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Mapping the Diffusion of Pension Innovation

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Multipillar pension reform is a global phenomenon. First implemented in Chile in 1981, multipillar reforms, involving the partial or full replacement of pay-as-you-go (PAYG) state pensions by systems of privately managed individual accounts, have spread rapidly in Latin America, Western Europe, and the post-communist countries of Central and Eastern Europe. The first instances of multipillar reform in Asia are now evident. This chapter puts these developments in perspective by comparing the current spread of multipillar reform with the earlier diffusion of first pension system adoptions between 1889 and 1994. This chapter will suggest that viewing this phenomenon as the diffusion of a new policy idea helps us better understand the global context of pension reform, as well as the reasons for and mechanisms of its spread.

Multipillar Pension Reform

Multipillar pension reform represents a new paradigm in pension system design by relying on multiple pillars of pension provision, including the state budget, state insurance programs, and private pension funds. Particularly, the idea that states can discharge part of their responsibility for insuring adequate pensions by mandating employee savings in individual, privately managed pension savings accounts, is new and revolutionary.

First developed by the “Chicago boys” team of economists in Chile and implemented in 1981, under the authoritarian rule of General Augusto Pinochet, whose reputation for social care was suspect, partial

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AUTHOR: Your figures 1 and 3 appear to be more columnar than graphical, at least as they came through in MSWord. Unless there is some other vision you have for them—and one that you can show me graphically—I’ve changed them to tables and numbered them accordingly in the text. Please take a look at the text of the figures because some of your original alignment was lost when the electronic files were transferred.

privatization of state pension systems was not widely accepted at first within the global social policy community. Many experts questioned, and continue to question, whether multipillar systems really work to achieve some of the major goals of pensions, particularly protecting people from poverty and exploitation by fee-hungry investment managers (Beattie and McGillivray 1995; James 1996; Queisser 2000). Another element slowing the acceptance of the Chilean reform was the fact that it had come, after all, from Chile, a semiperipheral middle-income country in the global economy. However, Chile proved to be a powerful example in Latin America and a model case for advocates of neoliberal policies, and soon Western European countries with long-established welfare systems were experimenting with reforms inspired by the Chilean model.

In 1994 the World Bank published *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, a major report that set forth a series of well-substantiated arguments in favor of multipillar pension reforms. *Averting the Old Age Crisis* argued that pension systems should ideally have three pillars: a state-managed, redistributive pillar providing a basic pension to secure against poverty; an earnings-related pension supported by mandatory lifetime contributions to individual pension savings accounts that are privately managed; and a pillar of voluntary private schemes, including supplemental industry, corporate, and mutual benefit plans. Such highly visible support and coherent argumentation for the multipillar model from a major international organization added significantly to the legitimacy and acceptability of these proposals in countries around the world. By 1999 Katharina Müller, a contributor to this volume, had coined the term the “new pension orthodoxy” to capture the extent to which multipillar reforms had become a dominant new policy paradigm. This new paradigm is not fully accepted by all parties to the debate, but it clearly represents a new phenomenon in global approaches to old-age provision and is increasingly the norm in countries around the world.

Policy Invention and Diffusion

As a new policy invention in the process of diffusion to countries around the world, multipillar pension reform is amenable to analysis from the multidisciplinary literature on diffusion of innovation (Rogers 1995). A diffusion perspective is useful because it enables us to situate multipillar pension reform as a global policy trend and it points to several causal mechanisms for its spread that are often ignored in the traditional political economy of policy reform literature. Using the diffusion perspective to complement a political economy analysis, therefore, can lead to a

fuller understanding of the process by which policy innovations spread and a greater understanding of the international dimension of reform (Dolowitz and Marsh 2000). Such understandings are critical for global policy advocates who seek to promote the diffusion of their own policy innovations, as well as for scholars who analyze global social and institutional change.

The political economy of pension reform literature usually begins from the premise that path dependencies created by existing political institutions and policy structures constrain the development of new domestic policies (for example, Pierson 1994). Radical change is explained through a model of shock and response in which domestic policymakers tend to enact policy change when faced with a crisis (Bates and Krueger 1993, p. 452; Nelson 1990). A crisis forces decisions on policymakers who are otherwise inclined to maintain the status quo. In particular, a crisis forces them to decide on a policy response from among a relatively well-known set of internationally available policy options. The political economy literature usually assumes these options to exist and poses the question, why do policymakers choose one or another response—often one that is economically sub-optimal? The answer usually involves politics, which is understood as a competition for resources among self-interested actors and interest groups, rather than as a competition among supporters of different policy ideas. In this model, policy ideas are generated non-problematically by economists and problems in implementing them are generated by politics.

The diffusion literature starts from a somewhat different vantage point and with a somewhat different concept of the origins and genesis of policy reform. Diffusion studies emphasize that some class of policy changes arises from the creation and spread of new ideas. Such changes cannot take place until these new policy ideas are invented and tested in a specific environment. When invention has occurred, innovations may be undertaken in other countries. Interestingly, the diffusion literature suggests that crisis is not a sufficient condition for policy innovation. Necessity may be the mother of invention, but invention does not always occur when needed. The diffusion literature thus makes a substantial contribution to our understanding of the political economy of reform by injecting a new self-consciousness about how new policy ideas are generated in global discourse (see, for instance, Deacon 1997; Queisser 2000). A second notable contribution of the diffusion literature is that it has generated highly robust results about which states are more likely to adopt innovation earlier. A variety of studies (primarily of policy diffusion among the 50 states of the United States) have shown that states that are larger, more industrial, and economically more prosperous tend to adopt policy innovations before states that are smaller and poorer (Walker 1969; Gray 1973; Welch and Thompson 1980). This situation

usually is explained by the fact that richer states have more slack resources (Cyert and March 1963), rendering policy experimentation easier and the risk of failure less severe. The diffusion literature also has reported strong regional effects, suggesting policy emulation among states in the same region or peer group. Berry and Berry (1999) list three main mechanisms: emulation of neighboring states, emulation of regional leader states, and emulation of global peer states. Studies have shown strong evidence to confirm regional patterns of innovation diffusion, with smaller states tending to follow the examples of regional or global leaders (Walker 1969; Gray 1973; Collier and Messick 1975). The third substantial contribution of the diffusion literature is to shed light on mechanisms of policy diffusion. These mechanisms include interstate competition for economic resources and legitimacy (Berry and Berry 1999), the role of interstate organizations (Walker 1969; Welch and Thompson 1980) or "epistemic communities" (Haas 1992) in spreading ideas and information about policy reform, and the role of regional models in demonstrating policy feasibility (Walker 1969). As we will see, these findings receive further confirmation below in this investigation of diffusion of pension reform ideas over time.

The diffusion approach taken here is historical and comparative. Most diffusion studies employ event history analysis (Berry and Berry 1999, p. 190) to analyze a set of policy adoptions over a given period of time. In contrast, this study investigates policy adoptions during two time periods by comparing the diffusion of multipillar pension reform since 1981 with the earlier spread of national pension systems in the years 1889 to 1994. This historical comparison of two episodes of diffusion in one policy domain (Burstein 1991) enables us to better understand which features of multipillar pension reform diffusion are particular to an episode and which features reflect relatively timeless patterns. A simple visual mapping technique is used to allow us to see individual countries in the data, while illustrating causal mechanisms. Such visual display of quantitative information follows principles articulated and exemplified by Tufte (1992). Another peculiarity of the policy diffusion literature is that most of its early works concern diffusion among the 50 U.S. states. Global studies of policy innovation diffusion are relatively few (Collier and Messick 1975; True and Mintrom 2001). This study shows, however, that approaches and insights derived from the study of diffusion among the 50 states can be applied usefully to the analysis of global policy diffusion.

One cautionary note: Diffusion models do not explain everything about the political economy of reform and cannot be seen as a complete paradigmatic replacement of this rich literature (Dolowitz and Marsh 2000). For instance, the diffusion literature has very little to say about how innovations are altered during the process of adoption in particular

states (Rogers 1995), a question that is central to the political economy of reform literature, including my own previous work on pension reform (Orenstein 2000). I do not mean to underestimate the importance of this problem or suggest that the diffusion literature can serve fully to replace the literature on the political economy of reform. What I do claim is that the diffusion literature emphasizes a commonly overlooked set of causal mechanisms for policy innovation and provides a different picture of the policy reform process—one that is appropriate for analyzing the diffusion of new policy ideas. By so doing, this diffusion literature can make a substantial contribution to our understanding of global policy reform processes.

The First Phase (1889–1994)

Researchers seldom have looked at the spread of welfare state institutions around the world as an instance of policy diffusion. Notable exceptions are Collier and Messick (1975) and Rodgers (1998). But most accounts of welfare state development come from the growing literature on historical institutionalism (Weir and Skocpol 1985; Esping-Andersen 1990; Skocpol 1992; Pierson 1994). These institutionalist accounts have emphasized the deep historical roots of welfare state institutions in particular national contexts and the importance of national path dependencies in explaining their development. This chapter seeks to challenge the perception that welfare states grow from primarily national roots by showing that international emulation has been a critical factor in determining the course of welfare state development globally.

The first pension system was invented in Germany and implemented by Bismarck in 1889. The Bismarckian model was very important in Europe (Bonoli 2000, pp. 10–11), putting pressure on other European states to respond similarly—or differently—to increased worker demands and state imperatives for greater old-age security. As table 7.1 and figure 7.1 show, pension systems were adopted across Western and Central Europe before the first world war, with Eastern European and some Latin American states, plus South Africa, adopting in the interwar period. But the major explosion of pension systems around the world occurred in the wake of the Second World War and under the influence of the international principles articulated by the International Labor Organisation (ILO) in its Declaration of Philadelphia in 1944 (ILO 1944). Those principles included the creation of unified, national pension insurance systems under a central social security administration, to provide a specified set of benefits, including disability and old-age pensions (ILO 1944, p. 20). The ILO, in conjunction with major countries including the United States, vigorously promoted these aims in regional conferences

Table 7.1 Global Spread of Pension System Adoption, 1889–1994

	<i>Europe/Antipodes/ United States/Central America</i>	<i>Latin America/Caribbean</i>	<i>Africa/Middle East/Asia</i>
1880s	DE		
1890s	DK, NZ		
1900s	AU, AT, BE, IS, UK, CS, IE		
1910s	FR, IT, NL, SE, ES, RO, LU		
1920s	CA, BG, EE, HU, LV, LT, PL, RU, YU, GC	CL, EC	ZA
1930s	FI, NO, US, GR, PT	BR, PE, TT, UY, BB	
1940s	AL, CH, TR, MC	AR, CO, CR, DO, GY, MX, PA, PY, VE	DZ, GQ, JP
1950s	CY, JE, LI, MT, SM	BO, HN, JM, NI, SV, BS	BI, EG, IQ, GN, IR, IL, LY, MU, MA, RW, SY, ZR, CV, CN, ID, IN, MY, PH, SG, LK, TW
1960s	AD	CU, HT, GT, BM, GD	BF, CM, CF, CG, CI, ET, GA, GH, KE, LB, MG, ML, MR, NE, NG, SA, TG, TN, TZ, UG, ZM, NP, VN, FJ, FM, MH, PW
1970s		AG, BZ, DM, LC, VC, VG	BJ, TD, JO, KW, LR, OM, SD, SN, SZ, BH, SC, ST, HK, KR, PK, KI, SB, WS
1980s			GM, YE, PG, VU
1990s			ZW, BW, TH

Notes: Bold type indicates a country with a population of more than 1 million people in 2000. Italic type indicate a high-income OECD country. Countries are listed alphabetically by geographic category.

ISO 3166 Economy Codes: AD = Andorra, AG = Antigua, AL = Albania, AR = Argentina, AT = Austria, AU = Australia, BB = Barbados, BE = Belgium, BF = Burkina Faso, BG = Bulgaria, BH = Bahrain, BI = Burundi, BJ = Benin, BM = Bermuda, BO = Bolivia, BR = Brazil, BS = The Bahamas, BW = Botswana, BZ = Belize, CA = Canada, CF = Central African Republic, CG = Democratic Republic of Congo, CH = Switzerland, CI = Ivory Coast, CL = Chile, CM = Cameroon, CN = China, CO = Colombia, CR = Costa Rica, CS = Czechoslovakia, CU = Cuba, CV = Cape Verde, CY = Cyprus, DE = Germany, DK = Denmark, DM = Dominica, DO = Dominican Republic, DZ = Algeria, EC = Ecuador, EE = Estonia, EG = Arab Republic of Egypt, ES = Spain, ET = Ethiopia, FI = Finland, FJ = Fiji, FM = Micronesia, FR = France, GA = Gabon, GC = Guernsey (author's abbreviation), GD = Grenada, GH = Ghana, GM = The Gambia, GN = Guinea, GR = Greece, GT = Guatemala, GQ = Equatorial Guinea, GY = Guyana, HK = Hong Kong (China), HN = Honduras, HT = Haiti, HU = Hungary, ID = Indonesia, IE = Ireland, IL = Israel, IN = India, IQ = Iraq, IR = Islamic Republic of Iran, IS = Iceland, IT = Italy, JE = Jersey (author's abbreviation), JM = Jamaica, JO = Jordan, JP = Japan, KE = Kenya, KI = Kiribati, KR = Republic of Korea, KW = Kuwait, LB = Lebanon, LC = St. Lucia, LI = Liechtenstein, LK = Sri Lanka, LR = Liberia, LT = Lithuania, LU = Luxembourg, LV = Latvia, LY = Libya, MA = Morocco, MC = Monaco, MG = Madagascar, MH = Marshall Islands, ML = Mali, MR = Mauritania, MT = Malta, MU = Mauritius, MX = Mexico, MY = Malaysia, NE = Niger, NG = Nigeria, NI = Nicaragua, NL = Netherlands, NO = Norway, NP = Nepal, NZ = New Zealand, OM = Oman, PA = Panama, PE = Peru, PG = Papua New Guinea, PH = Philippines, PK = Pakistan, PL = Poland, PT = Portugal, PW = Palau, PY = Paraguay, RO = Romania, RU = Russia, RW = Rwanda, SA = Saudi Arabia, SB = Solomon Islands, SC = Seychelles, SD = Sudan, SE = Sweden, SG = Singapore, SM = San Marino, SN = Senegal, ST = St. Tome and Principe, SV = El Salvador, SY = Syrian Arab Republic, SZ = Swaziland, TD = Chad, TG = Togo, TH = Thailand, TN = Tunisia, TR = Turkey, TT = Trinidad and Tobago, TW = Taiwan (China), TZ = Tanzania, UG = Uganda, UK = United Kingdom, US = United States, UY = Uruguay, VC = St. Vincent, VE = República Bolivariana de Venezuela, VG = Virgin Islands, VN = Vietnam, VU = Vanuatu, WS = Samoa, YE = Republic of Yemen, YU = the former Yugoslavia, ZA = South Africa, ZM = Zambia, ZR = Zaire, ZW = Zimbabwe.

Source: Author, based on diverse material and sources.

(Altmeyer 1945, pp. 720–21; ILO 1948a, 1948b), through the dispatch of consultants (Acosta 1944, p. 46), the publication of reform templates (Acosta 1944; Shoenbaum 1945), and the articulation of principles by major world leaders, including the U.S. president Franklin D. Roosevelt (ILO 1945). Earlier reforming countries also were encouraged to revise their often fragmented systems of pension provision to meet the new standards. All of this was done in the context of creating a world order that would guarantee peace. Considering these facts, it is very strange that analysts have tended to ignore the extent to which pension systems reflect global trends.

To enhance our understanding of this phenomenon, I have charted in figure 7.1 the first adoption of a pension system in the 152 countries listed in the U.S. Social Security Administration's publication, *Social Security Programs throughout the World* (SSPTW), 2001 Web edition. I have coded each country according to the International Standards Organization's (ISO 3166) two-letter economy codes, also available on the Web. This provides a standard plot size for each country on the chart, enabling visual quantitative comparisons. I use the date of adoption of pension systems reported in SSPTW, which is usually the date of first pension legislation rather than the date of reform implementation. These dates are used advisedly because in several countries legislation was adopted well before pension systems actually were created. Other anomalies may exist. However, I did not attempt to correct the SSPTW data, but instead chose to use a single standardized source to avoid errors of bias, as has long been the standard in the field (Collier and Messick 1975, p. 1302). Countries are listed alphabetically by decade of adoption and region. Three of these regions are purely geographical, whereas the first one, "Europe/Antipodes/United States/Central America," is more cultural and economic in nature. It represents the high-income Organisation for Economic Co-operation and Development (OECD) nations minus Japan, including the industrial countries that have long been governed by settlers of European origin. These countries can be considered a single cultural/economic region for purposes of policy innovation and dissemination.

Note that by focusing on the first establishment of national pension systems, table 7.1 aggregates pension systems of three distinct types. Scholars of European welfare states have identified two ideal types of early pension systems in Europe (Bonoli 2000, pp. 10–11). First, Bismarckian social insurance systems emphasized providing workers a pension that reflected a proportion of their income while working. Second, the Danish (1891) or later Beveridgean (U.K.) model was essentially an extension of the poor laws, and emphasized poverty relief and the maintenance of basic minimum living standards. Financing for these two types of systems differed in accordance with their goals. Whereas the Bismarckian system relied on contributions from employers, employees,

and the state, Denmark's 1891 system was general tax financed. France, Italy, the United States, and Switzerland initially followed the social insurance model, but New Zealand, the United Kingdom, Sweden, and Norway initially followed the Danish poverty-prevention tradition. These two pension system types were quite different at first, but most national systems tended to adopt elements of both over time (Bonoli 2000, 12). The result is that now "the guarantee of a minimum income combined with a partial replacement of earnings is a common feature to almost all pension systems," although Germany and Denmark remain exceptions to that rule (Bonoli 2000, p. 13). A third distinct type of pension system was the national provident fund, a central savings fund administered by the government that generally provided a lump-sum benefit at retirement. These were popular in Asian and some African countries under British colonial influence (Gillion et al. 2000, p. 501). As this brief discussion suggests, a more detailed analysis of the spread of each of these types of systems internationally might yield interesting results and an even more nuanced view of cultural and regional patterns of pension system diffusion. The aggregate analysis presented here, however, focuses on arguably the main event in this first phase of reform—the establishment of a broad, national pension system where none existed.

The diffusion literature has tended to focus on four factors to explain policy innovation and diffusion—state wealth, size, industrialization, and geographic region. A first-order question, therefore, is whether these variables also explain the creation and diffusion of pension systems, beginning with Bismarck's reforms in 1889. The basic answer is yes.

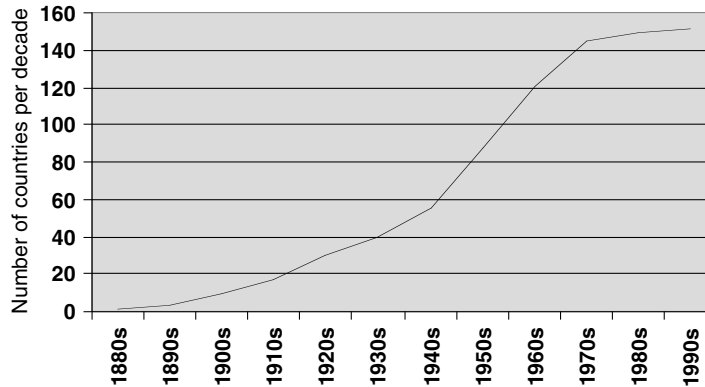
Table 7.1 shows strong evidence for many of the key findings of the policy diffusion literature. First, level of economic development is highly correlated with the timing of pension systems adoption (Walker 1969; Collier and Messick 1975). The average high-income OECD country established a pension system approximately 40 years before the average non-OECD country. Collier and Messick (1975), however, note that later adopters tended to adopt at much lower absolute levels of economic development. Second, country size is also an important factor. In each region of the world, large countries innovated before very small countries (that is, countries with fewer than 1 million people in 2000 are not set in bold type in table 7.1). Also, the regional variable is a strong influence. Pension reform diffused for 30 years in Europe and the high-income OECD countries before being adopted in Latin America. African and Asian countries innovated approximately 20 years later than did their counterparts in Latin America, creating a regional cascade effect. One reason for this, of course, is the earlier history of statehood in Latin America, which suggests that "stateness" (Linz and Stepan 1996) also may be a relevant variable in international comparison.

It is likewise interesting to note that international diffusion of pension systems follows the usual distribution pattern for adoption of innovations—a few countries are pioneers, followed by a steep increase in the rate of adoption, with a few laggards filling in at the end. When charted cumulatively, this results in an S-curve (see figure 7.1). The curve resembles similar curves for the United States, which have been explained by the confluence of a large number of interrelated factors that determine policy adoption and the learning and interaction effects between adopting states (Gray 1973, pp. 1175–176).

Finally, an intraregional cascade effect is visible, particularly through the graphic analytical approach in table 7.1. In Europe it is notable that the first countries to innovate were mainly Anglo-Saxon countries, with Germany being the policy creator. Denmark and New Zealand came next, followed by Australia, Austria, Belgium, Iceland, the United Kingdom, Ireland, and Czechoslovakia, which at that time was part of the Austro-Hungarian Empire. Next came the Mediterranean and Romanic countries, France, Italy, Spain, Luxembourg and Romania, along with the Netherlands and Sweden, during the 1910s. Pension innovation spread to Eastern Europe only in the 1920s, after 30 years' gestation in the West (see also Collier and Messick [1975, p. 1312] for a graphic display). At the same time, the innovation jumped to the leading Latin American countries, including Chile and Brazil, in the 1920s and 1930s. Most large, industrial Latin American countries adopted by the end of the 1940s, and the smaller nations and Caribbean countries followed in the 1950s and 1960s. Only small island nations were left in the 1970s. In Africa, too, the first innovator was South Africa. The first in Asia was Japan in the 1940s. On those two continents most of the major countries followed within 20 to 30 years; the smaller and more peripheral states adopted systems last. This intraregional cascade strengthens the finding that wealth, size, and region are key factors determining policy innovation, with the larger, wealthier, more industrial countries in each region innovating first, and reform then spreading out concentrically from core to periphery. This underlines the global importance of a relatively stable set of regional policy innovation leaders, just as Walker (1969) found in the United States.

One big question to arise from table 7.1 is what causes the interregional diffusion of pension system ideas? Culture and regional example appear to be important. It is notable that pension systems were restricted to Europe and the Anglo-Saxon countries for 30 years before diffusing first to Latin America and then to Africa and Asia simultaneously. However, table 7.1 provides evidence that the existence and activities of international organizations operating in a policy area also may be critical. We know that in 1919 the ILO was founded to spread international labor standards. We observe that slow interregional diffusion was the norm

Figure 7.1 Cumulative Adoption of First Pension Systems Worldwide



until 1919 when pension system establishment began a process of inter-regional diffusion. There is also a sharp upturn in the rate of diffusion in the 1940s (figure 7.1), with the publication of the Declaration of Philadelphia and the ILO's global campaign to spread its new welfare state model.

Activities of the ILO were a major factor in the export of pension ideas to the rest of the world (Collier and Messick 1975, p. 1305; Craig and Tomé 1969), particularly after the Second World War. The ILO's actions encompassed the setting of international norms of social protection, generation of reform templates, provision of consultants and consulting advice, and the use of high-level regional meetings to popularize its ideas and approach. Most crucially, the ILO's 1944 Declaration of Philadelphia won the endorsement of the major victorious powers as the template for a new, peaceful, postwar social order. It makes for impressive reading and was highly inspirational at the time of its publication. The Declaration of Philadelphia was significant not only for its high-level political support (ILO 1944, 1945), but also for the way it set strong, highly idealistic, but widely agreed and specific norms for full employment and social protection after the war (ILO 1944), although it should be noted that pension provision was only one element in this vision. The ILO energetically distributed information about its program through high-profile regional meetings that brought top political leaders together to discuss specific social policy challenges (ILO 1948a, 1948b). The ILO provided legislative reform templates, in the form of detailed information about reform programs in leading states (Schoenbaum 1945), regular updates about the progress of reform in different countries (Acosta 1944),

and reports by regional leader countries about their activities in spreading reform in their region (Altmeyer 1945). The ILO also provided expert advice to reforming countries (Acosta 1944, 46), including actuarial support. All in all, the organization played a major role in the establishment of social welfare states, articulating a global vision for social reform and creating momentum behind the first phase of pension system adoption in countries around the world.

The Second Phase (1981–2041)

What is different about this second phase of pension reform? What do we learn by comparing it with the first phase of pension system diffusion? I find four main ways in which the second phase differs from the first phase of reform. First, the content of reform differs. Whereas the first episode of reform involved the establishment of first pension systems in the context of broader social system development, the second phase involves reforming pension systems created in the first wave. Second, the inventing country is different, and differently situated in the global economy. When Chile moved to privatize its pension system in 1981, it was a semiperipheral developing country, whereas Germany—the leader in the first phase—was a leading industrial economy. Third, the rate of diffusion of multipillar pension reform has been faster. It is spreading at approximately two times the rate of first adoptions, and the speed of interregional transfer is particularly pronounced. Fourth, the leading international organization involved in formulating and spreading reform is different: The World Bank, rather than the ILO, is dominant in the spread of multipillar reform, reflecting shifts in global discourse on social and economic policy. There are also significant similarities between the first and second reform phases, including the fact that country income and region remain significant determinants of reform. This section will discuss these differences and similarities in turn.

Perhaps the overriding difference between multipillar pension reform and the establishment of first pension systems is that multipillar reform is a second-phase reform. Because most countries in the world have established pension systems already, the multipillar movement involves changing the organization of pension commitments rather than founding wholly new systems. Multipillar reforms therefore are less ambitious in scope, and they necessarily react to what came before them.

In particular, multipillar reforms reflect an attempt to remedy some of the problems of the previous ILO model, which called for the establishment of unified, defined-benefit pensions run by a central social security administration. These systems relied primarily on some form of PAYG

pension financing. In PAYG systems, current-year pension contributions are used to pay current-year pension outlays. Social security administrations use actuarial methods and manipulation of various pension parameters to ensure a relatively predictable or "defined" benefit to all pensioners, usually consisting of a target "replacement rate" of previous income. This system contrasts with fully funded, defined-contribution plans in which employees and possibly employers contribute to individual savings accounts. In funded systems, contributions are defined but benefits are uncertain, depending on investment results.

Although ILO model pension systems represented a major advance over a past in which few states felt an obligation to ensure old-age security (Gillion et al. 2000, p. v), experience revealed some characteristic problems of these systems. First, social security administrations in much of the developing world faced serious administrative problems from corruption, politicization, and low state capacity (Gillion et al. 2000, p. 9). It proved difficult for such administrations to operate PAYG pension systems adequately and to avoid political pressures to promise more benefits than were realistically payable (World Bank 1994). As a consequence, people lost faith in national pension systems. The problem was particularly acute in Latin America (Gillion et al. 2000, p. 541) and formed an important backdrop to the Chilean reform and its decision to rely more heavily on private sector managers. Second, PAYG pension systems involve intergenerational transfers of income that become difficult to manage when the population is aging (World Bank 1994). When the working-age population is growing and employment levels are high (a central goal of the ILO's Declaration of Philadelphia) (ILO 1944), PAYG pension systems provide a generous income for the first retiring generation. But as people spend longer in retirement and the proportion of workers to pensioners narrows, as it has in many industrial countries, PAYG pension systems face serious fiscal challenges. The population aging problem is most acute in developed Western countries and the former socialist countries of Central and Eastern Europe. A third problem of state PAYG pension systems is that their benefits are tied mainly to wage growth in the economy. This worked well in the postwar boom when wage levels rose dramatically. But more recently wages have stagnated in relative terms while returns to capital have increased. This means that funded pension systems did better than state PAYG pension systems (World Bank 1994).

Multipillar pension systems seek to diversify retirement income sources (Chlon, Góra, and Rutkowski 1999) and separate the various social goals of pension systems into different mechanisms of financing. In the World Bank model (World Bank 1994), the first pillar of pension provision should be state-financed and redistributive, providing a basic income for all who have worked a requisite period of time.

Relatively simple administrative means can be devised for countries with low policy capacity, to ensure that all workers receive at least some minimum income. A second pillar of pension provision should be mandatory and provide income-related benefits. As opposed to the older ILO model, which emphasized PAYG benefit financing, advocates of multipillar reform suggest that these income-related benefits should be fully funded, privately managed, and accumulated in individual pension savings accounts. In theory, this strategy reduces reliance on inefficient state social security administrations and enables systems to take advantage of more efficient private sector management. Finally, a third pillar of voluntary private pension schemes may be created on a variety of different models with state tax incentives.

The Chilean system was a particularly radical version of what later became the multipillar model. The Pinochet government mandated a complete replacement of the former PAYG state pension system founded in 1924 with a system of mandatory, fully funded, defined-contribution individual savings accounts managed by private pension fund administrators (AFPs). Workers' previous contributions to the state system were recognized through the issuance of individual "recognition bonds" that paid a 4 percent real interest rate (Gillion et al. 2000, p. 542). The new Chilean system also provided a minimum guaranteed pension to retirees whose pension accounts fall below this minimum level and who have worked at least 20 years, as well as a means-tested public assistance program for indigent elderly people (Gillion et al. 2000, p. 542). This constituted the first pillar of the new multipillar system. Since Chile, most reforming countries have chosen a partial rather than a full replacement of the previous PAYG system.

Multipillar pension reform was shaped by perceived problems with the older ILO model as well as by its original model. Why was Chile the policy inventor rather than a core capitalist economy like Germany in the first wave, and what impact did this have? Chile's first-mover status may reflect the globalization of economic policy discourse and the ways in which developing countries have become laboratories for experimentation with different economic principles (Deacon 1997). The Pinochet regime clearly drew on the latest economic ideas of the industrial world, particularly from those current at the University of Chicago, in formulating its pension system. This may signal the growing impact of "epistemic communities" (Haas 1992) of like-minded professionals in global economic policy, whom Haas and others have argued are central in the dissemination of policy advice. It also suggests that innovative policy thinking now may be more available to developing countries than in previous periods. In any case, it is clear from the past 20 years' experience (table 7.2) that reform no longer starts in the rich, Anglo-Saxon OECD countries and radiates out to the less industrial world. Instead, most

Table 7.2 Global Spread of Multipillar Pension Reform, 1981–2001

	<i>Europe/Antipodes/ United States/Central America</i>	<i>Latin America/Caribbean</i>	<i>Africa/ Middle East/Asia</i>
1980s	CH, NL, UK	CL	
1990s	DK, SE, AU, HU, PL	AR, CO, PE, UY, BO, MX, SV	KZ
2000s	BG, EE, HV, LV	CR, NI	HK

Notes: Bold type indicates a country with a population of more than 1 million people in 2000. Italic type indicate a high-income OECD country. Countries are listed alphabetically by geographic category.

ISO 3166 Economy Codes: AR = Argentina, AU = Australia, BG = Bulgaria, BO = Bolivia, CH = Switzerland, CL = Chile, CO = Colombia, CR = Costa Rica, DK = Denmark, EE = Estonia, HK = Hong Kong (China), HU = Hungary, HV = Croatia, KZ = Kazakhstan, LV = Latvia, MX = Mexico, NI = Nicaragua, NL = Netherlands, PE = Peru, PL = Poland, SE = Sweden, SV = El Salvador, UK = United Kingdom, UY = Uruguay.

Sources: Palacios and Pallarès-Miralles 2000, and the author's own research.

pension system innovation in the early years of the second phase has occurred in middle-income, semiperipheral countries like Chile, Uruguay, Argentina, Poland, and Hungary. The fact that Chile was the inventing country may account for this, as well as for the strong regional diffusion in Latin America. It should be noted that at least one middle-income, semiperipheral country, New Zealand, also was a leader in the first phase of pension system adoption. However, this trend toward innovation at the semiperiphery seems more pronounced in the second phase of multipillar reform.

A third difference visible between tables 7.1 and 7.2 is the speed of diffusion, particularly interregional diffusion. In the first phase, it took more than 30 years before pension reform spread out of Europe. In the second phase, mandatory funded pension systems spread from Chile to three industrial West European countries within a few years, and to Central and Eastern Europe in the next decade, again before most capitalist core countries had adopted the innovation. This provides evidence that policy ideas travel faster now, perhaps because of the increasingly powerful role international organizations play in spreading policy ideas across regional boundaries. It is notable that the ILO joined the first phase of pension innovation in 1944, after 55 years of diffusion. The World Bank joined in the promotion of multipillar reform 13 years after it was first invented in Chile. Current trends indicate that second-phase innovation is spreading at approximately twice the rate of the first wave. If this trend continues, it will take approximately 60 years for multipillar pension reform to sweep the globe (1981–2041), with the peak occurring somewhere in the 2000s and 2010s.

A fourth difference between the two episodes of reform lies in the international organization leading the charge. Whereas the first establishment of

pension systems worldwide was influenced by the normative and substantive platform of the ILO, the aims and methods of multipillar pension reform have been articulated in large part by the World Bank (World Bank 1994; Chlon, Góra, and Rutkowski 1999; Holzmann 2000). This reflects broader changes in economic policy thinking since the Second World War, mainly the decline of Keynesianism and the rise of neoliberalism, represented most vigorously by the International Monetary Fund and the World Bank in international policy discourse (Deacon 1997). Although it would be an exaggeration to say that either the ILO or the World Bank acted alone as a global policy advocate in either phase,¹ the leadership role these organizations have played has been important in setting the tone of reform. Walker (1969) observed that interstate organizations play a great role in the diffusion of policy innovations among states by spreading information and experiences of reform to others. The World Bank certainly has played that role in the current reform phase, organizing conferences and publishing books about the political economy of reform; sending pension officials from reforming countries to Chile and other places where reform has already taken place; and generally accelerating the growth of knowledge about reform processes, methods, and outcomes. In addition, the World Bank has sent its experts to reforming countries, such as Hungary and Poland, to help with technical aspects of reform.

These differences are important for putting the contemporary diffusion of multipillar pension reform in context. They demonstrate the extent to which globalization and particularly the international spread of ideas has accelerated. However, there are also some striking similarities between the two phases of reform. First, consistent with the diffusion literature, country wealth remains a significant determinant of innovation in the second phase. As noted previously, most early innovators have been middle-income developing countries like Poland, Hungary, Argentina, and Uruguay. High-income industrial countries also are well represented among the early reformers, but there are only a few poor countries, such as El Salvador and Kazakhstan. On average, wealthier countries remain more likely to innovate despite their higher preexisting pension commitments. This contradicts a major finding of the historical institutionalist literature (compare Pierson 1994) that suggests that wealthier countries with more established welfare programs and systems of interest representation will face greater political obstacles to reform. Such obstacles undoubtedly exist but their effects are overwhelmed by the greater capacity for policy innovation in rich states.

Regional example remains an important predictor of pension reform adoption in the second phase. Latin America, which had the powerful example of Chile, experienced the most rapid spread of innovation during the second decade of reform. Chilean experts appear to have played a major role in this, spreading reform ideas and policies by consulting

with regional neighbors. Other factors—for instance, language and perceived social similarities—probably supported this development. Similarly, it is notable that the first two decades of multipillar pension reform were restricted to Latin America and Europe, with the exception of Kazakhstan and Hong Kong, which were until the 1990s part of major European empires. This suggests that diffusion is far more likely to occur within regions, whereas interregional diffusion remains difficult. Other regional effects also are evident. One particularly striking feature is that the first reforming regions in the first phase were the same as the first reforming regions in the second phase—Europe/Antipodes/United States/Central America and Latin America—although in a somewhat different order. In addition, it is interesting that Chile was not only the first country to adopt multipillar pension reform, but also the first Latin American country to adopt a pension system in 1924. This suggests that there may be enduring reasons that particular regions and countries are more innovative in social policy (following Walker 1969), and that we may need to rethink the main obstacles to innovation. Although many authors have emphasized the size of implicit pension debt and other path dependencies as obstacles to innovation, the primary obstacles actually may be cultural or ideational.

In particular, the absence of Asian and African countries from the first 20 years of multipillar pension reform raises important questions about the relative impact of different determinants of reform. A path-dependency perspective might suggest that countries with less entrenched pension systems of the old model should be more likely to adopt the new model more readily. But national path-dependency explanations of pension reform cannot adequately explain the timing of policy innovation. Instead, innovation timing appears to track global trends, regional models, and the actions of global policy actors in spreading these innovations. The next section develops the hypothesis that reform timing is driven in part by a “global politics of attention” (Orenstein and Haas 2000). Because global policy actors cannot focus equally on all regions of the globe at once, because of scarce resources, their decisions about where to focus their attention may help determine patterns of diffusion in the second phase of pension innovation.

National Path Dependency or Global Policy?

Until now, the literature on the political economy of reform has focused on political and economic obstacles to change at the national level. Political scientists, notably Pierson (1994), have shown that political institutions and policy structures create path dependencies that make it hard to change national policies. The political economy literature emphasizes that a crisis

is needed to place reform on the agenda. Even then, economists have shown fairly conclusively, countries with high implicit pension debt tend only partially, rather than fully, to replace their preexisting pension systems with a private, funded pillar (for example, James 1998). This is because high implicit pension debt makes it harder for countries to finance the transition to a funded system. Current literature on the political economy of pension reform suggests that preexisting policies, policy structures, and institutions play a significant role in shaping subsequent reform efforts (see also Weir and Skocpol 1985; Müller 1999; Orenstein 2000), thereby creating enduring differences in national policy structures.

However, the global policy diffusion patterns identified here seem to challenge this literature in important ways. First, it seems that these publications underplay the extent to which policy innovation is a global process driven by the diffusion of policy ideas (Rodgers 1998). Crisis, except in a most general sense, does not appear to be a sufficient condition for multipillar pension reform. Many countries experience pension system crises, and only some adopt multipillar reforms. In addition to crisis conditions, new policy ideas were necessary for multipillar reform to take place. In particular, the invention of multipillar reform arose from global trends in economic policy discourse, as they played out at the University of Chicago in the 1970s and 1980s.

Although publications on the political economy of reform focus on the importance of domestic economic and political variables in explaining policy adoption, both phases of pension reform analyzed in this chapter suggest that countries reform in response to global and regional models, under the influence of norms and ideas spread by the leading international organizations and epistemic communities of the day. Historical-institutionalist theories and path dependencies may explain a lot about why countries adapt innovations in specific ways to suit national conditions (compare Orenstein 2000), but they must be combined with a diffusion perspective to explain the important questions of why countries innovate in the first place and on what basic model they do so. Rather than locating the explanation for social policy change at the international or domestic level, the political economy literature needs a serious effort to integrate an international perspective with historical-institutionalist and path-dependency accounts. It is likely that these different approaches are not mutually exclusive, but rather complementary, tending to explain different parts of the phenomenon. Some of the chapters in this volume have already begun this work. For instance, Chlon and Mora study the influence of international financial institutions (IFIs) in domestic policy processes, and Mueller relates the influence of IFIs to levels of country indebtedness. More needs to be done, in particular to understand how internal processes of IFI decisionmaking may affect the diffusion of innovation.

Global Politics of Attention

Let us consider alternative explanations for why Asian and African countries have lagged behind in both phases of reform. This is a serious puzzle indeed because the path-dependency literature strongly suggests that the most amenable places for multipillar pension reform would be the late-reforming countries of Africa and Asia, with their smaller implicit pension debts and less-developed programmatic political networks. Why have these countries not been the first to embrace multipillar reform? There are several possible explanations. First, there may be long-standing structural features of the African and Asian states that make them slower policy innovators. This possibility has beguiled the U.S. literature from the beginning, when Walker (1969) showed that California, New York, Massachusetts, and New Jersey on average adopted policy reforms much sooner than did Mississippi or South Dakota, across a wide variety of policies and policy areas. Perhaps the same is true globally—perhaps the European and (North and South) American countries uniformly adopt policy innovations earlier because of more favorable structural conditions. If so, this would have to be shown across more policy areas, and a good explanation would be interesting and potentially important for global policy advocates.

A different but complementary explanation for this phenomenon might focus on the role of international organizations. Following Walker (1969), let us assume that the interregional diffusion of policy innovations is driven in large part by international organizations and other global policy advocates who play a major role in the spread of policy ideas and models. It is possible that international organizations have neglected the African and Asian countries in the second phase of pension reform to date, despite the relatively positive chances of reform there. If that is true, a global politics of attention may be driving policy diffusion and its spread may depend in part on where global policy advocates happen to focus their substantial policy resources, as well as on domestic factors. International organizations may make decisions on where to target their attention based on their evaluation of a country's importance in the global economy, their evaluation of the seriousness of its pension crisis, their evaluation of a country's likelihood and political will for reform, or other factors. Although many chapters in this volume suggest that domestic factors drive pension reform processes, there is some evidence to suggest that international organizations can affect the initiation of reform in developing countries. A previous study of Central and Eastern Europe showed that certain social sector reforms in the region started simultaneously in several countries after the World Bank began to devote significant resources to promoting these programs (Orenstein and Haas 2000). Several other studies have suggested that the

World Bank's high degree of attention to pension reform in Central and Eastern Europe has facilitated adoption of multipillar innovations in the region (Müller 1999; Orenstein 2000). In other regions, such as Latin America, the World Bank and other international organizations and bilateral aid agencies played a supporting role in pension reform (see Müller in this volume), perhaps accelerating the pace of diffusion.

The global politics of attention perspective raises questions about the priorities and internal decisionmaking processes of global policy advocates. For instance, why has the World Bank focused so much attention on promoting pension policy diffusion in Central and Eastern Europe and not on African and Asian countries where the relative impact of its resources could be greater? Are Central and Eastern European states seen as targets of opportunity because of ongoing economic transformation and the impending European Union accession process, which increase chances for reform? Are Central and Eastern European countries seen by others as global pension reform leaders and thus potentially influential models? Is the World Bank supporting a European Union agenda at the expense of reform in poorer developing countries? Do the larger pension systems of European states make them the most important targets for reform, despite the greater political challenges? Whatever the reasons, it would seem important to investigate further the link between the internal processes of global policy advocates and global patterns of policy diffusion.

Conclusions and Recommendations

This chapter has found that level of economic development, size, regional example, and activities of global policy advocates have influenced the diffusion of pension innovations around the world. There also are significant differences between the first and second phases of reform, notably that in the second phase the content of reforms has been different, the first reforming country was a semiperipheral one, the speed of diffusion is higher, and the leading international organization is different. The adoption of multipillar reforms by the countries that led the first phase may have been slowed by higher implicit pension debt, but such historical path dependencies cannot adequately explain policy adoption decisions globally. In addition to domestic factors, this chapter suggests that the invention and spread of new ideas, the presence of regional examples, and a global politics of attention are driving the second wave of multipillar pension innovations.

Several policy recommendations may be drawn from this historical study of pension innovation. First, the World Bank and other global policy advocates in social policy and other areas should focus their attention

on achieving reform in regional example countries because surrounding countries often take their cues from these regional leaders. Second, diffusion of innovation may be faster if global policy advocates identify and pursue reform on several continents at the same time. Third, global policy advocates should consider putting their limited resources to best use by focusing their attention on those regions that for historic or cultural reasons appear to innovate later than others. In summary, global policy advocates appear to be a major force in the interregional diffusion of policy ideas and would benefit from a careful and systematic analysis of where and how their resources are best employed.

Note

1. Chlon and Mora in this volume show the United States Agency for International Development, the European Bank for Reconstruction and Development, the Inter-American Development Bank, and the International Labor Organization also to be important in the second phase. In the first phase, the U.S. Social Security Administration provided technical assistance, primarily to countries in Latin America (Altmeyer 1945).

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Table 7.1 Global Spread of Pension System Adoption, 1889–1994

	Europe/Antipodes/US/CA	Latin America/Caribbean	Africa/Middle East	Asia
1880s	<i>DE</i>			
1890s	<i>DK, NZ</i>			
1900s	<i>AU, AT, BE, IS, UK, CS, IE</i>			
1910s	<i>FR, IT, NL, SE, ES, RO, LU</i>			
1920s	<i>CA, BG, EE, HU, LV, LT, PL, RU, YU, GC</i>	<i>CL, EC</i>	<i>ZA</i>	
1930s	<i>FI, NO, US, GR, PT</i>	<i>BR, PE, TT, UY, BB</i>		<i>JP</i>
1940s	<i>AL, CH, TR, MC</i>	<i>AR, CO, CR, DO, GY, MX, PA, PY, VE</i>	<i>DZ, GQ</i>	<i>CN, ID, IN, MY, PH, SG, LK, TW</i>
1950s	<i>CY, JE, LI, MT, SM</i>	<i>BO, HN, JM, NI, SV, BS</i>	<i>BI, EG, IQ, GN, IR, IL, LY, MU, MA, RW, SY, ZR, CV</i>	<i>NP, VN, FJ, FM, MH, PW</i>
1960s	<i>AD</i>	<i>CU, HT, GT, BM, GD</i>	<i>BF, CM, CF, CG, CI, ET, GA, GH, KE, LB, MG, ML, MR, NE, NG, SA, TC, TN, TZ, UG, ZM</i>	
1970s		<i>AG, BZ, DM, LC, VC, VG</i>	<i>BJ, TD, JO, KW, LR, OM, SD, SN, SZ, BH, SC, ST, GM, YE</i>	<i>HK, KR, PK, KI, SB, WS</i>
1980s			<i>ZW, BW</i>	<i>PG, VU</i>
1990s				<i>TH</i>

Notes: Bold indicates country with over 1m population in 2000. Italics indicate high-income OECD country. Countries listed alphabetically by category.

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Table 7.2 Global Spread of Multipillar Pension Reform, 1981–2001

	<i>Europe/Antipodes/US/CA</i>	<i>Latin America/Caribbean</i>	<i>Africa/Middle East</i>	<i>Asia</i>
1980s	CH, NL, UK	CL		
1990s	DK, SE, AU, HU, PL	AR, CO, PE, UY, BO, MX, SV		KZ
2000s	BG, EE, HV, LV	CR, NI		HK

Notes: Bold indicates country with over 1m population in 2000. Italics indicates high-income OECD country. Countries listed alphabetically by category.

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Sources: Palacios, Robert and Montserrat Pallarès- Miralles, International Patterns of Pension Provision, Washington, DC: The World Bank, 2000, and own research.