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The Politics of NDC Pension Scheme Diffusion: Constraints and Drivers

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Abstract: Nonfinancial defined contribution (NDC) schemes offer governments desirable properties in terms of efficiency, fairness, and financial sustainability and an opportunity to deflect the blame for pension cuts. Yet adoptions of NDC schemes largely ground to a halt and several countries retreated from NDC implementation after legislation. Lack of support from powerful international actors is partly to blame, as is the perceived rigidity of NDC in reducing room for policy maneuver. Correct implementation requires substantial administrative capacity. Less demanding automatic stabilizing mechanisms undercut the appeal of NDC in the European Union. Thus, while being an important option for policy makers and a benchmark against which to measure alternative reforms, NDC is unlikely to become the dominant pension design choice anytime soon.

Key words: Nonfinancial Defined Contributions, Policy Diffusion, Policy Reversals, International Organizations, European Union, Automatic Stabilizing Mechanisms

JEL codes: H55, J58

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Abbreviations and Acronyms

ASM	Automatic Stabilizing Mechanism
DB	Defined Benefit
EU	European Union
FDC	Financial Defined Contribution
GDP	Gross Domestic Product
ILO	International Labour Organization
NDB	Nonfinancial Defined Benefit
NDC	Nonfinancial Defined Contribution
PAYG	Pay-As-You-Go
OECD	Organisation for Economic Co-operation and Development

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1. Introduction

Proponents of pension reforms based on nonfinancial defined contribution (NDC) principles argue that NDC displays a number of desirable properties in terms of efficiency, fairness, and financial sustainability. NDC schemes influence individuals' choices to work in the formal labor market and contribute to their own pension (micro efficiency). Inclusion of life expectancy in the benefit calculation encourages participants to work longer, as postponing retirement is rewarded. If these incentives work, then the supply of a country's labor and thereby gross domestic product (GDP) increase (macro efficiency). NDC schemes guarantee both intragenerational fairness – i.e., that each monetary unit contributed yields one unit in benefits (plus an imputed interest) – and intergenerational fairness by guaranteeing that each generation pays the same percent of income in contributions. The NDC approach facilitates financial sustainability as do financial defined contribution (FDC) schemes, but without the burden of financing the transition costs.

NDC-based reforms have at times enjoyed support by powerful international actors like the World Bank. Reversals of some FDC reforms (Holzmann 2013) and growing awareness of the associated financial and market might also create further openings for NDC reforms. The NDC design offers potential political advantages to policy makers, notably eliminating or lowering the need for repeated ad hoc pension retrenchment measures that may be politically costly to officeholders who impose them (Brooks and Weaver 2006). Repeated ad hoc reforms may also have negative impacts on the legitimacy of and trust in pension systems.

Despite these potential advantages, the diffusion of NDC pensions was limited in recent years. A first cluster of NDC pension system adoption occurred in the 1990s in Sweden, Italy, Latvia, and Poland. Where implementation was fully successful, such as in Sweden, only minor adjustments followed (Weaver 2016). In countries where implementation was more problematic, such as in Italy, interventions were more profound, but they seldom directly clashed with the NDC logic (Jessoula and Raitano 2017). Ultimately, Italy's NDC scheme was tightened up with the 2011–2012 Fornero reform.

This relatively successful first wave was not followed by massive adoption elsewhere. Around the turn of the century, a number of reforms followed in places such as Kyrgyzstan and Russia, but they were either never properly implemented or, as in Russia, were reversed. In 2009, Norway introduced an NDC pillar and stuck to it.

In the 21st century, and especially since the global financial crisis of 2008–2009, adoption of more limited automatic stabilizing mechanisms (ASMs), often accompanied by incremental retrenchment mechanisms and sometimes by the creation of small FDC tiers, largely supplanted NDC pension reforms in the policy repertoires of most advanced industrial countries. A balancing mechanism was introduced in Germany, Spain, and Lithuania. Benefits are tied to life expectancy in Finland, France, Portugal, and Spain. The statutory retirement age is tied to life expectancy in Cyprus, Denmark, Finland, Greece, the Netherlands, Portugal, and Slovakia (European Commission 2018, 36).

Hence the puzzle addressed in this paper: Why, given that it appears to address many of the policy design and political problems confronted by pension planners, has NDC not been "bought" more frequently by policy elites? Is it due to complex transitional arrangements, opposition from powerful societal actors, or perceptions that it will harm some societal groups (women, workers with low lifetime earnings) (James 2012; Foster 2014)? Or does it result from the technically demanding implementation, requiring a trained and qualified administration, or from shortcomings in communication strategies by its proponents? Does the very "transparency" of NDC systems in making redistributive elements of pensions clear and paying contributions for them out of general revenues rather than cross-subsidies from other workers heighten distributional conflicts? Or are the causes more explicitly political: the fear of reelection-oriented politicians that imposing cutbacks in (albeit unsustainable) pension promises through NDC reforms will be used against them in the next election?

A central argument of this paper is that the causal forces are complex. While political constraints are ubiquitous, politicians in some countries are better positioned to create durable cross-party cartels in favor of NDC than others. The weight of other factors has differed across reform "waves" and regions. In many European Union (EU) countries, adoption of limited ASMs, advocated by European institutions, serves as a substitute for NDC reforms. These "boundary-straddling" reforms are easier for policy makers to understand, can be tailored to path-dependent policy inheritances, send clearer signals about expectations for longer working lives, and pose a lower risk of unexpected blame-generating, year-on-year nominal cuts in benefits as a result of ASMs being triggered. In developing and transitional economies, NDC-based reforms are often adopted with little buy-in or even understanding of NDC pensions by domestic elites, making them very vulnerable to reversal when problems arise, or elite preferences change.

2. Definitions and patterns

2.1. Background information

NDC pension systems are usually defined as having four characteristics (Holzmann and Palmer 2006b; Palmer 2006, 2012; Holzmann 2017). First, they operate on a pay-as-you-go (PAYG) basis, although they may have modest buffer funds to cover cyclical effects on liquidity. Second, benefits are based on lifetime earnings rather than earnings over a certain number of years; each additional year of contributions gives additional benefits. The retirement age is flexible, and benefits are adjusted to reflect a longer or shorter duration of anticipated payment. Finally, they contain automatic mechanisms to adjust benefits for changes in life expectancy and macroeconomic and demographic (including fertility and net migration) performance. Contribution rates are fixed.

Outcomes of pension reform processes are divided into two dimensions (Table 2.1). The rows contain different outcomes with respect to NDC pension reforms. Countries that adopted NDC early (Sweden and Italy) are labeled "Innovators." Countries that adopted

NDC later and/or with external technical assistance are called "Adapters." Countries that adopted NDC reforms and then either did not implement them or dropped them are called "Dropouts," while those that adopted some form of ASMs without a full NDC reform are labeled "Boundary Straddlers." Countries where NDC was considered but rejected or where NDC never reached the agenda and incremental reforms were adopted instead are labeled "Incrementalists." Because NDC and FDC pillars both have the objective of tightening the link between lifetime contributions and pension benefits (Góra 2001), the columns show outcomes with respect to adoption of FDC tiers.

Table 2.1: NDC policy-making outcomes in selected countries

Outcome	Countries without FDC pillars	Countries with FDC pillars
NDC Innovators		Italy (1995); Sweden (1991–1998)
NDC Adapters	Norway (2009)	Latvia (1996); Poland (1997–1998)
Boundary Straddlers		
Statutory retirement age linked to life expectancy	Cyprus; Denmark (2011); Finland (2015); Greece (2010); Italy (2010); Malta; Netherlands (2012); Portugal (2013)	Slovakia (2012)
Benefits linked to life expectancy	Finland (2005); France (2003); Portugal (2007); Spain (2011)	
Other/Multiple stabilizing mechanisms	Canada (1997) and Quebec (2011); Greece (2012); Germany (1997 and 2004); Spain (2013)	Lithuania (2016)
Dropouts	Kyrgyz Republic (1997); Mongolia (1999)	Russia (2002); Egypt (2010)
Incrementalists	Austria; Brazil; Japan; Slovenia	Hungary; Estonia

Source: European Commission 2018, 54.

Note: The year(s) of reform adoption is in brackets. Several years apply to incrementalists.

The patterns shown, while hardly startling, are nonetheless worth noting: Latin American countries generally adopted FDC reforms early, before NDC reforms were on the international reform agenda. A first NDC reform wave was confined to Western Europe (Sweden and Italy) and some postsocialist countries (Poland and Latvia); it occurred for the most part in the late 1990s. FDC-expanding reforms were often enacted simultaneously or in close temporal proximity with NDC reforms. A second wave of NDC reforms in former Soviet bloc countries occurred at the turn of the century, but these reforms proved more fragile; most of these NDC systems were not sustained. A third wave of "boundary-straddling" reforms that employ automatic stabilizing adjustments without a full-blown adoption of NDC took place since the early 2000s, especially in EU countries. However, neither NDC nor boundary-straddling reforms have had sustained takers outside Europe and the former Soviet bloc. In Latin America, for example, where the shortcomings of privatized FDC pensions led to much policy change in recent years, there has not been a rush to NDC as a substitute or complement. Understanding these patterns and the underlying political logics is the purpose of the rest of this paper.

2.2. Theoretical perspectives on NDC diffusion

To address the politics of diffusion of NDC, this paper employs the analytical framework developed by Kingdon (2002). Kingdon argues that for issues to reach and remain on the policy agenda, there must be a conjunction between at least two of three (and preferably all three) policy-making "streams"—problems, policy, and politics. These policy steams often operate quite separately from one another, with distinctive sets of actors and dynamics.

In the problem stream, the public and policy elites must perceive a problem to be both important and solvable; issues tend to get on the agenda after a "focusing event" such as a financial crisis. In the policy stream, there must be policy proposals that appear to be technically, financially, and politically feasible. Its proponents must have resources, skills, and communication strategies to connect their proposals to concrete concerns of policy makers, the public, and social actors and address their potential shortcomings. Skilled policy entrepreneurs often play a critical role in "selling" policy prescriptions that they have already developed to politicians. Finally, in the politics stream, changes in the public's policy priorities (often as a result of focusing events), changes in policy elites (often resulting from elections), and pressure from interest groups all influence which issues and proposals make it onto the agenda, and which remain on it or fall off. Path dependence matters for both the policy and politics streams: proposals that impose substantial costs on identifiable groups relative to the status quo are unlikely to remain on the policy agenda. In moving from agenda setting to policy adoption, the structure of political institutions – the existence of multiple veto points or supermajority requirements – affects the prospects for changes from the status quo.

Applying the framework to NDC reforms, in the problem stream a fiscal or economic crisis is likely to turn policy makers' attention to festering pension financing problems. Yet this is not a sufficient condition for adoption of NDC reforms, as they provide little immediate fiscal relief unless applied retroactively. Governments that also face substantial medium- and long-term financing problems in their public pension systems may consider structural pension reforms. However, restructuring through NDC is unlikely to make it to the agenda unless incremental refinancing and retrenchment options have been exhausted. So:

> *Hypothesis 1 (H1):* NDC*-based reforms are most likely to make it on the agenda during a fiscal or economic crisis, when (a) a short-term budget crisis is combined with (b) medium- and long-term pension funding problems, and (c) incremental pension refinancing and retrenchment initiatives have already been exhausted.*

In the policy stream, path dependence also influences the direction of pension reform (Bonoli and Palier 2007). As Pierson (1994, 1998) explains, any set of pension or other entitlements that are being disbursed according to some criterion generates interest groups that will fight against the elimination of such a distributive "status quo." Additionally, there is negativity bias – a term borrowed from cognitive psychology – in which people (in this case, voters) are more sensitive toward the imposition of losses than toward the granting of benefits. The problem of path dependence worsens the larger the pension system is and the more special benefits (e.g., rights to early retirement) it distributes to specific groups of beneficiaries who seek to retain those benefits.

A move to an NDC system is most likely from pension systems that are earnings-related, as it involves less redistribution (and hence fewer perceived losses) than transitions from systems such as universal flat-rate systems (Weaver 2010). Yet if the link is already fairly strong, the extra political capital needed to move to an NDC system may be perceived as wasted. Thus intermediate cases – defined benefit (DB) systems with weak contribution–benefit links – may be the likeliest candidates for adoption. Indeed, Italy, Latvia, and Poland were all cases of unsustainable single-pillar DB systems. Groups enjoying special pension privileges can be expected to fight to continue those privileges, however. Overall:

> *H2: NDC reforms are most likely to be adopted (a) in DB benefit systems, where (b) adequate historical payroll records exist, (c) pension benefits are fragmented across multiple benefit regimes, and (d) benefit–lifetime contribution linkages exist but are relatively weak.*

Also in the policy stream, multiple transnational actors have long been involved in advocating for particular approaches to public pension provision, from the International Labour Organization (ILO) and the International Social Security Association (ISSA) to the World Bank and the Organisation for Economic Co-operation and Development (Brooks 2005; Melo 2004; Teichman 2004; Ervik, Kildal, and Nilssen 2009; Stepan and Anderson 2014; Orenstein 2008). Policy experts from Chile were also involved in many of the Latin American privatization reforms, and Swedish experts in providing technical advice on NDC reforms. Transnational actors can participate in several stages of the pension reform process, including formulation and commitment building within government, coalition building to promote adoption of the proposal, and policy implementation (Orenstein 2005, 2008).

The views of the international community evolved over time, with the World Bank moving away from a focus on FDC reforms toward giving "enhanced focus on basic income provision for all vulnerable elderly" and increased recognition to the importance of initial conditions for correct policy design (Holzmann and Hinz 2005, 2; Gill, Packard, and Yermo

2004). In addition to the “norm-teaching” potential of transnational actors, there may also be coercion through conditionality: governments facing fiscal difficulties are likely to respond to the preferences of transnational actors if financial incentives are attached. But most research suggests that even where international financial institutions played a strong role in pressing for particular actions, the preferences of domestic elites and path dependency from prior pension policy choices were the dominant factors in individual governments’ decisions.

Earlier research suggests that several mechanisms may be at work in the transnational spread of pension reform models. Weyland’s research on the pattern of FDC pension diffusion in Latin America emphasizes cognitive limitations of domestic policy makers that “limits policymakers’ range of attention and restricts the options they consider,” (2005, 290). For example, the widespread knowledge of the Chilean model and its perceived successes help explain the widespread adoption of FDC on the continent. By contrast, NDC reforms were “for most of the 1990s not cognitively available in Latin America” (2005, 289–290). Moreover, lower-income countries adopting FDC reforms expected rewards in international status and investment associated with the privatization of their pension system (Brooks 2007). Thus for a number of mutually nonexclusive reasons, NDC failed to become the dominant pension reform option in any region. This may have inhibited its adoption because it lowered both its cognitive availability and perceived plausibility. While the concept underscoring NDC is as understandable, if not easier, to comprehend than that of some competing options on offer, its implementation is technically demanding. This may inhibit its “saleability” to domestic ministries, especially where the potential “buyer” sees its country’s situation and capacity as very different from that of earlier European adopters of NDC-based pension reforms.

EU policy recommendations and direct legislative intervention are another potential institutional influence on the design of EU member states’ pension systems, despite the absence of EU’s competences in the field. As a consequence of the sovereign debt crisis, the

EU's involvement in pension policy making has been stepped up through the European Semester, a tool for macroeconomic coordination (Guardiancich and Natali 2017), and tougher conditionality mechanisms, such as the financial assistance programs to several Southern and Eastern European member states.

The single firm recommendation by the European Commission was the adoption of a specific ASM – that is, linking retirement age to life expectancy (European Commission 2011).In addition, the Council of the EU added the possibility of linking life expectancy to either retirement age or pension benefits, thereby increasing the palette of available options and, hence, of political room for maneuver to individual member states (Guidi and Guardiancich 2018).

In practical terms, ASMs were adopted in a dozen EU countries (Table 2.1). Such adoptions, of course, do not solve the underlying financial problems of individual pension systems, generated, for example, by excessively generous benefits. At most, they may help to avoid a further decline in sustainability. Hence, the advantages of defined contributions have not been seized, as European reforms have fallen short of a full transition to NDC and long-term financial sustainability.

In contrast to the EU, the World Bank has strongly advocated for NDC pension reform, sponsored several volumes on the subject (Holzmann and Palmer 2006a; Holzmann, Palmer, and Robalino 2012, 2013), and included NDC reforms in advice to a number of countries. But NDC-based reforms never enjoyed the hegemonic position within World Bank advice giving that FDC reforms did in the 1990s.

Nor have the Organisation for Economic Co-operation and Development (OECD) or the ILO been strong advocates for NDC-based pension reforms. Neither organization recommends a particular type of pension system to be adopted by its members, and both often discuss one or another pension system characteristic: for instance, recently, the ILO (2017) engaged in the promotion of noncontributory basic pension schemes and the OECD (2017) suggested how to implement flexible retirement correctly. Yet both organizations have openly shown some aversion to NDC schemes. The ILO has been skeptical about defined contributions, as they shift the responsibility on the future beneficiary in the absence of explicit redistribution. Whitehouse (2010, 2012) claims that few benefits are to be reaped by implementing complex NDC reforms. Similarly, Cichon (1999, 87) argues that "most of [NDC's] potential financial and distributive effects could also be achieved by a classical, linear defined-benefit formula." NDC proponents disagree with both analyses, which focus only on the benefit calculation formula, and do not address other advantages of NDC in terms of fairness, efficiency, and fiscal sustainability.

Considering both potential "norm teaching" and coercive potential of transnational actors and the "availability heuristic":

> *H3: NDC reforms are most likely to be adopted when (a) there are close linkages between host country elites and policy experts advocating for NDC reforms, and (b) conditionality and/or promises of financial assistance make adoption of NDC reforms financially attractive. (c) Adoption of NDC reforms by other countries in the same region perceived as "peers" also increases the probability of their adoption. Adoption of NDC is* less *likely (d) when European Union bodies are the primary providers of advice and financing to their own member states in the wake of the global financial crisis.*

Most of the cross-national research on pension reform suggests that even countries under economic duress are not pure "policy takers"; the nature of the interaction between transnational and domestic actors is critical. In the politics steam, NDC proposals are unlikely to make it to the policy agenda unless they have at least one powerful domestic institutional advocate. In a survey-based study of pension reform processes, Chłoń and Mora (2003) found that Ministries of Labor generally played the most important role, followed by Ministries of Finance and international institutions, but substantial variation arose across countries and regions. Given the key roles of Ministries of Finance in most countries, their support is likely to be especially important. Hence:

> *H4: NDC-based reform is more likely to be adopted (a) if at least one prominent domestic agency in the host country supports it, especially (b) the Ministry of Finance.*

In the politics stream, even if NDC pension proposals make it to the agenda, they are unlikely to be adopted in political systems featuring multiple veto points (e.g., separation of powers, bicameral legislatures, and powerful courts that can overturn reform legislation) unless all veto points are controlled by actors with similar policy preferences. Thus:

> *H5: NDC-based reforms are most likely to be adopted in political systems with fewer veto points.*

Another set of potential hypotheses focuses on the specific nature of the pension reform process when NDC was considered. Because pension policy making has a high conflict potential, there are certainly risks that it will become bogged down in group conflict and end up in stalemate or incremental reform. In comparing the Latvian and Estonian pension reforms, for example, Tavits (2003) argued that a perceived need for a quick solution to a pressing problem in combination with lack of experience in policy reform is likely to lead to the wholesale adoption of a foreign model. Overall, then:

> *H6: NDC pension reforms are likely to be adopted (a) when a specially tailored process rather than the normal legislative process is used to develop the proposal, when (b) that process is closed rather than open in terms of the number and preferences of participants, and (c) its development is done on a fast single-round process rather than an extended, multiround one.*

The positions of social and political actors are an additional set of factors that are likely to influence the possibilities for shifts away from the policy status quo. FDC reforms are more likely to appeal to conservatives for their potential to lower government's role in pension provision and strengthen financial markets and hence economic growth, but they are still likely to prefer NDC over incremental adjustments to DB schemes. A shift toward NDC may split social democratic parties if it ends special privileges enjoyed by some of their members. And parties of all political persuasions may fear that current or future cutbacks triggered by NDC reforms will be used against them in future elections. Thus:

> *H7: In democratic systems, NDC pension reforms are (a) most likely to be adopted by governments dominated by technocrats or where broad cross-party "cartels" in favor of NDC are established before the reform is adopted, and (b) most likely to be sustained where a durable cross-party consensus can be maintained.*

Civil society actors may also influence the prospects for adoption of NDC reforms. The role of labor is likely to be especially important. Myles and Pierson (2001, 332) argued that "almost everywhere, [pension] reform has been backed either by the active or passive consent of organized labor." But labor confederations are very diverse in who is included and how they are structured. Some labor confederations may oppose NDC pensions if they believe that it disadvantages their members relative to other plausible alternatives (e.g., increased injection of general revenues), but they may acquiesce in an NDC reform if they get sufficient assurances for the long-term pension prospects for their members. High government transfers to the current pension scheme are likely to lower trade union support for a shift to NDC, as this shift may eventually lead to the elimination of the transfer. If NDC reforms are perceived to reduce disparities disadvantaging long-career union workers vis-à-vis other workers (e.g., in highly fragmented pension systems), they may win labor confederation support or at least acquiescence. And blue-collar unions may prefer NDC to some alternatives, notably linking the statutory retirement age to life expectancy, due to the traditional labor aversion to elimination of seniority pensions and, in general, to the compulsory extension of working lives. Overall, a plausible starting hypothesis is that:

H8: NDC-based reforms are unlikely to be adopted unless labor confederations are either politically marginal actors or support or acquiesce in their adoption.

These hypotheses, it should be noted, are complementary rather than mutually exclusive. They represent starting points for organizing expectations rather than arguments where there is a strong a priori sense that the hypotheses will be confirmed.

3. Innovators

3.1. Sweden

Sweden not only has the oldest NDC system, it also has the one whose origins are best documented (Anderson 2001; Marier 2008; Lundberg 2009; Loxbo 2007). By the late 1960s, Sweden had developed a three-tier pension system composed of a flat-rate universal tier financed by a combination of payroll contributions and general revenues, a contributory earnings-related tier, and an income-tested tier financed by general revenues. A long-term decline in financial sustainability of the flat-rate and contributory pension tiers buffeted the system after the 1960s. Other design flaws meant that many blue-collar workers made contributions for which they received no credits. An economic and financial crisis that hit in 1991 led to lower indexation and cuts in early pensions. The 1991 election brought a minority coalition government of center-right parties to power. The new Minister of Health and Social Affairs, Bo Könberg, sought the collaboration of the then-dominant Social Democratic Party both to win broad support in the Riksdag for the adoption of a long-term solution and to prevent it from becoming politicized in the next election, thus increasing its sustainability.

A multiparty group representing the four coalition partners and the Social Democrats (but not the far right and left) negotiated the agreement. Business, labor, as well as pensioners were excluded from direct participation in negotiations out of fear that compromise would become more difficult (Lundberg 2009). The working group developed the broad outlines of an agreement by early 1994, which included a shift to a dominant NDC tier, an expanded income-tested tier to protect workers with low earnings histories, and a modest mandatory FDC tier. The 1994 election brought the Social Democrats back into power in a minority government, and negotiations on details of the new system continued until 1998. Some renegotiation was necessitated by strong grassroots opposition in the blue-collar labor union confederation (Landsorganisationen, or LO) and in the Social Democratic Party (Loxbo 2007).

The reform has undergone only modest modifications since that time, such as measures to reduce the automatic balancing mechanism's volatility and changes in tax policy to minimize nominal benefit cuts (Weaver 2016). In recent years, concern has arisen over a number of issues, including increased rates of poverty among Swedish seniors.

The working group that negotiated the reform has also been continued. Indeed, commentators have focused on the five-party "cartel" that crossed ideological bloc boundaries as a critical factor in its success both in negotiating the Swedish reform and sustaining it (Weaver 2016; Lundberg 2009). A number of "commissions" were established in the past half-decade, investigating, for example, the possibility of increasing the minimum eligibility age for receipt of the income (NDC) and guarantee (income-tested) pension. But the need to develop a consensus within the working group to keep pensions out of partisan competition has meant that little change was made in the core NDC tier.

The Swedish case provides mixed support for this paper's hypotheses. Despite experiencing both a short-term crisis and longer-term funding problems (H1), the Swedish reform was the continuation of a long process that started in the mid-1980s, rather than a crisis decision (Marier 2008). Sweden had adequate payroll records, an unfragmented system, and strong linkages to lifetime contributions (H2). As an NDC "Innovator," Sweden had high domestic capacity, so no external help was needed (H3). The Swedish political system has few veto points (H5) and relied on a specially tailored, relatively insulated process (H6). This process was extended as a result of opposition within LO and the Social Democratic Parties. The reform straddled periods of center-right and Social Democratic governments, with cross-bloc support both in initiation and implementation (H7). The leadership of Sweden's blue-collar labor confederation endorsed the new system, while grassroots opposition to the reform was defeated in motions at LO Congresses (H8).

3.2. Italy

Italy is the archetypical example of the Southern European welfare state model (Ferrera 1996). It developed a segmented, inequitable, and wasteful single-pillar DB pension system, in dire need for reform. Yet due to the divided nature of the government coalitions with the *Democrazia Cristiana* acting as pivot, change proved impossible to achieve until the early 1990s.

Two factors contributed to this turn of events: (i) the downsizing of the public pillar followed the sudden change of political actors in the early 1990s and the tightening of external constraints; and (ii) the newly formed technocratic governments started inclusive concertation, while being less exposed to parliamentary control and/or electoral punishment (Ferrera and Jessoula 2007). Four reform rounds followed each other in the 1990s in Italy, named after Prime Ministers Amato (1992), Berlusconi (1994), Dini (1995), and Prodi (1997).

Their common denominator was that they were shaped by changes in internal and external conditions. Internally, corruption scandals engulfed the Italian parliament in the early 1990s, leading to the demise of most of the First Republic's parties. Externally, compliance with the Eurozone convergence criteria set by the Maastricht Treaty represented the strongest external constraint on Italian runaway public spending.

After the demise of the Berlusconi government (primarily due to protests against its pension reform initiative), his former Labor Minister Lamberto Dini became Prime Minister of a largely independent government. Given the spiraling debt of over 125 percent of GDP and ongoing speculative attacks, pension reforms were central to the program of this technocratic executive (Ferrera and Gualmini 2004).

Dini launched institutionalized tripartite concertation rounds on a new social pact that included changes in the pension system (Jessoula 2009). Three main issues were discussed: the separation of social insurance from social assistance, the introduction of a new calculation formula, and the revision of seniority pensions. The main employers' association, *Confindustria*, condemned the timid approach toward seniority pensions and did not sign the new pact. The unions proved to be more cooperative, due to the maturation of reform-minded fringes within the labor movement, the collaborative style of the Dini government, and concessions, including an extremely slow phasing in of the NDC formula, which *de facto* excluded older workers, the unions' main constituency (Ferrera and Jessoula 2007). On their behalf, the unions surveyed their members to secure grassroots acceptance and supplied the government with information on their preferences, thereby allowing a balancing of technical soundness with political feasibility (Ferrera and Jessoula 2007; Baccaro 2002).

The government signed a formal pact with the unions leading to the new pension law in August 1995. The NDC formula substantially increased the pension system's fiscal sustainability. Yet excessive haste generated several technical errors (Schøyen and Stamati 2013). The link between annuity divisors and life expectancy was to be updated by decree every 10 years instead of automatically. The divisors related to age groups rather than birth cohorts, reducing the incentives to remain active. The rate of return on contributions was linked to GDP growth while benefits were indexed to prices, hence, a non-NDC feature.

After the global financial crisis, the problem of financial unsustainability resurfaced. The imperfect NDC design attracted widespread criticism, including from its main authors (Gronchi and Nisticò 2006). The Fornero-Monti reform of 2011, which directly hit the interests of older workers, had the political advantages of external conditionality, imposed by the European Central Bank, and of being legislated by Mario Monti's technocratic government. In particular, the phasing-in period was radically shortened and most coefficients tied to life expectancy (Jessoula and Raitano 2017; Natali and Stamati 2014).

In sum, the inequitable pre-reform Italian pension system (H2) faced short-term emergencies mixed with longer-term financial unsustainability (H1), thereby bringing to the fore more audacious policy solutions. The external constraints were so formidable that the unions accepted collaboration with a technocratic government (H8). Despite enjoying room for maneuver (H5), the cabinet supported concertation, which resulted in a fast special legislative procedure (H6). Yet precisely due to excessive haste, further adjustments to the NDC system were required.

4. Adapters: Poland

Poland inherited from socialism an inequitable and expensive DB pension system that entered a deep crisis during the transformational recession (Guardiancich 2013). To make things worse, the newly democratized polity had an unstable party system and highly politicized trade unions (the conservative Solidarność pitched against the socialist successor All-Poland Alliance of Trade Unions, OPZZ), which made traditional policy making almost impracticable (Ost 2000; Rae 2008). The powerful public administration had a say in all matters related to social policy reform. Moreover, the Ministry of Finance and the Ministry of Labor were at loggerheads, with the former favoring radical restructuring and the latter just incremental adjustments.

The pension reforms in the mid-1990s were simply emergency policy making to rein in runaway spending. After the Constitutional Tribunal demanded proper restructuring (Hausner 2001), Poland embarked on the lengthiest legislative process in the region under a government led by the Democratic Left Alliance (SLD) in coalition with the Polish Peasants Party (PSL) (Guardiancich 2013; Müller 1999; Orenstein 2000, 2008).

Three peculiarities characterized the reform: the establishment of a Plenipotentiary for Pension Reform with a markedly technocratic policy-making approach, the active position of the government at the center of political and social dialogue, and the unbundling of reforms into two phases under two different executives.

Selling a partisan reform to the public was impossible due to intense left-right animosity. World Bank official Michał Rutkowski appealed for the creation of an independent team of experts to end an impasse between the Finance and Labor Ministers. Consequently, the Office of the Plenipotentiary for Social Security Reform was created and was chaired by Rutkowski. Most of its members were politically unaffiliated to more easily carry out the complex negotiations. Its three Plenipotentiaries (Andrzej Bączkowski, Jerzy Hausner, and Ewa Lewicka) were highly respected figures with ties to both center-left and center-right political camps.

With assistance from international organizations, the Office produced the reform package "Security through Diversity," which espoused a multipillar NDC-cum-FDC design. The United States Agency for International Development (USAID) financed the improvement of regulatory capacity. The Swedish International Development Agency supported the NDC pillar. The Phare Consensus program funded the reorganization of the Social Insurance Institute and ILO experts offered technical advice.

As a result of unbundling, the "easier," new second-pillar laws were legislated during the SLD–PSL government in 1996–1997, and the "difficult" ones (i.e., those regulating the public pillar and the Social Insurance Institution, ZUS) by the center-right coalition between Solidarity Electoral Action (AWS) and the Freedom Union (UW) in 1997–1998. The role of the Plenipotentiary in selling the reforms was crucial and required multiple concessions. Disability pensions and the heavily subsidized farmers' pension system were excluded from reforms to appease the rural electorate of PSL and SLD (Armeanu 2011). Tax-financed security provisions for uniformed services, prosecutors, and judges were maintained. Granting bridging pensions (early exit financed by employers) was crucial to convincing the miners. The retirement ages of women and men were not equalized to have the conservative AWS on board. Workers older than 50 were excluded from the NDC (and FDC) system, a necessary concession to the unions.

Most importantly, the Office skillfully employed the credit-claiming potential of systemic reforms and convinced the public that multiple objectives were obtainable at once (Office of the Plenipotentiary 1997, ii–iv). The reform's four policy aims were to institute a defined contribution, partially funded, multipillar pension system that guaranteed high replacement rates (Golinowska and Żukowski 2007).

In reality, Polish reformers and interest groups faced significant tradeoffs. Financial viability and economic competitiveness were key political objectives. The public was more interested in increased equity, conceived as the elimination of unfair redistribution (through the NDC pillar), and improved effectiveness (through the FDC one).

The public shared a "negative consensus" against the old DB schemes (Perek Bialas, Chłoń-Domińczak, and Ruzik 2002). By April 1997, vast majorities approved of the main elements of "Security through Diversity": accumulation in individual accounts, a tightened contribution–benefit link, and funding (Chłoń 2000). The updated concept of equity, encapsulated in the NDC design, gained acceptance. The replacement of the state by private funds increased public support and the use of multipillar terminology served as successful propaganda, thereby partly concealing the aim to lower benefits through defined contributions (Chłoń 2000; Golinowska and Żukowski 2007).

The implementation of reforms was far from flawless: the ZUS was ill-prepared for the new tasks, some (minor) technical difficulties arose with the NDC system, and the insufficiently precise older employment records led to recounts. None of these put into question the essence of the NDC pillar. Instead, the hot topics on the agenda became: (i) the low retirement age, which was equalized at 67 under the center-right Civic Platform (PO) government in 2012 (later reversed by the ultraconservative Law and Justice); and (ii) the budget deficits created by the FDC pillar and its underwhelming performance, which led to a partial dismantlement under the Premiership of Donald Tusk.

Most of this paper's hypotheses hold for Poland. In the problem and policy streams, adherence is almost total: the short- and long-term fiscal prospects and the Constitutional Tribunal's stop to incremental reforms show that in the mid-1990s the problem topped the political agenda (H1). The Polish DB pension system was fragmented and inequitable, and by excluding elderly workers most problems with patchy past employment records could be resolved (H2). The World Bank seconded a Pole as head of the well-endowed Plenipotentiary Office, which boosted the reform's credibility (H3). In the political stream, all major political players supported a thorough restructuring of the system (H4). (The actual legislation of the NDC pillar was dominated by parties of the right (H7)). Thus the reform was able to proceed despite the veto-rich political environment (H5). The special consultative procedure and the prestige and independence of the Plenipotentiaries (H6) compensated for the relative openness of the process. Finally, the unions never questioned the NDC design (H8), in part as the result of several generous quid pro quos.

5. Boundary straddlers: Germany

The German pension system is a classic one-tier social insurance system with a strong link between contributions and benefits. State subsidies played an important role in funding the German pension system in recent years, however. Germany's steep demographic decline put a strong strain on its pension system financing as contribution rates approached 20 percent, with projections in the late 1980s that they could reach 36 percent by 2030 (Schmähl 2007, 323).

Incremental refinancing and retrenchment preceded serious debate on restructuring. A relatively closed and depoliticized process of pension policy making involving employers and unions broke down in the mid-1990s. In 1997, the Christian Democratic Union (CDU) -led coalition under Helmut Kohl enacted a pension reform that included a “demographic factor” stabilizing mechanism. This was then suspended and cancelled after the Social Democrats (SPD) and Greens came to power following the 1998 election (Schulze and

Jochem 2007). By 2003, Chancellor Schröder admitted that eliminating the demographic factor had been a mistake.

Following the recommendation by a new government-appointed commission, a new "sustainability factor" was enacted in 2004. Unlike the demographic factor, the new ASM is based on the ratio of pension beneficiaries to contributors, and it includes changes in fertility rates, net migration, and labor force participation. It is not designed to adjust for all demographic change, but rather to hold contribution rates to 20 percent in 2020 and 22 percent in 2030, much less than would be required for full long-term balance (Rüb and Lamping 2010, 159). Moreover, in response to opposition from trade unions and the left wing of the SPD, the impact of the sustainability factor was capped: it could not cause pensions for workers with a full earnings history to fall below a 46 percent replacement rate. Since 2008, the German government has intervened several times on the ASM to prevent cuts from going into effect (Weaver 2016). Despite the reputation of the German point system, further reforms are probably needed. In May 2018, pursuant to the coalition agreement between Christian and social democrats, the German government established a commission to consider further reforms to enhance the system's long-term sustainability.

In the German case, both long-term demographic pressures (H1b) and short-term pension funding crises (H1a) were critical drivers of pension reform initiatives, and adoption of ASMs occurred after a long sequence of refinancing and retrenchment interventions (H1c). A transition to NDC was certainly technically feasible, given the DB structure (H2a) and the availability of payroll records (H2b), but the consolidated structure of the German pension system, with the exception of civil servants (H2c), and the relatively strong linkage to lifetime earnings (H2d) meant that relatively few gains in equality would occur from a shift to NDC. German domestic actors were aware of the NDC reform option, and the reform process was driven by domestic actors and interests rather than transnational ones (H3). But NDC lacked a powerful institutional champion within the government (H4a). Within the commission developing the 2004 reform proposals (H6), its trade union members opposed

ASMs (H8). Hence, the commission endorsed only the more limited sustainability factor rather than a full NDC approach. Governments of both right (first) and left (later) came to see some form of ASM as essential to increasing the affordability of the pension system (H7a), but there was only agreement on restraining the increase in contribution rates rather than freezing them.

6. Incrementalists: Slovenia

As in most postsocialist countries, pension reforms dominated the Slovenian political agenda for the past 25 years. The single-pillar nonfinancial defined benefit (NDB) system underwent two parametric reforms in 1992 and in 1999 that never really solved its fiscal sustainability problems (Stanovnik 2002). This was the result of a political system rife with veto points and powerful trade unions, especially the successor Association of Free Trade Unions of Slovenia (ZSSS), that have a quasi-pivotal role within the Economic and Social Council (Guardiancich 2012, 2013).

The center-left coalition between Borut Pahor's Social Democrats, the Democratic Party of Pensioners of Slovenia (DeSUS), and two other leftist parties elected in September 2008 had little appetite for reforms. The financial crisis changed all this. In December 2009, the EU started an excessive deficit procedure against Slovenia and urged Pahor's government to lower the budget deficit by 2013. Under increasing pressure from the financial markets, European institutions, and the OECD, Labor Minister Ivan Svetlik tabled several retrenchment measures and started preparing the continuation of the 1999 parametric reform.

For the first time, the NDC concept landed on the Slovenian political agenda. In March 2009, Svetlik nominated the Head steering committee of experts on pensions. The ensuing document "Modernization of the Pension System in the Republic of Slovenia" envisioned a radical two-step restructuring of the Slovenian pension system.

The first step (2011–2015) would introduce drastic parametric changes, such as higher retirement age (65 for all), Swiss indexation (half wages, half prices), elongation of the calculation period for the assessment base, and fewer credited periods for military service, parenthood, university studies, etc. Even more dramatic was the second step, applicable to all workers born after 1960, which envisioned a new multipillar design that included a zero pillar partly financed by the state budget, a first NDC pillar, a second, occupational supplementary pillar, and individual savings accounts. The proposal had several problems, including a failure to provide microeconomic simulations showing who would lose or gain from the new system. Hence, negotiations with the unions and employers were inconclusive.

Pahor was initially committed to achieving broad consensus: the government organized more than 50 meetings with the social partners and produced about 300 documents between March 2009 and September 2010. The government gave in on a number of points: most importantly, the 2010 Pension and Disability Insurance Act eliminated the second phase – i.e., the introduction of an NDC pillar – and settled for a nonnegligible parametric reform.

Nonetheless, the negotiations broke irremediably down because the social partners felt that their alternative proposals were not taken into account. Consequently, in September 2010, the government submitted the text to the National Assembly without either the consent of the unions or the support of DeSUS. After collecting enough signatures for a referendum, the ZSSS, various opposition conservative parties, DeSUS, and others constituted an "unholy alliance" to bring the pension reform down. After a faulty campaign, the government's defeat was memorable: 72.2 percent voted against (Stanovnik and Turk 2011, 16). Ultimately, Pahor suffered a vote of no confidence in September of the same year.

Slovenia shows that even if the problem and policy streams are aligned, political settings with many veto points (H5) and militant trade unions (H8) need skilled negotiators and overall awareness that reforms are necessary. It took a far worse deepening of the crisis during the following center-right government to pass a parametric reform, paradoxically similar to the one rejected a year earlier. It is possible that Pahor's government used the NDC proposal just as a Trojan horse to push for a substantial parametric reform and never intended to enact it.

7. Dropouts

7.1. Former Soviet Union and Central Asia

Most, if not all, Former Soviet Union countries inherited inequitable and unsustainable single-pillar NDB pension systems. The NDC concept was thus contemplated in a number of cases (the Kyrgyz Republic, Georgia, Russia plus Mongolia) to better align contributions and benefits, and bring fiscal costs under control. Additional common elements included the involvement of external experts, especially from the World Bank. Despite the – at least formal – adoption of NDC, none of those reforms survived intact.

How did NDC reforms get on the agenda in places like Mongolia? Three factors appear to have been important. First, in the late 1990s, FDC reforms were still the dominant model for transnational actors such as the World Bank and USAID. Concerns were raised in these organizations about the applicability of FDC reforms in countries that lacked basic financial market infrastructure and strong rule of law. But as one person involved in the Mongolian reform initiatives put it, "There was a persistent belief among many in the development community that somehow 'demand would generate supply' and that a captive pool of investment capital would somehow magically promote capital market development without putting future pensions at risk" (confidential personal communication). In Mongolia, NDC reforms emerged in part as a compromise between parametric reforms, perceived as insufficiently transformative, and FDC reform, which was seen as not immediately practical. Because NDC created notional accounts, it could be portrayed as paving the way for funded accounts later. Second, the experiences of Sweden, Latvia, and Poland meant that NDC was perceived as a plausible alternative, just as happened earlier with FDC reforms in Latin America. NDC models also enjoyed growing support from staff in the World Bank, bringing the Bank on board. Finally, “border-straddling” ASMs, such as linkages of retirement age to longevity, were just beginning to emerge and may not have been well known among the consultants advising the authorities.

The Mongolian reform was enacted by a Democratic Union Coalition government composed of the Mongolian National Democratic Party and the Mongolian Social Democratic Party elected in 1996. However, the former communist Mongolian People's Revolutionary Party, which returned to power in 2000, lacked commitment to the new system. Also, according to international observers, policy, political economy, and institutional weaknesses were present (World Bank 2012; Bogomolova 2014).

Policy shortcomings were substantial. The reforms went ahead despite the absence of the key precondition of having proper employment histories for post-1960 cohorts. Most important, the abrupt transition between pre- and post-1960 cohorts would have excessively penalized the latter, thereby forcing the authorities to prevent the scheme from being applied until 2033. Among political economy concerns, no “white paper” explained the rationale behind the NDC design choice, nor was there an independent research and vetting office to guide legislators on the technical aspects of any of the legislation. The reform was prepared by an external consulting team funded by USAID. Although some technical staff understood the reform at the time, it was never explained to senior policy makers. According to those involved, the consultants worked closely with members of parliament (MPs) sympathetic to the Democratic Union Coalition government, but little effort was put into building a broader consensus for reform. Operational challenges and confusion over the concept of NDC contributed to public skepticism.

Hence, the lessons from Mongolia are that both careful thinking about smooth transitions between cohorts and public information to ensure the reform’s credibility are needed.

The Russian reform reversal was born out of different causes, as serious design flaws were absent. Russia inherited from Soviet times an NDB system that by 1989 counted 44 million retirees and granted replacement rates between 60 and 100 percent of the average wage. Its positive attributes were awarding generous credits to women and early retirement provisions in case of sickness, injury, or child care leave. The negative attributes included the system's complexity, as over 250 categories existed for privileged eligibility (Cook 2007).

Population aging and the transition to a market economy, characterized by a sharp drop in contributors due to evasion and unemployment, rendered the system unsustainable. Until 1999, arrears of three to six months built up and replacement rates collapsed to 30–40 percent of average wages (Williamson, Howling, and Maroto 2006). The policy responses were piecemeal and inconclusive, such as periodically raising minimum pensions while simultaneously limiting their maximum level. The 1998 financial crisis precipitated the situation.

The arrival of Vladimir Putin in 1999 broke many of the stalemates that characterized Boris Yeltsin's weakened presidency (Cook 2007). Putin unified the government around a liberalized welfare state model and the Duma passed several social security reforms, including of pensions. In this liberalizing vein, a multipillar NDC-cum-FDC pension system design, advocated and supported by the World Bank, was chosen.

Putin appointed the National Soviet for Pension Reform, headed by Prime Minister Michael Kasiyanov, which included actors with very diverse views. The World Bank stepped in by offering a Social Protection Adjustment Loan worth some US$800 million. Even though the Bank was not directly involved in the negotiations, the National Soviet opted for the multipillar model presented by the Ministry of the Economy.

In the aftermath of the crisis, which witnessed growing deficits of the Pension Fund of Russia, some reform of the pension system was required (Eich, Gust, and Soto 2012). Yet in

2013, instead of intervening on the very low statutory and effective retirement ages, the authorities replaced the NDC scheme with a point system.

The precise motives for replacing the NDC with a points formula in the Russian Federation are unknown. One potential motive, compatible with this paper's framework, may have been to generate fiscal savings by squeezing the pension replacement rates more than under the NDC scheme and using less transparent tools under the point system. With a points formula based on discretionary indexation patterns, the government can modify the expenditures according to fiscal constraints regardless of their impact on beneficiaries. The points formula does not automatically adjust for changes in the contribution rate or lengthening life expectancy. For a government that plans to reduce the contribution rate and hesitates to raise the retirement age, points may provide useful room for maneuver. Similarly, exceptionally high late retirement bonuses, granted through additional points, would have to be explicitly contributed for in the NDC system. Finally, points may have been a more attractive framework in 2016, when second-pillar members were allowed to opt back to the PAYG system, with bonuses awarded for such a decision.

In sum, the political economy of the adoption of NDC in Russia neatly fits within this paper's theoretical framework. Russia inherited a fragmented, unsustainable PAYG-DB system (H2) that could not survive the 1998 financial crisis (H1). The insulated reform process (H5 and H6), supported by the World Bank (H3), within a political environment that wanted to show its commitment to "world society" (H4), was conducive to the conversion to NDC-cum-FDC. The political situation, however, changed dramatically in a matter of years. The very effects of the NDC reform clashed with the Putin regime's immediate needs. In fact, all the arguments in favor of the introduction of NDC schemes in 2006 – transparency, automatic adjustment, and insulation from political discretion – may have been critical political liabilities in 2013.

7.2. Egypt

The single-pillar Egyptian PAYG-DB pension system had obvious shortcomings, including undercoverage, high rates of evasion, unfairness, fiscal unsustainability, and poor management. Treasury subsidies amounted to 35 percent of total pensions paid in 2009 (Maait and Demarco 2012, 161). In 2004, a window of opportunity opened as a cabinet reshuffle brought in a group of ministers with strong credentials as reputed entrepreneurs. Egypt embarked on an ambitious wave of reforms, including of the pension system.

Between 2005 and 2010, the Ministry of Finance with the World Bank's technical assistance prepared a comprehensive pension system overhaul, whose multipillar architecture included a NDC-cum-FDC pillar. The team operated within a rather closed environment, thereby excluding a wider spectrum of actors, most notably the National Social Insurance Authority. The phase-in was expected to be very slow, since participants in the current DB system could not constitutionally be compelled to switch to the new system (Maait and Demarco 2012). The new 135/2010 pension law, passed in May 2010, was a paramount achievement and sign of strength of the Finance Ministry's team, which took part in multiple public debates, including with MPs. However, implementation of the new pension system required executive regulations, which had not been passed at the time of the Arab Spring (or Egyptian Revolution) of January 2011, and which resulted in the resignation of former president Hosni Moubarak and his cabinet.

A political impasse followed the first months of the revolution, and most economic transformational projects were called to a long halt, including the pension reform. The election of Mohamed Morsi and the Muslim Brotherhood in June 2012 reversed several of these projects, and during the short life of this government, pension law 135/2010 was cancelled. Several reasons may be credited for such decision. Although the Finance Ministry steered the reform process, the World Bank's strong involvement led to a public perception that the process was being driven by an international financial institution long viewed with suspicion in Egypt (Hanieh 2015). In 2011, key decision makers shared the view that the reform was insufficiently domestically owned. If the exclusion from discussions of the technical staff of the National Social Insurance Authority was instrumental to push for more radical solutions, it was detrimental in the long term. Soon after the revolution, pension policy was shifted to the Ministry of Social Solidarity, whose views were aligned with those of the National Social Insurance Authority. Despite communication efforts, the reform did not achieve wide understanding among the population, thereby undermining government efforts to gain strong public support. Most crucial, the delay in issuing executive regulations was a factor that enabled the decision to be reversed: due to low implementation capacity, the new pension system was only a law but was not yet operational at the time of the revolution.

After President Morsi was deposed, the current government was left with the legacy of a necessary but postponed reform. As of early 2018, the executive was considering a parametric reform, without endorsing the previous NDC design. It is also very unlikely that FDC schemes will be part of this reform, except on a voluntary basis and as a small complementary tier.

8. Conclusions and prospects for NDC systems

This paper began with the puzzle of why NDC-based pension reforms were not broadly adopted after a promising start in the 1990s. The analysis herein suggests a number of conclusions about (i) the patterns of diffusion of NDC pension reforms, (ii) the conditions that facilitate or impede their adoption, (iii) the prospects for further diffusion, and (iv) issues of sustainability of NDC-based reforms already in place.

8.1. Patterns of diffusion

The diffusion of NDC systems is notable for both its limited geographic scope and timing. Three distinct waves of NDC and “boundary-straddling” pension reforms can be seen over time. The first wave was confined to Western and Central Europe in the mid-to-late 1990s. “Innovator” countries (Sweden and Italy) developed the NDC reform concept and were quickly followed by "Adapters" (Poland and Latvia). A second wave in former Soviet bloc countries occurred around the turn of the century, but these proved fragile. A third wave of stabilizing, boundary-straddling reforms in the EU countries occurred mostly during and after the financial crisis, but they all fell short of full NDC adoption. A few other countries, notably Norway and Egypt, adopted NDC reforms, but do not fit neatly into these waves.

8.2. Facilitating and impeding conditions for NDC-based reforms

The multicase analysis in this paper suggests no clear set of necessary and sufficient conditions that are likely to lead either to the adoption and sustaining of an NDC pension system or to its rejection, abandonment, or weakening. The forces shaping pension reform politics, the variations in existing pension systems, and institutional rules governing pension reform are simply too complex to be governed by a few propositions. But the cases do suggest that a number of probabilistic relationships affect pension reforms. More importantly, the cases suggest, consistent with Kingdon's analysis of multiple policy streams, that it is not individual causal relationships that matter, but rather connections among causal forces across the problem, policy, and political streams that "open windows" for NDC reforms or other types of pension reforms, including ASMs.

In the problem stream, long-term pension funding problems get pension reform issues on the broad discussion agenda among policy experts and government ministries (H1b), but given the political sensitivity of pension reform, it is generally a short-term fiscal crisis that moves pension reform near the top of politicians' priorities (H1a). While a shift to restructuring is generally associated with the exhaustion of refinancing and retrenchment reforms (H1c), the cases of Southern European countries under pressure from the Troika suggest that "exhausted" is an elastic concept: reforms that might not have been politically acceptable in the absence of that pressure become viable. Dependence on external financing to resolve a fiscal crisis can add pressure (H3b). But such pressure was absent in several cases, notably Sweden and Norway. And even where that pressure exists, it only pushes countries in a particular reform direction if the external funder is strongly supportive of NDC. Moreover, the “third wave” of cases in Europe suggest that when short- and medium-term fiscal concerns are dominant, parametric reforms and ASMs that fall short of full NDC are likely to be more attractive than NDC to policy makers and the funders on whom they depend.

In the policy stream, NDC systems are most likely to emerge in DB systems (H2a), but adequate payroll records are not a necessary condition for their adoption (H2b), as the experience of the former socialist countries demonstrates. Similarly, NDC has emerged in both unified (Sweden) and highly fragmented (Italy) pension regimes (H2c), as well as in those systems where the linkage to lifetime benefits was both moderate and weak (H2d).

Transnational policy entrepreneurs and external financing are important in determining whether NDC reforms emerge as options to be seriously considered in some countries (H3a). In the first wave, NDC emerged domestically among policy expert communities in Sweden and Italy. In Poland – where national experts played a role – and Latvia, but less so in Norway, experts associated with Sweden and the World Bank helped in not just convincing domestic elites to seriously consider NDC, but also in designing, financing, and implementing the reforms. The second wave of reforms, in former Soviet bloc countries with limited domestic expertise, drew on expertise from the World Bank and national and international aid agencies. With insufficient political stability, weak domestic buy-in, and limited understanding of NDC, these experiments proved fragile. In the third round of (boundary-straddling) reforms, it was largely European actors plus the International Monetary Fund that were responsible for setting financial conditions; organizations such as the OECD also provided advice. These organizations generally favored tailored incremental reforms with immediate impact coupled with boundary-straddling ASMs rather than adoption of NDC (H3d). Dissemination of the NDC paradigm was weak in part because no international organization has to date taken it on as a core and consistent policy recommendation.

Another potential influence on reform choice within the policy stream is whether a particular reform becomes a dominant reform among "peer" countries in a region, triggering the "availability heuristic" (H3c). While definitive evidence is lacking, the cases here suggest that an "endorsement heuristic" may also be at work; i.e., whether a policy option has been widely adopted in the region (and thus won implicit endorsement from others), and is widely perceived to produce desirable results. As noted above, NDC reforms never became the dominant reform paradigm in any region. Thus NDC reforms incurred multiple disadvantages from their perceived rigidity, the availability of plausible alternatives to achieve fiscal objectives in developed countries, their virtual absence in most regions of the world (East and Southeast Asia, Latin America, and Africa), and their record of fragility in several former socialist countries.

Until a more fine-grained analysis of cases of adoption and nonadoption can be conducted, only provisional conclusions for the political stream are possible from the cases. NDC systems have been adopted in countries with both high (Sweden) and low (Latvia) domestic institutional expertise in pension policy, but the latter cases were accompanied by strong external support. It has generally occurred in relatively closed planning processes, but those were quite lengthy in some cases (both Sweden and Norway). Rather than reflecting the preferences of right party governments, they have generally been enacted by technocratic governments (Italy) or with multiparty consensus (Poland, Norway, and Sweden) (H7). And while organized labor has usually not been an enthusiastic proponent of NDC reforms, it has mostly acquiesced when offered sufficient side payments (Italy and Poland). In other cases, unions have been too weak to resist (H8).

Overall, a key lesson about the politics stream is that active selling of NDC reforms to the public is less important to their successful enactment than achieving a durable near-consensus among political and economic elites (H6 and H7). The reason for this almost certainly lies in the loss-aversion and differential attention to negative information of voters (Eckles and Schaffner 2010) and the blame-avoiding and blame-generating instincts of politicians. Elements of NDC such as "quasi-ownership of NDC balances," flexible retirement ages, and fiscal sustainability of the pension system in the long run may be attractive to voters (Bodor and Rutkowski 2012), but their understanding of and attentiveness to these factors is likely to be low. Moreover, framings of NDC by opponents that emphasize potential losses to voters, such as "brakes" and automatic balancing mechanisms, are likely to be more powerful. NDC schemes often achieve financial sustainability in large part through reductions in replacement rates. Although policy makers try to avoid this politically toxic narrative, opposition parties, unions, and representatives of the elderly very often seize upon the adequacy of benefits. There is no way to square this circle; reforms that seek to achieve financial sustainability will come at the expense of lower benefits, longer work lives, and/or more costly contributions (Barr 2012).

The political problem, in short, is not just that politicians are myopic (though they often are, as the case of Russia neatly shows), but that it is difficult to create a single reform option that all groups in society will see as preferable to the status quo and to all plausible alternatives. Thus in democratic countries, keeping NDC reform proposals away from electoral competition and from the temptation of opposition parties to generate blame against potential losses through a cartel of major parties has been critical to their adoption and maintenance (Weaver 2018).

8.3. Prospects for further diffusion of NDC reforms

Several issues concerning policy considerations and political dynamics emerge as central to the prospects for additional diffusion of NDC pension systems. A first issue is whether NDC systems are perceived to produce the benefits their advocates claim, without offsetting costs and risks. Here, as von Nordheim (2012, 122) noted, "The devil is in the details," and not just the details of the NDC scheme, but other pension and social assistance tiers serving the elderly. If workers are to lengthen their working lives, both the expectation of longer work and the costs of not working longer on retirement incomes must be communicated effectively to the public (Sundén 2012), as was attempted, for example, in Sweden and Italy through so-called “Orange Envelopes.” Given the public’s “willful inattentiveness” to retirement issues, notions of a flexible retirement age embedded in NDC are less likely to be effective in changing retirement behavior than signals sent by “boundary-straddling” mechanisms such as linking retirement age to life expectancy.

A second issue concerns whether the advantages of a well-designed NDC system can be produced through alternative designs or incremental reform measures. While few countries have adopted full-blown NDC systems, core principles of NDC have entered into recent pension policy discourse. Several countries have moved toward increasing the number of years of earnings that are included in calculating pension benefits and otherwise increasing incentives for extending working lives. ASMs have also been incorporated in national policy in countries like Germany, without moving fully to NDC. Only the notion of imputed interest on prior contributions among core NDC principles seems to have been largely bypassed. Many of these reforms straddle the boundaries between “retrenchment” and “restructuring” reforms, as outlined above.

Of course, proponents of NDC systems argue that incremental and boundary-straddling reforms inadequately address both the microeconomic issues confronting DB pension systems and their long-term financial sustainability. At the macro level, financial sustainability of a pension system is not solved by simply introducing an ASM that links either benefits or the retirement age to life expectancy: these expedients are likely only to “limit the damage.” As for the micro advantages of efficiency, adequacy, and fairness, NDC is not without problems of its own. The lifetime contribution focus of the NDC approach to pension reform fits reasonably well in a system like Sweden’s, where something close to full working careers for both men and women is facilitated by social supports such as generous child care, and credits are given for some noncontributory periods (e.g., parental leave). But benefit adequacy requires that NDC designs must be complemented with a zero pillar to alleviate poverty and explicit social policy components to cover those earnings gaps that apply to people with interrupted working careers. The Swedes and Norwegians in their guarantee pension programs have recognized that mandatory credit splitting between married couples under NDC is insufficient to tackle the difficulties arising from inadequate lifetime earnings, primarily of women. In countries where social supports are lacking, a robust zero pillar will be even more necessary. Of course, the fact that the problem of incomplete contributory histories is very visible in NDC systems does not mean that the alternatives do not have similar shortcomings.

A third issue in the policy stream affecting further diffusion concerns the “availability and endorsement heuristics.” As noted above, NDC never became the dominant reform option in any region, and it is unlikely that this will occur in the near future, as expert opinion has shifted away from one-size-fits-all pension reforms. Indeed, the dominant notion today, as Börsch-Supan (2012) expressed it, is that “There is no such thing as an ‘optimal pension reform,’ since current systems vary significantly in terms of the causes of future problems, and no single reform element suffices quantitatively to offset population aging. Country-specific policy mixes are the appropriate solution under these circumstances.” In this context, the more prominent role that NDC design might play in national pension policy discussions is that of a yardstick against which to measure the available solutions.

A fourth policy issue concerning further diffusion of NDC reforms is whether most of the potential adopters of NDC-based reforms in middle- and lower-income countries have the information and technical expertise needed to successfully design and operate an NDC system. In countries with limited technical capacity, it cannot be assumed that data on GDP or employment growth, let alone projections of life expectancy, will be free from contestation when public benefits and scarce budget dollars are at stake. Any attempt at implementing NDC pension systems should be accompanied by an adequate training plan for policy makers and administrators, as well as widespread public information campaigns.

Political constraints are also likely to limit the further diffusion of NDC reforms. A pension reform that will last to the “next Ice Age” may not have a strong intrinsic attraction for pragmatic politicians (and those occasionally profiting from benefit clientelism). Reforms that do not provide immediate budgetary relief will not either when there is immediate pressure from creditors and international financial institutions to reduce spending. The scant opportunities for program control, and the potential that NDC systems could produce “blind-siding” blame from triggering of an ASM that could be avoided in a system with more discretion, may lead politicians to believe that these risks outweigh any benefits of being “lashed to the mast” of automatic adjustments. The sensitivity of Swedish and German politicians to the potential political fallout from stabilizing mechanisms when they were triggered suggests that such triggers need to be designed so as to minimize backlash.

The record so far suggests, in short, that NDC-based reforms are likely to remain an important option – perhaps even a key benchmark – for pension reformers in the near future, but NDC is unlikely to become the dominant reform option in the near or medium term so long as it lacks strong and consistent backing from a powerful international actor like the World Bank or the OECD and is not the dominant reform in any region. Rather, what is witnessed is a piecemeal and incremental adoption of core NDC principles that are gradually bringing many PAYG-DB schemes closer to this “benchmark.”

8.4. Sustainability of NDC reforms

A final question is whether NDC systems are durable and resilient to social and political challenges once they are adopted. Here the picture is decidedly mixed. In the European Economic Area, NDC reforms have been sustained with modest revisions, especially when political elites are able to keep them out of electoral contestation (H7b). But while only limited changes have been made in Sweden under electoral pressure, countries such as Italy considered intrusive re-reforms, such as the reintroduction of seniority pensions.

Outside of Western Europe, the picture for resilience is less clear. While NDC-based reforms in Poland and Latvia have survived basically intact, other former Soviet bloc countries and Egypt have either never had or just claimed they had introduced NDC reforms, only to backtrack at the most convenient occasion. Outside Europe, the inconsistency in the implementation of NDC can be attributed to political instability (both political unrest and governing party turnover) and to low public and elite understanding and even lower political commitment to the reforms. The bottom line on NDC mechanisms appears to be that they have the potential to add significantly to the resilience of government efforts to improve pension system sustainability, but are only as strong as the broader political system's capacity to resist popular pressures and politicians' short-term electoral fears.

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ABSTRACT

Nonfinancial defined contribution (NDC) schemes offer governments desirable properties in terms of efficiency, fairness, and financial sustainability and an opportunity to deflect the blame for pension cuts. Yet adoptions of NDC schemes largely ground to a halt and several countries retreated from NDC implementation after legislation. Lack of support from powerful international actors is partly to blame, as is the perceived rigidity of NDC in reducing room for policy maneuver. Correct implementation requires substantial administrative capacity. Less demanding automatic stabilizing mechanisms undercut the appeal of NDC in the European Union. Thus, while being an important option for policy makers and a benchmark against which to measure alternative reforms, NDC is unlikely to become the dominant pension design choice anytime soon.

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