Financial Innovation in Local Governments as a Response to the Deterioration of their Risk Profile and Legislative Changes: The case of Poland.

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ABSTRACT

The financial crisis which broke out in 2008 had a profound impact on public sector finances. During the crisis local governments undertook vast investment efforts which, on the one hand, created strong countercyclical stimuli for the economy and, on the other, resulted in their growing debt burdens, restricting local governments' ability to raise debt in future. Such a situation along with political pressure to continue investments triggered financial innovation efforts.

The article presents the changes in financial standing of Polish local governments and their response to such an adverse scenario through creating innovative products. The newly developed instruments include the sale and leaseback of property and reversed tenancy. As presented in financial flows simulations, the design of these instruments enables highly indebted local governments to acquire financing and thus allows them to bypass the statutory debt limits. The innovations described make a continuation of investment projects by local governments possible, but also increase the credit risk of some entities above statutory accepted levels. Moreover, they allow the generation of financial liabilities which are not disclosed in debt statistics. From the long-term perspective, this will increase the sector's systemic risk.

Key Words: local government debt, sale and leaseback of property, reversed tenancy, financial innovation

Introduction

The financial crisis which broke out in 2008 had a profound impact on public sector finances. During the crisis, local governments undertook vast investment efforts, which created strong countercyclical and pro-growth stimuli for the economy. Local government investments amounted to 9.2% of total investment in the EU countries. In the case of Poland, the local government sector had an even bigger influence on the domestic economy as it generated over 14% of total country investment. Several pieces of research show that local governments' spendings have relatively high productivity (Blöchliger, 2013), (Blöchliger and Égert, 2013), (Fredriksen, 2013) and thus effectively support economic growth. However, on the other hand they resulted in growing debt burdens. In the European Union, the debt of local governments grew from 5.5% of GDP in 2008 to 7.7% of GDP in 2013. In Poland local government debt nearly doubled - from 2.3% to 4.2% of GDP in this period.

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Consequently, the economic slowdown worsened the risk profile of local governments and hindered the execution of public policies (Vammalle and Hulbert, 2013). Since 2010, the local government sector in the European Union countries has experienced an overall decrease of its productivity, accompanied by a relative deterioration of its financial standing (Kluza, 2014). The debate on the design of the fiscal consolidation process in local governments as well as flaws of the fiscal austerity model for municipalities as a response to the crisis are shown *inter alia* in Peck (2014) and Donald et al. (2014).

The deteriorated financial standing of local governments triggered financial innovation efforts in the local government sector. This process is extensively described in Pérignon and Vallée (2014) based on data for local governments in France. Among others, the authors show the political behavior factors leading to demand for innovative financing products, which are often a sort of toxic instruments which increase the credit risk of local governments in the future. Additionally, the authors show that such behavior is more frequent in highly indebted, and thus, more risky entities. The dynamics behind the innovation process in the financial sector as well as the mechanisms leading from higher financial innovation to higher probability of financial crises is presented in Thakor (2012). The risks for taxpayers, investors as well as for the financial system, which may be generated by financial innovations in the local governments, are analyzed in Whitaker (2014). Whitaker's analysis concentrates on innovation in municipal bond issuance.

In this paper, we focus on innovative financial products in Poland such as the sale and leaseback of property and the reversed tenancy, outlining both the rationale and benefits of their implementation by local governments as well as the risks arising from them. These innovations must be clearly distinguished from the public sector innovation processes aiming at achieving social and economic development through freeing a creative potential, which are widely described in Gow (2014). They are more related to creative accounting instruments, although their primary goal is to sustain local governments' investments in the real economy.

The current wave of financial innovation in Polish local governments was caused by two main factors: the worsened financial standing of local governments in Poland during the economic slowdown period and legislative changes regarding statutory debt limits. This created a framework similar to that described in Pérignon and Vallée (2014), in which the demand for innovative products is mainly driven by entities with the worst financial standing.

The investment efforts of local governments in Poland were associated with a deep deterioration of their risk profile compared to the pre-crisis year, 2008. On average, local governments had the worst financial standing in 2011. Since 2011, the average situation has improved modestly, but there is a group of local governments with strongly worsening financial indicators. In 2013 around 20% of Polish local governments had debt service indicators, based on free operating cash flow and EBITDA, in the warning areas. Specifically, over 50% of the largest municipalities (towns with county rights), which perform both functions of the municipal boroughs and counties, have their net debt more than five times as big as their operating cash flow. A similar picture is presented by the ratios of total debt to total revenues (TD/TR) and financial outflows to total debt

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 $^{^2}$ For the ratio EBITDA / Gross Interest (EBITDA/GI) the typical warning level is a value ≤ 2.0. For the ratio Free Operating Cash Flow / Net Debt (FOCF/ND) the typical warning level is a value ≤ 0.2.

(FO/TR), which were till the end of 2013 the statutory limits.³ A brief summary of the financial standing changes of Polish local governments is presented in Table 1.

Table 1: Financial ratios for local governments in Poland

	2008	2011	2013
All local governments in Poland:			
TD/TR*	20.2%	38.4%	37.7%
FO/TR*	5.5%	7.2%	8.0%
EBITDA/GI	13.76	4.94	5.96
FOCF/ND	1.75	0.27	0.31
of which: towns with county rights			
TD/TR*	25.8%	49.4%	48.0%
FO/TR*	5.8%	8.0%	8.0%
EBITDA/GI	10.39	3.42	4.33
FOCF/ND	0.90	0.18	0.21

^{*} without excluding the debt related to the EU co-financed projects Source: author's analysis based on data from the Ministry of Finance

At the beginning of 2014 the TD/TR and FO/TR statutory limits were replaced by the individual debt limit from par. 243 of the Public Finance Law (PFL).⁴ It states that for an *n*-th year the relationship of financial outflows to total revenues (Left Hand Side of equation, LHS) cannot exceed the 3-year average surplus defined as the relationship of operating revenues plus sales of fixed assets minus operating expenses to total revenues (Right Hand Side of equation, RHS). The formula from par. 243 PFL is as follows:

where:

Financial outflows – sum of installment payments and interest expenses for loans, bonds and other instruments classified as financial liabilities.

Db – operating revenues

Sm – gross revenues from sale of fixed assets

Wb – operating expenses (including interest expenses).

The financial liabilities and flows related to the EU co-financed projects are excluded from the formula, similarly to the TD/TR and FO/TR ratios calculated on a statutory basis.

³ The statutory limits set by the Public Finance Law till 2013 were:

a. $TD/TR \le 60\%$ as calculated for the current year

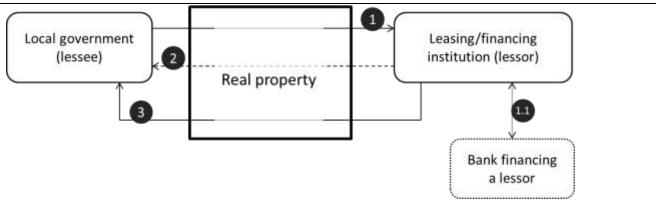
b. $FO/TR \le 15\%$ as calculated for the current year.

The debt and interest payments related to the EU co-financed projects were excluded from the statutory limits.

⁴ Public Finance Law of August 27, 2009 as amended (Journal of Laws 2009, no. 157, pos. 1240).

The newly introduced statutory debt limit had a strong impact on the financial policies of local governments due to their diminished operating surpluses as a result of the economic slowdown. The combined local governments' operating surplus in relation to total revenues dropped from 12.4% in 2008 to below 8% in the 2009-2013 period. Simultaneously, interest expenses in relation to total revenues grew from 1.0% in 2008 to 1.6% in 2013, despite the drop of market interest rates by half. Ex ante analyses showed that the individual debt limit from par. 243 PFL will limit the room for new financing in the case of more than 15% of local governments, especially in the counties (38%) – see Kluka and Kluza (2012). Recent calculations of Regional Comptroller Offices showed that the new debt limit may be more restrictive than the previous 15% limit in the case of ca. 90% (KRRIO, 2013: 211). As a consequence, several local governments which either were in danger of outright exceeding their statutory limits or did not have enough space to continue their investment projects on the desired scale under new limits, started, along with the financial sector, to seek instruments which may help them to handle the new regulation from par. 243 PFL. The sale and leaseback of property and reversed tenancy were invented as instruments which address their needs in the most suitable way.

Figure 1: General scheme of a sale and leaseback of property



Explanation of the phases in the diagram:

- 1. purchase of real estate property from the local government by leasing institution subject to the conditions stated in the tender
- 1.1. (optionally) purchase of the receivables by a bank financing leasing institution
- 2. transfer of the property for use by the local government in the form of leasing
- 3. repurchase of the property from leasing institution by the local government after the end of the lease

Source: Author

Sale and leaseback of property and reversed tenancy instruments

The formula of financing through the sale and leaseback of property with operating leasing consists of three main parts - the sale of assets, then the transfer of them to the seller for use as an operating lease and then their repurchase after a period of use. The transaction scheme is presented in Figure 1.

⁵ The average WIBOR1M rate amounted to 6.10% in 2008 and 3.04% in 2013.

The sale and leaseback of property in operating leasing is carried out under the Act on Property Management (APM) of August 21, 1997 as amended (Journal of Laws 1997 no. 115 pos. 741) and requires a public tender. In such tenders there are two selection criteria: price of purchase and cost of financing (interest margin). The handover of the property for use by the local government is for a minimum of 5 years. The transaction may be applied to property which belongs to the local government or is in perpetual usufruct. The property may be transferred by the local government for use by other entities.

In the case of an operating leasing, the part of a leased asset is repurchased at the end of the contract – i.e. redemption value. Its minimal level is defined by legislation, for example in 5-year transactions it amounts to 67% of the purchase price and in 10-year transactions it amounts to 46% of the purchase price. The repurchase of the asset is classified as a capital expenditure.

There is an option of paying a deposit together with lease installments. The deposit is an equivalent of partial capital prepayment. Using such a deposit may be beneficiary for both sides of the transaction. For a financing institution, it will lower the credit risk. For the local government, this creates the opportunity to acquire cheaper financing as well as curb political risks associated with leaving a large balloon payment at the end of the lease contract. The transaction of the sale and leaseback of property may also be structured with an initial lease payment. This is an equivalent of own share in a leased asset, which will diminish the basis for the interest calculation and the redemption value. In practice, the initial lease payment is in the range of 0%-30%.

In the case of reversed tenancy, the transaction scheme is analogical as in the sale and leaseback transaction presented in Figure 1. There is the sale of property by the local government with a pledge of its repurchase after a specific time period and with the same price as it initially was sold for. During the period from the sale till the repurchase, an agreement of reversed tenancy applies between the local government as a tenant and the financial institution as a lessor. The local government is paying contractual rent payments which are classified entirely as operating expenses but not financial expenses. In addition, the agreement is explicitly not classified as the local government's financial liability. Thus, the local government avoids a risk that in certain circumstances reversed tenancy may be treated as external financing, which may happen in the case of the sale and leaseback of property.

Financing based on the reversed tenancy is a very flexible instrument. There is a lack of restrictions regarding a transaction repayment period, redemption value, size of voluntary deposit etc. The rent installments may be fixed or, similarly to financial contracts, variable depending on interbanking interest rates or any other economic indicator, e.g. the consumer prices index. In the case of real estate reversed tenancy, a public tender is required under APM. In the case of movables (for example means of transport, sewage networks), the public tender is carried out under the Public Procurement Law (PPL) of January 29, 2004 as amended (Journal of Laws 2004 no. 19 pos. 177).

⁶ See the Regulation of the Minister of Finance in Poland of December 28, 2011 on detailed guidelines for classification of debt instruments to public debt (Journal of Laws 2011 no. 298, pos. 1767).

⁷ See the opinions regarding the sale and leaseback in operating leasing formula presented in the statements of Regional Comptroller Offices for Proszowice borough (resolution no. SO.II/421/22/13 RIO in Kraków of December 23, 2013) and Skarżyski county (resolution no. 117/II/2013 RIO in Kielce of December 10, 2013).

Advantages of the sale and leaseback of property and the reversed tenancy for local governments

Due to the current financial standing of several local governments and restrictions imposed by par. 243 of PFL, several entities cannot obtain financing in a form of traditional bank loan or municipal bonds. In such situations, the sale and leaseback of property and the reversed tenancy becomes an attractive alternative. These instruments allow to temporarily release capital frozen in existing property. From this perspective, they are beneficial for local governments, especially during periods of economic slowdown when the sale of fixed assets, which is another available alternative, would have to be done usually with unfavorable market prices. In addition, the sale and leaseback of property and the reversed tenancy enable to extract financial resources from assets which are not for sale and are intended to be maintained by the local government in the future, like a school or a municipal clinic.

A comparison of the impact of a bank loan, the sale and leaseback of property and the reversed tenancy on local government statutory limits is found in Table 2. The simulation is based on real data from an exemplary local government. The basic scenario (A) shows a situation when this entity decides to limit its investments in 2014 by PLN 4 million (ca. EUR 1 million) in order to comply with statutory debt limits. Other scenarios (B, C, D) assume that the entity continues its investments on a desired level with the use of different instruments. For comparability of variants, it is assumed that all the instruments have 10-year repayment period, the debt is incurred on January 1, 2014 and there is no grace period in capital repayments. The repayment schedule for the loan assumes linear amortization. In the case of the sale and leaseback and the reversed tenancy, the deposit payment schedule is structured identically to the loan repayment schedule, so that the redemption value is zero. The interest margin for the loan is 1.5% over WIBOR 3M. For leasing and reversed tenancy, the interest margin is 3.0% over WIBOR 3M, which reflects market conditions for such transactions.

The crucial characteristic of operating leasing is that it is not a financial liability, i.e. it is not a debt position in local government reporting standards. Both the capital and interest part of the lease installment are classified as operating expenses and the initial sale of asset is a capital revenue. Such a formula causes that, for the 3 years after the transaction, the individual debt limit from par. 243 PFL is improved. Also, the repurchase transaction is classified as capital expenditure and thus it is neutral for the individual debt limit. In the case of using a deposit it is also treated as a capital expenditure.

The sale and leaseback can be also carried out in a form of financial leasing. Such a structure is less advantageous for local governments with a tight statutory debt limit, because the whole lease payment is a financial outflow, included in the LHS of the ratio from par. 243 PFL. The advantage of financial leasing over operating leasing is a lack of regulation regarding transaction parameters such as minimal repayment period or minimal redemption value.

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⁸ See the document of the Ministry of Finance in Poland: DP11/657/14/MKT/2014/RD-10668 of January 31, 2014.

Table 2: Comparison of the impact of a bank loan, the sale and leaseback of property (operating leasing) and reversed tenancy on the local government's statutory debt limits

A. Basic scenario - investments decreased by PLN 4 million in 2014 and no new external financing

PLN thsd.	2013 Actual	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total revenues	24 871	21 849	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
operating revenues	18 682	20 058	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
capital revenues (incl. project subsidies)	6 188	1 790	0	0	0	0	0	0	0	0	0
proceedings from sales of fixed assets	82	1 100	0	0	0	0	0	0	0	0	0
Total expenditures	26 963	23 024	17 841	18 053	18 813	18 017	18 017	18 017	18 017	18 017	18 017
operating costs, incl:	16 844	16 595	16 030	16 738	17 082	17 017	17 017	17 017	17 017	17 017	17 017
interest paid on debt	389	479	577	553	525	496	397	297	198	99	50
capital expenditures	10 119	6 429	1 811	1 315	1 731	1 000	1 000	1 000	1 000	1 000	1 000
Budget surplus/deficit	-2 092	-1 175	1 329	1 248	853	1 657	1 657	1 657	1 657	1 657	1 657
operating surplus/deficit	1 839	3 464	3 140	2 564	2 584	2 657	2 657	2 657	2 657	2 657	2 657
Financial inflows	7 024	1 200	0	0	0	0	0	0	0	0	0
Financial outflows	4 314	25	1 329	1 248	853	1 653	1 477	1 477	1 477	1 477	1 477
Total debt (end of period)	10 944	12 636	11 141	9 893	9 040	7 387	5 909	4 432	2 955	1 477	0
Statutory limits											
par. 243 (RHS) - max statutory ceiling	-	2,9%	11,3%	15,0%	16,8%	14,3%	13,3%	13,4%	13,5%	13,5%	13,5%
par. 243 (LHS) - financial outflows / revenues ratio	18,9%	2,3%	9,9%	9,3%	7,0%	10,9%	9,5%	9,0%	8,5%	8,0%	7,8%
Compliance with par. 243 statutory limit	-	OK									
Debt / Total revenue ratio (excl. EU related debt)	44,0%	57,8%	58,1%	51,3%	46,0%	37,5%	30,0%	22,5%	15,0%	7,5%	0,0%

B. Scenario with a bank loan – investments higher by PLN 4 million (maintained at 2013 level)

PLN thsd.	2013 Actual	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total revenues	24 871	21 849	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
operating revenues	18 682	20 058	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
capital revenues (incl. project subsidies)	6 188	1 790	0	0	0	0	0	0	0	0	0
proceedings from sales of fixed assets	82	1 100	0	0	0	0	0	0	0	0	0
Total expenditures	26 963	27 187	17 988	18 182	18 924	18 112	18 095	18 078	18 060	18 043	18 026
operating costs, incl:	16 844	16 758	16 177	16 867	17 193	17 112	17 095	17 078	17 060	17 043	17 026
interest paid on debt	389	642	723	682	637	590	474	358	241	125	58
capital expenditures	10 119	10 429	1 811	1 315	1 731	1 000	1 000	1 000	1 000	1 000	1 000
Budget surplus/deficit	-2 092	-5 338	1 183	1 119	741	1 563	1 580	1 597	1 614	1 632	1 649
operating surplus/deficit	1 839	3 300	2 994	2 435	2 472	2 563	2 580	2 597	2 614	2 632	2 649
Financial inflows	7 024	5 200	0	0	0	0	0	0	0	0	0
Financial outflows	4 314	425	1 729	1 648	1 253	2 053	1 877	1 877	1 877	1 877	1 877
Total debt (end of period)	10 944	16 236	14 341	12 693	11 440	9 387	7 509	5 632	3 755	1 877	0
Statutory limits											
par. 243 (RHS) - max statutory ceiling	-	2,9%	11,0%	14,5%	16,1%	13,6%	12,7%	12,9%	13,1%	13,2%	13,3%
par. 243 (LHS) - financial outflows / revenues ratio	18,9%	4,9%	12,8%	12,1%	9,6%	13,4%	12,0%	11,4%	10,8%	10,2%	9,8%
		disqualifi	disqualifi	_			•				
Compliance with par. 243 statutory limit	-	cation	cation	OK							
Debt / Total revenue ratio (excl. EU related debt)	44,0%	74,3%	74,8%	65,8%	58,2%	47,7%	38,2%	28,6%	19,1%	9,5%	0,0%

C. Scenario with the sale and leaseback (operating leasing) – investments higher by PLN 4 million (maintained at 2013 level)

PLN thsd.	2013 Actual	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total revenues	24 871	25 849	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
operating revenues	18 682	20 058	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
capital revenues (incl. project subsidies)	6 188	5 790	0	0	0	0	0	0	0	0	0
proceedings from sales of fixed assets	82	5 100	0	0	0	0	0	0	0	0	0
Total expenditures	26 963	27 644	18 439	18 627	19 363	18 545	18 522	18 499	18 475	18 452	18 429
operating costs, incl:	16 844	17 031	16 444	17 128	17 448	17 361	17 338	17 315	17 291	17 268	17 245
interest paid on debt	389	479	577	553	525	496	397	297	198	99	50
capital expenditures	10 119	10 613	1 995	1 499	1 915	1 184	1 184	1 184	1 184	1 184	1 184
Budget surplus/deficit	-2 092	-1 795	732	674	302	1 130	1 153	1 176	1 199	1 223	1 246
operating surplus/deficit	1 839	3 027	2 727	2 174	2 217	2 314	2 337	2 360	2 383	2 407	2 430
Financial inflows	7 024	1 200	0	0	0	0	0	0	0	0	0
Financial outflows	4 314	25	1 329	1 248	853	1 653	1 477	1 477	1 477	1 477	1 477
Total debt (end of period)	10 944	12 636	11 141	9 893	9 040	7 387	5 909	4 432	2 955	1 477	0
Statutory limits											
par. 243 (RHS) - max statutory ceiling	-	2,9%	14,8%	17,8%	19,0%	12,3%	11,4%	11,6%	11,9%	12,0%	12,1%
par. 243 (LHS) - financial outflows / revenues ratio	18,9%	2,0%	9,9%	9,3%	7,0%	10,9%	9,5%	9,0%	8,5%	8,0%	7,8%
Compliance with par. 243 statutory limit	-	OK									
Debt / Total revenue ratio (excl. EU related debt)	44,0%	48,9%	58,1%	51,3%	46,0%	37,5%	30,0%	22,5%	15,0%	7,5%	0,0%

D. Scenario with the reversed tenancy – investments higher by PLN 4 million (maintained at 2013 level)

PLN thsd.	2013 Actual	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total revenues	24 871	25 849	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
operating revenues	18 682	20 058	19 170	19 301	19 666	19 675	19 675	19 675	19 675	19 675	19 675
capital revenues (incl. project subsidies)	6 188	5 790	0	0	0	0	0	0	0	0	0
proceedings from sales of fixed assets	82	5 100	0	0	0	0	0	0	0	0	0
Total expenditures	26 963	27 644	18 439	18 627	19 363	18 545	18 522	18 499	18 475	18 452	18 429
operating costs, incl:	16 844	17 215	16 628	17 312	17 632	17 545	17 522	17 499	17 475	17 452	17 429
interest paid on debt	389	479	577	553	525	496	397	297	198	99	50
capital expenditures	10 119	10 429	1 811	1 315	1 731	1 000	1 000	1 000	1 000	1 000	1 000
Budget surplus/deficit	-2 092	-1 795	732	674	302	1 130	1 153	1 176	1 199	1 223	1 246
operating surplus/deficit	1 839	2 843	2 543	1 990	2 033	2 130	2 153	2 176	2 199	2 223	2 246
Financial inflows	7 024	1 200	0	0	0	0	0	0	0	0	0
Financial outflows	4 314	25	1 329	1 248	853	1 653	1 477	1 477	1 477	1 477	1 477
Total debt (end of period)	10 944	12 636	11 141	9 893	9 040	7 387	5 909	4 432	2 955	1 477	0
Statutory limits											
par. 243 (RHS) - max statutory ceiling	-	2,9%	14,5%	17,2%	18,1%	11,3%	10,5%	10,7%	10,9%	11,1%	11,2%
par. 243 (LHS) - financial outflows / revenues ratio	18,9%	2,0%	9,9%	9,3%	7,0%	10,9%	9,5%	9,0%	8,5%	8,0%	7,8%
Compliance with par. 243 statutory limit	-	OK									
Debt / Total revenue ratio (excl. EU related debt)	44,0%	48,9%	58,1%	51,3%	46,0%	37,5%	30,0%	22,5%	15,0%	7,5%	0,0%

Source: Author

The reversed tenancy has the flexibility of financial leasing. At the same time it has the key properties of operational leasing, i.e. it is not classified as a debt category and rental payments are non-financial operating expenses. The disadvantage of the reversed tenancy compared to the operating leasing is that in the reversed tenancy the deposit for partial capital prepayments has no explicit feature of refundable deposit. As a result, currently there is no clear regulation whether this is capital or operating expenditure. A prudential approach implies treating it as operating expenditure, which results in a lower maximum debt ceiling in the RHS of par. 243 PFL compared to operating leasing.

In the case of land as the object of the transaction, only financial leasing or reversed tenancy could be applied. Thus, a typical transaction conducted by a local government regarding a developed real estate should consist of two agreements: the operating leasing (a sale and lease back transaction) for the premises and the financial leasing (a sale and lease back transaction) or the reversed tenancy for the land.

The simulations show that the sale and leaseback and the reversed tenancy have several advantages over a traditional bank loan or municipal bond financing specifically for highly indebted local governments, assuming that they have 'political necessity' to acquire new external financing, e.g. for investment continuation. First of all, in the case of some indebted local governments, these are the only instruments available which may allow them to take on a new debt – a typical loan or bond issuance is already banned by the statutory debt limit from par. 243 PFL (see Table 2 – years 2014 and 2015 in Scenario B). Moreover, the sale and leaseback and the reversed tenancy improve for the first three years the maximum debt ceiling from RHS in par. 243 PFL compared to the transaction conducted with a bank loan or bond issuance. And, for the whole period of financing, they are characterized by a lower value of financial outflows ratio from LHS of par. 243 debt limit. In addition, the sale and leaseback and the reversed tenancy instruments, although they are clearly the means for raising external financing, do not cause an increase of reported indebtedness and related indicators (e.g. Debt/Total revenue ratio), used for financial soundness assessment. Altogether, their impact on the statutory limit is predominantly positive - see Table 3 for a comparison between the scenarios.

Table 3: Impact on the statutory debt limits – bank loan financing versus sale and leaseback (operating leasing) and reversed tenancy for the scenarios presented in Table 2

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Sale and leaseback vs. Bank loan										
Par. 243 (RHS) - max statutory ceiling	0,0%	3,8%	3,3%	2,9%	-1,3%	-1,3%	-1,3%	-1,2%	-1,2%	-1,2%
Par. 243 (LHS) - financial outflows / revenues ratio	-2,9%	-2,8%	-2,7%	-2,6%	-2,5%	-2,4%	-2,3%	-2,3%	-2,2%	-2,1%
Debt / Total revenue ratio (excl. EU related debt)	-25,4%	-16,7%	-14,5%	-12,2%	-10,2%	-8,1%	-6,1%	-4,1%	-2,0%	0,0%
Reversed tenancy vs. Bank loan										
Par. 243 (RHS) - max statutory ceiling	0,0%	3,5%	2,7%	2,0%	-2,3%	-2,2%	-2,2%	-2,2%	-2,1%	-2,1%
Par. 243 (LHS) - financial outflows / revenues ratio	-2,9%	-2,8%	-2,7%	-2,6%	-2,5%	-2,4%	-2,3%	-2,3%	-2,2%	-2,1%
Debt / Total revenue ratio (excl. EU related debt)	-25,4%	-16,7%	-14,5%	-12,2%	-10,2%	-8,1%	-6,1%	-4,1%	-2,0%	0,0%

Note: The shaded values indicate the advantage of financing with the bank loan. All other non-zero values indicate the advantage of sale and leaseback (operating leasing) and the reversed tenancy over the bank loan.

Source: Author

As a result, the sale and leaseback of property and reversed tenancy were mainly used by local governments with inferior financial standing. Typically their 'total debt to total revenue' ratios amounted to around 60% - a very high level, even though this ratio does not include the liabilities created by the sale and leaseback of property and reversed tenancy (see Appendix 1). For comparison, the average 'total debt to total revenue' ratio in the local government sector amounted to 37.1% at the end of 2014.

⁹ See par. 23i of the Act on Personal Income Tax of July 26, 1997 as amended (Journal of Laws 1991 no. 80 pos. 350) and par. 17i of the Act on Corporate Income Tax of February 15, 1992 as amended (Journal of Laws 1992 no. 21 pos. 86).

Conclusion

In 2014, the new statutory debt limits for local governments in Poland were implemented under paragraph 243 of the Public Finance Law. This legislative change combined with shrinking operating surpluses of local governments during the period of economic slowdown stimulated financial innovation in this sector directed at mitigation of the impact of paragraph 243. The newly developed instruments include the sale and leaseback of property and reversed tenancy. These instruments have some recognized positive characteristics from voters' perspectives; namely, they allow investments to continue, which are usually desirable for the local community, without the necessity of raising money from the sale of fixed assets which may be sold for unfavorable prices during periods of economic slowdown.

There are also substantial disadvantages from the public perspective, however. The most visible one is the higher cost of such instruments, but this is generally the least problematic issue. The key risk is that these instruments are mainly used by local governments with the highest debt levels and/or weak free operating cash flows in order to bypass the new debt ceilings. In the long-term, this causes an increase of credit risk for the local government sector. To mitigate this risk, the sale and leaseback of property and reversed tenancy should be more closely regulated, similarly to standard debt instruments. This means including them as debt categories in the calculation of statutory debt limits as well as introducing full disclosure of them in local government budgetary reports on financial liabilities.

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Appendix 1: Examples of local governments which raised financing through the sale and leaseback of property and reversed tenancy

Name	local government category	Total Debt / Total Revenue; 31.12.2014*	Total Debt; 31.12.2014; mln PLN**	Financing with leasing or tenancy (not included in Total Debt); mln PLN	Instrument type
Aleksandrów Łódzki	municipal-rural borough	27,6%	30,9	6,8	reversed tenancy
Bierutów	municipal-rural borough	45,4%	15,2	3,6	reversed tenancy
Borzęcin	rural borough	77,8%	21,3	2,7	reversed tenancy
Daszyna	rural borough	78,7%	15,4	3,7	reversed tenancy
Dolsk	municipal-rural borough	45,5%	7,9	5,4	reversed tenancy
Dubiecko	rural borough	45,8%	14,3	4,3	reversed tenancy
Kluczborski	county	52,4%	37,7	15,1	sale and leasback (operational leasing)
Kłodzko	municipal borough	51,7%	44,5	7,4	sale and leasback (financial leasing)
Krośnice	rural borough	63,9%	26,7	3,9	reversed tenancy
Łapanów	rural borough	55,5%	18,8	4,7	reversed tenancy
Łazy	municipal-rural borough	48,6%	26,0	11,2	sale and leasback (operational leasing)
Mrozy	rural borough	58,6%	15,9	1,8	reversed tenancy
Nowy Dwór	rural borough	14,5%	2,1	1,2	reversed tenancy
Ostrowice	rural borough	304,2%	33,5	7,0	reversed tenancy
Raciechowice	rural borough	63,2%	16,4	5,0	reversed tenancy
Siedlce	town with county rights	50,4%	214,7	74,6	reversed tenancy
Skalbmierz	municipal-rural borough	41,5%	9,1	2,0	reversed tenancy
Szczekociny	municipal-rural borough	46,8%	10,6	4,5	sale and leasback (operational leasing)
Wrocław	town with county rights	64,1%	2 267,6	80,7	sale and leasback (operational leasing)
Zbąszynek	municipal-rural borough	54,2%	19,1	1,2	reversed tenancy

Total Debt / Total Revenue for the local	
government sector	37,1%

Source: Author

Note: exchange rate for Polish Zloty (PLN) on Dec. 31, 2014 was EUR/PLN = 4.3138, USD/ PLN = 3.5458

^{*} The statutory limit set by the Public Finance Law till 2013 was Total Debt / Total Revenue ≤ 60%, excluding the debt related to the EU co-financed projects from a numerator.

^{**} Excluding financing from the sale and leaseback of property and reversed tenancy, which are not classified as financial liabilities.

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