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Reversing Pension Privatization: Rebuilding public pension systems in Eastern European and Latin American countries (2000-18)

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Abstract

From 1981 to 2014, thirty countries privatized fully or partially their public mandatory pensions; as of 2018, eighteen countries have reversed the privatization. This report: (i) analyses the failure of mandatory private pensions to improve old-age income security and their underperformance in terms of coverage, benefits, administrative costs, transition costs, social and fiscal impacts, and others; (ii) documents the reversals of pension privatization, the laws, governance, new entitlements, financing and contribution rates of the new public pension systems; (iii) provides guidance on the key policy steps to reverse pension privatization, for those countries considering returning back to a public system.

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Acronyms

ANSES	National Social Security Administration, Argentina (in Spanish, Administración Nacional de la Seguridad Social)
AFP	Private Pension Administrator (in Spanish, Administradora de Fondos de Pensiones)
DB	Defined Benefit
DC	Defined Contribution
ECLAC	Economic Commission for Latin America and the Caribbean
EU	European Union
GDP	Gross Domestic Product
IFIs	International Financial Institutions
ILO	International Labour Organization
ISSA	International Social Security Association
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
NDC	Non-financial (notional) Defined Contribution
PAYG	Pay-as-you-go pension system
UN	United Nations
UPF	Unified Pension Fund of Kazakhstan
UNRISD	United Nations Research Institute for Social Development
ZUS	Polish Social Insurance Institution (in Polish, Zakład Ubezpieczeń Społecznych)

Executive summary

This report: (i) analyses the failure of mandatory private pensions to improve old-age income security and their underperformance in terms of coverage, benefits, administrative costs, transition costs, social and fiscal impacts, and others; (ii) documents the reversals of pension privatization, the laws, governance, new entitlements, financing and contribution rates of the new public pension systems; (iii) provides guidance on the key policy steps to reverse pension privatization, for those countries considering returning back to a public system.

From 1981 to 2014, thirty countries privatized fully or partially their public mandatory pensions. Fourteen countries were in Latin America (by chronological order, Chile, Peru, Argentina, Colombia, Uruguay, the Plurinational State of Bolivia, Mexico, the Bolivarian Republic of Venezuela, El Salvador, Nicaragua, Costa Rica, Ecuador, Dominican Republic and Panama), another fourteen countries in Eastern Europe and the former Soviet Union (Hungary, Kazakhstan, Croatia, Poland, Latvia, Bulgaria, Estonia, the Russian Federation, Lithuania, Romania, Slovakia, Macedonia, Czech Republic and Armenia), and two in Africa (Nigeria and Ghana). Most of the privatizations were supported by the World Bank, the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD), USAID and the Asian or Inter-American Development Banks, against the advice of the ILO.

As of 2018, eighteen countries have re-reformed and reversed pension privatization fully or partially: the Bolivarian Republic of Venezuela (2000), Ecuador (2002), Nicaragua (2005), Bulgaria (2007), Argentina (2008), Slovakia (2008), Estonia, Latvia and Lithuania (2009), the Plurinational State of Bolivia (2009), Hungary (2010), Croatia and Macedonia (2011), Poland (2011), the Russian Federation (2012), Kazakhstan (2013), the Czech Republic (2016) and Romania (2017). The large majority of countries turned away from privatization after the 2007-2008 global financial crisis, when the drawbacks of the private system became evident and had to be redressed.

With sixty per cent of countries that had privatized public mandatory pensions having reversed the privatization, and with the accumulated evidence of negative social and economic impacts, it can be affirmed that the privatization experiment has failed. Pension privatization did not deliver the expected results. Coverage rates stagnated or decreased, pension benefits deteriorated and gender and income inequality compounded, making privatization very unpopular. The risk of financial market fluctuations was shifted to individuals. Administrative costs increased reducing pension benefits. The high costs of transition – often underestimated – created large fiscal pressures. While private sector administration was supposed to improve governance, it weakened it instead. Workers' participation in management was eliminated. In many cases, the regulatory and supervisory functions were captured by the same economic groups responsible for managing the pension funds, creating a serious conflict of interest; furthermore, the private insurance industry, which ultimately benefits from people's savings, moved towards concentration. Last, but not least, pension reforms had limited effects on capital markets and growth in most developing countries.

The report then reviews the main experiences of re-reforming pensions and how countries reversed pension privatization, the laws enacted, basic characteristics of the new public model, new rights and entitlements, re-establishment of a public pension administrator, transfer of members and funds and recognition of past entitlements, financing and new contribution rates, contribution collection and fund management, supervisory and regulatory changes, governance and representation of employers and workers, social dialogue. While the reversals of pension privatization need more years to mature, clear and measurable improvements and positive impacts can already be observed in terms of reduced fiscal pressures, lower administrative costs, higher coverage and pension benefit levels, and reduced gender and income inequalities.

Pension privatization can be reversed quickly, in as a little as a few months. For those countries considering rebuilding their public pension systems, there are eleven main policy steps: They are to: (i) start social dialogue to generate consensus and launch communication campaigns; (ii) constitute a technical tripartite reform committee, in-charge of designing and implementing the re-nationalization of the pension system; (iii) enact law(s) with the main characteristics of the pay-as-you-go defined benefits scheme, in compliance with ILO social security standards; (iv) create a public pension institution/ administrator ensuring tripartite governance; (v) transfer members from the private to the public system; (vi) transfer the accumulated resources of the individual accounts; (vii) set new contribution rates and start collecting contributions for the new public pension system; (viii) close the contribution collection mechanism of the private system; (ix) implement inspection services and contribution enforcement mechanisms; (x) create the unit or entity in charge of investment management of the public pension scheme; (xi) close the private sector pension supervisory and regulatory body.

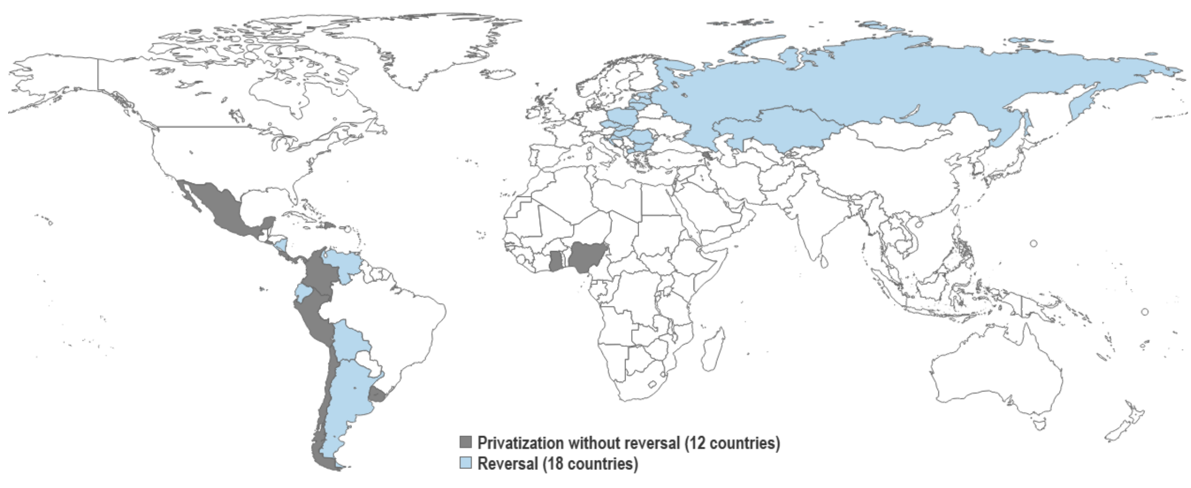
This paper and associated country case studies document the underperformance of private mandatory pensions, and abstract lessons for governments intending to improve their national pension systems. Strengthening public social insurance, coupled with non-contributory solidarity pensions, as recommended by ILO standards, have improved the financial sustainability of pension systems, made pension entitlements better and more predictable, allowing people to enjoy a better retirement in their older years. The responsibility of States to guarantee income security in old-age is best achieved by strengthening public pension systems.

1. Pension privatization: Three decades of failure

From 1981 to 2014, thirty countries privatized fully or partially their social security public mandatory pensions (figure 1). Fourteen countries were in Latin America: Chile (first to privatize in 1981), Peru (1993), Argentina and Colombia (1994), Uruguay (1996), the Plurinational State of Bolivia, Mexico and the Bolivarian Republic of Venezuela (1997), El Salvador (1998), Nicaragua (2000), Costa Rica and Ecuador (2001), Dominican Republic (2003) and Panama (2008). Another fourteen countries in Eastern Europe and the former Soviet Union embarked on the experiment to privatize pensions: Hungary and Kazakhstan (1998), Croatia and Poland (1999), Latvia (2001), Bulgaria, Estonia and the Russian Federation (2002), Lithuania and Romania (2004), Slovakia (2005), Macedonia (2006), Czech Republic (2013) and Armenia (2014). Additionally, two countries privatized their public pension system in Africa, Nigeria (2004) and Ghana (2010). It should be noted that this is a small number of countries. Despite pressures from the international financial organizations and the pension fund industry, only 30 countries privatized all or parts of their pension systems; that is, the majority of countries in the world have opted not to privatize.

As of 2018, eighteen countries have re-reformed, reversing pension privatizations (figure 1): the Bolivarian Republic of Venezuela (2000), Ecuador (2002), Nicaragua (2005), Bulgaria (2007), Argentina (2008), Slovakia (2008), Estonia, Latvia and Lithuania (2009), the Plurinational State of Bolivia (2009), Hungary (2010), Croatia and Macedonia (2011), Poland (2011), the Russian Federation (2012), Kazakhstan (2013), the Czech Republic (2016) and Romania (2017).

Figure 1. Countries that privatized social security mandatory pensions and that reversed privatization, 1981-2018



With sixty per cent of countries that had privatized public mandatory pensions having reversed the privatization, and with the accumulated evidence of negative social and economic impacts, it can be affirmed that the privatization experiment has failed. The reasons are multiple, ranging from high fiscal and administrative costs, to low coverage and benefits, to the unpredictability of old-age income due to capital market risks, as documented in this report and its companion country case studies. While some governments repealed privatization early, the large majority of reforming countries turned away from privatization after the 2007-2008 financial crisis, when the drawbacks of the private system became evident and had to be redressed.

In light of the responsibility of governments to guarantee income security in old-age, the objective of this report is to provide policy makers and social security institutions with an analysis of the reversals of pension privatization, including lessons learnt from recent re-reforms. The paper is organized in three parts. The first part presents the privatization experiment, and the reasons that led countries to abandon this model. The second part documents the reversals from privatization. The third and final part abstracts the policy steps needed to redress pension privatization for those governments interested to return to public pension systems.

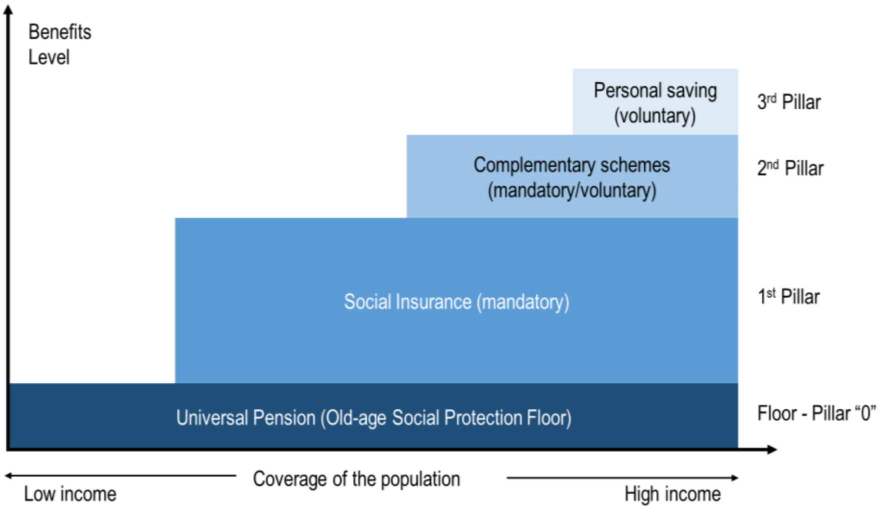
1.1. The Privatization Experiment

Since the origin of social security systems, the private insurance industry has typically catered the small 3rd pillar (voluntary pensions) and sometimes the 2nd pillar (complementary pensions). The wave of pension privatizations during the 1980s-2000s was an incursion of the financial sector into expanding to the larger 1st social insurance pension pillar (Box 1). This radical experiment was initiated in 1981, during the dictatorship of General Pinochet in Chile [1]. With the backing of a group of free-market economists trained at the University of Chicago, the Chilean public pension system (1st pillar) was changed to a private system run by private pension administrators. This structural reform was aimed at reducing for the government the fiscal costs of social security by replacing social insurance pensions with individual accounts managed by private pension fund administrators. Affiliation to the private pension system was mandatory for employees and voluntary for the self-employed; interestingly, the military were excluded and kept their pensions in the public system. Employers' contributions were eliminated under this new system, but they had to provide an 11 per cent wage increase to workers at the time of the reform. Workers, instead of receiving a pension with a Defined Benefit (DB) at the end of their careers, were required to deposit Defined Contributions (DC) into their individual accounts, and these savings at the age of retirement were to be used to buy an annuity from a private insurance company. Workers could also make voluntary deposits to the mandatory individual account; both the mandatory and voluntary deposits were tax-deferred. Workers became compulsory consumers of the financial industry without sufficient information to make informed decisions, assuming individually all financial market risks. A primary objective of the pension privatization experiment was to mobilize people's savings to stimulate national long-term savings and develop capital markets.

[1] The reform was implemented under an authoritarian regime, without public discussion; with the Congress in recess since the military coup of 1973, the Military Junta held legislative power.

Box 1
Understanding pension systems: the multi-pillar pension model of the International Labour Organization (ILO)

Pension systems exist in all countries with the objective to eliminate old-age poverty and provide income security for older persons. In most countries, the right to social security for all is enshrined in the Constitution and/or secured by law. The right to social security is also asserted in Articles 22 and 25 of the Universal Declaration of Human Rights. Countries aim to achieve universal pension coverage at adequate benefit levels. This is normally achieved by a public system that includes contributory public social insurance, combined with non-contributory social pensions, complemented by voluntary pensions for those who want more savings for retirement.



Pillar 0 - the Pension Floor: It is aimed at establishing a social protection floor for older persons. This pillar is usually provided through a non-contributory pension scheme. It is financed from the general budget. Universality of coverage can be achieved through a universal non-contributory scheme or by a combination of social insurance and a means-tested or pensions-tested pension scheme. Regardless of the specific design of Pillar 0, it should guarantee a minimum level of income, with adequate levels of benefit, for a life in decency and dignity.

1st Pillar - Social Insurance: It follows the typical design of social security pension systems, defined benefit and mandatory, financed through employer and worker contributions. Its objective is to provide higher levels of pension benefits in order to maintain the standard of living after retirement. It should provide at least a minimum pension at 40 per cent of pre-retirement insured income for 30 years of contributions, as well as a reduced/adjusted minimum benefit for those who have contributed for at least 15 years. Implementation of, as necessary, successive parametric reforms are required to ensure its sustainability.

2nd Pillar - Complementary Pillar: Not all countries need to have this pillar, it is a complementary contributory component, it can have any characteristics, voluntary or mandatory, employment-based occupational or non-occupational, defined benefit or defined contribution, usually financed by employer's contributions and privately managed, aimed at supplementing the pension benefits from the previous two pillars.

3rd Pillar - Voluntary Personal Savings Pillar: This pillar is also complementary, comprised of a set of voluntary private pension schemes for those with the economic capacity to make additional personal savings, generally managed by private pension administrators under full market competition and government regulation.

Source: ILO, 2018a and 2018b; Gillion et al, 2000; Cichon et al, 2000.

The Chilean pension experiment caught the attention of many. As it was being implemented, those friendly to privatization and market-led reforms described it as a pioneering experience for other countries to follow. Eventually, major International Financial Institutions (IFIs) and conservative think-tanks began to promote similar social security reforms, primarily the World Bank, together with USAID, the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development

(OECD), the Cato Institute and the Inter-American and Asian Development Banks (Mesa-Lago, 2012; Orenstein, 2008). The publication «*Averting the Old Age Crisis: Policies to protect the old and promote growth*» (World Bank, 1994) served as an important reference and blueprint for policy discussions. It presented pension systems as multi-pillar, and focused on the reform of the first pillar shifting towards private individual accounts invested in capital markets instead of public social insurance (Wodsak and Koch, 2010). With a strong emphasis on promoting economic growth, the World Bank publication depicted the traditional public pension system as a failure – both socially and economically. The World Bank emphasized the positive effects that pension privatization could have on capital markets, supporting investment growth, as well as claiming that they could provide higher benefit levels and stronger incentives for people to contribute – however, they failed to explain the very high costs of transition as well as the many risks to pensioners.

Advocates of privatization also claimed that defined benefit public social insurance would lead to an unavoidable «social security crisis» or an «old-age crisis», using this as justification to introduce structural reforms and the full or partial privatization of social security pension systems, particularly in middle-income countries (Table 1). In countries where a full privatization of the first pension pillar was not feasible, some schemes or regimes were privatized, while others were kept public. Costa Rica, for example, after several years of pressure and advice from the IFIs, adopted private individual retirement savings as a complement to the defined benefit public system. In countries where privatization was not possible at all due to excessively high transition costs or insurmountable public resistance, the World Bank promoted as a second best reform option a non-financial (notional) defined contribution (NDC) [2] system facilitating the path towards future privatization (Holzmann and Palmer, 2006). With significant resources and direct access to Ministries of Finance, the World Bank, the IMF, the OECD, USAID and the Inter-American Development Bank and the Asian Development Bank, managed to promote the pension privatization agenda through policy advice, setting up regulators or supervisory bodies, creating modelling software, training, publications and by providing multi-million dollar loans. Orenstein (2008) estimates that the success rate of the World Bank projects promoting reform consistent with pension privatization was high – nearly 76 per cent – despite being a highly contentious and difficult issue in most countries.

Table 1. Typology of pension privatization reforms 1981-2010

	Full privatization	Partial privatization
Main Features	Replacement of the public Pay-As-You-Go (PAYG) system with a privately managed pension system, based on fully-funded individual accounts and defined contributions (DC).	Introduction of a complementary fully-funded individual accounts component in a larger system, resulting in a system composed of several pension schemes, some public (with DB, PAYG and public administration features) and others privately managed (with DC and fully-funded individual accounts). The weight of the pillars significantly differs among countries. The larger the private pillar, the lower is the capacity of the public pillar to deliver adequate income security to older persons.
Country Examples	Chile (1981), Plurinational State of Bolivia (1997), Mexico (1997), El Salvador (1998), Kazakhstan (1998), Nicaragua (2000), Dominican Republic (2003), Nigeria (2004)	Argentina (1994), Uruguay (1996), Hungary (1998), Poland (1999), Costa Rica (2001), Latvia (2001), Bulgaria (2002), Croatia (1999), Estonia (2002), the Russian Federation (2002), Lithuania (2004), Romania (2004), Slovakia (2005), Macedonia (2006), Ghana (2010)

Source: Mesa-Lago, 2004; Mesa-Lago and Hohnerlein, 2002; Obermann, 2005; Orenstein, 2008; Grishchenko, 2014.

[2] Non-financial (notional) Defined Contributions are notional or fictitious individual personal accounts under a public PAYG system, that -according to the World Bank- could smooth a transition from the DB to the DC system (Holzmann, 2017).

Indeed, pension privatization was controversial. The reforms were contested by the International Labour Organization (ILO) and by many others, including by the World Bank's Chief Economist at the time, Nobel Laureate Joseph E. Stiglitz (Orszag and Stiglitz, 1999). The ILO expressed disagreement and objected in numerous statements and reports (Gillion et al., 2000; Cichon, 1999 and 2004; Bonilla-Garcia and Conte-Grand, 1998; Fultz, 2004), including a joint ILO-ISSA publication (Beattie and McGillivray, 1995). The ILO emphasized the importance of a well-balanced consideration of pension adequacy, financial sustainability and equity. For the ILO, pension systems should be guided at their core by the objective to provide old-age income security, contrary to the World Bank, with its prevalent objective to support economic growth and reduce fiscal pressures. The ILO argued in particular against relying too heavily on privately managed DC individual accounts that inevitably shift the risks to the individual. It also drew attention to the immense difficulty for countries to shoulder the high transition costs and double burden of phasing out or reducing the pay-as-you go schemes and introducing the new individual accounts pillar. The ILO further highlighted that good governance was a requirement for both the public and the private systems, and that privatization did not necessarily improve the quality of governance. In addition, substantial decrease in benefit levels were often disguised and pushed through such structural reforms.

The ILO, through its technical advisory support as well as its policy and technical documents, has long recommended parametric reforms [3] to reinforce public pension schemes, instead of structural reforms to privatize them (Cichon et al. 2006; Diop, 2008; ILO, 2014; ILO, 2017). The position of the ILO is rooted in its body of international labour standards drawn up and adopted by representatives of governments, employers and workers from around the world (Box 2). The ILO was and is against alarmist predictions of an «old-age crisis» caused by demographic and sustainability challenges. While it is correct that the maturation of pension systems entails increased benefit expenditure in the long term, this is a normal phenomenon, and hardly cause for alarm. The experience of higher income countries demonstrates that it is feasible to adapt pension systems though minor parametric reforms in order to make them sustainable throughout demographic change, pension schemes' maturation and other future challenges.

Ultimately, over time the arguments advanced by the ILO proved correct. Even in European countries - with large older populations - the pension systems are sustainable with adequate parametric adjustments and some limited public budget support (European Commission, 2015). Private pension systems underperformed, as shown in the next section. Despite pressures from the financial industry, requests from governments to IFIs for support for structural pension reforms reduced. The World Bank abandoned the pension privatization push, replaced the leadership of the Bank's Social Protection Department, and since the mid-2000s there have been no stand-alone pension reform projects within the World Bank loans portfolio [4].

[3] Structural reforms transform the public system, for example replacing it in whole or part with a private one. Parametric reforms on the other hand involve minor changes, such the age of retirement, contribution rates, benefit formula, etc. of the existing public system with the aim to strengthen their long-term financial sustainability while ensuring old-age income security.

[4] Though in a few cases they may be subcomponents of financial sector loans, public sector reform programmes or technical assistance by the World Bank's Financial Sector and Capital Markets Global Practice, but not stand-alone loans for pension reforms.

Box 2
ILO principles for designing and reforming pension systems

An international consensus was forged by governments, and employers' and workers' organizations on the objectives, functions and appropriate design principles of pension systems. These are reflected in principles embodied in the international social security standards. These principles include:

Principle 1. Universality. Social security is a human right, which in practical terms is understood as the need to guarantee universal protection without leaving anyone behind. The principle of universality is not only enshrined in ILO standards but also in several United Nations (UN) instruments, including the Universal Declaration of Human Rights, Article 22 which states that *«everyone, as a member of society, has the right to social security».*

Principle 2. Social solidarity and collective financing are at the centre of social security and ILO standards. Contrary to privately operated pension schemes based on individual savings accounts, collectively financed protection mechanisms generate positive redistribution effects and do not transfer the financial and labour market risks onto individuals.

Principle 3. Adequacy and predictability of benefits. This principle refers to the entitlement to defined pension benefits prescribed by law. The Social Security (Minimum Standards) Convention, 1952 (No.102) and the Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128) envisage the provision of income security to people who have reached pensionable age through: (i) earnings-related contributory pensions (guaranteeing minimum benefit levels, or replacement rates corresponding to a prescribed proportion of an individual's past earnings – in particular for those with lower earnings) and/or (ii) flat-rate pensions (mostly residency-based and financed by the general budget) and/or means-tested pensions. These standards prescribe that earnings-related schemes need to provide periodic payments of at least 40 per cent (Convention No. 102) or 45 per cent (Convention No. 128) of the reference wage after 30 years of contribution or employment. These standards also require that pensions need to be periodically adjusted following substantial changes in the cost of living and/or the general level of earnings.

Principle 4: Overall and primary responsibility of the State. It refers to the obligation of the State, as the overall guarantor for social protection, to ensure the «financial, fiscal and economic sustainability» of the national social protection system «with due regard to social justice and equity» by collecting and allocating the needed resources with a view to effectively delivering the protection guaranteed by national law (ILO Social Protection Floors Recommendation, 2012 (No. 202)).

Principle 5: Non-discrimination, gender equality and responsiveness to special needs. With a view to secure gender equality, pension designs should duly take into account solidarity between men and women, by adopting financing mechanisms, eligibility conditions and benefit conditions that offset gender inequalities originating in the labour market or due to interruption in the careers of women arising from their reproductive roles and/or care responsibilities (Recommendation No. 202).

Principle 6: Financial, fiscal and economic sustainability. Ensuring the sustainability is a permanent challenge for the State in exercising its overall and primary responsibility to guarantee a functional and comprehensive social protection system. This requires taking all necessary measures, including realizing periodically the necessary actuarial studies and introducing as required minor parametric reforms to ensure the sustainability of the pension system. The State is also accountable to ensure the sustainability of national social security systems in view of, among other factors, demographic change.

Principle 7: Transparent and sound financial management and administration. The principle refers to the need for good governance of the system, particularly with respect to financing, management and administration, to ensure compliance with the legal and regulatory frameworks (Convention No. 102 and Recommendation No. 202).

Principle 8. Involvement of social partners and consultations with other stakeholders. The principle recognises the need to ensure social dialogue and representation of protected persons in social security governance bodies. The principle of participatory management of social security systems has been since long established in international social security standards, namely in Article 72(1) of Convention No. 102, which stipulates that «where the administration is not entrusted to an institution regulated by the public authorities or to a government department responsible to a legislature, representatives of the persons protected shall participate in the management, or be associated therewith in a consultative capacity, under prescribed conditions; national laws or regulations may likewise decide as to the participation of representatives of employers and of the public authorities».

Source: ILO, 2018a and 2018b; ILO Conventions and Recommendations.

1.2. Lessons learnt from three decades of pension privatization

Pension privatization was presented as a clear cut solution to address population ageing and ensure the sustainability of social security pension systems. At the time, pension systems in many countries were facing a range of challenges, such as the proliferation of special social security regimes and fragmentation, informality and low coverage and low contribution rates, which could have been addressed with parametric reforms preserving public systems. No advanced industrialized democratic country replaced its public pension system with a private, fully funded individual account system [5]. However, in developing countries privatization was put forward as the solution. Expectations were high when reforms were introduced and countries hoped to improve both their pension systems and their overall economic performance. Coverage rates and benefit levels were expected to increase, inequality to decrease, administrative costs to decrease through competition, governance of pension management to improve, and capital markets to deepen supporting new investments and economic growth.

In practice, however, pension privatization did not deliver the expected results (table 2). Coverage rates stagnated or decreased, pension benefits deteriorated and gender inequalities compounded, making reforms very unpopular. The risk of financial market fluctuations was shifted to individuals. Administrative costs increased reducing pension benefits. The high costs of transition – often underestimated – created large fiscal pressures. While private sector administration was supposed to improve governance, it weakened it instead. Workers participation in management was eliminated. The regulatory and supervisory functions were captured by the same economic groups responsible for managing the pension funds, creating a serious conflict of interest; furthermore, the private insurance industry – which ultimately benefits from people's savings – moved towards concentration. Last, but not least, pension reforms had limited effects on capital markets and growth in most developing countries.

(a) Coverage rates stagnated or decreased

There is international consensus on the objective of extending social protection to all. This is in line with the human right to social security and the principle of universality of protection. Advocates of pension privatization argued that mandatory individual accounts would earn higher interest and thus improve compliance and willingness to contribute (World Bank, 1994). However, evidence shows that reforms did not extend pension coverage; on the contrary, a majority of countries registered a decrease in coverage rates [6] of contributory schemes.

The decentralization of the contributions collection function acted as an important trigger for the reduction in coverage rates. Before privatization, normally contribution collection was done by a centralized scheme under the control of social security institutions. Following the Chilean model, many of the countries that privatized their systems transferred and decentralized the function to private pension fund managers, thus creating a highly inefficient and ineffective fragmented contributions collection system.

[5] Sweden's pension system is the only case of a developed country with individual accounts as the first pillar: however, the system remains publicly managed, even with private companies involved in the investment of assets.

[6] Often estimated as the share of active contributors in the labour force.

In Argentina, the number of contributors fell from 46 per cent of the labour force in 1993 (prior to the reform) to 35 per cent in 2002 for men, and from 42 to 31 per cent respectively for women (Bertranou et al., 2018). Likewise, coverage rates in Chile dropped from 64 per cent in 1980 (prior to the reform) to 61 per cent in 2007 (Mesa-Lago, 2014). In Hungary, coverage decreased from around 75 per cent of the labour force before 1998 to 71.8 per cent in 2009 (Simonovits, 2012). In Kazakhstan, coverage rates decreased from around 66 per cent before 1998 to 63 per cent at the end of the reform in 2013 [7]. Coverage in Mexico also fell from 37 per cent to 30 per cent from 1996 to 2004 (Mesa-Lago, 2004).

In other countries, coverage stagnated after the privatization, therefore failing to meet expectations. In the Plurinational State of Bolivia coverage rates stagnated between 1997 and 2009 at around 12 per cent (Mesa-Lago, 2018). Between 1991 and 2010, coverage rates in Colombia stagnated at around 28 per cent (World Bank, 2014). In Poland between 1999 and 2013 coverage rates stagnated at around 78 per cent (Polakowski and Hagemejer, 2018). Similarly, coverage rates in Uruguay stagnated at around 70 per cent between 1995 and 2003.

Mesa-Lago (2004) points out that the weighted average of coverage for nine countries [8] in Latin America decreased from 38 per cent before the privatization reforms to 27 per cent in 2002 after the reforms. While the absolute coverage figures may differ, the overall trend is the same, indicating underperformance in coverage as a result of the privatization reforms.

(b) Pension benefits deteriorated

The shift in the privatization processes from defined benefits to defined contributions had a major effect on replacement rates. It had a serious negative impact on pension benefit adequacy, with pension levels often not meeting ILO standards as prescribed by the Social Security (Minimum Standards) Convention, 1952 (No.102) [9] and the Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128) [10] that envisage a replacement rate of at least 40 per cent (ILO Convention No. 102) or 45 per cent (Convention No. 128) of the reference wage after 30 years of contribution or employment (Box 2).

In the Plurinational State of Bolivia, following the reform, the replacement rate averaged 20 per cent of the average salary during working life, well below ILO international standards. In Hungary, in the privatized system, the replacement rate for persons with 20 years of contributions were estimated to be between 9.8 to 12.5 per cent lower than the pre-reform levels and more than 18 per cent lower for persons with 30 years of service (Szikra, 2018). In Kazakhstan, the replacement rate fell from 60 per cent before the reform to 29.27 per cent in 2013 following the reform and just before the privatization reversal. In Poland, the shift from the DB to DC system resulted in a fall in the replacement rate from an average of 67 per cent prior to the reform to below 40 per cent following the reform, falling well short of the promised replacement rate of at least 71 per cent (Maltseva and Janenova, 2018; Mesa-Lago, 2018; Polakowski and Hagemejer, 2018; Szikra, 2018).

[7] Estimations based on Hinz et al. (2005), OECD (2014) and Maltseva and Janenova (2018).

[8] These include: Argentina, the Plurinational State of Bolivia, Chile, Colombia, Dominican Republic, El Salvador, Mexico, Peru and Uruguay.

[9] Henceforth ILO Convention No. 102.

[10] Henceforth ILO Convention No. 128.

Table 2. Pension privatization reforms and main results

	Argentina	Bolivia, Plur. State of	Hungary	Kazakhstan	Poland
Coverage rates of contributory schemes	Coverage rates fell between 1993 and 2002 from 46 to 35 per cent of the labour force for men, and from 42 to 31 per cent for women.	Coverage rates stagnated at 12 per cent of the labour force, the lowest level in Latin America.	Coverage rates decreased from around 75 per cent of the labour force before the reform in 1998 to 71.8 per cent in 2009.	Coverage rates decreased from around 66 per cent of the labour force before the reform in 1998 to 63 per cent at the end of the reform in 2013	Between 1999 and 2013, coverage rates stagnated at around 78 per cent
Benefit levels/ replacement rates (adequacy)	Replacement rates oscillated between 45 per cent and 52.5 per cent. However, benefits above the minimum were lacking automatic indexation – thus resulting in declining purchashing power.	Benefit levels deteriorated; replacement rates averaged 20 per cent of the average salary during working life, much below ILO international standards	Pensions were at least 9.8 per cent lower than the pre-reform levels with 20 years of contributions and 18 per cent lower with 30 years of contributions.	Benefit levels deteriorated; replacement rates fell from 60 per cent before the reform to 29.3 per cent in 2013 just before the reversal of privatization.	Pension benefits deteriorated; replacement rates fell below 40 per cent after the reform from an average of 67 per cent before the reform, and thus failing to meet the promised rate of at least 71 per cent.
Cost of transition	Very high; the pension privatization-driven annual deficit grew from 1 per cent of GDP in 1994 to nearly 3 per cent of GDP in 2001. It is estimated to cost 3.6 per cent of GDP in 2040 instead of achieving a surplus of 0.2 per cent as initially estimated.	Very high; transition costs were 2.5 times the initial projections. Estimated to cost annually 1.7 per cent of GDP in 2040 instead of the initial estimation of 0.2 per cent of GDP.	Very high; annual transition costs increased from 0.3 per cent of GDP in 1998 to 1.2 per cent of GDP in 2010.	Very high; increased the annual budget deficit by 1.7 per cent of GDP in 1998, and 2.8 per cent in 2008. The cumulated cost between 1998 and 2025 is estimated by the IMF to reach 36.5 per cent of 1997 GDP.	Very high; the annual cost was estimated to rise from 1.48 per cent of GDP in 2000 to 2.22 per cent in 2017. The cumulated transition cost between 1999 and 2012 was estimated at 14.4 per cent of 2012 GDP.
Administrative costs	Very high. In 1995 following privatization, administrative costs were at 3.54 per cent of contributor's income, representing 32.2 per cent of total contributions. In 2002, these costs rose to 50.8 per cent of contributions.	High. In 2004, the costs were at 2.2 per cent of contributor's income. The administrative costs represented about 18 per cent of contributions.	Very high. The costs represented 14.5 per cent of contributions in 2007 and 12.3 per cent in 2010. Administrative costs were estimated to represent 22.6 per cent of the final balance of the individual account after 40 years of contributions.	Very high. In 2007, average fees were 0.05 per cent on individual account balances and 15 per cent on investment returns. Together, these administrative costs were estimated to represent 16.8 per cent of the final balance of the individual account after 40 years of contributions.	Very high. Until 2004 fees remained unregulated and some pension fund administrators charged up to 10 per cent of contributions. Administrative costs were estimated to represent 18.74 per cent of the final balance of the individual account after 40 years of contributions.
Financial risks transfered to individuals	Yes	Yes	Yes	Yes	Yes
Loan conditionality and/or supported by IFI loan	Yes: IMF included pension reform in loan conditionality	Yes: World Bank loan	Yes: World Bank loan	Yes: World Bank and Asian Development Bank loans	Yes: World Bank loan

	Argentina	Bolivia, Plur. State of	Hungary	Kazakhstan	Poland
Social dialogue	Deteriorated social dialogue following the privatization	Limited social dialogue during the reform process	Social dialogue deteriorated	Social dialogue deteriorated	Limited social dialogue
Gender inequalities	Increased. The reform reduced replacement rates due to women's shorter careers and contributory periods, and higher longevity	Increased; The proportion of older women receiving any type of pension fell from 23.7 to 12.8 per cent from 1995 to 2007	Increased; The reform reduced replacement rates due to women's shorter careers and contributory periods, and higher life longevity	Increased; The reform reduced replacement rates due to women's shorter careers and contributory periods and higher longevity	Increased: The share of women at risk of old-age poverty reached a level as high as 22.5 per cent.
Who benefitted most from pension privatization	Financial sector - Pension fund administrators and commercial life insurance companies	Financial sector - Pension fund administrators and commercial life insurance companies	Financial sector - Pension fund administrators and commercial life insurance companies	Financial sector - Pension fund administrators and commercial life insurance companies	Financial sector - Pension fund administrators and commercial life insurance companies
Effect on capital markets	Limited	Limited	Limited	Limited	Limited

Main sources: Bertranou et al., 2018; Maltseva and Janenova, 2018; Mesa-Lago, 2018; Polakowski and Hagemejer, 2018; Szikra, 2018.

In Chile, the recent review of the private mandatory pension system revealed that the median future replacement rates average 15 per cent (and only 3.8 for low income workers), well below ILO standards and requiring significant public support (Comisión Presidencial de Pensiones Bravo, 2015, p. 88). The deterioration of benefit levels resulted in increases in old-age poverty, undermining the main purpose of pension systems which is to provide adequate income security in old-age.

(c) Gender and income inequality increased

Pension privatization broke the social contract enshrined in social security. Well-designed social insurance schemes are redistributive for two main reasons: (i) they include transfers from employers to workers, and (ii) they are designed to redistribute income from those with higher lifetime earnings to those with lower lifetime earnings and from the healthy and abled to those sick, disabled or unable to work, such as during maternity (Ortiz, 2018). Public pension systems traditionally offset gender and income inequalities, and also provide solidarity across generations, from the youngest workers to the most vulnerable older persons. Guaranteeing a minimum pension for low-income earners or compensating for interruptions in career and contributory periods due to child-caring or family care responsibilities support gender equity. Gender-specific constraints, such as lower participation in the labour market, lower income and asset ownership, should be considered in the design of pension systems (Arza, 2015; UN Women, 2015).

However, those in favour of privatization argued that the redistribution and savings functions should be fulfilled through different schemes/pillars because of the «distortions and evasions» that solidarity elements would generate (World Bank, 1994, p. 82). The redistributive components of social security systems were eliminated with the introduction of individual accounts, as a result, those with low incomes or unable to work, even if temporarily, had very small savings and consequently ended with small pensions, thereby increasing inequalities.

In particular, gender inequality was exacerbated. Women typically have lower contributory records since women generally have work records interrupted by maternity, are often partially employed and earn lower salaries than men. In some Latin American countries, the unemployment rate of women is twice that of men, and the regional average wage of women is 30 per cent lower than that of men. Pension privatization reforms increased the minimum number of contribution years required to qualify for the minimum pension, with particularly adverse effects on women.

The pension formula of public PAYG schemes often contains solidarity elements to counteract gender inequalities, for example by recognizing time spent for child or elderly care responsibilities as contributory years or by introducing a minimum guaranteed pension level (Fultz, 2011). As an example, the redistributory mechanism in the Norwegian pension and tax system reduces the 43 per cent income difference between women and men to only 7 per cent (Hansen, 2018). This type of mechanism is not found in privatized individual account systems in which savings during working years and the returns on investments of contributions determine benefit levels. In addition, the use of sex-differentiated mortality tables to calculate annuities based on accumulated savings in the individual accounts is also discriminatory, as women live longer than men. The element of solidarity between men and women and the degree of redistribution that exists in public pension systems has been lost with the introduction of individual accounts, with highly detrimental impacts on women (Behrendt and Woodall, 2015).

Women are more likely to be adversely affected by pension privatization reforms. In the Plurinational State of Bolivia, the proportion of elderly women receiving a contributory pension fell from 23.7 per cent in 1995 to 12.8 per cent in 2007 as a result of the reform (Mesa-Lago, 2014). Average pension levels for women ranged from 39 to 86 per cent of the average pension for men, depending on the type of pension. In Kazakhstan women are more likely to be engaged in farming or in household activities, therefore unlikely to contribute to and benefit from private schemes. Hungary reduced the maximum creditable period of contributory years for child care to one year, which directly affected benefit levels for women (Maltseva and Janenova, 2018; Mesa-Lago, 2018; Szikra, 2018).

(d) High transition costs created large fiscal pressures

The costs of transitioning from a public PAYG to a «funded» private system were seriously underestimated across all reformed countries, and created new fiscal pressures which were difficult for most governments to afford.

Transition costs were often very high, coming from two sources. First, government had to recognize the contribution pension entitlements or acquired rights of insured persons in the prior PAYG system [11]. Second, the transfer of active contributors from the PAYG system to the new private system abruptly generated a financial deficit in the PAYG system and thus increased the tax burden in the short-term because the PAYG system still had to continue to honour existing pension payments. Given the high fiscal costs, most governments required private pension funds to invest their accumulating reserves in government bonds, creating a circular dynamic in which the only beneficiaries were the private pension administrators who benefited from the fees and commissions they charged.

These transition costs from the public solidarity based systems to private individual account systems were not properly assessed by international financial institutions and technocrats who were promoting them. In some cases, no sound analysis of the expected transition costs was carried out, in others calculations were based on unfounded optimistic assumptions. In The Plurinational State of Bolivia the actual transition costs of the reform were 2.5 times the initial projections. The World Bank had initially estimated the transition costs of privatization in the Plurinational State of Bolivia at 0.2 per cent of GDP in 2040 – after the privatization, the World Bank projected it as 1.7 per cent, about 8 times the original estimate. In Argentina, it was initially estimated that the transition to privatization would range from a cost of 0.2 per cent of GDP to a surplus of 0.2 per cent of GDP; however, after the privatization, the World Bank estimated the transition would cost at 3.6 per cent of GDP – 18 times the original estimate (Mesa-Lago, 2004).

The newly created fiscal distress was unacceptable to many governments, particularly as concerns regarding fiscal pressures and the financial sustainability of public pension systems were the main driver behind privatization reforms in all countries. Privatization had been presented as the remedy to avoid a «social security crisis» and to ensure more sustainable future financing for pension systems.

Financing the transition towards individual accounts exacerbated pre-existing fiscal pressures in most countries. In Poland, between 1999 and 2012, the cumulative transition costs of the reform were estimated at 14.4 per cent of 2012 GDP, and approximately 6.8 per cent of GDP was consumed in servicing the additional public debt. In comparison, the

[11] In fact, Chile and some other countries which followed its experience and adopted the full replacement of PAYG schemes, opted to issue "recognition bonds", financed by the National Treasury, to explicitly recognize the acquired rights of participants in the previous PAYG system, creating new public debt and exacerbating fiscal pressures (Queisser, 1998a; Riesco, 2004).

cumulative privatization revenues over the same period amounted to 5.24 per cent of 2012 GDP. In Kazakhstan, government budget deficit was estimated to have increased by approximately 1.7 per cent of GDP in 1998 to cover transition costs and it reached a peak of 2.8 per cent of GDP in 2008; while the cumulative cost (1998-2025) was estimated at 36.5 per cent of 1997 GDP (IMF, 1998; Maltseva and Janenova, 2018; Polakowski and Hagemejer, 2018).

In Chile, even thirty years after the reform, in 2010, transition costs represented still 4.7 per cent of GDP (Mesa-Lago, 2014). While in Argentina the public system ran an annual deficit of 3.3 per cent of GDP in 2000, contributions diverted to the private system represented around 1.5 per cent of GDP (Bertranou et al., 2018; Titelman et al., 2009).

As a consequence of the reform in Hungary, the state budget required to cover the fiscal deficit increased from 0.19 per cent of GDP in 1998 to 1.36 per cent of GDP in 2009 (Hirose, 2011; Szikra, 2018). Drahokoupil and Domonkos (2012) documented that government bonds in Hungary and other countries were often issued to finance the transition costs of pension privatization, generating a vicious and costly cycle. The private pension fund administrators were the only beneficiaries of this cycle, cashing in the administrative costs for the financial transactions. With respect to the costs of the reforms, in addition to concerns regarding direct transition costs, concerns arose also regarding potential additional costs resulting from compensatory measures that governments had to implement to cover the low benefit levels in the privatized schemes. In some countries, following the Chilean example, governments provided a minimum guaranteed level of return on investments of pension funds to compensate for financial losses in times of economic downturn. As a consequence, in countries like Chile, taxpayers were required to cover not only the very high cost of transition to the private system that was supposed to be financially sustainable and provide higher pension benefits, but also the pension «top-ups» to increase the very low levels of pension benefits provided by the private system. Many governments were distressed by these facts and considered the advantages of moving back to the PAYG public pension schemes, that would avoid such high fiscal costs and where future obligations could be calculated with greater certainty.

(e) High administrative costs

The privatization of the management of pension funds was expected to minimize administrative expenses due to competition between funds (World Bank, 1994). However, in practice, this was not the case as apart from rent-seeking and profit generation, private pension fund administrators need to finance many overhead costs that do not occur in public PAYG systems such as for marketing, corporate overheads, or adverse selection. Ionescu and Robles (2014) estimated that administration charges, investment management fees, custodian fees, guarantee fees, audit fees, marketing fees and legal fees, among others, would reduce accumulated assets (or pensions) over a 40 year period by as much as 39 per cent in Latvia, 31 per cent in Estonia and 20 per cent in Bulgaria. Nobel Laureate Peter Diamond and Nicholas Barr (2008, p. 163) demonstrated that on average, for each percentage point deducted on commissions, future pensions are reduced by 19.6 per cent.

Administrative costs of private pension funds are much higher than those of public administrations, and as a consequence making returns and ultimately pensions lower. As an example, administrative costs of pension systems jumped from 6.6 per cent in 1990 (public system) to 32.2 per cent in 2000 (post-reform) in Argentina and from 2.6 per cent in 1993 (public system) to 14.1 per cent in 1999 (post-reform) in Colombia (table 3). Only the Plurinational State of Bolivia experienced a reduction following the privatization due to strict regulation and close oversight, as well as by eliminating competition between pension funds – the later defeating a main supposed benefit of privatization.

Table 3. Administrative costs before and after privatization reforms in selected countries (as a percentage of contributions)

Country	Before privatization reform	After privatization reform
Argentina	6.6 (1990)a	50.8 (2002)c
Bolivia, Plur. State of	8.6 (1992)a	18.1 (2002)c
Hungary	2.0 (1998)d	14.5 (2007)b
Colombia	2.6 (1993)a	25.9 (2002)c
Chile	8.0 (1980)d	19.5 (2002)c
El Salvador	7.8 (1996)a	21.3 (2002)c
Peru	NA	30.5 (2002)c
Mexico	NA	40.3 (2002)c
Uruguay	6.5 (1990)e	18.2 (2002)c

Sources: [a] Claramunt, 2004; [b]Mesa-Lago, 2014; [c] Mesa-Lago, 2004; [d] Iglesias and Acuñas, 1991; [e] Based on consolidated administrative data of Banco de Previsión Social (BPS, 2005).

Private pension fund administrators disguise commissions under different types of fees, making it difficult to enact regulations to capture all of them. For example, in Poland, funds charged three different types of fees: a distribution/sales fee [12], a management fee and a premium fee. Until 2004, the level of the distribution/sales fee remained unregulated and some pension funds applied rates as high as 10 per cent of the value of contributions, estimated to represent 18.7 per cent of the final balance of an individual account after 40 years of contributions (Ionescu and Robles, 2014). This fee was reduced to 3.5 per cent after 2004. Many members were unaware of the fees being charged to them.

Other governments like Argentina and Kazakhstan also introduced caps on commissions in light of the excessive fees charged. Poland additionally introduced a ban on marketing of pension funds since this was an additional cost driver. In Argentina, the average administrative costs reached 3.54 per cent of income of contributors in 1995 – representing 32.2 per cent of contributions- without any restriction established by the government at that time (Rofman, 2000). In 2002, when the minimum contribution rate was set at 5 per cent of total income, the administrative fees increased to about 50.8 per cent of contributions (Cetrángolo and Grushka, 2004).

In Kazakhstan, prior to the 2013 pension re-reform, commission fees charged by private pension funds often reached the maximum limits of 15 per cent of their investment income and 0.05 per cent per month of pension assets (Hernandez and Stewart 2008). The total administrative costs were estimated to represent 16.84 per cent of the final balance of an individual account after 40 years of contributions (Ionescu and Robles, 2014). In Hungary, administrative costs were above 10 per cent of contributions, reaching up to 14.5 per cent in some cases. The impact of these costs is estimated to represent 22.57 per cent of the final balance of an individual account after 40 years of contributions (Ionescu and Robles, 2014; Szikra, 2018).

In the private systems of Mexico and Costa Rica, members were expected to pay the equivalent of 5 years of contributions throughout their contributory career solely to cover administrative fees (Durán-Valverde and Pena, 2011). In El Salvador, the management costs of the public system before the reform as a percentage of the contributions was

[12] This includes fees paid out by pension fund administrators to cover the marketing and selling shares of the funds.

7.8 per cent, and increased to 21.3 per cent in 2002 following the privatization. The highest management costs emerged in Mexico and Argentina, where these increased to 40 and 45 per cent of contributions respectively. According to Mesa-Lago (2004), the non-weighted average of management costs as a percentage of contributions for 10 Latin American countries [13] was 25.8 per cent in 2003 (Mesa-Lago, 2004). In Chile, total administrative costs as a percentage of contribution rose from 8 in 1980 to 19.5 in 2002 – representing 33.8 per cent of accumulated assets even 20 years after the reform (Mesa-Lago, 2012).

(f) Weak governance: Capture of regulation and supervision functions

The overall objective of government regulation of private pension funds is to ensure that pension fund managers act in the interest of the workers and pensioners and not (only) in the interest of the insurance company. Pension fund regulations are meant to address a number of market imperfections such as asymmetric information, moral hazard, myopic individual behaviour and imperfect competition. Regulatory efforts also aim to prevent evasion, mismanagement, fraud or corruption, inefficient administration as well as overly risky business strategies (Orszag and Stiglitz, 1999; Gillion et al. 2000). To fulfil this role, it is indispensable that regulatory authorities are independent and have sufficient intervention powers. However, in many cases, the regulatory function of private pension funds was captured by private interests.

Regulatory capture is the situation in which a regulatory agency, created to defend the public interest, acts on behalf of certain economic interest groups in the industry which it is required to supervise. Capture usually occurs in a non-visible manner, including through situations such as influencing traffic or insider trading. In the private pension fund industry, the functions of regulation and supervision of the pension system were often captured by the same economic groups responsible for managing pension funds, creating a serious conflict of interest [14]. Already early in the privatization debate, the World Bank and various researchers identified the risk of a ‘revolving door’ between the fund management companies and the supervisory agency – that is to say the risk of industry capture (Didier and Schmukler, 2014).

The capture of pension regulators by industry lobbies is documented in some financial markets e.g. Ireland and United States (Turner, Hughes and Maher, 2016), and less well-documented in others. In most developing countries where financial and regulatory structures were still underdeveloped, pension privatization processes favoured the entry of large foreign financial conglomerates, creating a quasi-market with limited competition (Impavido, Lasagabaster and García-Huitrón, 2010). Additionally, most countries preferred to regulate and supervise this pension quasi-market with small specialised agencies – more susceptible to regulatory and supervisory capture – than integrating the supervision into broader financial and

[13] These include: Argentina, the Plurinational State of Bolivia, Chile, Colombia, Dominican Republic, El Salvador, Mexico, Nicaragua, Peru and Uruguay.

[14] For example, in Argentina, at the turn of the century, the private pension fund supervisory body (the Superintendence of AFPs) colluded with the government to allow pension funds to change US dollar instruments into peso set instruments at the time when the exchange rate was at par; this caused those instruments to lose two-thirds of their value when the devaluation of the peso occurred (Mesa-Lago, 2008).

regulatory structures, less prone to capture (Hu and Stewart, 2009; Turner, Hughes and Maher, 2016; Queisser, 1998a and 1998b; Didier and Schmukler, 2014).

The close ties between politicians and the financial sector, as well as the scarcity of high-level staff skilled in financial market regulation, contributed to the selection of regulators from the existing industry, thus accommodating private interests (Didier and Schmukler, 2014; Crabtree and Durand, 2017; Urteaga-Crovetto, 2014). In Costa Rica, the ex-president of the Central Bank Jorge Guardia publicly denounced the fact that regulators/supervisors of the financial system, comprised of superintendencies (supervisory bodies) including for the private pension system, often aligned with private banks' interests [15].

In this context, the implementation of privatization reforms did not create the necessary incentives for pension fund managers or regulators to pursue the interests of the members of the fund. In Chile, AFPs are among the largest shareholders of privatized public entreprises (Undurraga, 2011). Depósito Central de Valores S.A. – a private company owned by the financial industry including the AFPs, replaced the central bank as the custodian of pension assets (Queisser, 1998a).

Further, in many countries like the Plurinational State of Bolivia and Poland, the direct involvement of social partners in the supervision of the private pension funds was excluded, thus decreasing the supervisory oversight in place. Overall transparency and accountability were low and governance structures were under-developed.

In general, the management, supervision and regulation of the pension funds has been weak, creating room for mismanagement. The reforms created loopholes that allowed pension funds to reap excessive profits for the industry and foreign investors to become dominant players. The more extensive and longer pension systems are privatized, the larger the influence of private pension funds and the financial sector, making the reversal from privatization more difficult (Wilson Sockey, 2017).

(g) Concentration of the private insurance industry

A further argument advanced by proponents of the pension privatization was that it was expected to generate competition among many pension administrators and thus improve efficiency and service delivery (Impavido et al., 2010). In effect, generally when mandatory private pensions were launched a significant number of private pension administrators were present in the market; however, over time the move towards market concentration happened in all cases and often national companies were absorbed by large foreign corporations.

In some countries, such as the Plurinational State of Bolivia and El Salvador, there were only two major pension administrators creating oligopolistic markets and thus defeating the benefits of competition. In the Plurinational State of Bolivia, pension administration and assets were concentrated in the hands of two AFPs that belonged to foreign financial institutions Zurich Financial Services AG and Spain`s Banco Bilbao Vizcaya Argentaria SA (BBVA). In El Salvador, following a number of mergers and acquisitions of pension administrators, only two administrators survived, one belonging to the Spanish BBVA, and the other to Citigroup USA which were later bought by a Honduran and a Colombian firm respectively, another illustration of how the private insurance industry tends towards concentration. The number of private pension fund administrators shrank from 60 to 21 in Hungary and the six biggest firms concentrated

[15] See "En Guardia," La Nación, 2 Octubre 2012.

90 per cent of contributing members. In Poland there were initially 21 funds, while over the years – mainly through mergers or acquisitions– the sector was consolidated into only 12 funds, with 48 per cent of the assets being managed by only three funds. Argentina's AFPs reduced in number from 24 at the time of privatization of the system to 10 at the time of the reversal of privatization. Chilean AFPs fell from 21 to 5 between 1994 and 2008; concentration of contributors in the biggest three firms rose from 67 per cent to 86 per cent (Mesa-Lago and Bertranou, 2016; Mesa-Lago, 2018; Polakowski and Hagemejer, 2018; Szikra, 2018).

(h) Who benefitted from people's pension savings? The financial sector

Who benefited from national pension savings of individuals? This is an important developmental question. In many countries, the pension reserves of young pension systems in the accumulative phase were used for national development; for example, in Finland, accumulated public pension funds in the 1930-40s were used for rural electrification and basic public infrastructure, and after 1961 to finance industrialization, benefitting millions of Finnish people (Kangas, 2006). However, the potential use of pension funds for national public investment was generally lost with «funded» privatized systems, which invested the savings of individual members in capital markets seeking high returns, without prioritizing national development goals. Privatization was supposed to give an important role to private pension funds in national development including for housing, infrastructure and environmental priorities through the purchase of mortgages, government bonds and securities. However, the limited benefits of using capital markets for these types of investments should be questioned, instead of using direct public investment (Muller, 2008; Hujo, 2014).

Indeed, it is the financial sector, the private pension administrators and commercial life insurance companies, who appear to benefit most from people's pension savings. Table 4 below illustrates the increase in pension fund assets under private management, including mandatory and voluntary pensions. On average, the amount of people's savings going to the financial sector increases steadily from 2000 to 2016, reaching an average of 14 per cent of the countries' GDP. In Chile, the amount was as high as 70 per cent of GDP in 2016. Overall, in 2016 the financial sector was administering approximately USD 616 billion of assets covering people's pension savings in 24 countries (Table 4).

Furthermore, in a majority of countries national investment regulations do not include any restrictions on the investment of pension funds abroad even in countries in much need of social and economic investments (e.g. Armenia, Bulgaria, Croatia, Czech Republic, Estonia, Lithuania, Romania and Slovakia); in others, some limits are indicated (e.g. Costa Rica 50 per cent, Peru 42 per cent, Colombia 40 per cent, Poland 30 per cent, Mexico and the Russian Federation 20 per cent). In Chile, private pension administrators can invest up to 80 per cent of their assets abroad representing 56 per cent of Chile's GDP. Only the Dominican Republic and Nigeria prevent pension funds from investing abroad (OECD, 2018).

Table 4. Assets in funded and private pension funds (as per cent of GDP and in billion USD)

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Argentina	-	-	-	10.4	10.4	10.1	10.3	12.3	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Armenia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.6	1.3
Bolivia, Plur. State of	-	-	-	15.1	18.9	19.8	21.1	19.6	21.3	21.8	25.7	27.3	-	-	-	-	-	-
Bulgaria	-	-	0.6	1.0	1.4	1.9	2.4	2.9	3.7	3.2	4.3	5.3	5.7	7.0	8.3	9.8	10.6	11.5
Chile	-	-	51.3	52.8	56.0	56.0	55.6	57.5	60.8	49.8	61.8	62.3	57.7	59.7	61.9	67.5	69.0	69.6
Colombia	-	-	5.0	6.4	7.5	8.6	11.4	11.3	15.0	14.4	13.3	16.1	16.9	18.2	18.1	20.1	20.5	22.5
Costa Rica	-	-	2.9	4.7	6.0	4.5	5.6	6.7	6.1	7.0	7.6	7.4	8.4	9.5	11.0	11.6	16.6	17.6
Croatia	-	-	-	1.1	2.3	3.5	4.3	5.6	6.8	6.8	9.3	11.6	12.9	16.2	18.5	21.4	23.6	26.0
Czech Republic	-	-	2.1	2.5	2.9	3.3	3.8	4.2	4.4	4.8	5.5	5.9	6.1	6.7	7.3	7.9	8.1	8.4
Dominican Republic	-	-	-	-	0.2	0.6	1.2	1.7	2.3	3.0	4.0	4.6	5.4	6.5	7.5	10.8	11.0	12.0
El Salvador	-	-	-	7.4	10.5	13.6	17.0	18.1	19.7	20.9	24.3	25.6	26.3	28.7	30.1	31.9	32.9	34.6
Estonia	-	-	0.0	0.2	0.8	1.8	2.6	3.5	4.4	4.5	6.7	7.3	6.8	8.3	9.4	11.2	12.8	14.7
Ghana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	3.4	4.0
Hungary	-	-	3.9	4.4	5.2	6.7	8.3	9.6	10.8	9.5	13.0	14.6	3.8	3.9	3.9	4.0	4.1	4.3
Latvia	-	-	-	-	-	0.3	0.4	0.4	0.4	0.4	0.7	0.9	0.8	0.9	1.0	1.2	1.4	1.5
Lithuania	-	-	-	-	-	-	-	-	-	-	-	4.0	3.9	4.3	4.6	5.2	5.8	6.7
Mexico	-	-	3.8	4.6	5.2	5.5	8.8	10.0	9.9	10.0	11.7	12.6	12.7	14.1	14.7	15.5	15.5	15.5
Nigeria	-	-	-	-	-	-	-	-	2.5	2.8	3.4	3.6	3.8	4.3	5.0	5.1	5.6	6.0
Panama	-	-	-	-	-	-	-	-	-	0.4	-	0.6	0.6	0.4	0.7	0.8	0.8	1.2
Peru	-	-	6.9	8.3	10.7	11.4	13.2	16.0	19.1	14.0	19.0	20.9	17.6	19.4	19.1	19.9	20.3	21.0
Poland	0.3	1.3	2.4	3.8	5.3	6.7	8.7	11.0	11.9	10.9	13.2	15.4	14.6	16.8	18.3	8.8	7.9	8.3
Romania	-	-	-	-	-	-	-	-	0.0	0.2	0.5	0.9	1.2	1.7	2.3	3.0	3.6	4.3
Slovakia	-	-	0.0	0.0	0.0	-	0.5	2.4	3.6	4.6	6.2	7.2	8.2	9.4	9.7	10.5	10.2	11.2
Uruguay	-	-	-	8.4	10.6	11.3	12.2	13.4	13.2	11.0	14.0	16.6	16.7	18.9	19.1	20.0	21.7	22.6
Average	0.0	0.1	4.5	6.3	7.1	7.9	9.8	11.1	11.5	9.5	11.6	12.7	11.9	13.1	13.7	13.4	13.4	14.1
Total assets in Billion USD	0.6	2.3	82.6	110.8	132.4	169.7	245.8	319.1	390.0	369.9	391.1	507.8	540.7	609.0	671.9	668.7	608.4	615.6

Source: Based on OECD Global Pension Statistics Database and World Bank Development Indicators.

In addition to pension fund administrators, commercial life insurance companies have benefited from a captive market to deliver annuities. Typically, once the member of the pension fund reaches retirement age, the accumulated balance in the individual savings account is used to purchase an annuity (lifetime or fixed period annuity) from the private annuity market. Insurance companies, normally operating as part of the same economic interest groups as the AFPs, are the only ones authorized to sell annuities and thus often charge substantial commissions.

Furthermore, often international financial groups are major shareholders of national pension fund administrators, or the national pension funds are subsidiaries of large international financial corporations. In the Plurinational State of Bolivia, the pension fund Futuro de Bolivia S.A, was acquired by Switzerland’s Zurich Financial Services AG, and the country’s other pension fund, Prevision S.A. is part of Spain’s Banco Bilbao Vizcaya

Argentaria SA (BBVA) [16]. In Chile, the pension fund Provida SA's controlling shareholder was Spain's Banco Bilbao Vizcaya Argentaria SA (BBVA) until Metlife Chile took it over in 2013. Another example is Chile's Habitat AFP controlled by Citibank (Citigroup) and Invesco until 2014 followed by Prudential Financial US [17].

From a developmental perspective, it is of major concern, particularly for developing countries, that people's pension savings should go to large international financial corporations. Evidence shows that pension privatization has contributed to the concentration of economic power in the hands of international financial firms looking to generate profit rather than contribute to national development. Indeed, privatization generated high levels of profits for pension fund administrators. Even in countries like Hungary where pension funds were formally required to operate on a non-profit basis, they concluded expensive service contracts with their parent or holding companies for the administration of the funds in order to hide profit. As a result, the average real yield of the private pension funds in Hungary was zero between 1998 and 2005, while administration costs were above 10 per cent.

This was one of the main reasons that led countries to nationalize pension funds. When Argentina nationalized ten private foreign-owned pension funds (Law 26,465 Nov 2008), several international banks and insurance groups BBVA (Spain), HSBC Holdings (UK), MetLife Inc (US) and ING Groep NV (Netherlands) were among the companies that were controlling those funds. By nationalizing private pension funds and converting private pension entitlements into public pension entitlements, approximately USD 25.5 billion was transferred from the individual accounts of the closed private system to the Argentinian government and its National Social Security Administration (ANSES) (Hohnerlein, 2012).

(i) Limited effect on capital markets in developing countries

The World Bank in its 1994 flagship publication «Averting the Old Age Crisis: Policies to Protect the Poor and to Promote Growth» claimed that the introduction of a mandatory private pension pillar could help to develop capital markets and the financial sector. However, many of the arguments only hold if certain pre-conditions are met such as the existence of well-functioning, competitive markets with sound financial regulation (Barr, 2000, p. 37). This was typically not the case in developing countries privatizing pensions.

The contribution of private pension funds to the expansion of local capital markets in developing and emerging economies has been limited (Laeven, 2014). The exceptions are Chile and the high income economies, where there is evidence of positive effects. However, in most of the countries mentioned in this report, the development of capital markets was rather limited. While Hungary, Poland and Argentina were able to develop slightly more diversified capital and investment markets, –even before the reforms in the case of Argentina-, Kazakhstan and the Plurinational State of Bolivia had nascent capital markets. As a result, private pension fund investment opportunities and potential outcomes were limited.

[16] Zurich Financial Services Group. Annual Report 2001; see BBVA SA Prevision AFP website www.prevision.com.bo [June 2018].

[17] Actuarial Post, 2013. "MetLife to acquire Chile's largest pension fund Provida".]; Reuters, 2014. "Prudential Financial to buy stake in Chile's AFP Habitat", U.S. insurer Prudential Financial has agreed to purchase up to 40.29 per cent of Chilean pension fund manager AFP Habitat.

Overall, in countries with not very deep and not very diversified capital markets, investments could either be heavily concentrated abroad or focused on government bonds. Governments opted for the latter, for obvious developmental reasons explained in earlier sections. In Hungary government bonds initially constituted 80 per cent of all assets, and in the Plurinational State of Bolivia 81 per cent (in 2007). In Kazakhstan, pension funds invested 50.5 per cent of contributions in national government securities, 25.9 per cent in corporate securities and 10.4 per cent in bank deposits with low capital returns; only a small share went into domestic private stocks. A similar herding trend, with highly concentrated investments, often in government bonds and bank deposits occurred in other countries that had privatized pensions and that faced similar limitations with respect to investment markets.

Due to the heavy concentration of investments in government bonds and bank deposits, private pension funds contributed very little to the development of local capital markets. In fact no positive effect on the Hungarian capital market could be traced to the pension funds, and only marginal effects were observed in the capital market of the Plurinational State of Bolivia. In Costa Rica, Dominican Republic, El Salvador and Uruguay hardly any pension funds are invested in local stocks. In El Salvador where the law regulating the capital market was enacted almost at the same time as the pension reform, the lack of national instruments and pressure from the government resulted in 81 per cent of the pension fund invested in state debt, which was used to finance the transition (Mesa-Lago and Rivera, 2017). Similarly, the limited investment possibilities in Kazakhstan and the high transition costs led to state restrictions on investment; pension funds in Kazakhstan failed to trigger the development of the capital market (Maltseva and Janenova, 2018).

(j) Financial market and demographic risks transferred to individuals

While the primary objective of social protection arrangements is to pool risks and to protect against life cycle risks, private individual account schemes shift the systemic risks burden (i.e. demographic, financial and economic) to the individual. It is the worker/pensioner who bears the investment, longevity and inflation risks in a funded individual account scheme. As regards the investment risk in defined contribution systems, the worker faces great uncertainties regarding the future level of pension benefits as it depends on the rate of return earned. Since financial markets in low and middle income countries are more volatile, this risk exposure is even higher for workers in those countries. This was particularly the case during the 2008 financial crisis which had a catastrophic impact on workers who retired with very low pension entitlements because the value of their accumulated savings and expected future rates of return had diminished drastically.

As the risks were transferred to individuals, the successive financial and economic crisis had major negative social and economic impacts for workers and pensioners. In Argentina, the domestic financial crisis of 2001-2002, lead to a 44 per cent decrease in the values of the pension funds in 2002 – from USD 20.381 million in 2000 to USD 11.650 million in 2002 (Hohnerlein, 2012). In order to mitigate the financial losses of pension funds, avoid future risks of financial fluctuations and guarantee the level of benefits, the termination of the private system– discussed since 2002 – was approved during the crisis of 2008 (Bertranou et al., 2018). In Chile in 2008, the AFPs lost 60 per cent of all benefits accrued during the period 1982-2008 (CENDA, 2010). The crisis has also produced a generation of workers who face more irregular, insecure or part-time work, leading to more disrupted contributory histories. This will most likely translate into a resurgence of old-age poverty or a build-up of political pressure for the (re-)introduction of solidarity elements and pension top-ups, changes in the benefit formula or supplementary benefits for retirees.

Furthermore, in some countries the State has stepped in to finance and provide or supplement the pensions that should have been provided by the private pension system. This was the case in Argentina before the reversal of privatization where, as individual accounts were being drained, the State stepped in to cover in full 77 per cent of the pensions payments to 445,000 private pillar pensioners, as well as additional payments to 179,000 pensioners to maintain the minimum guarantee, and 33,000 pensions for those who had depleted their individual accounts (Bertranou et al., 2018).

Of concern is also the investment strategy followed by private pension funds with high-risk portfolios which made the funds more vulnerable to economic and financial crisis. In Peru, during the global financial crisis of 2008-2009, the assets of pension funds dropped by 50 per cent or more as portfolio managers of the private funds administrators AFPs, had invested the funds in high-risk instruments taking risk even above those assumed by the participants in the Peruvian stock market. In addition, the evaluation of the management performance of the portfolio managers of the AFPs shows the absence of competitive behavior (Flores and Sanchez, 2016).

As regards the longevity risks, most countries that have mandatory defined contribution schemes do not make choice of an annuity mandatory, thus allowing for full withdrawal of account assets, in which case the individual is fully exposed to the longevity risk. Even where annuities are mandatory, private pension funds face a structural disadvantage since they have much smaller risk pools than a single, public pension fund. The smaller the risk pool, the greater the variance around the average life expectancy. Private pension funds calculate the risk of longevity carefully - at the cost of lower annuities for pensioners (Gillion et al., 2000, p. 59). The inflation risk erodes the value of fully funded pensions further. Typically, defined contribution schemes do not automatically provide annuitized benefits and, when they do, those benefits generally are not price indexed. Pensioners thus bear the inflation risk under the privatized schemes whereas defined benefit schemes are usually indexed to prices or wages (Gillion et al., 2000).

(k) Deteriorated social dialogue

ILO Convention No. 102 highlights the importance of social dialogue and the representation of protected persons in social security governance bodies. Participatory management of social security systems has been long established in international social security standards, and social dialogue is one key element to create the transparency and understanding necessary to operate social insurance schemes.

Most structural reforms that privatized pensions in Central and Eastern Europe and Latin America were implemented with limited social dialogue, which later led to questionable legitimacy (Mesa-Lago, 2014). Prior to the reform, most social security pension funds had some form of tripartite governance through representatives of workers, employers and the government. Privatization eliminated such participation in the new system, despite the fact that workers were the sole contributors and the owners of the individual accounts (in Chile, small pension funds initially had such representation, but this eventually disappeared). In Argentina, the Plurinational State of Bolivia, Colombia, El Salvador, Mexico, Panama and Peru, workers were excluded from the administration of their pension funds (Mesa-Lago, 2008). Likewise in Hungary, the tripartite administration of the public system continued right after the reform but was later abolished by the conservative government. These reforms were against ILO standards, especially ILO Convention No. 102. Article 72 of the Convention stipulates that, «where the administration is not entrusted to an institution regulated by the public authorities or to a Government department responsible to a legislature, representatives of the persons protected shall participate in the management, or be associated therewith in a consultative capacity.» The abolition of employer contributions in Chile and the Plurinational State of Bolivia moreover was against Article 71 of the Convention which requires employers and workers to share the contribution obligations.

Decisions on pension reforms were adopted without adequate consultation or the participation of social partners, the general public or those most affected by the reforms. In the Plurinational State of Bolivia, privatization was undertaken against strong opposition from the ministries of labour and health as well as trade unions leading to public demonstrations in protest of the reform.

There were strong media campaigns to promote private pensions, often marketing by private pension funds, to diminish public opposition. The experience of Hungary and Poland «demonstrates that provider's advertising and marketing campaigns can overshadow the government's information NPCC [National Pension Communication Campaign] and give rise to a situation where consumers over-estimate the benefits and under-estimate the cost and risks of the DC system.» (Atkinson et al., 2012, p. 24).

Distrust in private pension systems increased rapidly when replacement rates plummeted and pension benefit adequacy became a serious problem, failing to provide sufficient protection in old age, putting older persons at risk of poverty, as well as when coverage extension stagnated as in the case of Hungary and Kazakhstan, or fell as in the case of Argentina, the Plurinational State of Bolivia, Chile, Dominican Republic, El Salvador and Mexico (Bertranou et al., 2018; Maltseva and Janenova, 2018; Mesa-Lago, 2018; Polakowski and Hagemejer, 2018). In a perception survey conducted in 2008 before the reversal of privatization in the Plurinational State of Bolivia, only 38 per cent of respondents wanted to maintain the private system and 61 per cent were in favour of a new system that reversed privatization. Even stronger opposition evolved in Argentina during the crisis in which people had witnessed a widespread failure in respecting contracts and property rights, accompanied by a political crisis and a weakening of the «social contract». More recently, in Chile, over the last few years, demonstrations against the private pension fund system mobilized millions of people in the streets.

2. Reversing pension privatizations

After a couple of decades of problematic implementation, many countries began to re-reform their pension systems. The first countries to repeal pension privatizations and/or consider privatizations unconstitutional were the Bolivarian Republic of Venezuela (2000), Ecuador (2002) and Nicaragua (2005). They were followed by Bulgaria (2007), Argentina (2008), Slovakia (2008), Estonia, Latvia and Lithuania (2009), the Plurinational State of Bolivia (2009), Hungary (2010), Croatia and Macedonia (2011), Poland (2011), the Russian Federation (2012), Kazakhstan (2013), the Czech Republic (2016) and Romania (2017).

In total, eighteen countries, thirteen in Eastern Europe and the former Soviet Union and five in Latin America, reversed privatizations, that is, 60 per cent of the countries that had privatized pensions reversed the process and started to switch back to public systems. As described in the previous section, these countries retrenched privatization and fully or partially re-reformed their pension systems mainly due to the high fiscal costs of privatization; the decrease or stagnation in coverage and pension benefit levels; the very high administrative costs; the shift of economic and financial risks to individuals exposing them to deteriorating pension levels; and the lack of tangible benefits to national development, among other reasons. Pension privatization was not providing income security to the majority of older persons; on the contrary, pension benefits deteriorated, increasing gender and income inequalities. The system of individual accounts became unpopular and untenable.

The privatization of pensions did not meet expectations in most countries and generated a lot of frustration. The political support which had brought about privatization reversed gear, to support a return to the public system or to minimize the share of mandatory private schemes in the provision of old-age protection and its financing. The experience on pensions is similar to other sectors such as water supply, transport, postal services, electricity and power, that also reversed earlier privatizations and re-nationalized or re-municipalized public services in recent years (Box 3).

Box 3
Privatization and recent re-nationalization and re-municipalization experiences in other sectors: Water supply, transport, electricity and power, postal services

The experience of the reversals of pension privatization presented in this report is not different from other recent experiences of privatization and renationalization of the provision of public goods and services such as utilities and transport.

In the 20th century, the role of the government as provider of public services was not questioned until the 1980s-1990s, when the international financial institutions such as the IMF and the World Bank as well as other organizations such as the OECD and USAID started promoting privatization. Despite this policy push, the public sector owns and operates the majority of public services in cities and countries all over the world. In recent years, a number of governments that privatized are renationalizing public services due, among others, to poor performance, reduced services, high user fees leading to affordability issues, regulatory capture, collusions leading to monoply profits and declines in investment. Some examples:

- Water supply: During the last 15 years, 235 cases of water remunicipalization, concentrated in high-income countries, with 184 remunicipalizations compared to 51 in low- and middle-income countries, for example in France, the United States, Spain, Germany and Argentina; perhaps the most known case was Paris (2010) water re-municipalization, which improved delivery and reduced water prices by 8 per cent.
- Transport: Private sector failure was common in privatized local public transport, services were reduced dramatically and prices saw steep increases. Some examples of renationalization: Japan (2010), New Zealand (2008 railways), Argentina (2008 airlines; 2015 railways), United Kingdom (2009 railways), Pakistan (2011, railways).
- Electricity and power: Public ownership of electricity companies is common in Europe, United States, Asia including China, India, Indonesia, South Korea; many countries that had privatized reversed privatization, such as France (1982), Germany (in 2005 renationalized electricity distribution networks and created new public municipal renewable energy), Brazil (2007), Argentina (2009), Finland (2011), the Plurinational State of Bolivia (2012), Japan (in 2012 Tokyo Electric Power Company was nationalized after the Fukushima Daiichi nuclear disaster).
- Other: Postal services and communications renationalized in France (1982), Argentina (2003), the Plurinational State of Bolivia (2008); Canada (2008) remunicipalized solid waste collection, snow removal, police and fire to lower costs and improve efficiency; Germany (2008) re-nationalized security, national registration; the United Kingdom (2008) and Finland (2011) stopped urban cleaning private contracts for cost reduction and employment generation.

Sources: Kishimoto, Lobina and Petitjean, 2015; Hall, 2012.

The main wave of pension privatization reversals occurred during the global financial and economic crisis of 2008, when the drawbacks of the private systems became impossible to overlook and had to be redressed. The crisis severely affected financial and capital markets, significantly reducing the real value of private pension assets and, consequently, causing popular outrage with the results of the private system. Many pensioners had to rely on social support as the value of their pension benefits had fallen to very low levels, often below the poverty line. In addition, for countries in the Eurozone that were struggling to comply with the Maastricht criteria regarding debt and fiscal deficits, the costs of transition were excessive and found little support among governments as they were ultimately transferring badly needed public funds to the financial sector. As a consequence of unmet expectations and the fiscal challenges, many countries reversed pension privatization.

Argentina terminated the individual accounts of its members and beneficiaries during the global financial crisis in December 2008 and transferred all funds to the PAYG scheme under the newly established Argentine Integrated Pension System (SIPA). The government of Cristina Kirchner enjoyed vast legislative support and popular support at the time (Bertranou et al, 2018; Mesa-Lago, 2014).

Hungary turned to the IMF and the European Union (EU) for credit in the wake of the 2008 financial crisis, limiting its scope for policy options. Hungary had to adhere to the Maastricht criteria that set the limits of fiscal deficit at 3 per cent and debt levels at 62 per cent of country GDP. Fiscal constraints were decisive in its resolution to nationalize the private individual account system. In an attempt to ease fiscal pressures, the Hungarian government announced for 2010 and 2011 the suspension of payments to the private pension funds as a preliminary measure and diverted these to the public system. In December 2011, Prime Minister Viktor Orban announced the temporary measure to be permanent. Hungary officially nationalized the private pension assets and eliminated the individual accounts in 2011, returning to its pre-1998 mandatory PAYG public pension system (Szikra, 2018; Simonovits, 2012).

Poland also faced fiscal constraints and high transition costs, running at 1.7 per cent of GDP, while trying to meet the Maastricht budget deficit criteria set at 3 per cent (Égert, 2012). The transition costs were financed entirely by borrowing, and 70 per cent of pension funds purchased government bonds, a vicious circle that only benefited the financial sector which cashed in commissions. As a result, in 2011 Poland cut the government's contribution to the private pension system from 7.3 to 2.3 per cent of salaries, shifting the difference to the public PAYG system. In 2013, the government announced that it would let workers transfer their contributions from the private to the public pension plan and eliminated mandatory contributions to the private system. Eventually, in 2014 the government transferred government bonds held by the private funds to the public social security institution, leaving the private funds with portfolios largely in equities. Later that same year, people had to decide whether or not to leave some of their assets with the private funds, with the result that only 100,000 members remained in the private individual accounts system (Polakowski and Hagemejer, 2018).

Kazakhstan reversed pension privatization as part of a modernization plan, *Kazakhstan 2050 strategy*. In 2013, it merged the ten private pension funds with the state-run Unified Pension Fund (UPF), under the Kazakhstan National Bank. With this move, the government not only aimed to improve efficiency in the management of pension savings but gained access to long-term financing for infrastructure and national development investments (Maltseva and Janenova, 2018).

Similar pressures led to retrenchments of private second pillar mandatory pensions in Bulgaria, Croatia, Estonia, Latvia, Macedonia, Romania, and Slovakia. In the Russian Federation, it was President Vladimir Putin who privatized pensions in 2002, and it was also President Putin who questioned the policy and reversed privatization back to a public system in 2012 (Wilson Sokhey, 2017; Fultz and Hirose, 2018).

In other countries where privatization has not been reversed, both criticism of the underperformance of private pensions systems and the prevalence of high transition costs have acted as triggers for the introduction of some kind of re-reforms. For example, in 2008 Chile introduced state-financed social pensions and supplementary pension top-ups for those who could not contribute, had insufficient contributory years to the private system, or their pension benefits were too low (Box 4). The government of El Salvador in 2017, in an attempt to tackle these difficulties, increased contribution rates from 13 to 15 per cent and decided to channel 2 percentage points to finance a new collective fund called the Solidarity Guarantee Account, aimed at paying a guaranteed minimum and supplementary pensions. Colombia, following on-going discussions to tackle performance problems of the pension system, is considering the idea of adopting a public component of notional accounts, to complement a second pillar of mandatory individual accounts. One issue to explore is the additional fiscal cost associated with these reforms, which could worsen existing fiscal pressures.

Box 4
Ongoing pension reform discussions in Chile, Colombia, El Salvador, Mexico, and Peru

Chile: Since the introduction of the Chilean private pension system in the 1980s, several adjustments have been implemented. Over the years, low contributory coverage and the adequacy of pension benefits have been questioned, both the low benefits paid by private schemes and by the non-contributory scheme.In 2008, a non-contributory state-financed social assitance pension benefit was set up for those who could not contribute, or had insufficient contributory years to the private system during their working period. In addition, the Solidarity Supplement was created, financed through the general budget, which consists of a top-up to the non-contributory pension for those with contributions to the individual accounts, in order to articulate the non-contributory pension with the individual account and encourage the payment of contributions by low-income members. During the administration of former President Michelle Bachelet, attempts were made to reform the pension system, including creating a presidential advisory commission which collected several proposals, but with no legislative result. In 2018, the newly elected President Sebastian Piñera announced that he would undertake a pension reform to increase the solidarity pillar, to introduce employer's contribution at 4 per cent, and to create a special benefit supplement for women and the middle-class who are near or past retirement age.

Colombia: The enactment of Law 100 in 1993, introduced a pension reform that allows a public defined benefit system and a private system of individual accounts to coexist in parallel.Members can switch from one system to another at will. However, the main problems that the 1993 reform intended to solve still persist, including low coverage, inequities including high gender inequality, high fiscal pressures, and financial unsustainability. Only a quarter of the population over the age of 65 and only 5 per cent of women are currently benefiting from a pension. Poverty in old age in Colombia is estimated to be one of the highest in Latin America. In the current debate regarding pension reform in Colombia, there is agreement on expanding the existing programmes «*Colombia Mayor*» (a non-contributory programme) and «Periodic Economic Benefits (BEPS)» (a programme based on individual savings for people in the informal economy). The idea of eliminating the duality of the current parallel system is generally agreed, given its economic and political unsustainability. However, opinions differ on whether the contributory component should be based on a public system or private individual accounts. One side advocates for closing the private individual savings system, considered by some sectors to be a bad deal for the state and people, benefiting only pension fund administrators. Whereas the other side promotes the elimination of the defined benefit system, moving towards a multi-pillar system, with privately managed individual accounts as the mandatory first pillar. Both sides are considering the idea of adopting a public component of notional accounts.

Mexico: A first privatization reform took place in 1997, when private individual accounts replaced the public PAYG defined benefits as the mandatory pension system for private sector workers previously affiliated to the Mexican Institute of Social Security (IMSS). In 2007, private pension schemes replaced also the PAYG scheme of the Institute of Social Security and Services for State Workers. Mexico's reform followed the Chilean model and World Bank recommendations at that time. In order to mitigate the detrimental effects of privatization on benefit levels and coverage rates, a targeted non-contributory pension scheme was introduced at the federal level in 2007, which was further adjusted in 2013. This scheme covers the poor population aged 65 and above. Additionally, thirteen Mexican Federal States also introduced targeted non-contributory social pension schemes that pay a complementary pension to beneficiaries aged 68 and above. According to the latest ILO estimates (ILO, 2017), the current coverage rate of the Mexican pension system is 64 per cent, which is below the average for Latin America, and the projected replacement rates are merely between 16 to 26 per cent. The annual cost of transition from the public to the private schemes has been estimated at 1.3 per cent of GDP (2015) and it is estimated to increase to 3 per cent of GDP in 2046, after 40 years of privatization. In this context, there is a growing consensus that the new government should implement a reform of the pension system, which is expected to include a universal public pension.

El Salvador: In 1998, following advice from the World Bank and the Inter-American Development Bank, El Salvador reformed its public pension system and created the Pension Savings System (SAP), based on individual accounts and administered by private pension fund administrators (AFPs). Since then, coverage rates stagnated between 25 to 28 per cent of the labour force, among the lowest in the Latin American region. The share of retirees receiving monthly retirement payments is as low as 38 per cent, as many are not able to meet the requirement of 25 years of contributions to receive a pension. Lump sum payments – which do not provide income security in old age – are, unfortunately, the predominant form of pension (62 per cent). Replacement rates among those entitled to a pension are also low, ranging between 39 and 43 per cent of the worker's last salary. Competition between AFPs is virtually non existant, as only two AFPs manage all mandatory pension funds. As a result, individual accounts' administrative costs are among the highest in Latin America, reaching around 20.4 per cent (calculated as the net commission plus insurance premium over the deposit in the individual account). Additionally, high transition costs led to a worsening of the fiscal balance, with government debt levels becoming unsustainable. It is estimated that 70 per cent of the fiscal deficit was due to commitments related to the transition to the private pension system. In 2017, as an attempt to tackle this difficutl situation, the government reformed the SAP, increasing contribution rates from 13 to 15 per cent and channelling 2 percentage points to finance a new collective fund called the Solidarity Guarantee Account, aimed at paying guaranteed minimum and supplementary pensions. However, significant transfers from the Government are still required to cover all pension expenses during this transition period, as the 2017 reforms addressed mainly the adverse impact of the transition cost on public finances, leaving aside important matters such as low coverage rates and benefits.

Peru: The Peruvian Private Pension System has experienced a number of reforms since its inception in 1992. However, many problems persist including its very low coverage of no more than 16 per cent of the labour force. Administration costs are the highest among private systems in the region: 29.4 per cent of the deposit. In 2016, a major reform to the private pension system was introduced. Members reaching the retirement age of 65 were allowed to withdraw up to 95.5 per cent of the total available funds in their individual account, leaving the accumulated remaining 4.5 per cent as an insurance premium for Social Security Health Insurance to cover medical services for life. According to recent figures, more than 95 per cent of beneficiaries opt to withdraw 95.5 per cent of their individual account balance. This measure could be considered as a step toward the complete termination of the private individual account system. Public discussions are taking place, including a fusion of the two pension systems, either into a public or a private unified system.

Source: Albo et al., 2008; ILO, 2017; Comision Presidencial Pensiones Bravo, 2015; Mesa-Lago and Rivera, 2017; Soto, 2008; Valencia 2008.

While many countries reversed privatization after the 2008 financial crisis, a number of countries questioned the private model earlier, like the Bolivarian Republic of Venezuela (2000), Ecuador (2002) and Nicaragua (2005). These countries had strong national debates questioning the public benefit of private pensions, ultimately leading to declaring private pensions unconstitutional and repealing the laws that had created them. In the Plurinational State of Bolivia, the demand for a re-reform was also endogenous, led by the high costs of transition and the detrimental social impacts of private pensions. The government of President Evo Morales merged and nationalized the two private pension funds and combined them with a redistributive component, a move that represented a return to the public PAYG system. The re-reform in 2010 also introduced a new public PAYG system called *Sistema Integral de Pensiones* (SIP) (Diaz, 2018; Mesa-Lago, 2018; Navarro Medal, 2018; Peña-Jarrín, 2018). More countries are currently considering pension re-reforms (Box 4).

Table 5 below gives an overview of the reversals of pension privatizations, differentiating between two re-reform types. Some countries terminate the system of individual accounts, transferring all private individual account funds to the public system. Others downsize individual accounts, mainly by lowering the share of mandatory contributions to the private pension funds or transferring the management to the state and/or offering the choice to pension fund members of opting back to the PAYG scheme.

Table 5. Reversal of individual accounts and pension privatization

Terminating Individual Accounts	Downsizing Individual Accounts
■ Venezuela, Bol. Rep. of (2000), Ecuador (2002) and Nicaragua (2005). ■ Argentina, 2008 (government ends individual accounts and transfers funds to PAYG system) ■ Hungary, 2010 (government transfers individual accounts to PAYG system, merging with state budget) ■ Bolivia (Plur. State of), 2009 (constitutional ban on social security privatization and closing of individual accounts system for new entrants) ■ Russian Federation, 2012 (contributions to individual accounts are diverted to social insurance) ■ Poland, 2011 (downsizing) and 2014 (transfer of all individual accounts back to the ZUS social insurance PAYG system) ■ Czech Republic, 2016 (new government ends Individual Accounts System)	■ Bulgaria, 2007 (cancelled the contribution increase in the individual account pillar – currently frozen at 5 per cent) ■ Estonia, 2009 (government suspended its 4 per cent contribution to the 2nd pillar) ■ Latvia, 2009 (individual account contribution reduced from 8 per cent to 2 per cent) ■ Lithuania 2009 (individual account contribution reduced from 5.5 per cent to 1.5 per cent) ■ Macedonia, 2011 (Contributions to mandatory individual accounts reduced from 7.42 per cent to 5.25 per cent) ■ Croatia, 2011 (mandatory individual account contribution reduced from 10 per cent to 5 per cent). ■ Slovakia, 2012 (Individual account contribution reduced from 9 per cent to 4 per cent) ■ Kazakhstan, 2013 (transfer of administration to the Government) ■ Romania, 2017 (government reduced and froze contribution rates to 2nd individual account pillar)

Source: Bertranou et al., 2018; Diaz, 2018; Fultz and Hirose, 2018; Kay, 2009; Maltseva and Janenova, 2018; Mesa-Lago, 2014 and 2018; Navarro Medal, 2018; Peña-Jarrín, 2018; Polakowski and Hagemejer, 2018; Szikra, 2018; Velculescu D., 2010.

While every country case is specific and needs to be assessed in its context, there are common elements. This section will review the main experiences in terms of: (i) timing of the re-reforms, (ii) laws enacted, (iii) basic characteristics of the new public model, (iv) new rights and entitlements, (v) re-establishing the public pension administrator, (vi) transfer of people and funds and recognition of past entitlements, (vii) financing and new contribution rates, re-introducing employers contributions, (viii) contribution collection and fund management, (ix) supervisory and regulatory changes, (x) governance and representation of employers and unions, (xi) social dialogue in the re-reform process; as well as some of the positive impacts: (xii) reduced administrative costs, (xiii) social and economic impacts, and (xiv) fiscal impacts [18]. Table 6 summarizes selected country results in each of these areas.

2.1. Timing of the re-reforms

Timing is of critical importance to policy makers – how long will it take? The available experiences show that pension privatization can be reversed quickly. In Hungary, the renationalization of pensions was conceptualised and implemented between April and December of 2010, and in Argentina, from October to December 2008. In Kazakhstan, the re-reform happened in approximately one year between 2012 and 2013 due to a strong initiative on the part of the government and little involvement of stakeholders. In other countries, reversing pension privatization took longer, as pension reforms operate within

[18] Unless stated otherwise, the majority of the information in this section is abstracted from the cases of Argentina (Bertranou et al., 2018), the Plurinational State of Bolivia (Mesa-Lago, 2018), Hungary (Szikra, 2018), Kazakhstan (Maltseva and Janenova, 2018) and Poland (Polakowski and Hagemejer, 2018).

a complex political economy framework, often involving the conflicting economic and political interests of different stakeholders, for example, the pension fund administrators and trade unions. In the Plurinational State of Bolivia, the re-reform took around four years between 2006 and 2010, and will be fully implemented only in 2019. Similarly in Poland, pension re-reform elements were introduced in several steps since 2010 up to the conclusion in 2014, with a duration of around four years.

The fastest reversals from pension privatization took only a few months. The re-reform process in Hungary started in April 2010 with the government's plan to reduce its deficit and debt. In October 2010, the Parliament adopted a law to redirect private pension fund contributions to the treasury for 14 months. In late November the same year, the Government introduced and adopted a law to eliminate the private individual account pillar, which took effect in December 2010. In Argentina, the main re-reforms were also fast-tracked in a few months. The government of Argentina started encouraging debates on the future of the pension system in 2002, involving various stakeholders, experts, and national and international institutions. There was a first soft re-reform pension law in April 2007, which imposed caps on private pension administrative fees, enabled members to choose between the private and the public system, and made the public PAYG system the default for new entrants. In October 2008, amid the international financial crisis, the government announced the renationalization of pensions, and a second re-reform law approved by the Senate nationalized individual accounts by transferring the members and assets to the public Guaranteed Fund, marking the end of the private pension system in Argentina (Bertranou et al., 2018).

In Kazakhstan**,** the pension privatization reversal took place as part of a broader reform (Socio-Economic Modernization – Kazakhstan 2050 strategy). Starting in 2012, the president requested the development of reform proposals; after which the government conducted consultations with various stakeholders, including civil society groups and pension fund administrators. On 23 May 2013, the Parliament adopted the re-reform bill, transferring all pension assets and obligations to the newly created UPF.

Other reversals of pension privatization took longer in terms of the political process, but once approved, implementation was fast. The government of the Plurinational State of Bolivia started the re-reform process in 2006 with public discussions and debates involving ministries, trade unions, employers, civil society and other relevant national stakeholders, including debates at the National Assembly. In 2009, the new constitution formally banned the private administration of social security schemes, and in December 2010, the re-reform law was approved, creating a public PAYG system for new entrants. In 2015, a public administrator (*Gestora Pública*) was announced to replace the private pension fund administrators marking the end of private management of mandatory individual accounts.

From 2010 to 2013, the government of Poland launched media campaigns exposing the negative aspects of the private pension system. In 2011, its new pension law cut the contribution rate to the private system, and the Polish government requested a review of the pension system. In 2013, the Government allowed workers to divert their contributions from the private to the state-run pension funds. As of January 2014, the individual accounts were no longer mandatory and current members are allowed to transfer to the public scheme (Polakowski and Hagemejer, 2018).

2.2. Laws enacted

Pension reforms require passing legislation. In all cases reviewed in this study, laws were enacted, e.g. regarding the termination of privately managed individual accounts and creation of public PAYG pension systems. In some cases, the country had first to approve a law that reduced the private system, then another law to terminate it (Argentina, Hungary, and Poland), while in other cases it only required one law to reverse the privatization (Kazakhstan and the Plurinational State of Bolivia). It is worth noting that in the Plurinational State of Bolivia the pension re-reform was an integrant part of a larger process, which culminated in a new Constitution in 2009.

In Argentina, law 26,222 of April 2007 introduced the possibility of opting for the public system, made it the default for new entrants and improved the benefit adequacy by increasing pension accruals from 0.85 per cent to 1.5 per cent of past earnings per year of contribution. Its cornerstone law 26,425, of December 2008, eliminated individual accounts systems by transferring all members to the public PAYG system, the *Sistema Integrado Provisional Argentino* – SIPA.

In the Plurinational State of Bolivia, the new Constitution that came into effect on 7 February 2009 banned social security privatization and reaffirmed the guarantee of a universal non-contributory pension (*Renta Dignidad*). The year after, the re-reform law No. 065 of 10 December 2010 replaced the private system with a new public PAYG defined benefit system for new entrants, the *Sistema Integral de Pensiones* (SIP). In 2015, the *Decreto Supremo 2248* created the public entity *Gestora Pública* to manage remaining individual accounts, with starting date in March 2019, as a result of two decrees in 2016 and 2017.

In Hungary, the Act CI/2010 of October 2010 directed private pension fund contributions to the treasury for 14 months, and the law 1281/2010 of December 2010 established the automatic transfer of workers to the public PAYG system. In Kazakhstan, law No.105-V ZRK of 21 June 2013 on Pensions transferred all members to the public Unified Pension Fund (UPF).

In Poland, the Law of 25 March 2011 introduced the re-reform by reducing the contribution rate to individual accounts from 7.3 to 2.92 per cent, and directing the remaining individual accounts to the public NDC system. In 2013, the Law of 6 December concretized the nationalization of the pension system by withdrawing the obligation to contribute to individual accounts, making it voluntary for all new entrants, and allowing the transfers of current individual accounts to the public NDC scheme.

2.3. Basic characteristics of the new public model

Although the re-reforms differ from each other, there are main common elements in the configuration of the new pension systems after the re-reforms. All cases retreat from privatization, downsizing or abolishing mandatory individual accounts and strengthen public social insurance based on the principles of social solidarity and shared responsibility for pension provision among government, employers and employees. We can differentiate between re-reforms that weakened the individual accounts of a pension system and re-reforms that terminated them, presented earlier in Table 5. Among the cases studied, Argentina, the Plurinational State of Bolivia, Hungary and Poland carried out re-reforms in greater depth, either by terminating the mandatory private pillar or closing it to new entrants. Other countries are still re-reforming their pension systems, like Kazakhstan, which at the moment has a transitory first public pensions pillar on PAYG basis while also keeping the individual accounts with the management having been transferred from private to public entities. Countries returned to a public PAYG system as prior to the privatization, in accordance with ILO international social security standards, with defined benefits in Argentina, the Plurinational State of Bolivia, and Hungary; or with notional defined contributions in Poland. They strengthened the redistributive elements of the pension system, including by new or enhanced non-contributory social pensions, to improve old-age income security.

Most pension systems in the world comprise three or four tiers or pillars, described in Box 1, namely Pillar 0, universal non-contributory social pensions; pillar I, mandatory public social insurance; pillar II, complementary contributory component (voluntary or mandatory); and pillar III voluntary private pensions. The great pension reform debate over the past decades evolved around the design and management of the large contributory pillar I and the smaller complementary pillar II.

The new model in Argentina consists of a three-pillar system, composed of a non-contributory Universal Basic Pension scheme – «*Pensión Universal para Adultos Mayores»* administered by the Ministry of Social Development; a public PAYG defined benefit mandatory scheme – *Sistema Integrado Previsional Argentino* (SIPA) administered by the public entity ANSES; and complemented with an option to contribute to voluntary private pension funds (Bertranou et al., 2018).

The Plurinational State of Bolivia's pension system after the renationalization is comprised of a non-contributory Universal Basic Pension scheme *Renta Dignidad;* a public PAYG defined benefit mandatory scheme; and a semi-contributory scheme, the «*Fondo Solidario*», aimed at guaranteeing minimum protection for those with low pension levels (Mesa-Lago, 2018).

In Hungary, the pension system has returned to a three-pillar model as prior to privatization. The new model consists primarily of a non-contributory means-tested scheme and a public PAYG DB scheme. Workers have moreover the possibility of voluntary contributions to private pension funds.

In Poland, the system, after the reversal, consists of a public system of a mandatory first pillar NDC pension scheme run by the state. A guaranteed minimum pension is financed from public funds. In addition, a means and pensions-tested benefit is provided. There is an occupational pension for workers in high-risk occupations financed by employers. Private Individual accounts for additional savings are voluntary as of 2014 (Polakowski and Hagemejer, 2018).

Kazakhstan's new pension system has three pillars. The zero pillar provides a floor, a non-contributory basic and solidarity pension. The first pillar has two types of mandatory public pensions, one is a DB scheme running on a pay-as-you-go basis and the other is based on individual accounts managed by a public pension fund. The last pillar is a voluntary private scheme. The government is considering a new public PAYG NDC scheme financed by employers' contributions to be implemented in 2020 to complement the current system (Maltseva and Janenova, 2018).

2.4. New rights and entitlements

Shifting back to a publicly managed PAYG defined benefit pension system requires defining the rights and entitlements under the new scheme, in particular regarding the defined benefit levels and possible solidarity and redistributive elements, as well as the other parameters such as the retirement age, the pension formula, contributory ceilings and floors, eligibility criteria related to the minimum required duration of contributions and contribution rates. The ILO Conventions No.102 and No. 128 envisage the provision of income security to people at pensionable age through defined benefits with periodic payments of at least 40 per cent (Convention No. 102) or 45 per cent (Convention No. 128) of the reference wage after 30 years of contribution or employment. These standards also require that pensions need to be periodically adjusted following substantial changes in the cost of living and/or the general level of earnings (Box 2).

With the reversal of private pension systems, benefit levels improved in most of the countries. In Argentina, the Plurinational State of Bolivia, and Hungary and Kazakhstan, members were granted the right to real pension entitlements based on defined benefits. The pension benefits are guaranteed by law, either as a minimum benefit or as a share of previous earnings. In most of the cases the replacement rates exceed the requirements of ILO Conventions No. 102. In Poland, however, benefit levels have not improved as the public pension continues to be based on a defined contribution system.

Additionally, in accordance with ILO Social Protection Floors Recommendation, 2012 (No. 202), a non-contributory pension is guaranteed by the government of the Plurinational State of Bolivia and Kazakhstan to all the population above pensionable age, while in Argentina, Hungary and Poland it is delivered as a means-tested and/or pension-tested benefit.

In Argentina, men and women with at least 30 years of contributions can benefit from the PAYG pension at the age of 65 and 60 respectively, and a pension-tested benefit provided to persons aged 65 and above not receiving any other pension, and a means-tested benefit is provided to persons aged 70 and above without any other income. The PAYG DB pension replacement rate was estimated at around 71.6 per cent assuming 35 years of contribution based on the average wage (OECD, 2017b), comprising of a flat-rate pension of USD 194, plus 1.5 per cent of the insured's average monthly earnings multiplied by the number of years of contributions. The pensions-tested non-contributory scheme delivers a monthly benefit of USD 329 – corresponding to 80 per cent of the minimum PAYG pension; and the means-tested scheme pays USD 288 monthly, corresponding to 70 per cent of the minimum PAYG pension.

In the Plurinational State of Bolivia, the universal non-contributory pension *Renta Dignidad* is granted to all the population aged 60 and above. Beneficiaries receive approximately USD 563 per year (around USD 47 per month), or USD 469 per year if they are already benefiting from another pension. Pensionable ages were lowered for the new public PAYG DB pension to 55 for men and 50 for women, and a replacement rate of 70 per cent is guaranteed with 30 years or more of contributions. The Solidarity Fund finances any gap to meet the guaranteed level of benefit.

Hungary's contributory PAYG DB scheme grants pensions to both men and women at the retirement age of 63 and 6 months, while means-tested non-contributory benefits are available from the age of 62. For 35 years of contributions, for example, the replacement rate of the PAYG pension is guaranteed at 74 per cent of average earnings. The pension accrual rate is 33 per cent for the first ten years of contributions; 2 per cent annually between 11 and 25 years of contributions; 1 per cent annually between 26 and 36 years of contributions; 1.5 annually between 37 and 40 years of contributions;, and 2 per cent annually above 40 years of contributions. The minimum monthly pension is guaranteed at USD 103 as of 2018, and the non-contributory means-tested benefit is around USD 79 per month as of 2013 (Szikra, 2018).

All citizens in Kazakhstan regardless of employment period are covered by a universal solidarity pension, which provides a benefit in 2018 of between USD 45 and USD 82.5 – corresponding to 54 and 100 per cent of the minimum subsistence level respectively. For the employed, the PAYG pension – with contributions solely from the State- guarantees replacement rates of between 60 and 75 per cent of the previous wage, for men from the age of 63 with 25 years of employment, and women from the age of 58.5 with 20 years of employment respectively. The Individual accounts system managed by public UPF offers annuities with a monthly benefit no lower than USD 98.4 (Maltseva and Janenova, 2018).

In Poland, contributory PAYG NDC pension benefits are available for men and women from the age of 65 and 60 respectively. Pension benefits include a minimum guaranteed monthly pension of approximately USD 240 (as of March 2016), financed by government, and a monthly pension from the NDC system. The NDC system is based on contributions and replacement rates are estimated at 39 per cent for men with 45 years of continuous contribution, and 34 per cent for women with 40 years of contributions which are among the lowest rates in OECD countries (OECD, 2017a) and fail to comply with ILO standards (ILO Conventions No.102 and No. 128). The government also provides a means-tested and pensions-tested benefit of around USD 129 per month as a targeted social assistance (Polakowski and Hagemejer, 2018).

2.5. Re-establishing or creating a public pension administrator

With the end of privately managed individual accounts, the fragmented management of pensions by a multiplicity of private administrators collecting contributions and managing smaller funds –a major design problem in most of the privatization reforms– was replaced by a centralised public administrator. This allowed for increased administrative efficiency and thus a reduction of administrative costs; and consequently, the improvement of benefit levels for members in most countries. Reducing the number of funds also increased transparency and allowed for greater risk pooling overall bringing the pension systems more in compliance with the principle of transparent, accountable and sound financial management and administration (ILO Recommendation No 202).

In some cases, a new entity was created to take over the management of individual accounts, e.g. Kazakhstan, while in others those accounts were transferred to pre-existent public pension administrators. As the public PAYG system was still operational in Argentina, the reversed system administration switched back to ANSES. Similarly, in Hungary, the administration of the system continues under the responsibility of a public entity, the Central Administration of National Pension Insurance (ONYF). Also in Poland, the management of the public PAYG NDC scheme remains with the Polish Social Insurance Institution (ZUS), which was already in operation prior to the re-reform. The Plurinational State of Bolivia and Kazakhstan created new public pension administrators, the *Gestora Pública* and the UPF, respectively. In Kazakhstan, investment management of the UPF's pension assets was transferred to the National Bank of the Republic of Kazakhstan (NBRK) (Mesa-Lago, 2018).

In light of the back and forth between private and public pension fund management, a key issue in the reform countries will be to ensure efficient, sound and transparent administration of the pension scheme to re-establish the trust of workers and pensioners in the system. Basing the system on sound actuarial valuations to ensure financial sustainability and making the related information publicly available in a factual, user-friendly manner through a non-ideological communication and information strategy is an important step to re-gain the trust of the population.

2.6. Transfer of members and funds and recognition of past entitlements

The transfer of members from the private to public system implies the transfer of the assets of pension funds – as recognition of cumulated benefits in the system that is closing. The resources could be transferred to another individual account, a notional account, or a collective fund. In all studied cases, except Kazakhstan, the reversal of private pension systems meant the return of most members and their cumulated assets to a collective public fund.

The funds transferred improved governments' fiscal position, ending the pressures created by privatization transition costs, relieving public debts and deficits. In Argentina, all members and assets from the mandatory private funds – around 9.5 million people and USD 25.5 billion – were transferred to the public system. With the transfer of funds to the public system, there was an increase in the lawsuits of pensioners against the Argentine State, alleging issues of unconstitutionality. Lawsuits against the pension system existed well before the re-reform, a long-standing practice in the country. A number of lawsuits came from the manner in which the initial benefits were fixed and their subsequent adjustment as well as from the methodology for the recognition of rights for the transfer of members between systems (Bertranou, 2011).

In the Plurinational State of Bolivia, all individual accounts and assets –around 0.5 million members and USD 5.4 billion– were transferred from the mandatory private system to the public system in 2010, despite the temporary continuation of private management (Mesa-Lago, 2014). In Hungary, by 2011, almost all members – 2.93 million out of 3 million – chose to return to the public PAYG system with their assets totalling USD 11 billion; the benefit calculation for those transferred is based on defined benefit formula (Szikra, 2018).

In Kazakhstan, the management of all individual account pension funds and members was transferred automatically to the public Unified Pension Fund; benefits continue to be paid following the individual account defined contribution formula. In Poland, no transfer of members was required as every individual account member was also affiliated with the public system. Approximately USD 33 billion of assets from the individual account pension funds were transferred to the individual NDC accounts in the public scheme in 2014. Assets of members that remained in the individual account pension fund will be moreover gradually shifted to the public tier NDC during a 10 year period prior to retirement, the so-called «zipper mechanism» that aims to protect workers from low pension levels (Polakowski and Hagemejer, 2018).

2.7. Financing mechanisms: New contribution rates including re-introducing employers' contributions

In a multipillar system, the government general budget typically finances the zero pillar non-contributory component, while workers' and employers' contributions finance the first pillar and in most countries, the government guarantees the pension payments of PAYG schemes in case of a deficit (Cichon et al, 2000). In many of the re-reform studies documented employers' contributions were re-introduced, strengthening the principles of solidarity and participation of all social stakeholders in financing pensions.

In Argentina, the government finances the non-contributory Universal Basic Pension by taxes, while the contributory public PAYG scheme receives contributions from workers at a rate of 11 per cent, and from employers at a rate of 10.17 per cent [19].

In the Plurinational State of Bolivia, following the re-reform the contributory public PAYG system is financed through contributions from workers at a rate of 12.71 per cent,

[19] The 16 per cent rate employers used to pay – reduced to 10.8 per cent due to the 2001 crisis in Argentina (Hohnerlein, 2012) – was not restored.

and from employers at a rate of 3 per cent. The non-contributory Universal Basic Pension (*Renta Dignidad*) is financed by the government through a tax on hydrocarbons, and revenues from the capitalization of former public enterprises. The semi-contributory (solidarity) scheme is collectively financed by workers at rates of from 0.5 to 10 per cent according to the level of income, and by employers at a rate of 3 per cent [20].

In Hungary**,** the re-established public PAYG scheme is financed through contributions from workers at a rate of 10 per cent, and from employers at a rate of 24 per cent. The non-contributory pension benefits are tax funded (Szikra, 2018).

In Kazakhstan, the universal solidarity pension is financed by the government through taxes, and the individual accounts scheme is financed by workers with a contribution rate of 10 per cent. Employers contribute at a rate of 5 per cent into the mandatory occupational pension scheme for employees in hazardous and dangerous working conditions – as the result of the re-reform. Employers will finance the NDC scheme at a contribution rate of 5 per cent starting in 2020 (Maltseva and Janenova, 2018).

The public PAYG NDC scheme in Poland is financed through contribution payments totalling a rate of 19.52 per cent equally shared between workers and employers as introduced by the re-reform. Since individual accounts are voluntary as of 2014, contributions go by default to the public NDC. Potential deficits of the system will be covered by the state budget.

2.8. Contribution collection and fund management

In private pension systems, the fragmentation of contribution collection was a major problem. With each of the funds establishing in parallel their own system to collect contributions and keep related records, administrative costs are much higher and less efficient not benefiting from economies of scale of a single administrative body to manage the funds. With the reversals, government in all cases centralized the collection of contributions through a public agency, either the tax collector or the public pension administrator, allowing increased efficiency and effectiveness. By also centralising the management of the investment in a public entity, a more diversified portfolio, e.g. in the Plurinational State of Bolivia, and a focus on development projects, such as in Argentina and Kazakhstan.

In Argentina, the Federal Administration of Public Revenue, a central tax collection agency, is now responsible for collecting contribution payments, while the ANSES manages the public pension system. The National Bank of Argentina is responsible for operational procedures and the Investment Committee (with members from ANSES, the Secretary of Finance, the Secretary of Treasury) for defining the investment criteria. In the Plurinational State of Bolivia, the private pension fund administrators continue to be in charge, on a temporary basis, of collecting contributions and managing the fund and investments. The *Gestora Publica* will take over these responsibilities once operational in 2019. In Kazakhstan, the Unified Pension Fund is responsible to collect contributions, while the National Bank of Kazakhstan is managing the fund and its investments. In Poland, the public entity ZUS remains in-charge of collecting social insurance

[20] Worker's contribution rates are 0.5 per cent of monthly declared earnings from 1,656 bolivianos to 13,000 bolivianos; 1 per cent of monthly declared earnings from 13,001 bolivianos to 25,000 bolivianos; 5 per cent of monthly declared earnings from 25,001 bolivianos to 35,000 bolivianos; and 10 per cent of monthly declared earnings above 35,000 bolivianos. The minimum wage is 2,000 bolivianos, approximately USD 289 as values of 2017.

contributions, paying out pension benefits, and managing the investment of the public pension fund. In Hungary, contributions are collected by the National Tax and Custom Administration, while the public funds are managed by the Treasury (Szikra, 2018).

2.9. Supervisory and regulatory changes

At a minimum, regulation should include the following three elements: (i) accounting standards that provide information enabling an independent auditing process to verify the information and regular reporting of solvency and financial performance data; (ii) regulation to guide the managers' behaviour and (iii) institutions able to enforce the rules and regulations (Gillion et al., 2000). Most privatizations created autonomous bodies for the regulation and supervision of private pensions, for example the superintendencies in Argentina and the Plurinational State of Bolivia, or Financial Supervisory Authorities in Hungary and Poland. In practice, however, the transparency and accountability of the private systems were often questionable, resulting in underperformance of the funds and the administration.

In Kazakhstan, for example, most private pension fund administrators did not publish the list nor the structure of shareholders. Due to scarce regulation, they made decisions regarding investments and administrative expenses. Similarly in Poland administrative fees remained unregulated until 2014, and no regulatory action was ever taken on oligopolistic practices of private pension providers. With the reversal of the privatizations, most supervisory and regulatory agencies were replaced by newly created or reinforced public entities, often part of a broader regulatory structure, therefore increasing the transparency, accountability, and governance of the pension system, at the same time making it less prone to industry capture.

Argentina abolished the Superintendency that previously watched over the private pension funds and introduced as part of the re-reform a congressional committee (with elected members from both chambers) that monitors the public PAYG pension scheme and its evolution, and may give non-binding recommendations. The Plurinational State of Bolivia established a new public and non-autonomous Pension and Insurance Supervisory and Control Authority to replace the previous Superintendence (supervisory authority of the private individual account system), with the mandate to oversee both pensions and insurance. In Hungary, the supervisory and regulatory functions are now under the Ministry of Human Resources and the Hungarian National Bank. In Kazakhstan, the Agency for Regulation and Supervision of Financial Markets and Financial Organizations (AFN) oversees the National Bank of the Republic of Kazakhstan and its operation, including pension funds management. In Poland, the private individual accounts and public pension funds are regulated by the Financial Supervision Authority (FSA), which is overseeing financial markets, including the banking sector, capital and insurance markets, cooperative savings and credit unions and other payment institutions and services. The Ministry of Family, Labour, and Social Policy provides general supervision of the public schemes under ZUS (Polakowski and Hagemejer, 2018).

2.10. Governance of the re-reformed systems

The governance of pension systems ensures adequate policy formulation and related decision-making processes, the institutional arrangements and implementation structures, as well as the administrative operations to actually make the structures work, including supervision (Gillion et al, 2000; Cichon et al, 2000). Pensions were privatized in a number of countries based on hypothetical debates on the improvements that the private sector would bring; however, as presented in earlier sections, the private model did not deliver. As a result, the role of the governments was strengthened.

The re-reforms reinforced the government's role in the administration, regulation and supervision of the pensions systems in all cases. In some cases, the new governance system includes a tripartite structure in accordance with ILO international standards on social security, as in Argentina. Others like the Plurinational State of Bolivia despite the constitutional mandate, have not yet included tripartite representation, which may undermine the political sustainability of these new public pension systems (Mesa-Lago, 2018).

Argentina**,** for example, created a National Congress Commission and a tripartite advisory council, including representatives from pensioners and banks. In Poland, the participatory character of the governance framework was improved, as representatives of trade unions and employers are members of the supervisory board of the ZUS. ZUS is governed by the Management Board composed of 2-4 members, who are appointed and dismissed by the Supervisory Board (tripartite) on the recommendation of the President of ZUS. After restoring the public pension system, Hungary created in 2010 the Economic and Social Council, a national tripartite consultation body, which includes the participation of workers', employers' and social civil society representatives; however, no specific tripartite representation took place under the new pension system. Meanwhile in the Plurinational State of Bolivia and Kazakhstan, the government significantly increased its executive powers over the pension systems with no representation of workers and employers in the governance of the schemes. In Kazakhstan, the UPF is managed by the National Bank, while the oversight of the advisory body is placed directly under the president of the Republic of Kazakhstan.

2.11. Social Dialogue in the re-reform process

The government, social security institutions, employers and workers as contributors and beneficiaries, retirees/beneficiaries are the key stakeholders in a social security system and thus should be involved to some extent in the governance of that system. In particular, the representation of both workers and employers is enshrined in the ILO international labour standards (Box 2). Involvement can consist in participation in re-reform decisions, monitoring performance and having a role in the administration of the scheme.

The overall weak performance of the private schemes in terms of low benefit levels and generally decreased coverage, and the aggravated burden of the government in terms of the high transition costs and high administrative costs, motivated governments to undertake the re-reform process with eagerness, generally speed was prioritized over social dialogue. While the financial crisis reduced the resistance of private pension administrators against reversal, and the population was in general supportive of the re-reforms switching back to public systems, governments tended to centralise processes, sometimes ignoring complaints from both the private administrators against the re-reforms, and from the trade unions who supported for the reversal of pension privatization but wanted additional changes.

In Argentina, despite the long process to re-reform pensions, the financial crisis of 2008 accelerated the implementation process; As a result, the final pension bill for renationalization of the pension assets was implemented by the government in just a couple of months after it has been announced, providing limited time to social partners, civil society and pension funds to react to the announcement. While trade unions were generally supportive of the re-reform, employers' organizations and the financial sector were resistant to the process, and a counterproposal was elaborated by private pension administrators (Bertranou et al., 2018).

The government of the Plurinational State of Bolivia consulted the sole trade union federation *Central Obrera Boliviana* (COB) during the preparation process, and held public and congressional debates – reaching consensus with the workers. However, the government involved employers' organizations to a lesser extent – for example the Confederation of Private Employers was not consulted on employers' contributions to the Solidarity Fund.

In Hungary, the Economic and Social Council was created in 2010 to replace the previous national tripartite consultation body, however with less negotiation power and unable to influence the re-reform process, which was led by the government and implemented at a quick pace avoiding any consultation. Trade unions were against the lack of social dialogue, but supportive of the nationalization, and employers' organisations were mobilized to protest against the nationalization, but without any success. The Government gained back popularity after the pension re-reform.

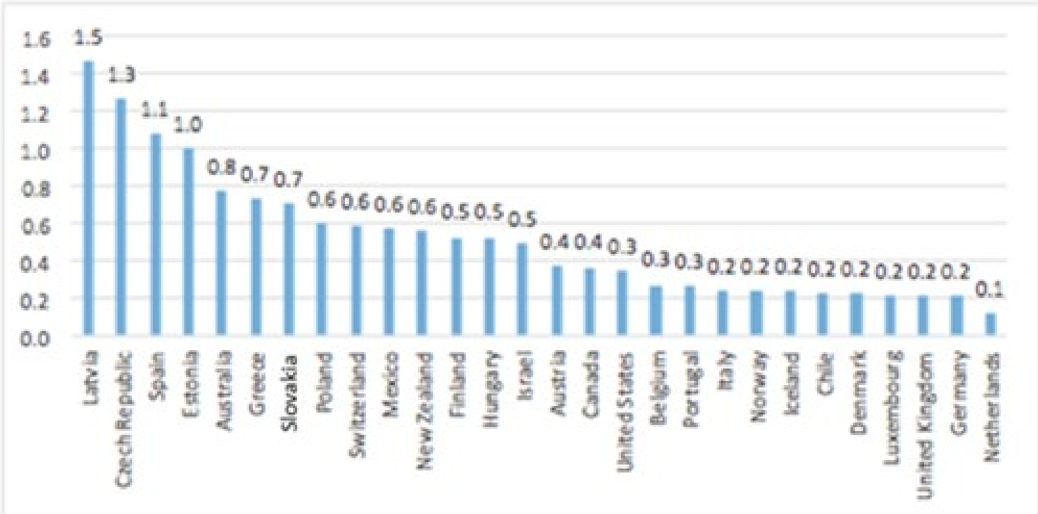
Similarly, there was also only minimal social dialogue involved in the re-reform formulation in Kazakhstan. The re-reform was strongly led by the President and the Government, with little participation from for civil society, social partners, pension funds and public involvement in the re-reform process and the debate around it. The public was more divided with opposing groups organizing protests against the reforms. Most of the protests addressed issues around increased retirement age and the effect of pension re-reform on women. Overall, actual resistance to the re-reform came in the majority of cases only from members of the financial and private pension fund community (Altiparmakov, 2014).

In Poland, the formal consultation body is not yet operating, as the trade unions boycotted the Tripartite Commission in 2013, therefore closing the door to possible discussions on the social security system. The re-reform process in Poland lacked transparency and there was only limited social dialogue or open discussion and communication surrounding the pension re-reform. Nonetheless, the move to transfer private pension assets back to the public fund has been well received (Cohen and Cienski, 2014).

2.12. Positive impacts: Reduced administrative costs

High administrative costs, including the various forms of fees and commissions that the private individual account funds were charging their members posed a serious problem and in many cases spurred the re-reform process. The OECD observed that countries with DC systems and a large number of small funds had higher operating costs, including administrative costs and investment expenses, than countries with public PAYG defined benefit and hybrid systems. Operating costs in 2016 (Figure 2) in Latvia accounted for 1.5 per cent of assets under management, 1.3 per cent in the Czech Republic, 1.1 per cent in Spain, 1.0 per cent in Estonia, 0.8 per cent in Australia, 0.7 per cent in Greece and the Slovakia, while in DB schemes in comparison they accounted for 0.3 per cent of total assets in Belgium and Portugal, 0.2 per cent in Denmark, Germany, Iceland, Italy, Luxembourg, Norway and the United Kingdom and 0.1 per cent in the Netherlands (OECD, 2017b).

Figure 2. Operating expenses in selected OECD countries, 2016 (as a percentage of total assets)



Source: OECD, 2017b.

As a part of the re-reforms, many countries introduced measures to curb administrative costs to ensure that the new pension systems would be less costly. Commissions and premium fees were effectively abolished in Argentina including for the public system. Commissions and fees were also abolished for the remaining individual account funds in Hungary. In Kazakhstan, commission fees and operational costs were halved under UPF. Administrative fees have been decreasing in Poland, even prior to the re-reform and as the funds are now managed by ZUS, costs are likely to decrease further due to economies of scale (Polakowski and Hagemejer, 2018).

2.13. Social and economic impacts

Pensions systems have significant social and economic impacts. Social impacts depend largely on pension scheme design regarding the treatment of individuals with irregular work histories, low incomes, family care obligations and others. Defined benefit, PAYG schemes are better able to fulfil the principles solidarity and of non-discrimination, gender equality and responsiveness to special needs (Recommendation No. 202, Woodall and Hagemejer 2009). Public systems can also deliver positive economic impacts by investing people's savings in national public development projects.

The reversal of pension privatization improved the level of benefits due to new rights and entitlements and the solidarity principles that underpin defined benefits schemes. Benefits for women were improved in countries such as Argentina, the Plurinational State of Bolivia, and Hungary. Additionally, most re-reforms also resulted in an increase of coverage, including through the creation or strengthening of social pensions. With the increase in coverage rates, the introduction and extension of non-contributory benefits and higher replacement rates in the reintroduced PAYG schemes, the risk to fall into poverty in old-age has been significantly lowered in all countries.

Governments moreover were able to invest part of the nationalized funds in public development projects, as in Argentina and Kazakhstan. For example, in Argentina, the

Government invested a part of the nationalized funds in public investment projects (e.g. nuclear power electricity plants, roads, trains, public housing, etc.) to create public goods which are expected to create positive multiplier effects with regards to public revenues such as taxes and social security contributions (Hujo and Rulli, 2014).

In Argentina, accrual rates increased from 0.85 to 1.5 percent, added to the Universal Basic Pension, that led to an increase in coverage and benefit levels, especially for women and for low income groups. Part of the re-reform in Argentina involved the introduction of a universal basic pension (PBU) that helped to increase both coverage and adequacy of benefits. The gender gap was also addressed as part of the expansion of contributory pension coverage. For instance, mothers with seven or more children and without means to support themselves are eligible to receive a non-contributory benefit and a universal allowance for each child below age 18 or disabled if they are unemployed or in the informal economy and lack a pension. Additionally, the Argentinian government launched another critically important programme, known as the 'Moratorium,' which allowed workers of retirement age to receive a pension regardless of whether they had completed the full 30 years of required social security contributions through formal employment. The 'Moratorium' had a strong impact on coverage rates, benefitting primarily women and low-income earners. Since the reversal coverage rates for women have increased from 67.57 per cent in 2006 to 92.37 per cent in 2010 and women have, since 2009, higher coverage rates than men (Hujo and Rulli, 2014).

The main positive impact of the reform in the Plurinational State of Bolivia involved the re-introduction of solidarity and redistribution in the new pension system. Official projections indicate substantial increases in benefits for lower income groups, under the new pension system. Non-contributory pension schemes (*Renta Dignidad* and the Solidarity Pension) were particularly important to provide income protection for older persons not covered under the contributory schemes, including many women. The Plurinational State of Bolivia moreover is addressing the gender gap, as insured mothers with 10 years of contribution can add one year of coverage for each child born (child credit) with a maximum of three years. Alternatively, women can use the child credit to retire sooner, with one year earlier retirement per child (with a maximum of 3 years) (Arza, 2017).

In Hungary, the re-reform led to a decrease in government debt and an increase in social solidarity. Positive effects can be also observed with regards to gender equity with the maternity voucher increasing from 2 to 3 years. Projections conducted by Freudenberg et al. (2016) on the medium and long-term effects of the pension reform reversal on adequacy indicate an improvement with regards to adequacy among female members, especially in the short and medium term. The replacement rate, calculated as a percentage of the average wage in the economy, is projected to be 0.54 and 0.50 for men and women respectively in 2020 under the re-reform scenario, and 0.5 and 0.46 under the most optimistic funded DC scenario, with the rate of return on investment of 4 per cent (which is significantly higher than the rates of return in recent years).

In Kazakhstan, the non-contributory Basic Social Pension and Solidarity Pension improved benefit adequacy for low-income groups in particular, improving overall equity in the system. With public management of investments, the government also gained access to long-term financing for large scale infrastructure projects. On the other hand, the re-reform in Poland is not likely to generate significant socio-economic impacts, since the operational principles were little changed after the nationalization and replacement rates as well as the level of benefits (adequacy) remain low in the NDC system.

2.14. Fiscal impacts

The privatization experiment was founded on the conviction that privately managed, fully funded pensions would be sustainable. However, government finances deteriorated significantly as a result of high transition costs of privatizing pensions. The added fiscal burden of rescuing the financial sector as a result of the 2008 financial crisis, reduced the governments' capacity to continue financing the costs of privatization.

Moreover, the global financial crisis had a negative impact on capital markets and significantly affected the private pension funds' performance, creating additional pressure on government finances as pension benefit levels fell far below expectations and thus many governments had to launch publicly-financed supplementary pension top-ups [21]. High public deficit and debt figures posed a considerable problem for EU member states in particular, as they are required, in line with the EU Maastricht criteria, to keep their budget deficit under 3 per cent of GDP and their public debt under 60 per cent of GDP.

Following the nationalization of private pension funds, governments improved their short-term fiscal positions, easing the fiscal deficit and decreasing overall debt. The transfer of accumulated assets as well as contributions from the private to the public system naturally had an overwhelmingly positive impact improving pension finances and fiscal balance.

In the long-term, the fiscal impact of the re-reforms will heavily rely on the ability of countries to adapt their pensions systems to the changing demographic, economic and labour market conditions through timely and properly designed parametric reforms.

In Argentina, the re-reform had a positive impact on the short-term financial conditions of the pension scheme, with a financial inflow equivalent to about 9.5 per cent of GDP in 2008 (Datz and Dancsi, 2013). The transfer of funds back to the public system of around USD 25.5 billion significantly improved the Governments' fiscal position, easing budgetary pressure in a context of limited access to international financial markets. The government used the pension fund assets partly to pay the foreign debt, to finance family allowances and to invest in government projects. Government gross debt decreased from 53 to 38 per cent of GDP between 2009 and 2011 (Angelaki and Carrera, 2015). In the long term the public system will also have to cover an increasing number of pensioners under the consolidated public fund (SIPA). In the course of the re-reform, the Plurinational State of Bolivia's public debt between 2010 and 2011 decreased from 38.5 to 33.9 per cent of GDP. Renationalization allowed the government to access around USD 5.4 billion and thus significantly expanded its fiscal position. In the long run, however, there is a risk of financial imbalance in the system.

In Hungary**,** the nationalization of pension assets contributed to an initial decrease of sovereign debt by around 5 percentage points of GDP in the first half of 2011, bringing the budget deficit to a record low. This was a high priority for the government and helped Hungary achieve its removal from the European Unions' list of Excessive Deficit Procedures (Maastricht Criteria on Debt and Fiscal Deficit). Hungary's fiscal deficit dropped following the re-reform averaging 2.75 per cent annually from 2011-2016 versus 5.8 per cent from 2005-2010 prior to the re-reform. Public sector debt decreased likewise from 81.8 to 79.0 per cent of GDP between 2010 and 2012. The Hungarian government also used part of the pension funds assets to repay an IMF loan and cover other urgent expenses, a practice not recommended by the ILO given its negative sustainability impacts.

[21] For example, between 2001 and 2010, the sovereign debt rate in Hungary increased from 53 per cent to 81 per cent of GDP and in Poland from 40 to 55.5 per cent.

While the positive impact can be clearly observed, it must be noted that the nationalization also triggered strong criticism from the IFIs -the IMF, the World Bank- as well as from the EU, the OECD, and various credit-rating agencies. As a result, the Hungarian Forint depreciated, credit default swap spreads increased and government bonds were downgraded (Datz and Dancsi, 2013), negatively affecting the Hungarian economy in the short-term – however medium-term prospects show improvements as a result of the reversal of pension privatization.

Kazakhstan's pension re-reform followed a partly similar pattern, the low investment returns and high transition costs of privatization had negatively affected the governments' fiscal position (Zhandildin, 2015). With the nationalization of the management of the private funds, the government implicitly extended its fiscal space and increased its room to manage its sovereign debt and invest in national development.

Poland's reform led to a significant shift of both assets and liabilities from the private funds to the government, improving the government's short-term fiscal position. Following the re-reform, the state insurance system (ZUS) decreased its deficit from 3.52 to 2.73 per cent of GDP, and the government's fiscal position improved, dropping its fiscal deficit from an average of 4.78 per cent annually between 2006-2011 to 3.72 per cent between 2012 and 2017. General government debt levels also decreased from 56.2 to 50.2 per cent of GDP between 2011 and 2014 (IMF World Economic Outlook database).

Table 6 Reversing pension privatization, rebuilding public pension systems and their results, in Argentina, the Plurinational State of Bolivia, Hungary, Kazakhstan and Poland

Areas	Argentina	Bolivia, Plur. State of	Hungary	Kazakhstan	Poland
Timing of re-reform	October-December 2008	2009-2010	April-December 2010	2012-2013	2013-2014
Laws enacted	■ Law 26,222 of April 2007 introduced the possibility of opting for the public system and made this the default option for new entrants. ■ Law 26,425 of December 2008 abolished individual accounts and transferred members to the public PAYG scheme.	■ The Constitution of 2009 banned social security privatization and guaranteed the right to the universal non-contributory pension (*Renta Dignidad*). ■ Law No 065 of December 2010 introduced the new public PAYG system: *Sistema Integral de Pensiones* (SIP).	■ Act CI/2010 of October 2010 directed private pension fund contributions to the treasury for 14 months. ■ Law 1281/2010 of December 2010 ruled the automatic transfer of workers to the public PAYG system.	■ Law No.105-V ZRK of 21 June 2013 on Pensions consolidated the 10 private pension funds in to the public Unified Pension Fund (UPF).	■ Act Dz. U. 2011 poz. 398, reduced the share of contributions to the individual account schemes from 7.3 per cent to 2.3 per cent. ■ Act Dz. U. 2013 poz 1717, made contributions to individual accounts voluntary and allowed the transfer of accounts to the public system.
Basic characteristics of the new public model	The system consists of a public PAYG defined benefit (DB) scheme, combined with a non-contributory Universal Basic Pension.	The system is comprised of a public PAYG defined benefit (DB), combined with a non-contributory Universal Basic Pension (*Renta Dignidad*). A semi-contributory Solidarity Fund guarantees minimum protection to those in the Public scheme.	The system consist of a PAYG defined benefit (DB) scheme is combined with a non-contributory means-tested scheme.	The system consists of a universal solidarity pension for all citizens; and mandatory public pension schemes: one is a DB PAYG scheme and the other is an individual accounts scheme managed by the public Unified Pension Fund (UPF). There is an occupational pension for high-risk occupations financed by employers.	The system consist of a public PAYG NDC scheme, run by the State; a minimum pension level is guaranteed, publicly financed. The government also provides a means- and pension-tested non-contributory pension. Private individual accounts are voluntary as of 2014.
New rights and entitlements	Public PAYG DB pension at the age of 65 for men and 60 women with an expected replacement rate around 71.6 per cent with 35 years of contribution. The pensions-tested non-contributory scheme delivers a benefit to those 65+ and a means-tested benefit to those 70+ without any other income.	Public PAYG DB pension at the age of 55 and 50 for men and women, respectively, with guaranteed replacement rate of 70 per cent with 30 years of contributions. The Solidarity Fund finances any gap to meet the guaranteed level. The universal non-contributory pension (Renta Dignidad) is granted from the age of 60.	Public PAYG DB pension benefit for men and women from the age of 63 and 6 months at a replacement rate of 74 per cent with 35 years of contributions. The means-tested non-contributory pension is available at the age of 62.	Public PAYG pension guarantees replacement rates of 60 and 70 per cent for men from the age of 63 and women at the age of 58.5 respectively. The universal non-contributory solidarity pension is available at the same ages. The individual accounts system managed by public UPF offers monthly benefit.	Public PAYG NDC pension replacement rates are 39 per cent for men with 45 years of contributions and 34 per cent for women with 40 years of contributions. The guaranteed minimum monthly pension is available for men 65+ and women 60+. Means- and pensions-tested non-contributory pensions are granted at the same ages.
Re-establishing or creating the public pension administrator	ANSES took over the resources of the private pension administrators and their members.	A new public pension administrator (*Gestora Pública*) was created in 2015, planned to start operations in March 2019.	Administration of the system continues under the responsibility of the public Central Administration of National Pension Insurance (ONYF).	A new public entity, the Unified Pension Fund (UPF), has taken over the administration of the system. Investment management of the UPF's pension assets was transferred to the National Bank of the Republic of Kazakhstan (NBRK).	The public PAYG NDC scheme is under the management of the Polish Social Insurance Institution (ZUS); those temporarily remaining under private individual accounts continue to be managed by private pension fund administrators.

Areas	Argentina	Bolivia, Plur. State of	Hungary	Kazakhstan	Poland
Transfer of members and funds and recognition of past entitlements	All members, their entitlements and funds were transferred to the public Argentine Integrated Pension System administered by ANSES.	All members, their entitlements and funds were transferred to the public system.	Majority of members opted voluntarily for the public PAYG scheme. The individual accounts funds were transferred to the Treasury.	All individual account pension funds and members were transferred automatically to the UPF. Entitlements under the individual accounts scheme are recognized in the new system under defined contribution formula.	No transfer of members was required as every individual account member was also affiliated with the public system administered by ZUS. Assets from the individual account pension funds were transferred to the individual NDC accounts in the public scheme.
Re-introduction of employers' contributions	Employers paid contributions prior to the re-reform and will continue	Yes	Yes	Yes (occupational pension scheme)	Yes
Financing	The PAYG scheme receives contributions from workers and employers. The non-contributory universal basic pension is financed from the general budget.	The public PAYG system and the solidarity scheme are financed through contributions from workers and employers. The non-contributory *Renta Dignidad* is mostly financed by tax on hydrocarbons and revenues from the capitalization of former public enterprises.	The PAYG public scheme is financed through contribution from workers and employers. Non-contributory benefits are tax-financed.	The Basic Social Pension and Solidarity Pension are tax-financed. The individual account scheme is financed by workers' contributions. Employers contribute to the mandatory occupational pension scheme for employees in hazardous and dangerous working conditions.	The PAYG NDC scheme is financed by contributions from workers and employers. Potential deficits in the system are financed from the general budget.
New contribution rates	Workers: 11 per cent Employers: 10.17 per cent	Workers: 12.71 per cent (to the solidarity scheme is between 0.5 to 10 per cent based on level of income) Employers: 3 per cent (to Solidarity scheme 3 per cent).	Workers: 10 per cent Employers: 24 per cent	Workers(individual accounts): 10 per cent Employers: (mandatory occupational pensions): 5 per cent	Workers: 9.76 per cent Employers: 9.76 per cent
Collection of contributions	By the Federal Administration of Public Revenues (centralized tax collection authority).	The public «*Gestora Pública*» shall be in-charge of collecting contributions from 2019.	Contributions are collected by the National Tax and Custom Administration.	UPF is the public pension administrator and operator, including contribution collection.	ZUS social insurance collects contributions and pays out pension benefits.
Fund management and investments	The National Bank of Argentina managing the funds; investment policy defined by an Investment Committee.	Public «*Gestora Pública*» shall be in charge of fund management and investment - private AFPs are temporarily in charge.	Public PAYG funds are managed by the Treasury.	Managed by the National Bank of Kazakhstan.	ZUS social insurance is in charge of the investment management of the public pension funds.
Supervisory and regulatory changes.	Argentina abolished the Pension Superintendency and introduced a congressional committee that monitors the public PAYG scheme.	Pension and Insurance Supervisory and Control Authority replaced the Superintendencia, with the mandate to oversee both pensions and insurances.	Ministry of Human Resources and the Hungarian National Bank carry out the functions.	The Agency for Regulation and Supervision of Financial Market and Financial Organizations (AFN) oversees the National Bank and its operations, including the management of pension funds.	Both public and private pension funds are regulated by the Financial Supervision Authority (FSA). The Ministry of Family, Labour, and Social Policy provides general supervision of the public schemes under ZUS.

Areas	Argentina	Bolivia, Plur. State of	Hungary	Kazakhstan	Poland
Governance of the reformed systems	The new Pension System is supervised by a National Congress Commission and a tripartite advisory council, including representatives from pensioners and banks.	The government increased the executive powers over the pension system. The new scheme does not have yet representation of workers and employers.	A tripartite Economic and Social Council was created as a consultative body. No tripartite representation under the new pension system.	The UPF is managed by the National Bank. The oversight is placed directly under the president of the Republic of Kazakhstan. There is no representation of workers and employers in the governance of the scheme.	ZUS is governed by the Management Board composed of 2-4 members, appointed/dismissed by the Supervisory Board (tripartite) on the recommendation of the President of ZUS.
Social dialogue in the re-reform process	Limited social dialogue and congressional debate on the re-reform.	Congressional debates were held; trade unions extensively consulted.	There was limited public discussion and congressional debate.	Limited social dialogue, with the government presiding over policy formulation.	Limited social dialogue during the reform process.
Positive impacts: (a) Reduced administrative costs	Commissions and premium fees abolished. The public system cannot charge any fees.	Until the *Gestora Pública* is established, fees are unchanged.	Commissions and fees were abolished for the remaining individual account funds.	Commission fees and operational costs halved under UPF.	No indication, but as the funds are now managed by ZUS, costs are likely lower due to economies of scale.
(b) Social and economic impacts	Accrual rates increased from 0.85 to 1.5 per cent, added to the Universal Basic Pension, led to an increase in coverage and benefit levels, especially for women and for low income groups. Pension reserves invested in infrastructure projects.	Projections indicate substantial benefit increases for lower income groups and women. Insured mothers with 10 years of contribution gain one year for retirement for each child born; the mother's solidarity pension improved gender equity.	The re-reform led to decreased government debt and an increase in social solidarity. Positive effects can be also observed with regards to gender equity with the maternity voucher.	The non-contributory Basic Social Pension and Solidarity Pension improved benefit adequacy for low income groups and equity in the system. With public management of pensions, the government gained access to long-term financing for infrastructure projects.	No major social and economic impacts foreseen as the operating principles changed little for the NDC systems and replacement rate and adequacy levels of the benefits remain low.
(c) Fiscal impacts	USD 25.5 billion were transferred from private funds into the public fund, eliminating the public system's deficit and decreasing the government debt from 53 to 38 per cent between 2009 and 2011.	USD 5.4 billion were transferred from the private to the public system, decreasing the public debt from 38.5 to 33.9 per cent of GDP between 2010 and 2011.	USD 11 billion of the private funds were transferred to the public fund, decreasing the fiscal deficit from 5.8 between 2005-2010 to 2.75 per cent in 2011 and public debt decreased from 81.8 to 79 per cent of GDP between 2010 and 2012.	As individual accounts continued their operation under a public management, it is likely to have had no significant impact on the fiscal position of the Government.	USD 33 billion were transferred to the ZUS, reducing the fiscal deficit from 4.78 per cent (between 2006 and 2011) to 3.72 per cent (between 2012 and 2017), and public debt from 56.2 to 50.2 per cent of GDP between 2011 and 2014.

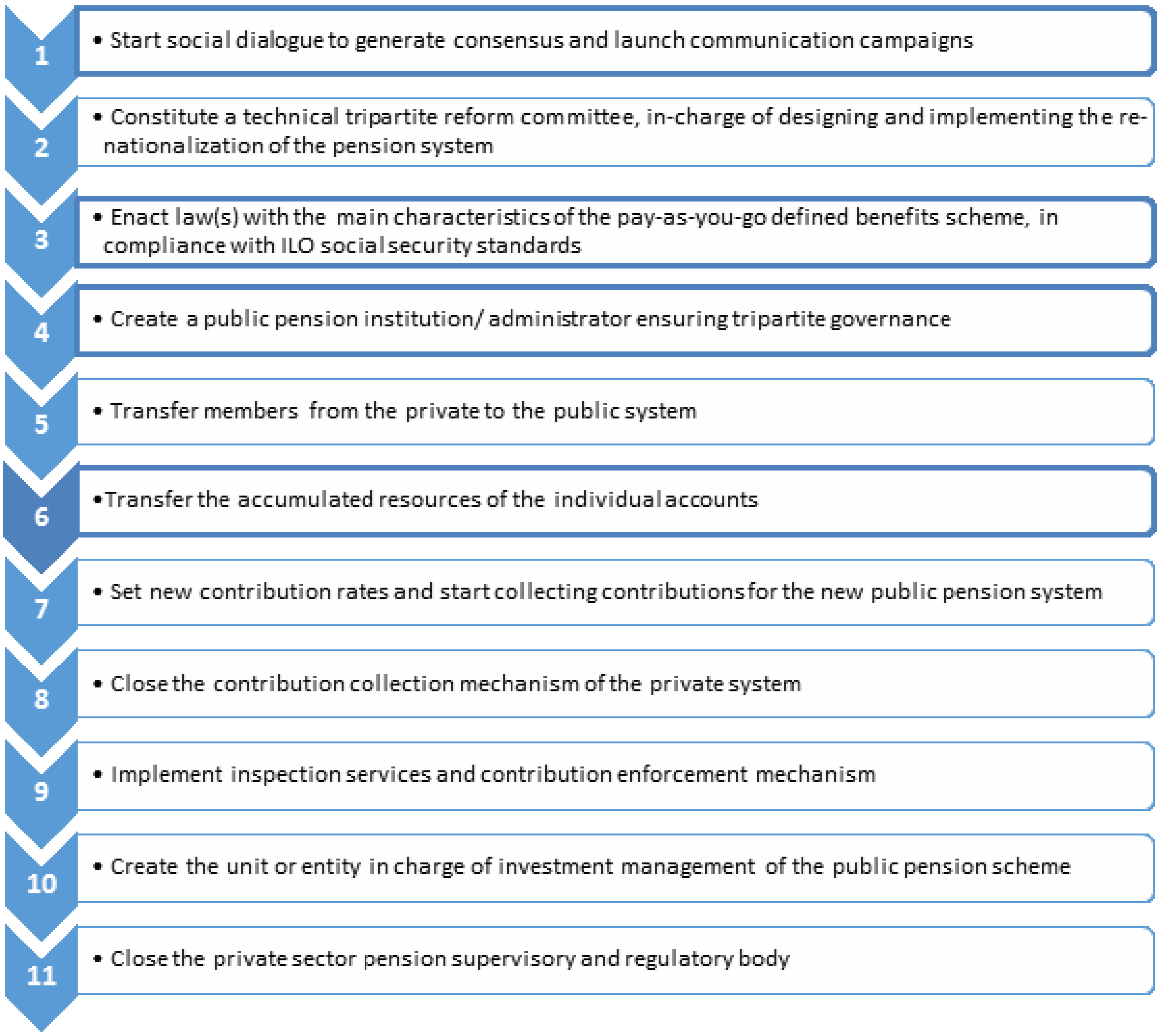
Main sources: Bertranou et al., 2018; Maltseva and Janenova, 2018; Mesa-Lago, 2018; Polakowski and Hagemejer, 2018; Szikra, 2018.

3. How to reverse pension privatization: Policy steps

Drawing from ILO's vast experience in providing support to governments across the world to reform pensions and drawing on in-depth analysis of recent country cases, this section provides guidance on how to reverse privatization for those countries that may be interested to return to a national public pension system.

There are eleven main policy steps to reverse pension privatization (Figure 3). They are to: (i) start social dialogue to generate consensus and launch communication campaigns; (ii) constitute a technical tripartite reform committee, in-charge of designing and implementing the re-nationalization of the pension system; (iii) enact law(s) with the main characteristics of the pay-as-you-go defined benefits scheme, in compliance with ILO social security standards; (iv) create a public pension institution/ administrator ensuring tripartite governance; (v) transfer members from the private to the public system; (vi) transfer the accumulated resources of the individual accounts; (vii) set new contribution rates and start collecting contributions for the new public pension system; (viii) close the contribution collection mechanism of the private system; (ix) implement inspection services and contribution enforcement mechanisms; (x) create the unit or entity in charge of investment management of the public pension scheme; (xi) close the private sector pension supervisory and regulatory body.

Figure 3. Main policy steps for reversing pension privatization



Step 1. Start social dialogue to generate consensus and launch communication campaigns

Ideally, any reform of social security, but in particular large-scale reforms, should be implemented in a context of social dialogue and consensus among the main stakeholders, including civil society and in particular advocacy groups for pensioner's rights. The involvement of employers' and workers' organizations is particularly necessary, as they finance the system through their social security contributions. While not all countries engage in social dialogue, the ILO recommends strong national social dialogue that should assist in building public support to reverse pension privatization. Involving stakeholders in the decision-making process and design of reforms will generate ownership and a sense of responsibility for the success of the reform, which enables a smooth implementation process. There is a more than ever pressing need to pursue tripartite social dialogue to secure an appropriate degree of political will and social consensus for more sustainable and adequate reforms with positive social outcomes.

Social dialogue should be combined with communication and education campaigns to inform the public of the benefits of the new public system. Communication campaigns are necessary to ensure that the public is well informed about the advantages of the re-reform process, including the steps that will be taken for the transition to the new system, the new rights and duties, allocation of funds, contributions rates, and options at the individual level. Uncertainty could create unnecessary resistance to change. Best practice from countries shows that it is important to start a public information campaign at the very beginning, to ensure adequate national dialogue and generate consensus, keep it ongoing during all the re-reform process, and extend the communication campaign after completion so all citizens are well-informed.

Step 2. Constitute a technical tripartite reform committee, in-charge of designing and implementing the re-nationalization of the pension system

Given the technical complexities of the pension reform process, the constitution of a technical tripartite pension reform committee, responsible for designing and implementing the renationalization of the pension system, is recommended. The committee should include representatives of employers and workers as well as multidisciplinary experts with demonstrated experience in public social security systems, such as economists, actuaries, lawyers, statisticians, administrators, investment specialists, among other social security experts. The tripartite reform committee should propose the main characteristic of the public system, conduct a feasibility study or an actuarial valuation to assess the economic and financial sustainability of the new system and make recommendations on the reform options for consideration.

Step 3. Enact law(s) with the main characteristics of the pay-as-you-go defined benefits scheme, in compliance with ILO social security standards

The elaboration of the new law will require legal analysis. This task can be under the responsibility of the tripartite technical reform committee, ideally with the participation of lawyers specialized in social security systems, to ensure functionality and compliance with the ILO's international social security standards.

The good functioning and future sustainability of a pension scheme depend to a large extent on the quality of its design, which normally includes the definition of the benefit profile, pension formula, contribution rates and qualification requirements, as well as implementation arrangements and governance. The design of the new system should consider transitional and gradual measures. The design must also take into account the adequacy of benefits, in particular, to guarantee at least the minimum benefits set out in ILO Conventions No. 102 and No. 128 on social security pensions [22]. Equity and solidarity issues should also be reflected in the law as regards gender and re-distribution among low-income and high-income earners. Adequate solidarity mechanisms should be included in all public pension systems.

Step 4. Create a public pension institution/administrator ensuring tripartite governance

Where no public administrator exists for the general pension scheme, the priority is to proceed with its design and implementation. There is extensive international experience in the design of public pension scheme institutions. The basic functions to be considered in the design of this administrator should be enforcement and collection of contributions, including the registration of members and the accounting of contributions (maintaining individual records); management of benefits, including the processing of applications and periodic payments; management of investments; and planning and advisory services, including actuarial and legal advice. In line with ILO standards and the ISSA/ILO guidelines for good governance of social security systems (ISSA, 2013a), the new public pension system should have a tripartite governing body (the board or commission), with the participation of employers and workers' organizations (the main funders of the system), which ultimately will be responsible for issuing pension policies as well as supervising the implementation of the scheme and the running of the social security organization that administers the pension scheme, and other general governance issues.

Step 5. Transfer members from the private to the public system

Once the institutional framework has been created, the next step is to transfer the members from the private to the public system. The administrative process includes the migration of databases on members and contribution history, as well as information on the employers, with their respective individual characteristics, to guarantee the continuity of the collection process and contributory records at the company and individual level.

Provisions to transfer the information on individual contribution history and wages, must be taken into account for the future verification of eligibility conditions and calculation of benefits. In the absence of a central register of individual accounts by a public entity, pension fund management companies should be required to provide such information through a properly regulated process.

For those members who were part of the old public pension system operating before privatization, it is also necessary to take measures to recognise their contributions and acquired rights, duly totalling all the periods contributed across the different schemes.

[22] In line with ILO Convention No. 102 pension benefits should provide at least 40 per cent of pre-retirement insured income for 30 years of contribution, and a reduced/adjusted minimum benefit, for those who have contributed for at least 15 years. ILO Convention No. 128 provides higher standards for pensions.

Step 6. Transfer the accumulated resources of the individual accounts

An important decision concerns the destination of the resources accumulated in the individual accounts of the system to be closed. Ideally, these resources should become part of the retirement assets of the new PAYG scheme to leverage its financing. Whatever the decision, the transition must be fair in terms of actuarial values, so contribution periods to the private system to be closed should be adequately recognized in the new system. In the event that savings in individual accounts are transferred to the new PAYG scheme, contributors must be guaranteed that their pension rights in the new system are equal to or higher (actuarially) than those of the system to be closed. In some national legislations individual accounts are considered private property, so they cannot be transferred to the PAYG scheme, except if members accept the transfer voluntarily. Otherwise, the individual account assets can be transferred to a complementary individual provision, if it exists.

Step 7. Set new contribution rates and start collecting contributions for the new public pension system

Contribution rates are critical to ensure financing of the new public scheme and should follow sound actuarial studies, in order to guarantee long-term sustainability. The vast majority of public pension schemes operate under the concept of defined benefits, which guarantee a benefit level (based on the years of contributions including credited periods and the amount of earnings during the same period), and with a target level of reserves during defined future periods. Some countries opt for a financing system based on partial funding, i.e., partial accumulation of actuarial reserves, which ideally requires a series of future increases in contribution rates (the scaled-premium financing system) in order to adapt the level of contributions as the pension system matures and costs grow. Mechanisms for adjusting other parameters, such as retirement ages in-line with increased longevity and contributory periods, should also be addressed, respecting the principles set out in international social security standards.

Once contribution rates have been defined, the public system can start collecting contributions. To this end, a centralized contribution collection system must be established, ensuring adequate coordination with other public entities, in particular with the taxation authorities in-charge of collecting taxes, taking into account the ISSA guidelines for contribution collection and compliance (ISSA, 2013b). Some countries have opted for a unified contribution system with tax collection, which should ensure the application of specific collection criteria for the social security system. In some countries, despite the establishment of private pension funds, the collection of contributions remained centralized under the responsibility of a public entity. In those cases, much of the transition work towards the public system is already done.

Step 8. Close the contribution collection mechanism of the private system

The beginning of the collection of contributions to the public centralized collection system must be synchronized with the ending of the collection of contributions in the private system that is being closed. The population should be well informed about the changing collection process, including access to the new regulations and procedures.

Step 9. Implement inspection services and contribution enforcement mechanisms

One of the main responsibilities of a social security institution is to establish a strong social security inspection service, accompanied by contribution enforcement mechanisms. The inspection services must have a sufficient number of highly qualified personnel. Contribution control mechanisms should have coordination processes with other public entities, including other social security institutions, in order to share information useful for identifying contributors. Information on employers and self-employed and their scale of operations, such as business records, operating licenses, energy consumption, among others can help generate an adequate business intelligence platform, which can be of critical importance to ensure sound, efficient and effective control.

Step 10. Create the unit or entity in charge of investment management of the public pension scheme

Investment management is another critical function that must be designed and implemented as part of the new institutional framework of the pension system. The ISSA/ILO Guidelines on Investment of Social Security Funds (ISSA, 2013c), provide comprehensive guidance to design and implement a holistic investment framework. Consideration should be given to investment structures (which will be the structures specifically charged with carrying out this function and their respective roles), investment regulations, investment strategies, investment processes (how the function is carried out in practice) and monitoring investment management.

Step 11. Close the private sector pension supervisory and regulatory body

The reversal of the private system is completed by the closure of the supervisory and regulatory body that was created with privatization. Such an entity is no longer required as private pension fund administrators are no longer required. In countries where voluntary private pensions systems operate, regulatory and supervisory functions may be transferred to an independent financial supervisory body.

It should be noted that while the regulatory functions of private individual account schemes operate within the financial and banking system, the regulatory and supervisory bodies of social security institutions are under the umbrella of the ministries of labour and social security, and optimally interact within a tripartite framework.

To conclude, this paper and associated country case studies document the underperformance of private mandatory pensions, and abstract lessons for governments intending to improve their national pension systems. Globally, countries are abandoning private mandatory individual accounts pensions. From 1981 to 2018, thirty countries fully or partially privatized their social security public mandatory pensions. As of 2018, eighteen of these countries have re-reformed, reversing pension privatizations fully or partially. Privatized mandatory pension systems struggled with high transition and administrative costs, reducing coverage rates, deteriorating benefit levels, and increasing gender and income inequalities. While the reversals of pension privatization need more years to mature, clear and measurable improvements and positive impacts can already be observed in terms of reduced fiscal pressures, lower administrative costs, higher coverage and pension benefit levels, and reduced gender and income inequalities. Strengthening public social insurance, coupled with non-contributory solidarity pensions, have improved the financial sustainability of pension systems, made pension entitlements better and more predictable, allowing scheme members to better plan for their retirement and enjoy better income security in their older years.

Bibliography

Albo, A.; González, F.; Hernández, O.; Herrera, C.; Muñoz, A. 2008. *Toward the Strengthening of the Pension Systems in Mexico: Vision and Reform Proposals* (Mexico D.F., BBVA).

Altiparmakov, N. 2014. *Initial Performance of Pension Privatization in Eastern Europe – Are Reform Reversals Justified?* Working Paper (Belgrade, Serbian Fiscal Council).

Angelaki, M.; Carrera, L. N. 2015. «Radical pension reforms after the crisis: a comparative analysis of Argentina and Greece» in *Politics and Policy*, Vol. 43 Issue 3, pp. 378-400.

Arza, C. 2015. *The Gender Dimensions of Pension Systems: Policies and Constraints for the Protection of Older Women*. UN Women Discussion Paper No. 1. (New York, UN Women).

—. 2017. «Non-contributory Benefits, Pension Re-Reforms and the Social Protection of Older Women in Latin America», in *Social Policy and Society*, volume 16, issue 3, July 2017, pp.361-375.

Atkinson, A.; Harrison, D.; Messy, F-A.; Yermo, J. 2012. «Lessons from National Pensions Communication Campaigns», *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 18 (Paris, OECD Publishing).

Barr, N. 2000. *Reforming Pensions: Myths, Truths and Policy Choices*. IMF Working Paper WP/00/139 (Washington DC, IMF).

—; Diamond, P. 2008. *Reforming Pensions: Principles and Policy Choices* (New York, Oxford University Press).

Beattie, R.; McGillivray, W. 1995. «A risky strategy: reflections on the World Bank report Averting the old age crisis» in *International Social Security Review*, Vol. 48, Issue 3-4, pp. 5–23.

Behrendt, C.; Woodall, J. 2015. «Pensions and other social security income transfers» in: J. Berg (Ed.), *Labour Markets, Institutions and Inequality: Building Just Societies in the 21st Century* (Cheltenham, UK, Geneva, Edward Elgar, ILO), pp. 242–262.

Bertranou, F. 2011. *Encrucijadas en la seguridad social argentina: reformas, cobertura y desafíos para el sistema de pensiones*. (Buenos Aires, ECLAC/ILO).

—; Cetrángolo, O.; Grushka, C.; Casanova, L. 2018. *Pension privatization and reversal of pension reforms in Argentina*. Extension of Social Security (ESS) Paper No 64 (Geneva, ILO)

Bonilla-Garcia, A.; Conte-Grand, A. (ed.) 1998. *Pensiones en América Latina: Dos décadas de reforma* (Lima, ILO).

BPS (Banco de Previsión Social). 2005. *Boletín Estadístico 2005*. (Montevideo).

CENDA (Centro de Estudios Nacionales de Desarrollo Alternativo). 2010. *Resultados para sus afiliados de las AFP y compañías de seguros relacionadas con la Previsión 1982-2008* (Santiago de Chile).

Cetrángolo, O.; Grushka, C. 2004. *Sistema previsional argentino: crisis, reforma y crisis de la reforma*., Serie Financiamiento del Desarrollo N° 151 (Santiago de Chile, ECLAC).

Cichon, M., 1999. «Notional defined-contribution schemes: Old wine in new bottles?» In *International Social Security Review,* Vol. 52, Issue 4, pp. 87–105.

—. 2004. *Approaching a common denominator? An interim assessment of World Bank and ILO position on pensions*. (Geneva, ILO).

—; Hagemejer, K.; Woodall, J. 2006. *Changing the paradigm in social security: From fiscal burden to investing in people* (Geneva, ILO).

—; Scholz, W.; van de Meerendonk, A.; Hagemejer, K.; Bertranou, F.; Plamondon, P. 2000. *Financing social protection* (Geneva, ILO).

Claramunt, C. O. 2004. «Assessing Pension System Reforms in Latin America» in *International Social Security Review*, Vol. 57, Issue 2, April 2004, Pages 25-46.

Cohen, N.; Cienski, J. 2014. «Poland pension reform reversal highlights public disillusion», in *Financial Times*, February 5 2014.

Comisión Presidencial Pensiones Bravo. 2015. *Informe Final Comisión Asesora Presidencial sobre el Sistema de Pensiones* (Santiago de Chile).

Crabbe, C. A. (ed.). 2005. *A Quarter Century of Pension Reform in Latin America and the Caribbean: Lessons Learned and Next Steps* (Washington, DC, Inter-American Development Bank).

Crabtree, J.; Durand, F. 2017. *Peru: elite power and political capture* (London, Zed Books).

Datz, G.; Dancsi, K. 2013. «The politics of pension reform reversal: a comparative analysis of Hungary and Argentina», in *East European Politics,* Vol. 29, Issue 1, pp. 83-100. DOI:10.1080/21599165.2012.759940.

Díaz, L. D. 2018. *The Reversal of Pension Privatization in Venezuela*. Extension of Social Security (ESS) Paper No. 71. (Geneva, ILO).

Didier, T.; Schmukler, S. L. (eds.). 2014. *Emerging issues in financial development: Lessons from Latin America*. (Washington, DC, World Bank).

Diop, A. 2008. *Pension reforms in Central and Eastern Europe in a global perspective: Lessons learned*, paper presented at the Wissenschaftliches Kolloquium «Internationale Entwicklungen in der Rentenpolitik», Berlin, 2. April 2008.

Drahokoupil, J.; Domonkos, S. 2012. «Averting the funding-gap crisis: East European pension reforms since 2008», in *Global Social Policy* Vol. 12, Issue 3, pp. 283-299.

Durán-Valverde, F.; Pena, H. 2011. *Determinantes de las tasas de reemplazo de pensiones de capitalización individual: escenarios latinoamericanos comparados*. Serie seminarios y conferencias No. 64 (Santiago de Chile, UN ECLAC).

Égert, B. 2012. *The Impact of Changes in Second Pension Pillars on Public Finances in Central and Eastern Europe*, OECD Economics Department Working Papers, No. 942 (Paris, OECD Publishing). DOI: 10.1787/18151973.

European Commission. 2015. *The 2015 Ageing Report: Economic and budgetary projections for the 28 EU Member States (2013-2060)*. European economy 3/2015 (Luxembourg, Publications Office of the European Union).

Flores Konja, A.; Sanchez Cruz, J. 2016. « Pensions funds and its performance during the crisis 2007-2012», in *Revista de la Facultad de Ciencias Contables*, Vol. 24, No. 45, pp. 99-106.

Freudenberg, C.; Berki, T.; Reiff, A. 2016. *A Long-Term Evaluation of Recent Hungarian Pension Reforms*. MNB Working Papers 2 (Budapest, Magyar Nemzeti Bank).

Fultz, E. 2004. «Pension reform in the EU accession countries: Challenges, achievements and pitfalls», in *International Social Security Review,* Vol. 57, Issue 2, pp. 3–24.

—. 2011. *Pension crediting for caregivers: Policies in Finland, France, Germany, Sweden, the United Kingdom, Canada and Japan* (Washington, DC, Institute for Women's Policy Research).

—; Hirose, K. 2018. *Second-pillar Pension Re-reforms in Bulgaria, Croatia, Estonia, Latvia, Macedonia, Romania, and Slovakia*. Extension of Social Security (ESS) Paper No. 72. (Geneva, ILO).

Gillion, C.; Turner, J.; Bailey, C.; Latulippe, D. (Eds.), 2000. *Social Security Pensions: Development and Reform* (Geneva, ILO).

Grishchenko N. 2015. *Pensions after pension reforms: A comparative analysis of Belarus, Kazakhstan, and Russia*, paper presented at the 1st International Conference on Applied Economics and Business, ICAEB 2015.

Gubbels J.; Snelbecker D.; Zezulin L. 2007. *The Kosovo Pension Reform: Achievements and Lessons,* Social Protection Discussion Paper No. 0707 (Washington, D.C., World Bank).

Hall, D. 2012. *Re-municipalising municipal services in Europe* (London, University of Greenwich).

Hansen, T. 2018. *Gender Issues and Redistributive Mechanisms in the Norwegian Pension System*. IEN technical seminar on gender mainstreaming in social security (Geneva, International Social Security Association).

Hernandez, D. G.; Stewart, F. 2008. *Comparison of Costs and Fees in Countries with Private Defined Contribution Pension Systems*. IOPS Working Paper No. 6 June 2008 (Paris, International Organisation of Pension Supervisors).

Hinz, R. P.; Zviniene, A.; Vilamovska, A. 2005. *The New Pensions in Kazakhstan: Challenges in Making the Transition*. Social Protection Discussion Paper No. 0537. (Washington, DC, World Bank).

Hirose, K. (ed.). 2011. *Pension Reform in Central and Eastern Europe in times of crisis, austerity and beyond*. (Budapest, ILO).

Hohnerlein, E. M. 2012. «Pension Re-reform in Argentina», in *Zeitschrift für ausländisches und internationales Arbeits- und Sozialrecht (ZIAS)*, No. 3/2012, pp. 213-234.

Holzmann, R. 2017. *The ABCs of Nonfinancial Defined Contribution (NDC) Schemes*. IZA Policy Paper No. 130 (Bonn, IZA Institute of Labour Economics).

—; Palmer, E. (eds.). 2006. *Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes.* Proceedings of the NDC Conference in Sandhamn, Sweden, September 28–30, 2003 (Washington, DC, World Bank).

Hu, Y.; Stewart, F. 2009. *Licensing Regulation and the Supervisory Structure of Private Pensions: International Experience and Implications for China*- OECD Working Papers on Insurance and Private Pensions, No. 33 (Paris, OECD Publishing).

Hujo, K. (ed). 2014. *Reforming Pensions in Developing and Transition Countries*. (Basingstoke, Geneva, Palgrave, UNRISD).

—; Rulli, M. 2014. *The Political Economy of Pension Re-Reform in Chile and Argentina: Toward More Inclusive Protection*. Research Paper 2014-1. (Geneva, UNRISD).

Iglesias, A.; Acuña, R. 1991. *Chile: Experiencia con un Régimen de capitalización 1981-1991.* Colección Estudios Políticos y Sociales (Santiago, ECLAC/UNDP).

ILO. 2010. *World Social Security Report 2010/11. Providing coverage in times of crisis and beyond* (Geneva).

—. 2014. *World Social Protection Report 2014/15: Building economic recovery, inclusive development and social justice* (Geneva).

—. 2017. *World Social Protection Report 2017–19: Universal social protection to achieve the Sustainable Development Goals* (Geneva,).

—. 2018a. The ILO Multi-Pillar pension model: Building equitable and sustainable pension systems. Social Protection for All Issue Brief (Geneva).

—. 2018b. *Social Protection for Older Persons: Policy trends and statistics 2017-19*. Social Protection Policy Papers 17 (Geneva).

IMF. 1998. *Republic of Kazakhstan: Recent Economic Developments.* IMF Staff Country Report No. 98/84. (Washington, DC).

—. World Economic Outlook database (Washington, DC).

Impavido, G.; Lasagabaster, E.; García-Huitrón, M. 2010. *New policies for mandatory defined contribution pensions: Industrial organization models and investment products* (Washington, DC, World Bank).

Ionescu, L.; Robles, E. A. 2014. *Update of IOPS Work on Fees and Charges,* IOPS Working Papers on Effective Pensions Supervision, No.20 (Paris, IOPS).

ISSA (International Social Security Organization). 2013a. *Good Governance Guidelines for Social Security Institutions* (Geneva).

—. 2013b. *Guideline on Contribution Collection and Compliance* (Geneva);

—. 2013c. *Guideline on Investment of Social Security Funds* (Geneva).

Kangas, O. E. 2006. *Pensions and Pension Funds in the Making of a Nation-State and a National Economy: the Case of Finland*. Social Policy and Development Programme Paper No. 25 (Geneva, UNRISD).

Kay, S. J. 2009. ‘Political risk and pension privatization: The case of Argentina (1994-2008)», in *International Social Security Review*, Vol. 62, Issue 3, pp. 1-21. DOI:10.1111/j.1468-246X.2009.01335.x.

Kishimoto, S.; Lobina, E.; Petitjean, O. (eds.). 2015. *Our public water future: The global experience with remunicipalisation.* (Amsterdam, London, Paris, Cape Town and Brussels: Transnational Institute (TNI), Public Services International Research Unit (PSIRU), Multinationals Observatory, Municipal Services Project (MSP) and the European Federation of Public Service Unions (EPSU)).

Kleinjans, J. K. 2003. «The Colombian pension system after the reform of 1994: An evaluation», in *International Social Security Review*, Vol. 56, Issue. 1, pp- 31-52.

Laeven, L. 2014. *The Development of Local Capital Markets: Rationale and Challenges*. IMF Working Papers 14/234 (Washington DC, IMF).

Liu, T.; Sun, L. 2016. «Pension Reform in China» in *Journal of Aging & Social Policy*, Vol. 28, Issue 1, pp. 15-28. DOI: 10.1080/08959420.2016.1111725.

Maltseva, E.; Janenova, S. 2018. *Reversing Pension Privatization in Kazakhstan,* Extension of Social Security (ESS) Paper No. 67 (Geneva, ILO).

Mesa-Lago, C. 2004. *An appraisal of a quarter-century of structural pension reforms in Latin America*. CEPAL Review 84, December 2004 (Santiago de Chile, UN ECLAC).

—. 2008. *Reassembling Social Security: A Survey of Pension and Health Care Reforms in Latin America* (Oxford, Oxford University Press).

—. 2012. *Reassembling Social Security: A Survey of Pensions and Health Care Reforms in Latin America.* Baltimore: John Hopkins University Press.

—. 2014. *Reversing pension privatization: The experience of Argentina, Bolivia, Chile and Hungary*. Extension of Social Security (ESS) Paper, Working Paper No. 44. (Geneva, ILO).

—. 2018. *Reversing Pension Privatization in Bolivia*. Extension of Social Security (ESS) Paper No. 65 (Geneva, ILO).

—; Bertranou, F. 2016. «Pension reforms in Chile and social security principles, 1981-2015», in *International Social Security Review*, Vol 69. Issue 1, pp. 25-45.

—; Hohnerlein, E. M. 2002. «Testing the Assumptions Concerning the Effects of the German Pension Reform Based on Latin American and Eastern European Outcomes,» *European Journal of Social Security*, Vol. 4, No. 4, pp. 285-330.

—; Rivera, M. E. 2017. *Propuestas de re-reforma de pensiones en El Salvador: Evaluación comparativa y recomendaciones.* Documentos de Trabajo 2017-1 (San Salvador, FundaUngo).

Müller, K. 2008. *Pension privatization and economic development in Central and Eastern Europe: A Political Economy Perspective* (Geneva, UNRISD).

Navarro Medal, K. 2018. *Repeal of the Privatization of the Pension System in Nicaragua*, Extension of Social Security (ESS) Paper No. 70 (Geneva, ILO).

Obermann, T.P. 2005. *The effect of the privatization of pension plans on financial and regulatory systems in Latin America* (Atlanta, GA, Federal Reserve Bank of Atlanta).

OECD (Organisation for Economic Co-operation and Development). 2014. *Society at a Glance: Asia/Pacific 2014*. (Paris).

—. 2017a. «How does Poland compare?» in *Pension at a Glance 2017* (Paris).

—. 2017b. *Pensions at a Glance 2017: OECD and G20 Indicators* (Paris).

—. 2018. *OECD Survey of Investment Regulation of Pension Funds* (Paris).

—. Global Pension Statistics Database (Paris).

Orenstein, M. A. 2008. *Privatizing Pensions: The Transnational Campaign for Social Security Reform* (Princeton, NJ, Princeton University Press).

Orszag, P. R.; Stiglitz, J. E. 1999. «Rethinking Pension Reform: Ten Myths about Social Security Systems», Presented at the conference on «New Ideas About Old Age Security» The World Bank Washington, D.C. September 14-15, 1999. Later published In R. Holzman and J. Stiglitz (eds.). 2001. *New Ideas about Old Age Security* (Washigton DC, The World Bank).

Ortiz, I. 2018. «The Welfare State in the 21st Century: Latest Trends in Social Protection» in J. A. Ocampo and J. Stiglitz (eds.), *The Welfare State Revisited* (New York, Columbia University Press).

Peña-Jarrín, F. 2018. The Reversal of Pension Privatization in Ecuador. Extension of Social Security (ESS) Paper No. 69 (Geneva, ILO).

Polakowski, M.; Hagemejer, K. 2018. *Reversing pension privatization: The case of Polish pension reform and re-reforms*. Extension of Social Security (ESS) Paper No. 68 (Geneva, ILO).

Queisser, M. 1998a. Th*e Second-Generation Pension Reforms in Latin America*. Working Paper AWP 5.4 (Paris, OECD).

—. 1998b. «Regulation and supervision of pension funds: principles and practices» in *International Social Security Review*, Vol. *51, Issue* 2, pp. 39-55.

Riesco, M. 2004. *Private Pensions in Chile: A Quarter Century On* (Santiago de Chile, CENDA).

Rofman, R. 2000. *The pension system in Argentina: six years after the reform.* World Bank Social Protection Discussion Paper Series No. 15 (Washington, DC, World Bank).

Simonovits, A. 1999. *The New Hungarian Pension System and its Problems*. KTK/IE Discussion Papers 1999/1 (Budapest, Institute of Economics Hungarian Academy of Sciences).

—. 2012. «Pension Re-reform in Hungary», in *Zeitschrift für ausländisches und internationales Arbeits- und Sozialrecht (ZIAS)*, No. 3/2012, pp. 213-234.

Soto, C. 2008. «Movimiento laboral y su efecto en la tasa de reemplazo», in R. Ham Chande, B. Ramírez López y A. Valencia Armas (eds). *Evaluación y tendencias de los sistemas de pensiones en México* (Mexico, Tijuana Colegio de la Frontera Norte/Miguel Ángel Porrúa).

Szikra, D. 2018. Reversing privatization and re-nationalizing pensions in Hungary. Extension of Social Security (ESS) Paper No. 66 (Geneva, ILO).

Titelman, D.; Vera, C.; Pérez Caldentey, E. 2009. *Pension System Reform in Latin America and Potential Implications for the Chinese Case.* The IDEAs Working Paper Series, Paper No. 06/2009.

Turner, J.; Hughes, G.; Maher, M. 2016. «An international comparison of regulatory capture and regulatory outcomes: The case of pension regulators in Ireland and the United States», in *Journal of Financial Regulation and Compliance*, Vol. 24 Issue. 4, pp.383-401.

UN Women, 2015. *Protecting Women's Income Security in Old Age: Towards Gender-Responsive Pension Systems*. (New York).

Undurraga, T. 2011. *Rearticulación de grupos económicos y renovación ideológica del empresariado en Chile 1980-2010: Antecedentes, preguntas e hipótesis para un estudio de redes*. Working Papers ICSO-UDP No. 2011 (Santiago de Chile, Instituto de Investigación en Ciencias Sociales).

Urteaga-Crovetto, P. 2014. «On Environment: The 'Broker State,' Peruvian Hydrocarbons Policy, and the Camisea Gas Project», in R. Stryker and R. González (eds.). 2014. *Up, down, and sideways: Anthropologists trace the pathways of power*. (New York, Berghahn Books).

Valencia, E. 2008. «Conditional Cash Transfers as Social Policy in Latin America: an Assessment of their Contributions and Limitations», in *Annual Review of Sociology*, Vol. 34, pp. 475-499.

Velculescu, D. 2010. S*ome Uncomfortable Arithmetic Regarding Europe's Public Finances.* IMF Working Paper, WP/10/177. (Washington, D.C., IMF).

Wilson Sokhey, S. 2017. *The Political Economy of Pension Policy Reversal in Post-Communist Countries*. (Cambridge, Cambridge University Press).

Wodsak, V.; Koch, M. 2010. «From three to five: the World Bank's pension reform policy norm», in S. Park and A. Vetterlein (eds): *Owning Development- Creating Policy Norms in the IMF and the World Bank* (Cambridge, Cambridge University Press, pp. 48-70).

Woodall, J.; Hagemejer, K. 2009. *How can we maintain pension levels in pay-as-you-go schemes? - Maintaining Pension Levels in PAYG Schemes in Ageing Societies: Rules versus Discretion*. Paper presented at the International Social Security Association Technical Seminar on pensions, Paris, 1-2 October 2009.

World Bank. 1994. *Averting the old age crisis: policies to protect the old and promote growth* (Washington, DC).

—. 2014. World Bank HDNSP pensions database (Washington, DC).

Zhandildin, M. 2015. «Pension System Reform in Emerging Countries: The Case of Kazakhstan,» in *Global Journal of Emerging Market Economies*, Vol. 7, No. 1, pp. 65-88.