies*, 46, 671-692.
- Swank, Duane. (2002). *Global capital, political institutions and policy change in developed welfare states*. New York: Cambridge University Press.
- Swank, Duane. (2003) *Codebook for 21-nation pooled time-series data set: Political strength of political parties by ideological group in capitalist democracies*. Retrieved from <http://www.marquette.edu/polisci>
- Tonelson, Alan. (2000). *The race to the bottom: Why a world worker surplus and uncontrolled free trade are sinking American living standards*. New York: Westview.
- United Nations Conference on Trade and Development. (2003). *UNCTAD handbook of statistics on-line*. Retrieved from <http://www.unctad.org>
- United Nations University, World Institute for Development Economics Research. (2001). *World income inequality database*. Retrieved from <http://www.undp.org/poverty/initiatives/wider/wiid.html>

- Wallerstein, Michael. (1999). Wage-setting institutions and pay inequality in advanced industrial societies. *American Journal of Political Science*, 43, 649-680.
- Wood, Adrian. (1994). *North-South trade, employment and inequality: Changing fortunes in a skill-driven world*. Oxford, UK: Clarendon.
- World Bank. (2002). *World development indicators CD-ROM*. Washington, DC: Author.

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