

# USING OFFSHORES IN ECONOMIC ACTIVITY THROUGH THE BEHAVIORAL EFFECTS OF ECONOMIC AGENTS

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**A** The article is devoted to an analysis of the main motivations forming decisions by economic agents on the usage of offshore in their economic activity were stated. The main goals of economic agents among such as tax minimization, protection from political and currency risks. Also main lines of offshore influence on national economy and especially on economic agents were outlined. In research we used theory of behavioral finances as basics of economic agents decision reasoning. Also we used Google Trends to find linkage between information activity and offshore interest among users of Internet. We found that searches on key words with direct offshore (Cyprus) has cyclic nature and low level of information influence meanwhile key words "offshore" in English, Russian and Ukrainian has high level of information influence – lots of information materials in media provokes peak in searches. But between information peaks searches that contain key word "offshore" sounds like "register offshore company", "buy ready offshore company", "offshore schema". So we made assumption that searches with stated keywords during information calmness have orientation on solving of practical problems in economic activity of companies.

**B** Offshore, information, information activity, economic behavior, behavioral finance.

## ОФШОРИЗАЦИЯ ЭКОНОМИКИ ЧЕРЕЗ ПРИЗМУ ПОВЕДІНКОВИХ ЕФЕТІВ ЕКОНОМІЧНИХ АГЕНТІВ

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**A** Статтю присвячено з'ясуванню основних мотивацій, очікувань та факторів впливу на рішення економічних агентів щодо використання офшорів у господарській діяльності. У ході дослідження виділено основні цілі економічних агентів, досягнення яких планується через використання офшорів, серед яких мінімізація податкового тиску, захист від політичних та валютних ризиків тощо. Водночас виділено основні напрямки впливу офшорів на економіку в цілому та на окремих економічних агентів як складову національної економіки. Застосовано теорію поведінкових фінансів як базис для обґрунтування офшоризаційних рішень економічних агентів та застосовано статистичний аналіз для виявлення зацікавленості користувачів Інтернету, у тому числі й економічних агентів у питаннях офшоризації через інструмент Google Trends. Порівняно динаміку пошукових запитів та кількості інформаційних матеріалів, що містять ключові слова «Кіпр», «офшор», «оффшор», «offshore», і отримано, що зацікавленість користувачів в окремих офшорах є циклічною і пов'язана з оновленням інформації перед подачею річної звітності, тоді як тренди щодо решти ключових слів залежать від інформаційної кампанії – зростання кількості інформаційних матеріалів із цими ключовими словами у пресі приводить до зростання зацікавленості користувачів Інтернету, у тому числі й економічних агентів. Визначено найпоширеніші ключові пошукові фрази: «зарегіструвати офшор», «компанія в офшоре», «оффшорная схема». Тобто зроблено висновок, що незважаючи на сплески зацікавленості інтернет-користувачів у питаннях офшорів, більшість пошукових запитів мають прикладний характер.

**B** Офшор, інформація, інформаційні матеріали, пошуковий запит, економічна поведінка, поведінкові фінанси.

## ОФШОРИЗАЦИЯ ЭКОНОМИКИ СКВОЗЬ ПРИЗМУ ПОВЕДЕНЧЕСКИХ ЭФФЕКТОВ ЭКОНОМИЧЕСКИХ АГЕНТОВ

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**A** Статья посвящена выяснению основных мотиваций, ожиданий и факторов влияния на решение экономических агентов относительно использования офшоров в хозяйственной деятельности. В ходе исследования выделены основные цели экономических агентов, достижение которых планируется через использование офшоров, среди которых минимизация налогового давления, защита от политических и валютных рисков и т.д. В то же время выделены основные направления влияния офшоров на экономику в целом и на отдельных экономических агентов как составляющую национальной экономики. Применена теория поведенческих финансов как базис для обоснования офшорных решений экономических агентов и применен статистический анализ для выявления заинтересованности пользователей Интернета, в том числе и экономических агентов в вопросах офшоризации через инструмент Google Trends. Сравнена динамика поисковых запросов и количества информационных материалов, содержащих ключевые слова «Кипр», «офшор», «оффшор», «offshore», и получено, что заинтересованность пользователей в отдельных офшорах является циклической и связана с обновлением информации перед подачей годовой отчетности, тогда как тренды в остальном ключевых слов зависят от информационной кампании – рост количества информационных материалов с этими ключевыми словами в прессе приводит к росту заинтересованности пользователей Интернета, в том числе и экономических агентов. Определены самые распространенные ключевые поисковые фразы: «зарегистрировать офшор», «компания в офшоре», «оффшорная схема». То есть сделан вывод, что несмотря на всплески интереса интернет-пользователей в вопросах офшоров, большинство поисковых запросов имеют прикладной характер..

**B** Офшор, информация, информационные материалы, поисковый запрос, экономическое поведение, поведенческие финансы..

## Introduction

Economy of Ukraine nowadays faces economic crisis, financial system experienced a number of shocks, politics is unstable and situation in Donetsk, Lugansk and Crimea is uncontrolled. To solve stated problems Ukraine needs financial resources. Sources are well-known – internal financial resources, external loans, credits of international organization etc. One of perspective sources of financial resources is minimization of tax payments with offshore mechanisms. Approximate sum of money transferred to offshores in 2014 was over 1 bln USD and has a tendency to growth [4]. That's why in current situation minimization of tax payments with offshore mechanisms is quite important state task.

## Theoretical and Methodological Backgrounds

The global scope and dynamics of offshore relationships that increasingly become more and more shocking force the update of their theoretical and methodological support for flexible regulatory policy. A special place in the modern research methodology belongs to behavioral principles. We agree with V. Andrushchenko that the origins of ideas about the economy and finances lay in the field of human motivations and interests [1].

The theory of rational expectations (created by R. Lucas) and theoretical behaviorism have taken its rightful place in the theories and practice of determination of essence and practical overview of various economic relations between market participants.

Especially the importance of taking into account all behavioral effects is seen accordingly to offshorization of economy. Obviously, the monetary rationalization of economic agent's behavior is not able to cover the entire range of its motivations and interests [6]. So, on the totality of them, variability of their forms of manifestation is based economic phenomenon of offshores. It is methodologically important to consider all aspects of economy that contribute to the use of offshore companies, not just those related to effects from usage of such offshore entities.

However, the process of consideration of the behavioral effects of economic agents in solving offshorization problems lacks flexibility and consistency. Their influence is seen primarily in terms of minor and related problems, not in terms of primary problems, so the potential of behavioral tools is significantly impaired. The need to increase the capacity of common behavioral methodology to minimize the negative effects of offshorization is the key to productive solving of defined problem. Due to the limits of specific scientific methodology, the

solving of this problem has high priority to determine specific goals that guide individual economic agents in making their own decisions on the use of offshore companies in their activities. Thus, the combination of general and specific scientific-methodological positions is able to form the basis for the most adequate answers about the goal of the study.

## Main Problem

For determining of influence factors of offshores on economic agents it is important to determine key aims of offshore usage in their economic activities.

Based on types of companies and types of offshores [5] we assume that main targets to achieve by usage of offshores are next.

1) minimization of tax payments.

Key target to achieve by usage of offshores in economic activity is legal or illegal minimization of taxes paid on results of economic activity. In developed countries main method of offshore minimization of tax payments is creation of offshore schemas with usage of principle "Letter of Law" – law is interpreted literally, not by the principle "Spirit of Law". This allows lowering taxes paid and keeping this process legal. The example of such offshore tax minimization is "Netherlands Sandwich" and "Dutch Sandwich". In Ukraine to reach the tax minimization target is used aggressive tax planning. It provides legal and illegal methods of tax minimization with offshores and next partial legalization of money that are transferred to offshores. Among illegal schemas of tax minimization is usage of sham companies that exists only for special operation with specified offshore company or chain of companies with offshore ones included.

2) optimization of financial flows.

Second target to achieve with usage of offshore companies is optimization of financial flows. It is performed by creation in offshores special funds that are operated as entities that consolidate financial resources of non-offshore company or group of companies. These consolidated financial resources are used with specific purpose – investment (long-term investment for investment funds, stable income investment for private pension funds), short-term speculation (investment on short term instruments with high risk and high level of income) etc. Consolidation of such financial resources in Ukraine is also possible but next investment income will be taxed on high rates of income tax and fast short-term investment will face transaction problems because of state control on money flows over 50000 UAH [3].

3) legalization of funds illegally transferred to offshores in previous periods.

Another target to reach with usage of offshores is legalization of funds illegally transferred to offshores in previous periods. In economic terms it means that funds illegally transferred to offshores runs through chain of companies (to hardener the process of real owner identification) with last one in non-offshore jurisdiction and this last company became the foreign investor. In Ukraine such legalization is widespread and investment comes from Cyprus, Germany and Netherlands;

4) hedging.

Number of offshores offer possibility to register special hedge funds which are not taxed. Such hedge funds are used for management of tangible and intangible assets. Another field of usage of such hedge funds is as the head management company in private pension funds. This allows to such funds to avoid national regulation for investment sources of private pension funds. This performed as pension contract among Ukrainian company and private pension fund group which contains offshore management company that operates with major financial resources. One more sphere of hedge funds usage is insurance. Special insurance hedge funds are used to hide losses, not only incomes. In developed countries with active stock markets it is tightly regulated because such offshore insurance can cause fluctuation on the market. But in Ukraine control over offshore insurance is weak and economic agents can use special offshore funds to minimize records of losses;

5) preserving the value of financial assets.

Next but not less important target of offshore usage in economic activities is preserving the value of financial assets. In Ukraine the exchange rate UAH/USD in 2013-2015 fell on more than 300% (from 7.95 to 26 UAH/USD), bankrupted many banks and other critical problems in financial sphere of economy. That why offshore companies with their USD or EUR banking accounts are one of the main mechanisms to preserve the value of incomes from foreign operations. Also offshore companies are used to avoid such unpopular regulation norms as exchanging all foreign currency incomes to national currency on commercial rate in date of receiving or banking norms that all foreign currency transactions must be preordered because banks keep dollars only to cover daily preordered operation. Mechanism for offshores is that contract is signed in UAH and all transactions between Ukrainian company and offshore company are performed in UAH. All foreign currency income is stored on offshore account and is used for payment to partners from other countries;

6) protection of financial resources and assets.

In on current level of economic development it is often happens such negative economic phenomenon

as raider attacks on companies. In such situation offshore companies works as nominal owners through network of subsidiaries. By documents all tangible and intangible assets are leased by Ukrainian company or Ukrainian company is subsidiary of international group of companies. The raider attack in such situation is useless because Ukrainian company is worthless and all possible raided assets can be returned under international law or will be covered by insurance companies. Also offshores offer service of nominal owners. This service is greatly used in time of political revolution, like happened in Ukraine. Nominal owner service offers protection from political risks and company owned by foreigners who are unconnected with Ukrainians can't be legally nationalized or their real owner can avoid political pressure;

7) place for secondary capital accumulation.

Nominal ownership service in offshores also offers possibility to register offshore companies only with banking accounts and no real economic activity. To such accounts can be linked international payment cards as Visa, MasterCard, American Express etc. Incomes that are accumulated on accounts of intermediary companies are transferred to that accounts and can be freely used anywhere you can find ATM or bank. For Ukrainian companies such offshore financial companies gives ability to avoid financial control over all operations with accounts on amount over 50000 UAH and to hide assets in foreign countries that are bought on money from such offshore companies;

8) personal offshore advantages.

Some offshores offer personal tax advantages to individuals who are residents of that offshores. For example in Monaco all residents don't need to provide information about their foreign income nor pay taxes on such income. Only taxes paid are taxes on income received on territory of Monaco. For Ukraine such target of offshore usage is not widespread and income received by residents of offshores that offer personal tax advantages are close to zero.

Also important is to define the key factors that influence on decisions of offshore usage in economic activities. Among them are politics, social, economic, financial, taxation, information ones etc.

Politics influence factors are driven by changes in political environment of state, getting to power of opposing forces, revolutions etc. As result of such changes, economic agents linked to empowered politic parties feel politic pressure from current state rulers. As answer to such pressure they transfer their assets to offshores to minimize the risk of political pressure or raider attacks. In Ukraine such situation took place in 2014 during and after Revolution. Evidence is that in 2013 (the year before revolution)



to offshores was transferred close to 6 bln USD, and during and after revolution (2014-2015) to offshores was transferred more than 30 bln USD [7] to hide untaxed incomes and to minimize risk of political pressure from new government. Also one point to mention – stated sums of income transferred to offshores don't include transfers from banking accounts, only trade operations with offshores and intermediary companies.

Social influence factors are determined by development of social organizations that are oriented on public blame of companies that use offshores in economic activities, especially for tax minimization. In developed countries company's public profile is quite important so they have to react on such public organization's actions as fast as possible. It can be usage of longer chain of companies to hide offshore activities or performing special open audit that reveals real targets of offshore usage in economic activities. In Ukraine social influence factors are not developed because of low level of information spreading about negative effects of offshore usage for society. Today social influence is developed only on theoretical level in proper researches.

Economic influence factors are presented in integration of Ukraine into world market and in entering to domestic market products of international companies. Goods and services of these companies are cheaper than Ukrainian due to international tax advantages. That's why Ukrainian economic agents also use international tax advantages (mainly offshore tax advantages) to stay competitive with international companies. In deal economic conditions such situation

will lower prices on domestic market but in real conditions prices are growing and both international and domestic companies increasing their incomes with transferring them to offshores without taxation.

Taxation influence factors are presented by changes in tax law or administration practices for some taxes. In Ukraine the growth of interest to offshores linked to implementation of new changes to tax law with main aim – to check whether current mechanisms of offshore transaction has maximum output or company has to create a new ones.

Special among others are information influence factors. They are represented by information materials in state and private mass media and in special information systems. We assume that information about possible or planned changes in any of stated influence factors can cause growth of interest to offshores.

To check this assumption is a good idea to use online analysis instrument Google Trends. Analysis is made for period 01. 2008-12. 2015 on content and search trends. This instrument represent data in percentage rate – from all monthly periods the maximum one defines as 100 (%). Other periods are represented in correlation to maximum (from 0 to 99) [2].

Analysis is made for basic statements for searches “offshore” in Ukrainian (офшор), Russian (оффшор) and English and for major offshores for Ukraine–Cyprus and BVI.

For basic statement “Cyprus” trends are shown on Fig. 1.

As seen on Fig. 1 we can assume that trend of Searches for basic statements Cyprus has year cyclic

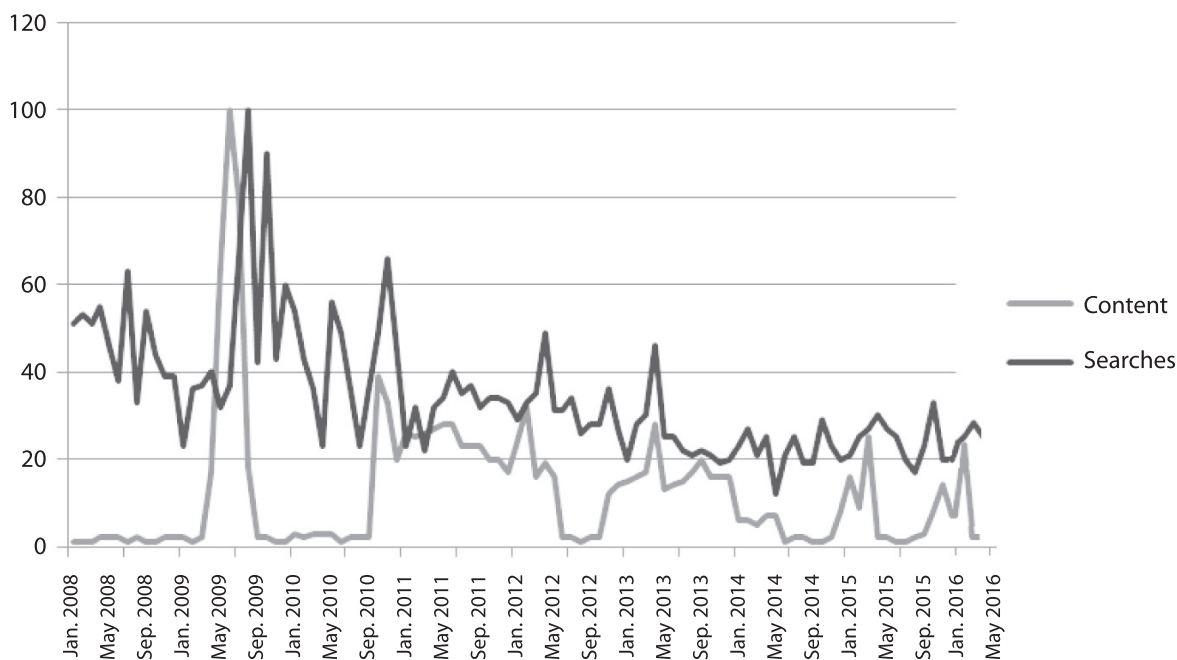


Fig. 1. Content and Searches Trends of basic statement “Cyprus”

nature with peaks each July. This is connected to economic activity of offshore companies because due to Cyprus legislation till 1st of August all registered companies must prepare a Financial Statement. So, Ukrainian owners of offshore companies and their accountants check the changes in Cyprus legislation to avoid mistakes and fines. Main amount of searches in July are “Cyprus Laws”, “Cyprus Taxes”, “Taxation changes Cyprus”. During other periods main searches are “register company Cyprus” and “buy company Cyprus” in Ukrainian, Russian and English languages. Content contains mainly news about changes in tax legislation and business ads about registration of new companies with information about its possible efficiency.

Fig. 1 also contains non-typical peak in March 2013. This peak characterize the warns of Ukrainian owners of Cyprus companies about the financial crisis in that country. After situation stabilized situation with search activity returned to its normal cyclic dynamics.

Last peak in Spring, 2016 was provoked by Panama’s leaked documents that contains info about offshore companies connected with current President of Ukraine Petro Poroshenko [8].

About amount of search activities, global trend shows that amount of searches year-to-year falls that means the lowering of interest of Ukrainian economic agents in offshore Cyprus companies.

Analysis of same trends for another most used offshore by Ukrainian economic agents shows the same picture with cyclic dynamics. Year peaks linked with the end time to send financial statements to Government of offshore countries.

For basic statement “offshore” in Ukrainian language trends of Content amount and searches are shown on Fig. 2.

Basic statement “offshore” in Ukrainian characterizes the interest of Ukrainian-speaking part of society in processes of economy offshorization. As seen on Fig. 2, both trends are not cyclic, but both trends have positive correlation among them – when trend Content reaches its local peak, trend Searches also shows similar peak with temporal lag up to 1 month.

Also on Fig. 2 we see several peaks of Searches that shows high level of user’s interest to offshore. First one is in May-September 2009 and it is caused by the start of anti-offshore policy of Ukrainian Government headed by Julia Timoshenko. It was expected that as result of that policy at least 500 mln UAH (approx. 65 mln USD) will be additionally received by state from taxes. In real figures no additional income was found. Second peak was in December 2010 – January 2011. It was caused by Tax Code of Ukraine that entered into force from the 1st of January, 2011. Interest to offshore was mainly economic – which ones are best suitable for tax minimization under new regulations and new offshore schemas were created.

Next peaks on the beginning of 2012, 2013 and 2014 are caused by changes in taxation policy and next optimization of offshore schemas of tax minimization. Minor local peaks during all described period are caused by information attack about big offshore cases. As stated before reaction period of users is up to 1 month, but calming period is also very small – when the amount of content fall, the amount of searches also fall.

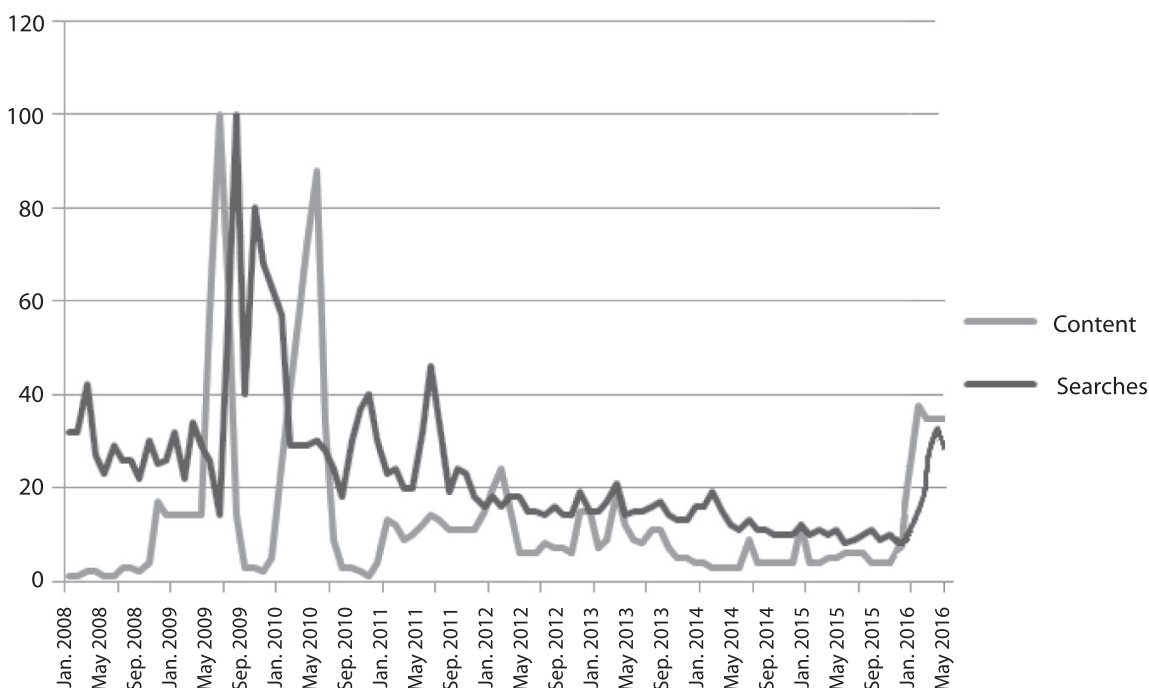


Fig. 2. Content and Searches Trends of basic statement “Offshore” in Ukrainian

Last peak in Spring, 2016 was provoked by Panama's leaked documents that contains info about offshore companies connected with current President of Ukraine Petro Poroshenko.

Is searches mainly used "offshore" on Ukrainian, "offshore company", "register offshore", "offshore mechanism".

Next basic statement is "offshore" on Russian that characterizes Russian-speaking part of society. Trends for basic statement "offshore" are shown on Fig. 3.

From Fig. 3 we found that Search trend does not have cyclic dynamics and Search trend almost fully determined by Content trend. The evidences are that both trends have similar peaks in Spring 2009, Winter and Spring 2012, Summer 2014. Also Content trend has additional peaks that are not correlate with Search trend like in Winter 2010. The reasons of such peaks are political pressure on opposing political parties or "dirty" pre-election technologies. But such Content activity has no impact because of tiredness of society from offshore content.

Last peak in Spring, 2016 is connected with offshore companies linked with current President of Ukraine Petro Poroshenko.

Also we've compared Fig. 2 and 3 and resulted that trends are similar and peaks are detected in the same time periods. Also we found that amount of Searches with basic statement "Offshore" in Russian is 60-80% higher than "Offshore" in Ukrainian.

Last but not least basic statement is "Offshore" in English with trends shown on Fig. 4.

Analysis of Fig. 4 shows that Content trend and Searches Trend are low correlated. Only two peaks

are linked with two big information injects – adoption of Tax Code of Ukraine and scandal on offshore companies connected with President Petro Poroshenko. For Ukraine such fact is expected because Searches in English keep up to 3% of all searches in Ukrainian, Russian and English languages and English-speaking Ukrainians form the same part of Ukrainian society. For Search trend, usage of "Offshore" in English is used to find information in the origins and for Content trend English variant is often used to point the source of information. So even theoretically no useful correlation can be found between these trends.

### Conclusions

Problem of offshorization of Ukrainian economy through prism of behavioral finances gives opportunity to underline the targets to be reached by usage of offshores in economic activity in general and special ones for Ukraine.

1) To main targets to be reached by usage of offshores in economic activity in Ukraine belong tax minimization, protection from political risks and saving the value of financial assets.

2) Among influence factors on offshorization of economy we underlined economic, politic and information ones. Founded that as in modern society the most important asset is information, information influence factors on offshorization of economy are key ones in mechanisms of management of offshorization processes. The study of Content and Search trends with comparison to economic and political events on basic statement "Offshore" on all used in Ukraine languages

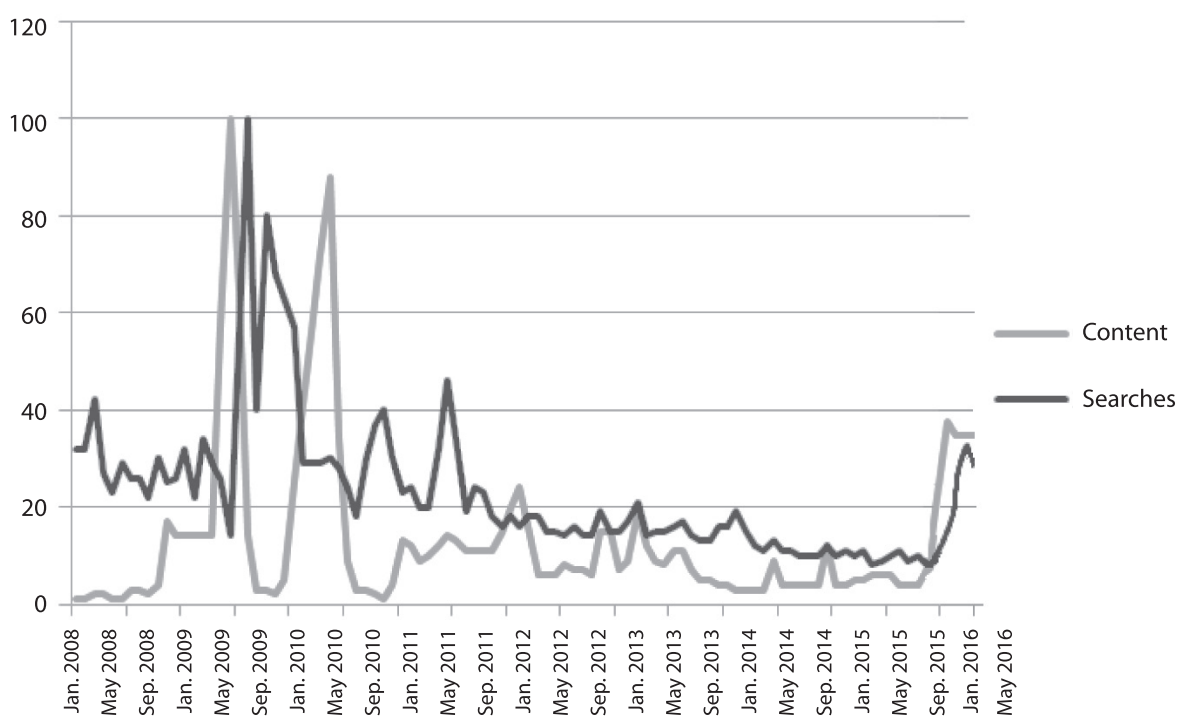


Fig. 3. Content and Searches Trends of basic statement "Offshore" in Russian

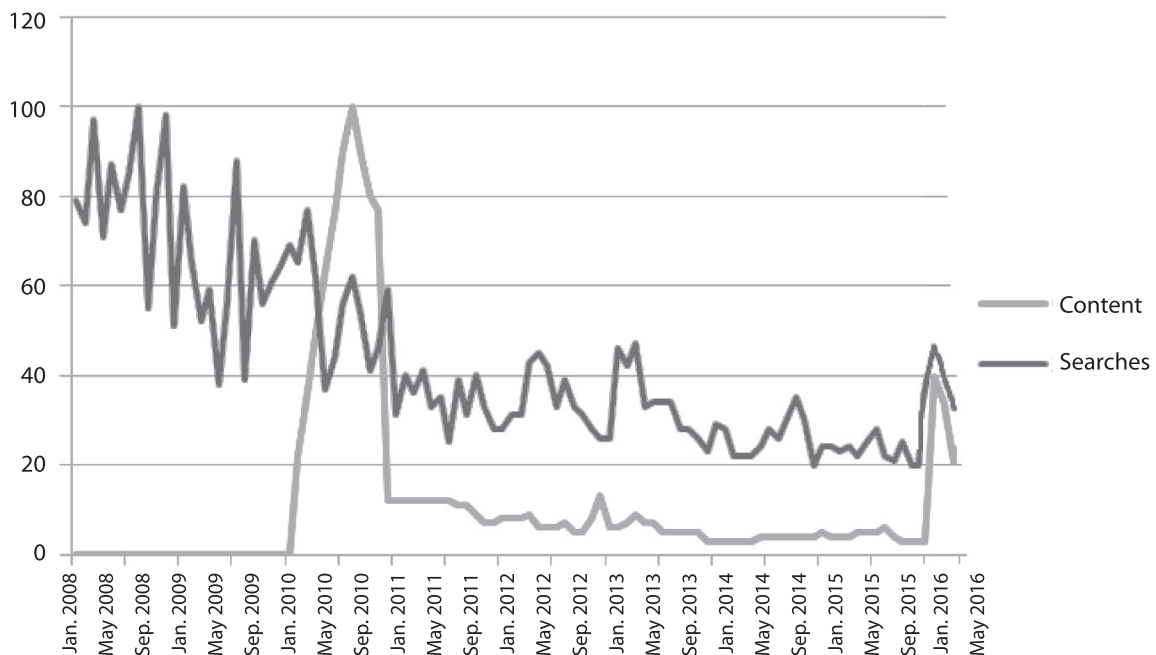


Fig. 4. Content and Searches Trends of basic statement “Offshore” in English

(Ukrainian, Russian, English) shows that peaks in Content trend determine peaks in Search trend with time lag up to 1 month. Also, due to transcription made by Google trends on Search trend, the nature of majority of searches is oriented on search of specific info about tax minimization schemas with offshore usage. Second place keeps searches of information about changes in legislation of offshores or intermediary countries to keep high rate of offshore schemas effectiveness.

As example, the most used search phrases in peak periods of trend are “register offshore company”,

“offshore tax minimization”, “buy offshore company”. Due to language approx. 65% are made in Russian, up to 3% in English, rest – in Ukrainian language. So even in line with information injects in media, Search trend with key word “Offshore” has mainly practical orientation.

As result we think that Ukrainian government should perform active antioffshore policy and implement the monitoring of content to minimize the influence of offshorization of economy on Ukrainian society.

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