



The collection of pension contributions: a comparative review of three Central European countries

Tine Stanovnik, Predrag Bejaković & Agnieszka Chłoń-Domińczak

To cite this article: Tine Stanovnik, Predrag Bejaković & Agnieszka Chłoń-Domińczak (2015) The collection of pension contributions: a comparative review of three Central European countries, *Economic Research-Ekonomiska Istraživanja*, 28:1, 1149-1161, DOI: [10.1080/1331677X.2015.1100836](https://doi.org/10.1080/1331677X.2015.1100836)

To link to this article: <http://dx.doi.org/10.1080/1331677X.2015.1100836>



© 2015 The Author(s). Published by Taylor & Francis



Published online: 30 Nov 2015.



Submit your article to this journal [↗](#)



Article views: 301



View related articles [↗](#)



View Crossmark data [↗](#)

The collection of pension contributions: a comparative review of three Central European countries

Tine Stanovnik^{a*}, Predrag Bejaković^b and Agnieszka Chłoń-Domińczak^c

^aFaculty of Economics and Institute for Economic Research, Kardeljeva ploscad 17, 1000

Ljubljana, Slovenia; ^bInstitute of Public Finance, Smičiklasova 21, 10000 Zagreb, Croatia;

^cInstitute for Statistics and Demography, Warsaw School of Economics and Educational Research Institute, Warsaw, Poland

(Received 17 December 2012; accepted 17 September 2015)

This article presents a comparative review of systems of collection of pension contributions in three Central European countries. We discuss some basic requirements for successful contribution collection and show how these three countries fare in that regard. The changing role of the social security institutions is described. The broad trend toward integrated collection systems, with an enhanced role of the tax authority is clearly discerned, although with some country-specific features. Contribution compliance is analysed for the largest group of insured persons – employees, using the indicator: *covered wage bill (as percentage of GDP)*. The value of this indicator has mostly been decreasing in the 2000s. This is not a satisfactory development and could contribute to the deteriorating financial sustainability of public pension systems.

Keywords: contribution collection systems; contribution compliance; covered wage bill; pension rights; Central Europe; pension system

1. Introduction

A number of Central and East European countries reformed their pension systems during the 1990s and early 2000s. A quite common characteristic of these reforms was that, in the preparatory phase, insufficient attention was given to the design of certain infrastructure elements and to administrative and institutional preparations that are vital for the successful completion of such large social projects. Among these infrastructure elements, of particular importance is the process of collecting pension contributions. Although this has never been a high priority project during pension reforms, it has drawn the attention of international organisations. Thus, the International Social Security Association (ISSA) organised an international conference on compliance and contribution collection in Montevideo in 2009. The International Labour Organisation (ILO) has also been quite active, organising conferences and funding joint research projects on contribution collection issues. Here, particular attention was given to countries of Central and Eastern Europe. As these countries experienced large political, economic and social changes in their transitions to functioning market economies, they were also forced to cope with the consequences that these changes had on their contribution

*Corresponding author. Email: stanovnikt@ier.si

collection systems. Further, the modernisation drive undertaken by these countries could not bypass the modernisation of institutions involved in contributions and tax collection.

Our paper describes developments in the field of pension contribution collection in three Central European Countries: Croatia, Poland and Slovenia. These three countries have not only pursued quite different paths with regard to pension reform but they have also experienced very different developments of their contribution collection systems. With regard to pension reforms, Poland was a frontrunner, introducing a notional defined contribution system (NDC) as the public pension pillar and a mandatory second pillar in 1999.¹ Croatia legislated sweeping changes in the first pillar in 1998, and a mandatory second pillar in 1999. Slovenia passed pension reform legislation in 1999, introducing parametric changes in the first pillar and a voluntary second pillar.² To a varying degree, these pension reforms also resulted in changes in the pension contribution collection system. The additional significance of our article to the existing research is that it analyses the complex issue of contribution collection systems, while its scientific contribution in the field is in comparing three post-socialistic states and their development in social security.

The structure of this paper is as follows. Section 2 will present a discussion of issues related to contribution collection, in particular, what characteristics are required for successful contribution collection. Section 3 will provide a brief description of the main functions involved in the contribution collection process: we start with the procedures for registration of insured persons and procedures for the payment of contributions, together with the control procedure. Here, we will also describe the flow of information from the employer to the relevant social insurance institution, to the tax authority and to the employee. The treatment of self-employed persons is somewhat different and is beyond the scope of this review. Apart from the control function, we will also look at the audit, enforcement and record-keeping function, all in a comparative perspective. Section 4 will deal with contribution compliance: the question of arrears and contribution debt, the analysis of the overall quality of contribution compliance and – last but not least – what happens to workers' rights if pension contributions have not been paid. Section 5 provides some concluding remarks.

2. Some common elements of contribution collection processes

Enoff and McKinnon (2011) identify several key elements relevant for successful contribution collection: (i) the organisational location of the collection function; (ii) the age (or maturity) of the social insurance programme; (iii) the degree of coverage and size of the labour force; (iv) the degree of automation; (v) the extent of coordination with outside organisations, (vi) the application of a process of constant evaluation and adjustment of collection policies and practices; and (vii) social security 'culture' in a country. With regard to the first element – organisational location of the collection function – it concerns who is responsible for the collection of pension contributions: the social insurance institution or the tax authority. Here, a fairly common view among experts (Bailey and Turner 1998, McGillivray 2001) is that combining the collection of social security contributions and taxes can improve compliance and result in a more efficient use of resources. A similar position has also been expressed by Ross (2004), who states that '[i]n principle, integration of collection activities will work best when both the social insurance agency and the tax administration are both modernised so that the task of integration can be narrowly focused on the transfer of collection functions.' Barrand, Ross, and Harrison (2004) document the overall discernible trend of moving from a

parallel collection system (with the social insurance institution responsible for contribution collection and the tax authority responsible for tax collection) to an integrated collection system, with the tax authority assuming responsibility for the collection of contributions and taxes.

In Central and East European countries, the movement to integrated collection systems did not quite follow Ross's prescription, as the integration occurred mainly through the modernisation of the tax administration and not through a synchronised modernisation of the tax administration and social security administration. Of course, not all countries in the region moved to integrated collection systems. Thus, in Poland, the social insurance institution (ZUS) retained the contribution collection function. In Croatia, the tax administration assumed responsibility for contribution collection starting from July 2001. In Slovenia, contribution collection was traditionally in the purview of the tax administration or its proxy: the newly formed unified tax administration assumed this responsibility starting from 1996, whereas the Central Payment Agency was responsible for contribution collection³ in the pre-transition (socialist) period and up to 1996. With regard to the second element – the age (or maturity) of the social insurance programme – all social insurance systems in Central and East European countries date from at least the early post-war period. However, during the 1990s social insurance systems in these countries underwent radical changes amid unfavourable economic circumstances. This – predictably – caused severe problems with contribution collection. As for the third element – the degree of coverage and the size of the labour force – it concerns not only how many workers are covered by social insurance, but also the quality of the coverage. A large informal economy, with a large proportion of the rural population, large proportion of self-employed and atypical employment are all elements that cause problems in the social insurance system – even in mature and developed ones. Thus, Sailer (2011) demonstrates the low coverage of the self-employed in the mandatory pension system of Germany, with almost three quarters of all self-employed being without mandatory pension insurance. A very high non-compliance rate among the self-employed in the US is documented by Manchester (1999). Similarly, the coverage of the self-employed and farmers in Slovenia, Croatia and Poland is also problematic, as these two groups of insured persons are characterised by a low quality of coverage. With regard to the fourth element – the degree of automation – much progress has been made in the use of IT solutions in the contribution collection process, resulting in improvements in the efficiency of contribution collection. As a matter-of-fact, most papers presented at the Tokyo conference on Priority challenges in pension administration (Takayama, 2011) dealt with the use of IT and the assessment on its impact on the organisation of social insurance institutions and improvement of customer services. In Section 3 we shall document the important changes with regard to the management of data and the introduction of IT in the three Central and East European countries.

With regard to the other elements required for a successful contribution collection system: coordination with outside organisations, constant evaluation and adjustment of collection policies and practices, the social security 'culture' in the country, we note that successful coordination – particularly between the tax authority and social insurance institutions – requires harmonisation on a number of definitions (Barrand et al., 2004). In particular, common definitions of income for tax and social contribution assessment purposes is highly desirable, as well as common definitions of employees and the self-employed. Social security 'culture' in a given country might well include trust in social security institutions. In a number of Central and East European countries, the low level of trust in these institutions had undesirable implications for their social protection

systems. Most of these ex-socialist countries introduced paradigmatic pension reforms, with a mandatory, fully-funded second pension pillar. Typically, enrolment in this pillar was mandatory for young workers, whereas older workers were required to stay in the 'old' system. All the other workers could voluntarily join this second pillar, thus channelling a part of their pension contribution to the second pillar pension funds; by joining the second pillar they were also forced to relinquish certain pension rights from the first pension pillar. Many of these workers who could choose whether to stay in the 'old' system or whether to join the new ('mixed') system, with the fully-funded second pillar, actually decided to join the new system. Their enrolment by far exceeded expectations. It has been shown for Hungary (Augusztinovics et al., 2002) that some 20% of the total membership of second pillar pension funds had no rational financial reasons for joining the mixed system; a similar percentage of insured persons in Poland stated that they joined the second pension pillar funds 'due to troubles with ZUS' (Chłóń-Domińczak, 2002, p. 161). Needless to say, many of these 'voluntary' entrants came to regret their decision and governments in a number of these Central and East European countries were forced to offer possibilities for moving back to the 'old' system (single public pension pillar) to these insured persons.

3. The contribution collection process in Croatia, Poland and Slovenia

There are a number of tasks and phases in the contribution collection process. The first is, obviously, proper registration of employers and employees within the social insurance institutions. These procedures differ across the three countries, mostly with regard to whether registration is unified, so that a single registration within a social insurance institution suffices or separate registration is required for each social insurance institution. It is the employer's (contribution payer's) duty to register with the appropriate social insurance institution. In Poland it is the Social Security Institution (ZUS) and in Slovenia it is the Institute for Health Insurance (ZZZS), whereas in Croatia separate registrations for each social insurance institute are still required. The employer must submit a request for registration of an employee in a similar fashion. As regards the contribution collection function, in Poland and Croatia the push for rapid modernisation of the collection system was imposed by pension reforms, with the introduction of a mandatory second pillar. This requires that individualised monthly payments and other information for second pillar contributions have to be processed by the relevant institution (tax administration or social insurance institution), before they are transferred to the appropriate pension fund.⁴ Extending the requirement for individualised payment records of contributions to the public pension scheme (first pillar) is but a small additional step. Clearly, countries that did not opt for a mandatory fully funded private pillar (second pillar) – such as Slovenia – were under less pressure to modernise the collection procedure for the public pension scheme (Vežjak and Stanovnik, 2004). However, even Slovenia eventually did catch up, switching from aggregate monthly reporting to individualised monthly reporting in 2008. Table 1 provides information on the monthly reporting requirements in the three countries, showing that only Croatia has also retained an aggregate monthly reporting form (the ID and IDD forms), which the employer sends to the tax authority.⁵

The procedure for monthly reporting of individualised mandatory second pillar contributions is virtually the same as reporting for the first pillar contributions: in Poland this information is sent to the social insurance institution (ZUS), whereas in Croatia aggregate data are sent to the tax administration and individualised data are sent to a special agency, REGOS, whose task is to monitor and control second pillar

Table 1. Monthly reporting requirements for the employer to the tax administration (T) or social insurance institution (S) on public pension contributions paid, 2010.

Croatia	Aggregate (T) and individualised (R)
Poland	Individualised (S)
Slovenia	Individualised (T)

Notes: For Croatia, individualised (R) refers to the individualised form that the employer sends to REGOS, the agency in charge of recording contributions and contribution bases for the public pension scheme (first pillar) and mandatory private pension schemes (second pillar).

Source: The authors according to national regulations and National Pension Insurance Institutions.

contributions. In Slovenia, persons working in hazardous occupations are enrolled in a mandatory pension fund, managed by *Kapitalska družba* (KAD), which is a state-owned pension management company; monthly (individualised) reports are sent by employers to this pension management company. In Poland, the social insurance institution (ZUS) has the main role in the contribution collection process. ZUS is not only responsible for the control of data, i.e. checking whether the information on contributions paid corresponds to the money received; it also performs inspections, that is, on-site and in-depth inspection of a firm's accounts and whether contributions have been paid according to the rules and regulations. ZUS has the power to allow deferred payment of contributions due and is also in charge of enforcement of contribution payment. As stated by Chłoń-Domińczak (2004, p. 188), ZUS has – in this respect – the same capacity and authority as the tax administration. However, ZUS cannot by itself write off any part of old-age pension contributions due (Chłoń-Domińczak (2004, p. 189).

With regard to the 'power and competencies' criterion, the Slovene Pension and Disability Insurance Institute (ZPIZ) is in an intermediate position, having less authority than ZUS, but more than the Croatian Institute for Pension Insurance (HZMO). The tax administration performs the control function, checking whether the information received on the monthly forms corresponds to the monies received on its account within the single treasury account. Following this, the tax administration transfers these payments to the ZPIZ account within the single treasury account. The inspection of employers' records is performed not only by the tax administration, but also by ZPIZ, which has its own staff of inspectors. However, the responsibilities of ZPIZ stop here, as ZPIZ has no power of enforcement; it can only proceed to notify the tax authority of irregularities uncovered during the inspection. After receiving such a report from ZPIZ, a separate inspection of the employers' records is performed by the inspectors of the tax administration; if necessary, the tax authority initiates enforcement procedures. The power to defer payment of contributions, as well as the power to write off debt, is exclusively in the domain of the tax administration.

Of the three social insurance institutes, the Croatian Institute for Pension Insurance (HZMO) has the weakest competencies. The control function is performed by the tax authority, which also performs on-site inspections and has the exclusive right to grant deferral of contribution payment, as well as the power of enforcement and write-off of contribution debt. As a matter of fact, HZMO does not even disburse pensions, as contributions are not transferred to the HZMO account, but rather remain in the state treasury account for direct disbursement to pensioners. The pension reform in Croatia also introduced a new institution (agency) – REGOS. Originally, it was envisaged that this agency would be responsible for the collecting, enforcing, registering and transferring of mandatory second pillar contributions, and for the registration of affiliation, switching and account management (Anušić, O'Keefe, & Madžarević-Šujster, 2003, p. 38).

However, this tall order has been somewhat downsized during the following years, as the tax authority was strongly opposed to such an arrangement, taking this as an infringement on its powers and competencies. The tax authority won the ‘tug-of-war’, so that the enforcement for first pillar and second pillar contributions has not been transferred to REGOS. Particularly important changes have occurred in the transfer of data: this is now done mostly in electronic format, as seen from Table 2, which compares the reporting modes in the early 2000s and early 2010s.

In Croatia, monthly reporting in electronic format is mandatory for medium and large companies and starting from 1 January 2012 it will be mandatory for all employers employing more than 100 workers.⁶ In Poland, in the early 2000s, the electronic format was mandatory only for employers employing more than 20 persons, using predesigned software provided by ZUS. By the late 2000s, the mandatory requirement was expanded, so that it now includes all firms employing more than five persons. Slovenia introduced mandatory electronic monthly reporting for all employers starting in July 2008 and it was fully operational in January 2009.⁷ Prior to 2008, monthly reporting was either in paper format or was provided on other media (flash discs, etc.). The introduction of new IT and relevant computer software was not without problems. The quite serious difficulties and ‘crisis’ situation at ZUS, due to the delay in the introduction of the IT system, as well as problems experienced in matching identification numbers of insured persons is well documented.⁸ This was particularly severe in allocating contributions to the individual accounts in the second pillar. The height of the crisis was in 1999, and the situation was completely normalised only by the end of 2002. In spite of the fact that ZUS received payment of second pillar contributions from employers, a large proportion of the contributions could not be allocated to the second pillar pension funds. This unallocated amount was recorded as a debt of ZUS toward the pension funds. In 2003, a special law was passed in the *Sejm* to repay this debt with government bonds. The unallocated contributions to the second pillar pension funds have been gradually cleared, so that reconciliation is now complete.

As already mentioned, Slovenia introduced the electronic format for reporting of first pillar contributions in July 2008. The testing phase lasted until the end of the year, so that from January 2009 monthly reporting of contributions in electronic format is mandatory. No serious difficulties have been reported – possibly also because the individual identification (tax) numbers are well established. What information do the tax authority and social insurance institution require, on a monthly basis, from the employer with respect to personal income tax (PIT) and social contributions paid on behalf of their employees? In Slovenia, the employer must provide the monthly declaration (REK) containing individual data on social contributions and withheld PIT; this is sent

Table 2. Social contributions: changes in the monthly reporting mode, early 2000s and early 2010s.

	Early 2000s	Early 2010s
Croatia	No electronic format	Mandatory electronic format for medium and large companies
Poland	Electronic format (paper format available for all employers)	Mandatory electronic format (with exception of employers with fewer than five employees)
Slovenia	No electronic format	Mandatory electronic format

Source: The authors according to national regulations and National Pension Insurance Institutions.

to the tax authority. The information provided in the REK declaration also includes the contribution base and taxable income for PIT. In Poland, the employer must provide ZUS with a monthly declaration containing data on social contributions paid. This declaration also includes information on the contribution base. In Croatia, the employer must send two forms: an ID declaration (containing only aggregate data on social contributions paid and PIT withheld) to the tax authority, and the individualised R-Sm declaration to REGOS, which contains only data on contribution bases and pension contributions for the first and second pillar.

What information do the tax authority and social insurance institution require, on an annual basis, from the employer with respect to PIT and social contributions paid on behalf of their employees? In Slovenia, the tax authority ceased requiring an annual individualised declaration on taxable income, contribution base, social contributions and PIT withheld, for the tax year 2010.⁹ However, the employer does send an annual (M-4) declaration to ZPIZ, containing individualised data on the contribution base (only for pension and disability insurance), pension contributions paid and pension contributions due. The data on the M-4 form are not fully compatible with the monthly REK form, so that the M-4 data cannot be obtained by simply summing up the monthly REK forms. In Poland, the employer provides the tax authority only with annual data on PIT withheld, for each employee. There is no additional requirement, as ZUS compiles the necessary annual data on social contributions paid from the monthly forms it received from the employer. In Croatia, the employer still sends to the tax authority the annual declaration IP, containing individualised data on taxable income, the contribution base, pension contributions and withheld PIT.

The 'who receives what and when' question is relevant, as it reveals the roles and positions of national social insurance institutions. Thus, only ZUS receives the monthly information necessary for the control of contribution payment. As the Slovene Pension and Disability Insurance Institute (ZPIZ) does not perform the control function (this is in the domain of the tax authority), it does not require monthly data; the same applies to the Croatian Pension Insurance Institution (HZMO). However, there are differences in the competencies between the Slovene and Croatian social insurance institutions: ZPIZ has an account within the state treasury, from which pension benefits are being disbursed, whereas HZMO does not have such an account. In Croatia, pensions are directly disbursed to pensioners from the Ministry of Finance account within the treasury.¹⁰ Another difference is that ZPIZ receives its annual declaration M-4 directly from the employer, whereas HZMO, the Croatian social insurance pension institution, receives the annual data from the REGOS agency.¹¹ The allocation of relevant functions in the pension contribution collection process is depicted in Table 3.

The role of ZUS is exceptional, and it defies the usual allocation of functions, according to which the only core function of the pension insurance institution is record-keeping of information on employees, i.e. information that will be relevant for the calculation of pensions upon retirement. That the pension insurance institution should be responsible for the collection of relevant employee information is quite obvious, as the natural competency of the tax authority is not the long-term storage of data relevant for the granting of social insurance benefits. As for Slovenia and Croatia, the relinquishing of certain functions by the social insurance institutions was relatively recent. Thus, up to mid-2001, Croatia had separate systems for collection of social insurance contributions and PIT (Bejaković, 2004, p. 69), with HZMO responsible for the collection of pension contributions, control and on-site inspection of contribution payments, as well as deferral and write-off of contribution debt. From 2003 onward, all these functions

Table 3. Allocation of relevant functions in the pension contribution process in Croatia, Poland and Slovenia, as of 2011.

Function	Croatia	Poland	Slovenia
Control of contribution payments	Tax authority	ZUS	Tax authority
On-site inspection	Tax authority	ZUS	ZPIZ and Tax authority
Enforcement	Tax authority	ZUS and Tax authority	Tax authority
Granting deferrals and write-off of contribution debt	Tax authority	ZUS to the extent limited by the law	Tax authority
Record-keeping of relevant employee information	HZMO	ZUS	ZPIZ

Source: The authors according to national regulations and National Pension Insurance Institutions.

were allocated to the tax administration. In Slovenia, ZPIZ had the authority to grant deferrals and write-off of contribution debt;¹² changes in the Pension and Disability Insurance Act, enacted in 2005, ceded this function to the tax authority (starting from 2006). Further changes have been introduced and were effective from January 2011, completely abolishing the right to grant deferrals and payment of contribution debt in monthly instalments.

For each of the five functions depicted in Table 3, there are detailed procedures and regulations stipulating how national tax authorities and social insurance institutions shall properly perform them. Although procedures differ between countries, there are certain communalities to be observed. The control of contribution payment is mostly concerned with (a) checking whether the required monthly data are – at all – provided by the employer and (b) checking their internal consistency. Thus, with regard to the control function, in Croatia the employer's bank is still required by law to inform the tax authority on paid wages no later than eight days after wages were paid. As stated by Bejaković (2004), this requirement is not being enforced. In addition, if the tax authority does not receive the required ID or IDD monthly form from the employer, it notifies the employer. If the employer does not respond, the tax authority sends a written request. The procedure in Slovenia is similar, in that the tax authority relies strongly on the monthly REK forms; failure on the part of the employer to respond and provide this form results in a repeated request and eventually to on-site tax inspection. This means that the tax base is assessed, with the labour inspection notified in order to establish whether there is a breach of the labour code.

In Poland, all information sent to the social security institution (ZUS) is verified. This includes: correctness of ID numbers, correctness of individual information, correctness of individual data with contributions transferred. In the case of inconsistencies, requests for completion or correction of information are issued. In the case of large discrepancies, on-site inspections are performed. Of course, only on-site inspection can reveal more subtle omissions and underreporting of incomes and contributions paid. The function of enforcing social contributions is the 'natural' purview of the tax authority, as employers who do not pay social contributions typically also do not withhold personal income taxes on behalf of the employees. However, we have seen that Poland has a different arrangement, whereby ZUS is in charge of the enforcement of contribution collection. The importance of deferrals and write-offs of contribution debt has somewhat decreased since the early years of transition to market economies. In this early period,

with big state enterprises forced into restructuring, special laws were enacted in ex-socialist countries (including Poland, Slovenia and Croatia) granting the deferral of payment of contributions for these enterprises. At present, the granting of deferrals and write-offs of contribution debt varies considerably among countries. In Croatia, there are no specific rules for granting deferrals of contribution payment. However, as stated by Šnajder (2009), the tax authority has, in recent years, very rarely granted deferrals and write-offs of pension contribution debt. Unlike Croatia, Poland has detailed procedures for the granting of deferrals (and instalment settlement) as these can be subject to regulations on public aid. In any case, deferrals of contribution payment can be granted only to those employers who do not have any contribution debt so far. Poland still provides the possibility for a 'systemic' write-off, this is applicable to public health-care institutions that go through a restructuring process, and ZUS can write-off some of the contribution debt of these institutions. As already mentioned, Slovenia has abolished the possibility for granting deferrals, and write-offs are in the purview of the tax authority.

4. Contribution compliance and social insurance rights

How well does the tax authority or social insurance institution perform its function of contribution collection? In other words, what can we say about contribution compliance? Contribution compliance cannot be viewed in isolation, without taking into account the overall economic development of a country and the size of its formal sector. There are various indicators for measuring the quality of contribution compliance, and we shall not review them here.¹³ Probably the simplest indicator to use would be the level of arrears (as a percentage of all contributions collected). Arrears measure the amount of contributions due, but not remitted to the tax authority or social insurance institution. It says nothing about lost contribution revenue due to unreported or underreported wages and other income subject to contribution payment. A broad indication of unreported and underreported wages and thus of evaded social contributions could be obtained through information from on-site inspection, but this information is not readily available. We have therefore opted for the indicator covered wage bill, expressed as a percentage of GDP. This indicator shows the hypothetical wage bill of the economy that would have, given the statutory social contribution rate, produced the actual (observed) contribution revenues collected. Of course, this indicator is not perfect, as it measures compliance at the macro level and includes only the largest group of insured persons – employees. The self-employed and farmers and other labour active insured persons are not included. Nevertheless, a decreasing trend-value of this indicator does signify a worrisome trend: the quality of contribution compliance could be deteriorating and/or the level of the shadow economy increasing.

Table 4 presents the values of the covered wage bill (as a percentage of GDP) for the three countries.¹⁴ The data presented suggest a trend-decreasing value of the covered wage bill for all three countries. In particular, a noticeable decrease was experienced in Croatia, where the value of the covered wage bill fell from 34.3% of GDP in 2000 to 29.6% of GDP in 2009.

Some further precision on contribution compliance can be obtained by relating the covered wage bill to the actual wage bill, i.e. showing how large a share of wages (and other labour income) evades contribution payment. Such a comparison is presented only for Slovenia, as National accounts statistics do not provide data on gross wages and salaries for Poland and Croatia.

Table 5 seems to imply that in Slovenia more than 20% of wages are not subject to social contributions. Actually, this does not mean that such a percentage of wages

Table 4. The covered wage bill as a percentage of GDP, 2000–2009.

	Croatia	Poland	Slovenia
2000	34.3	27.9	35.5
2001	34.3	28.5	34.5
2002	34.5	27.1	34.0
2003	31.9	25.9	34.1
2004	31.9	25.1	34.0
2005	31.5	25.5	34.1
2006	31.3	25.6	33.6
2007	31.6	25.8	32.2
2008	29.2	26.2	33.1
2009	29.6	26.0	35.0

Sources: GDP data obtained from National accounts statistics, data on contributions were obtained from year-books of the social insurance institutes.

evades contribution payments, as some wage-like disbursements are – by law – not subject to income tax and social contribution payments. This applies specifically to vacation allowances, which represent some 5% of the total annual wage bill, as well as some other disbursements, such as travel and meal allowances that are received regularly by employees. Similarly, some forms of contractual work are also – in effect – not subject to social contribution payments.

Does non-compliance and non-payment of contributions on behalf of the employee by the employer have consequences for the insured person – employee? It seems that the prevailing view (also legally codified) is that the employee should not bear the consequences of non-compliance by the employer,¹⁵ i.e. that his pension rights should not be affected. This is in stark contrast to the self-employed, for whom pension rights depend exclusively on the payment of pension contributions. However, it has to be admitted that social insurance institutions were never quite comfortable with this, perhaps viewing it as an open invitation for contribution evasion. Countries that tried to harden their position, recognising as insurance periods only those periods for which contributions were actually paid, were quickly forced to ‘backpedal’. For example, in Romania the pension law enacted in 2000 introduced a provision whereby only periods for which contributions were paid should count as insurance periods; this provision was quickly repealed.¹⁶ Therefore, the position taken by most pension social insurance institutions is that even if contributions are owed (but not necessarily paid) by the employer,

Table 5. The covered wage bill and actual wage bill as a percentage of GDP, 2000–2009, Slovenia.

	Covered wage bill	Actual wage bill	Ratio (1:2)
2000	35.5	46.0	0.77
2001	34.5	46.5	0.74
2002	34.0	44.3	0.77
2003	34.1	43.9	0.78
2004	34.0	43.9	0.77
2005	34.1	43.6	0.78
2006	33.6	43.3	0.78
2007	32.2	42.8	0.75
2008	33.1	43.7	0.76
2009	35.0	45.6	0.77

Source: For actual wage bill (Gross wages and salaries), Statistical yearbooks of the Republic of Slovenia.

this period is still counted as an insurance period. For example, the Slovene Pension and Disability Insurance Act stipulates in article 191 that only periods for which contributions have been paid are counted as insurance periods. Article 192 (1) states that, regardless of article 191, if contributions are accounted for, but not paid, this is counted as an insurance period. Article 192 (2) goes even further and states that the very fact that the employee is insured (i.e. registered by his employer into the social insurance registry) suffices for counting this period as an insurance period, and therefore this period contributes towards one's pension. It must be noted that such a generous treatment is valid only for first pillar contributions and does not extend to second pillar contributions. Croatia offers a less generous treatment. If there is no proof of wages actually paid and pension contributions paid, this 'insurance period' is counted only for purposes of acquiring sufficient years for pensioning. The pension amount is computed only on the basis of wages actually disbursed. If there is no proof of wages being paid, the accrual rate for pensions for that 'insured' year is 0% (Bejaković, 2004, p. 100). In Poland, for employees, owed and not paid contributions are taken into account during pension calculations (in the NDC part of the pension system). The self-employed do not get pension rights for unpaid contributions. Pension social insurance institutions are trying to raise the awareness of employees with regard to contribution compliance by their employers, although it is difficult to see why an employee would be motivated to check whether contributions (on his behalf) have been paid, if non-compliance does not have an effect on his pension rights.

5. Concluding remarks

The paradigmatic pension reforms that have taken place in many Central and Eastern European countries, i.e. partial privatisation of pension systems through the introduction of a private, mandatory fully-funded second pillar, has had a visible impact on administering institutions. Overall, the role of pension social insurance institutions has been reduced; of the three countries included in our analysis, this reduction was particularly pronounced in Croatia and – to a lesser extent – in Slovenia. However, defying the trend, the social insurance institution in Poland (ZUS) has even enhanced its position. The introduction of the mandatory fully funded private pension pillar also triggered important changes in the reporting requirements for the employer. In particular, monthly recording of individual contributions became mandatory. Although individualisation of monthly reporting is not an inherent requirement for first pillar contributions, except in the case where an NDC scheme is introduced as a first pillar public scheme, this 'individualisation' trend seems to have caught on. Croatia introduced monthly reporting of individual contributions for the first pillar at the same time as monthly reporting of second pillar contributions. Slovenia, who does not have a mandatory second pillar, jumped on the bandwagon and introduced electronic monthly reporting of individual contributions in 2008. Overall, the benefits of this development and the increase in data-reporting (albeit in electronic form) have yet to be seen. A rush toward modernisation by electronic monthly reporting of individual contributions in public pension systems does not necessarily and automatically translate into improved compliance. This task, which is vital for the long-term financial sustainability of social security systems, requires continuous improvements on the 'scoreboard' of key elements relevant for successful contribution collection. Among the most crucial elements is the careful and detailed planning and coordination between the social insurance institution and the tax administration, and one is reminded of the warning of Stanley Ross (2004) that 'tax collection

or contribution collection in modern societies requires a government-wide approach. It is necessary to have the cooperation of a number of government agencies to be effective.'

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes

1. The mandatory second pillar has been considerably downsized in 2011, with the contribution rate for this pillar decreasing from 7.3% to 2.3%, with the difference going to the first – public pension – pillar.
2. The second pillar is mandatory only for certain hazardous occupations. For workers in these occupations, employers pay additional contributions to a special pension fund within the second pillar.
3. In 1996, the Central Payment Agency was merged with the Administration for Public Revenues (RUJP) to form the Tax Administration (DURS).
4. Only in Hungary – albeit for a short time period – were contributions for the second pillar transferred directly from the employer to the appropriate pension fund. This practice ended already in 1999, so that second pillar contributions are collected by the tax administration, which then transfers these contributions to the designated pension funds.
5. This is described in greater detail in Bejaković (2004).
6. Monthly reporting is done using the R-Sm form.
7. Monthly reporting is done using the REK form.
8. See Chłoń-Domińczak (2004, pp. 163–171).
9. The annual form, which the employer sends to the tax authority, was abolished in 2010. This was a year after individualised reporting was fully introduced. This one year lag is similar to the situation in Poland, where ZUS required that employers provide annual individualised data for 1999. As reported by Chłoń-Domińczak (2004), this was 'due to problems in recording monthly declarations'.
10. HZMO provides the treasury with the necessary information for pension payments to be made (see Bejaković, 2004, p. 77).
11. REGOS compiles the annual data from the monthly R-Sm forms.
12. This was stipulated in the 1999 Pension and Disability Insurance Act (article 228).
13. Some of these indicators are described in Stanovnik and Fultz (2004, p.45).
14. These figures were computed using the latest GDP figures. Owing to upward revisions of GDP figures for Croatia and Slovenia, the values of the covered wage bill presented here are lower than those presented in Stanovnik and Fultz (2004).
15. Máté (2004, p. 148) states that '[...] the basic concept is that the employer's failure to pass on worker contributions must not disadvantage the employee [...] even if the deduction of the employees' contribution is, due to lack of evidence, only presumable on the basis of the existence of the insurance, the period of insurance is still counted'.
16. The provision was repealed in 2002 (see Toma, 2004, p. 233).

References

- Anušić, Z., O'Keefe, P., & Madžarević-Šujster, S. (2003). *Pension reform in Croatia* (sp discussion paper no. 0304) Washington, D.C.: World Bank.
- Augusztinovic, M., Gal, R., Matits, A., Máté, L., Simonovits, A., & Stahl, J. (2002) The Hungarian pension system before and after the 1998 reform. In E. Fultz (Ed.), *Pension reform in central and Eastern Europe, vol. 1* (pp. 25–94). Budapest: ILO, Central and Eastern European Team).
- Bailey, C., & Turner, J. (1998) Contribution evasion and social security: Causes and remedies. 2nd International Research Conference on Social Security, International Social Security Association, Jerusalem, January 25–28.

- Barrand, P., Ross, S., & Harrison, G. (2004). *Integrating a unified revenue administration for tax and social contribution collections: Experiences of central and eastern European countries* (Working Paper No. 237). Washington, D.C.: International Monetary Fund.
- Bejaković, P. (2004). The collection of pension contributions in Croatia. In E. Fultz & T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 59–104). Budapest: ILO, Central and Eastern European Team.
- Chłoń-Domińczak, A. (2002). The Polish pension reform of 1999. In E. Fultz (Ed.), *Pension reform in Central and Eastern Europe, vol. 1* (pp. 155–196). Budapest: ILO, Central and Eastern European Team.
- Chłoń-Domińczak, A. (2004). The collection of pension contributions in Poland. In E. Fultz & T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 155–196). Budapest: ILO, Central and Eastern European Team.
- Enoff, L. D., & McKinnon, R. (2011). Social security contribution collection and compliance: Improving governance to extend social protection. *International Social Security Review*, 64, 99–119.
- Fultz, E., & Stanovnik, T. (Eds.). (2004). *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe*. Budapest: ILO, Central and Eastern European Team.
- Manchester, J. (1999). Compliance in social security systems around the world. In O. S. Mitchell, R. J. Myers, & H. Young (Eds.), *Prospects for social security reform* (pp. 295–312). Philadelphia, PA: University of Pennsylvania Press.
- Máté L. (2004). The collection of pension contributions in Hungary. In E. Fultz and T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 105–154). Budapest: ILO, Central and Eastern European Team.
- McGillivray, W. (2001). Contribution evasion: Implications for social security pension schemes. *International Social Security Review*, 54, 3–22.
- Ross, S., (2004). Collection of social contributions: Current practice and critical issues. ISSA Conference on Changes in the Structure and Organization of Social Security Administration, Cracow, June 3–4.
- Sailer, M. (2011). Extending pension coverage in Germany: The employment insurance approach. In N. Takayama (Ed.), *Priority challenges in pension administration* (pp. 94–110). Tokyo: Maruzen Co.
- Šnajder, T. (2009). Analiza učinaka i statistika naplate prikupljanja doprinosa za obvezna osiguranja. *Analysis of Results and Statistics of Collection of Contribution for Mandatory Insurance, Porezni vjesnik*, 17, 35–49.
- Stanovnik, T., & Fultz, E. (2004). The collection of pension contributions – a comparative review. In E. Fultz & T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 21–58). Budapest: ILO, Central and Eastern European Team.
- Takayama, N. (Ed.). (2011). *Priority challenges in pension administration*. Tokyo: Maruzen Co.
- Toma, C. (2004). The collection of pension contributions in Romania. In E. Fultz & T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 197–246). Budapest: ILO, Central and Eastern European Team.
- Vezjak, K., & Stanovnik, T. (2004). The collection of pension contributions in Slovenia. In E. Fultz & T. Stanovnik (Eds.), *Collection of pension contributions: Trends, issues and problems in Central and Eastern Europe* (pp. 247–282). Budapest: ILO, Central and Eastern European Team.