



THE IMPACT OF FINANCIAL LEARNING ON INTERNATIONAL PORTFOLIOS-AN APPLIED STUDY FOR A NUMBER OF ECONOMIES

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ABSTRACT

This study aims to highlight the role and importance of financial education and its impact on international portfolios for a number of economies and its role among financial portfolios, as the ability of individuals Determined through the use of basic financial and economic concepts , which play an important role in achieving an appropriate level of financial well - being. learning financial in education Knowledge and skills and behaviors necessary to adopt management practices money in order to gain profits and savings and borrow And investment , as the study conducted a detailed analysis of the economies' portfolios during the period (2005-2020) and in light of the data obtained for the study sample represented in the portfolios of foreign and local stocks and the market values of those portfolios as well as several other determinants, and the study sample consisted of (64) A foreign portfolio , and using many financial and statistical methods, the study reached many conclusions and recommendations, the most important of which are : It is noted that there is a disparity among emerging economies that tend to benefit more from the improvement in the level of financial education compared to their developed counterparts, in addition to the fact that the positive impact of financial education was more evident during the recent financial crisis, especially for economies with less developed financial markets. The study concluded in the most important recommendation: it should Enhancing the level of efficiency of investors and encouraging them to diversify their investment portfolios in terms of foreign investments, as it will help raise the level of financial education and reduce the country's bias towards local equities In order

KEY WORDS

Financial education;
country bias; stock
markets.

to take advantage of external opportunities to achieve the best trade-off between efficiency for return and risk.	
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Introduction

Study methodology:

- The study Problem:

financial education as important in influencing financial decision-making (Cole et al. , 2012). It is the intellectual dialectic of the study In the main question whether The impact of financial learning on international portfolios during the study period, as the study problem can be formulated in the following question:

- How does financial education affect the degree of country bias ? Is there a disparity in financial education among economies?

Second : the importance of the study:

- The importance of the study is gained from the novelty of its subject , because it provided a cognitive and intellectual addition to one of the most important modern investment concepts , which is linking the concept of financial learning to the degree of country bias.

- The study sheds light on the need for researchers and decision makers to search for the causes that contributed to the low degree of financial education and its consequences on international investment.

- The importance of the study was complementary to the picture in knowing whether the degree of market integration affected the country's bias, which is reflected in financial education.

- Third : Study Hypotheses:

The study is based on a main hypothesis as the following:

- does not affect t Financial education on country bias score. T does not vary Financial education among developed and emerging economies.

Fourth: Study Objectives:

- The aim of this study is to find out whether financial education affected by economies by country bias score .

- This study aims to explore The weighting degree of financial education in developed economies versus emerging market economies .

- aims to try to know the role of financial education in international portfolios and to show the fact that financial education affects financial awareness, knowledge, skills and investor behavior to make sound financial decisions in order to achieve individual financial well-being.

- This study aims to find out Is that low The level of education and financial awareness is one of the main reasons behind the increasing reliance on local stock portfolios.

Fifth: the study population and sample: Scientific studies confirm The need to conduct the study with an accurate description of the original community in preparation for determining the sampling criteria, which includes choosing the study sample represented by this community.

The community of this study includes the portfolios of the countries of the world, while the sample of the study consisted of (64) investment portfolios represented among different economies . And that the selection of these portfolios came to reflect the countries' markets, represented by the optimal risky

portfolio, as the study sample was intentionally chosen, by relying on several criteria, which are as follows:

- 1- The selected portfolios were weighed at the market value.
- 2- The selected portfolios are the most active during the period studied.
- 3- The non-stop work of these portfolios in their global markets during the period studied.

Sixth: Study data and duration:

The study period covered from the year (2005) to the year (2020). As the number of observations of the international portfolios of foreign direct investment reached (960) , while the rest of the independent variables were (4800). Watch for each of the market values of the selected countries portfolios.

The data was obtained by using several methods to search for it, the first of which was to enter the websites directly , and the second was to subscribe to the official global websites (data bank .world , International Finance , IMF , Datastream) .

Seventh: Study procedures and methods:

The procedures and methods of the study were according to the following steps:

- 1- Calculating the share of country i shares invested in the country (I * j) The market capitalization ratio of the country (j) in its global market capitalization , through the use of the following equation (Cooper & Vanpée , 2013, 290):

$$I*j = MCj / MCworld \text{ (1)}$$

so MCj is the market value of the country , j MCworld global market capitalization.

- 2- By using the above equation, the degree of country bias was calculated In which the portfolios are weighting the local shares in the first country investment portfolio compared to the foreign shares, through equation (2) Wakalaty (2017:28, Zamit): (2) $EHBi = 1 - Foreign\ Equity_i / Foreign\ Equity\ to\ Total\ Market$

- 3- Using financial and statistical programs to calculate the relationship between variables .

Theoretical side: Financial learning , international portfolios, and country bias

One of the well-known phenomena in international capital markets is the extent to which investors focus on investing B stock portfolios in the local markets. It is evident from this that investors are reluctant to reap the full benefits of international diversification and overinvest in their domestic assets rather than in international portfolios. This preference is commonly called the " country bias puzzle " and has attracted a great deal of attention in attempts to solve this puzzle. Following the seminal work of French and Poterba (1991), several authors have documented a number of plausible explanations that focus primarily on institutional factors or individual investor behavior (see Lewis , 1999 ; Karolyi and Stulz , 2003 and Sercu and Vanpée , 2012).). However, what has not been researched is the role of financial education in international portfolio diversification. This evidence is important for understanding the mechanism through which education affects international portfolio holdings and can be used to better inform policymakers and investors, particularly in the current economic climate.

witnessed tremendous growth in financial instruments and products, as evidenced by the multiplicity of new assets that were developed on the basis of high-risk mortgages and other mortgages before the global financial crisis of 2007-2009, as it posed a major challenge to the ability of investors to make

financial decisions. intact in light of the increasing losses observed during this period (Klapper et al. 2013). The increase of these innovations and the risks associated with them has generated an urgent need for a decline in the level of literacy, that is, for better education and financial development, among citizens, educators, community groups, companies, policy makers, and government agencies to ensure their financial security (Lusardi , 2008 ; Lusardi and Tufano , 2009 and Gerardi et al. 2010) . Financial education has an important role in diversifying financial products and services, and that is by educating individuals about the various available financial products and services, which enables them to make informed decisions about choosing the appropriate financial products and services for them. By understanding the risks associated with investing in various financial products and services NICOLAESCU& TODERAȘCU, 2023:325-326) . Well-informed and educated people who are more financially aware may be able to better manage their financial affairs by making good and profitable decisions for their financial and economic security and thus achieve well-being. (Mizen et al. 2012). Increase the level of financial education Contribute to a better diversification of financial products and services. Diversification is affected by the level of financial knowledge . The higher the level of financial knowledge, the faster the achievement of these goals will increase (Meyer & Rose, 2001:3) . Financial literacy as a person's ability on take decisions Finance Correct , budget preparation _ And management funds in a form More efficient , and manageable Debts credit , and appraisal Risks and returns related in different Options investment and saving , as well as owning broader understanding for ethical dimensions social Economic (Sayed Ali, 115-115, 2022). This means that financial literacy includes Possess knowledge and understanding in money and asset management, banking, investments and loans, insurance and taxes . , As well as understanding and awareness of the basic concepts underlying money and asset management such as time value of money, risk management and insurance. , As well as using the knowledge to make financial decisions and plan for the future.

education plays an important role in developing financial markets and diversifying financial products and services. Helps individuals understand the basic concepts of finance and investments, manage their financial resources effectively, and make informed decisions about financial products and services (Annamaria Lusardi & Olivia S. Mitchell , 2014). Financial education is important for individuals to manage their finances effectively and make wise decisions about financial products and services. It helps individuals understand basic financial concepts, such as budgeting, saving, investing, and debt management. With this knowledge, individuals can make correct decisions about their financial resources, such as choosing the right investment products and managing their debt effectively and efficiently , in addition, financial education can also help individuals avoid fraud and deception Financial (OECD, 2016:6) . In the same vein , financial education has many benefits, both for individuals and for society as a whole. For individuals, financial education can help them achieve their financial goals, such as saving for retirement. It can also help individuals make informed decisions about financial products and services, such as credit cards, loans, and insurance policies. Financial education also has benefits for society as a whole . It can help reduce poverty and inequality by enabling individuals to make informed decisions about resources Finance. It can also help reduce financial instability by promoting responsible investment and lending practices (NICOLĂESCU & TODERAȘCU, 2023) .

The decision-making process does not depend on personal factors or on financial models, but also on situational factors. Situational factors do not extend to the problem that the decision-maker faces, but extend to his environment as well. Therefore, the decision-maker needs an analysis of the variables of

the problem from all sides (Chandra, 2008) :8) . Financial decisions are usually between the available and specific financial resources that the individual possesses in exchange for existing financial options and services. Therefore, individuals have to be prepared to invest time and other resources to apply their knowledge, practice their skills, and their ability to access information and take advice and advice and trust enough to practice their skills and obtain the desired results (Remund , 2010). As one of the direct factors that judge the attitudes of individuals is thinking in the short term versus the long term, as well as spending instead of saving. Since the level Financial education does not mean how much financial information an individual possesses, but rather the effectiveness of making fundamental financial decisions (kempson and A. Finney (2009)) .

OECD) defines Financial education as the process by which financial consumers/investors improve their understanding of financial concepts, products and risks, through objective information, instruction and/or advice, they develop their skills To be more aware of financial risks and opportunities, in order to make optimal choices , and to know where to go If they need help , take other effective actions to improve their financial well-being. (International Labor Organization 2016:1) .

has an important role to play in the development of financial markets as it helps individuals to understand the performance of financial markets and the various financial products and services available. Through this knowledge, individuals are able to make the right decisions about investing in financial markets and choosing the appropriate financial products and services for them (OECD, 2017;1) . Financial education also helps individuals understand the risks associated with investing in the financial markets. This knowledge helps individuals make informed decisions about investing in financial markets and choosing appropriate investment products (NICOLĂESCU & TODERAȘCU, 2023) . Financial education contributes to the development of financial markets in several ways, the most important of which are :

- **Increase participation**

Financial education helps individuals understand financial products and services, enabling them to make sound decisions about investing and saving. This, in turn, can increase participation in financial markets, leading to their growth and development. Financial education can increase participation in financial markets by providing individuals with the knowledge and skills to understand financial products and services. This leads to an increase in investment and savings, and this leads to the growth and development of financial markets.

- **Better investor protection**

Financial education can also help individuals understand the risks associated with financial investments, resulting in better investor protection. This can increase investor confidence in the financial markets and attract more investments .

- **Improving financial culture**

By improving financial knowledge, financial education helps individuals make better financial decisions , which can lead to improved financial outcomes. All of this will contribute to the growth and development of financial markets.

- **Increasing innovations**

Financial education can also enhance innovation in financial markets by encouraging individuals to think creatively about financial products and services. This leads to the development of new and innovative financial products and services that meet the needs of consumers.

- **improve market efficiency**

Financial education can improve the efficiency of the markets by providing individuals with the necessary knowledge and skills to analyze the financial markets and make sound investment decisions. This leads to more efficient allocation of capital and better market performance (Milesi-Ferretti and Tille 2011).

- **Increased financial stability**

Financial education can contribute to increasing financial stability by helping individuals understand the importance of diversification and risk management in their financial portfolios. This can help mitigate the impact of financial shocks and reduce the likelihood of financial crises (Kang and Stulz, 1997,8).

- **Enhance consumer protection.**

Financial education enhances consumer protection by enabling individuals to make informed decisions about financial products and services. This can help prevent consumer abuse and reduce the likelihood of financial fraud and scams (Shapiro, 2014:509). Financial education can improve consumer protection in multiple ways. By understanding their rights and responsibilities as consumers of financial products and services, individuals can make informed decisions and protect themselves from potential fraud and abuse. Furthermore, financial education can equip individuals with the knowledge and skills to identify and report financial misconduct (2001:660 Huberman), thus contributing to the overall transparency and accountability of financial markets. In addition, financial education can promote responsible borrowing and lending behavior, which reduces the risk of over-indebtedness and financial distress among consumers. Finally, financial education can raise awareness of the importance of financial planning and risk management, helping individuals prepare for unexpected events and protect themselves and their families from financial shocks.

- **improve economic development**

Financial education can contribute to overall economic development by increasing financial inclusion and fostering entrepreneurship. By providing individuals with the knowledge and skills to start and grow a business, financial education helps create jobs and drive economic growth. In addition, financial education plays an important role in the economic development of a country by increasing the level of financial knowledge of the population, and can improve the ability to plan financially and make decisions regarding expenditures and savings. This leads to better money management and greater financial stability, whether for individuals or institutions. Financial literacy can help people better understand the benefits and risks of different financial products and make informed decisions about investments or savings. This can lead to an increase in the demand for financial products and services, as well as their diversification.

Financial education aims to enable workers to make wiser financial decisions at the family or business level, as it enhances behavior among the various target groups, such as youth, women, owners of small projects, immigrants, and wage workers, towards improving planning, budget, increasing savings, spending, and optimal borrowing (International Labor Organization 2016:1).

The improvement of the financial position of the individual is determined by allocating funds to invest in different categories of sectors and securities that do not move in the same direction. As it is possible to invest in well-diversified diversified assets by choosing the assets that are less closely related (Islam & Faisal, 2011:8). If the investor allocates his money in local assets, he will be exposed to risks, which may have a general effect on the country's economy. In Ramtah (4168, 2010, Mansourfar, et al.). The tendency of local assets to move in one direction with the movement of the general market led to an increase in the strength of the correlation between returns, which weakened the local diversification. Which led to the search for displacement for international diversification, because the correlation coefficients between countries are much less than among the local stocks within the same country. (298: Blackman, et al, 1994). This is due to the economic, political, institutional, and psychological factors that affect the returns of securities, and they tend to vary greatly between different countries, which results in relatively low correlations between international securities (Eun, et al, 2012:299). . And when the investor loses as a result of investing in the shares of one country, he may make a profit from investing in the shares of other countries, which enables him to compensate for the losses. Thus, he spreads the risk, by investing in the shares of different countries, with a focus on the correlation coefficient in relation to among stocks, which results in a significant reduction of risk (89, 1974 : Solnik). Among the advantages of the globalization of investments is the improvement in the efficiency of the global allocation of capital, as well as the enhancement of the ability to diversify investment portfolios. Capital fled Sufficient for its implementation (Lessard, 1973: 620), and in contrast, the implementation of investments with low returns in other countries due to the availability of capital necessary for its implementation, so diversification reaps the fruits of this imbalance (17-18: 2013, Chaudhary & Goel,). Growth, integration, lifting restrictions on global financial markets, and changes in international politics and economic policies have led to an increase in global investment opportunities (Addae & Trecia, 2001, 2). Many international studies She emphasized that it is possible to reap more profits through international diversification, but that international investors' preferences are still biased in favor of their local investments within their countries (Abid et al, 2014:46). This preference confirms the presence of a country bias, which is the subject of controversy and disagreement until now (Coval & Moskowitz, 1999, 2045). The impact of this bias will be the reason for the contradiction between theory and practical application in investment.

Recent studies have shown that the globalization of markets has not resulted in major and sudden changes in the structure of the link between the securities in the global markets (2591, Bekaert et al. 2009). It is known that the goal of international diversification should focus on reducing the risk of the investment portfolio, which consists of various securities listed in foreign markets (Halicki & Uphaus, 2015: 422-423). And Because the investor is characterized by rationality and rationality, he can make the most of international investments in light of the facilities provided, and from them Reducing barriers and restrictions on foreign investment, capital movement, increasing market transparency, and reducing foreign investment costs, as investors must increase their orientation towards investing in foreign stocks. But they did not. This is because most investors, all over the world, have a new behavioral bias, which is known as the country bias (Home Bias) (Al-Sayed Ali et al., 2022, 6).

As it is seen as a practical puzzle, the proposed solutions to this puzzle were mostly the result of strict barriers that could impede international investment operations, as well as due to behavioral biases (Gilovich, et al, 2002: 20). The behavioral approach to country bias is based on several psychological aspects of the behavior of individuals. Although the benefits of international investment are well documented, many stock portfolios are still heavily anchored in local markets (Cooper & Vanpée , 2013,236). Country Bias (Home Bias) refers to the common tendency of investors to allocate the lowest weights to foreign stocks in their risky portfolios (Eun & Resnick, 2012:390) . The measure of bias is defined as the most used indicator and is calculated by the difference between foreign assets divided by the global stock portfolio (1994:41 Kaplanis & Cooper). The value of the bias index ranges between the correct one and zero, when the country bias scale is equal to the correct one, this indicates a complete bias of local stocks against foreign stocks. In the event that the country bias measure is equal to zero, this indicates that there is no bias for local stocks compared to foreign stocks. (Sayed Ali et al., 5, 2022). In addition, the above linkage should be most effective during extreme economic events such as the recent financial crisis, which originated in the United States in mid-2007, as it caused a sharp decline in asset prices . This , in turn, led to a further decline in the assets invested abroad, and thus led to an increase in the percentage of stock portfolios that are concentrated in the local market for investors. (et al, 2021 , Malekpour).

The current economic conditions mean that there are real concerns about the economic security of people, particularly those who lack the skills and resources to deal with the disadvantages and benefit from the advantages of financial markets. Researcher W.N revealed that people do not possess the required levels of financial knowledge to make good decisions. For example, deciding whether to plan for retirement is one of the most important financial decisions people make financially People's decisions are getting more complex, and problems with decision-making in these areas are increasing (Mandel & Klein , 2007). People's financial problems in recent years show that they make financial decisions without having the right tools at hand (Consumer Federation of America , 1991). One difficulty with making poor financial decisions is that their consequences are hidden in the short term and only revealed over longer periods of time. The researchers suggest that poor financial decisions will become an epidemic problem; Therefore, policy makers are faced with a new problem: the poor financial decisions made by individual investors (Danes & Hira , 1987).

The applied side: the impact of financial learning on international portfolios, an applied study of a number of economies

Based on the study data described in the study methodology and using equation (1) and (2) , bias rates were calculated Annual (for each portfolio in its own currency) and given that the American portfolio is the local portfolio for the study In addition, averages were calculated for those portfolios during the study period The results are shown in the following table to show the impact of financial learning on international portfolios :

Table (2): Average and annual rates of bias for the governors of the study sample countries from 2005 to 2020

<i>EHBi</i> 2012	<i>EHBi</i> 2011	<i>EHBi</i> 2010	<i>EHBi</i> 2009	<i>EHBi</i> 2008	<i>EHBi</i> 2007	<i>EHBi</i> 2006	<i>EHBi</i> 2005	Countries
0.999482	0.999449	0.999474	0.999422	0.999372	0.99938	0.999372	0.999313	Argentina
0.999985	0.999985	0.999984	0.999986	0.999986	0.999986	0.999984	0.999983	Netherlands
0.984966	0.985475	0.986645	0.988266	0.990593	0.989013	0.990844	0.991643	Australia
0.991379	0.990752	0.990156	0.989307	0.988239	0.988774	0.988427	0.988003	Austria
0.982556	0.980625	0.979744	0.976763	0.973375	0.976996	0.977782	0.976748	Belgium
0.988649	0.986565	0.984658	0.985916	0.985478	0.984074	0.985266	0.983445	Bermuda
0.999429	0.999169	0.998952	0.99948	0.999501	0.99949	0.999652	0.999731	Brazil
0.999846	0.999901	0.999905	0.999923	0.999942	0.999957	0.999959	0.999967	Bulgaria
0.976661	0.97824	0.979298	0.981662	0.982444	0.978601	0.979261	0.980149	Canada
0.99865	0.998508	0.998346	0.998315	0.998165	0.997501	0.997205	0.996948	Cayman Islands
0.996772	0.996958	0.996753	0.9973	0.997874	0.997684	0.998151	0.998939	Chile
0.974505	0.975901	0.974122	0.975763	0.979572	0.978387	0.980935	0.981568	China Hong Kong
0.999152	0.999385	0.999563	0.999565	0.999623	0.99965	0.999659	0.99965	China Macao
0.999571	0.999551	0.99961	0.99963	0.99959	0.999681	0.999704	0.999762	Colombia
0.999974	0.999966	0.999962	0.999955	0.999965	0.999959	0.999957	0.999966	Costa Rica
0.999097	0.998903	0.998616	0.998143	0.998548	0.999259	0.999112	0.999422	Cyprus
0.999335	0.99934	0.999327	0.999258	0.999043	0.99905	0.999163	0.999197	Czech Rep.
0.990481	0.990915	0.990963	0.991141	0.991442	0.991636	0.991728	0.991695	Denmark
0.999914	0.999902	0.999731	0.999877	0.999929	0.999923	0.99992	0.999909	Egypt, Arab . of
0.999841	0.999842	0.999851	0.99985	0.99986	0.999822	0.999842	0.999875	Estonia, Rep. of
0.991825	0.992127	0.99211	0.99282	0.993375	0.99289	0.992906	0.993491	Finland
0.933628	0.930939	0.921886	0.914023	0.906382	0.917694	0.919084	0.920917	France
0.92872	0.930533	0.928845	0.925096	0.921202	0.927137	0.925573	0.934445	Germany
0.999784	0.999931	0.999936	0.999908	0.999919	0.999954	0.999963	0.999942	Gibraltar
0.996178	0.997586	0.997327	0.996125	0.995499	0.996451	0.997094	0.997046	Greece
0.99473	0.993745	0.993717	0.994234	0.993757	0.993333	0.993966	0.994207	Guernsey
0.999794	0.999768	0.999654	0.999648	0.999691	0.999726	0.999803	0.999894	Hungary
0.999782	0.999781	0.999802	0.999792	0.999719	0.999142	0.999388	0.999531	Iceland
0.999967	0.999965	0.999956	0.999959	0.999965	0.999969	0.999991	0.999997	India
0.999652	0.999766	0.99981	0.999875	0.999842	0.999928	0.99995	0.999951	Indonesia
0.945931	0.945918	0.945748	0.941801	0.935482	0.945301	0.946792	0.950091	Ireland
0.972997	0.969922	0.967853	0.966653	0.964926	0.965518	0.962542	0.95854	Italy
0.908961	0.901498	0.906846	0.915	0.912863	0.929948	0.923041	0.910716	Japan
0.994551	0.993597	0.992902	0.992749	0.989929	0.988762	0.988253	0.987032	Jersey
0.998376	0.998627	0.999054	0.99916	0.998844	0.999311	0.99934	0.999537	Kazakhstan, Rep.
0.996444	0.996981	0.996875	0.996979	0.997246	0.995597	0.996789	0.997799	Korea, Rep. of
0.999106	0.99898	0.998968	0.998893	0.998529	0.999108	0.99924	0.999355	Kuwait
0.999872	0.99989	0.99991	0.99991	0.999895	0.999922	0.999933	1	Latvia
0.999825	0.999785	0.999825	0.999843	0.999837	0.999891	0.999921	0.999914	Lebanon
0.92067	0.921562	0.920052	0.919324	0.92119	0.919981	0.920169	0.922282	Luxembourg
0.998694	0.998824	0.999001	0.999192	0.999408	0.999641	0.999764	0.99984	Malaysia
0.999317	0.999352	0.99942	0.999465	0.99948	0.999563	0.99951	0.999499	Malta
0.997383	0.996966	0.995073	0.996126	0.995194	0.995707	0.997322	0.997685	Mauritius
0.998915	0.998949	0.998871	0.998935	0.998164	0.99845	0.998582	0.999632	Mexico
0.956892	0.957995	0.958456	0.955046	0.954828	0.95649	0.956227	0.950968	Netherlands, The
0.998541	0.998593	0.998669	0.998869	0.999044	0.999012	0.999028	0.998825	New Zealand
0.976836	0.978359	0.97965	0.980584	0.980812	0.984886	0.985726	0.988152	Norway

0.99999		0.999994	0.999995	0.999996	0.999996	0.999985	0.999992	0.999984	Pakistan
0.999777		0.999773	0.999804	0.99982	0.999815	0.999852	0.999809	0.99978	Panama
0.999825		0.99984	0.99984	0.99985	0.999831	0.999819	0.999765	0.999754	Philippines
0.999658		0.999688	0.999605	0.999627	0.999606	0.999394	0.999546	0.99963	Poland, Rep. of
0.996312		0.995687	0.994576	0.993707	0.993534	0.994709	0.994735	0.994312	Portugal
0.99993		0.999939	0.999941	0.999949	0.999945	0.999953	0.999945	0.999969	Romania
0.998753		0.99871	0.998962	0.998862	0.999113	0.999448	0.999597	0.99925	Russian
0.995523		1	1	1	1	1	1	1	Saudi Arabia
0.979289		0.982179	0.983603	0.986103	0.986448	0.985877	0.987592	0.988046	Singapore
0.999296		0.999123	0.999196	0.999223	0.99981	0.999833	0.99986	0.999855	Slovak Rep.
0.999596		0.999562	0.999555	0.999511	1	1	1	1	Slovenia, Rep. of
0.995874		0.996045	0.996349	0.997116	0.997629	0.997885	0.99768	0.997269	South Africa
0.989193		0.988279	0.986445	0.981135	0.978506	0.979383	0.978107	0.975466	Spain
0.987379		0.987177	0.986277	0.987271	0.988162	0.986644	0.987043	0.987326	Sweden
0.969437		0.968357	0.968886	0.967865	0.966647	0.969953	0.970563	0.968615	Switzerland
0.999244		0.999393	0.999367	0.9993	0.999506	0.999577	0.999841	0.999855	Thailand
0.999966		0.999949	0.999938	0.999943	0.999928	0.999944	0.999897	0.99997	Turkey
0.999997		0.999998	0.999998	0.999999	0.999999	0.999997	0.999998	0.999998	Ukraine
0.908276		0.906333	0.909761	0.909328	0.911043	0.905801	0.896867	0.89978	United Kingdom
0.795527		0.801095	0.812401	0.822201	0.843521	0.800361	0.803869	0.806177	United States
EHB averg	EHBi2020	EHBi2019	EHBi2018	EHBi2017	EHBi2016	EHBi2015	EHBi2014	EHBi2013	Countries
0.999428	0.999471	0.999392	0.999439	0.999488	0.999458	0.999458	0.99945	0.999428	Argentina
0.999984	0.999982	0.999982	0.999983	0.999984	0.999984	0.999985	0.999986	0.999986	Netherlands
0.989883	0.99168	0.991868	0.992378	0.985483	0.992131	0.992531	0.992398	0.992216	Australia
0.9911	0.993551	0.993597	0.993463	0.993262	0.992845	0.992774	0.991793	0.991273	Austria
0.981237	0.985356	0.985686	0.985111	0.984484	0.984007	0.985035	0.98308	0.982446	Belgium
0.989697	0.993118	0.993632	0.99404	0.994023	0.99375	0.994161	0.994019	0.99436	Bermuda
0.999348	0.999288	0.999182	0.9992	0.999309	0.9993	0.999258	0.999256	0.999373	Brazil
0.99988	0.999783	0.999814	0.999828	0.999838	0.999862	0.999875	0.99984	0.999836	Bulgaria
0.968617	0.966614	0.966654	0.968416	0.869522	0.970861	0.972118	0.972972	0.974403	Canada
0.984828	0.954306	0.959011	0.958583	0.963995	0.960042	0.979845	0.999021	0.998803	Cayman Islands
0.997135	0.9969	0.996784	0.996715	0.996709	0.996551	0.996699	0.996659	0.996704	Chile
0.973707	0.966989	0.968444	0.968184	0.968993	0.969689	0.969759	0.973281	0.973224	China Kong
0.999023	0.997981	0.998108	0.998374	0.998525	0.998688	0.998731	0.998818	0.998889	China Macao
0.999499	0.99928	0.999275	0.99927	0.999306	0.99933	0.99933	0.99939	0.999697	Colombia
0.999962	0.999941	0.999949	0.99995	0.999967	0.999966	0.99997	0.999971	0.999974	Costa Rica
0.999245	0.999546	0.999515	0.999581	0.999605	0.999668	0.999701	0.999635	0.999562	Cyprus
0.999289	0.999435	0.999413	0.99937	0.99933	0.999329	0.999331	0.999348	0.999358	Czech Rep.
0.99083	0.989899	0.99034	0.990587	0.990811	0.990498	0.99075	0.990266	0.990125	Denmark
0.99993	0.999982	0.999983	0.999977	0.999968	0.99997	0.99996	0.999969	0.999962	Egypt, Rep. of
0.999805	0.999643	0.999724	0.999721	0.999743	0.999786	0.999837	0.999818	0.999828	Estonia, Rep. of
0.992631	0.993458	0.993186	0.992891	0.992919	0.992259	0.99247	0.991696	0.991673	Finland
0.931096	0.949985	0.948556	0.94586	0.94408	0.941021	0.940086	0.932802	0.930592	France
0.92972	0.934506	0.935198	0.935025	0.934563	0.930699	0.932383	0.926233	0.92536	Germany
0.999925	0.999964	0.999954	0.999855	0.999939	0.999917	0.999986	0.999905	0.999945	Gibraltar
0.996882	0.99701	0.997609	0.997707	0.997459	0.99701	0.997113	0.996582	0.996317	Greece
0.995855	0.997682	0.998005	0.99798	0.998127	0.997881	0.997327	0.997693	0.9973	Guernsey
0.999758	0.999764	0.999753	0.999749	0.999738	0.999768	0.999786	0.999782	0.999807	Hungary
0.999696	0.999743	0.999758	0.999781	0.999802	0.99982	0.999796	0.999747	0.999748	Iceland
0.999955	0.999878	0.99992	0.999917	0.999944	0.999952	0.999965	0.999962	0.999979	India
0.999752	0.999636	0.999615	0.999599	0.99969	0.9997	0.9997	0.999682	0.999632	Indonesia

0.944294	0.933336	0.936478	0.938336	0.941977	0.970547	0.944351	0.943409	0.943201	Ireland
0.968323	0.969762	0.970379	0.96888	0.968712	0.969676	0.971951	0.97265	0.972207	Italy
0.916396	0.920942	0.920955	0.921385	0.92273	0.911939	0.920058	0.919621	0.91583	Japan
0.99441	0.997421	0.997326	0.997751	0.998136	0.998565	0.998038	0.998075	0.99747	Jersey
0.998805	0.998947	0.998799	0.998816	0.998754	0.998492	0.99842	0.998178	0.998224	Kazakhstan
0.994832	0.989463	0.990184	0.991124	0.992373	0.993459	0.994611	0.995378	0.996009	Korea, Repf
0.999315	0.999695	0.99966	0.999687	0.999685	0.999627	0.999628	0.999629	0.999255	Kuwait
0.99982	0.99966	0.999701	0.999691	0.999678	0.999678	0.999733	0.999779	0.999865	Latvia
0.999881	0.999979	0.999954	0.99993	0.999917	0.999895	0.99988	0.999854	0.999841	Lebanon
0.917094	0.912282	0.913173	0.912225	0.913399	0.914198	0.913985	0.913483	0.915524	Luxembourg
0.998821	0.998069	0.998221	0.998345	0.998447	0.998344	0.998361	0.998449	0.998542	Malaysia
0.998558	0.997607	0.997626	0.997453	0.997484	0.997354	0.997382	0.997107	0.999307	Malta
0.996946	0.997938	0.997632	0.997265	0.997424	0.99734	0.997189	0.997319	0.99757	Mauritius
0.998843	0.998882	0.998928	0.998836	0.998871	0.998964	0.998876	0.998803	0.998824	Mexico
0.958017	0.962815	0.962603	0.962362	0.962015	0.958899	0.960342	0.956245	0.956084	Netherlands, The
0.998529	0.997977	0.998024	0.998088	0.99814	0.998079	0.998236	0.998189	0.999156	New Zealand
0.984827	0.987251	0.987775	0.98892	0.987996	0.987873	0.988117	0.987677	0.986621	Norway
0.999991	0.999995	0.999993	0.999991	0.999992	0.999991	0.999992	0.99999	0.999988	Pakistan
0.999784	0.999773	0.999764	0.999736	0.999752	0.999729	0.999716	0.999764	0.999883	Panama
0.99978	0.99965	0.999665	0.999709	0.999758	0.999724	0.999763	0.999832	0.999848	Philippines
0.999497	0.999405	0.999338	0.999302	0.999343	0.99934	0.999361	0.999501	0.999609	Poland, Rep. of
0.995762	0.997051	0.997123	0.996802	0.996965	0.997017	0.996944	0.996451	0.996273	Portugal
0.999931	0.999895	0.999888	0.999911	0.999916	0.999927	0.999935	0.99993	0.99992	Romania
0.998812	0.998398	0.998643	0.998671	0.998505	0.998328	0.998501	0.998627	0.99863	Russian
0.997423	0.99485	0.995137	0.995549	0.995852	0.995616	0.995201	0.995535	0.995541	Saudi Arabia
0.980764	0.975826	0.975023	0.975962	0.976732	0.976837	0.977394	0.97727	0.978036	Singapore
0.999427	0.999198	0.999259	0.999268	0.999343	0.999386	0.999506	0.999366	0.999314	Slovak Rep.
0.999683	0.999571	0.999566	0.999547	0.999556	0.999586	0.999633	0.999637	0.999602	Slovenia, Rep. of
0.996804	0.9973	0.997001	0.996981	0.996601	0.996477	0.996554	0.996171	0.995939	South Africa
0.984837	0.985304	0.986012	0.985842	0.986549	0.987421	0.987638	0.988117	0.993992	Spain
0.988353	0.988265	0.988507	0.98846	0.988354	0.988299	0.987775	0.993725	0.992987	Sweden
0.970427	0.974413	0.97454	0.97418	0.973389	0.9711	0.970828	0.969797	0.968266	Switzerland
0.999274	0.998819	0.998881	0.998992	0.999037	0.999097	0.999071	0.999157	0.999253	Thailand
0.999956	0.999973	0.999969	0.999973	0.999976	0.999969	0.999965	0.999967	0.999976	Turkey
0.999997	0.99999	0.999994	0.999998	0.999998	0.999997	0.999996	0.999996	0.999996	Ukraine
0.914472	0.94098	0.937183	0.937121	0.93233	0.917611	0.911228	0.907398	0.900529	United Kingdom
0.793676	0.784998	0.775294	0.774464	0.773868	0.77811	0.77437	0.773139	0.779415	United States

From the above table, it is clear to us that all countries have a very high bias, as it is noted that the highest bias was in (Ukraine), as it reached full bias for the years (2005 to 2020), followed by (Saudi Arabia), which also reached full bias, but for the periods (2005 to 2011). This was followed by (Slovenia) for the periods from (2005 to 2008), followed by (Latvia) for the year (2005). This indicates that local investors in those countries and in those periods did not go towards international investment, but rather concentrated most of their investments towards local investment, which reduces profit opportunities despite the easing of restrictions and lifting barriers that impede investment operations, and this is inconsistent with the principle of diversifying investment portfolios. As the principle of diversification provides for the distribution of wealth in several investments, taking into account the correlation coefficient, which shows that there is no significant impact of financial education in those countries. On the other hand, it is noted that (United States) had the least bias during the study period

from (2005 to 2020), followed by (United Kingdom , Japan) during the study period, which indicates the existence of an effect of financial education in those countries, and it indicates the existence of a discrepancy in between countries and the figure below shows that,

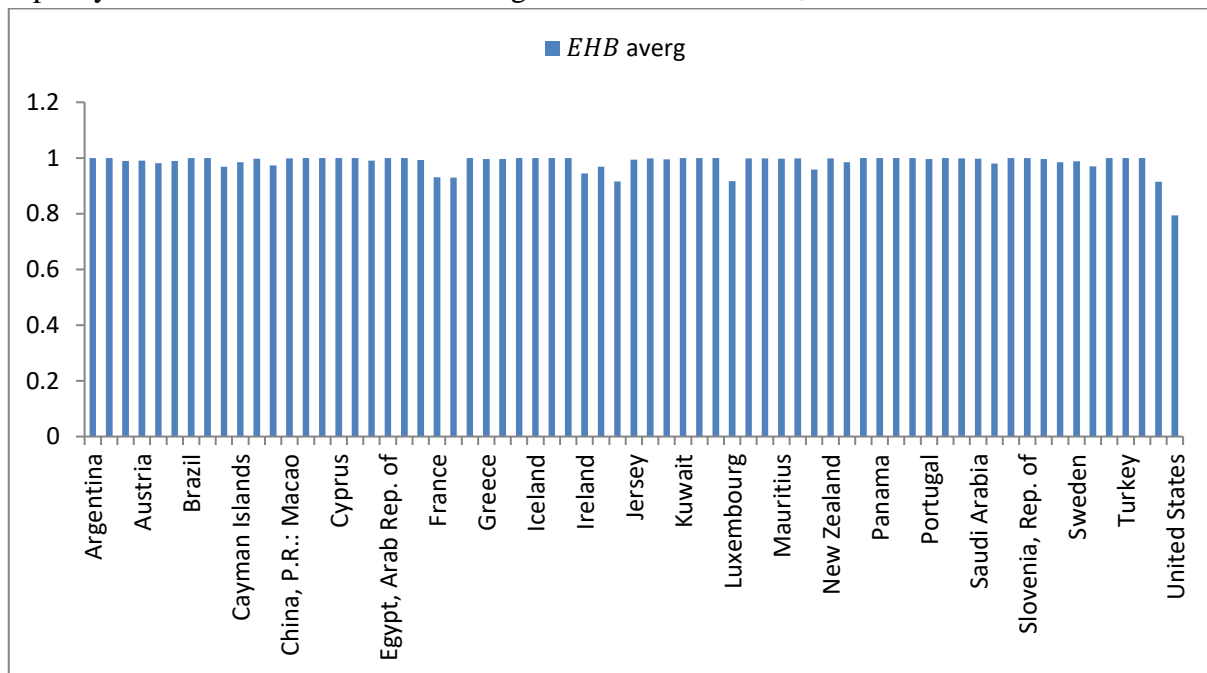


Figure (1) The average annual bias of the portfolios of the study sample countries from 2005 to 2020

As for the overall level, it is noted from table (2) and figure (1) that each of (Lebanon , Gibraltar , Egypt Romania , India , Turkey , Costa Rica , Aruba, Kingdom of the Netherlands , Pakistan Ukraine) achieved the highest bias rates and was close to the correct one (0.999880661 , 0.999925092 , 0.999929769 , 0.999930797 , 0.99995539 , 0.999956462 , 0.99996208 , 0.9999844). 02, 0.999991494, 0.999996725) , respectively , and this indicates a decrease in financial education in those countries . The lowest levels of bias were for (United States , United Kingdom , Japan , Luxembourg , Germany, France , Ireland , Netherlands, The , Italy , Canada) as it amounted to (0.793675726 , 0.914471875 , 0.916395783 , 0.917093668 , 0.92971997 , 0.931095855 , 0.944293715 , 0.958016767 , 0.968323148, 0.968617362) respectively and denotes a higher financial learning index for countries measured at country bias.

From the figures and tables above , the differences are clearly evident in the country's bias towards stocks , and it is noted that all portfolios, including the US portfolio, which had the least bias, As it becomes clear that investors in general and Americans in particular enjoy preferences for local stocks; That is, they tend to invest less internationally than would be expected in theory, and real foreign participation is less than the optimal part of the international assets within investors' portfolios.

Conclusions:

1- The study proved that financial education affects It is noted that there is a disparity among emerging economies, which tend to benefit more from the improvement in the level of financial education compared to their developed counterparts. We also found that the positive impact of financial education was most pronounced during the recent financial crisis Especially for economies with less developed financial markets.

- 2- The study proves that high levels of financial education indicate the diversification of the international portfolio, and therefore the inclusion of financial education in school curricula should be at the top of the agenda of policy makers, especially for emerging market economies.
- 3- The study proves that there is a distinction between developed and emerging market economies in the context of financial learning, given that these It documented the differential impact of financial education on international portfolio diversification. We also noticed that the emerging economies were more sensitive to the level of education during the global financial crisis than the advanced economies , and it is related to the financial and economic policy .
- 4- The study proves that low levels of education and the usual dependence on local portfolios can explain why the country bias remained at high levels during the early stages of the financial crisis. At the same time, foreign direct investment is dwindling and becoming more volatile. Domestic demand and investment in the national economy remain limited and often insufficient to ensure sustainable development.
- 5- The study proved that the more diversified the industry is in a country (the local country is USA as a model), the lower its readiness for international diversification compared to the rest of the countries . This means that large companies are more transparent , which means that the costs of information gathering and asymmetry will be lower . In addition, they will be more liquid than small companies (in general), which reduces transaction costs. .
- 6- Proved The study showed that country bias increases during crises , and this reveals that in periods of uncertainty, investors are more reluctant to invest in foreign markets .

Recommendations:

- 1- should It enhances the level of efficiency of investors and encourages them to diversify their investment portfolios in terms of foreign investments. Because it will help raise the level of financial education , and reduce the country's bias towards local stocks In order to take advantage of external opportunities to achieve the best trade-off between efficient returns and risks.
- 2- She recommended The study stressed the importance of investors' interest in diversifying their investments in order to reduce the country's bias towards shares , since the local investor will move from the local environment to the international environment for investment, and this will result in greater feasibility reflected in an efficient exchange of return and risk.
- 3- Necessity to understand And realize that rates High bias indicates the concentration of domestic investment without foreign investment, as investors should they take with an eye consideration knowledge Circumstances Economic For other countries, and moving towards international investment because of its many advantages.
- 4- Urge entities Competent on to encourage following The policy of not focusing on internal investment only and moving towards International investment because of its advantages in light of easing barriers and lifting restrictions.

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