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ВЗАИМОДЕЙСТВИЕ КРЕДИТОВ БАНКОВСКОЙ СИСТЕМЫ И ЭКОНОМИЧЕСКОГО РОСТА В РЕСПУБЛИКЕ АРМЕНИЯ

Аннотация. *Цель:* изучить роль коммерческих банков в обеспечении экономического роста страны, и наоборот. *Проектно-методологический подход:* с использованием и анализом данных коммерческих банков о распределении кредитов (предоставление кредитов домохозяйствам и секторальное распределение в частном секторе), активах и пассивах, соотношении собственного капитала и кредита к ВВП, а также данных о темпах роста ВВП выявляются тенденции и, следовательно, исследуется роль коммерческих банков. *Результаты:* Соотношение активов банковской системы к ВВП в 2015 г. снизилось на 1,8 процентных пункта по сравнению с 2014 г., хотя по сравнению с 2000 г. соотношение значительно увеличилось, достигнув 68,5% по сравнению с 22,8% в 2000 г. Аналогичная тенденция наблюдалась и в отношении соотношения банковского кредита к ВВП. Эта тенденция отражает изменения и сдвиги, которые наблюдались как в экономике, так и в банковской системе: экономический рост и смягчение некоторых требований по предоставлению кредитов. *Вывод:* в посткризисный период (с 2012 по 2015 г.), восстановление экономики вызвало рост спроса на банковские кредиты, что повлекло за собой увеличение активов и пассивов банковской системы. Экономический рост и развитие банковской системы двигались в том же направлении. Перспективы роста кредитования банковского сектора Армении чувствительны к событиям, которые фиксируются в реальном секторе экономики, который, в свою очередь, уязвим к внешним факторам, таким, как обесценивание национальной валюты. *Практическое применение:* результаты могут быть использованы Центральным банком и Министерством финансов Республики Армения при разработке различных стратегий и других законодательных актов, связанных с политикой, а также теми учёными, которые заинтересованы этой темой.

Ключевые слова: кредит, коммерческий банк, экономический рост, банковская система, кредитная политика, Армения.

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INTERACTION OF CREDITS OF THE BANKING SYSTEM AND ECONOMIC GROWTH IN THE REPUBLIC OF ARMENIA

Abstract. *The goal:* researching the role of commercial banks in providing for the economic

growth in the country, and the opposite of it. **Project-methodological approach:** using and analyzing the data of commercial banks about the distribution of credits (providing credits to households and sectorial distribution in the private sector), assets and liabilities, correlation of equity capital and credit to the GDP, as well as the data about the speed of growth of the GDP we have found tendencies, and therefore studied the role of commercial banks. **The results:** The correlation of assets of the banking system to the GDP in 2015 went down by 1.8 percent compared with 2014, though in comparison with 2000 this correlation has significantly increased having reached 68.5% compared with 22.8% in 2000. A similar tendency was observed with regards to the correlation of the banking credit to the GDP. This tendency reflects the changes and shifts that were seen both in the economy, and the banking system: the economic growth and mitigation of certain requirements on providing credits. **The conclusion:** in the post-crisis period (from 2012 to 2015) the reconstruction of the economy caused the growth of demand for banking credits which led to an increase in assets and liabilities of the banking system. The economic growth and development of the banking system moved in the same direction. The prospects of growth of credits of the banking sector of Armenia are sensitive to the events that are recorded in the real sector of the economy that, in turn, is exposed to external factors, such as the depreciation of the national currency. **The practical application:** the results may be used by the Central bank and the Ministry of Finance of the Republic of Armenia when developing different strategies and other legislative acts related to politics, as well as can be used by scientists who are interested in this topic.

Keywords: a credit, a commercial bank, economic growth, a banking system, a credit policy, Armenia

Introduction. The negative developments associated with the aftermath of the crisis experienced by the Global Economy along with the low recovery rates of some industries entailed new risks and resulted in some uncertainties owing to the second wave of the Global Financial Crisis and public debt issues that some nations were facing. The negative developments of the Global economy hit the Armenian Banking sector, namely being affected by the impact of the integration processes and uncertainties that the global financial markets were facing. The aftermath of the Global Financial crisis, in its turn, deepened the financial issues that the Eurozone nations were experiencing and slowed the expectations with respect to the growth rates of the Global Economy. It needs to be noted that the low interest rates suppose low costs that the commercial banks could bear both with respect to liabilities and new financial resources being attracted, since the interest rates of loans that the banks borrow are and/or attract from the international financial institutions are usually associated with the LIBOR. Moreover, the low interest rates that were prevailing at the international financial markets owing to the efforts of the central banks of various nations in response to the Global Financial Crisis affected the level of profitability on the corresponding accounts of the Armenian commercial banks with the non-resident banks that declined to a certain extent. Furthermore, despite the fact that the Armenian banking system is considered as one of the most competitive sectors of the economy in Armenia, the system faces some challenges and is coping with various threats.

At the last stage of the development of the Global economy Armenia became extremely vulnerable to the changes happening in the financial markets, and the external sector threats the economy of Armenia is facing are the proof of that. Moreover, the shifts happening in the Global economy are the source of concern with respect to the stability of the Armenian banking system, namely with regard to the “excess liquidity”, since about the half of the total amount of the assets of the Armenian banking sector is allocated at the foreign corresponding accounts (assets with the lowest level of profitability). This situation states that the Armenian banking sector not only is experiencing difficulties with regard to consolidating and reallocating both domestic savings and cash flows, but also allocates domestic financial resources abroad. Actually, the difficulties of the banking sector are associated with consolidating and reallocating both domestic savings and financial resources and preventing the massive outflow of domestic resources. The capital market significantly affects this whole process that needs to effectively reallocate the financial resources that are accrued at the hands of the nation and to represents the realistic and adequate financial situation of the main “actor” of the market. Consequently, if the level of domestic investments is still low, and foreign investments are associated

with other factors, then a group of population that plays an active role in the capital market, nevertheless, prefers investing in foreign stocks issued by the renowned brands rather than investing in the stocks of the Armenian companies. Surely, this situation cannot be only explained by the issues the banking sector is facing; the rather significant size of the shadow economy, risks that are associated with the real sector of the economy, low level of development of the other sector of the financial market, low growth rates of the economy and other factors affect the described situation as well. These factors affect the banking sector as well, and impact the investment allocation decisions made by the banks and cause risks associated with managing the investment portfolio. It needs to be stated that remittances and personal transfers received from abroad (mainly originated from the 1990s onwards) via banking system uniquely affect the development path of the banking sector as well: increasing demand for money and putting additional pressure on inflation.

Hence, we attempt to investigate the role of the commercial banks in ensuring the nation's economic growth and vice-versa.

Literature Review. By examining the contribution of the banking sector to economic growth across the sample of 16 transition countries in Central and South Eastern Europe from 1991 to 2011, Petkovski and Kjosovski (2011:64) find that “the contribution of the relatively underdeveloped credit markets to growth has been rather limited” [1, p. 64]. In case of three sub-Saharan African countries — Kenya, South Africa and Tanzania, Odhiambo (2007:277) concludes, that “a demand-following response is found to be stronger in Kenya and South Africa, whilst in Tanzania a supply-leading response is found to predominate” [2, p.277]. Al-Moulani and Alexiou (2017:1), by studying the relationship between banking sector depth and long-term economic growth in the natural resource-based economies, and the rest of the world in the period from 1964 to 2013, find that “the banking-growth relationship is non-linear and positive within certain levels of banking sector depth in in case of all country groups”, and “total effect of banking sector deepening on long-term economic growth is weaker in economies with abundant natural resources than in the rest of the world” [3, p. 1]. Prochniak and Wasiak (2017:334) by investigating the impact of the development and stability of the financial sector on economic growth across the sample of 28 EU countries and 34, OECD economies in the period from 1993 to 2013 show that “the size and the performance of the financial system have a significant impact on economic growth”, however “too big size of the financial sector, i.e. excessive lending or too high volume of nonperforming loans, has a negative impact on GDP growth” [4, p. 334]. Monnin and Jokipii (2010:21), by investigating the relationship between banking sector stability and the consequent evolution of real output growth for a sample of 18, OECD countries (a sample of 521 banks) from 1980Q1 to 2008Q4, find that “banking sector stability appears to be an important driver of GDP growth in subsequent periods” [5, p. 21]. For a sample of 70 Emerging/Developing countries, Liang and Reichert (2006:33) find a strong evidence of Granger causality between the output and the measure of financial sector development (FSD), elaborated by the authors, thus “suggesting that Granger causality runs from economic development to FSD, evidence of a “demand-following” relationship” [6, p. 33]. In the case of Barbados in the period from 1980 to 2014, Best and Francis (2015:22-23) find an evidence of the “demand-following” hypothesis in the short run [7, p. 22–23]. Isu and Okpara (2013:14) state that in the case of Nigeria “financial deepening follows a demand following hypothesis” and the “growth of the economy is necessary for financial development and not necessarily otherwise” [8, p. 14]. In the case of Laos, Kyophilavong et al. (2014:16) state that “promotion of financial sectors could contribute to economic growth and at the same time, economic growth also stimulates financial development” [9, p. 16]. In the case of 12 members of Economic Community of West African States, Atindéhou et al. (2005:777) find that in “all but a few countries, results indicate a weak causal relationship between finance and economic development on one side, and between economic development and finance on the other side” [10, p. 777]. The results of Chang and Caudill (2005:1334) favor supply-leading hypothesis for Taiwan [11, p.1334]. In the case of Jordan, AL-Naif (2012:100) finds that there is a “one-directional causality relationship from financial development to economic growth in both the long- and short-run” [12, p.100].

Overall, the results vary from country to country: in case of some nations the evidence of supply-leading hypothesis being weak, while in other cases the demand-following hypothesis showing strong evidence. Hence, in case of Armenia we attempt to investigate the role of the commercial

banks in ensuring the nation's economic growth and vice-versa.

Design/methodological approach. By using and analyzing commercial bank data on loan allocation (extending credits to households and sectorial distribution in the case of the private sector), own capital, assets and liabilities, and credit-to-GDP ratio, and GDP growth rates data, trend patterns are identified and consequently the role of commercial banks is investigated.

Results. It needs to be noted that the current economic situation doesn't favor the banking system. Thus, the commercial banks by assessing the possible scenarios of the growth of the economy and the impact of the depreciation of the national currency (see fig. 1) revised the requirements for getting loans and made them stricter, hence adopting more conservative loan policy in case of extending loans to bank clients (see fig. 2).

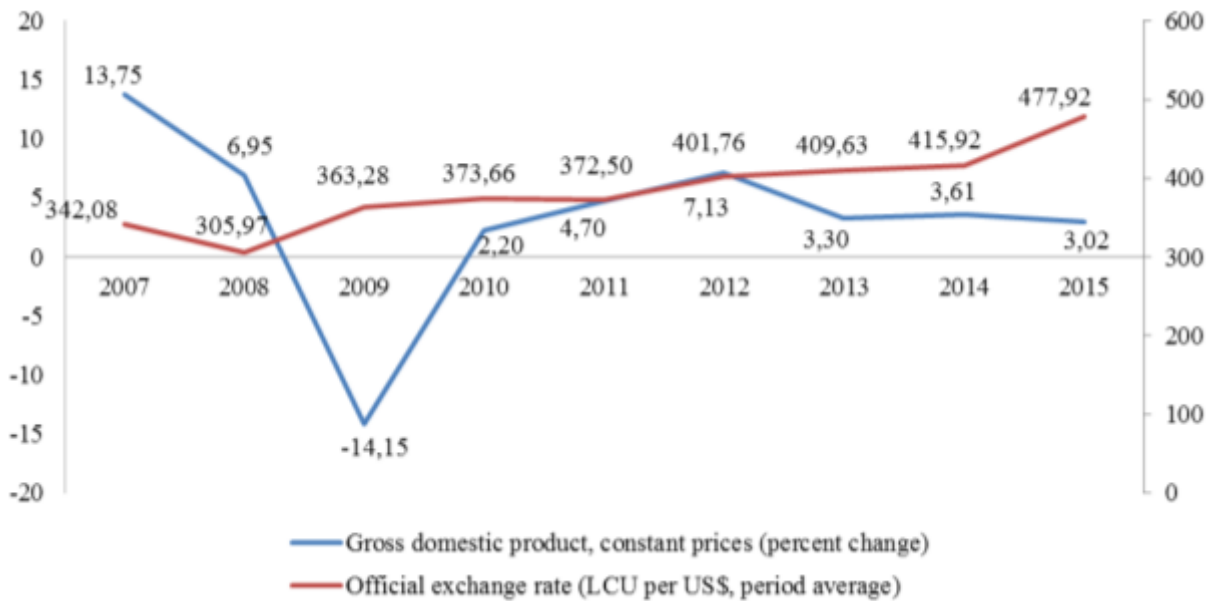


Fig. 1. GDP growth rates and official exchange rate from 2007 to 2015

Source: [14], [15]

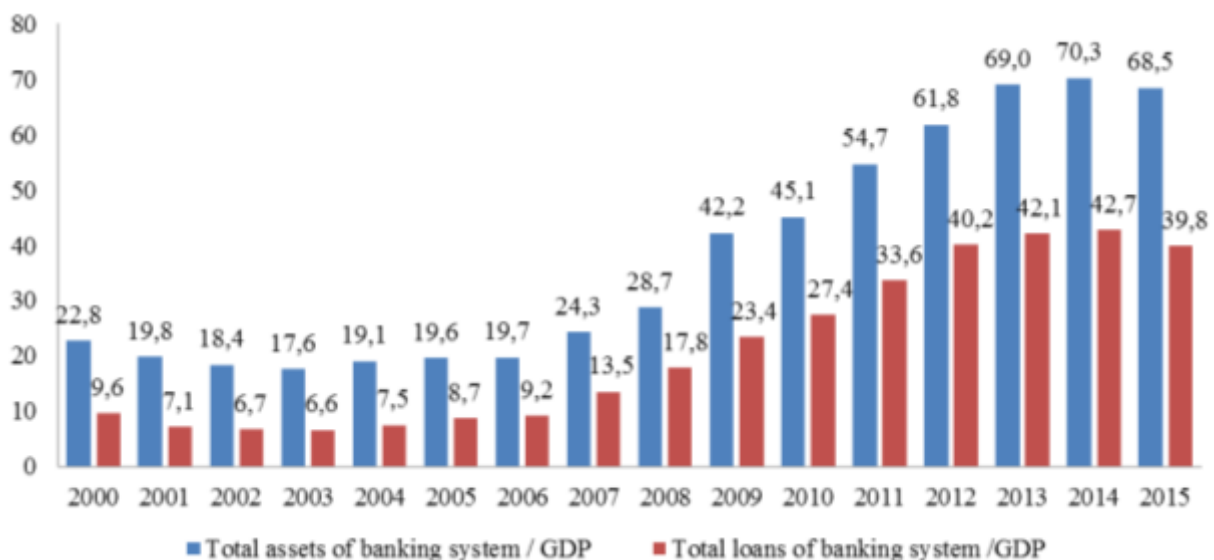


Fig. 2. Bank loan-to-GDP and Bank assets-to-GDP ratios from 2000 to 2015 (%)

Source: [13]

Banking system assets-to-GDP ratio reported a slight decline in 2015 decreasing by about 1.8 percentage points over 2014, although in comparison to 2000 the ratio reported a significant increase reaching 68.5% while compared to 22.8% back in 2000. The same trend was observed with respect to

the bank loan-to-GDP ratio. In 2015, the ratio amounted to 39.8%, reporting a decrease of about 2.9 percentage point while compared to 2014 ratio. The ratio's increase over 2000 was tremendous as well (39.8% while compared to 9.6%). This trend pattern reflected the changes and developments reported both in the economy and banking system: i.e. economic growth and easing of some of requirements to provide loans.

Assets, liabilities, capital and profit of banking system* (thousand AMD)

Period	Total Assets	Total Liabilities	Total Capital	Current period retained earnings/Loss **	Previous period retained earnings/ Loss **
31.12.2012	2,470,631,226	2,077,042,203	393,589,023	42,821,279	66,191,242
31.12.2013	2,943,734,392	2,487,701,871	456,032,521	37,928,881	98,209,091
31.12.2014	3,410,922,738	2,941,802,920	469,119,818	21,195,062	108,335,132
31.12.2015	3,457,080,811	2,943,030,970	514,049,841	(20,356,731)	122,137,908

Source: [16]

* Monthly reports data.

** Cumulative.

In the post-crisis period (from 2012 to 2015), the recovery of the economy caused increase in demand on the bank loans (table, fig. 3 &4), thus entailing an increase in both bank assets and liabilities. In other words, economic growth and the growth of the banking system moved in the same direction: i.e. banking system development could be associated with the economic growth, and the economic growth could be associated with the banking system development. Increase in the total capital was linked to the new requirements of the Central Bank on the minimum threshold value of the own capital that needed have to be reached to 30 billion Armenian drams (AMD) by January 1, 2017 instead of 5 billion Armenian drams.

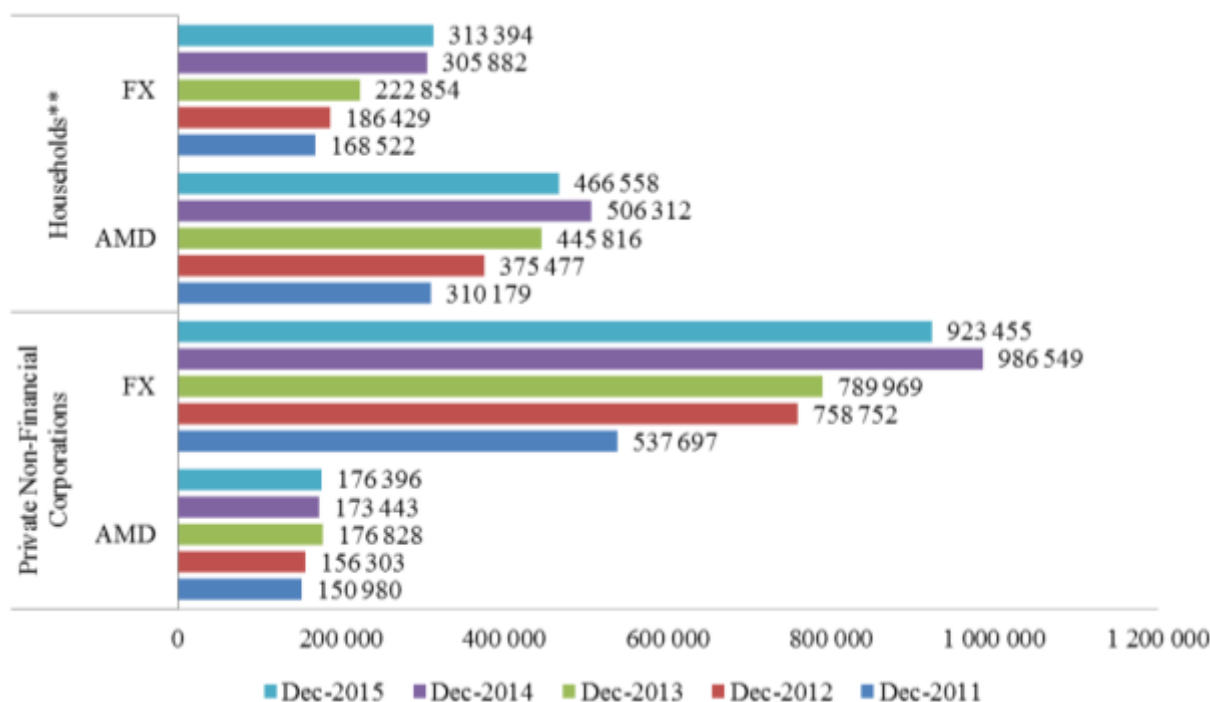


Fig. 3. Commercial bank loans by sectors of economy (end of period, mln AMD)*

Source: [17]

* Accrued interests are not included. Loans include also repo agreements, factoring and leasing operations.

** Including loans extended to bank employees and insiders.

Over the period 2011–2015, the loans extended to both resident private non-financial corporations and households reported a tremendous increase (see fig. 3). Loans extended in foreign exchange were

predominant in case of the private companies, while loans provided to households were mostly in local currency. Loans to private companies accounted for a major share in the total loan portfolio of commercial banks. In 2015, the commercial banks were more cautious in making their decisions (see Figure 1) with respect to extending loans to both private companies and households, thus pinpointing the fact that commercial banks are sensitive to growth perspectives of the economy. In 2015, loans extended to private companies (in foreign exchange) declined by 63,091 million Armenian Drams in comparison to the amount of loans extended to private companies in 2014. The same trend was observed in case of the loans to the households (extended in local currency). In 2015, the decline amounted to 7.9 percent while comparing to the amount extended to households in 2014.

In the loan portfolio of commercial banks from 2013 to 2015, consumer loans were of the largest share (see fig. 4), followed by the loans extended to the industrial and/or processing companies, and trading companies. In case of the loans extended to the industry it could be concluded that the driver of the growth banking sector loans could be the growth of the industry and/or future prospects of growth of the industry. More conservative loan policy of 2015 could have been associated with the depreciation of Armenian dram that possibly hit the industry, hence, once more reinstating our proposition that Armenian banking system loan growth prospects are sensitive to the developments that happen in the real sector economy. In 2015, the amount of loans extended to the industry declined by 53,977 million Armenian drams in comparison to 2014 (or by 12.6 percent). The same trend was observed with respect to many sectors of the economy except the lending extended to services sector, the agriculture, constructions and mortgage loans. Tremendous increase in lending was reported in construction sector that reached about 59.3 percent in 2015 while comparing to 2014.

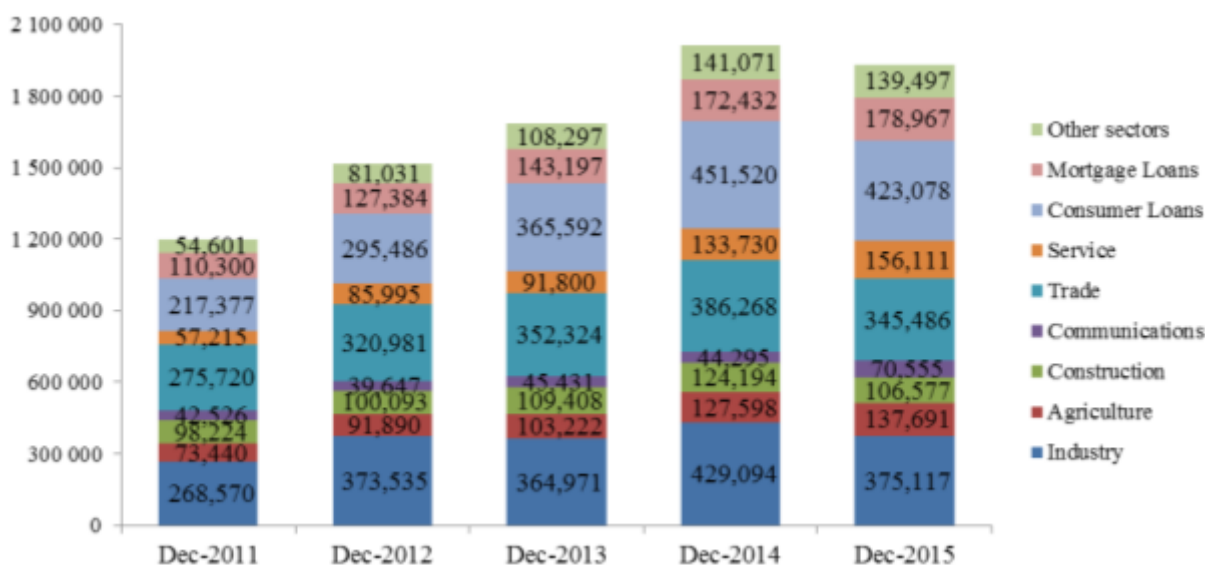


Fig. 4. Commercial banks' total loans to residents by fields* (end of period, mln AMD)

Source: [18]

* From Jul-11 the sectoral classification of residents has been changed in accordance with NACE rev. 2, does not include loans to financial institutions.

Conclusion. In the post-crisis period (from 2012 to 2015), the recovery of the economy caused increase in demand on the bank loans, thus entailing an increase in both bank assets and liabilities. Economic growth and the growth of the banking system moved in the same direction: i.e. banking system development could be associated with the economic growth, and the economic growth could be associated with the banking system development.

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Practical Implications. The results could be used by the Central Bank and Ministry of Finance of the Republic of Armenia, in designing various strategies, and other policy related legislation, and by those scholars that are interested in this topic.

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