What Pariahs can Teach Us: The Political Economy of Adopting and Abolishing Private Pensions

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Abstract: This paper argues that the recent reversals in pension privatization hold important lessons for the political economy of pension reform. While international policy diffusion accelerated the adoption of private systems, pushing diffusion in some cases even too far, domestic factors were crucial in explaining the reversals. In particular, the interaction between problem pressure in the form of high public debt, weak financial markets, and politically unconstrained governments can explain when and why countries renationalize their pension systems. The article uses a mixed methods design: a pooled cross-section analysis shows the role of the domestic political economy for the long-run stability of privatization and serves as a tool for case selection; a qualitative controlled comparison between four countries gives evidence when and why governments re-nationalize pension systems.

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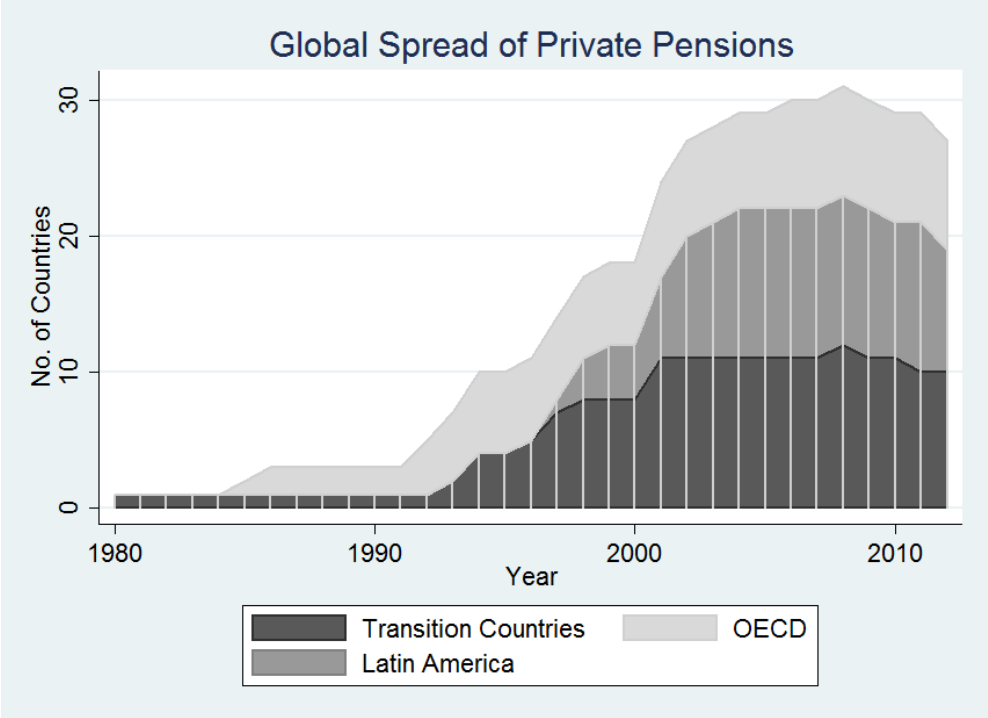
1. Introduction: The Implications of Recent Reversals

In developing countries and advanced economies alike public pensions are often the biggest type of expenditures for social protection. The rise of private pensions across the world has therefore received a lot of attention from practitioners and academics alike.[1] Ever since Chile – a 'political pariah' of its time – privatized its public pension system in 1981, pension privatization has also become a standard example of international policy diffusion. If there is disagreement it is about why and how diffusion happened rather than whether it happened.[2] Initially, private pensions were supposed to enhance growth, minimize political risks and reduce budget deficits in the long run, while at the same time efficiently providing income for the elderly. In the 1990s and 2000s, financial lobbies, international organizations and epistemological communities argued heavily for their introduction.[3] In countries in which the domestic political constellation was permissive, and the costs of transition not too high, private pension systems were introduced.[4]

Most of these approaches assume that the privatization of pensions is irreversible. Adoption is equated with a paradigmatic and lasting political change. Yet, recent events show that diffusion might have gone too far. Some countries have become new pariahs, by fully or partially reversing the privatization of pension systems. Figure 1 gives a stylized impression of the long increase and sudden reversal of pension privatization. At least four countries – Argentina, Bolivia, Hungary, and Kazakhstan – have implemented major reversals, abolishing the private scheme, and nationalizing a large part of the accumulated assets. Below this surface of complete reversals, other countries followed with partial reforms. For instance, a large group of countries has partly or temporarily re-channeled contributions from the private to the public pillar.[5]

Figure 1: The global spread and recent dip in privatizing pensions



Source: own graph, see section 3 for details.

Even if drastic reversals are still relatively rare, they tell an important story: the stability of political outcomes in pension politics cannot be taken for granted, especially not in developing countries. The informal handbook for the diffusion of private pension schemes, the World Bank's "Averting the Old Age Crisis"[6], was an attempt to reconcile positive and normative tradeoffs in a mixed system in which public pensions should avoid excessive inequities, whereas private pensions should unleash growth and productivity. The multi-pillar system should lead to fewer political risks, smaller fiscal deficits and more growth. The reversals are strong reminders that these promises have not materialized, at least not everywhere.[7]

A particularly striking example is the idea that the privatization of pensions should spur growth of capital markets. To the contrary, we will see that rather than a consequence of pension reform, capital markets are a political and economic prerequisite for private pension systems. Where these prerequisites are missing governments often did not even try to introduce private pension systems. Where, however, international diffusion led governments to introduce these systems, the introduction was done on shaky grounds and in several cases has led to severe backlashes.

In particular, I will show that the dangerous combination of high levels of debt with weak financial markets provided a new type of political risk which, under certain circumstances, gives governments incentives to re-nationalize the private pension scheme. If governments did not manage to bring public

debt down, but assets in private pension schemes started accumulating they became attractive sources of public revenue. Where the political system allowed for strong majorities such as in Hungary, the result was a full reversal, i.e. the seizing all the assets; where political competition was stronger, such as in the Slovak Republic, governments could not get hold of the assets, but made changes at the margin, such as re-diverting contributions.

Hence, the recent reversals of pension privatization hold broader lessons in store. We see that diffusion can 'over-shoot' and make developing countries adopt new policies even if they don't dispose of the structural prerequisites to do so. In the short run, pension privatization was clearly also about international policy diffusion, policy learning and in some cases even about overselling. In the long run, however, political and economic fundamentals may reverse some of this 'overshooting', especially in developing countries which lack the basis for these changes. The final outcome in these cases might be harmful both economically and politically.

In the following, I first take stock of the scholarly literature explaining the rise of privatized pension. In section three, I will look at recent cases of reversing privatization and how these reversals square with the scholarly literature. From this I develop the argument that in cases in which adoption of private pensions did not have the political and economic prerequisites reversals are likely. To show this I will use a mixed-methods design. In the fourth section, I will explore the determinants of the long-run stability of private pension systems for a sample of around 60 countries over more than 30 years. The results show that private pension systems are more likely in countries with lower public debt, stronger capital markets and higher exposure to diffusion factors. In section five, I compare four countries to discover the causal mechanisms underlying the results of the quantitative analysis. The analysis matches cases of stability with cases of reversals, using the quantitative results as tool for case selection. The different fate of the Chilean and Hungarian systems shows the relevance of debt and mature financial markets for the stability of the systems. A comparison of Uruguay and the Slovak Republic reveals a similar difference, but on a more incremental level, as the smaller electoral margins only gave rise to smaller reversals in the Slovak case. The final section concludes with broader lessons for the diffusion of pension reforms.

2. The pendulum swings 'right': How to explain the trend towards privatization

The introduction of private pensions can mean several things. Some countries such as Chile completely abolished the public system, whereas Argentina or Hungary put in place the new system in addition to the public scheme. The private pension schemes can differ in several ways, but they have in common that they are based on funded, defined-contribution accounts. For some authors 'private pensions' mean individual as opposed to collective accounts, for others mandatory as opposed to voluntary systems. The World Bank defines private pension systems as 'mandatory personal retirement accounts' (Holzmann 2012). According to this definition the total number of countries having (partly) shifted to a private pension scheme is 38.[8]

What makes countries introduce private pension schemes? Early economic contributions focused on three main advantages of privatization as drivers for reform: First, whereas public systems were exposed to the danger of politicians intervening, and, in the worst of all cases, depleting the assets of the public system, a private system should be immune against political risk. Instead private systems were organized by the market, and exposed to market risks only. Second, public systems were argued to lead to economic disincentives and create large public deficits. A private, individual system, in turn, would transfer the decision of how much to save to the individual and reduce public deficits. Third, this correspondence should also enhance savings and, in more general, efficiency. More savings should lead to a deepening of financial markets, and this should eventually lead to more growth.

This early optimism was soon questioned along all three fronts: private pensions can lead to political risks; deficits may increase; growth may be sluggish. As the actual performance of private pensions seems an ambivalent motive for the privatization of pensions, political scientists have looked for other explanations. On the side of domestic politics, John Myles and Paul Pierson[9] have famously argued that legacies play a strong role, so that mature systems would introduce private pensions more reluctantly.[10] Another form of restrictions comes through political institutions affecting the likelihood of reforms.[11] Voting systems and the polarization or distribution of voters will affect the likelihood of reform. Demographic change may tip the political balance against a parametric reform.[12] In contrast, special-interest groups push for privatization. Financial-service companies gain from a privatization and should lobby for its introduction.[13] Politicians who want to attract foreign capital and to spur financial markets will support their cause.[14] According to this logic pension reform should precede the growth of capital and financial markets.

Other authors explain the rise of private pensions with international politics. Some authors found evidence for a logic of imposition: pension privatization was often part of conditionality imposed by the World Bank and the International Monetary Fund.[15] Adoption of private pensions can also be the result of competition or policy learning. Sarah Brooks, for instance, shows that the spread of private pensions is clearly nonlinear and contingent on the number of adopters in a region.[16] Some authors put more emphasize on 'softer' forms of learning and interaction such as learning or networking. Michael Orenstein puts emphasis on the World Bank's leading role as a policy entrepreneur.[17] Kurt Weyland argues that the patterns of diffusion are not compatible with any rational form of learning, but rather point to processes of bounded and biased forms of learning.[18] In small circles of technocrats cognitive biases can arise, and people may anchor their belief around an often arbitrary or erroneous piece of information. Finally, newer contributions, highlight the conditioning of diffusion effects on the domestic political context and the political alternatives such as other types of pension reforms.[19]

3. The pendulum swings 'left': the theoretical implications of recent reversals

In 2008, the Argentine government decided to fully reverse pension privatization, the de facto abolition of the private pension scheme. Hungary and Bolivia followed in 2010, Kazakhstan in 2012 and Poland (in

2014) and Russia seem on the same path. Other countries introduced partial reversals, particularly after the global financial crisis. Poland (in 2011) and Estonia, for instance, (temporarily) channeled the lion's share of contribution back into the public system.[20] Finally, those countries that were only in the process of implementing a reform, such as Bulgaria and Romania, put the transition on halt. Even in cases where private pensions where still introduced such as in the Czech Republic, the reform was quickly withdrawn.[21]

How do the theories mentioned above cope with this new information – the reversibility of reforms and the partial 'unlearning', breaking away from the crowd? Much of the comparative and international literature seems to have taken the irreversibility for granted: they have equated reforms with lasting political change. As a consequence, they are stronger in explaining why and where the privatization happens then how long it lasts. Take the example of the diffusion literature. Why do these countries become pariahs and decide to break away? The reversibility implies that (as figure 1 shows) that policy areas may not always follow the iconic S-shape that is commonly and sometimes erroneously equated with diffusion.[22] More substantively, reversibility has consequences for the explanatory power of some of the causal mechanisms of diffusion. For instance, the literature argued that the international financial institutions can coax countries into reforms with the help of conditional loans. Yet, both Argentina and Hungary have used the money raised by nationalizing pensions to keep the international financial institutions at bay. Hence, the political leverage of international financial institution seems to hold only up to a limit. Beyond this limit, the reversal makes countries less dependent from conditional loans.

How else have these reversals been explained? Some diffusion arguments also work for reversals. Orenstein points out that the World Bank began to withdraw from privatization in the early 2000s.[23] Nonetheless, the reversals often took place to make a statement against the international financial institutions. Approaches dealing with the socialization of elites also have limits. Take the example of Poland, where practically the same political parties, and the same individuals first pushed for the introduction of private pensions in the 1990s and, more recently, for the partial reversal.[24] Reversals may also be the consequence of (non-)rational learning, for instance if politicians learn about the negative consequences. However, if cognitive biases and availability heuristics inform politicians' choices, why do countries then break away? Why would the availability heuristics of Chilean technocrats have changed dramatically in 1981; or those of Hungarian politicians in 2010?

Hence the focus of the question needs to shift from why countries adopt privatized pensions to why some countries run privatized pensions in the long-run whereas others re-nationalize them relatively quickly. In a nutshell it seems that while international policy diffusion goes a long way in explaining the rapid adoptions of private pension systems across the world, the domestic political economy pushed back in those cases where the context for privatization was not difficult. Arguably the best example is the idea that privatization would stimulate the growth of capital markets. However, for economic and, especially for political reasons capital markets are an important precondition for pension reforms. Financial market companies are important beneficiaries of private pension systems and lobby heavily for both the introduction and maintenance of private pension schemes.

Other economic arguments for the privatization of pensions can also be turned 'upside down'. Whereas private pensions were supposed to decrease budgetary pressure, the discussion about transition costs has shown that governments often increased fiscal pressures in the transitory phase. This is the famous problem of double financing pension reforms. As a consequence the reversals reinstate an older finding in the literature: Short-term costs can outweigh (uncertain) long-term gains. Note that debt-ridden governments may arrive in two ways at this result. Either the government anticipates the problem and does not privatize its pension system or it implements a privatization, but takes it back as the pressure from public debt is too high. In either case, the prediction is that the country will not run a private pension system in the long run.

-Finally, the combination of (weak) capital markets and (high) public debt might have important political consequences. The privatization of pensions did not reduce the political risk of the state arbitrarily interfering in (private) pensions. Evidence from OECD countries shows that governments have heavily subsidized, 'protected' and rescued private pension systems.[25] More importantly, government can also do the opposite, i.e. using private pension assets for public purposes. When is such interference more likely? Recent reversals show that such interference is likely if governments have incentives to use private pension fund assets to solve budgetary problems.[26] This can only happen if pension funds are sufficiently large relative to public debt to be an attractive source of public revenue.

Political risk of asset seizure will hence rise with public debt and the accumulated assets. Only in countries with very large pension funds, capital markets are politically powerful and one should expect a private pension system to be stable in the long run. Alternatively, countries with very high levels of public debt should have never even adopted private systems. Yet, the interaction between the two reveals the political opportunity costs of maintaining with a private pension system. If the asset-to-debt ratio is relatively high, politicians might be tempted to solve budgetary problems with the help of pension assets. In a sense, the ratio can be interpreted as a proxy measure of political risk.

All in all, we would expect countries to run a private pension system when public debt is under control, the economy is growing, capital markets are strong and hence governments have little incentives to alter the system. However, we know from the literature that often international factors, for instance peer pressure from neighbors or the international financial institutions have clearly increased the odds of running a private pension system even in cases where these political and economic fundamentals were not given. In such cases, reversals will be likely.

The reversals show that there are complicated dynamics at play: some countries might never implement a privatization, whereas others 'experiment with privatization', only to take it back. For these reasons, the following sections use a mixed-methods design to test the arguments in two steps. First, the next section looks at the long-run predictions only: is a country likely to run a private pension system or not? This part will show the importance of many diffusion factors pushing for privatization, whereas high debt and low market capitalization pushed against it. In the next step, the regression results are used as the basis for selecting for countries to be inspected in a controlled qualitative comparison. The qualitative evidence can reveal the dynamics of pension politics better, and also reveals the causal mechanism underlying the quantitative results. We will see that domestic political and economic factors

were crucial in explaining the difference between maintenance and reversal of pension privatization in these cases.

4. Quantitative Evidence: Explaining lasting reforms

For the quantitative tests, I collected macro-level data for some 60 countries between 1980 and 2012. The sampling frame follows Brooks[27] and covers mainly those (Latin) American and European countries which had a sizeable public pension scheme around 1980, the moment when Chile triggered the privatization process. The dependent variable measures whether a country in a given year runs a mandatory private pension scheme (1) or not (0). The private pillar can partially or completely replace the public pension pillar with mandatory private, individual pension accounts.[28] As a robustness check, a second dependent variable also includes voluntary private schemes as long as these are supported by a considerable tax subsidy.[29] The definitions allow for reversals. I count as instances of reversals those in which a country has abolished or drastically reduced the private pillar.

Moving on to the key independent variables, *market capitalization* is the logarithm of stock market capitalization in percent of GDP. *Debt* is defined as the logarithm of general government gross debt in percent of GDP. *Ratio* is the ratio of *market capitalization* and *debt*. This variable proxies the political risk of a private pension scheme, and is calculated as the interaction between the previous two variables. It is important to note that *market capitalization* serves as a proxy variable for the size of private pension assets as there is no reliable information about pension fund assets over time.[30]

Table A-1 shows the descriptive statistics for these variables. It also reports information on the control variables. Following the literature in comparative political economy these are: *growth,* measured as the moving average of the last five years; *gdp*, the log of *GDP*; *elderly* as the share of people above 65; *service* as the share of service-sector employment; left-right *partisanship* of the government; government *majority* as the difference in the vote share of the two largest parties; *veto* as the number of veto points; *enpp* as the effective number of parties; and Polity IV's index of *democracy*.

Compared to this the international factors are by and large expected to increase the odds for a private pension system. The controls for international factors are: *trade* in percent of GDP; outstanding World-Bank *loans* in percent of GDP; the number of regional *peers,* i.e. the percentage of transition and Latin American economies that have already adopted a private pension system. Finally, the table shows four different variables to measure spatial diffusion. These variables are spatial lags using four different weights: *y_dist* uses inverse geographic distances; *y_dist_sd* is similar to *y_dist* but the weights are row-standardized; *y_cont* uses a contiguity matrix; *y_cont_sd* is similar to *y_cont* but the weights are again row-standardized. Similar to Plümper and Neumayer[31] I experimented with several different spatial lags. The results only report those with strongest results which happen to be spatial lags with weights using row-standardized inverse distances.

Table 1 presents the results of pooled cross-section regressions. The models are logit regressions with either a (logarithmic) time trend or a battery of time dummies.[32] The standard errors are clustered for

countries. The models use the spatial lag to account for cross-sectional correlation.[33] To reduce the problem of endogeneity, the model uses the spatial lag at time t-1. Similarly, the key independent variables *market capitalization, debt* and *ratio* are lagged variables. Table 1 shows the results. The first model of table 1 includes a smaller subsample of control variables plus year dummies. The second model includes all control variables plus year dummies. The third model replaces the year dummies with a logarithmic trend in time.

[Table 1 about here]

The second column of table 1 contains the results of a model with a full battery of year dummies. The signs for the first three variables follow the expected pattern. *Market capitalization*, has a positive effect on pension reforms. It is clear that countries cannot simply 'jump start' their financial markets by adopting a private pension system. Rather, the finding supports claims about the strong role of financial markets in privatizing pensions.[34] Higher levels of *debt* reduce the likelihood of a country to have a private pension scheme. This would be true for models without the interaction term, and not only the consequence of a lower-order coefficient.[35] Hence, the finding shows that financial constraints reduce the odds of having a private pension system which would 'stand the test of time'.

As the third variable, *ratio*, shows the interaction effect is negative, i.e. the higher the ratio between market capitalization and debt the less likely a country is to have a private pension system. This interaction effect is best portrayed with the help of Figure 2.[36] The figure shows a curvilinear relationship between with the effect of public debt being contingent on the size of market capitalization. For ease of exposition the lower panel of the figure shows the frequency distribution of market capitalization. We see that the probability of a private pension system is lowest for levels of market capitalization around the median. As expected, *debt* always reduces the probability of running a private pension scheme, but the probability increases towards both ends of market capitalization. This implies that higher assets-to-debt ratios make it less likely to have a private pillar, unless the assets become truly large. Due to the lower number of cases for very high levels of *market capitalization*, the confidence intervals are very big on the right-hand side of the graph. All in all, however, the graph confirms the idea that the combination of debt and asset plays an important role in the long-run stability of a private pension system.

[Figure 2 about here]

Turning to the control variables exhibits mixed findings. The level of *growth* in the previous five years does not tip the balance in one direction or the other. Auxiliary regressions show that this is a consistent finding for alternative model specifications (see table A-2). Unsurprisingly, the likelihood of privatized

pensions increases with problem pressure expressed through higher percentages of the elderly in the population. More interesting is the fact that the likelihood of a private pension system also increases with the size of the service sector. This might imply that societies which undergo structural change undertake all kinds of reform activities, ranging from introducing social non-contributory (see Mares/Carnes in this volume) to private pensions. Perhaps unsurprisingly, the domestic politics is less visible than in studies that focus on the introduction of private pensions. The only variable which shows a significant and positive effect is democracy.[37] This is an interesting finding in itself, as several of the most important cases of reversal are also cases in which democracy seems to be regressing.

International variables do show visible effects. For instance, loans from the World Bank make private pensions more likely.[38] *Trade* as percentage to GDP does not seem to influence pension privatization much. I also experimented with capital flows in the form of inward foreign direct investment or capital inflows, but the results where unconvincing. The peer variables, especially the number of Latin American countries do confirm previous studies on the adoption of pension systems, and the adoption of other innovations in social protection (see contributions of Lierse et al. and of Brooks this volume). The spatial lag yields a negative sign. This is similar to other studies,[39] and might be due to a competition logic: a country might implement a pension reform as a signal to international capital markets to lure in capital from neighbors. There is some debate as to whether this result is reasonable, but a similar case has been made for other policy areas such as labor market or tax policies (see also contribution of Cao and Lopez Cariboni in this volume).[40]

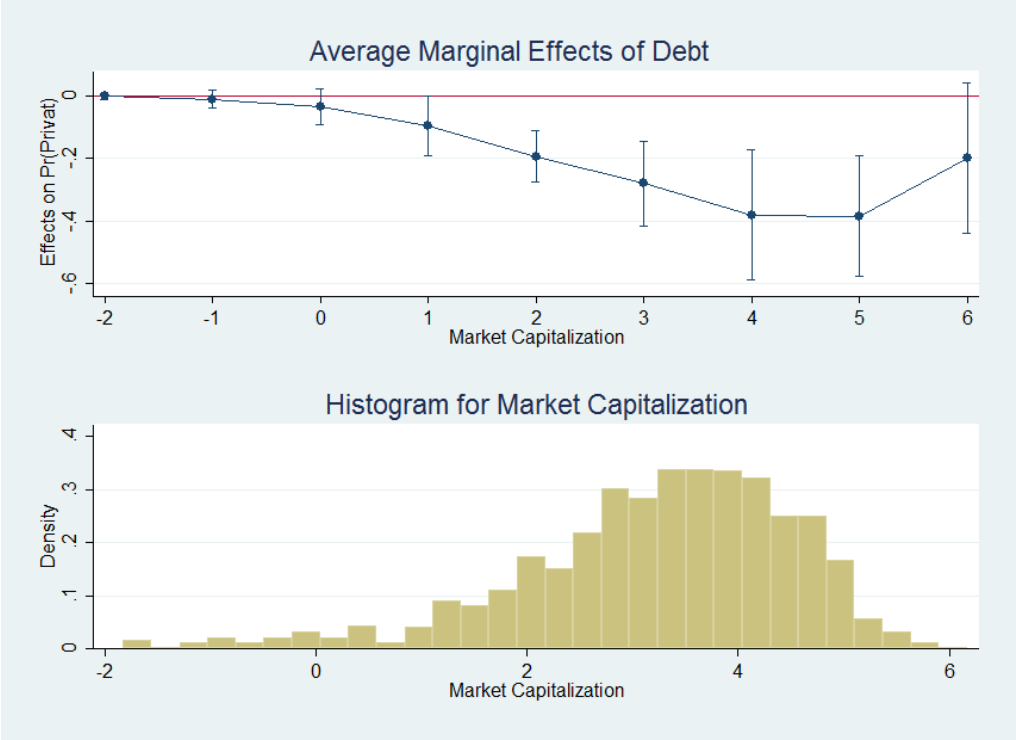
All things considered diffusion factors by and large push for running a private pension system in the long run, whereas high public debt and weak capital markets push against this. The major findings of model (1) are robust to several changes in the specification. Model (2) includes a larger battery of control variables. The effects for the diffusion variables and the key politico-economic variables become stronger rather than weaker. A model with a time trend instead of the year fixed effects does not affect the results of table 1 either. The appendix lists further tests. Slightly changing the definition of reforms does not affect the results strongly. For instance, if I expand the definition of 'private pensions' to include also voluntary, tax-subsidized systems the results are very similar (table A-2, model (3)). The same goes for tests with sub-samples either excluding entire regions (table A-2, model(1)) or countries on a case-by-case basis (table A-2, model(2)).

Table 2: Regression results for the privatization of pension systems

	(1)	(2)	(3)
debt (t-1)	-3.081***	-5.229***	-4.331***
	[1.240]	[1.363]	[1.233]
stock market (t-1)	1.921***	2.307***	2.341***
	[0.841]	[0.929]	[0.871]
ratio (t-1)	-4.419***	-6.642***	-6.233***
	[2.119]	[2.605]	[2.340]
growth	1.515	-10.79	-3.834
	[13.967]	[14.170]	[14.253]
gdp p.c.	-0.0509	-0.0837	-0.0859
	[0.000]	[0.000]	[0.000]
gdp	0.134	0.352*	0.281
	[0.141]	[0.185]	[0.188]
pop65	0.308*	0.444***	0.377***
	[0.157]	[0.167]	[0.145]
service	0.101	0.160***	0.137***
	[0.062]	[0.063]	[0.057]
veto	0.174	0.259	0.196
	[0.242]	[0.241]	[0.266]
majority	2.287	2.930	2.489
	[2.232]	[2.380]	[2.608]
enpp	-0.0571	0.0165	0.0298
	[0.192]	[0.215]	[0.036]
transition peers	0.238*	0.377***	0.344***
	[0.129]	[0.138]	[0.143]
Latin peers	0.567***	0.860***	0.717***
	[0.183]	[0.209]	[0.198]
y_dist_sd(t-1)	-9.454***	-18.25***	-8.106***
	[4.408]	[4.480]	[2.332]
trade		-0.00463	-0.00144
		[0.010]	[0.010]
loans		46.49***	43.44***
		[16.248]	[15.991]
partisanship		-0.312	-0.234
		[0.194]	[0.185]
democracy		1.208***	1.032***
		[0.434]	[0.431]
year			306.4***
			[138.924]
_cons	-7.520	-21.32***	-2346.4***
	[6.110]	[8.374]	[1052.462]
N	783	714	714
pseudo R^2	0.351	0.486	0.434
ll	-342.9	-248.5	-273.9
chi2	341.1	9263.2	121.9

*Notes: only models (2) and (3) use lagged independent variables; z-scores in parentheses; levels of significance * < .1, ** < .05, *** <.01; clustered standard errors; time effects in models (1) and (2) omitted.*

Figure 2: Interaction of Stock Market Capitalization and Debt Levels



5. Qualitative Evidence: When and Why Countries Reverse the Reforms

The quantitative models yield long-run predictions about whether or not a country has a private pension scheme in the long run. These models have several limits. First, they do not deal with the dynamics, and especially not those cases in which reversals happened. Second, there is a lot of heterogeneity in private pension systems – e.g. differences in coverage and generosity – which the regressions cannot easily capture. Third, they also do not justice for the complex role of past decisions and the institutional legacies these create. Finally, and perhaps most importantly, they do not fully reveal the causal mechanisms of the macro-aggregate correlates. For these reasons, this section narrates the political and dynamics in two pairs of countries: Chile vs. Hungary and Uruguay vs. the Slovak Republic. In both pairs, the first country has seen stability in the private pension scheme, whereas the second country has experienced reversals. Whereas Chile vs. Hungary exemplifies radical solutions, Slovakia vs. Uruguay shows smaller, more incremental changes.

We will see that the dynamics of debt and capital markets go a long way in explaining the difference between stability and instability. We will see that the evolution of debt and capital markets stabilized systems in Chile and Uruguay, but clearly increased pressure in Slovak Republic and Hungary. The size of

the reversals, however, also depended on the degree of political competition between major political factions. Whereas the political system allowed for a big swing in Hungary, the Slovak Republic often produces unstable multi-party coalition governments. In the Slovak case, we also see instances of reversal, but of much smaller scope, focusing on contribution rates rather than the accumulated assets.

The case selection is summarized in table 3. It is important to discuss this case selection in light of the results of the quantitative model. With some degree of exaggeration, one can argue that the model predicts Slovakia and Chile well, whereas it does worse for Hungary and Uruguay.[41] Hungary lies above the regression line, i.e. the model overestimates the likelihood of a private pension scheme, whereas for Uruguay the opposite holds true. One of the reasons for these errors lies in the very coarse 1/0 definition of the dependent variable. The defining characteristics of private schemes are very diverse and differ in such important terms as coverage or eligibility. Correspondingly, reforms of these private systems are equally diverse. The qualitative analysis can increase the level of detail to show the differences in the scope of the reforms.

Another interpretation is that the reversal in Hungary will bring the country back to 'equilibrium' in terms of the quantitative results. Hence, the quantitative models help to derive some expectations while they also control some of the alternative explanations for the case comparisons. Matching Hungary to Chile and Uruguay to Slovakia is clearly imperfect, but it reduces the relevance of other explanations. In this sense, the case selection follows the logic of a controlled comparison.[42] It is motivated not only by variation in the key independent variables, but also the controls.[43] Uruguay and Slovakia, in particular deliver very similar predictions according to the model (1) in table 1, in both cases very low.[44] The predicted probabilities for the comparison between Hungary and Chile are further apart, but in both cases the model predicts a private pension scheme. The qualitative comparisons can identify those factors which drive these cases apart.

The controlled comparisons proceed as follows: In each case I will start with a brief description of the stability and changes of the pension system. Then, I will proceed to the key independent variables, debt and the size of the pension assets/ strength of capital markets. Next, I will move on to political factors such as the electoral competition and their role in the evolution of the pension system. Finally, I will briefly come back to international factors and policy diffusion to see their role in the four countries.

Table 3: Stability and Size of Outcomes

		Size of Reforms	
		small	large
Stability of Reforms	stable	Uruguay (0.22)	Chile (0.89)
	unstable	Slovak Republic (0.23)	Hungary (0.70)

Based on the predicted probabilities of model (1) in table 1; see also table A-3 in the appendix.

Big Reforms in Chile and Hungary

The comparison of Chile and Hungary reveals the difference between a very mature and politically powerful financial market vs. a vulnerable private pension system in a debt-ridden country and considerable political dynamics.

Chile's 1980/1 reform is still one the most drastic case of privatization in the pension system. The reform practically abolished the public pillar and subsidized the transition to the private pillar with transfers between five and eight percent of GDP per annum. Even if Chile became later on the role model of pension reform, it has well-known deficiencies such as high administrative costs and limited returns.[45] After 1981, discontent with the pension system arose with the low coverage rates, and the huge problems of old-age poverty.

However, the system remained remarkably stable over time. After the political transition, the newly formed centre-left governments did try to change the 2nd pillar, but most changes took place in the form of additions to the systems, rather than reversals. The most conspicuous of these additions was the introduction of a basic non-contributory pension system in 2008 complementing the earnings-related private pension system.

The evolution of debt and the importance of the financial markets go a long way in explaining the maintenance of the 2nd pillar. Chilean public debt fell drastically to less than 10 percent of GDP in recent years. With the decline in public debt, a prime motive of reversal, revenue shortage, subsided. Moreover, the 1980/1 reform founded pension funds which grew up to 67 percent of GDP in 2010. This lay the basis for the political strength of private pensions. Just as an example, over 19,000 salespeople operated the private pension system on the ground, and financial-service companies greatly benefited from the established accounts.[46] Even after the political transition, both contributors and financial market agents had powerful advocates in parliament, mainly among right-wing pro-Pinochet parties.[47]

Political competition also plays an important role in explaining the stability. It is not very surprising that a military dictatorship can 'sit out' the hardships of the funding gap which haunts the transition from public to private systems. More interesting, however, is the period after the political transition. So far, incoming centre-left governments could not change the status quo radically. On the one hand, the governments of the Concertación were very heterogeneous coalitions of major democratic anti-Pinochet parties, with internal divisions about the question of pension reforms. On the other hand, the political competition from the pro-Pinochet parties guaranteed that government majorities were not large and stable enough to guarantee big changes. When, for instance, the first Bachelet government tried to increase the regulation of private pension funds, the strong opposition from business-oriented pro-Pinochet parties in the senate proved enough to veto the bill.[48] Instead, left governments sought to complement the private pension system with a non-contributory minimum pension scheme rather than to abolish it. In doing so, Chile follows a more general pattern of policy diffusion in this area (see Boeger in this volume).

In many senses, Hungary is the opposite case of Chile. The private pension scheme never completely stabilized, and was abruptly taken down in 2010. When Hungary introduced its pension system in 1998, it was based on a compromise of a left-liberal coalition government.[49] The outcome was a reform less radical than in Chile, but it still channeled one third of all contributions from the public into the new private pension scheme. Till 1998 and 2010 there were swings back and forth in which conservative governments halted the growing contributions to the private system and left-liberal governments increased the contributions to the private system. Eventually, the second FIDESZ government practically renationalized the private pension system. This resulted in the overwhelming majority moving back not only with their monthly transfers, but all the accumulated assets into the public pillar.[50]

The dynamics between debt and asset accumulation in the pension funds plays a considerable part in explaining the ultimate reversal. The 1998 reform produced a mixed public private system with huge transitory problems. The reforms contributed massively to the rise of public debt, as young contributors left the public system, and the deficit in the public scheme increased. Rising debt made the assets accumulated in pension funds an interesting target similar to Argentina.[51] At the time of the nationalization, assets were around 15 percent of GDP.

Contrary to Chile, the pension funds, and the capital market in more general, were not deeply entrenched in Hungarian society. Although the 1998 reform was triggered by a business elite who wanted to strengthen the national capital market, the reform did not generate the expected growth effects. To the contrary, it was hampered by low growth and huge capital-market volatility in the late 1990s and early 2000s .[52] This may be one reason why the popularity of the new system rapidly declined in the 2000s.[53] Another reason was that the majority of funds was administrated by foreign companies, which further weakened the legitimacy of the system (e.g. Financial Times 26th of July, 2010). Finally, from the very beginning of the private pension scheme, the Hungarian government heavily regulated the pension funds. Most importantly, pension funds had to invest most of their assets into public debt.

The timing and the size of the reversal depended on the political dynamics. The 1998 reform was pushed through by a heterogeneous coalition government with frequent changes in the cabinet. The majorities of government coalitions remained small and fragile so that policy changes could only be incremental. This changed when FIDESZ won a two-thirds majority in the parliament in 2010 and quickly pushed through the necessary legislation. Nationalizing the equivalent of 15% of GDP allowed the government to adopt a 'bullish' stance against the European Commission and the International Monetary Fund. On the domestic level, the reversals decreased the need for immediate, unpopular fiscal retrenchment. Moreover, FIDESZ managed to pacify the middle classes by packaging the re-nationalization with the introduction of a flat income tax (Hungary Around the Clock, 13th of December, 2010). If the government learned from the Argentine case, it avoided making this public. Rather the opposition and international investors brandished the government for repeating the Argentine 'nightmare' (Bloomberg, 26th of November, 2010).

Smaller Reforms in Slovak Republic and Uruguay

The comparison between the Slovak Republic and Uruguay shows the dangerous dynamics between rising debt and political instability in a more subtle form. The political conflict was largely fought over marginal changes, i.e. over transfers and not assets. Uruguay implemented a moderate, but very stable private scheme in the 1990s. At the time, levels of public debt were considerable. Yet, levels of public debt have declined over time and reduced the need for drastic reversals. In the Slovak Republic the evolution is reverse: public debt has risen over time, and contributions to the private pillar and the cumulative assets do represent an important 'bargaining chip' in the evolution of pension politics.

When Uruguay introduced its private system in 1995/6, this had almost no effect on the public pillar and public debt.[54] The system introduced was mandatory so that coverage was relatively high, but the scope and transfers to the private scheme were much smaller than in Chile. In fact, the World Bank had lobbied for a much stricter implementation of the Chilean model, decreasing the importance of the public pillar much more drastically, but the Sanguinetti administration opted for the more moderate mixed model. The system in place has proved remarkably stable over time. Recent reform activities concentrated on either more marginal issues or other forms of social assistance.[55]

The dynamics of debt and accumulating assets was less pronounced than in Chile, but the overall direction was similar. Especially from the 2000s onwards public debt decreased drastically. At the same time, pension assets increased steadily and were in 2010 similar to those in Hungary. Hence, while the size of assets nowadays makes them more attractive, governments are under less fiscal pressure. In addition, even if the pension system did not create tremendous rates of returns were in the beginning, these increased considerably in the 2000s. This may be one reason why public support for the pension system is relatively high compared to Latin American standards.[56] Thus, while the capital markets are not politically as strong and deeply entrenched as in Chile, the support for the private pension seems large enough to maintain the status quo.

Model (1) in table 1 underestimates the existence and stability of the Uruguayan system to a certain degree. One, of the reasons, as argued above may be the differences in the dependent variable and the small scope of the initial pension reform. Another factor is again the role of electoral competition and the stability of the political system. There are three major parties in Uruguay which make landslide victories highly unlikely. The initial 1995/6 reform was implemented by a 'grand coalition' of the two traditional parties Colorados and Blancos. Subsequent elections increasingly strengthened a third party, the Frente Amplio. The Frente Amplio had rejected pension privatization in the 1990s, but even in office its majority was nowhere near to the results of the Hungarian election in 2010. Therefore, though the financial crisis of 2007 triggered a debate about the nationalization of private pensions this was not seriously considered.[57] Similar to Chilean left governments, Frente Amplio aimed to complement the existing system and not to reverse it.

According to the results of model (1), the Slovak Republic should be very similar to Uruguay. Similar to Uruguay, the political system does not allow for big changes. Yet the dynamics of public debt and

financial markets are less benign than in Uruguay. Hence, the instability in the Slovak private pension scheme found its way in the quarrels about contribution rates and not about the accumulated assets.

As a matter of fact, there is high instability in the Slovak private scheme. From the very beginning reforms were based on complicated compromises and every new incoming and politically opposite government tried to undo, whatever was done by its predecessor.[58] After several failed attempts, it was the second government of Mikuláš Dzurinda which introduced a mandatory private pillar and channeled more than a third of the total contribution into the new system. With the elections of 2006, the political opposition came into office, and Robert Fico's government tried to undo the privatization, by giving people the option to return into the public system. This reversal was, again, taken back, by a conservative government in 2010. When this government tumbled in 2012, the second government of Fico again reversed parts of the private system by reducing the contribution rate from 9% to 4%.[59]

Contrary to Uruguay, the Slovak governments only managed to tame public debt till the global financial crisis of 2007, after which the level almost doubled from below 30 percent to more than 50 percent of GDP. As most of this debt is related to expenditure on old-age security, it still puts governments under strong pressure to reform the system. In this context, pension fund assets - though not much larger than in Uruguay (ca. 18 % of GDP in 2010) -, constitute an attractive political alternative to other forms of government revenue. There is little evidence for lobbying from vested interest.[60] Financial markets have not reached the level which would give them the necessary political and economic status to play an important political role. There is ample evidence, however, that the World Bank and the epistemic community put their weight into the scale to push for the privatization of pensions.

One factor which strengthens the supporters of the private pension system is the moderately permissive consensus in public opinion to maintain the system. But even then the pressure from debt might have been enough, if it was not for the complicated political competition. The political dynamics created mostly fragile, politically heterogeneous coalition governments with small majorities. In this context, the reversals took place at the margin: changes in the rates of contributions to the private system, the optionality of the system, and ultimately in coverage rates.[61]

Comparing the four cases, it is clear that the political pressures from public debt increase the temptation to nationalize pensions as in Hungary and Slovakia. Where the private scheme was large and well entrenched it created a lobby strong enough to uphold it even against hostile governments. The paradigmatic case here is Chile. However, where the pension system was not strong enough, but constituted an attractive source of revenue for desperate governments, it was at risk. Hungary is the prime example. Compared to this the reforms in Uruguay and the Slovak Republic are much smaller. The evolution of public debt and financial markets differentiate these two countries, but the political systems, and especially the competition between political parties did not allow for radical changes.

6. Conclusions: When Do Pariahs Occur?

The recent reversals in pension politics hold important lessons for the evolution of social protection in developing countries. The quantitative evidence shows that whereas mainly international factors have pushed many countries to run private pension systems, the domestic political economy puts severe limits to these systems. The evidence suggests that rather than being the consequences of pension reform, structural fundamentals such as the strength of capital markets are a prerequisite for pension reform. Where privatization was nonetheless pushed through without these prerequisites, reversals are a likely consequence. This is especially true for situations in which debt levels increase, and the private system has accumulated some assets which could be used the public budget. Only in systems with very mature capital markets there is little evidence for this type of 'political risk'.

Nested into the quantitative results are four short case studies to reveal the underlying causal mechanisms explaining the stability or instability of private pension schemes. The qualitative evidence affirms that the existence of lobbying was fundamental for the maintenance of the Chilean and, to a lesser extent, also the Uruguayan system. The debt and capital market dynamics are less fortunate in Hungary and the Slovak Republic. What sets these two countries apart is the size of the reversal. Where the political system allows for big swings as in Hungary in 2010, the reform is drastic. In the Slovak Republic, the swings are still there, but much smaller, given the instability of the governments. Diffusion also matters in some of these cases, but arguably to a lesser degree than these political and economic factors.

Such a mixed methods design is not infallible. The quantitative analysis has clear limits. For instance, growth does not seem to matter very much, possibly because lack of growth undermines any type of system not only private pensions.[62] Moreover, public support for private pension schemes clearly seems to differ across countries, but data constraints don't allow for including this into the model. The case studies need to be short, and under-address some of the intricate details of the reform process and the outcomes.

Despites these shortcomings, the article contains important lessons for the continuity and change of social protection in developing countries. The reversals did not come without social costs. People loose trust in the state's capacity to organize old-age security. Moreover, implementing major pension reforms in a short period of time multiplies the transition costs. Ironically, this means that the Argentine and Hungarian pension system may accomplish very few of the major goals of social protection in the long run. In this sense, it is important to understand the interplay between international diffusion and domestic politics much better.

The four cases imply that there is evidence for overshooting, greatly propelled by processes of international policy diffusion (see also Rudra in this volume). The qualitative evidence suggests that pension reforms in which 'outside' influence from the World Bank or peers was stronger, even countries might have adopted private pension systems that do not really dispose of the necessary political and economic prerequisites: stable capital markets, sustainable government finance, and a stable and

competitive political system. This does not bode well for a lot of developing countries in which these fundamentals are themselves highly unstable. In these societies, international or peer pressure could ultimately be counterproductive for the systems of social protection.

This is an important question for further research. On a theoretical level, the article suggests that different forms of policy learning should be combined to help our standing of policy change in social protection. In pension politics and related areas of the welfare state, psychological and ideational accounts have recently gained currency.[63] By shifting from adoption to the maintenance of (un)stable policies, one can see that this is not necessarily a wrong, but perhaps incomplete approach. As the case of pension privatization has shown, there are strong 'rational' considerations of political economy that need to be factored in. Even if governments follow availability heuristics when they follow the 'band wagon', pressure piles up and make them vulnerable to reversals. A deeper understanding might be achieved by merging political-economy and cognitive accounts. The complex dynamics of different forms of learners is yet to be explored more fully, but they may explain instances of drastic and sudden policy reversals. Such a perspective also helps to understand why 'pariahs' occur and when they act as crystallizing points for future waves of international diffusion.

Appendix Table A-1: Variable Descriptions

Variable	Description	Mean	Std. Dev.	Source
Private	Private Pension System (1/0)			Brooks (2002), Holzmann (2012), Orenstein (2013), own
debt	ln(general government gross debt in % of GDP)	3.744	0.699	IMF WEO 2013
market capitalization	ln(market capitalization in % of GDP)			WDI
ratio	ratio of debt/stock markets	0.958	0.448	own
growth	GDP growth (moving average of last 5 years)	0.033	0.028	WDI
gdp p.c.	GDP p.c.	10162	10576	WDI
gdp	ln(GDP)	26.619	2.471	WDI
elderly	Population shave above 65	9.847	4.492	WDI
service	service sector employment as % of total	59.521	12.529	WDI
unemploy-ment	unemployment rate	8.558	4.511	WDI
	Political Constraints			Henisz
partisanship	left-right partisanship of government	1.117	1.224	Beck et al.
majority	difference between government and largest opposition party	0.580	0.170	Beck et al.
veto	Checks & Balances	3.822	1.423	Beck et al.
enpp	Effective number of parties	3.999	8.549	Bormann/ Golder
democracy	polity2 score	4.583	6.999	Polity IV
icrg	ICRG indicator of Quality of Government	0.655	0.233	Quality of Government, Gotheburg University
trade	Trade in % of GDP	66.411	41.206	WDI
loans	World Bank loans in % of GDP	0.011	0.029	WDI
peer	No. of Countries with private system	9.019	11.595	own
transition peers	No. of transition countries with private system	0.681	2.475	own
Latin peers	No. of Latin American countries with private system	1.154	3.048	own
y_dist_sd	spatial lag, weighted by inverse row-standardized distance	0.003	0.005	own, CEPII data
y_dist	spatial lag, weighted by inverse distance	0.141	0.193	own, CEPII data
y_cont_sd	spatial lag, weighted by contiguity row-standardized	0.141	0.275	own, CEPII data
y_dist	spatial lag, weighted by contiguity	0.454	0.957	own, CEPII data

Note: own calculations.

Appendix Table A-2: Additional Model Specifications

	Without Latin America	Jackknife	Including voluntary schemes
debt (t-1)	-5.800***	-4.229***	-2.680***
	[1.600]	[1.933]	[1.127]
stock market (t-1)	3.451***	2.472*	1.447***
	[1.096]	[1.330]	[0.604]
ratio (t-1)	-9.377***	-6.605*	-4.548***
	[2.832]	[3.862]	[1.901]
trade	0.0117	0.000870	0.00631
	[0.015]	[0.015]	[0.009]
loans	-28.82	34.89	21.68*
	[110.317]	[40.155]	[11.064]
growth	-3.453		4.271
	[19.321]		[10.788]
gdp p.c.	-0.000153	-0.0000778	-0.000107***
	[0.000]	[0.000]	[0.000]
gdp	0.645	0.272	0.170
	[0.508]	[0.374]	[0.158]
pop65	0.395***	0.368*	0.468***
	[0.177]	[0.215]	[0.138]
service	0.165*	0.118	0.0798*
	[0.086]	[0.093]	[0.042]
partisanship	-0.560***	-0.199	-0.0425
	[0.219]	[0.335]	[0.173]
veto	0.274	0.223	0.293
	[0.306]	[0.444]	[0.223]
democracy	1.209	0.925	0.553
	[0.793]	[0.864]	[0.373]
majority	3.575	2.495	1.538
	[3.590]	[4.741]	[2.288]
enpp	0.0528***	0.0278	0.0180
	[0.024]	[0.106]	[0.013]
transition peers	0.337	0.293	-0.0283
	[0.207]	[0.235]	[0.132]

Latin peers	.	0.613*	0.395***
	.	[0.318]	[0.163]
y_dist_sd(t-1)	-6.977***		-5.072***
	[2.511]		[2.064]
year	228.3		238.3***
	[167.155]		[111.842]
_cons	-1762.6	-18.20	-1822.2***
	[1267.104]	[17.843]	[849.403]
N	565	725	714
pseudo R2	0.450	0.380	0.266
ll	-201.2	-303.6	-351.3
chi2	110.8		79.50

Appendix Table A-3: Average Predict Probabilities of Model (1) in Table 1

country	average predicted probability	percentage of time private
Argentina	0.82	0.44
Armenia	0.04	0.00
Australia	0.53	0.62
Austria	0.06	0.00
Belgium	0.29	0.00
Bolivia	0.09	0.41
Brazil	0.66	0.00
Canada	0.21	0.00
Chile	0.89	0.98
Colombia	0.94	0.56
Costa Rica	0.83	0.35
Croatia	0.94	0.41
Czech Republic	0.80	0.06
Denmark	0.41	0.62
Dominican Republic	0.37	0.35
Ecuador	0.27	0.00
El Salvador	0.62	0.44
Estonia	0.81	0.35
Finland	0.26	0.00
France	0.40	0.00
Germany	0.35	0.35
Greece	0.07	0.00
Hungary	0.70	0.38
Iceland	0.09	0.00
Ireland	0.05	0.00
Italy	0.09	0.00
Jamaica	0.70	0.00
Japan	0.09	0.00
Latvia	0.81	0.35
Lithuania	0.69	0.33
Luxembourg	0.35	0.00
Mexico	0.79	0.47
Netherlands	0.40	0.59
New Zealand	0.10	0.21
Norway	0.17	0.00
Panama	0.42	0.15
Paraguay	0.22	0.00
Peru	0.94	0.59
Poland	0.33	0.44
Portugal	0.07	0.00
Romania	0.39	0.27
Slovak Republic	0.23	0.30
Slovenia	0.35	0.00
Spain	0.31	0.00

Sweden	0.56	0.56
Switzerland	0.53	0.83
Turkey	0.00	0.00
Ukraine	0.37	0.00
United Kingdom	0.75	0.80
United States	0.28	0.00
Uruguay	0.22	0.50
Venezuela, RB	0.33	0.00
Total	0.42	0.25

Column 2 shows the predicted probabilities for each country according to model (1) of table 1; column 3 shows the number of years a country had a 2nd pillar as percentage of the whole period.

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[22] In fact, many processes unrelated to diffusion can yield an S-curve. Imagine the case in which all countries react to a common international shock, but the speed of adaption is normally distributed. Author, Craig Volden, Michael M. Ting, and Daniel P. Carpenter, "A Formal Model of Learning and Policy Diffusion," *American Political Science Review* 102, no. 3 (2008).
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[29] OECD, "Pensions at a Glance 2013." An example would be the German 'Riester' reform of 2001. Initially the reform implied the introduction of mandatory private pensions. Severe political pressure made the government choose a more costly alternative in the form of a voluntary system with a sizeable tax incentive.
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[31] Thomas Pluemper and Eric Neumayer, "Model Specification in the Analysis of Spatial Dependence," *European Journal of Political Research* 49 (2010).
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[33] Robert Franzese and Jude Hays, "Empirical Models of International Capital-Tax Competition," in *International Taxation Handbook*, ed. G. Gregoriou and C. Read (Amsterdam: Elsevier, 2007).
[34] As a supplementary test I used the number of people employed in financial services instead of market capitalization. It is only available for OECD countries, but the effect on the probability of a private pension is even stronger.
[35] Thomas Brambor, William Roberts Clark, and Matt Golder, "Understanding Interaction Models: Improving Empirical Analyses," *Political Analysis* 14 (2006).
[36] The calculation use stata's margin command, version 12.0 Richard Williams, "Using the Margins Command to Estimate and Interpret Adjusted Predictions and Marginal Effects," *The Stata Journal* 12, no. 2 (2012).
[37] This is different to Lierse et al. in this volume, but private pensions are also very different from attempts to universalize social security.
[38] However, the effect might be inflated due to the large number of countries not receiving any loans.
[39] Brooks, "When Does Diffusion Matter? Explaining the Spread of Structural Pension Reforms across Nations."
[40] Franzese and Hays, "Empirical Models of International Capital-Tax Competition." Author.
[41] A look at table A-1 shows this. The table shows the predicted probabilities of private pension system in each country, and compares them to the amount of time in the last 30 years, the country really ran such a system. Chile comes much closer to the actual amount of time, than Uruguay.
[42] Jason Seawright and John Gerring, "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options," *Political Research Quarterly* 61, no. 2 (2008).
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[44] The predicted probabilities for this model are listed in appendix table 2.
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[47] Jenny Pribble, *Welfare and Party Politics in Latin America* (Cambridge: Cambridge University Press, 2013).
[48] Ibid., p. 81.
[49] Kristin Makszin, "Reforming East Central European Welfare States. Governments, Technocrats, and the Patterns of Quiet Retrenchment" (CEU 2013).
[50] Andras Simonovits, "The Mandatory Private Pension Pillar in Hungary: An Orbituary," *International Social Security Review* 64, no. 3 (2011).
[51] There is little evidence, that Argentina's example played a huge role in the 2010 reform. FIDESZ already attempted to abolish the 2nd pillar during its first term, but were afraid of the electoral consequences (Makszin 2013).

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[57] Joshua Malnight, "Coalitions, Institutions, and Nationalizations," *manuscript* (2012).
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