

GLOBALISATION AND FINANCIAL MARKETS SIZE LIMITS: CREDIT RISK MANAGEMENT ASPECTS

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Abstract. The paper presents a macroeconomic view on financial assets market integration. In process of globalization the cost of international transactions provides certain advantage for large markets. Real financial trends are different from theoretical assumptions. Intermediaries are more aggressive to use risky instruments with advantages of wide risk diversification at lower cost. The price of financial assets became higher as the size of assets markets became larger. The globalization impact is more essential for financial markets of advanced countries, not to less developed economies The impact of financial globalization on growth of the size of financial markets promotes the cross-country disbalance and leads the financial crises.

JEL Classification E580, F360, G210.

Key words: financial integration, global trends, risk diversification, assets, credit crisis, market concentration, assets, systematic risk.

Reikšminiai žodžiai: finansinė integracija, globalios tendencijos, rizikos paskirstymas, kredito krizė, rinkos koncentracija, aktyvai, sisteminė rizika.

1. Introduction

The main reasons of financial integration are cross-country financial liberalization, IT, trade and production internationalization and market competition growth. There are the numerous studies on key factors of globalization reflected the main country's indicators. The IMF financial stability reports provide wide view on world and regional financial system development. Since 70s-80s many countries have reduced barriers on cross-border trade, and financial liberalization made effect on financial assets flows. The common opinion on positive role of financial liberalization was based on risk diversification due to the market size, worldwide investing, lending possibilities, market efficiency. Economists made conclusion about benefits and of advantages from financial globalization on assets markets and financial convergence. It was stated, that welfare is higher without such friction as taxes on international trade in financial assets, and, finally, asset prices, portfolios, and firm financial policies are not country dependent. IMF study about financial stability (2003, 2004, and 2008) shows changes in global markets through different aspects. Using models in which the certain factors as taxes on international trade in financial assets, or size of different types of assets, economists concluded that financial globalization is beneficial because welfare is higher without these cross-country barriers. The 2003 IMF study on the effects of financial globalization on developing countries concludes that "while embracing financial globalization may resulting higher capital inflows, it is unlikely to cause faster growth by itself. In addition, some of the countries with capital account liberalization have experienced output collapses related to costly banking or currency crises" [3]. The classical model explains correlation between openness economy and financial liberalization, but the the impact of financial globalization is smaller than it would be in a model without frictions, because of number insider risks. The paradox of risk diversification, in my opinion, lays in decreased control of risks across countries and imbalance between savings and investment decisions. The ongoing global financial crisis created uncertainty in monetary strategies and shortterm consolidated decisions. The mortgage market bubbles started in US has influenced losses on investments and savings, then overlaps by crises of food, oil and energy, and finally covered by the economy recession. As financial globalization became essential reason of the ongoing world crisis, the urgent needs to change financial regulation in order to protect economies from such dramatic accidents. There are different investment behavior approaches in small and less developed country investment behavior.

There are empirical data supported the conclusion of investigation made by Obstfeld and Taylor (2003), there they stated, that "Capital transactions seem to be mostly a rich to rich [country] affair" (10, p. 175). It is clear about effects of financial integration on transaction costs and risk sharing for regional and global financial markets.

Baele, L. et al. [6, p.7–8] provided widely agreed interrelated benefits of financial integration:

1. More opportunities for risk sharing and risk diversification. The empirical evidence pointed, that sharing risk across regions enhances specialization in production and following beneficial results. The increased number of financial instruments and scale of the cross-ownership off assets again effected by financial integration should offer additional possibilities to diversify portfolios and share risk across regions.

2. Better capital allocation among investment opportunities. The elimination of trade barriers, common clearing and settlement platforms allow firms to choose the most efficient investment instruments and assets with expectation to allocate in the most efficient way.

3. Its common point that for higher growth is the last implication of greater financial integration, which is partially linked to the issue of capital allocation. A well known channel through which financial integration acts upon economic growth is greater financial development.

Moritz Schularick [9] discuss, that the financial globalization benefits can be substantial, because international financial integration allows for risk sharing, consumption smoothing and the efficient allocation of capital. According to standard economic models financial globalization should create particular opportunities for less-developed countries. Empirical cross-country studies have found little discernible growth effects of financial opening (Edwards, 2001; Edison et al., 2002, IMF Stability Reports, etc.) show, that international investment in poor and not developed countries is low.

2. The Extent of Financial Globalization and Volatility Risk

If financial globalization means a reduction in formal barriers to trade in financial assets, then the results of this process became unexpected. Behind the broadening and deepening of cross-border financial links there are three main forces. "One is changes in the behavior of local and foreign market participants. For example, over the past two decades advances in communications and computing technology and the consequent increase in the availability of information have contributed to a weakening of investors' home bias. At the same time, an increasing number of firms have opted to raise capital in international markets, including through the cross-listing of shares on major stock exchanges. A second driving force is unilateral action by national authorities. Beginning in the mid-1980s, authorities in many emerging markets liberalized their financial systems and implemented other market-oriented reforms. Progress in removing capital controls slowed after the financial crises of the late 1990s, but reform of local financial systems continued. A third force is multilateral action by a group of countries. Over the past decade, the international community has developed a range of standards to promote well functioning financial systems, and many countries have taken steps to harmonize national standards with these international ones. In addition, cross-border financial ties have been promoted through formal trade and investment agreements. Such agreements often give a greater impetus to regional than to global integration, in part because of the difficulties of reaching agreements among a large number of countries. The European Union is the best known example of a collective effort to achieve an integrated regional market." [16, p. 58-59].

Preconditions with respect to domestic financial sector development, institutional quality, and trade openness need to be met for financial integration to have a beneficial impact on economic growth. According empirical studies the correlation between financial openness of the country and economy growth is influenced by the level of country development.

As shown in the table below, the country with more developed financial sector, institutional quality and trade openness the risk of crises relatively lower. A well-functioning financial sector is a precondition for the efficient allocation of resources, and improvements in financial intermediation may ameliorate the allocation of resources across investment projects. A better trading, hedging and pooling of risks allows the funding of highly profitable.

 Table 1. Countries with De Facto Open Financial Accounts:

 Frequency of Crises (1970–2004)

Above the Me- dian in at least Three out of Four of the Factors	N	Ban- king Crises	Currency Crises	Debt Crises	Sudden Stops
Yes	23	0.61	0.57	0.22	0.7
NO	19	0.74	0.89***	0.53***	0.89*

Sources: International Financial Statistics (IFS), staff estimates based on the sources and definitions of sudden stops, and banking, currency, and debt crises described in Becker and others (2007, Appendix I).

A country has a currency crisis if the following three conditions hold at some point during a calendar year: (i) devaluation/ depreciation rate of at least 25 percentage cumulative over a 12-month period; (ii) devaluation/depreciation rate by at least 10 percentage points greater than in the preceding 12 months; (iii) a minimum of three years since last crisis; this definition was applied using IFS data. Sudden stops in capital flows are defined as a decline in financial flows by five percentage points of GDP.

Notes: The factors are financial sector development, institutional quality, macroeconomic policies soundness, and trade openness. Frequency of crises: fraction of countries that had at least one crisis during the sample period. N is the number of countries in each group. One-sided test of equality of means: * significant at the10 percent level; ** significant at the 5 percent level;

*** significant at the 1 percent level.

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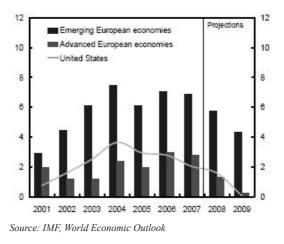
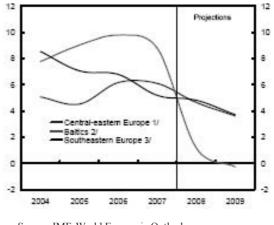


Fig. 1. Europe and the United States: Real GDP Growth, 2001–2009 (percent)

It is difficult empirically show a direct positive effect of financial integration on growth. Common opinion acknowledge that less developed countries benefit more from the development of domestic financial markets due to the direct effect of financial integration. Facing ongoing global financial crises the future of small countries with open economy isn't clear.



Source: IMF, World Economic Outlook.

1. The Czech Republic, Hungary, Poland, and the Slovak Republic. 2. Estonia, Latvia, and Lithuania.

3. Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Moldova, Romania, Serbia, and Turkey.

Fig. 2. Growth in Emerging Europe, 2004–2009

3. Economy Growth and the Business Cycle

Financial globalization has been argued to affect many aspects of economic performance-including long-run economic growth, the propensity to experience growth upturns or downturns, the sustainability of growth spells, the volatility of economic growth, the frequency of economic crises. There were many signals for overlapping few important fenomena as food price shoks, oil and enegy resource crises, and credit crisis started in US with colapce major investment institutions of the country. Reflected to differences in country financing conditions it could be resumed for differences in responses to the credit cycle across Europe. The role of financial assets as borrowing collaterals, developments in national housing and corporate finance systems have the potential to make bank lending procyclical. The financial sector can amplify business cycle fluctuations as well as the impact of monetary policy shocks and asset price movements on real activity.

4. The Limits of Globalization

With unexpected increase in cross-border trading in securities and the reduce formal restrictions for international investment, the practical aspects of economy convergence became important facing intencive integration processes.

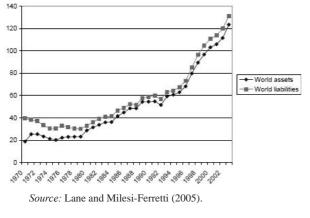


Fig. 3. World Assets and Liabilities, 1970-2003 (percent of world GDP)

Savings and investment: Feldstein and Horioka (1980) showed that savings and investment levels were very close for most countries. The conclusion based on the Feldstein-Horioka puzzle [Feldstein, Martin & Horioka, Charles (1980), "Domestic Saving and International Capital Flows", Economic Journal 90: 314-329], famously discussed in a paper by Nobel Laureate Robert Lucas in 1990, called as the "Lucas Paradox" points out that if production functions are the same across countries, then neoclassical models imply that the productivity of capital must be very high in developing countries or countries with low income, since wages are very low in these countries. In general, economists agreed, that large capital flows towards these countries. As a sample, Lithuania with its small scale economy and high level of openness during all transitional time didn't attract expected foreign investments. The same results are for other emerging economies. There are number of investigations about savings-investment correlation with capital mobility show that the modern dynamic model of open economy predicts that investment and saving would be correlated in the long run regardless of the extent of capital mobility, and it depends mainly on country's economic solvency. [Aspects of globalization: macroeconomic and capital market linkages in the integrated world economy, pp. 49-66, Christopher Tsoukis, George M. Agiomirgianakis, and Tapan Biswas, eds., Kluwer Academic Publishers, London, 2004]. Suprisingly, in 2000, developed countries' investment per capita was \$6,000, but in developing countries, investment per capita was only \$400.12 [Rene M. Stulz. The Limits of Financial Globalization. National Bureau of Economic Research (NBER); European Corporate Governance Institute (ECGI), Finance WP N°. 75/2005 March 2005].

5. The Limits of Financial Globalization

Financial globalization should enhance international risk sharing, reduce macroeconomic volatility, and foster economic growth; in practice the empirical efects shows other trends. Risk sharing has increased in advanced countries with their greater levels of financial openness and institutional control, but has not been essential in emerging market and developing countries. Another common thesis, that international financial integration has not increased macroeconomic volatility or crisis frequency in countries with well-developed domestic financial systems and a relatively high degree of institutional quality also are not supported empiricly.

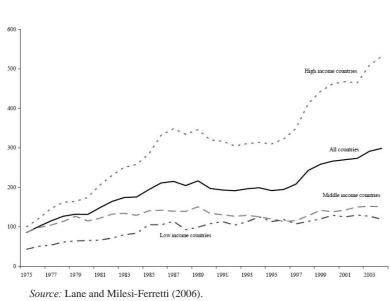
Table 2. Capital Controls by Type, 1995–2005

Type of Control	All Countries		Low Income	Middle Income	High Income
	1995	2005	1995-2005 average		
Aggregate	0.36	0.30	0.56	0.38	0.17
Inflows	0.32	0.26	0.50	0.33	0.16
Outflows	0.40	0.34	0.63	0.44	0.18
Equity	0.37	0.30	0.61	0.38	0.18
Debt	0.33	0.32	0.50	0.40	0.15
Short-Term Debt	0.34	0.30	0.59	0.40	0.15
Long-Term Debt	0.33	0.33	0.41	0.40	0.15
FDI	0.38	0.27	0.54	0.37	0.20

Sources: Annual Report on Exchange Arrangements and Exchange Restrictions, IMF; and staff calculations.

Notes: Unweighted averages of countries' capital controls, based on a capital controls index constructed by staff. Data for long-term debt refer to 1997 in the left panel and 1997–2005 in the right panel, respectively.

It means the diffusion linkage between financial globalization and economic growth. A number of underlying mechanisms are likely to be involved in the transmission of financial globalization to economic volatility and growth: Financial sector development; Institutional quality; Sound macroeconomic policies, and Trade integration. Each component has beneficial and Financial globalization-defined as the extent to which countries are linked through cross-border financial holdings, and proxied in this paper by the sum of countries' gross external assets and liabilities relative to GDP-has increased dramatically over the past three decades. This trend has been particularly pronounced in advanced economies, with emerging market and developing countries having experienced more moderate increases in their external stock positions over the period. These diverging trends stem from different capital control regimes, as well as from a range of persistent factors, including different



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Notes: Based on a sample of 74 countries (see Appendix Table 1) for which data on *de facto* financial globalization and *de jure* capital controls are available for the entire sample period. Income groups are according to the World Bank definition. The graph depicts unweighted averages of countries' ratios of the sum of external assets and liabilities relative to GDP.

Fig. 4. Gross External Assets and Liabilities by Income Group, 1975–2004 (In percent of GDP)

degrees of institutional quality and domestic financial development. Persistent factors related to geography and historical linkages-though they can be mitigated to some extent by greater financial market and corporate sector transparency—also help to explain different degrees of financial openness across the IMF's membership.

While, in principle, financial globalization should enhance international risk sharing, reduce macroeconomic volatility, and foster economic growth, in practice the empirical effects are less clear-cut. Risk sharing has increased somewhat in advanced countries-consistent with their greater levels of financial openness-but has not been noticeably affected in emerging market and developing countries. International financial integration has not increased macroeconomic volatility or crisis frequency in countries with well-developed domestic financial systems and a relatively high degree of institutional quality; it has, however, increased volatility for countries that have failed to meet these preconditions or thresholds. The link between financial globalization and economic growth is also complex. Although foreign direct investment and other non-debt creating flows are positively associated with long-run growth, the impact of debt seems to depend on the strength of a country's policies and institutions. The paper's empirical results are broadly supportive of the IMF's "integrated" approach, which envisages a gradual and orderly sequencing of external financial liberalization and emphasizes the desirability of complementary reforms in the macroeconomic policy framework and the domestic financial system as essential components of a successful liberalization strategy.

6. Financial Globalization and State Regulation

As financial globalization was caused by market liberalization, the domestic authorities lost the power on strict regulation. For emerging markets it became essential to export domestic assets and capital flows to international markets, and to open domestic markets for international investmen. Financial globalization reduces the state's ability to expropriate. The process of integration is complicated by conflict between needs to reduce barriers and state rules and regulations. The process of financial integration could promote financi-

al crises in those countries where investor protection is weak in respect for property rights suspect, corporate governance, or financial system supervision. The most developed financial markets could be also under uncertain if the size of the assets became critical. The US sub-prime mortgage market started to hit crisis at the end of 2006 when according estimation US\$100 billion worth of sub-prime mortgage defaults from less than credit-worthy borrowers in the USA. The financial turbulence escalated global crisis in July 2007 due to increased credit and market risks. The systematic risk took place with default of nine major US investment institutions.

The global financial market crisis felt by stock markets, companies and consumers in developing economies.

Conclusion

The impact of financial globalization has been limited. The ongoing global financial crisis is effected by financial globalization through investment channels. The beneficial factors are increasing market size, portfolio risk diversification, transaction cost efficiency. The negative side is related with lack of supervision. Although barriers to international investment have fallen sharply over the last 50 years, the impact of financial integration for countries still matter a great deal.

International financial integration has increased dramatically in the global economy over the past three decades, though this process has affected advanced countries to a much greater extent than other segments of the IMF's membership, in particular the developing countries.

The differing trends in *de facto* financial integration reflect in part countries' different policies with respect to the strength of *de jure* capital controls—notably the relatively early liberalization of the financial account in advanced countries. In addition, relative institutional quality and domestic financial development have also acted as constraints on the extent of *de facto* financial integration among emerging market and developing countries.

Notwithstanding differences across segments of the IMF's membership, the global trend toward increased international financial integration has affected all segments of the IMF's membership, and even—if to a lesser degree—those countries that have sought to lean against the wind through relatively restrictive financial account regimes.

In principle, greater financial openness holds promise: gains may come from greater risk-sharing, a more efficient worldwide allocation of capital, and broader technology transfer. Sizable gross external asset and liability positions in advanced countries seem to be reflected in significant risk-sharing gains and, to the extent that international asset trade expands further in emerging market and developing countries in the years ahead, risk-sharing gains should be at least as large, in view of the relatively high current degree of consumption volatility in this segment of the IMF's membership. Closer integration of emerging market and developing countries into global financial markets may also provide significant benefits to advanced country residents through enhanced opportunities for portfolio diversification.

Empirical evidence on the stability benefits of international financial integration is mixed. The results reviewed in the paper suggest that, for countries with relatively strong institutions, well-developed domestic financial systems, and sound macroeconomic policy frameworks, greater integration has not been accompanied by significantly higher macroeconomic volatility, whereas for countries without those conditions in place, volatility has tended to increase with greater openness. Likewise, within a sample of financially open countries, crisis frequency is found to be lower for countries that are relatively open to international trade, and with strong institutions, sound policies, and well-developed financial sectors.

The empirical relationship between international financial integration and long-run economic growth is complex. Evidence presented above stresses the

importance of unbundling financial integration into different components: foreign direct investment and other non-debt forms of financing are found to be positively and significantly associated with economic growth, whereas the impact of debt seems to depend on the strength of a country's institutions and policies. It bears noting, however, that even for countries that do not meet relevant thresholds, policy makers will need to take into account-in framing their strategies in relation to financial liberalization-that greater financial openness is associated with a number of "collateral benefits" that in turn seem to foster economic growth. In other words, when assessing the merits of liberalization, policy makers will need to be cautious, but also consider the costs of caution implied by efficiency losses related to capital controls.

Looking forward, the net benefits from financial integration are likely to be larger than in the past, in view of a more equity-based structure of international asset and liability positions, as well as policy and institutional reforms that increasingly are bringing emerging market countries up to the thresholds where net benefits associated with liberalization are likely to turn positive.

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GLOBALIZACIJA IR FINANSŲ RINKŲ PLĖTROS RIBOS: KREDITO RIZIKOS VALDYMO ASPEKTAI

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Santrauka. Finansinė globalizacija užtikrina efektyvų tarpininkavimą tarp taupymo ir investavimo pasauliniu mastu. Teoriniu požiūriu didžiausią finansinės globalizacijos naudą turėtų pajusti besivystančių valstybių rinkos. Dėl pažangių technologijų ir finansinio liberalizavimo konkurencija tarp tarpininkavimo paslaugų tiekėjų išaugo. Nepageidaujamas finansinės globalizacijos sukeliamas poveikis siejamas su atskirų valstybių finansų sistemų nepakankama kokybe: informacijos asimetrija, priežiūros stoka, ekonominių "burbulų" formavimas, apribojimai tarptautiniuose atsiskaitymuose, kt. Tarptautinio valiutos fondo vykdomi pasaulinės finansų integracijos ir finansinio stabilumo tyrimai, taip pat ekonomistų teikiami empiriniais rezultatais pagrįsti duomenys roda, kad finansinės globalizacijos realios tendencijos neatitinka teorinių prielaidų, kurios susiformavo kitoje ekonomikos aplinkoje, t. y. prieš keturis dešimtmečius. Šiandien globalizacijos teikiama nauda labiau pasireiškia pažangios ekonomikos valstybėse, o ne besivystančiuose kraštuose.

Vykstant dabartinei pasaulinei finansų krizei ir ekonomikos recesijai akivaizdu, kad finansinė globalizacija tampa svarbiu rinkų nestabilumo veiksniu. Finansinė globalizacija padidina nepageidaujamą ekonominio nuosmukio riziką. Šis naudos ir rizikos junginys yra neišvengiamas, kai informacija yra asimetriška, ar yra privaloma vykdyti neteisingai sudarytus kontraktus. Manoma, kad finansinė globalizacija sukelia neigiamus efektus trumpu ir vidutiniu laikotarpiu, tačiau ilgu laikotarpiu jos poveikis yra teigiamas, todėl būtina amortizuoti finansinės globalizacijos sukeliamus svyravimus rinkose. Kapitalo srautų atėjimas į vietines rinkas lemia realaus keitimo kurso augimą bei sukuria neproporcingai didelius finansinius perteklius, tai esant nepakankamai priežiūrai gali sukelti finansinę krizę. Procesai šiuo metu vykstantys finansų rinkose tampa vis mažiau valdomi ir visos šalys ieškoti konsoliduotų sprendimų slopinant nepageidaujamus svyravimus.

Eugenija Martinaityte, doctor of social science, assos. Professor of Mykolas Romeris university, graduated from Kaunas University of Technology and obtained the doctoral degree at Moscow Management Academy. Many years she worked at prof.K Antanavicius management system lab, Vilnius Gediminas Technical University. 1986–1991 she headed the Department of Economics. She also worked as Program director at the Open Society Fund (G.Soros Foundation) and later as on the executive director position at the Lithuanian Banking, Insurance and Finance Institute, with possibility to conduct many activities concentrated on Lithuanian Economy and Finance. Dr. Eugenija Martinaityte had internships in US, Switzerland, Italy and other countries, she cooperates with Lithuanian and foreign universities for research, supervising and consulting doctoral and master students.

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