ТОВ "Консалтингово-видавнича компанія "Ділові перспективи"

Інвестиційний менеджмент та фінансові інновації Міжнародний науковий журнал Том 8, №4, 2011

Журнал засновано у 2004 році Видається щоквартально ISSN 1810-4967 ISSN 1812-9358 (онлайн)

Реєстраційне свідоцтво КВ №9032 від 05.08.2004 р.

Головний редактор Сергій Козьменко

Журнал присвячено вирішенню найбільш актуальних питань управління інвестиційною діяльністю як на міжнародному, так і на локальних рівнях, стратегій та методів досягнення інвестиційних цілей, учасників інвестиційних процесів, інвестиційних інструментів, монетарних систем та фінансових ринків, а також фінансових інновацій.

Адреса: ТОВ "КВК "Ділові перспективи" пров. Дзержинського, 10 м. Суми, Україна, 40022

E-mail: head@businessperspectives.org URL: http://www.businessperspectives.org

За достовірність інформації, що міститься в опублікованих матеріалах, відповідальність несуть автори.

© ТОВ "КВК "Ділові перспективи", 2011

Закон про авторське право: Усі права захищено. Жодну частину даного видання не можна відтворювати, зберігати, передавати, рекламувати, демонструвати, адаптувати, переробляти, перекладати в будь-якій формі та будь-яким способом. Це також стосується розповсюдження, відчуження, здання в майновий найм, комерційний чи будь-який інший прокат, передрукування, розміщення на сайтах, імпортування та публічного показу. У випадку передрукування та відтворення матеріалів попереднє письмове узгодження з видавцем є обов'язковим. Усі вищевказані вимоги стосуються і некомерційних засад, а також будь-якого вільного доступу до попередніх, теперішніх та майбутніх випусків публікації.

Publishing Company "Business Perspectives"

Investment Management and Financial Innovations International Research Journal Volume 8, Issue 4, 2011

Issued from 2004 Published quarterly ISSN 1810-4967 ISSN 1812-9358 (online)

Certificate #9032

Editor-in-Chief Serhiy Kozmenko

The journal addresses the most burning issues of investment activities management on both global and local levels, strategy and methods of investment purposes achievement, investment processes participants, investment tools, monetary systems and financial markets, and financial innovations.

Address: Publishing Company "Business Perspectives" Dzerzhynsky lane 10 Sumy 40022 Ukraine

E-mail: *head@businessperspectives.org* URL: http://www.businessperspectives.org

The authors are responsible for the reliability of information which materials published contain.

© Publishing Company "Business Perspectives", 2011

Copyright: All rights reserved. No part of this publication may be reproduced, stored, transferred, advertised, demonstrated, adaptated, rearranged, translated in any form or bought by any means. This also concerns the distribution, disposition, property renting, commercial renting, or any other kind of renting, reprinting, siting, importing or public demonstration. In case of reprinting and reproduction of the materials the prior written permission of the Publisher is required. The above-named requirements should be also referred to non-profit basis as well as any free access to the previous, current and future issues of the publication.

Head of the Board

S. Kozmenko, Dr., Professor, Vice-Rector for Research at the Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)

Advisory Board

Robert Brooks, Professor, Department of Econometrics and Business Statistics, Faculty of Business and Economics, Monash University (Australia)

Al Bhimani, Professor of Management Accounting, Head of Department of Accounting, London School of Economics (UK)

Jo Danbolt, Professor of Finance, Department of Accounting and Finance, Faculty of Law, Business and Social Sciences, University of Glasgow, Scotland (UK)

Frank Skinner, Professor, School of Management, The University of Surrey (UK)

Editorial Board

- **B.M. Arvin**, Full Professor of Economics, Department of Economics, Trent University (Canada)
- **B. Aktan**, Ph.D., Assistant Professor of Finance, Department of Finance, Faculty of Economics and Administrative Sciences, Yasar University (Turkey)
- **B. Barlev**, John Berg Professor of Accounting, the Hebrew University of Jerusalem School of Business Administration (Israel)
- **E. Benson**, Professor of Finance, Department of Finance and Marketing, Western Washington University (USA)
- **M.L. Bertoneche**, Visiting Professor, Harvard Business School; Associate Fellow, University of Oxford; Professor in Business Administration, University of Bordeaux (France)
- **S. Bogner**, Professor, Vienna University of Economics and Business Administration (Austria)
- **L. Booth**, Dr., Professor of Finance, CIT Chair in Structured Finance, Rotman School of Management, University of Toronto (Canada)
- **D. Boyd**, D.B.A., Professor of Accounting, Gulf University of Science and Technology (Kuwait)
- **C. Chen**, Ph.D., Professor, School of Management, Fudan University (China)
- **K.C.** Chen, Ph.D., CFA, Theodore F. Brix Endowed Department of Finance, California State University, Fresno (USA)
- **I. Cooper**, Professor of Finance, London Business School; Director of the Institute of Finance and Accounting, London (UK)
- **N. Delcoure**, D.B.A., Assistant Professor of Finance, Sam Houston State University (USA)
- **A. Etebari**, Ph.D., Professor of Finance, Head of Accounting and Finance Department, Whittemore School of Bus & Econ Dept, University of New Hampshire (USA)
- **C.O. Ewald**, Professor and Chair in Financial Economics, Department of Economics, University of Glasgow (UK)
- **F.J. Fabozzi**, Ph.D., CFA, CPA, School of Management, Yale University (USA)
- **G. Favato**, Dr., Professor, Head of the Department of Accounting & Finance, Kingston University (UK)

- **M. Frühwirth**, Ph.D., Associate Professor of Finance, Department of Finance and Accounting, WU Wien (Austria)
- **J.S. Grice**, Ph.D., Associate Professor, Sorrell College of Business, Troy State University (USA)
- **J.A. Haslem**, Ph.D., Emeritus Professor of Finance, Robert H. Smith School of Business, University of Maryland (USA)
- **A. Herbst**, Dr., Professor of Finance, Department of the Charles R. and Dorothy S. Carter at the University of Texas at El Paso (USA)
- **Z. Hoque**, Professor of Accounting, School of Accounting, La Trobe University (Australia)
- **P. Hsiao**, Ph.D., Professor, Department of Finance, College of Business, San Francisco State University (USA)
- **G.V. Karels**, Ph.D., Professor of Banking, Nebraska Bankers Association College (USA)
- **E. Lawrence**, Ph.D., Professor of Finance, College of Business Administration, University of Missouri (USA)
- **D. Lien**, Ph.D., Richard S. Liu Distinguished Department of Business, Associate Dean for International Affairs, College of Business, University of Texas (USA)
- **O. Loistl**, Ph.D., Professor of Finance, Vienna University of Economics and Business Administration (Austria)
- **Cornelis Los**, Dr., Professor of Finance, Alliant International University School of Management (USA)
- **J.J. McConnell**, Professor of Finance, Emanuel T. Weiler Distinguished Professor of Management, Krannert School of Management, Purdue University (USA)
- **A.G. Malliaris**, Ph.D., Interim Dean and Walter F. Mullady Professor of Economics, School of Business Administration, Loyola University (USA)
- **C. Nolan**, Ph.D., Professor of Economics, Director of the Center for Dynamic Macroeconomic Analysis, University of St. Andrews (UK)
- **S.D. Norton**, Ph.D., Cardiff Business School of Cardiff University (UK)
- **M. Phillips**, Ph.D., Professor of Finance, College of Business and Economics, California State University (USA)
- **S.S. Poshakwale**, Ph.D., Professor of International Finance, School of Management, Cranfield University (UK)

- **J. Qi**, Ph.D., Bank of America Professor, Department of Finance, University of South Florida (USA)
- **A. Rai**, Ph.D., Associate Professor, Wichita State University (USA)
- **S.T. Rachev**, Ph.D., Department of Econometrics, Statistics and Mathematical Finance, School of Economics and Business Engineering, University of Karlsruhe (Germany)
- **M. Sathye**, Dr., Professor, Department of Business & Government, University of Canberra (Australia)
- **H. A. Shawky**, Dr., Professor of Finance and Economics, University at Albany, State University of New York (USA)
- V. Singal, J. Gray Ferguson Professor of Finance, Head of the Department of Finance, The Pamplin College of Business, Virginia Tech, Blacksburg (USA)
- **K. Tandon**, Professor of Finance, Head of the Department of Economics and Finance, Baruch College (CUNY) (USA)
- **G.F. Tannous**, Ph.D., Professor, Head of the Department of Finance and Management Science, College of Commerce, University of Saskatchewan Saskatoon (Canada)
- **K. Tseng**, Ph.D. in Economics, Pennsylvania State University (USA)

- **H. J. Turtle**, Ph.D., Professor of Finance, Department of Finance and Management Science, College of Business, Washington State University (USA)
- **A. Ukhov**, Ph.D., Assistant Professor of Finance, Cornell University (USA)
- **M.T. Vaziri**, Professor, Department of Accounting and Finance, California State University (USA)
- **J.D. Vu**, Associate Professor of Finance, DePaul University (USA)
- **K. Wang**, Professor, Institute of Finance, National Chiao Tung University (Taiwan)
- **R.A.** Weigand, Ph.D., Professor of Finance and Brenneman Professor of Business Strategy, Washburn University School of Business (USA)
- **M. Wilkens**, Dr., Professor, Department of Finance and Banking, University of Augsburg (Germany)
- **P. Wisniewski**, Dr., Associate Professor of Corporate Finance at the Warsaw School of Economics (Poland)
- **F. Wu**, Professor, Dean of Lingnan College, School of Business and Economics, California State University (USA)
- **B. Yavas**, Ph.D., Professor of Finance, School of Management, California State University (USA)

Contents

Papers' abstracts / Ahotauu до статеи	5
Serhiy Kozmenko, Taras Savchenko	
Countercyclical monetary policy in major economies of the Commonwealth of Independent States	8
Carlo Bellavite Pellegrini, Davide Romelli, Emiliano Sironi	
The impact of governance and productivity on stock returns in European industrial companies	20
Olga Dodd, Alex Gakhovich	
The holiday effect in Central and Eastern European financial markets	29
Enrico De Giorgi	
A behavioral explanation of the asset allocation puzzle	36
William Johnson	
Underpricing and underwriter wealth gains	45
Mei-Chen Lin	
Weekend effect in realizing gains and losses	64
Lucio Cassia, Tommaso Minola	
Capital structure decision of new technology-based firms: evidence from youth entrepreneurship	72
Wen-Chung Guo, Shin-Rong Shiah-Hou, Shih-Hua Pan	
Does intellectual capital matter for firms' performance? Some evidence from accounting data	83
Erkki K. Laitinen	
Extension of break-even analysis for payment default prediction: evidence from small firms	96
Juo-Lien Wang, Her-Jiun Sheu, Huimin Chung	
Corporate governance reform and earnings management	109
Nasser R. Al-Mawali	
Does the level of intellectual property rights have different effects on inter- and intra-industry trade?	119
Hao Fang, Yen-Hsien Lee	
The impact of the subprime financial crisis on stock index returns for high- and low-risk countries via CDS indices	123
Authors of the issue	138

Papers' abstracts / Анотації до статей

Сергій Козьменко, Тарас Савченко

Антициклічна валютна політика більшості країн Співдружності Незалежних Держав

Попередня фінансова криза спричинила закінчення незвичайно тривалого етапу відновлення у республіках СРСР, збільшуючи, таким чином, відповідність розробки ефективних показників, а саме – антициклічної економічної політики. З 1991 по 2010 рік, у країнах СНД було визначено чотирнадцять повних циклів. На початку червня 2011 року, одна економіка знаходилась на етапі відновлення, п'ять країн – на етапі зростання та одна – на етапі спаду. Автори також аналізували рівень антиціклічної валютної політики центральних банків більшості країн СНД. Крім того, визначено необхідність більш активної антициклічної політики у цих країнах.

Карло Беллавіте Пеллегріні, Давід Ромеллі, Емільяно Сіроні

Вплив управління та продуктивності на біржовий прибуток у Європейських промислових компаніях

Мета даного дослідження — визначити вплив індексу управління країною та індексу продуктивності компанії на загальні річні інвестиційні прибутки Європейських промислових компаній з 1 січня 1996 року по 31 грудня 2008 року. Автори враховують інноваційні базу даних досліджень компаній, що належать до європейських та неєвропейських країн. Щоб досягти поставленої мети, дослідники порівнюють трифакторну модель Фама та Френч (1992, 1993) з дослідженнями Доіджа та ін. (2007), а також Гомпарс та ін. (2003), аналізуючи управління та індекс, визначений Пархізгарі та Абурачіс (2003) для оцінки впливу продуктивності компанії на біржові прибутки. Емпіричні результати показують, що індекс визначення управління країною негативно пов'язаний з загальним річним інвестиційним прибутком промислових компаній, зареєстрованих на біржі. Що стосується більш продуктивних фірм, то вони характеризуються вищими біржовими прибутками.

Ольга Додд, Алекс Гаховіч

Ефект святкового дня на фінансових ринках Центральної та Східної Європи

У роботі досліджується ефект святкового дня на 14 ринках Центральної та Східної Європи (ЦСЄ), що розвиваються. Автори визначають, що ефект святкового дня спостерігається у регіоні ЦСЄ, при чому певна кількість країн засвідчує нетипові прибутки перед святковим днем. Крім того, автори також визначають нетипові прибутки після свята. Передсвятковий ефект найбільше виражений на початковому етапі діяльності ринку, і його важливість з часом зменшується. Таким чином, припускаємо, що покращення ринкової ефективності на ринках ЦСЕ відбувається з моменту відкриття фондових бірж. На новий рік та Різдво спостерігаються найбільші прибутки. До свят ліквідність зменшується.

Енріко де Гіоргі

Біхевіористське пояснення питання розподілу активів

У роботі поєднано біхевіористичну модель ризику отримання винагороди на основі теорії перспектив з інвестуванням для пояснення питання розподілу активів, яке полягає у тому, що інвестори порушують двофондовий принцип оптимальних розподілів з урахуванням середнього відхилення. У емпіричному аналізі за даними США, автори показують, що інвестори, які дотримуються біхевіористичної моделі ризику отримання винагороди та численних рахунків для інвестиційних операцій, вкладають капітал в облігації та акції з високою вартістю, оскільки толерантність ризику зменшується, що відповідає емпіричним результатам.

Вільям Джонсон

Встановлення ціни, що не покриває собівартість та доходи андерайтерів

У статті досліджено характеристики первісного публічного розміщення акцій (IPO), які проводять державні андерайтери та визначено, що для цих андерайтерів притаманне позитивне нетипове збільшення ціни акцій на 0.23%, що визначається на дату реєстрації заявки та на 0.21% у день випуску, для середнього значення збільшення ринкової капіталізації на 65 млн. доларів та 59 млн. доларів відповідно. Автор досліджує потенційні джерела доходів андерайтера: різниця між цінами на публічний випуск нових акцій, підвищена репутація за рахунок успішного IPO, передача власності від фірм, що провели IPO андерайтерам. Дослідник визначає, що доходи андерайтера визначаються за первісним публічним розміщенням акцій з найвищим встановленням ціни, що відповідає передачі власності від фірми, яка проводить IPO. Для андерайтерів, які мають здатність передавати власність, характерний найсильніший зв'язок між доходом та встановленням ціни, що не покриває собівартість. На останок, у роботі визначено, що характеристика діяльності андерайтера пов'язана з сукупним встановленням ціни, що не покриває собівартість випусків нових акцій. У середньому, на кожний долар заниженої ціни, андерайтер отримує збільшення ціни акції на 0.45 доларів та збільшення річного продажу на 0.16 доларів.

Мей-Чен Лін

Ефект вихідного дня у визначенні доходів та витрат

У статті досліджено ефект вихідного дня відносно ефекту розміщення на основі даних про операції на Тайванському ринку ф'ючерсів на фондові індекси. Фізичні особи мають тенденцію до визначення доходів та витрат у п'ятницю, таку ж тенденцію проявляють і посередники. Іноземні інвестори менш схильні до визначення витрат у п'ятницю. Враховуючи тенденцію до визначення доходів та прибутків разом, автор приходить до висновку, що ефект вихідного дня відносно ефекту розміщення не спостерігається. Крім того, торговці не бажають підписувати нові контракти у понеділок незалежно від порядку покупки або продажу, але вони схильні приймати довгі позиції за рахунок встановлення ціни наказу покупки у п'ятницю.

Луціо Кассія, Томмасо Мінола

Структурування капіталу фірм, що працюють на нових технологіях: дані на прикладі молодіжного підприємництва

У статті досліджено наявність неофіційної ієрархії у фінансуванні фірм, що працюють на нових технологіях (NTBF) та запропоновано дані про фактори визначення того, до якого джерела капіталу намагаються отримати доступ NTBF. Автори приділили увагу аспектам людського капіталу: вік, освіта та досвід, а також зосередили увагу на потенційних особливостях молодих недосвідчених підприємців та потенційним обмеженням. Ці результати підтримують непогодженість науковців про існування зворотної неофіційної ієрархії NTBF. Результати підтверджують традиційні структури неофіційної ієрархії та свідчать про те, що NTBF покладаються на зовнішній борг, що суперечить загальним теоретичним прогнозам. Однак, дані показують, що треба дослідити ієрархію між боргом та капіталом як фінансовим джерелом, якому надає перевагу NTBF коли вона досліджується за поздовжнім, а не поперечнм підходом.

Вен-Чунг Гуо, Шин-Ронг Шіа-Хоу, Ші-Хуа Пан

Чи має значення інтелектуальний капітал для діяльності фірм? Дослідження на прикладі даних бухгалтерського звіту

Мета статті – аналізувати зв'язок між інтелектуальним капіталом та діяльністю фірм. Автори визначають, що нематеріальні активи, відображені у балансовому звіті, та людський капітал позитивно пов'язані з проведенням бухгалтерських розрахунків. Однак, ми також визначили, що наукові дослідження та розробки мають негативний вплив на прибутки від діяльності, а також реклама та людський капітал негативно пов'язані з темпом зростання продажів. У статті також представлено негативний зв'язок між людським капіталом та непостійність прибутку. Крім того, у статті досліджено впливи розміру фірми, М/В та індустрії на ефекти інтелектуального капіталу.

Ерккі К. Лайтінен

Використання аналізу беззбитковості для передбачення невиконання зобов'язань зі сплати: дані на прикладі малих фірм

Аналіз беззбитковості (ВЕА) широко використовується як метод управління для аналізу зв'язку між об'ємом продажу та прибутком фірми. У даному дослідженні ВЕА використаний для передбачення невиконання зобов'язань зі сплати. По-перше, точка беззбитковості визначається як точка, на якій чистий прибуток дорівнює нулю та на якій витрати роблять капітал критичним. По-друге, пороги безпеки (МОS) визначаються за об'ємом продажу та вартістю позиченого капіталу. Автори визначають три гіпотези можливості передбачення порогів безпеки. МОS використовуються як показники несплати у моделі логістичної регресії (LRM) у вибірці малих фірм Фінляндії. Було визначено, що МОS для чистих продаж — це значний показник невиконання забов'язань зі сплати. Здатність передбачати традиційні фінансові та не фінансові показники краще визначається за маржею.

Цзюо-Ліен Ванг, Хер-Цзюн Шеу, Хуімін Чунг

Реформа корпоративного управління та управління прибутками

У роботі досліджується чи закон Сарбанеса-Окслі, датований 2002 роком, пов'язаний з управлінням прибутками в США. Результати показують значне зменшення розміру боргів після впровадження закону Сарбанеса-Окслі. Крім того, після впровадження даного закону, автори визначили зв'язок між фірмами з високими прибутками до управління та менший вплив поведінки управління направленої на зниження доходів. Отримуємо дані, за якими припускаємо, що закон Сарбанеса-Окслі був успішним у стримуванні маніпуляцій по збільшенню доходу фірм, які отримували незначні прибутки до управління. Результати дослідження показують, що закон Сарбанеса-Окслі сприяв досягненню цілісності фінансових звітів; однак, для тих фірм, що прагнуть отримати контрольні показники прибутків, цей ефект обмежений.

Нассер Р. Аль-Мавалі

Чи рівень захисту прав інтелектуальної власності по-різному впливає на міжгалузеву та внутрішньогалузеву торгівлю?

У даній статті автори дають відповідь на питання стосовно того чи існують будь-які різниці у впливі рівня захисту прав інтелектуальної власності на міжгалузеву та внутрішньогалузеву торгівлю. Рівняння визначення міжгалузевої та внутрішньогалузевої торгівлі оцінюються у контексті методу постійного коефіцієнту з використанням методу найменших квадратів (OLS) та методу випадкових ефектів з використанням загального методу найменших квадратів. Результати дослідження показують, що захист прав інтелектуальної власності є важливим як для міжгалузевої, так і для внутрішньогалузевої торгівлі. Однак, для внутрішньогалузевої торгівлі це більш важливо.

Хао Фанг, ε н-Хсі ε н Λ і

Вплив фінансової кризи субстандартного кредитування на дохід за біржовими індексами для країн з високим та низьким ризиком напротивагу індексам кредитного дефолтного свопа

У статті досліджуються ефекти доміно, визначені Лонгстафф (2010), та розподіл відхилення від індексу АВХ, оціненого за відношенням ціни сек'юритизованих боргових зобов'язань до індексу кредитного дефолтного свопу у Північній Америці (що має назву CDX-US індекс), та за відношенням CDX-US індексу до біржових індексів у країнах з високим та низьким ризиком у докризовому періоді та під час кризи. Емпіричні результати показують, що розподіл відхилення та ефект доміно співвідношення низького індексу ABX до індексів CDX-US є більшим ніж відношення більшого індексу ABX до індексів CDX-US. Результати причинного тесту показують, що індекс CDX-US розповсюджується на фондові ринки у країнах з високим та низьким ризиком, підтверджуючи те, що ринки кредитних дефолтних свопів керують фондовими ринками, що досліджується Норден та Вебер (2004). З початку періоду розвитку, виділяють більші ступені компонентів відхилення від відношення індексів CDX-US до біржових індексів у країнах з високим ризиком та країнах з низьким ризиком. На початковій стадії кризи виділяють значний ефект доміно між індексами CDX-US та фондовими ринками де спостерігається більший ефект доміно від відношення індексів CDX-US до біржових індексів у країнах з високим ризиком ніж у країнах з низьким ризиком. Результати підтверджують те, що значне збільшення шоків спричинене фінансовими кризами у країнах з високим ризиком, як описано Раделет та Сахс (1998) та Камінскі (2003).

Serhiy Kozmenko (Ukraine), Taras Savchenko (Ukraine)

Countercyclical monetary policy in major economies of the Commonwealth of Independent States

Abstract

The previous financial crisis caused the ending of an unusually long phase of recovery in the former USSR republics, thus increasing the relevance of developing effective measures, specifically, the countercyclical economic policy. Throughout 1991 to 2010, fourteen completed cycles were identified in countries of Commonwealth of Independent States (CIS). At the beginning of June 2011, one economy was in recovery phase, five economies were in the growth phase and one economy was in the decline phase. The authors also analyzed the level of countercyclical monetary policy of central banks in major economies of the CIS. The necessity of a more active countercyclical monetary policy in these countries was identified.

Keywords: business cycle, monetary policy, central banks, Commonwealth of Independent States. **JEL Classification:** E52, E58.

Introduction

Macroeconomic policies, especially monetary policies aimed at smoothing cyclical fluctuations are critical for maintaining stable and sustained economic growth. Economists in developed countries constantly explore the impact of monetary policy on the phases of business cycles. Increased interest in these studies occurs in periods of economic crisis (Mendoza and Terrones, 2008; Raghuram and Zingales, 1998; Wynne and Balke, 1995). Development of the global financial crisis of 2008-2009 confirms the urgency of cycle regulation in both theoretical and in practical aspects.

The main objectives of this study are: (1) recording business cycles in the former Soviet Union and studying business cycle parameters (amplitude, duration and causes of recessions, the level of synchronization); (2) analyzing central banks' impact on the parameters of business cycles in the major economies of the Commonwealth of Independent States (Russia, Ukraine, Kazakhstan, Belarus).

With all the variations and refinements, there are three main theories that explain the causes of cyclic fluctuations: the first relates to the dynamics of investment cycles, the second – with the uneven nature of the innovation process, and the third – to fluctuations in money supply. Given the above objectives of this work, taken as the basis of the monetarism theory, which was outlined back in 1963 in the classical work of Friedman and Schwartz and detailed in the context of the impact of money on business cycles (Milton and Schwartz, 1975). Theoretical interpretation of the central banks' impact on the business cycles' phases is based on the monetarism theory as well.

1. Characteristics of business cycles

1.1. Study of parameters of business cycles in the largest CIS countries. Economists have mostly used

two standard methods of recording peaks and low points of business cycles in individual countries: statistical procedures and methods for subjective evaluation (Don and Pagan, 1999; Don and Pagan, 2006; IMF, 2008; Wynne and Balke, 1995). The statistical method is based on the use of real GDP data. The subjective method takes into account the dynamics of a large number of macroeconomic indicators (GDP, industrial production, trade, capital flows, consumption, unemployment). The latter method, for example, has been used by the National Bureau of Economic Research USA. Both methods are based on annual data from 1960 to 2009, showing four points of lower global economic activity: 1975, 1982, 1991 and 2009 years (IMF, 2009).

In the International Monetary Fund report (IMF, 2009), quarterly real GDP data is used to determine the cyclical peaks and low points. This monetary policy is called the Bry-Boschan for quarterly data (Don and Pagan, 1999; Don and Pagan, 2006). Using Bry-Boschan, representatives of the IMF have studied business cycles in 21 countries with developed economies for the period from 1960 to 2009 (IMF, 2009).

Using the data presented in Table 1, we can determine the largest economies of the CIS: Russia (75.6% of total real GDP of the CIS), Ukraine (7.6%), Kazakhstan (6.3%), and Belarus (3.5%). The combined data of these countries produce about 93% of the total GDP of the CIS. These countries are also the leaders in terms of the CIS foreign trade, industrial production and other indicators of economic development. Thus, we investigate only the parameters of business cycles and measures of monetary policy of these countries. In addition, Table 2 defines the year in which the individual CIS countries finally resumed the economic downturn caused by the collapse of the Soviet Union and reached the value of real GDP, exceeding the 1990 level.

[©] Serhiy Kozmenko, Taras Savchenko, 2011.

To investigate the recurrence of economic processes in the CIS countries, we use similar approaches to IMF methods analyzed above. As the basic indicator of a business cycle the annual growth rate of real GDP between 1991 and 2010 was chosen. To clarify the turning points of cycles, information about real quarterly GDP were also used. Parameters of business cycles of the CIS countries are shown in Appendix A.

It is assumed that each country's recovery phase lasted until the excess of real GDP pre-crisis level of

1990 (Table 1). After reaching this level, it can be considered that the national economy has passed the phase of recovery. To determine the amplitude phase of recovery, we calculated the percentage of real GDP growth compared with 1990 levels. For downturns caused by the financial crisis of 2008-2009, the amplitude of the recovery phase, according to the IMF approach, is defined as the percentage of real GDP growth a year after the recession (real GDP growth for 2010).

Table 1. CIS GDP in constant prices of 2005, billions U.S. dollars

Country	1990		2009		Growth rate 2009/1990	Excess over 1	990 level
•	GDP data	%	GDP data	%		GDP data	year
Armenia	4,076	0.36%	5,793	0.51%	142%	4,304	2004
Azerbaijan	11,961	1.07%	26,949	2.35%	225%	13,245	2005
Belarus	23,782	2.13%	39,876	3.48%	168%	24,773	2003
Georgia*	11,939	1.07%	7,743	0.68%	65%	-	
Kazakhstan	50,230	4.50%	71,770	6.27%	143%	52,073	2004
Kyrgyzstan	3,069	0.27%	3,055	0.27%	100%	-	
Moldova	6,101	0.55%	3,252	0.28%	53%	-	
Russian Federation	845,224	75.68%	865,354	75.61%	102%	889,616	2007
Tajikistan	3,824	0.34%	2,962	0.26%	77%	-	
Turkmenistan	8,609	0.77%	12,414	1.08%	144%	8,676	2005
Ukraine	137,383	12.30%	86,480	7.56%	63%	-	
Uzbekistan	10,664	0.95%	18,873	1.65%	177%	10,962	2001
CIS Total	1,116,862	100.00%	1,144,521	100.00%	102%		

Notes: *Withdrew from the CIS in August 2009.

Source: Own calculations and [15].

As shown in Appendix A, for the past 20 years the CIS countries experienced 14 completed cycles. As of 2010, six economies are in the recovery phase, five economies are in the growth phase and one economy is in the decline phase. The decline phase of the CIS countries on average lasted 12.2 quarters, while in the developed countries 3.4 times less time. The average duration of recovery phase of the CIS countries amounted to 19.7 quarters or 6 times the duration of this phase in economically developed countries. The recovery phase in the CIS countries on average lasted 15.9 quarters, whereas in developed countries 21.8 quarters.

The amplitude of recession in the CIS averaged 26.3% of decline of real GDP, where as in developed economies, it was 2.7% decline. The amplitude recovery in CIS countries averaged 47.4%, which exceeded the corresponding rates in the developed countries by more than 10 times. Longer phases of recovery in CIS countries is caused by unprecedented duration and amplitude decline, which was caused by the collapse of the USSR.

The financial and economic crisis of 2008-2009 resulted in the complete recovery of three phases of

the business cycle and phase recovery of four cycles. Three episodes of recession, after a short recovery, were driven by the financial crisis of 1998. The recession phase, which followed the collapse of the USSR and half of the 6 CIS countries ended after 1995, while three other countries had their recession phase end the following year. Thus, the decline in the CIS countries was characterized by high synchronicity of business cycles. Conclusions on the high-level synchronization of business cycles in the CIS countries are confirmed by the correlation coefficients of annual growth rates of GDP of the CIS countries for the period of 1991-2009. Coefficients of correlation between business cycles of Russia, Ukraine, Kazakhstan and Belarus are among the largest.

Appendix A also provides the indicators of business cycles in the major economies of the CIS: Russia, Ukraine, Kazakhstan and Belarus. Findings of the cycles in the major economies of the CIS are confirmed by using the software adapted to the present data to the quarterly GDP in the CIS (Engel, 2011). Despite the high synchronization of the dynamics of business cycles in these countries, rates of variation confirm the presence of significant differences in duration and amplitude of phase cycles. The largest CIS

economies experienced a shorter phase of recovery than the average for the CIS, as well as, smaller amplitude and fall of real GDP. These numbers are explained by larger inertia of major economies.

Appendix B presents dynamics of real GDP in the major economies of the CIS. In Russia, the decline phase lasted from 1991 through the second quarter of 1997 and the recovery phase lasted for the third and fourth quarters of 1997 (Figure 1). The year of 1998 and the first quarter of 1999 showed a 7 decline phase caused by the financial crisis of 1998, which ended with the announcement of government default. Starting with the second quarter of 1999, the recovery and growth phases were observed and lasted 36 and 3 quarters, respectively. The fourth quarter of 2008 showed a decline phase, which lasted 5 quarters, with the first quarter of 2010 to be the recovery phase.

In Ukraine, the decline phase lasted from 1991 through 1999, and then began the recovery phase, which lasted 37 quarters (Figure 2). It should be noted that Ukraine is the only country we identified among the major economies of the CIS that was not seen in the recovery phase because of the absolute data of GDP data compared with 1990. The recession phase lasted five quarters through the fourth quarter of 2009. Since the first quarter of 2010, Ukraine's economy has passed the phase of recovery.

In Kazakhstan, the decline phase lasted from 1991 through 1995; the recovery phase lasted six quarters (Figure 3). It should be noted that certain periods in the years of 1996-1997 can be identified as "times of uncertainty", when the quarterly dynamics of real GDP did not meet the criterion of minimum duration of phase cycles for the Bry-Boschan routine for quarterly data (Don and Pagan, 1999; Don and Pagan, 2006). During the first half of 1998 and the second half of 1999 a decline phase was caused by the financial crisis of 1998. The third quarter of 1999 showed a recovery phase and then growth that lasted 20 and 18 quarters, respectively. The first quarter of 2009 showed a decline phase, which lasted until the third quarter of 2009. From the fourth quarter of 2009, Kazakhstan's economy has passed the phase of recovery.

In Belarus, the decline phase lasted from 1991 through 1995; the recovery phase lasted for the next eight years (Figure 4). Since 2004, the recovery phase began, which went down during the second and third quarters of 2009. After the third quarter of 2009, the recovery and growth phases began.

1.2. The relationship among phase cycles of countercyclical monetary policy. In order to analyze the impact of monetary policy on business cycles, no-

minal interest rates and real interest rate fluctuation according to the Taylor rule are used (IMF, 2009). For each recession phase the basic measure of the policy was presented by the change of the designated indicator between the peak and the low point cycle, which is a cumulative measure of the weakening or strengthening of the policy for the entire time of decline. In order to achieve the indicators of monetary policy, its stimuli were calculated as the sum of deviations in each quarter phase of decline.

Most empirical studies do make distinctions between different phases of business cycles (Bernanke, 1995; Enrique and Terrones, 2008; Christina and Romer, 1989; Wynne and Balke, 1995). An exception is the work of Peersman and Smets where it is shown that monetary policy usually carries a significant impact during recessions rather than during booms. Therefore, given the above study and the monetarism theory, we assume that monetary policy should have countercyclical orientation as during the recession phase (expansionist) and on the peaks of the growth phase (restriction).

It should be noted that during the recovery phase the monetary policy should have a procyclical nature that promotes economic growth. However, at the peak of the growth phase (when there is an "overheated economy" and the imbalances emerge) and in decline phase monetary policy should be mainly driven by countercyclical motives.

Table 2 presents an assessment of appropriate use of monetary policy types by central banks in the largest CIS countries. For the assessment of the appropriate use of restrictive or expansionary monetary policy, we were guided by three basic rules. First, a comprehensive restrictive monetary policy should be performed only after the economic transition from the recovery phase to the growth is completed. Otherwise, the premature restrictive measures may inhibit the increased business activity and slow down the economic recovery to pre-crisis level.

Second, an active restrictive policy should be held for a limited period of time that coincides with the peak of business activity. We determined the peaks of business activity on the basis of calculating the variance of quarterly real GDP growth indicators of average real GDP growth for the entire period of the recovery and growth phase. Applying the above rules, the central banks should be taking measures of restrictive monetary policy during the defined periods (Table 2).

Third, during the decline phase, methods of expansionary monetary policy should be employed. This argument applies primarily to the early phase of recession, when comprehensive and decisive measures of expansionary monetary policy can reduce the amplitude and duration of the decline phase.

Table 2. Evaluation of appropriate use monetary policy types

	Daniad	Restr	ictive policy (pea	ks of the growth p	hase)	Е	xpansionary pol	licy (decline phase)
	Period	Russia	Ukraine	Kazakhstan	Belarus	Russia	Ukraine	Kazakhstan	Belarus
	1 qtr				+/-				
2004	2 qtr				+/-				
2004	3 qtr				+/-				
	4 qtr				+/-				
	1 qtr				+/-				
2005	2 qtr								
2003	3 qtr			+/-					
	4 qtr			+/-	+				
	1 qtr				+				
2006	2 qtr			+	+				
2000	3 qtr			+					
	4 qtr		+/-	+	+/-				
	1 qtr		+/-	+	+/-				
2007	2 qtr		+/-		+/-				
2007	3 qtr	+			+/-				
	4 qtr	+							
	1 qtr	+			+				
2008	2 qtr				+				
2006	3 qtr				+				
	4 qtr					+	+		
	1 qtr					+	+	+	
2009	2 qtr					+	+	+	+
2007	3 qtr					+	+	+	+
	4 qtr					+	+		
	1 qtr								
2010	2 qtr								
2010	3 qtr								
	4 qtr								

Notes: Sign «+» means that the appropriate policy should be applied, signs «+/-» mean that the appropriate policy should be applied partially. Source: Own estimation.

2. Impact of central banks on phases of business cycles

2.1. Instruments of monetary policy. We will explore the impact of monetary policy on the phase of

business cycles in the major economies of the CIS on the basis of retrospective analysis of the use of basic tools of monetary policy. Table 3 lists the main tools of monetarypolicy, along with the regulations.

Table 3. The main instruments of monetary policy

	Country					
Group of instruments	Ukraine	Ukraine Russia Kazakhstan		Belarus		
		Main instrumer	nts of monetary policy			
Interest rate policy	Interest rate policy	Interet rates based on bank of Russia operations	Interest rate refinancing and monetary policy rates	Regulation of refinancing and other rates		
Required reserves	Regulating the rates of required reserves	Regulating the rates of required reserves	Regulating the rates of minimum required reserves	Regulating the rates of required reserves		
Currency exchange policy	Gold and foreign currency reserves management	Currency interventions	Currency interventions	-		
	Commercial banks refinancing	Credit organizations refinancing	Loan grants, accounting of debt securities	Liquidity grants instruments		
Liquidity regulation	Open market operations with securitites	Operations with securitites	Selling and buying of government securitites	Liquidity absorbtion intruments		
	Bond issuance	Bond issuance	Bond issuance	-		
	-	Establishing money supply targets	Attraction of bank deposits	-		
Limits	Regulation of export/import of capital	Direct limits	Direct limits of specific operation	-		

Source: [4, 13, 25, 29].

Analyzing the contents of Table 3 we can conclude that the central banks of CIS major economies in their activity mostly use four groups of instruments of monetary policy: required reserves, interest rate policy, monetary policy operations and liquidity regulation. Next, we analyze the features of the application of the above groups of instruments in correlation with the phases of business cycles. It should be noted that in exceptional cases quantitative restrictions are applied, however, we will not investigate them because they are not systematic nor utilize market based data tools.

Some differences in the definition and application of instruments of monetary policy are observed in Belarus. First, the tools of monetary policy are not determined by law. This reduces the effectiveness of monetary policy, because society does not possess reliable information on the precise list of instruments for its implementation. Second, the National Bank does not allocate separate currency intervention as a monetary policy tool and does not provide information regarding their implementation on its official website. Third, there is no clear structuring of instruments that regulate liquidity and no publicly available data on the balance of the adjustments of liquidity. Consequently, when studying the impact of the National Bank of Belarus at the phase of economic cycle we are forced to limit the analysis of two groups of instruments: interest rate policy and required reserves.

2.2. Interest rate policy. According to the regulations of the largest central banks of CIS countries, the interest rate is one of the main channels of transmission mechanism, though the banks are aware of the limited capacity of its current application in a transitional regime of monetary policy (National Bank of Ukraine, 2004; Bank of Belarus, 2007; National Bank of Ukraine, 2009; National Bank of Kazakhstan, 2010; Stelmakh, 2009). In practice, the interest rate policies of central banks of major CIS countries are not effective enough. In most cases, there is no significant correlation between central bank rates and interbank rates, which in turn, eliminates the impact of interest rate policy on the dynamics of retail rates money market segment. This thesis is confirmed by analysis of the interest rates in the banking systems of Russia, Ukraine, Kazakhstan and Belarus for the period of 2006-2010 (Appendix C).

Inefficiency of interest rate policy of central banks of the largest CIS countries, as part of the business cycle monetary policy, is confirmed by the significant spreads and dynamics between the rates of central banks on the one hand, and the interbank rate and the retail deposit market, on the other. Given the data presented in Table 2, we will determine whether a formally executed interest rate policy of central banks in major countries of the CIS had a countercyclical function.

Thus, only National Bank of Kazakhstan consistently applied countercyclical interest rate policy. Other central banks did not use this tool to influence the phase of the cycle, given the poor performance of the interest rate channel of transmission mechanism, or its effect was procyclical: the central banks tried to achieve the target performance goals (the dynamics of money supply, inflation, etc.) that are not directly related to phases of economic cycle.

Nevertheless, most CIS countries are in transition to the new monetary policy regime, which is based on ensuring price stability. Accordingly, it is expected to form the foundation that ensures effectiveness of the interest rate channel of transmission mechanism of monetary policy in general (Somik, 2010).

2.3. Required reserves. Another instrument of monetary policy that is applied by the central banks of major countries of the CIS is needed reserve requirements. The influence of this tool is determined by the dynamics of its main parameters: reservation period, the assets that may be counted as the reserves cover, the reserves object, required amount of reserves, which is kept daily in accounts of the central bank, required reserves ratios. After analyzing the above parameters, we can conclude that the first three parameters (period, coverage provisions and facility reservation) should be considered as elements of the mechanism of automatic reactions to the level of liquidity in the banking system. They can only indirectly influence the use of required reserves as a tool for adjusting the phases of economic cycle. In this context, it is suggested to analyze the reserves ratio and proportion to the requirements of required reserves that must constantly be kept in the accounts of the central bank.

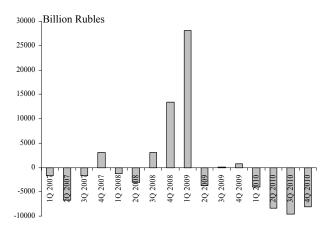
The dynamics of reserves established by the central banks of the Russian Federation, Ukraine, Kazakhstan and Belarus, as well as, a share of required reserves that have to be kept in daily accounts of the regulator, are investigated. Therefore, during the peaks of the growth phase the central banks of major CIS economies did not use reserves for countercyclical influence on economic dynamics. On the other hand, all central banks (excluding National bank of Ukraine) are using this tool in the early phase of decline for countercyclical influence.

2.4. Foreign exchange policy. The central banks of the major CIS economies implement foreign exchange policy and manage the international reserves, carrying out foreign exchange interventions (Table 3). The last action is affected by the sale of foreign currency to influence the domestic currency. A purchase or sale of foreign currency results in the increase or decrease in money supply on the domestic money markets.

Appendix D presents the dynamics of foreign exchange interventions (with '+' as a purchase, and with '-' as the sale of foreign currency by central banks) and international reserves of the Russian Federation, Ukraine and Kazakhstan. As noted above, the laws of the Republic of Belarus and regulations of its National Bank monetary policy (including foreign exchange interventions) are not regarded as instruments of monetary policy.

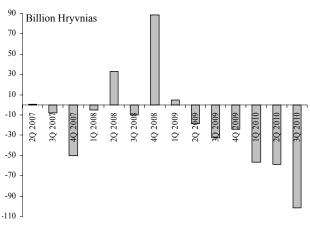
Thus, foreign exchange interventions of the central banks of Russia, Ukraine and Kazakhstan were not used to implement countercyclical monetary policy, and were used for other tasks: support for exchange rate stability and the formation of sufficient international reserves.

2.5. Regulation of liquidity. Figures 1-3 present the amount of funds granted to maintain the liquidity of banks with the sign "+" and with the sign "-" present specified amounts of funds mobilized from the commercial banks by the central banks.



■ Regulation of balance liquidity operations

Fig. 1. Liquidity operations of the Central Bank of Russian Federation



■ Regulation of balance liquidity operations

Fig. 2. Liquidity operations of the National Bank of Ukraine

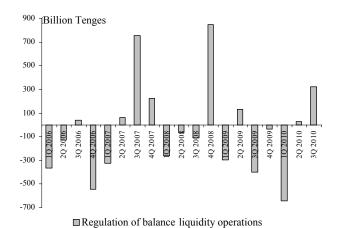


Fig. 3. Liquidity operations of the National Bank of Kazakhstan

Source: Own calculations and [17-19].

Central banks use several tools to increase liquidity: overnight loans, short-term loans, stabilization loans, tenders of liquidity support, etc. Also, the tools of liquidity absorption of commercial banks are used: issuance and placement of securities by central banks, raising money in deposits, reverse repurchase transactions, etc. Thus, the main indicators that illustrate the cumulative impact on liquidity of all instruments of central bank are operations with the balance of control liquidity. Belarus is excluded from the analysis due to the lack of data.

Thus, the regulation of liquidity operations by central banks in the major CIS economies had mainly countercyclical orientation. However, their real motives were far from a theory of the cycle regulation of the economy. Dynamics of liquidity regulation primarily was held because of the need to smooth the current imbalance between supply and demand on the national money markets through the volume of currency bought or sold by central banks in national currency markets and the possibility of an excessive money supply pressure on price levels in the national economy.

Conclusion

The global financial crisis of 2008-2009 caused the recovery (growth) phase in most CIS countries to end. As a result, on the one hand the problem of the cycle regulation of economic processes became relevant; on the other hand there was an opportunity to fully study the parameters of business cycles of the CIS countries. The main results of the business cycles analysis in the CIS countries over the period from 1991 to 2010 are presented in the first part of this paper. Over the past 20 years the CIS countries experienced 14 completed cycles. As a result, as of 2010, six economies were in the growth phase and one economy was in the decline phase.

More detailed analysis of business cycles in the major economies of the CIS: Russia, Ukraine, Kazakhstan and Belarus, which collectively produce about 93% of the total GDP of the CIS was presented. Based on the evaluation of the peaks of the growth phase and boundaries of the decline phase the periods during which it made sense to apply the restrictive or expansionary monetary policy were defined.

In the second part, the paper analyzes the actual level of compliance regimes of monetary policies implemented by central banks in the major economies of the CIS at the peak phase and recovery phase. Given the differences in models of monetary policies, money market structure and channels of transmission mechanism of CIS in comparison with the developed countries, the assessing of the level of countercyclical monetary policy based on nominal interest rates and declining of the real interest rate from Taylor rule are not acceptable. To solve this problem we used an integrated approach, which provided retrospective analysis of the main instruments of monetary policy: interest rates, required reserves, foreign exchange interventions to support liquidity.

The analysis of dynamics of interest rates of the central banks of major countries of the CIS states that only the National Bank of Kazakhstan have consistently applied the interest rate as a part of countercyclical policy. Other central banks did not use this tool as an active element of monetary policy or applied as procyclical factor while focusing on goals that were not directly related to the regulation of the phase of economic cycle.

Other tools of the monetary policy (required reserves, foreign exchange interventions to support liquidity) had largely a neutral effect on the parameters of the economic cycle. The application was determined by the factors that lie in the plane of ensuring a stable exchange rate dynamics, control of inflation, adequate liquidity in the banking system, creation of reserves, etc. Certain exceptions are required reserves, which the majority of central banks (exclude National Bank of Ukraine) were using for cycle regulation.

Given the above, it seems appropriate to use more active and effective countercyclical monetary policy by central banks in major economies of the CIS, which does not contradict the performance of their basic function, which is to ensure the stability of national currency. It should be emphasized that exter-

nal (exchange rate) and internal (inflation) stability of national currency is in direct correlation with real GDP trend, and, therefore, with phases and parameters of business cycles. Recently, the emphasis in the interpretation of the main function of the central banks of major countries of the CIS is shifting from maintaining stability of exchange rate to ensure an acceptable level of inflation (introduction of inflation targeting).

A complete task of forming a more active and effective countercyclical monetary policy is only possible when solving a number of objective problems in the regulation of economic processes. These problems lay within the competence of central banks and, as well as, the responsibility of other government authorities. It is possible to highlight the following main problems that limit the elements of countercyclical monetary policy in most CIS countries.

First, deals with generation of inaccurate forecasts of macroeconomic dynamics. To effectively use the countercyclical monetary policy tools, central banks should have timely and reliable estimates of changes in the key macroeconomic parameters (especially GDP data), which define the phases of economic cycle. Development of quality macroeconomic models to predict the impact on the dynamics of monetary policy instruments of the macroeconomic key indicators (GDP, inflation, exchange rate) should also be ensured.

Second, the monetary policy model should be reformed to improve efficiency of application of interest rates by central banks that influence the phase of economic cycle. It should be noted that during 2009-2010 some CIS countries took several measures to improve the efficiency of the interest rate channel of transmission mechanism. These measures and further formation of the necessary conditions for effective work in the long-term interest rate channel will use interest rate policy as a basic element of countercyclical monetary policy. This approach is entirely consistent with international experience.

Third, there should be coordination of use of the other instruments of monetary policy (required reserves, foreign exchange intervention, liquidity support operations), which are mainly used for automatic control of the money market with the objectives of countercyclical monetary policy. Solving these problems will help to build an effective countercyclical monetary policy, promote equilibrium of money market and support sustainable economic growth in CIS countries.

References

- 1. Bernanke, Ben S. (1995). "Inside the Black Box: The Credit Channel of Monetary Policy Transmission", *Journal of Economic Perspectives*, Vol. 9 (Autumn), pp. 27-48.
- 2. Business Cycle Dating Programs (BBQ). James Engel / National Centre for Econometric Research // http://www.ncer.edu.au/data.
- 3. Duenwald Christoph, Gueorguiev Nikolay, Schaechter Andrea. Too Much of a Good Thing? Credit Booms in Transition Economies: The Cases of Bulgaria, Romania, and Ukraine / IMF Working Paper, June 2005. 33 p.
- 4. Federal Law On the Central Bank of the Russian Federation, Moscow, July 10, 2002, http://www.cbr.ru/eng/today/status functions/main.asp.
- 5. Friedman, Milton, and Anna J. Schwartz (1963). A Monetary History of the United States, 1867-1960 (Princeton, New Jersey: Princeton University Press for the National Bureau of Economic Research).
- 6. Friedman, Milton, and Anna J. Schwartz (1975). Money and Business Cycles, The State of Monetary Economics, p. 32-78.
- 7. Guidelines for the Single State Monetary Policy in 2010 and for 2011 and 2012, http://www.cbr.ru/eng/today/publications reports/main.htm.
- 8. Harding Don, and Adrian Pagan. Dissecting the Cycle / Melbourne Institute Working Paper No. 13/99, May 1999. 34 p.
- 9. Harding Don, and Adrian Pagan. Measurement of Business Cycles / Melbourne Institute Working Paper, June 2006. 12 p.
- 10. International Monetary Fund (2009). World Economic Outlook: Crisis and Recovery (Washington, April).
- 11. International Monetary Fund (2008). World Economic Outlook: Financial Stress, Downturns, and Recoveries (Washington, October).
- 12. International Monetary Fund (2002). World Economic Outlook: Recessions and Recoveries (Washington, April).
- 13. Law On the National Bank of the Republic of Kazakhstan, March 30, 1995, http://www.nationalbank.kz/?docid=365.
- 14. Mendoza, Enrique, and Marco E. Terrones (2008). "An Anatomy of Credit Booms: Evidence from Macro Aggregates and Micro Data", NBER Working Paper No. 14049, Cambridge, Massachusetts: National Bureau of Economic Research.
- 15. National Accounts Main Aggregate Database of The Economic Statistics Branch of the United Nations Statistics Division// http://unstats.un.org/unsd/snaama/selbasicFast.asp.
- 16. National Bank of the Republic of Kazakhstan (2010). Financial Stability Report of Kazakhstan, http://www.nationalbank.kz/?docid=577.
- 17. Official site of the Central Bank of the Russian Federation, http://www.cbr.ru/eng/daily.aspx.
- 18. Official site of the National Bank of Ukraine, http://www.bank.gov.ua.
- 19. Official site of the National Bank of the Republic of Kazakhstan, http://www.nationalbank.kz/?switch=eng.
- 20. Official site of the Interstate Statistical Committee of the Commonwealth of Independent States, http://www.cisstat.com/eng/index.htm.
- 21. Peersman, Gert, and Frank Smets (2001). "Are the Effects of Monetary Policy Greater in Recessions than in Booms?" ECB Working Paper No. 52, Frankfurt: European Central Bank.
- 22. Rajan, Raghuram, and Luigi Zingales (1998). "Financial Dependence and Growth", *American Economic Review*, Vol. 88 (June), pp. 559-586.
- 23. Romer, Christina D. and David Romer (1989). "Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz", in NBER Macroeconomics Annual, Vol. 4, ed. by Olivier Jean Blanchard and Stanley Fischer, Cambridge, Massachusetts: National Bureau of Economic Research.
- 24. Schwartz Anna J. (2002). "Asset Price Inflation and Monetary Policy", NBER Working Paper No. 9321.
- 25. The Law of Ukraine on the National Bank of Ukraine, Kyiv, May 20, 1999, http://www.bank.gov.ua/Engl/B_legisl/index.htm.
- 26. Wynne, Mark A., and Nathan S. Balke (1995). "Are deep recessions followed by strong recoveries? Results for the G-7 countries", Federal Reserve Bank of Dallas.
- 27. Андреа Шехтер. Кредитный бум в Украине: риски для стабильности финансового сектора / Аналитический отчет ${\rm MB}\Phi-2004.-23~{\rm c}.$
- 28. Монетарна політика Національного банку України: сучасний стан та перспективи змін / За ред. В.С. Стельмаха. К.: Центр наукових досліджень Національного банку України, УБС НБУ, 2009. 404 с.
- 29. Национальный банк Республики Беларусь. Документы по операциям HБРБ, http://www.nbrb.by/mp/chart.asp.
- 30. Сомик А. Особливості дії трансмісійного механізму грошово-кредитної політики в період кризи: кредитний та процентний канали // Вісник Національного банку України. 2010. № 10.

Appendix A

Table 1. Business cycles characteristics of the CIS countries in 1991-2010

Countries		Length ¹			Amplitude ²	
Countries	Decline	Recovery ³	Growth	Decline	Recovery ⁴	Growth
		Main business cycles pa	rameters			
Azerbaijan	22	36	22	-58,12	164,45	113,63
Armenia	12	44	15	-53,09	125,08	56,8
Amenia	5	4		-16,1	2,60	
Belarus	20	31	22	-34,86	59,91	60,57
Delai us	2	2	3	-0,4	7,60	
Georgia	16	55		-72,33	144,01	
Georgia	5	4		-5,37	6,30	
	20	6		-38,61	2,21	
Kazakhstan	4	20	18	-1,9	68,41	36,18
	3	1	4	-2,4	7,00	
	20	34		-49,32	58,47	
Kyrgyzstan	3	18		-0,2	24,16	
	3			-1,4		
	26	2		-62,89	1,60	
Moldova	7	37		-9,69	67,35	
	4	4		-6,5	6,90	
Russia	26	2		-40,15	1,40	
	4	36	3	-5,3	83,27	5,6
	5	4		-7,9	4,00	
Tajikistan	26	54		-68,32	160,35	
	10	2		-18,88	1,50	
Turkmenistan	8	4		-23,25	6,70	
	4	30	20	-11,4	68,72	56,24
Uzbekistan	22	22	36	-18,89	26,73	86,8
Ultraina	34	37		-59,21	81,76	
Ukraine	5	4		-17,2	4,20	
	Characteristics	of business cycles across	all the countires	of the CIS		
Average (1)	12,2	19,7	15,9	-26,3	47,4	59,4
Standard deviation (2)	9,44	18,16	10,41	23,64	53,44	31,94
Coefficient of variation (2)/(1)	0,78	0,92	0,66	0,90	1,13	0,54
Number of observations	26	25	9	26	25	7
	Characteristics of	business cycles: Russia, I	Jkraine, Kazakh	stan, Belarus		
Average (1)	12,3	14,3	10,0	-20,8	32,0	34,1
Standard deviation (2)	11,02	14,35	8,27	19,74	34,37	33,84
Coefficient of variation (2)/(1)	0,90	1,00	0,83	0,95	1,07	0,99
Number of observations	10	10	5	10	10	3
Charac	cteristics of highly sy	nchronized declines caus	ed by the financi	al crisis of 2008-20	09	
Average (1)	4,1	3,3	3,5	-8,0	5,5	-
Standard deviation (2)	1,12	1,16	0,50	5,96	1,76	-
Coefficient of variation (2)/(1)	0,27	0,35	0,14	0,75	0,32	-
Number of observations	7	7	2	7	7	-

Notes: ¹Number of quarters; ²Rate change of real GDP; ³Number of quarters untill reaching GDP level of 1990; ⁴Growth of real GDP untill 1990.

Source: Own calculations.

Appendix B

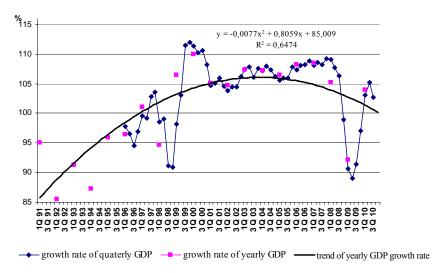


Fig. 1. Real GDP dynamics in Russia (1991-2010)

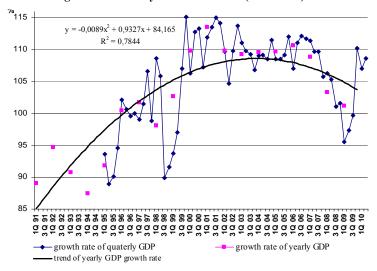


Fig. 3. Dynamics of real GDP in Kazakhstan (1991-2010)

Source: Own calculations and [15, 20].

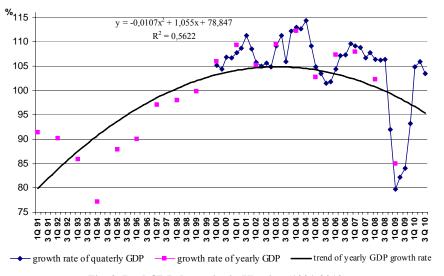


Fig. 2. Real GDP dynamics in Ukraine (1991-2010)

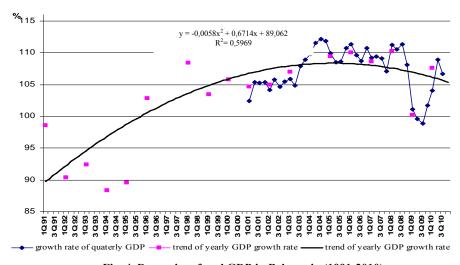
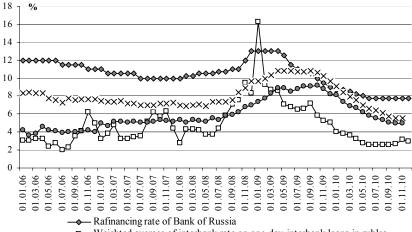


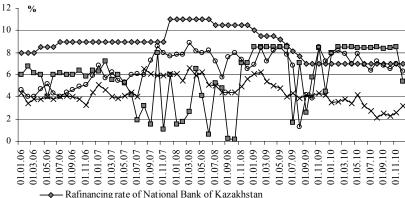
Fig. 4. Dynamics of real GDP in Belarus in (1991-2010)

Appendix C



- —— Weighted average of interbank rate on one-day interbank loans in rubles
- -x Deposit rate execept on-demand deposits
- Weighted average of consumer deposit rate

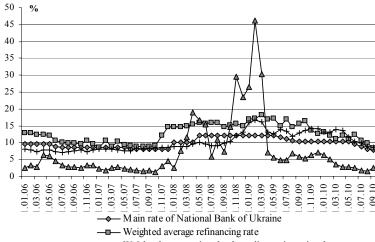
Fig. 5. Dynamics of rates of the banking system of Russia



- Weighted average interbank credit rate in national currency
- X Weighted average consumer deposit rate in national currency
- Weighted average corp orate deposit rate in national currency

Fig. 7. Dynamics of rates of the banking system of Kazakhstan

Source: Own calculations and [16-19].



- —▲ Weighted average interbank credit rate in national currency
- + Weighted average deposit rate in national currency

Fig. 6. Dynamics of rates of the banking system of Ukraine

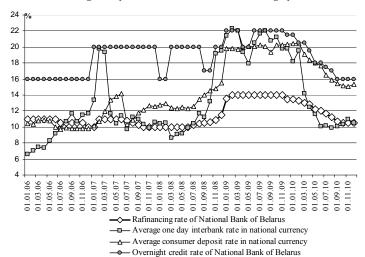


Fig. 8. Dynamics of rates of the banking system of Belarus

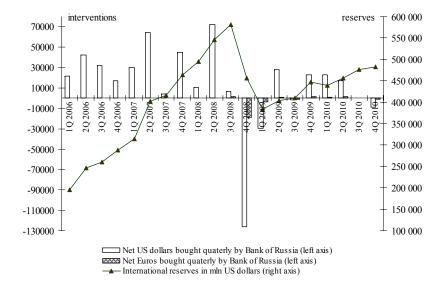


Fig. 9. Dynamics of currency intervention, and international reserves of the Central Bank of Russian Federation

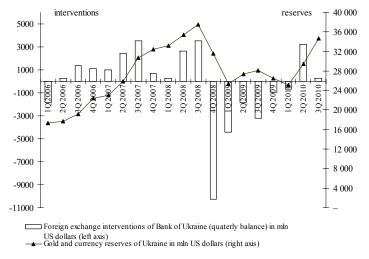


Fig. 10. Dynamics of interventions and international reserves of the NBU

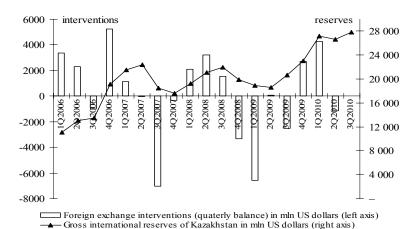


Fig. 11. Dynamics of interventions and international reserves of the NBK

Source: Own calculations and [17-20].

Authors of the issue

Serhiy Kozmenko	 Dr., Professor, Vice-Rector for Research at the Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)
Taras Savchenko	 Ph.D., Associate Professor, Department of Banking, Ukrainian Academy of Banking of the National Bank of Ukraine (Ukraine)
Carlo Bellavite Pellegrini	 Ph.D., Associate Professor of Corporate Finance, Department of Economics and Business Management Sciences, Catholic University; Director of CeMaFiR, Arnone Bellavite Pellegrini Foundation; ELS Committee Member of "P. Baffi" Center, Bocconi University (Italy)
Davide Romelli	 Ph.D. Student, Doctoral School of Economics, Cergy-Pontoise University (France)
Emiliano Sironi	 Ph.D., Post-Doctoral Fellow, Department of Statistical Sciences, Catholic University; Research Fellow of "P. Baffi" Center, Bocconi University (Italy)
Olga Dodd	 Ph.D., Senior Lecturer in Finance, Faculty of Business and Law, Auckland University of Technology (New Zealand)
Alex Gakhovich	 Faculty of Business and Law, Auckland University of Technology (New Zealand)
Enrico De Giorgi	 Ph.D., Assistant Professor of Mathematics, School of Economics and Political Science, University of St. Gallen (Switzerland)
William Johnson	 Assistant Professor, Whittemore School of Business and Economics, University of New Hampshire (USA)
Mei-Chen Lin	 Ph.D., Professor of Business and Administration, School of Business, National Taipei University (Taiwan)
Lucio Cassia	 Professor of Strategic Management and Entrepreneurship, Director of Research Center for Young and Family Enterprise, University of Bergamo (Italy)
Tommaso Minola	 Ph.D., Assistant Professor, Senior Associate, Center for Young and Family Enterprise, University of Bergamo (Italy)
Wen-Chung Guo	 Associate Professor, Department of Economics, National Taipei University (Taiwan)
Shin-Rong Shiah-Hou	- Associate Professor, Department of Finance, Yuan Ze University (Taiwan)
Shih-Hua Pan	- Graduate Student, Department of Finance, Yuan Ze University (Taiwan)
Erkki K. Laitinen	 Professor, Accounting and Finance, Faculty of Business Studies, University of Vaasa (Finland)
Juo-Lien Wang	 Ph.D., Assistant Professor, Department of Accounting, Chaoyang University of Technology (Taiwan)
Her-Jiun Sheu	 Ph.D., Professor, Department of Banking and Finance, National Chi Nan University (Taiwan)
Huimin Chung	 Professor, Graduate Institute of Finance, National Chiao Tung University (Taiwan)
Nasser R. Al-Mawali	- Assistant Professor of Economics, Sultan Qaboos University (Oman)
Hao Fang	 Assistant Professor, Department of Assets and Property Management, Hwa Hsia Institute of Technology (Taiwan)
Yen-Hsien Lee	 Associate Professor, Department of Finance, Chung Yuan Christian University (Taiwan)

Submission guidelines for authors

The cover page of a manuscript should contain the **title** and **name(s)** of the author(s). The author's name, degree, position and the place of work as well as contact details (phone number, job and/or personal e-mail) should be provided at the bottom of this page.

1. Abstract preparation guidelines

- 1.1. The abstract (150-200 words) should reflect the conceptual content of the article.
- 1.2. Journal of Economic Literature (JEL) classifications are necessary.

2. The paper main body preparation guidelines

- 2.1. The paper should present the result of independent original research, undertaken by the author; it should contain the data never published before.
- 2.2. The paper should contain a clear description of research objective and its subject.
- 2.3. The methodology of research should be described in detail.
- 2.4. The author's personal scientific contribution must be grounded in the paper.
- 2.5. The paper should contain basic suggestions on how to solve the problem under study.

3. References in the text

- 3.1. References in the text are made as follows: (Myers, 2000), the former being name of the author, the latter edition year.
- 3.2. Examples of references:

Alchian A., S. Woodward. Reflections on the Theory of the Firm // *Journal of Institutional and Theoretical Economics*, 1987. – №143. – pp. 110-136.

Berle A.A., G.C. Means. The Modern Corporation and Private Property. – New York: Macmillan, 1932. – 418 pp.

Cremers, K. and Nair, V. (2005). Governance Mechanisms and Equity Prices, *Journal of Finance*, Vol. 60, No. 6, pp. 2859-2894.

4. Manuscript length

4.1. The paper should not be less than 2000 words and should not exceed 6000 words.

5. Submission guidelines

Please send your paper using one of the formats listed below:

5.1. A soft copy as an MS Word .doc file (all versions accepted) or as .rtf file to:

Journal "Investment Management and Financial Innovations":

Executive Editor: imfiexeceditor@businessperspectives.org

5.2. A hard copy supplied with a disc containing a soft copy of the paper to:

Publishing company "Business Perspectives"

Dzerzhynsky lane, 10

Sumy 40022

Ukraine

6. Reviewing process

All papers are refereed by the international competent researchers using a "double-blind" review which is the best practice in papers reviewing.

7. Acceptance fee

We offer a very democratic fee policy to our contributors. We only ask for payment from those authors whose papers have already been reviewed and accepted for publication in the journal.



A joint subscription form 2010/2011

Follow guidelines to complete it.

"PROBLEMS AND PERSPECTIVES IN MANAGEMENT"

arre	For institutional subscribers	EURO
Problems Perspectives In Management	☐ Print ☐ Online	595 395
Charles Colores and	Print version + online	795
alle some		

"INNOVATIVE MARKETING"

☐ Print version	545
Online	370
☐ Print version + online	680
	Online

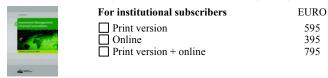
"INSURANCE MARKETS AND COMPANIES: ANALYSES AND ACTUARIAL COMPUTATIONS"

ASSESSED NAVITA NO CONTINUES	For institutional subscribers	EURO
	☐ Print version☐ Online	495 370
B	☐ Print version + online	650

"PUBLIC AND MUNICIPAL FINANCE"

Public @Municipal	For institutional subscribers	EURO
Finance	☐ Print version	495
	Online	370
	☐ Print version + online	650

"INVESTMENT MANAGEMENT AND FINANCIAL INNOVATIONS"



"BANKS AND BANK SYSTEMS"

-01-00-00	For institutional subscribers	EURO
& Banks Bank Systems	☐ Print version	560
	Online	375
	☐ Print version + online	690
AND ROOMS		

"ENVIRONMENTAL ECONOMICS"



For institutional subscribers	EURO
☐ Print version	495
Online	370
☐ Print version + online	650



WORLD FINANCIAL CRISIS: CAUSES, CONSEQUENCES, WAYS OF OVERCOMING

ISBN 978-966-2965-07-0

About the book:

- ♦ Language English
- Publisher "Business Perspectives" Publishing Company
- ♦ Editorship Serhiy Kozmenko, Tetyana Vasyl'eva
- ♦ Year of publishing December 2009
- ♦ Number of pages about 400 pages (hardback)

Unit cost:

- 1. Single copy 84€.
- 2. Five and more copies 80€ each.
- 3. Ten and more copies 70€ each.

CENTRALIZATION OF TREASURY MANAGEMENT

ISBN 978-966-2965-08-7

About the book:

- ♦ Authors Petr Polák (Chapters 1-11), Ivan Klusáček (Chapter 12)
- ♦ Language English
- Publisher "Business Perspectives" Publishing Company
- ♦ Year of publishing February 2010
- ♦ Number of pages about 100 pages (paperback)

Unit cost: one copy – 34€.



THE TRUTH ABOUT THE GLOBAL FINANCIAL CRISIS

ISBN 978-966-2965-06-3

About the book:

- ♦ Author Omar Masood
- ▶ Language English
- publisher "Business Perspectives" Publishing Company
- Year of publishing December 2009
- ♦ Number of pages about 150 pages (paperback)

Unit cost: one copy – 30€.

No. of Concession,		
Central of Trea	lization sury Manaç	pement

Underline one of the payment methods you prefer, and write the amount to pay (if you prefer, you can pay by one check/bank transfer to subscribe to all the journals):

ournais).				
1.	I enclose a check for ☐USD /☐ EURO	. ,		
2.	Send me an invoice for ☐USD /☐ EURO			
Write your	r contact details here:			
Name		Institution		
Address		E-mail	Tel	Signature

Please, send this form (with the check if you prefer to pay by check) at:

Ms. Lyudmyla Ostapenko
Publishing company "Business Perspectives"
Dzerzhynsky lane, 10, Sumy, 40022 Ukraine
E-mail: head@businessperspectives.org