

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Dolgikh, Tatiana

### Article

## IFRS Adoption and the Financial Statements Comparability: The Case of Russia and Canada

European Financial and Accounting Journal

**Provided in Cooperation with:** Faculty of Finance and Accounting, Prague University of Economics and Business

*Suggested Citation:* Dolgikh, Tatiana (2022) : IFRS Adoption and the Financial Statements Comparability: The Case of Russia and Canada, European Financial and Accounting Journal, ISSN 1805-4846, Prague University of Economics and Business, Faculty of Finance and Accounting, Prague, Vol. 17, Iss. 1, pp. 7-24, https://doi.org/10.18267/j.efaj.265

This Version is available at: https://hdl.handle.net/10419/297906

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



WWW.ECONSTOR.EU

https://creativecommons.org/licenses/by/4.0/

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Tatiana Dolgikh\*

#### Abstract:

The effect of International Financial Reporting Standards (IFRS) adoption on the level of financial statements comparability was investigated for Russia in the current article. Canada was chosen for comparison due to the close time frame of IFRS adoption, which also allowed comparing the influence of IFRS adoption for both types of economies – well developed and emerging. Initial sample selection had been created from 23 companies that are presented on the stock exchange markets of the particular countries. Each sample contains semi-annual data for four years of the preadoption period (2008 to 2011 for Russia, 2007 to 2010 for Canada) in which companies use their home country accounting standards and four years of the postadoption period (2012 to 2015 for Russia, 2011 to 2014 for Canada) in which companies use IFRS standards. The research was performed on the country level and industry level for both countries. Two measures had been used for the research: earnings-return regression and earnings-cash flow regression. The overall result of the study shows that the application of IFRS improved information comparability between companies only in Canada, while the same was not the case for Russian companies and the cross-country comparability. However, the study confirms an increase in the comparability level in the post-adoption period in such industries as Energy and Basic materials not only between companies inside of the given country but on the cross-country level as well.

**Keywords:** IFRS; Comparability; Russia; Canada. **JEL classification:** M41: M42.

### **1** Introduction

The importance of understanding financial information at the global level led to the creation of unified accounting standards. Nowadays there are two globally recognised sets of accounting standards: International Financial Reporting Standards (IFRS) and the U.S. Generally Accepted Accounting Principles (US GAAP). Currently, the use of IFRS standards is required in more than 140

<sup>\*</sup> Tatiana Dolgikh; Prague University of Economics and Business, Faculty of Finance and Accounting, Department of Financial Accounting and Auditing, Winston Churchill Square 1938/4, 130 67 Prague, Czech Republic, <tatiana.dolgikh@vse.cz>.

The article is processed as an output of a research project *The impact of the implementation of hedge accounting under IFRS 9 on the firm market value* registered by the Internal Grant Agency of Prague University of Economics and Business under the registration number F1/3/2022.

jurisdictions and permitted in many parts of the world including the European Union, Australia, Canada, Korea, Brazil, Russia, India, Malaysia, and others (IFRS Foundation, 2021a). The main purpose of IFRS is to bring transparency, accountability and efficiency to financial markets around the world. It means that adoption of the standards should increase the comparability of accounting information provided by different market sides.

Strong commitments to IFRS may promote the development of security markets, which may serve as an internal motivation for the adoption, especially in emerging countries (Ben Othman and Kossentini, 2015). Furthermore, institutional theory and resource dependence theory suggest that countries whose economic models depend highly on resources trading (regardless of whether exporting or importing) are more likely to adopt global reporting standards (Alon and Dwyer 2014). Both these factors can be highly relevant in the case of Russia. In recent years, despite some political issues and sanctions, Russia remains one of the biggest EU's trading partners and takes the fifth place, representing 4.8% of the EU's total trade in goods in 2020. Total trade in goods between the EU and Russia in 2020 amounted to EUR 174.3 billion. The EU is the largest investor in Russia. According to the European Commission data, the level of the EU foreign direct investments in Russia amounted to EUR 311.4 billion. It is very important to have the correct picture of one's partner's financial condition and be sure that the information in financial statements is transparent and efficient.

The main objective of this article is to examine whether the application of IFRS by the Russian companies has increased the comparability of financial statements not only on the country level but on the cross-country level as well. Canada was chosen for the study comparison due to the close time frame of its IFRS adoption, the close structure of the companies represented on stock markets, and the ability to compare the influence of IFRS adoption for both well developed and emerging economies.

In Russia, IFRS standards became mandatory for the filing of consolidated financial statements by domestic and foreign companies in 2012. Following the requirements of the federal law N208-FZ, all credit and insurance organisations and other organisations whose securities are traded on the stock exchanges and other securities markets must since January 2012 provide consolidated financial statements in compliance with IFRS along with reports prepared according to national financial reporting standards. Small and medium-sized enterprises (SMEs) currently use accounting standards issued by the Ministry of Finance (IFRS Foundation, 2021b).

As of January 1, 2011, IFRS became mandatory to use in Canada for publicly accountable enterprises as defined in the Handbook of Canadian Institute of Chartered Accountants (CICA Handbook). IFRS for SMEs is prohibited. Private enterprises have the option of applying either IFRS or the accounting standards for

private enterprises – ASPE (IFRS Foundation, 2021c). In this article, the level of comparability of financial statements was measured both for the pre-IFRS and the post-IFRS application periods for both countries on the internal and cross-country level.

The article is structured as follows. The introduction outlines the article's goal and then the literature review describes basic literature. The research design section provides data and proposes the research questions. The result and discussion contain the main findings of the article and the final section concludes.

### 2 Literature Review

The comparability of financial information enables users to identify and understand similarities in, and differences among, the items (IASB's Conceptual Framework, Section QC22). Different empirical studies showed that financial statement comparability reduces information asymmetry, improves analyst forecast accuracy (De Franco *et al.*, 2011), allows the companies to increase innovative efficiency through their better ability to predict future cash flows (Chircop *et al.*, 2020) and even makes better acquisition decisions (Chen *et al.*, 2018).

The measure of financial statement comparability, based on the idea developed by De Franco *et al.* (2011) that a given set of economic events allows companies with comparable accounting systems to produce similar financial statements, can be considered the main model in this type of research. The study was performed on the US companies. Two measures of accounting comparability (earnings-return regression and cash flow-return regression) and a test of their construct validity had been created. The study results provided evidence that comparability led to lower cost of acquiring information and increased quantity and quality of information available to an analyst about the company.

In a recent paper, Neel (2017) examined the comparability effect on 23 countries that mandatory adopted IFRS standards in 2005. There was used not only earnings-return and earnings-cash flow regression, but also accruals-cash flow regression. The study concluded that the comparability effect was larger in the countries with more transparent pre-IFRS reporting system and with domestic GAAPs that are closer to IFRS.

The influence of IFRS implementation on accounting comparability around the world had been studied on the example of developed and emerging markets. However, the results of such studies did not lead to a unified conclusion.

Papers focused on the European region started to appear following the mandatory IFRS adoption introduced in 2005. For example, in their study (based on 17 European countries), Yip and Young (2012) revealed that mandatory adoption of

IFRS standards improved information comparability across countries. Such improvement was noticed mostly among the companies from similar institution environments. Cascino and Gassen (2015) examined companies from Germany and Italy. It was found that companies with high compliance incentives to IFRS experienced a higher comparability effect. Experience of Spain, evaluated by Callao *et al.* (2007), showed that local comparability after IFRS adoption has decreased. According to the study, the comparability was affected by the use of IFRS and local accounting standards in the same country at the same time as well as by any significant difference between both sets of the standards. Comparison of the French and German companies by Liao *et al.* (2012) led to the conclusion that companies' earnings and book values were priced differently and they were not directly comparable in the years after mandatory IFRS adoption.

Examples of other developed markets can be illustrated by Canada, whereas as the result of IFRS adoption, Canadian financial statements became more comparable with the European and other IFRS adopters, but less comparable with the U.S. financial statements (Khan *et al.*, 2019). The experience of Japan was described by Mukai (2017). Many Japanese companies voluntarily adopted IFRS, what led to increased information comparability between IFRS companies in Japan and the EU member countries. However, the changes in comparability level among the Japanese companies were relatively small in comparison with the cross-country Japan/EU comparability level.

Emerging markets showed different types of conclusions as well. The earnings management study across the six largest Latin American economies (Argentina, Brazil, Chile, Colombia, Mexico, and Peru), made by Mongrut and Winkelried (2019) provided evidence against the belief that the adoption of IFRS can guarantee transparency. A separate study of Argentina (Roca, 2021) has adopted the Ohlson Model to examine the empirical association between equity prices and the two main accounting variables: Net Earnings and the Book Value of Equity. The study has failed to demonstrate any improvement of the tested variables. After the switch to IFRS standards, the accounting numbers presented a weaker association with the stock price. The case of Turkey (Temiz and Güleç, 2017) showed on the contrary positive effect of IFRS adoption, it was confirmed that accounting information produced under IFRS became more value relevant. The study of IFRS adoption in Iraq (Khdir and Bialek-Jaworska, 2020) provided evidence that mandatory IFRS adoption didn't improve financial information comparability

As far as it's known, there are no individual studies for Russia related to the comparability of financial information after IFRS adoption. Thus, this article aims to provide such a study. Additionally, investigated will be the possibility that IFRS adoption helped to improve the level of reporting comparability between the emerging (Russia) and developed (Canada) markets. Moreover, the current study in

addition focused on comparability level as per industry sectors. It allows making more complete conclusions.

In the context of the paper's objective, there is an interest in answering the following three main questions:

RQ1: Has the IFRS adoption increased the information comparability across companies in Russia?

RQ2: Has the IFRS adoption increased the information comparability across companies in Canada?

RQ3: Has the IFRS adoption affected the cross-country information comparability between Russia and Canada?

### 3 Research Design

### 3.1 Sample selection and data collection methodology

Initial sample selection had been created from the companies that are presented on the stock exchange of a particular country: Moscow Exchange (MOEX) for Russia and Toronto Stock Exchange (TMX) for Canada. Each sample should contain semiannual data for four years of the pre-adoption period in which companies use their home country accounting standards and four years of the post-adoption period in which companies use IFRS standards. Therefore, the pre-adoption period for Russia was 2008 to 2011 and the post-adoption period was 2012 to 2015. The pre-adoption period for Canada was 2007 to 2010 and the post-adoption period was 2011 to 2014.

Financial, insurance, and real estate companies were excluded from the sample due to special regulations according to which they perform their business activities.

The main limitations relate to the collection of data for the Russian companies. Originally, Thomson Reuters DataStream database had been used for both Canada and Russia. Unfortunately, the data related to Russia missed some semi-annual data or had data from various accounting standards (Local GAAP, IFRS, US GAAP) within the same financial period. MOEX database contains only common links to the official website of the given company without specification of a period, or to the Corporate Information Disclosure Center created by Interfax (independent Russian news agency). Thus, the Corporate Information Disclosure Center had been used for data collection for the Russian companies. The agency's portal contains all the information that listed companies are required to disclose.

From the total number of 1,000 companies listed in MOEX were excluded companies under special regulations as mentioned above, *i.e.* foreign companies and companies with missing financial statements (mostly disclosure center contains data from last ten years). Finally, all needed data had been collected for 23 companies

from different sectors, classified according to the industry markers from the Thomson Reuters DataStream database (Thomson Reuters, 2021), which are presented by the following industries:

- energy (coal, oil and gas, oil and gas-related services, renewable energy),
- basic materials (chemicals, metals and mining, construction materials, paper and forest products, containers and packaging),
- industrials (aerospace, machinery, equipment, construction and engineering, diversified trading and distributing, commercial services and supplies, air freight, airline services, marine services, transportation, ground),
- cyclical consumer goods and services (automobiles and parts, textile, homebuilding and construction supplies, household goods, hotels and entertainment services, media, retail),
- non-cyclical consumer goods and services (beverages, food and tobacco, personal and household products and services, food and drug retailing),
- healthcare (healthcare equipment and supplies, healthcare providers and services, pharmaceuticals, biotechnology and medical research),
- technology (semiconductors and semiconductor equipment, communications equipment, communications and office equipment, software and IT services),
- telecommunications services,
- utilities (electric utilities, natural gas utilities, water and other utilities, multiline utilities).

Due to the low number of companies in some of the sectors, it was decided to group these companies with the group name Trade, which includes such sectors as cyclical and non-cyclical consumer goods and services, healthcare, technology, industrials and telecommunication services.

The Canadian sample of companies was created on a pair-based principle with the close market capitalisation level and industry belonging as verified for the Russian companies. Tab. 1 shows the final sample selection from both countries.

	Numb	er of compar	nies in the in	Sample period		
Country	Energy	Basic materials	Utilities	Trade	Pre-adoption	Post-adoption
Russia	6	4	4	9	2008-2011	2012-2015
Canada	6	4	4	9	2007-2010	2011-2014

### Tab. 1 Sample selection

Source: Authorial computation.

#### 3.2 Background for comparability measures

According to the prior literature, accounting systems are comparable when similar economic events are reflected as similar accounting amounts in two different companies (De Franco *et al.*, 2011). This can be represented by Formula (1):

$$FS_i = F_i(EE_i),\tag{1}$$

where  $F_i()$  represents the accounting system of the company *i*;  $FS_i$  are the financial statements of the company *i*; and  $EE_i$  are economic events.

Following Formula (1), two companies with comparable accounting systems should record similar economic events in the same way and produce similar financial statements afterward.

Two measures had been used for the research. The first one is an earnings-return regression that is in line with De Franco *et al.* (2011) and represents the net effect of economic events on the companies' financial statements:

$$Earnings_{it} = \alpha_i + \beta_i Return_{it} + \varepsilon_{it}, \qquad (2)$$

where *Earnings* represent a proxy for financial statements from Formula (1) and can be calculated as the ratio of semi-annual net income before extraordinary items to the beginning of period equity. Stock return (*Return*) represents a proxy for a net effect of the economic events and can be calculated as the stock price return during the half-year. To detect the change in the stock price during the year was used data from yahoo! finance for a company on a local stock exchange. The subscript *i* represents the company *i* and the subscript *t* represents the period *t*. Formula (2) shows how investors' capital allocation decisions can influence the change in equity value (Neel, 2017).

Formula (2) was evaluated for each company of both countries by using eight semiannual data for pre- and post-IFRS application period. The next step represents the measurement of accounting comparability between the companies i and j. To estimate such comparability, the following assumption has been made: if two companies have been influenced by the same set of economic events, the more comparable accounting between them the more similar their financial statements should be. The company i's and the company j's accounting functions had been used to predict their earnings. To estimate the similarity between companies, the company i's earnings had been predicted by using its own function and the company j's function, with the same economic Return that can be presented as below:

$$E(Earnings)_{iit} = \hat{\alpha}_i + \hat{\beta}_i Return_{it}, \qquad (3)$$

$$E(Earnings)_{ijt} = \hat{\alpha}_j + \hat{\beta}_j Return_{it}, \qquad (4)$$

where  $E(Earnings)_{iit}$  is the predicted earnings of the company *i* by using the *i*'s function with the *i*'s return in the period *t*;  $E(Earnings)_{ijt}$  is the predicted earnings of the company *i* by using the *j*'s function and the *i*'s return in the period *t*.

It means that accounting comparability between the companies i and j,  $COMP_{ij}$  can be calculated as per Formula (5):

$$COMP_{ij} = -\frac{1}{8} \times \sum_{t=7}^{t} \left[ E(Earnings_{iit}) - E(Earnings_{ijt}) \right], \tag{5}$$

where  $COMP_{ij}$  represents comparability between the company *i* and *j*. Grater (less negative) value represents higher accounting comparability. This value was calculated for all the companies inside the particular industry both for the pre- and post-IFRS application period.

The second measure of comparability is in line with Barth *et al.* (2012) and represents earnings-cash flow regression that does not rely on market data, but create a mapping between the economic outcomes and accounting data. Prediction of the future cash flows gives to the company an opportunity to model an equity value and can be useful for capital allocations decisions (Neel, 2017):

$$Earnings_{it} = \alpha_i + \beta_i \, CF_{it+1} + \varepsilon_{it}, \tag{6}$$

where  $CF_{it+1}$  is the cash flow from operating activities during the half-year to the beginning of the period equity. For the collection of data for operating cash flows had been used statements of cash flows of the entity.

Formula (6) and the procedure described above had been used for accounting of the comparability level between the company i and j and allowed to calculate as follows:

$$COMPCF_{ij} = -\frac{1}{8} \times \sum_{t=7}^{t} \left[ E(Earnings_{iit}) - E(Earnings_{ijt}) \right], \tag{7}$$

where  $COMPCF_{ij}$  represents comparability between the company *i* and *j* in the similar way as it was presented above.

#### 4 Results and Discussion

As a result of all the calculations made, Tab. 2 shows descriptive statistics related to the companies' accounting and economic functions during the 8 semi-annual preadoption IFRS periods and the 8 semi-annual post-adoption IFRS periods separately. Data are presented for both countries and divided as per industry sector.

¥7	Variables ————————————————————————————————————					Post-adoption period					
Variables	Mean	SD	5%	Median	95%	Mean	SD	5%	Median	95%	
Russia, full	sample of	all compa	nies								
Earnings	0.1270	0.2547	-0.0419	0.0781	0.4989	0.0180	0.5871	-0.2704	0.0797	0.4274	
Return	0.0930	0.5956	-0.7565	-0.0079	1.3429	0.0787	0.2611	-0.3175	0.0745	0.5879	
CFO	0.0672	0.2518	-0.2420	0.0704	0.4075	0.0743	1.0328	-0.1012	0.1419	0.7597	
Russia, sam	ple of Basi	ic materia	ls industr	y							
Earnings	0.2191	0.2777	-0.0391	0.1171	1.0346	0.0898	0.1167	-0.2068	0.0959	0.2845	
Return	0.1155	0.5661	-0.8439	0.0063	1.2846	0.1300	0.2637	-0.2896	0.1006	0.6500	
CFO	0.0713	0.2067	-0.4517	0.0623	0.4775	0.2151	0.1837	0.0396	0.1503	0.6962	
Russia, sam	ple of Utili	ities indus	stry								
Earnings	0.0332	0.0779	-0.1661	0.0427	0.1354	0.0300	0.0950	-0.1747	0.0392	0.1615	
Return	0.2285	0.8320	-0.7498	0.0045	2.2033	0.0466	0.2681	-0.4934	-0.0859	0.4926	
CFO	0.0814	0.0523	-0.0002	0.0804	0.2074	0.1003	0.0627	0.0138	0.0920	0.2218	
Russia, sam	ple of Ene	rgy indus	try								
Earnings	0.1723	0.1240	0.0226	0.1455	0.4728	0.1186	0.0814	0.0031	0.0980	0.312	
Return	0.1008	0.4510	-0.7073	0.0975	1.2323	0.1465	0.1899	-0.1211	0.1097	0.587	
CFO	0.1166	0.1230	-0.1030	0.1101	0.3621	0.1933	0.1288	0.0430	0.1657	0.4824	
Russia, sam	ple of Tra	de industi	ry								
Earnings	0.0975	0.3327	-0.1796	0.0424	0.4717	-0.0863	0.9240	-2.8280	0.6580	0.580	
Return	0.0175	0.5682	-0.7522	-0.1284	1.3649	0.0663	0.2803	-0.3393	0.0683	0.662	
CFO	0.0260	0.3606	-0.3650	-0.0025	0.6086	-0.0792	1.6368	-2.6448	0.1729	1.0863	
Canada, ful	l sample of	f all comp	anies								
Earnings	0.0748	0.0638	-0.0809	0.0750	0.1654	0.0581	0.0770	-0.0844	0.0699	0.174	
Return	0.0386	0.1942	-0.3653	0.0209	0.3406	0.0556	0.1096	-0.1447	0.0564	0.243	
CFO	0.2113	0.1303	0.0637	0.1661	0.5366	0.2917	0.1767	0.1041	0.2293	0.715	
Canada, sai	nple of Ba	sic materi	ials indust	ry							
Earnings	0.3631	1.2639	-0.0449	0.0782	3.0883	-0.1210	0.2727	-0.7538	-0.0304	0.203	
Return	1.0364	5.5766	-0.5993	0.0310	12.325	-0.0819	0.3330	-0.5409	-0.1965	0.673	
CFO	0.2462	0.5298	0.0137	0.1191	1.4817	0.0202	0.2002	-0.4400	0.0613	0.349	
Canada, sai	nple of Uti	ilities indu	ıstry								
Earnings	0.0748	0.0638	-0.0809	0.0750	0.1654	0.0581	0.0770	-0.0844	0.0699	0.174	
Return	0.0386	0.1942	-0.3653	0.0209	0.3406	0.0556	0.1096	-0.1447	0.0564	0.243	
CFO	0.2113	0.1303	0.0637	0.1661	0.5366	0.2917	0.1767	0.1041	0.2293	0.715	

## Tab. 2 Descriptive statistics

Dolgikh, T.: IF	RS Adoption and the Financial Statements Comparability: The Case of Russia and	
Сс	nada.	

V	Pre-adoption period				Post-adoption period					
Variables	Mean	SD	5%	Median	95%	Mean	SD	5%	Median	95%
Canada, sa	mple of En	ergy indu	stry							
Earnings	0.0834	0.1241	-0.1815	0.0971	0.2739	0.0274	0.1536	-0.3282	0.0664	0.1955
Return	0.0561	0.2645	-0.4958	0.0866	0.4082	0.1053	0.4042	-0.3969	0.0816	0.9348
CFO	0.1493	0.1647	-0.1756	0.1596	0.4820	0.1127	0.1871	-0.2900	0.1364	0.3517
Canada, sa	mple of Tra	ade indus	try							
Earnings	0.0657	0.1388	-0.2361	0.0805	0.2760	0.1315	0.0076	-0.1607	0.1043	0.4136
Return	-0.0404	0.7246	-0.7429	0.0594	0.6630	0.2836	0.8987	-0.1918	0.1143	1.2914
CFO	0.2453	0.2327	-0.0935	0.2287	0.7371	0.3247	0.3120	-0.1069	0.2581	0.9503

Source: Authorial computation.

Tab. 3 represents the result of the comparability approach test for earning-return regression on the country level. The total comparability in Canada increased between internal companies in the post-IFRS adoption period. The number of companies with the increased level of comparability increased as well. In Russia, the total level of comparability decreased together with the number of companies in the post-IFRS adoption period. The cross-country comparability level decreased slightly. The findings are consistent with Neel (2017) when cross-country comparability occurs in case the pre-IFRS financial reporting is already on a sufficiently high level.

Country	Russia	Canada	Cross-country
Comparability	Decrease	Increase	Decrease
Pre-adoption	-0.1885	-0.2244	-0.2118
Post-adoption	-0.2826	-0.1856	-0.2328
Change	-0.0941	0.0388	-0.0021
N of Increase	6	17	17
N of Decrease	17	6	29
Sum	23	23	46

Tab. 3	Comparability	measure for	earnings-return	regression (COMP <sub>ii</sub> )

Source: Authorial computation.

Tab. 4 shows the result of the comparability approach test for earnings-return regression on the industry level. Comparability of financial statements per industry increased in the post-IFRS adoption period for Basic materials in Russia and Canada. Improvement is visible in the Energy industry, but only for Russia.

Country		Ru	ssia		Canada			
Industry	Utilities	Basic Materials	Energy	Trade	Utilities	Basic Materials	Energy	Trade
Comparability	Decrease	Increase	Increase	Decrease	Decrease	Increase	Decrease	Decrease
Pre-adoption	-0.0659	-0.2630	-0.1321	-0.2223	-0.0632	-1.1071	-0.2223	-0.1470
Post-adoption	-0.0773	-0.1178	-0.0635	-0.5686	-0.0923	-0.2931	-0.5686	-0.1828
Change	-0.0114	0.1452	0.0686	-0.3463	-0.0291	0.8140	-0.3463	-0.0358
N of Increase	1	4	6	0	0	3	0	6
N of Decrease	3	0	0	9	4	1	5	3
Sum	4	4	6	9	4	4	5	9

Tab. 4 Comparability measure for earnings-return regression  $(COMP_{ij})$  asper industry

Source: Authorial computation.

This result means that information comparability for earning-return regression increased by applying IFRS only in Canada at the country level. However, this did not get proved by separate sectors.

Simultaneous use of IFRS and local accounting standards by Russian and Canadian companies can cause such issues. Additionally, the difference between both sets of standards can lead to such consequences - in line with the experience of Spain, examined by Callao *et al.* (2007). Tab. 5 illustrates the result of the comparability approach test for earning-cash flow regression on the country level.

Country	Russia	Canada	Cross-country
Comparability	Decrease	Decrease	Decrease
Pre-adoption	-0.1852	-0.1398	-0.1781
Post-adoption	-0.2674	-0.1732	-0.2144
Change	-0.0822	-0.0334	-0.0363
N of Increase	9	4	22
N of Decrease	14	19	24
Sum	23	23	46

Tab. 5 Comparability measure for earnings-cash flow regression (COMPCF)

Source: Authorial computation.

The total comparability level in Canada and Russia between internal companies has decreased in the post-IFRS adoption period. The cross-country comparability has also decreased. However, the number of companies with decreased and increased

levels of comparability in the pre- and post-IFRS adoption period remained almost on the same level. The previous study of Khan *et al.* (2019) showed that Canadian financial statements became more comparable with the European IFRS adopters. The current study proves that it did not work for the pair of Canada-Russia. Tab. 6 represents the results of the comparability approach test for earnings-cash flow regression as per industry.

Country		Ru	ssia		Canada			
Industry	Utilities	Basic Materials	Energy	Trade	Utilities	Basic Materials	Energy	Trade
Comparability	Decrease	Increase	Increase	Decrease	Decrease	Decrease	Increase	Decrease
Pre-adoption	-0.0450	-0.2177	-0.1300	-0.2040	-0.0674	-0.3021	-0.1299	-0.1097
Post-adoption	-0.0638	-0.1024	-0.1016	-0.4575	-0.0816	-0.3242	-0.1050	-0.1201
Change	-0.0188	0.1153	0.0284	-0.2535	-0.0142	-0.0221	0.0249	-0.0104
N of Increase	1	3	4	1	1	1	4	6
N of Decrease	3	1	2	8	3	3	1	3
Sum	4	4	6	9	4	4	5	9

Tab. 6	Comparability measure for earnings-cash flow regression (COMPCF)
	as per industry

Source: Authorial computation.

Comparability of financial statements per industry increased in the post-IFRS adoption period for Energy in Russia and Canada. Improvement is visible in the Basic materials industry, but only for Russia.

It indicates that for both Russia and Canada, information comparability for earningscash flow regression has decreased by applying IFRS on the country level. Comparability measure as per industry confirmed the same for Utilities and Trade sectors. Cross-country comparability as per industry is represented in Tab. 7.

The level of comparability in the Energy and Basic materials industries increased in the post-IFRS adoption period for both regressions (in line with Yip and Young, 2012). It can be explained by the presence of companies with a long history, greater experience in preparation of financial reports and higher profitable industry sector.

However, the level of comparability in Utility and Trade industries decreased in the post-IFRS adoption period for both regressions. In the Trade industry it can be caused by the grouping of companies with different specialisation due to the low number of companies in the sample. In the Utility industry it can be explained by the presence of young companies with a relatively short history.

Variable		COI	MP <sub>ij</sub>		COMPCF				
Industry	Utilities	Basic Materials	Energy	Trade	Utilities	Basic Materials	Energy	Trade	
Comparability	Decrease	Increase	Increase	Decrease	Decrease	Increase	Increase	Decrease	
Pre-adoption	-0.07622	-0.4993	-0.1410	-0.1795	-0.0542	-0.2649	-0.1422	-0.1690	
Post-adoption	-0.1129	-0.3850	-0.1227	-0.3819	-0.0750	-0.1616	-0.1004	-0.2575	
Change	-0.03668	0.1143	0.0183	-0.2024	-0.0208	0.1033	0.0418	-0.0885	
N of Increase	2	5	8	3	2	4	9	9	
N of Decrease	6	3	4	15	6	4	3	9	
Sum	8	8	12	18	8	8	12	18	

Tab. 7 Comparability measure, cross-country as per industry

Source: Authorial computation.

The mean  $R^2$  value represented in Tab. 8 for earnings-return regression increased in the post IFRS adoption period for both countries.  $R^2$  value for earnings-cash flow regression increased drastically for Canada in comparison with Russia.

De Franco *et al.* (2011) model describes 7% of the data for earnings-return regression, Neel (2017) model describes 45% for 3 level regression. The current model presented in this article describes on average 15% for earnings-return regression, and 39% for earnings-cash flow regression.

Country	IFRS adoption	Mean	SD				
R <sup>2</sup> value earnings-return regression							
Russia	Pre-adoption	10.46	5.70				
Russia	Post-adoption	16.89	12.70				
Canada	Pre-adoption	14.70	5.70				
Canada	Post-adoption	19.37	10.20				
R <sup>2</sup> value earnings	s-cash flow regression						
Russia	Pre-adoption	33.34	26.90				
Russia	Post-adoption	36.90	27.10				
Canada	Pre-adoption	35.93	15.20				
Canada	Post-adoption	51.24	26.50				

Tab. 8  $R^2$  values

Source: Authorial computation.

Robustness tests had been conducted for all panel data of the research. The Durbin-Watson test showed a positive autocorrelation in the regression model's output (all the values are within intervals from 0 to less than 2). Wald test has not shown any Heteroscedasticity in the data. Finally, the CD Pesaran test did not prove any cross-sectional dependence (Tab. 9).

Test	Ho (null hypothesis)	Conclusion	p-value for regressions							
			Russia earnings- return Pre-	Canada earnings- return Pre-	Russia earnings- cash flow Pre-	Canada earnings- cash flow Pre-	Russia earnings- return Post-	Canada earnings- return Post-	Russia earnings- cash flow Post-	Canada earnings- cash flow Post-
Durbin- Watson statistic	There is no autocorrelation in the residuals	The null hypothesis cannot be rejected	1.512	1.340	1.360	2.300	1.200	1.584	1.376	1.566
Wald test	Heterosce- dasticity	Strong evidence against the null hypothesis	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pesaran CD test	No cross- sectional dependence	The null hypothesis cannot be rejected	0.333	0.373	0.344	0.794	0.561	0.401	0.461	0.413

### Tab. 9 Robustness test of regression models

Source: Authorial computation.

Thus, the current research provides the following answers to the three main research questions. There is no evidence that IFRS adoption increased information comparability across the companies in Russia. This is consistent with the previous research for emerging markets (Mongrut and Winkelried, 2019; Roca, 2021; or Khdir and Bialek-Jaworska, 2020). There is mixed evidence that IFRS adoption increased comparability level across the companies in Canada, which is in line with Callao *et al.* (2007); and Liao *et al.* (2012). There is no evidence that cross-country comparability between Russia and Canada increased after IFRS adoption. However, current research provides strong evidence that on industries levels such as Energy and Basic materials, IFRS adoption increased information comparability. The evidence can be found not only on the country but on a cross-country level as well. It adds to the previous research of Neel (2017); Khan *et al.* (2019); and others.

### 5 Conclusion

The main objective of the article is to examine whether the application of IFRS by the Russian companies has increased the comparability of financial statements both on the country and cross-country level. Canada was chosen for the cross-country comparison due to the close time frame of IFRS adoption, the close structure of companies represented on the stock markets, and the ability to compare the influence of IFRS adoption for both types of economies – well-developed and emerging. Such comparison complements the current academic literature and allows making conclusions not only for the country but also for individual industries.

The initial sample selection had consisted of the companies that are presented on the stock exchange of a particular country. It contains 23 companies from each side. Two measures had been used for the research: earnings-return and earnings-cash flow regression. The comparison was implemented for the pre-IFRS adoption period (2008–2011 for Russia, 2007–2010 for Canada) and the post-IFRS adoption period (2012–2015 for Russia, 2011–2014 for Canada).

Based on the study, three main answers had been provided for the research questions. There is no evidence that IFRS adoption increased information comparability across the companies in Russia. There is mixed evidence that IFRS adoption increased comparability level across the companies in Canada. There is no evidence that cross-country comparability between Russia and Canada increased after IFRS adoption. However, the current research provides strong evidence that on industries levels such as Energy and Basic materials, IFRS adoption increased information comparability. The evidence can be found not only on the country, but also on the cross-country level.

The decrease in cross-country comparability can be caused by the simultaneous use of IFRS and local accounting standards by the Russian and Canadian companies. Additionally, the difference between both sets of standards can lead to such consequences. Different results between the industries of Energy/Basic materials and Utilities/Trade can be explained by the long history and greater experience in preparation of financial reports of companies active within the sector of Energy/Basic materials. Worse results in the Trade industry can be caused by the grouping of companies with different specialisations due to the low number of companies in the sample. In the Utility industry, it can be explained by the presence of young companies with a relatively short history.

Despite the drop in the level of cross-country and intra-country comparability of financial statements, there is evidence that models describing the comparability level between the companies work better in the post-IFRS adoption period.

The study has some limitations. The companies' sample is small and it would be worth studying more of the listed companies currently using IFRS in both countries. The period under review is short and can be extended and complemented by quarterly data, respectively. Future studies may extend the comparability measures. The study does not analyse more than two of the emerging/well-developed markets. It can bring a more comprehensive view of the current situation for how IFRS adoption impacts financial reporting comparability in major economies, such as Brazil, China, and India. There are no clear reasons of the drop in comparability level after IFRS adoption and such reasons can be investigated within future research.

The results should be of interest to the institutions engaged in implementing changes necessary to harmonise local and international accounting. Users can benefit from the presented findings that highlight the problem of low financial statement comparability after the adoption of IFRS and allow taking the necessary steps to improve the current situation.

### References

Alon, A., Dwyer, P. D., 2014. Early Adoption of IFRS as a Strategic Response to Transitional and Local Influences. The International Journal of Accounting, 49(3), 348–370. DOI: 10.1016/j.intacc.2014.07.003.

Callao, S., Jarne, J. I., Lainez, J. A., 2007. Adoption of IFRS in Spain: Effect on the Comparability and Relevance of Financial Reporting. Journal of International Accounting, Auditing and Taxation, 16(2), 148–178. DOI: 10.1016/j.intaccaudtax.2007.06.002.

Cascino, S., Gassen, J., 2015. What Drives the Comparability Effect of Mandatory IFRS Adoption? Review of Accounting Studies, 20(1), 242–282. DOI: 10.10007/s11142-014-9296-5.

Chen, C. W., Collins, D. W., Kravet, T., Mergenthaler, R. D., 2018. Financial Statement Comparability and the Efficiency of Acquisition Decisions. Contemporary Accounting Research, 35(1), 164–202. DOI: 10.1111/1911-3846.12380.

Chircop, J., Collins, D. W., Hass, L. H., Nguyen, N. Q., 2020. Accounting Comparability and Corporate Innovative Efficiency. The Accounting Review, 95(4), 127–151. DOI: 10.2308/accr-52609.

De Franco, G., Kothari, S. P., Verdi, R. S., 2011. The Benefits of Financial Statements Comparability. Journal of Accounting Research, 49(4), 895–931. DOI: 10.1111/j.1475-679x.2011.00415.x.

European Commission, 2021. Russia. EU trade relations with Russia. Facts, figures and latest developments. Available from: <a href="https://ec.europa.eu/trade/policy/countries-and-regions/countries/russia/">https://ec.europa.eu/trade/policy/countries-and-regions/countries/russia/</a>. [17 October 2021].

IASB, 2010. The Conceptual Framework for Financial Reporting (rev. 2018). Available from: <a href="https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework/">https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework/</a>>. [17 October 2021].

IFRS Foundation, 2021a. Who uses IFRS Accounting Standards? Available from: <a href="https://www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction/">https://www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction/</a>>. [17 October 2021].

IFRS Foundation, 2021b. IFRS Standards — Application Around the World. Jurisdictional Profile: Russia. Available from: <a href="https://www.ifrs.org/use-around-">https://www.ifrs.org/use-around-</a>

the-world/use-of-ifrs-standards-by-jurisdiction/view-jurisdiction/russia/>. [17 October 2021].

IFRS Foundation, 2021c. IFRS Standards — Application Around the World. Jurisdictional Profile: Canada. Available from: <a href="https://www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction/view-jurisdiction/canada/>">https://www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction/view-jurisdiction/canada/</a>. [17 October 2021].

Interfax, 2021. Corporate Information Disclosure Center. Available from: <a href="https://e-disclosure.ru/">https://e-disclosure.ru/</a>>. [17 October 2021].

Khan S., Anderson M., Warsame H., Wright M., 2019. Has Adoption of IFRS Increased Non-North American Institutional Investment in the Canadian Stock Markets? Accounting Perspectives, 18(2), 71–93. DOI: 10.1111/1911-3838.12200.

Khdir, S. H., Bialek-Jaworska, A., 2020. IFRS Adoption in Emerging Markets: the Case of Iraq. Zeszyty Teoretyczne Rachunkowości, 106(162), 177–190. DOI: 10.5604/01.3001.0013.9004.

Liao, Q., Sellhorn, T., Skaife, H. A., 2012. The Cross-Country Comparability of IFRS Earnings and Book Values: Evidence from France and Germany. Journal of International Accounting Research, 11(1), 155–184. DOI: 10.2308/jiar-10215.

Ministry of Finance, 1995. Federal Law No. 208-FZ from 26.12.1995 with the latest Amendments and Additions On Joint Stock Companies. Available from: <a href="https://gss.unicreditgroup.eu/sites/default/files/markets/documents/Federal%20L">https://gss.unicreditgroup.eu/sites/default/files/markets/documents/Federal%20L</a> aw% 200n% 20Joint% 20Stock% 20Companies.pdf>. [17 October 2021].

Mukai, I., 2017. IFRS Application and the Comparability of Financial Statements. Journal of Accounting and Finance, 17(5), 52–63. ISSN 2158-3625.

Mongrut, S., Winkelried, D., 2019. Unintended Effects of IFRS Adoption on Earnings Management: The Case of Latin America. Emerging Markets Review, 38, 377–388. DOI: 10.1016/j.ememar.2018.11.004.

Neel, M., 2017. Accounting Comparability and Economic Outcomes of Mandatory IFRS Adoption. Contemporary Accounting Research, 34(1), 658–690. DOI: 10.1111/1911-3846.12229.

Ben Othman, H., Kossentini, A., 2015. IFRS Adoption Strategies and Theories of Economic Development: Effects on the Development of Emerging Stock Markets. Journal of Accounting in Emerging Economies, 5(1), 70–121. DOI: 10.1108/jaee-02-2012-0006.

Roca, F., 2021. The influence of mandatory adoption of IFRS in Argentina on value relevance of accounting information. Journal of Applied Economics, 24(1), 154–172. DOI: 10.1080/15140326.2021.1900695.

Temiz, H., Güleç, Ö. F., 2017. Mandatory Adoption of IFRS in Emerging Markets: the Case of Turkey. Accounting and Management Information Systems, 16(4), 560–580. DOI: 10.24818/jamis.2017.04007.

Thomson Reuters, 2021. Thomson Reuters Business Classification. Available from: <a href="https://trader.fandom.com/wiki/Thomson\_Reuters\_Business\_Classification">https://trader.fandom.com/wiki/Thomson\_Reuters\_Business\_Classification</a>>. [17 October 2021].

Yip, R. W. Y., Young, D., 2012. Does Mandatory IFRS Adoption Improve Information Comparability? The Accounting Review, 87(5), 1767–1789. DOI: 10.2308/accr-50192.