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Financial Consequences of the Act on Reimbursement of Medicines for the National Health Fund and Patients

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The aim of the paper is to present the financial consequences of the entry into force of the Reimbursement Act in 2012 for the National Health Fund, a payer of public funds, and for individual patients. A greater burden on the society – i.e. an increase in the level of co-payment for medicines – turns out to be integrated in the general tendency that emerges during the economic crisis in many European countries at different levels of socio-economic development.

Keywords: total pharmaceutical expenditure, out-of-pocket expenditure, reimbursement of medicines.

Finansowe konsekwencje ustawy o refundacji leków dla Narodowego Funduszu Zdrowia i pacjentów

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Celem pracy jest przedstawienie finansowych konsekwencji wejścia w życie ustawy refundacyjnej (obowiązującej od 2012 roku) dla Narodowego Funduszu Zdrowia – płatnika środków publicznych oraz dla indywidualnych nabywców. Większe obciążenie społeczeństwa – tj. wzrost skali współpłacenia za leki okazuje się wkomponowywać w ogólną tendencję, pojawiającą się w okresie kryzysu gospodarczego w wielu krajach europejskich, będących na różnym poziomie rozwoju społeczno-gospodarczego.

Słowa kluczowe: finansowanie leków, bezpośrednie wydatki prywatne, refundacja leków.

JEL: I11, I15, I18

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1. Introduction

On January 1, 2012, the new *Act on reimbursement of medicines, foods for particular nutritional uses and medical device*s entered into force (Ustawa z dnia 12 maja 2011 ..., Official Journal (Dz.U.) of 2011, no. 122, item 696, as subsequently amended). In experts' opinion, its main goal was to transform the medicine reimbursement system in Poland in such a way so as to ensure that it meets the current social demand for the supply of reimbursed products within the limits of available public funds.

The aim of this study will be to show how the Reimbursement Act has affected the structure of total pharmaceutical expenditure in Poland, i.e. how the proportions between public financing (reimbursement of medicines by the National Health Fund [NHF]) and private funding (co-financing by patients) have changed. The basic considerations concerning Poland have been supplemented with an international context by showing changes in the share of private financing in medicine expenditure in OECD countries in 2009–2015.

2. Reimbursement of Medicines – Current Legal Basis

The basic legal act governing the reimbursement of medicines in Poland is the *Act on reimbursement of medicines, foods for particular nutritional uses and medical devices* (Ustawa z dnia 12 maja 2011). This Act, along with the *Act on Pharmaceutical Law* (Ustawa z dnia 6 września 2001 ..., Official Journal (Dz.U.) of 2001, no. 126, item 1381) and the *Act on healthcare services financed from public funds* (Ustawa z dnia 27 sierpnia 2004 ..., Official Journal (Dz.U.) of 2004, no. 210, item 2135), governs all the matters related to the reimbursement of medicines.

Reimbursement enables patients to purchase products, listed in the title of the Act, free of charge or at lower prices because their cost is fully or partially covered by the National Health Fund in accordance with the list of reimbursed pharmaceuticals compiled by the Ministry of Health and updated every two months.

The Reimbursement Act contains a provision specifying the level of the total budget for the reimbursement of medicines, foods for particular nutritional uses and medical devices. The total budget for reimbursement means the amount of public funds earmarked in the National Health Fund's financial plan for the reimbursement (Article 118 of the *Act on healthcare services financed from public funds of 27 August 2004)* (Ustawa z dnia 27 sierpnia 2004).

Article 3.1 of the Reimbursement Act stipulates as follows: "The total budget for reimbursement shall not exceed 17% of the sum of public funds

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allocated to the financing of guaranteed services in the Fund's financial plan" (Ustawa z dnia 12 maja 2011). This provision applies to planned values; the planned threshold may actually be exceeded, giving rise to the so-called mechanisms for partial cost payback by applicants. The NHF financial plan can be modified in the course of a calendar year; however, the principle that the 17% threshold must not be exceeded remains in force. Therefore, a possible reduction in budget revenues has consequences for the total budget for reimbursement.

Article 6.1. of the Act provides for the reimbursement of products under three different reimbursement availability categories (Ustawa z dnia 12 maja 2011):

1. medicine, food for particular nutritional uses, medical device, available at pharmacies;
2. medicine, food for particular nutritional uses, applied under a drug programme;
3. medicine used in chemotherapy.

The inclusion of a product in the reimbursement list under a drug programme and chemotherapy is subject to the same principles and follows the same procedure as in the case of "pharmacy" reimbursement, i.e. on the basis of an appropriate reimbursement decision issued by the Minister of Health.

3. Public Expenditure on Medicines – The Scale and Trends of Changes in Reimbursement of Medicines

Table 1 presents the National Health Fund's expenditure budgeted in the financial plan and expenditure actually incurred on account of reimbursement of medicines in the two years preceding the entry into force of the new Reimbursement Act. We tried to preserve the structure of expenditure on reimbursement of medicines comprising: therapeutic programmes and reimbursement of prices of medicines available on the pharmacy market (these two categories are identified in the NHF financial plan and in the report on plan implementation under items B.2.3.1 and B.2.14) and expenditure on medicines used during chemotherapy (estimated value, determined by summing up the spending on 20 medicine items that generate the highest costs).

The expenditure on reimbursement of medicines actually incurred by the National Health Fund increased from PLN 10.5 billion in 2010 to almost PLN 11 billion in 2011; its share in the total cost of healthcare services grew from 18.5% to 18.9%.

	2010		2011	
	plan	**implementation**	**plan**	**implementation**
1. Therapeutic (drug) programmes (B.2.3.1.)	1485.8	1398.0	1596.7	1561.6
2. Reimbursement of prices of medicines (B.2.14)	8527.1	8546.3	8695.3	8831.9
3. Chemotherapy*		537.9		586.3
4. Total NHF expenditure on reimbursement of medicines		**10482.2**		**10979.8**
5. Costs of healthcare services (B.2)	57161.0	56643.9	58304.7	58224.3
6. Ratio of expenditure on reimbursement of medicines to the costs of healthcare services (B.2)		***18.5%***		***18.9%***

* / the sum of expenditure on 20 medicines generating the highest costs

Tab. 1. Reimbursement of medicines – financial plan of the National Health Fund and its implementation in 2010–2011 (PLN million). Source: prepared by the authors of this paper based on the NHF financial plans and annexes to resolutions of NHF Council concerning the adoption of the report on the implementation of the NHF financial plan for 2010–2011. Retrieved on 11 August 2018 from www.nfz.gov.pl/zarzadzenia-prezesa/uchwaly-rady-nfz.

The following tables present planned expenditure on reimbursement of medicines in 2012–2018 (Table 2) and expenditure actually incurred for this purpose in 2012–2017 (Table 3).

The analysis of the data presented in Table 1 and Table 3 allows for concluding that public financing of medicines used in chemotherapy stood at a similar level of approx. PLN 0.5 billion between 2010 and 2015; there was a slight upward trend in the reimbursement of medicines from this availability category in 2016–2017.

Public expenditure on medicines used in therapeutic programmes grew steadily: from PLN 1.4 billion in 2010 to PLN 3.2 billion in 2017.

The foregoing contrasts with the third reimbursement availability category, i.e. medicines available at pharmacies. Prior to the entry into force of the new Act, NHF expenditure on reimbursement of medicines available at pharmacies amounted to: PLN 8.5 billion in 2010 and PLN 8.8 billion in 2011. The first year of application of the new Reimbursement Act brought a reduction in NHF expenditure on reimbursement of medicines available on the pharmacy market to PLN 6.9 billion in 2012, i.e. by almost PLN 2 billion (a decrease by approx. 21%); in the subsequent years, NHF expenditure increased consistently (at varying pace), but in 2017 it did not reach the level of expenditure from the period preceding the entry into force of the new Reimbursement Act.

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	2012	2013	2014	2015	2016	2017	2018
1. Medicines in drug programmes (B.2.3.1.1)	1947.5	2080.5	2417.4	2557.0	2934.1	3294.5	3275.0
2. Medicines in chemotherapy (B.2.3.2.1)	788.4	622.6	544.7	563.8	643.5	678.4	683.1
3. Reimbursement in open door pharmacies (B.2.14)	8165.1	8198.0	7939.0	8160.1	8151.1	8327.9	8177.6
4. Provision for the costs of reimbursement of medicines – Article 118.2.2.c of the Act (B.2.16.1)	–	–	–	–	–	–	33.6
5. Total budget for reimbursement of medicines Bn = B.2.3.1.1 + B.2.3.2.1 + B.2.14 + B.2.16.1	**10901.1**	**10901.1**	**10901.1**	**11280.9**	**11728.7**	**12300.8**	**12169.4**
6. Costs of healthcare services (B.2)	62153.6	63230.8	66433.7	68481.0	71714.1	77659.5	78582.7
7. Ratio of the budget for reimbursement of medicines (Bn) to the costs of healthcare services (B.2)	***17.5%***	***17.2%***	***16.4%***	***16.5%***	***16.4%***	***15.8%***	***15.5%***

Tab. 2. Reimbursement of medicines – financial plan of the National Health Fund (final version) for 2012–2018 (PLN million). Source: prepared by the authors of this paper based on the NHF financial plans for 2012–2018. Retrieved on 11 August 2018 from https://www.gov.pl/zdrowie/plany-finansowe-nfz.

	2012	2013	2014	2015	2016	2017
1. Medicines in drug programmes (B.2.3.1.1)	1730.9	2001.7	2258.1	2480.6	2907.0	3235.0
2. Medicines in chemotherapy (B.2.3.2.1)	468.5	406.5	508.1	542.0	628.3	662.9
3. Reimbursement in open door pharmacies (B.2.14)	6863.1	7183.8	7551.1	7988.0	8087.6	8267.1
4. Provision for the costs of reimbursement of medicines – Article 118.2.2.c of the Act (B.2.16.1)	–	–	–	–	–	–
5. Total budget for reimbursement of medicines Bn = B.2.3.1.1 + B.2.3.2.1 + B.2.14 + B.2.16.1	**9062.4**	**9592.0**	**10317.3**	**11010.6**	**11622.9**	**12165.0**
6. Costs of healthcare services (B.2)	59875.6	62078.0	63338.4	67751.2	70962.8	75835.1
7. Ratio of the budget for reimbursement of medicines (Bn) to the costs of healthcare services (B.2)	***15.1%***	***15.5%***	***16.3%***	***16.3%***	***16.4%***	***16.0%***

Tab. 3. Reimbursement of medicines – implementation of the financial plan of the National Health Fund in 2012–2017 (PLN million). Source: prepared by the authors of this paper based on the annexes to the resolutions of the NHF Council concerning the adoption of the report on the implementation of the NHF financial plan for 2012–2017. Retrieved on 11 August 2018 from www.nfz.gov.pl/zarzadzenia-prezesa/uchwaly-rady-nfz.

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The above considerations concern the actual expenditure of the National Health Fund on reimbursement of medicines available on the pharmacy market, that is, the implementation of the financial plan.

Figure 1 shows the data on expenditure on reimbursement of medicines budgeted in the NHF financial plan and expenditure actually incurred.

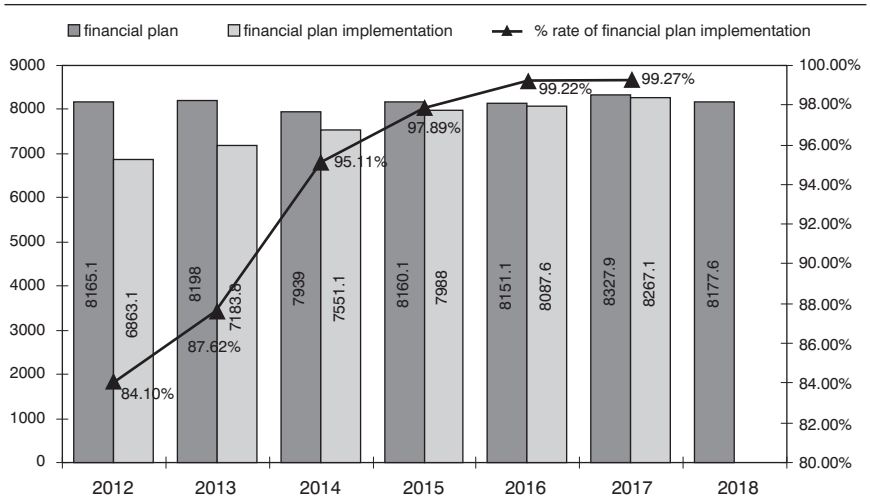

Fig. 1. Expenditure on reimbursement of medicines available on the pharmacy market budgeted in the NHF financial plan and expenditure actually incurred (PLN million) and the implementation of the financial plan (%) in 2012–2018. Source: prepared by the authors of this paper based on Tables 2 and 3.

The NHF expenditure on medicines available on the pharmacy market budgeted in financial plans for 2012–2018 stabilised at over PLN 8 billion, but these plans were not fully implemented, especially in the first years following the entry into force of the new Reimbursement Act. In 2012, the plan for this expenditure item was implemented in 84% only; in 2013 – in over 87.5%; in 2014 – in 95%; and in 2016–2017 the rate of implementation of the financial plan stood at over 99%.

As a reminder, Article 3.1. of the Reimbursement Act provides that: "The total budget for reimbursement shall not exceed 17% of the sum of public funds allocated to the financing of guaranteed services in the Fund's financial plan" (Ustawa z dnia 12 maja 2011). Figure 2 summarises these ratios – with reference to the NHF financial plan for 2010–2018 and plan implementation in 2010–2017.

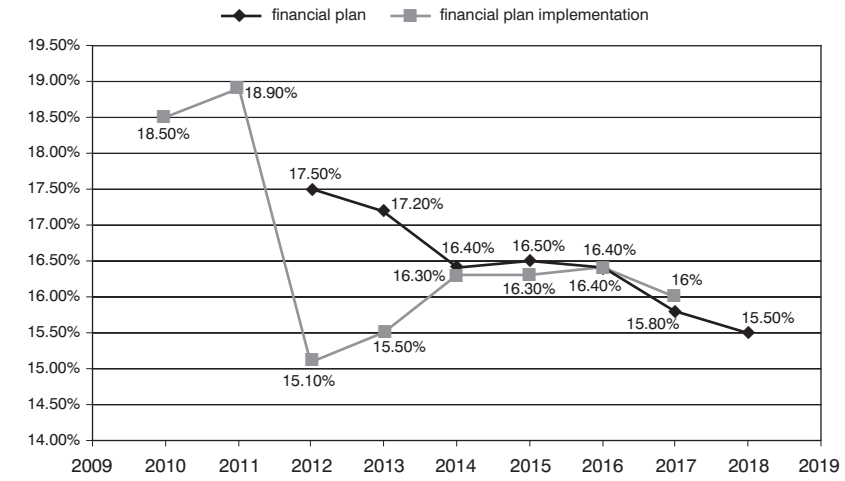

Fig. 2. Ratio of the budget for reimbursement of medicines to the costs of healthcare services in Poland in 2010–2018 (in accordance with the NHF financial plan and its implementation). Source: prepared by the authors of this paper based on Tables 1–3.

In financial plans (their final versions, because they were modified repeatedly, even in the course of a given year), the ratio of the budget for reimbursement of medicines to the costs of healthcare services stood at:

- in 2012–2013 – slightly over 17%,
- in 2014–2016 – below 17%,
- in 2017–2018 – below 16%.

In 2012–2013, the ratio of the actual expenditure of the NHF on reimbursement of medicines to the costs of healthcare services was significantly lower than the planned ratio and stood at (respectively): 15.1% and 15.5%; in subsequent years: 2014–2016 at over 16%, and in 2017 equalled 16%.

4. Consequences of Reimbursement of Medicines From the Purchaser's Perspective

In the open door pharmaceutical market, individuals purchase two types of medicines:

- Rx medicines – prescribed by a medical doctor; a prescription is required to purchase such medicine at a pharmacy,
- OTC medicines – bought without a prescription; purchasers themselves decide on the purchase.

OTC medicines along with dietary supplements, cosmetics and other medical products bought at a pharmacy are referred to as self-medication (SM).

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While the only source of financing for self-medication products are purchasers' private funds, Rx medicines may be reimbursed, i.e. co-financed by the public payer: the National Health Fund (with different reimbursement rates) or fully financed by the buyer (medicines sold at full price).

Table 4 presents the value of transactions on the pharmacy market and the structure of financing for Rx medicines and products purchased on the pharmacy market in 2011–2017.

	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Pharmacy market (Rx medicines and OTC products)	27.9	26.4	27.6	28.5	30.0	30.7	31.9
Rate of change in the transaction value	–	*–5.4%*	*4.5%*	*3.3%*	*5.3%*	*2.3%*	*3.9%*
Value of the Rx medicine segment	**17.8**	**15.7**	**16.3**	**16.9**	**17.7**	**18.0**	**18.4**
Rate of change in the transaction value	**–**	***–11.8%***	***3.8%***	***3.7%***	***4.7%***	***1.7%***	***2.2%***
Amount reimbursed by NHF for Rx medicines	**8.8**	**6.9**	**7.2**	**7.6**	**8.0**	**8.1**	**8.3**
Amount expended by patients on Rx medicines	**9.0**	**8.8**	**9.1**	**9.3**	**9.7**	**9.9**	**10.1**
% of patient co-payment for Rx medicines	***50.6%***	***56.1%***	***55.8%***	***55.0%***	***54.8%***	***55.0%***	***54.9%***
Patient expenditure on the pharmacy market	19.1	19.5	20.4	20.9	22.0	22.6	23.6
% of patient co-payment on the pharmacy market	*68.5%*	*73.9%*	*73.9%*	*73.3%*	*73.3%*	*73.6%*	*74.0%*

Tab. 4. Value of transactions on the pharmacy market and the structure of medicine financing in 2011–2017 in PLN billion (at retail prices). Source: compiled and calculated by the authors of this paper based on: 2011–2014: Kula, P., Polski rynek apteczny – szanse i zagrożenia, PharmaExpert. Retrieved on 17 July 2016 from www.farmacja-polska.org.pl/cms/uploads/dokumenty/prezentacja%20PharmaExpert; 2015: Czarnocki, J. (2016). Podsumowanie polskiego rynku farmaceutycznego w 2015 roku. Pharmaceutical Representative, 2(44); 2016–2017: Rynek farmaceutyczny w 2017 roku, IMS Health&Quintiles, IQVIA, Warszawa, January 2018. Retrieved on 24 July 2018 from www.nia.org.pl/wp-content/uploads/2018/01/IQVIA_Rynek_farmaceutyczny_2017_RAPORT.pdf.

The value of transactions on the pharmacy market (broadly understood) amounted to PLN 27.9 billion in 2011; in 2012 – when the new Reimbursement Act came into force – it decreased to PLN 26.4 billion (transaction value went down by PLN 1.5 billion, i.e. by over 5%). The subsequent years, i.e. 2013–2017, brought back the previously-reported upward trend in the value

of transactions on the pharmacy market, which was consistent but marked by varying degrees of intensity,

As regards the Rx medicine segment, which is relevant for this study, in 2011 (i.e. in the year preceding the entry into force of the new Reimbursement Act), the value of prescription medicines purchased on the pharmacy market was PLN 17.8 billion; in 2012, it declined dramatically to PLN 15.7 billion (a drop by over PLN 2 billion, i.e. by almost 12%). This significant fall in expenditure on Rx medicines came as a response to the coming into force of the new Reimbursement Act. Owing to the awareness of impending changes in the reimbursement of medicines and the uncertainty as to the real future burden on the society, patients began stockpiling medicines at the end of 2011 and reduced purchases at the beginning of 2012. In 2013–2017, the value of transactions in the Rx medicine segment grew consistently, but it was not until 2015 that it approached the value of medicines purchased in 2011, and in 2016 it exceeded this level.

As a consequence of the entry into force of the new Reimbursement Act, the share of reimbursed medicines in the value of purchased Rx medicines decreased: from 49.4% in 2011 to 43.9% in 2012 and 44.2% in 2013 (thus, co-payment by the society grew considerably). In 2014–2017, the share of reimbursement in the value of Rx medicines levelled off at around 45% (which translates into approx. 55% share of patient co-payment).

According to experts, one of the crucial reasons behind the significant decline in the share of reimbursement of Rx medicines in the value of transactions on the pharmacy market in 2012, and thus the increase in the rate of patient co-payment, was a safeguarding behaviour of some physicians. Underinformed and undertrained in the area of new principles and rates of medicine subsidies as well as threatened with fines for incorrectly written prescriptions, physicians more often prescribed reimbursed medicines available at full price or not reimbursed medicines (in 2013, the volume of sales of products sold at full price increased by 20%, and the volume of sales of reimbursed medicines fell by 16%) (Wpływ ustawy o refundacji …, Sequence HC Partners Sp. z o.o. & Domański Zakrzewski Palinka sp. k., 2014).

Another important reason for the drop in sales of reimbursed medicines at pharmacies was the lower level of reimbursement resulting from a reduced funding limit for many product groups. People with diseases such as diabetes, asthma, chronic obstructive pulmonary disease or vascular system diseases have been most affected by this change.

5. Structure of Total Pharmaceutical Expenditure – International Comparisons

In the next part of the study, we analyse the level and structure of pharmaceutical expenditure in European OECD countries and the USA.

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Table 5 presents the share of pharmaceutical expenditure in health expenditure in OECD countries in 2005–2016.

Countries	2005	2010	2016
Austria	13.2	12.2	12.0
Belgium	17.1	15.8	14.7
Czech Republic	25.7	20.4	17.4
Denmark	8.6	8.1	6.6
Estonia	24.0	20.5	19.0
Finland	16.1	13.5	12.5
France	17.6	15.7	13.9
Germany	15.2	15.0	14.3
Greece	22.3	28.6	26.3
Hungary	31.3	33.3	28.8
Ireland	15.5	14.8	12.8
Italy	20.4	18.8	17.7
Latvia	22.6	25.8	28.3
Lithuania	34.3	26.7	27.2
Luxembourg	10.2	9.8	8.6
Netherlands	11.1	9.8	7.8
Norway	9.7	7.7	7.6
POLAND	**29.8**	**24.3**	**20.7**
Portugal	22.1	19.3	15.1
Slovakia	33.3	29.2	26.1
Slovenia	21.3	19.9	18.3
Spain	20.7	18.2	19.1
Sweden	13.9	13.3	9.8
Switzerland	–	14.2	13.8
United Kingdom	–	12.0 (2013)	11.4
USA	12.5	11.9	11.9

Tab. 5. Pharmaceutical expenditure as % of healthcare expenditure in European OECD countries and the USA in 2005–2016. Source: prepared by the authors of this paper based on the OECD Data site. Retrieved on 25 August 2018 from https://data.oecd.org/healthres/pharmaceutical-spending.htm.

The analysis of the data in Table 5 allows us to conclude that the share of pharmaceutical expenditure in health expenditure of individual OECD countries in 2005–2016 varied widely and ranged from a few to over 30 per cent.

The highest share (20–30%) was characteristic of post-socialist countries in Eastern and Central-Eastern Europe: Lithuania, Latvia, Slovakia, the Czech Republic, Poland, Estonia, Slovenia and Greece. The lowest share was typical of highly developed countries: Denmark and Norway (less than 10%), Luxembourg and the Netherlands (in 2010–2016 also below 10%).

A vast majority of the analysed OECD countries was seen to follow a clearly downward trend in the share of pharmaceutical expenditure in health expenditure, with the decline of as much as several percentage points. Among these countries was Poland, where this ratio went down from almost 30% in 2005 to 24.3% in 2010 and to 20.7% in 2016 (decrease by over 9 percentage points).

Table 6 presents the structure of total pharmaceutical expenditure in 2015 (or the nearest year), as broken down into: public funding, private funding – direct out-of-pocket expenditure by household and voluntary health insurance as well as other sources of financing.

	Public expenditure (compulsory insurance and state budget)	**Voluntary health insurance**	**Current out-of-pocket expenditure**	**Other**
Germany	83.9	0.2	15.7	0.2
Luxembourg	80.2	7.2	12.6	0.0
Ireland	74.6	0.0	25.4	0.0
France	70.9	12.2	17.0	0.0
Slovakia	70.7	0.0	29.3	0.0
Belgium	69.2	0.1	30.6	0.1
Austria	68.4	0.6	30.9	0.0
United Kingdom	67.4	0.0	32.6	0.0
Netherlands	64.8	1.3	33.9	0.0
Italy	62.5	0.0	37.5	0.0
Czech Republic	59.5	0.0	40.5	0.0
Spain	59.3	0.0	40.7	0.0

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	Public expenditure (compulsory insurance and state budget)	Voluntary health insurance	Current out-of-pocket expenditure	Other
Norway	58.0	0.0	42.1	0.0
OECD 30	**56.8**	**4.4**	**38.6**	**0.2**
Finland	55.5	0.5	44.0	0.0
Switzerland	54.8	5.1	40.1	0.0
Portugal	54.7	1.2	44.0	0.0
Greece	51.7	0.0	48.3	0.0
Estonia	51.4	0.0	48.3	0.2
Sweden	51.3	0.0	48.7	0.0
Hungary	50.6	4.2	45.2	0.0
Slovenia	49.5	26.5	24.0	0.0
Denmark	43.7	5.7	50.6	0.0
Iceland	38.1	0.0	57.6	4.3
USA	36.5	34.4	29.1	0.0
Latvia	35.0	0.2	64.8	0.0
POLAND	**34.1**	**0.0**	**65.7**	**0.2**

Tab. 6. Structure of total pharmaceutical expenditure in European OECD countries and the USA (2015 or nearest year). Source: OECD Health Statistics 2017. Health at a Glance 2017: OECD indicators – © OECD 2017. Retrieved from https://www.health.gov.il/publicationsfiles/healthataglance2017.pdf.

The countries presented in Table 6 are ranked according to the decreasing share of public funding in pharmaceutical expenditure. Poland took the last place in the ranking, with only about 34% of the value of transactions on the pharmaceutical market financed from public funds (the scale of reimbursement of medicines); almost 66% of the value of purchased medicines was privately funded – i.e. direct out-of-pocket expenditure by households. A similar situation occurred in Latvia.

In the USA, public financing covered only 36.5% of the value of purchased medicines, but in this country almost 35% of the value of medicines was financed from voluntary health insurance, and direct out-of-pocket expenditure by households accounted for approx. 30% of the value of medicines.

At the top positions in the ranking, with over 80% share of public funding in the value of purchased medicines were: Germany (almost 84%) and Luxembourg (80.2%); almost 75% share of public funding of medicines was reported in Ireland, and just over 70% – in France and Slovakia.

In some OECD countries, in addition to out-of-pocket expenditure, voluntary health insurance plays an important role in financing medicines from private funds. This group of countries includes: USA (almost 35% share in total pharmaceutical expenditure), and among European countries – Slovenia (26.5%), France (12.2%) and Luxembourg (over 7%).

Figure 3 shows the share of direct out-of-pocket expenditure in total pharmaceutical expenditure in 2009 and 2015.

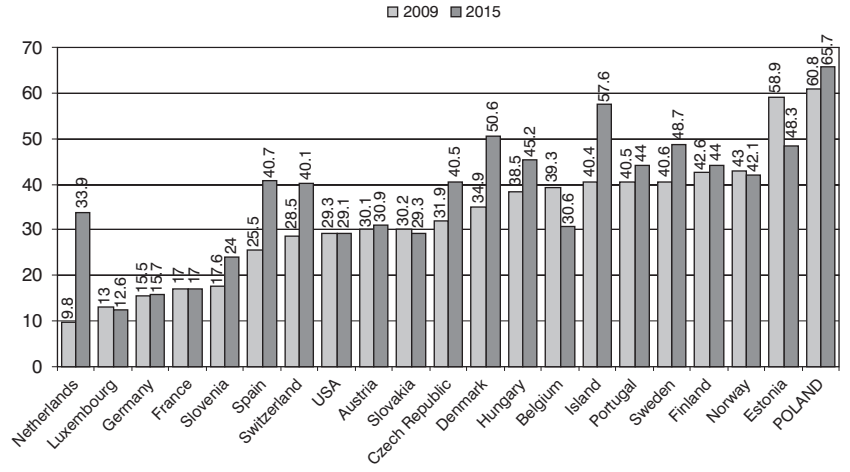

Fig. 3. Out-of-pocket expenditure as a share of total pharmaceutical expenditure in OECD countries in 2009 and 2015 (%). Source: prepared by the authors of this paper based on: 2009 – Health at a Glance 2011; OECD indicators; OECD 2011; 7.4.2. Out-of-pocket expenditure as a share of total pharmaceutical expenditure, 2009 (or nearest year). Retrieved on 25 August 2018 from https://www.oecd.org/els/health-systems/49105858.pdf; 2015 – Health at a Glance 2017; OECD indicators; OECD 2017; 10.1. Expenditure on retail pharmaceuticals[1] by type of financing, 2015 (or nearest year).Retrieved on 25 August 2018 from https://www.health.gov.il/publicationsfiles/healthataglance2017.pdf.

Comparing the data from 2009 and 2015 in a figure, we attempted to determine whether in these few years, including the period of the global financial crisis, there was a change in the pharmaceutical policy of the OECD member countries.

The analysis of the data allows for concluding that the method of financing medicines changed significantly in some European OECD countries in the period from 2009 to 2015. In many cases, the share of private funding (so-called direct out-of-pocket expenditure) grew considerably. The

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increase was reported in both highly developed countries: the Netherlands – growth in the share of direct out-of-pocket expenditure from 9.8% in 2009 to 33.9% in 2015 (the most dramatic increase in the share of private financing by over 24 percentage points), Spain (increase from 25.5% to 40.7%), Switzerland (rise from 28.5% to 40.1%), Denmark (increase from 34.9% to 50.6%) or Sweden (growth from 40.6% to 48.7%); but also in post-socialist countries, which are at a much lower level of socio-economic development: the Czech Republic (growth from 31.9% in 2009 to 40.5% in 2015) and Poland (increase from 60.8% to 65.7%).

In the analysed period, a decline in the share of direct out-of-pocket expenditure in total pharmaceutical expenditure was recorded only in Belgium (from 39.3% in 2009 to 30.6% in 2015) and in Estonia (from 58.9% to 48.3%).

It should be noted that in 2009, and in 2015 alike, Poland was marked by the largest share of direct out-of-pocket expenditure in total pharmaceutical expenditure among the 21 OECD countries under analysis.

6. Conclusion

The considerations contained in this study show that the entry into force of the Reimbursement Act in Poland in 2012 has increased the burden placed on the society in connection with the expenditure on the purchase of medicines – the rate of the so-called co-payment went up.

However, it should be remembered that the beginning of the second decade of the 21st century was the time marked by a global economic crisis and individual countries' attempts to recover from this crisis. Publications by various authors describing changes in the structure of financing the expenditure on pharmaceuticals in individual countries (Kujawska, 2016; Leopold et al., 2014; Vogler, Zimmermann, Leopold, & Joncheere, 2011) allow for formulating a thesis that **increasing the burden placed on the society in connection with the purchase of medicines is a common practice when European economies emerge from an economic crisis.**

Authors analysing the principles of pharmaceutical policy in European countries put forth a thesis that although the prices of pharmaceutical products in Western Europe are higher than in Eastern Europe, more medicines are subject to reimbursement there and the rate of reimbursement is higher (Vogler et al., 2008). In Eastern European countries, we observe a relatively high and often growing share of private financing (including subsidies for prescription medicines); also, we note that reimbursed medicines are selected in an ineffective manner, which – in the absence of voluntary health insurance – sometimes leads to the necessity for patients to withdraw from purchasing the medicine due to their inability to incur excessive expenses (Xu, Evans, Carrin, & Aguilar-Rivera, 2005).

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