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THE IMPACT OF THE BANKING SECTOR CRISIS UPON THE UKRAINIAN INVESTMENT FUND MARKET

WPŁYW SEKTORA BANKOWEGO NA RYNEK FUNDUSZY INWESTYCYJNYCH NA UKRAINIE

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Summary: This study is an attempt at evaluating the impact of the banking sector crisis of 2014-2016 upon the Ukrainian market of investment funds. The analyses cover a period between 2004 and the 2nd quarter of 2016, to illustrate the trend of changes observed on the market under study. The main focus of research was placed on platforms shared between the banking sector and the investment fund sector, such as the investment of free fund assets in bonds and shares issued by banking institutions or the use of financial instruments targeted to specific investor groups). Based on the findings, it may be concluded that the force of the systemic crisis' impact upon the market of investment funds was related to the type of investment funds under examination. The effects of the sector's decline were clearly reflected in the operation of open-end funds and interval funds, as evidenced by sizeable reductions of both their net assets and rates of return. For other types of investment funds, the researchers found no evidence of any impact in this respect.

Keywords: mutual funds, banking sector, banking sector crisis.

Streszczenie: Celem artykułu jest sprawdzenie, czy kryzys sektora bankowego z okresu 2014-2016 miał wpływ na rynek funduszy inwestycyjnych na Ukrainie. Badaniem objęto okres od 2004 r. do II kwartału 2016 r., aby pokazać zmiany, jakie nastąpiły na rynku funduszy inwestycyjnych. Uwagę badawczą skupiono na płaszczyznach łączących sektor bankowy i fundusze inwestycyjne (lokowanie nadwyżek pieniężnych funduszy w bankach, inwestycje funduszy w akcje i obligacje banków oraz oferowanie instrumentów finansowych tej samej grupie inwestorów). Na podstawie uzyskanych rezultatów można stwierdzić, że siła oddziaływania kryzysu sektora bankowego na fundusze inwestycyjne była uzależniona od rodzaju funduszu. Osłabienie sektora bankowego wpłynęło na część funduszy inwestycyjnych (otwartych i *interval*), powodując obniżenie wartości aktywów netto i stóp zwrotu. Na działalność pozostałych funduszy kryzys bankowy nie miał wpływu.

Słowa kluczowe: fundusze inwestycyjne, sektor bankowy, kryzys sektora bankowego.

1. Introduction

From the beginning of the investment fund operation in Ukraine (1994) up to the early 2001, the local market was populated solely by privatisation funds, designed as vehicles for investment in state-owned companies under privatization [Noel et al. 2006, p. 42]. In March 2001, new regulations were introduced to replace privatisation funds with investment funds. All the existing privatisation funds were obliged to transform into investment funds or conclude their operation within the next two years. With the inclusion of the above transitory period, the effective introduction of the earliest investment funds on the market took place as late as the second half of 2003. Over the next few years, the development of the market under study was hampered by a number of external factors, such as the stock exchange crisis (2006), the global financial crisis of 2008-2009 and the resulting economic decline, and the banking sector crisis of 2014-2016.

Presented research was preliminary and their main purpose was to evaluate the impact (if any) of the recent crisis of the banking sector upon the Ukrainian market of investment funds 2014-2016. The focus on the problem at hand was based on the ostensibly dominant position of the banking sector in the overall structure of the Ukrainian financial market (with more than 90% share in the market being held by banking institutions). The choice of research problem was also dictated by the specificity of the Ukrainian banking sector structure, and the apparent lack of in-depth analyses in this area. At present, the marked majority of foreign banks operating in Ukraine are associated with large capital groups which are fairly competent in combining their banking and asset management operations on foreign markets (including direct involvement in the investment fund markets). In addition, the wealth of available research on the Ukrainian market of investment funds seem to focus mainly on the principles of the investment fund market operation and the perspectives for its development [Kaminskyi, Lomovatska 2011; Bundzylo 2013; Shevchenko 2014; Stognuhin 2014; Legenchuk, Usatenko 2016].

The next section provides broad characteristics of the Ukrainian banking sector, with particular emphasis on the number of banking agents in operation and the volume of deposits held by non-financial companies and households. This is followed by the presentation of various legal formulas used in the construction of the investment funds in operation, and the basic structure of investment fund results obtained over the period between 2004 and the 2nd quarter of 2016. The third section of this paper presents results of analyses of changes in the structure of investment fund deposits and their associated returns, with particular emphasis on the impact of the banking sector upon the changes under examination. The final section presents an overview of the findings and research conclusions.

2. The structure and the volume of the Ukrainian banking sector

The Ukrainian banking sector is a two-layer construct, consisting of the central bank (the National Bank of Ukraine) and a number of commercial banking institutions. In the years 1991-2000, the access to the Ukrainian banking system was restricted to domestic companies, as dictated by the formal modernisation strategy. Foreign capital was invited to participate in the sector in the second half of 2001. The bulk of foreign mergers and acquisitions took place in the period 2004-2006 [Stępień 2008, pp. 132, 133].

The recent development of the Ukrainian banking sector can be segmented into two distinct stages (Table 1).

Table 1. Number of banks, bank's assets and deposits of household and non-financial corporations

Year	Number of banks			Bank's assets (bln UAH)	Deposits (bln UAH)		
	Active	Insolvent	Liquidated		Total	Non-financial corporations	Households
2004	160	n/a	44	n/a	77	34	43
2005	165	n/a	18	n/a	127	51	76
2006	170	n/a	15	n/a	175	65	110
2007	175	n/a	9	599	265	96	169
2008	184	n/a	13	926	338	118	220
2009	182	n/a	13	880	311	95	216
2010	176	16	6	942	393	116	277
2011	176	18	11	1 054	466	153	313
2012	175	17	6	1 127	545	173	372
2013	180	14	6	1 278	620	180	440
2014	147	16	21	1 317	637	219	418
2015	117	3	64	1 254	677	266	411
2q 2016	102	8	74	1 283	721	299	422

Source: own composition based on [Barisitz, Fungáčová 2015, p. 82] and National Bank of Ukraine data.

The first stage, covering the years 2004-2009, is characterised by the rapid increase in the number of banking agents in operation (with the record figures of 2008 showing as many as 184 banking institution in operation). The second stage, from 2010 to 2016, is marked by a steady reduction in the number of agents (data for the 2nd quarter of 2016 show upward of 100 banks in operation). A significant increase in the number of insolvencies and liquidations was observed in the banking sector between 2014 and the 2nd quarter of 2016. For the sake of comparison, in the period 2005-2013, the annual average was in the range of 10 bank liquidations, while in 2014, the number reached 21. In the first two quarters of 2016, liquidations affected an exorbitant number of 74 banking companies. Despite this drastic reduction of banking institutions, the total volume of banking assets follows a steady rising trend. This effect can be attributed to two factors. Firstly, the liquidations were, for the most part, observed among the smallest banks, representing a marginal share in the market. According to calculations conducted by Rashkovan and Kornyliuk [2015, p. 35], the market shares of both the 10 and 25 largest banks of the Ukrainian banking sector in the period 2004-2015 has increased by 17 percentage points, up to the level of 72% and 89%, respectively, at the end of 2015. The second factor is related to the foreign banks' involvement in the sector. At the end of 2011, the foreign banks' share in total banking assets was 42% (53 banks) [Lyutiy, Borovikova 2013, p. 68]. In the 2nd quarter of 2016, the share dropped to 33% (25 banks).

The asset volume increase was accompanied by a sizeable increase in the value of deposits held by households, observed up to the year 2013. Over the next two years, this value dropped significantly, possibly in response to the rising number of bank liquidation and the associated fear of losing one's savings. This was followed by another rise in the volume of deposits, as evidenced by 2016 data.

3. The structure and the volume of the Ukrainian market of investment funds

While most countries adopt a formal division into open-end, close-end, and specialised funds, the Ukrainian structure follows a more complex approach. Under the pending regulations of the Law on Collective Investment Institutions of 2013, market entities are classified based on their legal and organisational formula, duration, and the level of asset diversification. Investment funds are authorised to conduct their operation solely in the form of Unit Investment Funds (UIF) or Corporate Investment Funds (CIF), in either of the following formulas: open-end, interval, and closed-end funds.

Funds of the open-end and interval type are authorised to invest in various asset classes at a medium-to-high level of diversification (open-ended diversified, and interval diversified, respectively) or concentrate on a specific class of assets (open-ended specialised and interval specialised). Closed-end funds, on the other hand, may choose to diversify their investments (closed-end diversified) or adopt a strategy of non-diversification. With the latter scenario, they are also required to evaluate the associated risk level. If the adopted strategy is evaluated as low-risk, they are classified as closed-end non-diversified non-venture; if the estimates are high, they are classified as closed-end non-diversified venture.

The asset management market, similarly to the market of banking services, is dispersed and populated by a legion of entities (Table 2). Reports for the first half of 2016 present more than a thousand funds in operation, and under the management of 304 asset management companies (AMCs). Of the entire UIF segment, only six companies represented more than 5% of market share, with the remaining 46 companies ranked between 0 and 4.5%, with 35 of the latter ranked below 1% threshold. The dispersion is even more pronounced in the CIF segment of the market;

Table 2. Number of asset management companies (AMCs) and investment funds

Year	Number of AMCs	Total	Unit Investment Funds								Corporate Investment Funds			
			O*	I	CD	CNN	CV	Os	Is	All	I	CNN	CV	All
2004	88	29	0	6	0	0	20			26	0	1	2	3
2005	159	105	1	17	1	6	68			93	0	4	8	12
2006	228	284	4	19	3	20	199			245	0	20	19	39
2007	334	519	10	25	3	29	377			444	0	42	33	75
2008	409	888	32	41	4	22	636			735	1	107	45	153
2009	380	985	32	47	8	26	690			803	2	130	50	182
2010	339	1 095	36	48	9	32	755			880	2	141	72	215
2011	341	1 125	43	40	10	35	772			900	2	128	95	225
2012	353	1 222	41	38	13	45	829			966	2	110	144	256
2013	347	1 250	38	35	11	43	861			988	2	90	170	262
2014	336	1 188	26	29	10	35	846	4	1	951	2	75	160	237
2015	313	1 147	21	22	9	31	803	5	2	893	2	65	189	254
3q 2016	304	1 135	17	22	6	32	785	6	3	871	1	61	202	264

* O – Open-ended diversified, I – Interval diversified, CD – Closed-end diversified, CNN – Closed-end non-diversified non-venture, CV – Closed-end non-diversified venture, Os – Open-ended specialized, Is – Interval specialized.

Source: own composition based on Ukrainian Association of Investment Business data.

Table 3. Net Asset Value of investment funds (bln UAH)

Year	Open-ended	Interwal	Closed-end (ex. venture)	All funds (ex. venture)	Venture	Total
2004	3	24	89	116	1 407	1 523
2005	28	31	341	400	4 498	4 898
2006	62	41	1 079	1 183	12 744	13 926
2007	463	242	2 415	3 120	36 452	40 780
2008	517	182	3 355	4 054	50 557	54 611
2009	234	248	5 430	5 912	66 662	72 574
2010	281	245	7 776	8 302	86 439	94 741
2011	227	182	8 625	9 034	103 657	112 691
2012	161	156	9 446	9 762	129 498	139 261
2013	103	122	8 318	8 544	149 881	158 424
2014	60	108	10 199	10 367	170 038	180 405
2015	55	88	9 810	9 952	189 909	199 861
2q 2016	54	58	9 115	9 227	200 475	209 702

Source: own composition based on Ukrainian Association of Investment Business data.

with only one company reporting their net assets in the vicinity of 7% of the entire CIF assets in circulation. Market shares of the remaining 251 entities were below the 1.5% threshold.

The dominance of venture-type funds has been observed from the onset of investment fund operation in Ukraine, both in terms of total assets held, and in the number of entities. As per the second quarter of 2016, most of the investment funds active on the Ukrainian market were classified as closed-end non-diversified venture funds (86% of the total number of entities). Closed-end non-diversified non-venture funds (8%) were the second most populated group.

This structure of representation corresponded with the structure of proportionate net asset value held. Over the whole period under study, nearly all of total net assets on the market were held by venture-type funds (with a yearly average of 93%, Table 3). Venture-type funds were also the only segment showing a steady year-by-year asset increase. Other types of funds offered temporary asset increases, followed by reductions. For example, after a period of systematic increase between 2004 and 2008, open-end funds have registered a steady decrease of net assets from 2009 up to the present.

4. The crisis of the banking system and its impact upon the market of investment funds

The most fundamental aspect of investment fund operation is the management of deposits invested in various asset classes, in line with the formally adopted strategy of investment. Any available surplus of monetary assets is typically held in the form of banking deposits and accounts. Another element of fund operation bearing close associations with the banking sector is the use of shares and bonds issued by banking institutions – these are utilised by investment funds as a form of capital investment. Another overlapping area is the use of financial instruments addressed to specific investor groups. Close examination of those three areas can provide some insight into the character and the force of the impact effected by the recent crisis of the banking sector (2014-2016) upon the operation of the Ukrainian asset management market.

Close associations between the asset management market and the banking sector can only be observed for open-end and interval funds, as evidenced by their reported portfolio structure. Those two types of investment funds maintain ca. 20% and 15% of their net assets, respectively, in the form of banking accounts or deposits (Figure 1). Closed-end funds show even less involvement in the available range of banking services (12%). Venture-type funds are the most reluctant segment in this respect, showing only marginal involvement in the use of banking services (1.5%).

At this point, it may be useful to emphasise the reported changes in the level of investment fund assets kept with the banking sector. Up to 2013, and in line with the required level of asset liquidity, the open-end funds were found to keep ca. 30%

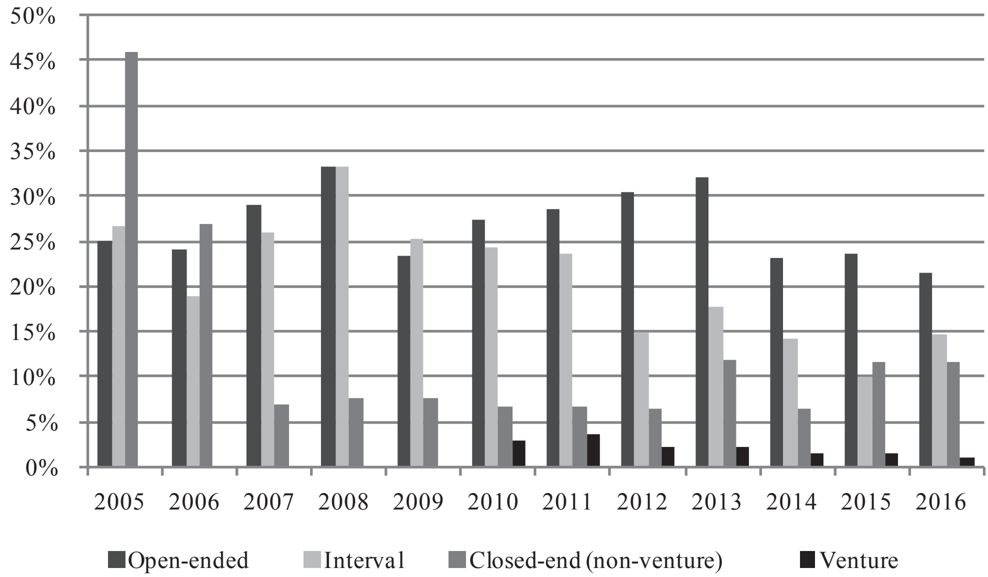

Figure 1. The share of assets held on banking accounts and deposits in the overall structure of investment fund portfolios

Source: own composition based on Ukrainian Association of Investment Business data.

of their net assets on banking accounts. As per the second quarter of 2016, this value has decreased by 10 percentage points (down to 20%). Even more pronounced decrease was observed for the interval-type funds – from 30% down to 15%. In this context, the decrease registered for closed-end funds comes as no surprise (from 46% in 2005 down to 12% in the 2nd quarter of 2016). One of the most characteristic features of the latter is the long-term portfolio strategy, supplemented by heavy use of banking deposits as forms of capital investment in the early stages of their development.

According to reports by the Ukrainian Association of Investment Business (UAIB), in 2014 and 2015, investment funds were found to have kept 0.348% and 0.001% of their total net assets, respectively, with non-solvent or liquidated entities of the banking sector (Table 4). Comparing the 2015 data against that of 2014, it may be noted that the funds under examination were fairly fast in their response to the risk of their banking partners falling into insolvency or liquidation (a reduction of 97%, from UAH 79.1 m down to 2.36 m). This trend is expected to continue in 2016.

The dynamic changes on the local market of banking services have had the effect of hampering the realisation of the investment strategies adopted by asset management companies. The continued decline of the banking sector was a strong stimulus for the funds to reduce their involvement in shares and bonds issued by banking institutions. The share of banking securities in the overall net asset structure of all types of funds

Table 4. Portion of net assets held by investment funds in non-solvent and liquidated entities of the banking sector in 2014-2015 (% NAV all funds)

Funds	Bank deposits		Bank current account		Bank bonds		Bank equities		Total	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Open-ended	0.042	0.000	0.002	0.000	0.000	0.000	0.027	0.011	0.071	0.011
Interval	1.180	0.000	0.602	0.001	0.000	0.000	0.000	0.000	1.241	0.001
Closed-end (ex. venture)	0.540	0.000	0.002	0.000	0.002	0.001	0.005	0.000	0.548	0.001
Venture	0.202	0.001	0.133	0.000	0.001	0.000	0.007	0.000	0.343	0.001
All	0.223	0.001	0.125	0.000	0.001	0.000	0.007	0.000	0.35	0.001

Source: own composition based on Ukrainian Association of Investment Business data.

has followed a steady decline path since 2008, and is now found only in selected few portfolios (as per the 2nd quarter of 2016). This trend may be stimulated not only by the worsening results of the banking sector, but also by the apparent reduction of their issue. On the other hand, reports of the share of securities in the total net assets for the period of 2014-2016 are only available in condensed format, and cannot be analysed in detail. It may be assumed that the managers of the open-end, interval, and close-end funds were fairly fast in reducing their involvement in security-type instruments, just as they had been seen to do during the earlier economic downturn (January 2008 – January 2009). In that period, the share of banking securities in total net assets held by funds represented a mere 14% of all assets invested in shares. In the 1st quarter of 2009, this share increased to 20%, and up to 25% in the subsequent quarter. With venture-type funds, the share of banking securities in their portfolio structures remained constant for the entire period of 2010 to 2016 (at 10% of total investment).

Interesting conclusions may be drawn from the comparison of investment from households and non-financial companies against total net assets held by the various types of funds. During the wave of bank liquidations, the value of banking deposits rose – an apparent paradox. Throughout the year 2015, the increase was from UAH 44bn in the 1st quarter of 2016 up to UAH 84bn, corresponding with a net asset increase by UAH 19bn and 10bn, respectively. It must be noted that the net asset value increase was only observed in venture-type funds. Other types of funds registered NAV decreases. According to the UAIB reports, the NAV decreases observed in open-end and interval funds was related to asset withdrawals by individual investors, with the reported low quarterly return rates (mostly negative) considered to be the most decisive factor behind such decisions (Figure 2).

Asset withdrawals have forced fund managers to reach for premature monetarisation of large portions of their assets, to the effect of continued and aggravated decline of their return rates. The coincident local stock market decline

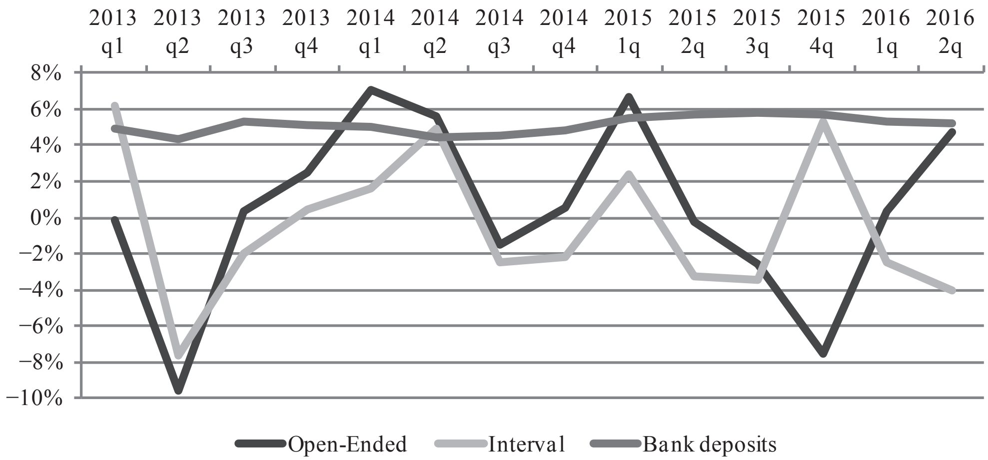

Figure 2. Rates of returns of investment funds and bank deposits

Source: own composition based on Ukrainian Association of Investment Business data.

was another important factor of impact upon the rates of return offered by investment funds (this aspect goes well beyond the research scope of this paper). Banking institutions, in turn, despite their problems, were able to control the return rates of their deposits held in UAH (an average of 5.5%). In addition, their strife for new deposits was supported by the novelisation of statutory regulations of the Household Deposit Guarantee Fund and the associated increase of asset return thresholds in case of liquidation.

5. Conclusions

Based on analyses conducted in the course of this research, it may be concluded that the crisis of the Ukrainian banking sector (2014-2016) was of indirect impact upon the operation of investment funds in Ukraine. Fund operators were fairly effective in their predictions of banking risks, and managed to withdraw their assets in time to avoid the wave of bank liquidations. It must be emphasised at this point that the impact of the banking sector crisis is only observed with selected types of investment funds. The venture-type entities were able to continue their operation as before, without any significant disturbances. Their limited involvement with the banking sector allowed them to maintain a steady year-by-year increase of net asset value, irrespective of the changes taking place in the banking sector.

In contrast to the above, the impact of the Ukrainian banking sector crisis was fairly pronounced in the case of open-end and interval funds, and decidedly less pronounced in the case of closed-end funds, as evidenced by sizeable decreases of their respective net asset values and return rates. In the author's opinion, this trend can be attributed to the following: the market rates of banking deposit returns, a decline of stock rentability and risk, and the increase in the risk of investments in banking securities. Lastly, the above effect may also be attributed to the recent wave of withdrawals from both types of funds, mostly due to the inadequate (or even negative) return rates offered by those institutions, particularly in contrast with the ostensibly higher return rates offered by banking deposits.

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